



universität
wien

المركز السوري
لبحوث
السياسات
Syrian Center For
Policy
Research



The Impact of the Earthquake in Syria

The Missing Developmental Perspective in the Shadow of Conflict

August - 2023

Contents

Acknowledgment	4
Executive Summary	6

1.

Political, Social, and Economic Structure Before the Earthquake 12

1.1. The Margin of the Margins Before the Conflict	13
1.2. The Impacts of the Conflict	15
1.2.1. Aggravation of Political and Institutional Tyranny	15
1.2.2. New Levels of Economic Collapse	17
1.2.3. Inhumane Living Conditions	20
1.2.4. Evanescence of Development Foundations	23
1.2.5. Loss of Social Trust	26

2.

Direct and Indirect Impacts of the Earthquake 28

2.1. Developmental and Social Impacts	29
2.2. Economic Impacts	33
2.2.1. Loss of capital stock and households' furniture	33
2.2.2. Loss of Gross Domestic Product	36
2.2.3. Loss of Employment	38
2.2.4. Prices and Poverty Rates Hike	40

3.

Response to the Earthquake: Failure of Political Powers and Continuation of War Foundations 42

4.

Discussion and Recommendations: Developmental Options	50
References	56
Appendixes	58

List of Tables

Table (1): Earthquake deaths and injuries in Syria by governorate and control area.	29
Table (2): Damaged and destroyed buildings due to earthquake in Syria by governorate and control area.	33

List of Figures

Figure (1): Economic Index in Syria during the period (2020-2022)	18
Figure (2): Living Conditions Index in Syria during the period (2020-2022)	20
Figure (3): Human Development Index in Syria during the period (2020-2022)	23
Figure (4): Social Capital Index in Syria during the period (2020-2022)	27
Figure (5): Ratio of estimated capital stock and furniture loss	35
Figure (6): The rates of GDP contraction in 2023 due to the earthquake	36
Figure (7): Total direct economic losses from the earthquake in Syria	37
Figure (8): Increase in unemployment rates due to the earthquake in Syria	38
Figure (9): Monthly inflation rates in the four affected governorates after the earthquake	40
Figure (10): abject and overall poverty rates before and after the earthquake in the affected areas (2023)	41
Figure (11): Impact of the Earthquake on the Poverty Gap in the most affected governorates (2023)	41

List of Appendixes

Appendix (1): Methodology for the analysis of the earthquake disaster in Syria	59
Appendix (2): Distribution of earthquake impacts by governorate, administrative division of the governorate, and control area.	60
Appendix (3): Earthquake's direct and indirect impact framework	61

Acknowledgment

The report was written by the Syrian Center for Policy Research team: Rabie Nasser, Wajdi Wahbi, Mohammad Kiki, Mohammad Al-Asadi, Ramia Ismail and Nabil Marzouk, in cooperation with the field researchers' team. The administrative work was coordinated by Rabe Bana. The work team extends its sincere thanks to the rich notes and comments provided by Petra Dannecker, Klaudia Wieser, Omar Dahi, Samer Jabbour, Fadi Dayoub, Sawsan Abou Zainedin, Abdullah Hassan, Ayman Aldassouky, and Yamen Ballan.

The research was carried out within the Know War 2 project, which is implemented in cooperation between the University of Vienna, the Research Center for Alternative Development, and the Syrian Center for Policy Research, which is supported by a grant from the Carnegie Corporation of New York.

Acronyms and Abbreviations

AA	Autonomous Administration
ACU	Assistance Coordination Unit
CBS	Central Bureau of Statistics in Syria
CPI	Consumer Price Index
ECI	The SCPR's Economic Index
EU	European Union
HDI	The SCPR's Human Development Index
GDP	Gross Domestic Product
GoS	Government of Syria
INF	Inflation Rate
LCI	The SCPR's Living Conditions Index
M-o-M	Month on month
SCD	Syria Civil Defence
SCI	The SCPR's Social Capital Index
SCPR	Syrian Centre for Policy Research
SIG	Syrian Interim Government
SYP	Syrian Pound
SSG	The Syrian Salvation Government
UN	United Nations
USD	United States Dollar
WFP	World Food Programme
WHO	World Health Organization
Y-o-Y	Year on year

Executive Summary

On the morning of February 6th of 2023, the southern regions of Turkey and northwestern Syria were hit by a devastating earthquake unlike any other one witnessed in the region for decades. The earthquake had a catastrophic effect on Syria, a country torn by war. It shocked Syria's marginalized and previously besieged northwest areas. The

earthquake's losses were deepened by the poor response of international powers, the negative role of internal conflict forces, and the weak institutional development and relief structures in all regions. In this context, this report analyses the repercussions of the earthquake disaster and evaluates its primary direct economic, social, and institutional effects.

Before the Earthquake

The affected regions lived in a state of political fragmentation. Dominant conflicting political forces imposed themselves as de facto authorities centered around the military and security apparatus. Regional and international external powers controlled political and military decision-making and institutional work in all areas of control. Despite the continuous change in the geopolitical situation in the region during the past twelve years, the dominance of the military and security agencies based on oppressive policies and identity politicization has continued.

The economic situation and living conditions in Syria have deteriorated in the last three years despite the decline in the intensity of the military battles, and this is reflected in the continued contraction of the economy by about 20 percent between 2020-2022, the increase in dependence on foreign aid, which amounted to about 30 percent of the GDP, and the increase in the trade deficit, public debt, and

hyperinflation rates. The right to access health and education continued to be lost, adding to the suffering of the forcibly displaced, who constitute 30 percent of the population, and the 91 percent of Syrians living in poverty. The deterioration of social trust has worsened on several levels throughout Syria. Trust among individuals has been affected by various authoritarian practices such as killing, enforced disappearance, torture, siege, the policy of starvation and collective punishment. In addition, the oppression of women and their deprivation of the most basic rights has increased.

The Earthquake's Impact

The study showed that the earthquake led to thousands of casualties among Syrians in the affected areas. Their number reached 10659 (4267 in Turkey). The number of earthquake victims inside Syria reached 6392 casualties and 11829 injuries. The most significant impact of the earthquake was concentrated in the northwestern regions of Syria, especially in Idlib Governorate, with 2985 deaths.

According to SCPR's estimates, until the first week of March, more than 170,000 people were displaced by the earthquake. They were distributed between 155,000 IDPs in northwestern Syria and 15,000 in Syrian government areas. Many of those displaced by the earthquake joined already-existing shelter camps or the newly-established camps to accommodate the large numbers of recent IDPs.

The earthquake also affected the fragile healthcare sector due to the ongoing conflict. Thus, it could not meet the increasing demands for rescuing the injured and affected individuals in many areas. Reports monitoring communicable diseases showed a rise in cholera, acute diarrhea, and respiratory diseases in various regions. The education process in the earthquake-affected areas was also impacted, as several schools were destroyed, damaged, or converted into centers for housing the affected individuals.

The total number of partially or completely damaged buildings throughout Syria

reached 12796, of which 2691 were destroyed. Idlib Governorate had the highest share of damaged buildings at around 46.6 percent. The northern countryside of Aleppo followed, accounting for approximately 34 percent of the total damaged buildings. Meanwhile, the number of damaged buildings in Aleppo City reached 997, with more than half destroyed. On the other hand, Lattakia Governorate had 225 collapsed buildings.

Losses in capital stock and household wealth of furniture and equipment amounted to 0.8 percent at the national level. Capital stock losses in Idlib reached 6.9 percent of the governorate total, compared to 2.1 percent in Aleppo. However, the estimates in Lattakia and Hama amounted to 6 and 3 per thousand, respectively. Such losses in accumulated wealth constitute severe damage to the economy at the national level in general and to the affected regions in particular, which need long years to compensate. At current prices, SCPR estimated the value of replacing capital stock and furniture at about USD 2.23 billion.

The results show a decline in the national GDP in 2023 due to the earthquake by 2.2 percent. At the local level, it declined by 16.2 percent in Idlib, and 4.4 percent in Aleppo, while in Lattakia and Hama, economic contraction rates were significantly lower, estimated at 5 per thousand and 3 per thousand, respectively. Estimating the losses in GDP is directly related to the time required to compensate for the losses

in economic, human, and governance resources.

GDP losses are estimated at USD 3.62 billion. Added to losses in capital stock and household furniture and equipment, the total direct economic losses reached USD 5.85 billion. The direct losses of the earthquake constitute about 33 percent of GDP in 2022, indicating the significant relative impact of the earthquake and considering the catastrophic state of the economy due to twelve years of conflict.

The earthquake caused significant losses in employment opportunities, leading to an increase in the unemployment rate by approximately 1.8 percentage points nationwide (equivalent to 90 thousand job opportunities). Inflationary pressures also increased due to the earthquake, leading to a sharp rise in prices. The monthly inflation rate in GoS-controlled areas (Hama, Latakia, and Aleppo city) ranged between 5.6 percent and 10 percent after the earthquake compared to January 2023. Prices also increased in Idleb governorate by 4.2 percent and in rural Aleppo by 2.2 percent.

The above situation represents additional deterioration in real household income rates and threatens further economic contraction. The results indicate increased abject poverty rates due to the earthquake by about 10.5, 3.8, 0.4, and 0.1 percentage points in Idleb, Aleppo, Hama, and Latakia, respectively. In addition, the gap between the average spending of poor households and the overall poverty threshold widened.

