

Rural Areas in Post War Syria: Challenges and possibilities for Resilience and sustainability

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Abstract

The chaos of Syria's seven years of war has caused severe damage to community and rural built environment, leading to series of challenges from ensuring adequate housing and infrastructure to support growing populations. Furthermore, reducing vulnerability to disasters and protecting the rural cultural and natural heritage are of paramount importance. In order to deal with those issues, we need to implement integrated policies and plans towards inclusion, mitigation and adaptation to climate change and resilience to disasters. Moreover, constructing sustainable buildings utilizing local materials and guarantee resources efficiency.

The study tackles the possibility of achieving aforementioned goals in Syrian rural areas and the obstacles that might hinder the process in the post war era. It also sheds light on the idea of considering the war as an opportunity to enhance both community and built environment, taking advantage of demographical and political substantial changes. This paper uses a quantitative method including statistics and surveys, to collect and analyse data from different resources working on the field, then comparing them and concluding the results. Finally, the results of the study will play a significant role in designing a guideline towards an integrated planning and upgrading system in the rural community.

Keywords: Upgrade; Resilience; Heritage; Built Environment; Challenge.

1. Introduction

The variation of geographic features in Syria results in different rural environments and forms of living. The population of the countryside prior to the conflicts, included more than half of the total population and mainly work in agriculture and related fields. However, this percentage was starting to shrink due to the low rate of population growth and migration to the cities (Omran, 2002). The rural areas in Syria, and even before the current crisis, were facing different challenges and needed developmental plans specifically devised to respond to their problems (Alasali, Shahin, 2016). Oppressor policies, corruption and inflexibility, have all resulted in poverty, unfair resources

distribution and migration to urban areas which were the prominent characters labelling the era before the conflicts (Aw-Hassan, De Pauw, La Rovere, Szonyi, 2006). When the war broke out, it did not only have a major humanitarian impact on Syria's population, but it has also drastically eroded livelihoods and caused increased levels of poverty, recurrent displacement, physical damage and messed up the rural social structure (WFP, 2017). Current numbers are frightening, and scholarly endeavours must be made to ensure a way out of the current crisis on every possible aspect. Thus, the paper is focusing on turning the war into an opportunity to enhance the situation in the rural areas, bearing in mind the deep roots of the causing factors dating back decades ago. In other words, taking advantage of the war to restart a comprehensive corrective progress to achieve resilience and stability.

2. Related work

Many studies and researches tackled the issues of Syrian rural areas, mostly concerned with poverty (Sara, 2011), agriculture sector problems, migration and climate change (Gleick, 2014). In addition, some studies were focusing on preserving the culture heritage of the post war region in the middle east (Srakar, Vecco, 2018), others concentrated on the housing issues in Syria's rural areas (Alasali, Shahin, 2016). While the major focus was upon urban areas in manner of resilience, fewer studies touched upon the rural communities and the key stone of the studies was either economy alone or food security (Save the Children, 2015). To our knowledge, no previous studies about considering the disastrous results of the conflict as opportunities to achieve resilience and sustainability in rural Syria.

3. Methodology

The paper uses a quantitative approach focusing on data collection, comparisons and statistical analysis. Data were collected based mainly on international reports and other researches related to the subject.

4. Challenges and difficulties in Syrian rural areas:

The countryside of Syria has always suffered from different problems on the urban, socio-economic and administrative levels, including weak infrastructure, land misuse and unfair corruption stemming from the absence of a wise policy making (UNDP, 2010). However, the paper is focusing and discussing mainly poverty, demographic change and the policies as key factors in the process of sustainability.

4.1 Poverty:

Poverty in Syria has been concentrated in the northeast region, especially in rural areas which have consistently been poorer than urban centres, and the urban-rural divide has grown since 1997 (Table 1). The poorest part of the country in 2007 was the rural northeast and was also the only area that experienced an increase in poverty between 1997 and 2004. (Aw-Hassan, De Pauw, La Rovere, Szonyi, ,2006).

The basic income resource of people living in rural areas is depending directly or indirectly on agriculture. Basically, food security is related to the natural resources and weather conditions. Even though some could provide income by temporary off farm labour, most of them have limited access to incomes from industrial production or services. (WBG, 2017).

The conclusion of the Third National Report on the Millennium Development Goals in Syria 2010 links the failure of reducing poverty to the outcomes of policies pursued by the Syrian government since 2000. Even though that during this time numerous anti-poverty projects were launched in the country. (UNDP, 2010).

