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THESQUARE

SYRIAN ENVIRONMENTAL-RELATED MIGRATIONS AS A DIRECT CAUSE OF 2011 UPRISINGS: RELIABLE ASSESSMENT OR DETERMINISM?

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The present paper aims to critically investigate about the hypothesis that climate and environmental changes, and in particular the harsh 2006 - 2010 drought, can be considered one of the root causes of 2011 Syrian uprisings, since it is appointed as creator of human displacement from rural areas to urban peripheries, mainly in the north-eastern region. In particular, the author will focus on the analysis of this suggestion, proposed by some influent politicians, international organisations, NGOs and academics.

An alternative vision, which reject this sort of determinism, proposed by some scholars, who make a deep insight into the political and economic history of Syrian regime (Hafiz and Bashar

Al-Assad) will be taken into consideration, and the tie between climate migrations and conflicts will be re-examined in a more cautious way.

Environmental issues in Syria and in the West Asian region: causes and consequences

a. Regional environmental issues

As the United Nations Environmental Programme (UNEP) stresses, "[d]*espite their heterogeneous characteristics in geography, natural resources, political and social structures, and income levels, MENA countries share a common context of critical environmental challenges*" (Abumoghli & Goncalves, 2020: my emphasis). Moreover, the two authors underline how regional conflictual contingencies hinder the capacity of face, and instead increase, the environmental emergency, this latter potentially becoming an additional cause of clashes, thus plunging the region in a dangerous vicious circle.
In particular, Adriana Seagle identifies the following main environmental issues for the West Asian region: a) Water scarcity and water distribution since "*the Tigris, Euphrates, and Nile Rivers provide enough water for farming communities and electricity, but here the struggle over hydro-hegemony is visible*" (in Koch & Stivachtis, 2019). As she suggests, water-related issues are caused by waste, ineffective irrigation, lack of innovation as well as by the struggle for the hoarding of this essential good; Turkey, for instance, "*is working on 22 dam projects* [that] *could have destructive implications on the Euphrates and Tiger Rivers*" (*idem*). Moreover, as Borghesi and Ticci (2019) underline

"*Due to the combination of water and precipitation scarcity, high population growth and geographic concentration of the population, this is the most water-stressed area in the world*".

b) Desertification and pollution. These issues are caused by nature and above all by human activities and unsustainable habits like over-population, over-grazing, urbanisation and (as it will be treated below) unsustainable economic growth.
c) Beyond these two categories, always at regional scale, the global warming is severely affecting the West Asian and North African region: "*this region* […] *is becoming drier, exposed to peaks of extremely high temperatures and to water crises and chronic shortages*" (*idem*). Not only, the region's coastlines are highly threatened by the rising of see level.

All these environmental issues have serious and even dramatic *consequences* when they act together in countries which are not ready to adapt to this kind of challenges.
The agricultural sector, for instance, is very exposed, since it faces continuous reductions in crop productivity, exposure to flooding, increased water shortages "*as well as* [a] *worsening* [of] *working conditions or a limited ability to work on outdoor tasks*" (*idem*). This, in turn, can lead on the one hand to a condition of food insecurity for the whole region, thus obliging the countries to depend more and more upon costly food import, as pointed out by Durrell (2018). On the other hand, many peasants could be forced "*to abandon unproductive lands and economically depressed communities*" (*idem*).

b. Syrian national environmental issues

Syria has some peculiar environmental issues, due to its geography. They can be mainly identified in dry lands, water shortages and frequent droughts, that principally affect the agricultural sector, a crucial activity because of the nourishment of the population, as well as for the quantity of Syrians who work in this sector (still 22% of the GDP in 2009 according to the Al Arabiya Institute) (Mahamid, 2013).
Moreover, not only scientific studies notice some kind of changes in the Syrian climate and environment situation. Indeed, a study

group from the World Bank made a survey to around 800 households in northeast and east Syria, about their perception on climate change. Results were eloquent, as we can see from Table 1. As a matter of fact, 100% of the interviewed agree that in Syria: temperature is hotter, there is less rain, the rainy season starts later, the rainy season is shorter and there are more frequent droughts.