The overall poverty gap increased from 52 percent to 59 percent in Idleb and from 45 percent to 47 percent in Aleppo.

Social solidarity following the earthquake was mainly humanitarian through the high level of response by civil society, local initiatives, and the private sector.⁽¹⁾ It showed a culture of social solidarity in the face of adversity, an essential factor in overcoming the social degradation that affected Syrians through the conflict.

(1) Syrian Center for Policy Research. (2023). [SCPR Field Survey to Track the Earthquake's Impacts: Social solidarity following the earthquake.](#)

Responses

Local political forces failed to respond to the disaster and exploited it to achieve their political interests. The GoS response was characterized by discrimination, politicization, evasion of responsibility, and lack of effectiveness. The government was late mobilizing resources to address the earthquake's impacts or resorting to international mechanisms to help the affected. Local initiatives to mobilize donations, volunteers, and aid delivery were constrained by requesting security approvals or restricting aid to institutions close to the authorities. However, the most dangerous aspect was the government's disregard for direct response or for requesting international support in areas outside its control.

The Syrian Interim Government (SIG) and the Syrian Salvation Government (SSG) failed as governing authorities responding to the earthquake. They did not adopt a clear strategy to address the disaster and demonstrated a weak ability to coordinate or mobilize resources, including the military, to assist the affected population. They also shifted the burden onto civil society and international organizations and continued to use the catastrophe to deepen division and reject opening spaces for cross-regional solidarity.

The international response was also distressing. UN and donor country interventions clearly differentiated between Turkey and Syria, on the one hand, and between the various areas of control inside Syria, on the other. The UN

response to the earthquake in the affected areas was not immediate. It did not send equipment and rescue teams under the pretext of border closures. However, the UN did not advocate opening them, and it took a whole week for the first UN convoy to enter Syria. The discrepancy in the flow of material aid to northwest Syria and the GoS areas was one of the worst manifestations of political fragmentation. Although they had felt the brunt of the disaster, aid to northwestern areas was hindered, compared with the ease of aid access to the GoS areas.

In contrast, civil society's response was the most effective and dynamic. Particularly in northwest Syria, civil organizations and initiatives contributed to mobilizing volunteers and saving thousands of lives despite the severe shortage of resources and equipment. These civil organizations often operate within a narrow space restricted by the arbitrary policies and bureaucracy of the de facto forces, in addition to tightened security scrutiny that aligns with their political agendas.

The report presents an alternative developmental approach to address the earthquake's repercussions. It is based on the importance of approaching a just and sustainable political settlement, with a central role for Syrian societal forces in developing options for overcoming the conflict and building a developmental transformation model. Therefore, the approach focuses on:

- investing in social solidarity and restoring respect for society at home and abroad;
- shifting from the service role of civil society to an active political and developmental role in the public space;
- expanding the possibilities of holding political and military conflict forces accountable;
- developing the role of civil organizations and initiatives in establishing anti-conflict, authoritarianism, and fragmentation governmental structures;
- adopting the social solidarity economy as one of the possible alternatives to transforming from war economies and focusing on investing material and human resources away from exploitation, militarization and depletion of the environment;
- linking political, social and economic actions and strengthening the developmental foundations of society so that it can influence the course of overcoming the conflict and the earthquake's effects.

Civil society and local initiatives could play an effective role based on an alternative approach to recovery from the earthquake. However, the role requires more effective coordination and building an equal relationship with partners, including international organizations. Civil forces across the regions should also take the initiative to lead the humanitarian aid system, to be responsible for partnership with society, to set priorities, and to carry out implementation under societal accountability.

Introduction

On the morning of February 6, 2023, a devastating earthquake struck the regions of southern Turkey and northwestern Syria. The earthquake's catastrophic effects were not limited to material and human losses. They extended to economic, social, and even political structures throughout Syria. This report presents preliminary monitoring and analysis of the effects of the disaster on Syria in general and on the most affected areas in particular, which mainly include the governorates of Idleb, Aleppo, Latakia, and Hama. The report briefly analyses the political, social, and economic structures in the most affected areas before and during the conflict. Understanding these structures and dynamics is a basic entry point for understanding the dimensions of the disaster and the extent to which its results, effects, and the responses of the main actors related to the structural distortions prevailing before the earthquake.

This preliminary analysis of the earthquake disaster draws on a composite framework of political economy and capabilities approaches. It adopts a participatory, interdisciplinary methodology in the research design and implementation. On the one hand, the report is based on the research, studies, and surveys carried out by SCPR's team during the years of the conflict, aiming to analyze the developmental situation of the earthquake-affected areas (Appendix 1). On the other hand, it relies on the results of the earthquake damage assessment carried out by the field research team, in

which the most important direct effects of the earthquake were monitored economically, socially, and institutionally.

The proposed framework for analysing the effects of the earthquake in the Syrian context includes a diagnosis of 1) The institutional structures, the active political and social forces, their changing roles before and during the conflict, and the nature of their response to the disaster; 2) The nature of social relations, levels of trust, cooperation, solidarity, shared values and customs, and societal interaction with the disaster; 3) The structure of the economy, the mechanisms of production and distribution, and the role of conflict economies; 4) The role of external powers politically, socially and economically, including humanitarian aid systems.

This report's earthquake analysis goes beyond being a mere natural disaster. The worsening of the impact of any natural disaster after the first shock is linked to the political, social, and economic foundations, systems, and actors in the afflicted region or society. Therefore, the final impact of the disaster depends on the ability of the prevailing regimes to respond sustainably through institutions, policies, initiatives, and interventions.

The report is structured as follows: First, the political, social, and economic structure before the earthquake; second, an assessment of the effects of the earthquake; third, the nature of the response by the institutions and actors; finally, the developmental options.



Political, Social, and Economic Structure Before the Earthquake

1.1 The Margin of the Margins Before the Conflict

The country was characterized by decades of authoritarian political rule. Political life was suffocated, and public institution functions were distorted. Accountability was absent, and security and military forces dominated. The wealth and resources were exploited for the benefit of the dominant political and economic elite. The developmental role of the state witnessed a radical change. Development policies had focused on “development at a minimum” through investment in infrastructure, public employment, public services, and support for primary commodities. Corruption spread, participation was absent, the quality of public services deteriorated, and economic opportunities were monopolized.

The state’s role in providing basic services has shrunk since the 1980s. The trend was aggravated in the first decade of the millennium with the broad implementation of neoliberal policies that concentrated wealth in the hands of a narrow elite of influential people. Stifling of political opinion followed, accompanied by unprecedented levels of inequality, marginalization, and waste of public resources. The economy’s ability to create job opportunities also declined in the first decade of the millennium, as employment rates, labor force participation, and real wages all dropped, and the expansion of informal work led to increased poverty rates.⁽¹⁾

The geographic disparity represents

one of the manifestations of the failure of the development model. Before the conflict, large parts of Syria suffered from systematic marginalization, poverty, limited job and investment opportunities, and poor education and health services. The disparity became evident in the eastern region (Al-Jazeera) and the northern region (Aleppo and Idlib, except for the city of Aleppo). The eastern region suffered from deprivation and marginalization, despite producing most of the country’s oil and grains. In Aleppo, the most prominent manifestations of inequality have emerged between the city (the industrial capital) where wealth and power are concentrated, and the countryside, which suffers from extreme deprivation. In the same context, evidence indicates increased marginalization in some areas affected by the earthquake even before the conflict, for example.

The increase in poverty rates: The overall poverty rates in rural Idlib were considered the highest nationwide in 2009, reaching 41 percent at a time when the national poverty rate was 24 percent. Similarly, rural Aleppo suffered from high poverty rates in 2009, while poverty rates in Hama were close to the national average. In Latakia, the poverty rate was significantly lower than the national average, reaching 16 percent in the same year. Aleppo, Idlib, Latakia, and Hama all witnessed a decline in employment rates, with industrial employment opportunities

(1) Syrian Center for Policy Research. (2013). [Socioeconomic Roots and Impact of the Syrian Crisis 2013](#).

concentrated in Aleppo, while Lattakia had the highest employment rates in the public sector.⁽¹⁾

The deterioration of education: The illiteracy rate among females in rural Aleppo reached 46 percent in 2010, the third-highest rate after rural Deir-ezzor and Ar-Raqqa. This rate was 26 percent in rural Idlib, 24 percent in rural Lattakia, and 23 percent in rural Hama, while the national average for illiteracy among females in rural areas was 30 percent. The illiteracy rate among males was 17 percent in rural Aleppo, 9 percent in rural Idlib and Lattakia, and 8 percent in rural Hama, while the national average was 11 percent. For comparison, the illiteracy rates in Damascus were 9 percent for females and 4 percent for males.⁽²⁾ These indicators demonstrate high levels of deprivation (very high illiteracy rates) and significant disparities between rural and urban areas, governorates, and, most importantly, between males and females. They reflect the significant development imbalance affecting the earthquake-affected areas. Notably, indicators of dropouts from primary and secondary education show similar trends to illiteracy rates.

The inequality in accessing healthcare: Health indicator rates, such as the under-five mortality rate, are high in Idlib and Hama at around 27 per thousand live births, compared to 26 in Lattakia and 19

in Aleppo, including the city, compared to the national rate of 21.⁽³⁾ The average population-to-doctor ratio is 1186 in Idlib, 790 in Aleppo, 708 in Hama, and 563 in Lattakia, while the national average is 661. Indications from public health and healthcare systems also suggest general neglect of rural areas, particularly in Aleppo and Idlib.⁽⁴⁾

(1) Syrian Center for Policy Research. (2010). *Poverty in Syria 2009*. Unpublished study based on the household income and expenditure survey in Syria 2009.