Table 1. Incidence of Extreme Poverty, by Region, 1997,2004 and 2007 (UNDP, 2010)

		1997	2004	2007
Southern region	Urban	10.65	5.82	10.6
	Rural	15.19	10.67	12.8
	Total			11.2
North- East region	Urban	13.94	11.16	10.8
	Rural	15.24	17.91	19.7
	Total			15.4
Central region	Urban	14.80	9.02	7.76
	Rural	22.58	11.10	9.05
	Total			8.4
Coastal region	Urban	11.34	9.34	5.6
	Rural	9.52	9.70	9.09
	Total			7.7
Syria	Urban	12.6	8.7	9.9
	Rural	15.9	14.2	15.1
	Total	14.3	11.4	12.3

Since the crisis, water resources have been either damaged or over exploited, and studies show that many lands are depending on rainwater for irrigation. Moreover, instead of being a source of livelihood for half of the population as it used to be, agriculture sector was dramatically affected by the warfare. Due to FAO and WFP Crop production has been impacted by high labour costs, shortages of workers, crop destruction and fragmented markets, with disrupted supply chains and

severe damage to grain silos and flour mills (Figure 1). Today, Syria has turned from a country having strategic self-sufficiency in wheat, to an importer (Tull, 2017).

The above-mentioned facts about the degradation of the agriculture statistics, alongside with the huge number of IDPs settling in the rural areas and the limited job opportunities, all that helped aggravating the originally existing poverty issue.

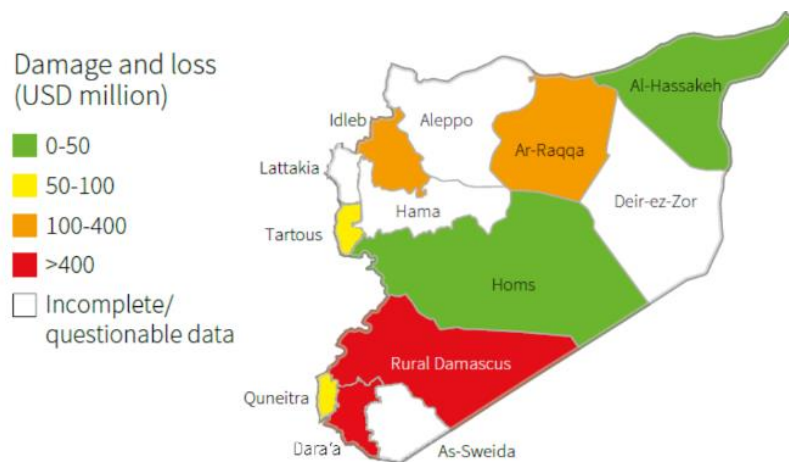


Figure 1. **Damage and loss to perennial crops in Syria in the past 4 years (FAO, 2017)**

4.2 Demographic redistribution:

Internal migration in Syria has had different patterns ranging from the most dominant type which is the rural- urban migration, to urban-urban, reaching the urban- rural, the least common. Albeit migration has permanent reasons such as education, economy, family reunification and social networks, services and policies, some incidents could provoke this process in a wider range. For example, the draught in Syria in the years prior to the conflicts which led to mass migration of 1.5 million people from rural areas to urban centres. (Khawaja, 2002)

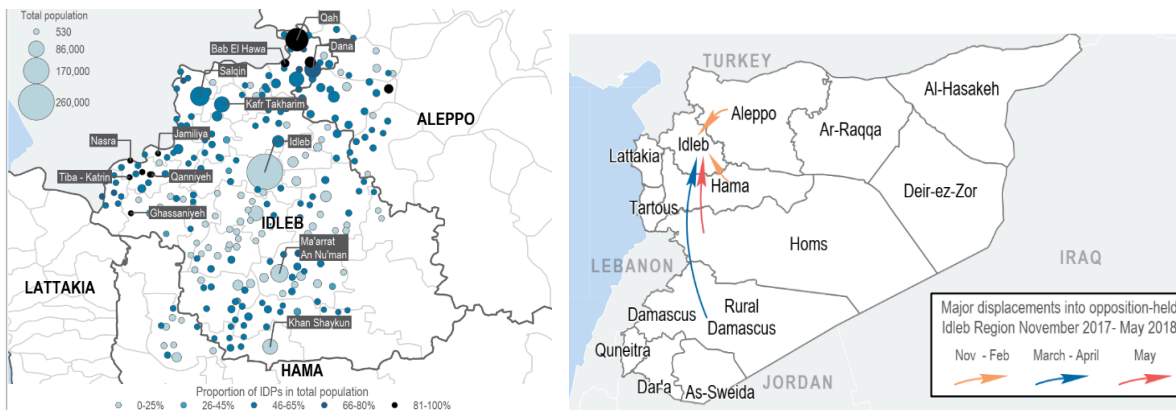


Figure 2. To the right, the flows of IDPs heading to Idlib governance and its surroundings, to the left the distribution of the IDPs in the targeted area. (REACH Initiative, 2018)