As claimed by the authors:

"*Perceptions of changes in weather patterns need not mean that weather patterns are actually changing or that climate change is actually occurring* […] *As to the reliance on data on perceptions, even if they may not always reflect reality very well, they are still an important entry point in trying to understand how changes in weather patterns of the environment affect household livelihoods, and how households respond to such events*. […] *Thus the information is valuable*" (Adoho & Wodon, 2014: 7, my emphasis)

	Country					Assets Quintiles					
	Algeria	Egypt	Morocco	Syria	Yemen	Q1	Q2	Q3	Q4	Q5	All
Changes reported by a majority of households											
Rain more erratic	81.7	43.6	91.1	99.6	71.6	76.8	74.4	78.0	79.8	78.6	77.5
Temperature is hotter	82.9	40.6	69.8	100.0	68.5	66.6	68.5	67.5	79.1	79.7	72.4
Less Rain	81.8	20.5	48.9	100.0	81.6	62.3	57.8	61.6	72.8	77.7	66.6
Land is dryer	64.5	13.8	73.0	98.3	74.6	63.4	65.5	65.1	65.0	65.2	64.8
Less fertile land	53.0	12.4	79.7	94.6	71.5	67.8	64.3	60.0	60.2	59.0	62.2
Rainy season starts later	51.9	12.1	71.4	100.0	67.2	46.4	58.6	62.3	66.0	69.1	60.5
Rain season is shorter	55.5	13.3	64.6	100.0	67.8	47.4	53.5	60.2	68.2	71.4	60.2
More frequent droughts	56.2	16.5	59.3	100.0	63.4	62.7	63.8	63.1	53.8	52.6	59.1
More diseases in animal and livestock	52.2	23.4	58.9	91.8	61.1	63.7	63.3	55.3	55.7	49.3	57.5
More insects and pets in crops	38.5	18.5	71.4	92.4	60.8	52.1	54.5	55.0	61.9	57.8	56.3
Less water in boreholes, rivers, lakes or streams	50.1	11.4	64.6	90.0	64.4	47.5	52.5	59.3	62.9	58.3	56.1
More air pollution	36.1	23.3	71.2	83.0	64.4	55.8	57.0	57.2	51.9	56.2	55.6
More frequent crop failure	41.7	21.0	65.9	87.0	61.2	62.8	59.2	59.9	50.6	44.9	55.4
Rainy season end earlier	39.2	15.1	54.3	99.8	61.6	47.8	51.3	62.2	55.1	53.8	54.0
More frequent livestock loss	47.6	17.5	56.1	88.1	53.0	63.3	55.7	53.9	49.8	40.1	52.5
More soil erosion	29.6	12.6	75.3	91.1	53.5	48.8	53.9	58.8	51.5	49.5	52.4
Changes reported by a minority of households											
More frequent sand storms	50.7	10.3	36.7	99.5	45.8	51.2	51.0	54.5	44.7	42.0	48.6
Temperature is colder	54.1	27.8	34.5	73.8	42.8	40.9	44.4	42.5	52.7	52.0	46.6
More water pollution in rivers, lakes, sea or steams	20.1	18.8	65.5	47.0	41.7	34.4	41.2	48.0	38.0	32.0	38.6
Deforestation and less trees	39.6	13.0	37.3	68.6	34.3	52.0	45.2	41.2	29.6	25.4	38.6
Less fish is rivers, lakes or sea	1.2	12.4	38.5	36.0	35.1	24.2	26.0	27.2	26.0	20.0	24.7
More frequent rain storms	21.2	9.8	59.4	0.1	16.9	25.8	28.3	25.2	16.6	12.0	21.5
More rain	15.1	20.8	52.0	0.0	17.5	23.6	27.5	28.5	15.3	11.1	21.1
More frequent floods	17.8	3.5	58.2	0.0	7.6	21.1	22.4	23.6	12.1	8.5	17.4

TABLE 1: Perception of climate change (Adoho & Wodon, 2014)

However, only in part these troubles are caused by external, natural factors or the anthropogenic climate change. As underlined by De Châtel (2014: 523ss.) droughts are part of the semiarid climate that characterize Syria. Therefore, it is the *socioeconomic impact* of the droughts that is much greater than in the past, not the droughts *per se*. And, for what concerns the causes, as pointed out by the author it is "*the mismanagement and overexploitation of resources* [that are] *at the root of desertification, not drought or climate change*" (*idem*).

What can be argued, then, is that we should be extremely cautious in addressing a central role in climate change alone in creating crucial events like migrations and, eventually, strains that can lead to wars. What makes the difference in facing the climate and environmental issues is the capacity of adaptation and resilience of a country. Indeed, what Syria and WANA countries in general need is a strategy

"*for strengthening the resilience of rural communities across the* […] *region, addressing their immediate vulnerability to climate variability and extreme weather events, and enhancing their long-term adaptation to hotter and drier conditions over the course of this century*" (Durrell, *op. cit.*: 9).

Environmental migration as a cause of new wars: the case of Syria (?)