(2) Central Bureau of Statistics. (2010). *Labor Force Surveys in Syria 2009-2010*.

(3) Central Bureau of Statistics. (2009). *Household Health Survey in Syria 2009*.

(4) Central Bureau of Statistics. (2012). *Statistical Yearbook of Syria 2011*.

1.2 The Impacts of the Conflict

1.2.1 Aggravation of Political and Institutional Tyranny

The societal movement in 2011 was a revolt against the political oppression that led to an “institutional suffocation” represented by the failure in governance, inequality, and marginalization. The political regime adopted a security-military strategy to crush the movement, using armed violence, collective punishment, and politicizing identities.⁽¹⁾ It led to unprecedented political tyranny, injustice, and gross violations of rights and freedoms. The interventions of regional and international powers played a crucial role in militarizing the movement and deepening societal divisions and dependence on external forces.

Throughout the years of conflict, studies on population, citizenship, and justice conducted by SCPR have revealed a deepening state of political fragmentation under the dominance of conflicting political forces that have imposed themselves as de facto military-centered authorities and were subordinate to regional and international external powers dominating the political and military decision-making process and the functioning of institutions in all areas of control. Despite the continuous changes in the geopolitical situation in the region over the past twelve years, the domination of military and security forces based on policies of oppression and politicization of identity has continued.

In this context, the necessary spaces for Syrian citizens to build political and social consensus have vanished. Political instability has been exacerbated by the continued systematic violence, the absence of policies to build trust and gain societal support, and the absence of effective political participation and representation channels. The de facto powers are tightening the available spaces for thinking, expression, and organization while allowing channels controlled by political, social, economic, and ideological elites loyal to the authorities or foreign powers to operate. It resulted in a systematic marginalization of the vast majority of social segments, accumulating a general state of frustration and despair while strengthening the emergence of clientelism governed by power relations.

Fragmentation and political tyranny have impacted the role of public institutions, which have become tools for collective punishment, looting, and imposing domination at the expense of citizens. Human and material resources have deteriorated, and corruption and clientelism have become more prevalent than before the uprising. Systematic discrimination based on political and ideological affiliations, nationalism, and sectarianism has spread, along with economic and social divisions that grant privileges to those close to the authorities. The democratic and developmental

(1) Syrian Center for Policy Research. (2022). [Identity Politics in Syria](#).

project was absent from the literature and practices of the dominant forces, and the most dangerous legacies of the conflict were formed, represented by political systems that monopolize power through force, violence, external support, and entrenchment of the exploitation and devastating of human, social, cultural, and material resources.

The regions affected by the earthquake are divided among several local and international political forces, where the cities of Aleppo, Hama, and Lattakia are under the control of the Syrian government (GoS), relying on direct Russian and Iranian support, with significant influence of security agencies and Baath Party structures on public institutions. The rural areas of Aleppo are under the control of the Syrian Interim Government (SIG), which derives its authority from its affiliation with Turkey, and the factions of the National Army dominate the actual decision-making process, relying on conflict economic activities and borders' revenues. It is worth mentioning that the local councils play a major role in providing public services based on humanitarian aid and Turkish funding. Meanwhile, the institutions in the areas controlled by the Syrian Salvation Government (SSG) are subject to the forces of Hay'at Tahrir al-Sham, which adopts exclusionary identity policies. Like in other areas of control, institutions lack transparency and integrity, human resources lack efficiency and qualifications, and corruption and favoritism are

systematically practiced, often leading to discrimination and granting privileges to individuals associated with Hay'at Tahrir al-Sham in military, economic, and social fields.

Civil society and community-based organizations and initiatives of varying sizes and legal frameworks are present throughout all regions of Syria. They primarily focus on relief and service aspects in their operations and occasionally address rights and development issues. Some organizations are based on traditional tribal, religious, and regional affiliations, while others are based on civic affiliations. They often operate within a narrow civic space constrained by arbitrary policies, bureaucratic procedures, and tightened security measures of the de facto powers that align with their political agendas. These organizations suffer from a severe lack of resources, making them reliant, in many cases, on their donors' agendas. They also lack governance structures, monitoring mechanisms, and codes of conduct and suffer from inconsistency and irregularity in service delivery, making them unable to meet increasing needs.

1.2.2 New Levels of Economic Collapse

In recent years, despite a decline in direct military operations, the dominant forces have continued to entrench the foundations of conflict economies by distorting public institutions and diverting human and material resources in favour of conflict elites. This situation appears in the absence of the rule of law and the dominance of military and security forces over most of the resources, and the pursuit of policies of destruction, looting, seizure, or expansion of illicit economic activities, and exploiting humanitarian aid.

These conflict-centered policies are associated with an economy that has suffered from systematic destruction over the years of war, affecting material and natural resources and resulting in unprecedented human capital losses through killing, torture, displacement, siege, exploitation, discrimination, and working under inhumane conditions. Conflict parties have sought to turn the economy into a tool subjugating and sustaining the conflict. The distortion of the economic system has contributed to shifting the burdens of the war onto citizens and small investors and providing opportunities to conflict elites and dominant foreign powers, further eroding trust between society and public institutions.⁽¹⁾

The foundations of conflict economies are concentrated in the areas most affected by the earthquake. Aleppo, Idlib, and the countryside of Hama were subjected to systematic destruction during military operations, in addition to siege and displacement amidst political fragmentation and the absence of security and stability. In recent years, no significant effort has been made to restore a healthy economic life. Rather, the exploitation continued with reliance on aid to meet emergency needs.

As a result of these policies, the economic situation has deteriorated, as evidenced by the “Economic Index”⁽²⁾ issued by the SCPR, which indicates a deepening of the deterioration throughout Syria over the past three years. The index decreased from 0.28 in 2020 to 0.24 in 2021 and reached 0.21 in 2022. All governorates performed poorly, with the economic index at 0.21 in rural Aleppo, 0.23 in Aleppo City, 0.25 in Hama, 0.24 in Latakia, and 0.19 in Idlib by the end of 2022 (Figure 1). This is reflected in a continued contraction of the economy by around 20 percent and 1 percent in 2021 and 2022, respectively. The contraction has not been limited to the agricultural sector, affected by drought, but also extended to the manufacturing, mining, energy, trade, transportation, government services, construction, and infrastructure sectors. The economy also suffers from a severe shortage of energy

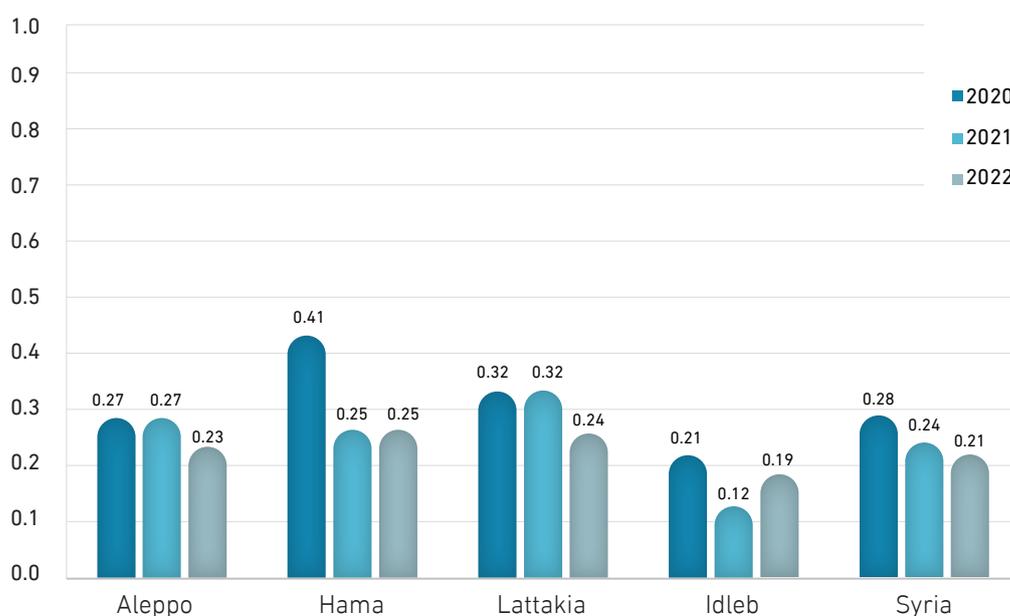
(1) Syrian Center for Policy Research. (2020). [Justice to Transcend Conflict](#).

(2) The Economic Index (ECI) is a composite index that ranges from 0 to 1, and is composed of three sub-indicators: the economic activity index, the infrastructure index, and the living conditions index. 0 represents the worst score while 1 represents the best score according to this scale.

carriers, financing sources, and domestic demand in an investment environment focused on conflict economies. In addition, the economy has become heavily reliant on external aid, which amounted to around 30 percent of the gross domestic product. In comparison, the trade deficit reached around 70 percent of the GDP in 2022, given the continuous reliance on imports, which amounted to about six times the exports.