The conflict provided a major boost to migration. According to the annual report of UNHCR in the beginning of the eighth year of the crisis in Syria, there are 6.2 million internally displaced people (IDPs) and 1.41 million of them are returning to their origins. During this latter period, the Euphrates Shield Area (ESHA) became one of the primary destinations for IDPs due to the area's relative safety and proximity to Turkey, with IDPs total number of 387,150 in late 2017 and the number is still increasing. (UN Dynamo Report, 2017)

According to a recent study conducted by REACH organization, estimated number of 1.4 million IDPs are residing in Idlib governorate and the surrounding opposition-held areas of western Aleppo and north-western Hama. The acute acceleration of the violence has resulted in further waves of displacement to and within the region as new IDPs have arrived from Eastern Ghouta, northern Homs and southern Hama.

Idlib governorate and surrounding areas is host to one of the largest IDP populations in Syria. (Table 2). Overall, KIs estimated that 1,207,295 IDPs resided in the 255 assessed communities at the time of data collection, accounting for approximately 36% of the total population of 3,331,836 individuals (REACH Initiative, 2018).

Table 2. Sub-districts with the largest number of IDPs in the region of Idleb and surroundings.

(REACH Initiative, 2018)

Dana		377,916
Atareb		104,310
Salqin		86,451
Idleb		72,744
Ma'arrat An Nu'man		67,610

Due to the rapid demographic changes and movement of the inhabitants seeking safety, it is hard to distinguish social features to build any study on. However, it is paramount of importance to document these changes, analyse them, raising questions regarding the potentials and opportunities. (Alasali, Shahin, 2016).

In other words, understanding the war-based created socio-economic structure and its features, could be a key factor of achieving resilience. That could be done by correctly employing the newcomer expertise, potential high education levels and different occupations to change the factual situation.

4.3 Policies:

As in many developing or under developing countries, food and agriculture related policies have a crucial impact yet inconsistent and not transparent. The second prominent feature is the exchange rate misalignments due to Government interventions that resulted in many problems regarding export-oriented agricultural sectors.

The policy interventions have a history of unjust taxing, pricing, subsidizing some commodities on the favour of others. Syrian domestic agriculture continues to be subjected to significant and often non-transparent regulations (e.g. marketing constraints at the wholesale level prevail, and price controls at the retail level are still possible), and a wide range of tariff and non-tariff measures remain a handicap for the country's agricultural trade. (Wehrheim, 2003).

In the recent years the plummeting growth rate of the Syrian agricultural sector between 2006 and 2007 started to improve from 2007, and then between 2008 and 2009 it almost recovered from -9% to more than 8%. This also meant that the agricultural sector's contribution to GDP improved by 12% in 2009. Considering that the ratio of consumer price changes had peaked in Syria during 2008, it is interesting to see how agricultural policies have responded to that challenge. (Kim, 2010).

However, the state system that once supported and provided farmers with seeds, as well as purchased their crops, has been restricted by the war. (Tull, 2017).

Another classification of policies must be appointed, which are the rural areas administrative regulations. The rules that limited the development and potentials of the rural areas leaving it in a state of weakness on many levels.

5. Opportunities:

If we shall examine some of the main reasons behind the existent deficiencies in rural areas, we can name many, such as deteriorating education levels, unjust policies, poor infrastructure, gender discrimination and so forth.

Even though that multiple displacements have contributed to a significant deterioration in living conditions and exacerbated competition over land, natural resources and employment with host communities. (Cunial, 2016). Yet, from these challenges many opportunities could be stemmed. Thus, the newcomers' level of education, expertise, economy and different social background could help reshaping the situation in the area.

The severity of housing damage is unprecedented in both urban and rural areas, but due to simple rural buildings patterns the damage is incomparable. (UN HABITAT, 2014). The infrastructure, which had been already poor, was not affected as much as in the cities. The damage on other sector levels was also less compared to the situation in cities since there was already a lack in health, educational and administrative facilities.

On the policy making level, having a chance to dramatically change the regulations is paramount of importance since policies have huge impacts on the situation in the countryside regarding agriculture production and food security. (Anderson, 2003).

Whereas at taking care of built environment is essential for the aftermath phase, preserving and maintaining the damaged or partially damaged infrastructure or facilities might not sound always the correct decision.

Table 3. The table indicates the problem and the opportunity it could have created (Developed by the author)

problem	opportunities
Poverty	Employing the flows of support from NGOs and other potential sources to enhance the economic situation. Focusing on education as a main role player into overcoming poverty and spreading the culture of equity among all individuals.
Flows of IDPs	Integrating the IDPs in the society and exploiting the well-educated category into improving the current situation intellectually, socio-economically and physically. Planning for recovery and resilience through community-based approach and encouraging the IDPs to be a dynamic part of the later phases.
Unjust policies and lack of resources	Considering the war as a way out of the corrupted policy makers whom injustice and non-transparency have created a long history of suppression and marginalization. Taking the chance to establish a new, consistent and fair policies based on the actual needs and rights.
Physical damage	Thinking of the appropriate housing type regarding the poor existent infrastructure and cease the chance to rebuild the damaged parts appropriately. Considering the damage as a chance to rebuild based on new masterplans and focusing on facilities that were poor prior to the conflicts such as schools and healthcare centres.