As Selby *et al*. point out "*in the view of many Western policymakers and commentators, the Syrian civil war was caused, in part, by anthropogenic climate change*" (2017: 232). In particular, according to the thesis followed by many, the severe drought of 2006 – 2010, allegedly due to the anthropogenic climate change, would have caused the displacement of hundreds of thousands of persons from Syrian rural northeast towards urban peripheries of

the nearest cities. This migration, in turn, would have exacerbated the already difficult socio-economic situation of the cities; and eventually, the urban protests following these strains have been appointed as crucial sparks of Syrian uprisings of 2011 and the following civil and international war.
However, the exceptional drought does not seem to be the only environmental issue of the country that could be considered at the basis popular uprisings, and they focus on the causes of those problems; in fact, some other troubles bound to the mismanagement of Syrian environment, that trace the origins back in the past decades, might have directly or indirectly been among the causes of the revolts, too, such as a harsh "*extractivism*" (Gürcan, 2019): the economic policy of exploiting oil and gas reserves, upon which Hafiz Al-Assad has relied on for decades.

Syria's one is not the first paradigm for which war is considered the extreme consequence of a climate migration. Indeed, the Darfur war (2003 – 2007) has been appointed by a number of very influent personalities as a conflict in which "*human-induced climate change was an important contributing factor*" (Mazo, 2009: 73): former UN Secretary-General Ban Ki-moon and former US Vice President Al Gore are two prestigious voices of this bold opinion in 2006.

In the same way for the Syrian case, Selby (op. cit.) lists a series of central decision-makers like former US President Barack Obama, former Secretary of State John Carry, Bernie Sanders, as well as International Organisations, NGOs, etc., who and which have argued that the 2006 – 2010 drought is one of the causes of the Syrian uprisings and subsequent war.

However, in his eloquently titled essay "The climate wars myth", Bruno Tertrais maintains:

"*When United Nations Secretary-General Ban Ki-moon, along with others, claims that climate change is probably one of the key causes of the Darfur conflict, those who*

perpetrated the massacres should applaud, for it partly absolves them of their own responsibilities" (2011: 20, my emphasis).

The same assumption and this very cautious attitude towards a climate determinism should be made in analysing 2011 Syrian uprisings, too. An indeed,

"*It is important to consider the 2006–10 drought and its possible role in triggering the 2011 uprising in the broader context of 50 years of resource mismanagement, rapid economic liberalization, the abrupt cancellation of state subsidies and the government's failure to address a humanitarian and environmental crisis that had been taking shape for more than a decade*" (De Châtel, op.cit.: 532, my emphasis).

What is very important to underline, then, is that Syria has had very unsustainable industrial and economic policies in the last decades, like a dangerous reliance on petroleum extraction and, subsequently, a full opening towards global capitalism. Undeniably, Hafiz Al-Assad' industrial regime of *extractivism*, together with the strong economic liberalisation imposed by Bashar Al-Assad in the 2000s after the depletion of oil reserves (Hinnebusch, 2012), provoked important damages to the environment as well as to the society in general. Indeed, the majority of the massive foreign investments that invaded Syria from the 2000s have concerned "*speculative and unproductive sectors such as real estate, finance and tourism, to the detriment of the productive sector and infrastructure investments*" (Gürcan, *op.cit.*: 8). This strategy, together with the end of the distribution of many subsidies to the population contributed to raise inequalities among Syrians, with a little portion of the population getting very rich while the vast majority was becoming poorer.

Conclusions

In the end, it is very important to stress all the limits of the deterministic approach that has sometime been used as reading grid, and according to which the 2006 - 2010 drought *per se* and consequent migrations towards north-eastern cities' peripheries is one of the causes of the Syrian uprisings of 2011.

The vision of the author is definitely the same reported in 2014 by Francesca de Châtel, according to whom: "*it was not the drought per se, but rather the government's failure to respond to the ensuing humanitarian crisis that formed one of the triggers of the uprising*" (op. cit.: 522, my emphasis).

Indeed, what could be very dangerous is that having a determinist approach would furnish easy solutions by directly linking a drought to civil unrests that degenerated into an international war and produced almost 6 million refugees and 5.2 million internal displaced people (according to FAO). Actually, this vision would lift Syrian government and all the decision-makers from their responsibilities, when it is the same government that crucially contributed to create such a fragile environment through its unsustainable policies. In fact, Syria, as well as many other WANA countries, is not enough resilient nor it has an adequate capacity of adaptation towards environmental crises nowadays. And this must be identified as precise political choice, not as a deterministic event.

In conclusion, what the author believes is that climate and environmental change can be well appointed as "*threat multiplier*", but they should be very cautiously considered as direct causes of uprisings and wars. Indeed, what is at stake here is the responsibility of the decision makers about economic policies in disregard of sustainability, as well as their lack of investment in adaptation and resilience, which are among the real causes of 2011 Syrian civil unrests.

Definitely, the climate-related migrations must not take responsibility away from the decision-makers. On the contrary governments should immediately invest in resilience in order to "*limit involuntary climate-induced displacement and give people the option of remaining where they are to build productive livelihoods*" (Durrell, *op. cit.*).

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