The public budget deficit reached 50 percent of the GDP, with public spending concentrated on the military, security, energy carriers, and wages, accompanied by the contraction of public investment. These deficits have led to the economy's dependence on external forces, surpassing the debt-to-GDP ratio of 250 percent in 2022.⁽¹⁾

Figure (1): Economic Index in Syria during the period (2020-2022)



Source: Syrian Center for Policy Research (2022). [Socio-economic assessment surveys in Syria from 2020 to 2022](#)

(1) Estimations of the Syrian Center for Policy Research.

The economic deterioration has been reflected in the continued high unemployment rates, which have risen in the past two years to reach 43 percent, crippling individuals' ability to participate in economic activity. The accompanying loss of educational and training opportunities negatively affected human capital in terms of quantity and quality. Expanding military and security activities has also led large segments of youth to engage in the conflict directly. In addition, there has been a trend toward engaging in illicit activities such as smuggling and drug trafficking. Decent working conditions were absent during the conflict, especially with the scarcity of opportunities, desperate need for work, and systematic policies that exploited individuals and resources. Favoritism and security measures prevailed over work seekers, and discrimination based on political and social affiliations and gender became widespread. Meanwhile, real wages deteriorated, social protection was absent, and child labor became prevalent in an unstable and unsafe environment.⁽¹⁾

Before the earthquake, the economy experienced a state of hyperinflation. Monthly price surveys by SCPR indicate a more than eightfold increase in the general price index in 2022 compared to 2019. The consumer price index recorded annual inflation rates (Y-o-Y) of 113 percent in 2020, 110 percent in 2021, and 85 percent in 2022. Prices and inflation levels vary between governorates affected by the earthquake. In 2022, the annual inflation

rate reached 89.5 percent in Hama, 80.7 percent in Lattakia, 91.7 percent in Idleb, and 88.7 percent in Aleppo.⁽²⁾

(1) Syrian Center for Policy Research. (2020). [Conflict Economies in Syria: Roots, Dynamics, and Pathways for Change](#).

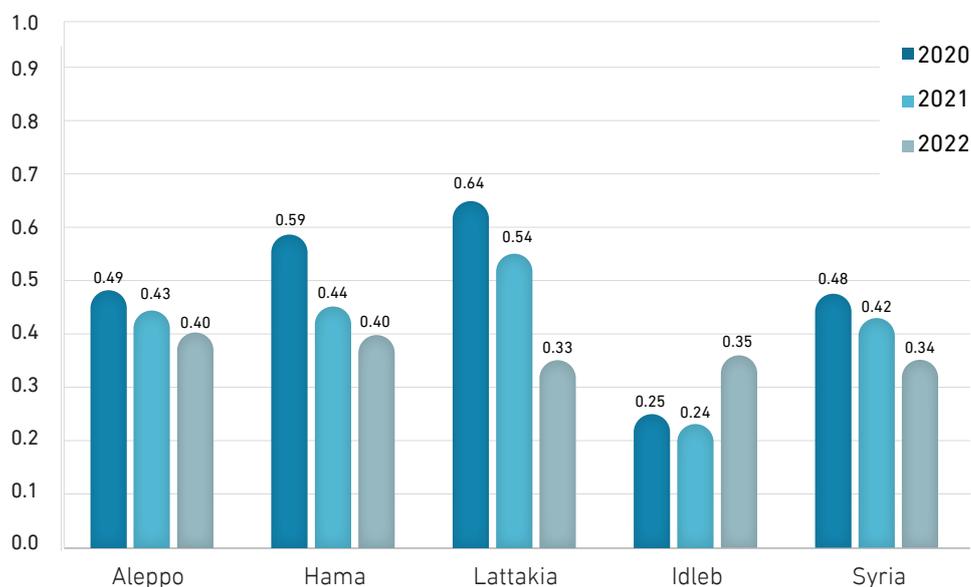
(2) Syrian Center for Policy Research, (2023). [SCPR'S Annual bulletin for consumer price index and inflation in Syria 2022, Issue 1](#).

1.2.3 Inhumane Living Conditions

The leading indicators of surveys on the economic and social conditions conducted from 2020 to 2022 showed a renewed deterioration in Syrians’ economic and living conditions. The “Living Conditions Index”⁽¹⁾ (LCI) published by SCPR significantly deteriorated across Syria,

reaching a value of 0.34 in 2022, down from about 0.42 in 2021 and 0.48 in 2020. The deterioration was evident in all governorates, with the LCI reaching 0.4 in Aleppo and Hama, 0.33 in Lattakia, and 0.35 in Idleb by the end of 2022 (Figure 2).

Figure (2): Living Conditions Index in Syria during the period (2020-2022)



Source: Syrian Center for Policy Research (2022). [Socioeconomic assessment surveys in Syria from 2020 to 2022](#)

(1) The Living Conditions Index (LCI) is a composite index that ranges between 0 and 1 and consists of 7 sub-indicators: housing quality index, household appliances index, fuel index, electricity index, sanitation index, communication index, and transport index. According to this measure, 0 represents the worst living conditions, while 1 represents the best.

Poor Housing Conditions: Military operations targeting civilian areas and facilities, including healthcare and educational institutions, looting, siege, and forced displacement, have directly affected the quality and safety of housing in many areas of Syria, resulting in a wide disparity in housing conditions across different governorates. The areas that were most affected by the earthquake, particularly in the governorates of Idleb (such as Harim, Dana, Maaret Tamsrin, and Ariha) and Aleppo (such as most of the eastern neighborhoods of Aleppo city and Afrin), had low rankings in terms of housing condition and the quality of building materials used. On the other hand, communities affected by heavy bombings saw the establishment of random displacement settlements made of bricks, iron sheets, or incomplete inhabited buildings covered with blankets and nylon. Furthermore, institutional distortions and the absence of relief-development coordination contributed to the creation of housing units lacking safety conditions and inadequate renovation of damaged homes. On the other hand, the quality of housing in Hama and Latakia Governorates was better, as the percentage of damaged houses from military operations was lower. However, the main cities in these governorates suffered from the spread of informal housing areas and non-compliant buildings and floors, which expanded significantly during the war years.

Energy and water deprivation: Accessing heating fuel is considered one of the most challenging obstacles facing displaced and

resident individuals in the northwestern regions. Therefore, most residents in Aleppo and Idleb relied on low-quality diesel and firewood - when available - as means of heating or on burning olive press residues, old clothes, cardboard, and plastic, which causes serious health problems. As for the governorates of Latakia and Hama, the GoS has reduced the quantity of fuel allocated to households and raised its prices several times during the past two years. In many areas, the failure to distribute households' full allowances has coincided with the availability of the material on the informal market at prices that exceed the official price tens of times. In addition, many families in the poorest areas resorted to selling their heating fuel allowances to obtain enough food.

Similarly, most Syrian regions suffered from a severe shortage of electric power, resulting in long periods of outages that lasted for several days in some areas, to the detriment of most Syrians' economic and living conditions. In Aleppo, reliance on purchasing electricity power (known locally as Amperes) from private generators at high prices has increased. In Idleb and the countryside of Aleppo, despite the expansion of the Turkish electricity network to reach most of these areas during the past two years, household electricity consumption remained at its minimum due to continuous price hikes beyond the financial capacity of most families. On the other hand, reliance on renewable energy sources, particularly solar energy, remained limited in most areas of the country due to the high

installation and maintenance costs and the difficulty of ensuring quality.

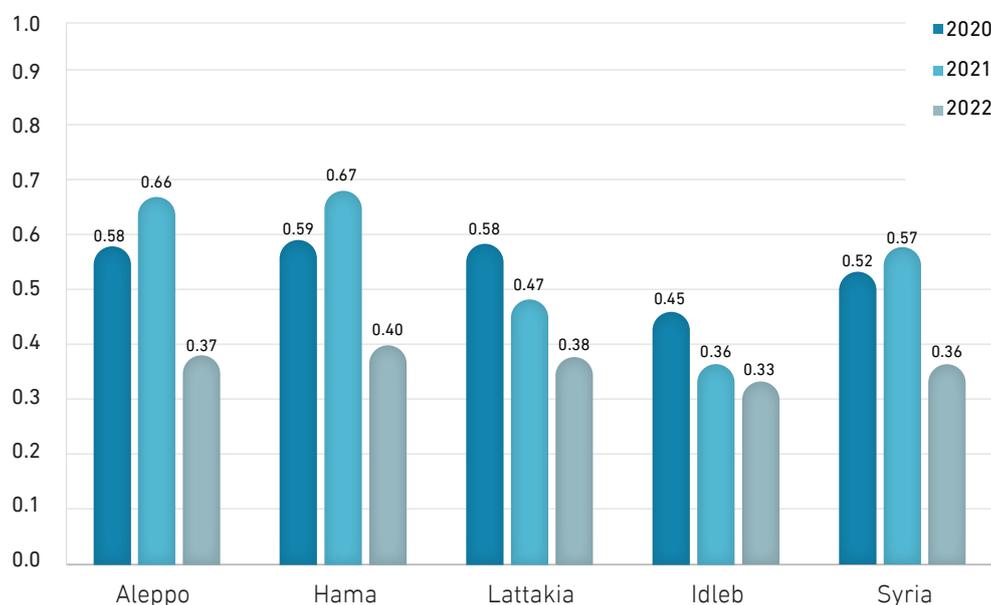
Families in many of the earthquake-affected areas have already suffered from water scarcity and poor sanitation services due to the damage to infrastructure during the conflict, the decline in public services, and the energy shortage. Although the damage in some areas has been repaired, many people, especially those in displacement camps and Idleb Governorate, continued to suffer from frequent water cuts or low-quality water, forcing them to resort to water cisterns. The damage to sewage networks and the lack of maintenance have resulted in severe consequences, including the leakage of contaminated water into groundwater and water networks.