6. Discussions:

- Studies show that education acts as the greatest transformational weapon to combat poverty. Poverty is inversely linked to levels of education. The studies also confirmed that even a modest improvement in education would necessarily reduce the number of poor people. The difference in the proportion of poor people in terms of educational status was comprehensive. In urban areas it affected 11.7% of illiterates, ranging to only 1.5% of university graduates. As regards equivalent rates in rural areas, these were 16.5% and 5% respectively. The foregoing confirms that poverty reinforces the lack of education, leading to a vicious circle of poverty and poor education. (*Sara, 2011*).
- The IDPs settling in the rural areas, could have difficulties integrating in the society since they come from different culture, social and educational backgrounds. In that context, many of them have either considered going back to their original cities or have already started. However, the individuals who have not considered leaving the rural areas could be directly or indirectly oriented to stay with the right tools and well-planned strategies. By offering promising visions they could be prompted to be involved in the resilience and sustainability plans. Economic, intellectual and social potentials that might be obtained by the new arrivals, could be considered a real key stone in shaping a better new community in the post-war era.
- With the chaos that usually follows every major disaster, policy making is one of many aspects to be affected. The current political and administrative situation in Syria is confused and managed by different agents. Moreover, the future of Syria is still unclear and blurry, having stable and well-

studied policies and regulations, at the meantime, is still hard. Hence, most of the sectors are encountering many difficulties and problems on different levels.

- Interestingly, whereas some are considering this kind of consequences as a curse, others might see it from different perspective. With a long history of oppression and corruption, old policies were getting even more rooted and needed a profound change that could not be done prior to the conflicts. What looks like chaotic circumstances now might be a base for better conditions in the future if managed and planned well.
- The damaging of infrastructure in the rural areas could be a chance to reconstruct better one from scratch given that the old existent one was poor and inconsistent with the needs of the people. Taking into consideration the relative easiness compared to big cities, this can be a good economic decision. At the same time, those partially damaged or weak infrastructure could be useful for housing, shelters and facilities that are meant to last for a short period of time.

7. Conclusions:

Since that rural areas in Syria became a centre for significant amount of population, collaboration and efforts on different levels must be made to combat deeply rooted problems paving the way into achieving resilience. Thus, to make improvements in the poverty, policy making, and demography issues, different measures and procedures are recommended:

- Strengthening agricultural productivity by providing temporary labour opportunities, delivering of agricultural inputs, supporting communities to identify new economic activities and repairing damaged infrastructure such as irrigation systems.
- The agricultural sector remains essential and will be key to Syria's future recovery. That's why recovery of the agriculture sector is needed to adapt to reduced use of water for irrigation, while at the same time coping with increased temperatures and more frequent droughts. Climate smart agriculture must also be considered.
- Regular mapping of the production regarding resources, capacity, prices and population. Moreover, incentives should be provided to seek long-term capital investments targeting both external resources and the newcomers of IDPs.
- Calling for profound changes in the policies of agriculture and food security regarding import, export in a way that increase its transparency and compatibility with international standards. From an economy-wide perspective, such policies would help Syria to develop and exploit its comparative advantage in agriculture to a greater extent.

- Regulations and administrative policies must be changed in the favour of equity and justice for the rural areas after decades of marginalization and neglect.
- Focusing on education as a key stone in achieving resilience by involving the expertise and capabilities of the IDPs in the process.
- Livelihoods analysis also needs to be strengthened, acknowledging the variety of strategies for host and IDPs, bearing in mind the potential opportunities that the IDPs could provide. Social, educational, economical and physical enhancements could be contributed to the area. The response would benefit significantly from coordinated livelihoods analysis, and collaboration to build strengthened inter-agency monitoring tools, that involve community stakeholders in analysis and findings.
- Poor or partially damaged infrastructure could be suitable for temporary housing. While totally damaged infrastructure should be reconstructed properly and based on the needs of the new community. Therefore, social mapping and analysis must be conducted to define the new structure of the society taking into consideration the returnees to their original cities or villages.

8. Future Work:

Due to the huge impact policies have on the socio-economic, education, agriculture sector and livelihoods in the rural areas, the future work will be an extend for this paper regarding policy making. The study will shed light on the needed changes of the policy making to become transparent and consistent with the new demands in the post war era.

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