1.2.4 Evanescence of Development Foundations

The “Human Development Index”⁽¹⁾ (HDI) released by the SCPR shows a significant decline in health, education, and food security indicators across Syria before the earthquake.

The index decreased from 0.57 in 2021 to 0.36 in 2022, and the performance of all governorates was poor in terms of human development, with the index reaching 0.37 in Aleppo, 0.4 in Hama, 0.38 in Lattakia, and 0.33 in Idleb during 2022 (Figure 3).

Figure (3): Human Development Index in Syria during the period (2020-2022)



Source: Syrian Center for Policy Research (2022). [Socio-economic assessment surveys in Syria from 2020 to 2022](#)

(1) The Human Development Index (HDI) is a composite index that ranges between 0 and 1, and it consists of three sub-indices: the education index, the health index, and the food security index. 0 is considered the worst and 1 is the best according to this scale.

Forced displacement: The population in the four earthquake-affected governorates (Latakia, Hama, Idleb, and Aleppo) is estimated at 9.18 million people, 43 percent of whom are in Aleppo governorate (1.72 million in the city and 2.19 million in the countryside), 29 percent in Idleb governorate (2.63 million people), 16 percent in Hama Governorate (1.45 million people), and 13 percent in Latakia Governorate (1.19 million people).⁽¹⁾ The governorates of Idleb and Aleppo have experienced significant waves of forced displacement from and to the governorates. The proportion of the displaced population at the national level in 2022 is estimated at 30 percent, with 26 percent of the displaced concentrated in Idleb (especially in Harim and the city center), 18 percent in Aleppo (especially in A'zaz, Afrin, and the city), 5 percent in Latakia, and 3 percent in Hama. Most of them reside primarily in rented houses, with relatives, in camps, and shelters.⁽²⁾

Aggravation of Poverty Severity: Indicators show the spread of extreme and abject poverty throughout Syria before the earthquake, with most families unable to adequately provide necessities. According to the calculations of the SCPR, the upper poverty threshold for a family reached SYP 1.6 million, while the lower poverty threshold (as an indicator of a family's ability to meet basic needs) was about SYP 1.16 million per month in 2022. The abject poverty threshold (as an indicator

of food deprivation) reached around SYP 736 thousand.⁽³⁾ The gap between poverty thresholds and income doubled in 2022, and the severity of inequality deepened between governorates and control areas. The overall extreme and abject poverty rates reached 91 percent, 80 percent, and 52 percent, respectively, in 2022. The poverty gap widened to approach 50 percent of the upper poverty threshold. The conflict in Syria has also led to a significant change in the structure of family income sources, with an increasing reliance on aid, as well as remittance transfers from relatives and friends abroad, and selling assets after depleting savings and losing sources of income.

Deterioration of public health: The catastrophic consequences of the conflict continued to take a toll on the public health of the Syrian population, with hundreds of thousands killed and millions injured, including soldiers and civilians, men and women, with a blatant disregard for the right to life and the right to health. It led to increased mortality rates and decreased life expectancy at birth, as well as a doubling of disease rates, including infectious diseases such as cholera, measles, leishmaniasis, and COVID-19, as well as non-communicable diseases such as hypertension, heart disease, cancer, disability, and malnutrition. The conflict has systematically destroyed the social determinants of public health and led to fragmentation and regression of the health

(1) Estimations of the Syrian Center for Policy Research.

(2) Syrian Center for Policy Research (2022). [Socio-economic assessment surveys in Syria from 2020 to 2022](#), and Syrian Center for Policy Research. (2021). [Determinants of forced displacement in the Syrian conflict](#).

(3) Syrian Center for Policy Research. (2023). [SCPR'S Annual bulletin for consumer price index and inflation in Syria 2022, Issue 1](#).

system, such as direct military targeting of the population and medical institutions and personnel and undermining the governance of the health sector.

Aleppo and Idleb governorates are among the most affected on the health level because of the conflict. Many obstacles face individuals to access health services in northwest Syria due to a lack of specialized services, shortages in expertise and medicines, and the destruction of infrastructure and equipment due to military actions. The leading role of civil society organizations has been essential in improving the governance of the health sector in the countryside of Aleppo and Idleb and expanding individuals' access to healthcare services. However, the challenge is that this relies on support from donor agencies. The Turkish government has also intervened in some areas, such as A'zaz, Al-Bab, and Jarablus, by supporting clinics and hospitals and providing care. In areas controlled by the GoS, there is a great reliance on public hospitals and government health centers that provide services for minimum fees. Still, they suffer from low-quality medical services, a shortage of medical equipment and specialized medical personnel, and the spread of corruption and mismanagement in the government health system. Rural areas, where there is also a shortage of medical personnel and equipment, experience greater levels of suffering.⁽¹⁾

Exacerbation of ignorance: In 2022, the SCPR study on adolescent showed

a severe educational setback during the conflict. The educational system became fragmented into several systems characterized by distortion and politicized governance, a shortage of qualified teachers, differences in curricula, and a decline in the quality of education. The infrastructure and facilities were also subject to severe destruction or were used for other purposes, such as housing displaced people. Policies of siege and discrimination have also hindered children's access to education. The COVID-19 pandemic has further exacerbated education challenges, including school closures and lack of alternatives, health concerns, and preventive measures. Additionally, the lack of security and the increasing poverty have increased school dropout rates.

Furthermore, the deterioration of public educational services has led to expanding the role of civil society and the private sector in education. However, their contribution remains modest compared to the substantial educational deficit. Rates of enrolment in primary education show that millions of children are being deprived of educational opportunities to varying degrees. The percentage of out-of-school children in primary education was about 45 percent between 2014 and 2017 and decreased to about 34 percent between 2018 and 2022. In earthquake-affected areas, the enrolment rate in primary education was around 65 percent in Idleb, 62 percent in Aleppo, 79 percent in Lattakia, and 90 percent in Hama in 2022.⁽²⁾

(1) Syrian Center for Policy Research. (2022). [The devastating of Right to Health during Syrian Conflict](#).

(2) Syrian Center for Policy Research. (2022). ["Hope Under Siege" Voices of Adolescents on education and ICT during the Syrian Conflict](#).

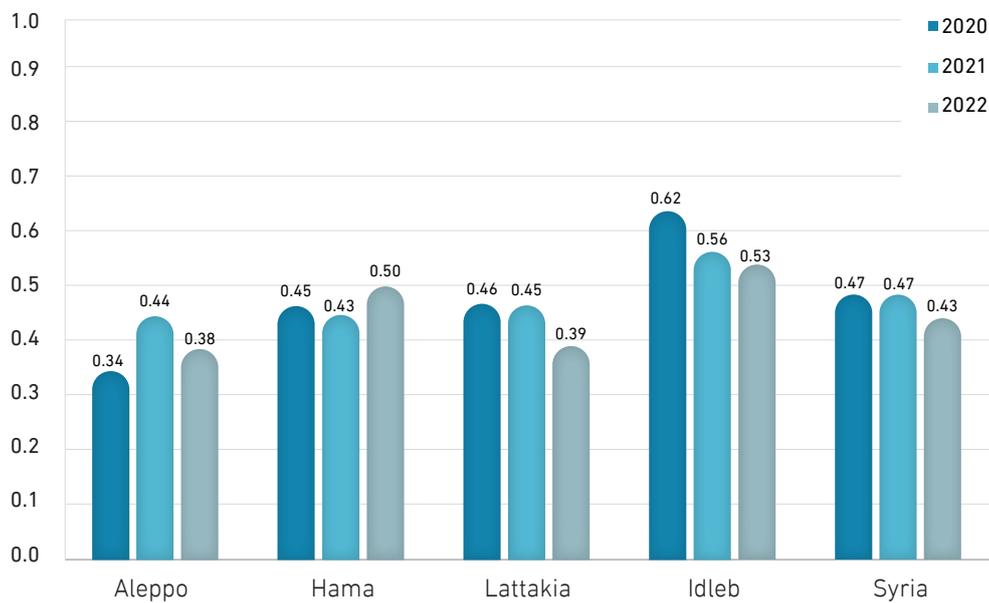
1.2.5 Loss of Social Trust

Social trust has declined on multiple levels across Syria. Various oppressive practices have impacted trust between individuals, such as killings, forced disappearances, torture, and sieges. These practices went hand in hand with a general loss of security due to incidents of abduction and arbitrary detention, as well as the escalation of crimes, including theft, looting, exploitation, and domestic and societal violence. The conflict has exacerbated disputes between individuals and communities regarding shared values, perceptions, and visions, because of the fragmentation of the cultural and moral sphere and politicisation of identities. The de facto powers have invested in these disputes, to consolidate their authority, and to fuel the conflict. Violations of the rights of Syrians without accountability and the continued dominance of the conflict elite in power have led many social groups, including children and adolescents, to lose hope for change. Consequently, more and more individuals resorted to traditional relationships during the conflict, such as kinship and religious-based relationships.

Women have been subjected to unprecedented levels of oppression. Despite expanding their economic and social roles during the conflict, the dominance of oppressive forces has led to restrictions on women's participation and the implementation of discriminatory measures. The "Social Capital Index"⁽¹⁾ issued by SCPR indicates this deterioration. The value of the index decreased from 0.47 in 2020 and 2021 to 0.43 in 2022, and the decline in this index was evident in all governorates. Its value reached 0.38 in Aleppo, 0.39 in Lattakia, 0.49 in Hama, and 0.53 in Idleb (Figure 4).

(1) The Social Capital Index (SCI) is a composite index that ranges from 0 to 1 and consists of three sub-indicators: the Social Network and Participation Index, the Trust Index, and the Common Values Index. According to this measure, 0 is the worst and 1 is the best.

Figure (4): Social Capital Index in Syria during the period (2020-2022)



Source: Syrian Center for Policy Research (2022). [Socio-economic assessment surveys in Syria from 2020 to 2022](#)

The above brief analysis highlights the developmental imbalances suffered by the earthquake-affected regions, and the danger of the continued roots of conflict, represented by the dominance of political authorities based on oppression, violence, and subordination to foreign powers, investing in social fragmentation and politicizing identities, the domination of conflict economies, and the external exploitation of political, social,

and economic spaces. It is not feasible to focus humanitarian efforts solely on mitigating the symptoms of conflict without changing the systems that perpetuate it. It should be noted that despite the poor development performance in all regions, the suffering in Idleb and Aleppo surpasses that of the other regions by far.



2.

Direct and Indirect Impacts of the Earthquake

The earthquake’s impact is analysed by estimating direct and indirect repercussions in the Syrian context. It requires understanding the nature of influential actors (local and external) and the system’s political, economic, and social relationships and cultural practices. The ultimate impacts of the earthquake largely depend on the foundations of development and the nature of the governance system.

2.1 Developmental and Social Impacts

The earthquake led to thousands of casualties among the Syrians in Syria and Turkey, reaching 10659 Syrians (4267 of whom were outside Syria)⁽¹⁾ and 6392 casualties and 11829 injuries inside Syria. The victims were distributed as follows: 1877 casualties and 3418 injuries in GoS-controlled areas, 1295 casualties

and 1499 injuries in areas controlled by the SIG, and 3220 casualties and 6912 injuries in areas controlled by the SSG (Table 1). These losses in human lives lead to a sharp increase in death rates and a significant decline in life expectancy in affected communities.⁽²⁾

Table (1): Earthquake deaths and injuries in Syria by governorate and control area.

	Victims	Injured
Syrian Government	1,877	3,418
Jebel Saman and As-Safira in Aleppo	991	1,802
Hama	51	260
Lattakia	835	1,356
Interim Government	1,295	1,499
Aleppo Countryside*	1,295	1,499
Salvation Government	3,220	6,912
Idleb**	2,985	6,542
Atareb in Aleppo	235	370
Syria	6,392	11,829

* Aleppo countryside includes the following districts: Al-Bab, Afrin, A'zaz, and Jarablus.

** Idleb includes the following districts: Idleb city center, Harim, Jisr-Ash-Shugur, and Ariha.

Source: Syrian Center for Policy Research’s 2023 earthquake impact field survey, Ministry of Health in Syrian government-controlled areas, ACU in the interim government and salvation government areas, and SCPR estimates based on cross-referenced data. (Appendix 2)

(1) The statement of the Turkish Interior Minister on March 4, 2013, indicated that the number of Syrian victims in Turkey had reached 4267 out of a total of 45 thousand victims.

(2) Syrian Center for Policy Research. (2023). [Field survey on the impacts of the earthquake](#). It is worth noting that the number of casualties in Syria, according to the official statistics of the GoS and the Assistance Coordination Unit, is about 5845 victims and 10849 injuries. This is less than the center’s figures for the increased number of deaths in the Jabal Sam’an area, which reached 991 according to the center’s field survey, compared to 444 according to the Syrian Ministry of Health data.

The earthquake's biggest impact was concentrated in northwestern Syria, particularly in Idlib Governorate, where the death toll reached 2985. The district of Harim suffered the most significant damage. Among cities, Jandairis in Aleppo countryside was hit the hardest by the earthquake, with 1100 victims recorded there alone. Analysis of the geographic impact of the earthquake across all Syrian territories (at the level of administrative districts) shows that the severity of damage was concentrated in the Harim district, followed by the Afrin district (the cities of Jandairis and Suran) and Jebel Saman (the cities of Aleppo and Atareb) to a similar degree. Jablah district and the city of Lattakia ranked third, while the Elghab Area in northern Hama ranked fourth.

According to SCPR's estimates, the number of people displaced due to the earthquake reached at least 170810 by the first week of March, distributed among 155174 displaced in northwestern Syria and 15637 in GoS-controlled areas. Many of the earthquake displaced joined the existing shelters, while new camps (especially in Afrin and Harim) were established to accommodate the large numbers of new displaced. The displaced suffered from a shortage of tents, food, and heating in the days immediately following the earthquake.⁽¹⁾

Just as the impacts of the earthquake varied by region, they also varied between

men and women. The earthquake exacerbated the suffering of women, as they were forced to stay outside with their families in harsh weather conditions for several days, without access to emergency supplies or some of their necessities, as well as a lack of suitable toilet facilities. Additionally, they suffered from a shortage of available tents or high prices, leading many to return to unsafe or partially collapsed homes. The needs of pregnant and breastfeeding women, older women, and women with special needs were largely unfulfilled. Consequently, the proportion of pregnant women and those with chronic diseases exposed to health complications that could endanger their lives increased.⁽²⁾

The earthquake has affected the already conflict-affected health sector, where 55 health facilities were damaged in northwestern Syria.⁽³⁾ The health system could not meet the increasing demand to save the injured and affected in many areas, such as the Badama and Harim regions⁽⁴⁾ and the shelters. In GoS-controlled areas, 116 health facilities were directly damaged, including 14 in Aleppo, 54 in Lattakia, and 48 in Hama, and they need infrastructure repairs and support with medical equipment. Reports on monitoring infectious diseases have also shown an increase in cholera, acute diarrhea, and respiratory diseases in various regions.⁽⁵⁾

(1) Syrian Center for Policy Research. (2023). [SCPR Field Survey to Track the Earthquake's Impacts: estimating the number of deaths and damaged buildings.](#)

(2) According to the Syrian Network for Human Rights (2023), [On International Women's Day, the Devastating Earthquake that Hit Northwestern Syria Has Exacerbated the Dire Situation of Women, With No Fewer than 35,000 Women Losing Their Homes.](#)

(3) Assistance Coordination Unit. (February 26, 2023). [Humanitarian Situation in North-West Syria Following the Devastating Earthquake.](#)

(4) REACH. (February 15, 2023). [Earthquake Response Rapid Needs Assessment.](#)

(5) UN-OCHA. (February 25, 2023). [North-West Syria: Situation Report](#)

The earthquake also significantly impacted the education process in the affected areas. The educational process was suspended in 208 schools in GoS-controlled areas, according to the directorates of education in the governorates. The distribution of affected schools was as follows: 80 schools in Aleppo, 100 in Lattakia, 27 in Hama, and one in Tartous. Fifteen schools in GoS-controlled areas were destroyed, and 453 schools suffered moderate damage.⁽¹⁾ In GoS-controlled areas, 126 schools were used as shelters (102 in Aleppo, 13 in Lattakia, 7 in Tartous, 4 in Hama, 1 in Idleb).⁽²⁾

The number of damaged schools in northwest Syria reached 392, including 11 destroyed schools, and 48 schools have been converted into shelters. The number of casualties in the education sector was 68 teachers and 79 injured. The greatest damage was concentrated in Harim, Salqin, and Sarmada in Idleb and in Jandairis and Afrin in the countryside of Aleppo.⁽³⁾ The cities of Salqin, Milis, Deir Hassan, Bseineh, and Armanaz in Idleb, as well as Jandairis and Atareb in the countryside of Aleppo, are considered disaster areas. These cities contain 53 schools with 28429 students, and the students were unable to return to their schools during the second semester of the academic year due to displacement or the destruction of their schools.⁽⁴⁾

Living conditions have deteriorated because of the earthquake, which caused significant damage to homes, public facilities, and infrastructure. The residents were also affected by the damage caused to the electricity sector, as the affected areas witnessed power outages lasting for several days. In the northern and northwestern regions of the country, the power outage was due to the interruption of energy supply from the Turkish side due to the damage to the Reyhanlı station and the electricity distribution networks. However, after the damages were repaired, electricity was restored to most of the affected areas within two weeks of the earthquake. However, access to sufficient and regular power remains limited for most of the population due to high prices exceeding most households' capacity. In addition, households whose electricity meters were completely damaged are forced to pay partial fees to obtain new ones. In the cities of Aleppo, Lattakia, Tartous, and Hama, despite most of the damages to the electricity distribution network being repaired relatively quickly, the availability of electricity remained at its minimum due to a shortage in electricity generation caused by a lack of oil supplies. This increased the suffering of those affected by the earthquake, especially with the lack of heating methods that depend on oil derivatives in the face of the harsh winter weather conditions that coincided with the disaster.

(1) According to the statement of the Director of Planning and International Cooperation at the Ministry of Education in Damascus on February 13, 2023.

(2) According to statements from the directors of education in the governorates.

(3) According to a statement by the Minister of Education in the interim government on February 19, 2023.

(4) Assistance Coordination Unit. (March 13, 2023). [Humanitarian Situation in North-West Syria Following the Devastating Earthquake](#).

As for water and sanitation, the most affected areas by the earthquake suffered from water supply interruptions due to damage to water distribution networks and power outages at main pumping stations. The areas of Afrin and Suran in the countryside of Aleppo and Harim, Salqin, and Bseineh in Idleb were particularly affected. In addition, some areas in Aleppo, Lattakia, and Hama experienced water outages for several days due to damage to distribution networks. In particular, the outages hit many neighborhoods in eastern Aleppo. Several main water tanks that supply some cities and towns also collapsed, as in the rural areas of Hama and the Elghab Plain. In some areas affected by the earthquake, such as Aleppo and parts of the city of Jablah, there were sewage leaks due to damage to the public network. In the heavily affected northwestern regions, the lack of access to clean drinking water due to damage to the water and sewage networks could lead to the risk of cholera outbreaks.

2.2 Economic Impacts

To estimate the economic losses, the report estimated losses in capital stock, gross domestic product, and employment at the regional level, according to several stages.

2.2.1 Loss of capital stock and households' furniture

The losses were estimated through a rapid field assessment of housing damages conducted by researchers and cross-referenced with data from the Assistance Coordination Unit and the GoS. Houses were classified as destroyed, heavily damaged, or cracked in the four most affected provinces: Idlib, Aleppo, Lattakia, and Hama.

Table (2): Damaged and destroyed buildings due to earthquake in Syria by governorate and control area.

	Destroyed buildings	Partially damaged buildings	Damaged and destroyed buildings
Syrian Government	890	2174	3,064
Jebel Saman and As-Safira in Aleppo	557	455	1,012
Hama	17	444	461
Lattakia	225	768	992
Tartous	15	20	35
Idlib (Al Ma'ra)	76	487	563
Interim Government	542	3,420	3,962
Aleppo Countryside*	542	3,420	3,962
Salvation Government	1,259	4,511	5,770
Atareb in Aleppo	83	190	273
Idlib**	1,176	4,321	5,497
Syria	2,691	10,105	12,796

* Aleppo countryside includes the following districts: Al-Bab, Afrin, A'zaz, and Jarablus.

** Idlib includes the following districts: Idlib city center, Harim, Jisr-Ash-Shugur, and Ariha.

Source: Syrian Center for Policy Research's 2023 earthquake impact field survey, Ministry of Health in Syrian government-controlled areas, ACU in the interim government and salvation government areas, and SCPR estimates based on cross-referenced data. (Appendix 2)

Damaged buildings: The infrastructure damage resulting from the earthquake, including residential buildings, has multiplied due to a large proportion of establishments in the areas affected by the earthquake being previously cracked due to the intense shelling they were subjected to during the conflict, in addition to the proliferation of new buildings that were constructed without considering the safety standards and requirements against earthquakes, some of which were built with the support of humanitarian organizations.

In this context, the total number of partially or completely damaged buildings throughout Syria reached 12796, of which 2691 were destroyed. The governorate of Idlib had the highest share of damaged buildings at around 46.6 percent, with the largest number of destroyed buildings (1252). Harim, Salqin, Dana, and Armanaz regions were among the most affected areas in Idlib. The northern countryside of Aleppo followed, accounting for approximately 34 percent of the total damaged buildings, including 630 destroyed buildings, which were concentrated in the cities of Jandairis, Suraan, and Atareb. Meanwhile, the number of damaged buildings in the city of Aleppo reached 997, with more than half of them completely destroyed.⁽¹⁾ According to the Syrian Center for Policy Research's estimates, more than 66 percent of the buildings that were totally destroyed in Aleppo city are concentrated in the eastern neighborhoods of Aleppo,

such as As-Sukkari, Bostan al-Basha, Fardos, Sha'aar, Salheen, Tarik Albab, and Kallaseh. Most of these areas were the scene of intense fighting and aerial bombardment during the years of conflict. In Latakia Governorate, the number of collapsed buildings reached 225, mostly concentrated in the coastal city of Jablah. However, the damage in Tartous and Hama governorates was relatively less, with Hama being more affected than Tartous, and was limited to some buildings in the Qadmous and Elghab Plain areas. In addition to the direct effects of the earthquake on buildings in the affected areas, several buildings in relatively distant areas from the directly damaged areas were evacuated in preparation for demolition.

Capital stock: The report relied on estimating the capital stock at the regional level before the earthquake by considering the estimated stock before the conflict, which was based on the net real cost and the perpetual inventory method, relying on public and private investment for the period (1963-2010) and the depreciation rates for residential and commercial buildings, infrastructure, equipment, and transportation.⁽²⁾ During the conflict period, the capital stock was estimated based on net investments and the destruction that occurred to the capital stock based on the 2014 population status survey and socio-economic surveys (2020-2022). The capital stock was distributed to districts based on the buildings in the areas as a proxy.

(1) Source: Intersection of data of the Assistance Coordination Unit in the regions of northwestern Syria, the local administration in the regions of the GoS, and Syrian Center for Policy Research. (2023). [SCPR Field Survey to Track the Earthquake's Impacts: estimating the number of deaths and damaged buildings](#).

(2) Syrian Center for Policy Research, 2011.

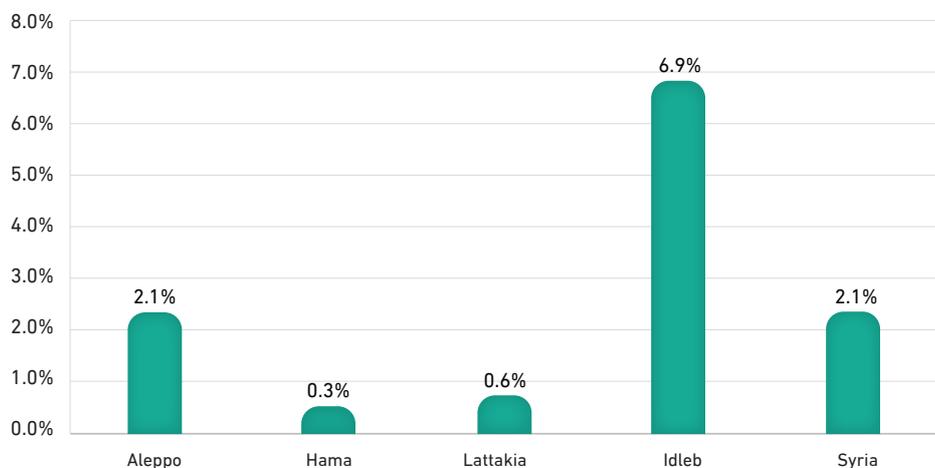
The percentage of housing damage in the earthquake was adopted as a proxy for estimating the impact of capital stock at the district level in the four governorates. The cost of replacing the capital stock was estimated based on the actual cost of construction, cladding, and study for each square meter of buildings in each district in 2022. According to replacement value, the total capital stock losses amounted to USD 2151 million.

Furniture and Equipment Losses: In addition to the losses in capital stock, the report estimated losses in household furniture and equipment. The estimation before the conflict was based on the Household Income and Expenditure Survey of 2009. Household furniture and equipment were then estimated in 2022 through socio-economic surveys conducted by the SCPR. Finally, the earthquake’s impact on furniture and equipment wealth was estimated using a proxy of housing damage.

The replacement cost of the furniture and equipment was estimated based on the monthly consumer price surveys implemented by the SCPR in 2022. The replacement value of furniture and equipment amounted to about USD 77.8 million.

The percentage of losses in the stock of capital and the wealth of households from furniture and equipment was 0.8 percent at the national level. The rate of losses in the stock of capital in Idleb governorate was 6.9 percent, with losses concentrated in Harim and Jisr-Ash-Shugur at rates of 24 percent and 14 percent, respectively, followed by Aleppo at a rate of 2.1 percent, with Afrin being the most affected area with a rate of 24.3 percent. Meanwhile, losses in Lattakia were 0.6 percent and in Hama 0.3 percent. These losses represent severe damage to the accumulated wealth on the national level in general and to the affected areas, which need years to compensate.⁽¹⁾

Figure (5): Ratio of estimated capital stock and furniture loss to capital stock and furniture in 2022



Source: Syrian Center for Policy Research. (2023). [Earthquake loss estimation model in Syria.](#)

(1) The minimum value for replacing the damaged capital and furniture inventory is USD 2.1 billion, while the maximum is USD 2.3 billion.

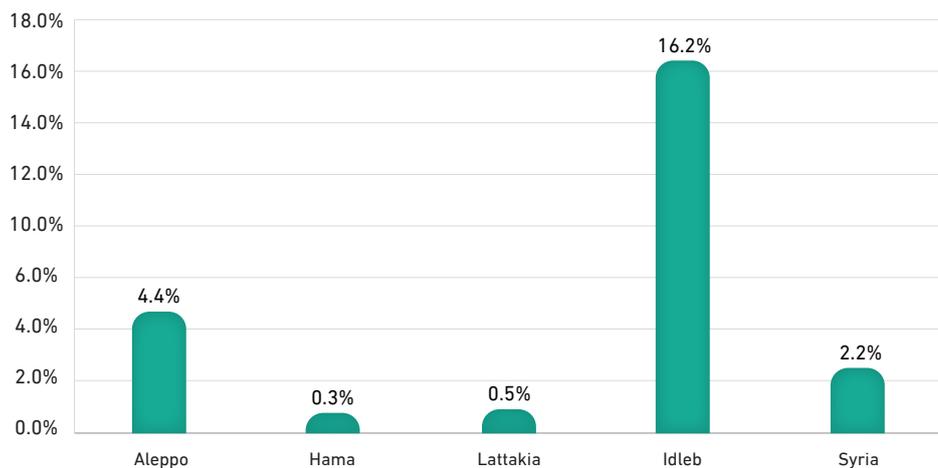
2.2.2 Loss of Gross Domestic Product

The population and workforce in the areas affected by the earthquake were estimated based on pre-conflict labor force surveys and economic and social surveys conducted during the conflict. The district Gross Domestic Product (GDP) was calculated by distributing the GDP at the regional level according to the employed workers and the productivity of the workers in each sector, based on the 2009 and 2010 labor force surveys for the pre-conflict period, as well as the 2014 population status survey and the economic and social surveys conducted by SCPR between 2020 and 2022.

The losses in GDP resulting from the earthquake were estimated using the elasticity of capital stock and GDP during

the conflict period by district. The results show a decline in the national GDP in 2023 due to the earthquake by 2.2 percent. Figure (6) shows the rate of economic contraction in GDP at the district level, where the GDP in Idleb decreased by 16.2 percent, with the losses concentrated in the Harim and Jisr-Ash-Shugur districts, as the GDP declined by 24 percent and 14 percent, respectively. The GDP decline in Aleppo was estimated at 4.4 percent and was concentrated in Afrin and Atareb at rates of 24 percent and 7 percent, respectively. As for Lattakia and Hama, the rates of economic contraction were significantly lower compared to Idleb and Aleppo, where the contraction in Lattakia was estimated at about 0.5 percent and in Hama at 0.3 percent.

Figure (6): The rates of GDP contraction in 2023 due to the earthquake



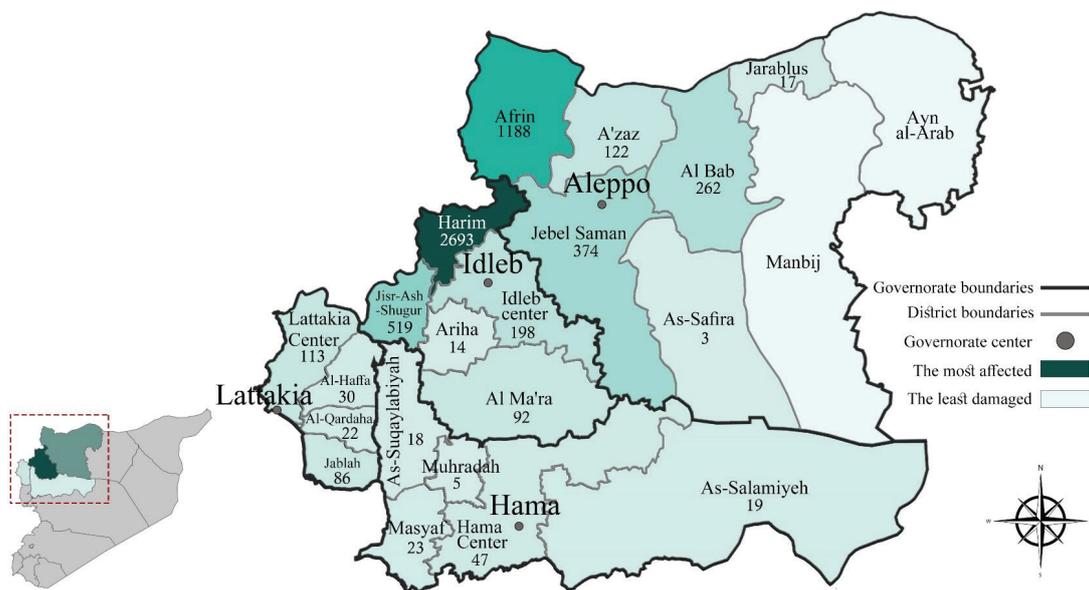
Source: Syrian Center for Policy Research. (2023). [Earthquake loss estimation model in Syria](#).

Estimating the losses in GDP is directly related to the time required to compensate for the losses in economic, human, and governance resources. The report estimated the total loss in GDP due to the earthquake at seven upcoming years, based on literature that studied the effects of similar earthquakes in terms of intensity, given the fragility of the developmental and institutional status in the affected country.⁽¹⁾

Therefore, GDP losses accounted for USD 3.6 billion.⁽²⁾ Added to the losses of capital stock and furniture, the total direct economic losses reach USD 5.85 billion.⁽³⁾ Idleb governorate recorded the highest level of losses, amounting to USD

3.5 billion (77 percent in Harem district), followed by Aleppo governorate, with total losses amounting to USD 1.97 billion (60 percent of which were in Afrin and 20 percent in Jabal Semaan area). The total in Lattakia Governorate is USD 251 million, and in Hama Governorate is USD 112 million (Figure 7). The direct losses of the earthquake constitute about 33 percent of the GDP for the year 2022, which shows the significant impact of the earthquake in light of the disastrous state of the economy as a result of twelve years of conflict.

Figure(7): Total direct economic losses from the earthquake in Syria (USD million)



Source: Syrian Center for Policy Research. (2023). [Earthquake loss estimation model in Syria](#).

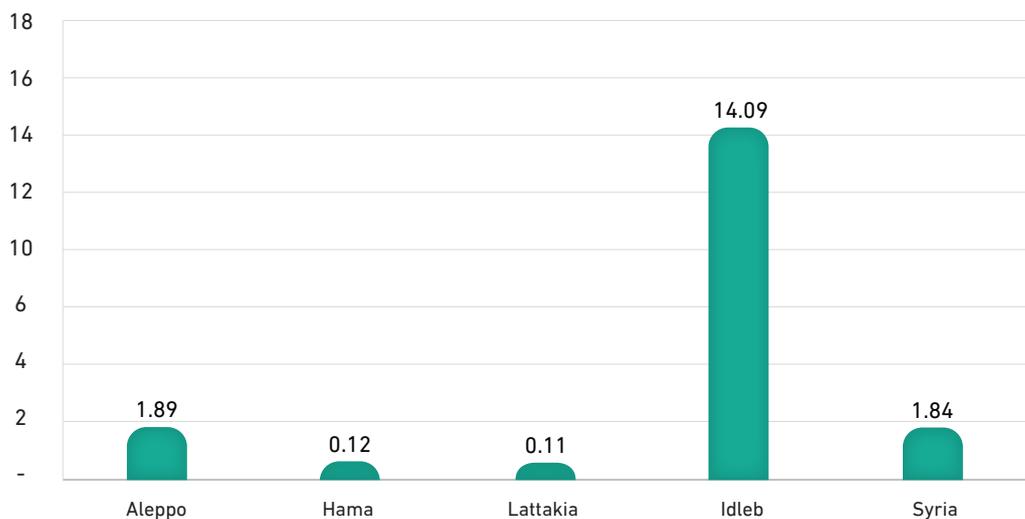
(1) Lackner, Stephanie (2018). [Earthquakes and economic growth](#), FIW Working Report, No. 190, FIW - Research Centre International Economics, Vienna.
 (2) The minimum estimate for the total GDP losses is USD 3.4 billion, and the maximum is USD 3.9 billion.
 (3) The minimum estimate for direct losses from the earthquake is USD 5.5 billion, and the maximum is USD 6.3 billion.

2.2.3 Loss of Employment

Before the earthquake, the Syrian economy suffered from high unemployment levels, reaching 42.9 percent in 2022. The earthquake caused significant losses in employment opportunities, leading to an increase in the unemployment rate by approximately 1.8 percentage points nationwide (equivalent to 90 thousand job opportunities). The impact was particularly severe in Idleb Governorate, where the unemployment rate increased by about 14 percentage points, reaching 59 percent. The worst losses were concentrated in Harim,

where unemployment reached 69 percent, with 24 percentage points resulting from the earthquake. Unemployment rates in Aleppo also increased by approximately 1.9 percentage points, reaching 47 percent. The losses were concentrated in Afrin and Atareb, where unemployment increased by about 10 and 3 percentage points, respectively, due to the earthquake. Meanwhile, unemployment rates rose somewhat in Lattakia and Hama, where unemployment increased by about 1.1 percentage points. (Figure 8)

Figure (8): Increase in unemployment rates due to the earthquake in Syria (percentage points)



Source: Syrian Center for Policy Research. (2023). [Earthquake loss estimation model in Syria.](#)

In the early days, the earthquake led to severe disruptions in businesses and services and forced hundreds of thousands to flee, affecting available job opportunities and sources of income. Job losses and operational disruptions varied depending on the severity of the damage to the district and the waves of displacement that followed. Employment opportunities have entirely disappeared in the devastated cities such as Jandiris and, to a lesser extent, in the districts of Harim and Jisr al-Shughour.⁽¹⁾ The spread of temporary and informal work also led to the lack of channels to compensate workers or ensure their return to their jobs, and displacement led to the loss of jobs for the displaced.

Despite the extent of the damage, economic activity gradually resumed in the affected cities as workers returned to their jobs driven by the severe poverty. Job opportunities increased in the construction, cladding, and related trades sectors due to the residents' interest in repairing their homes. There was also an increase in demand for professions related to lodging supplies such as tents.

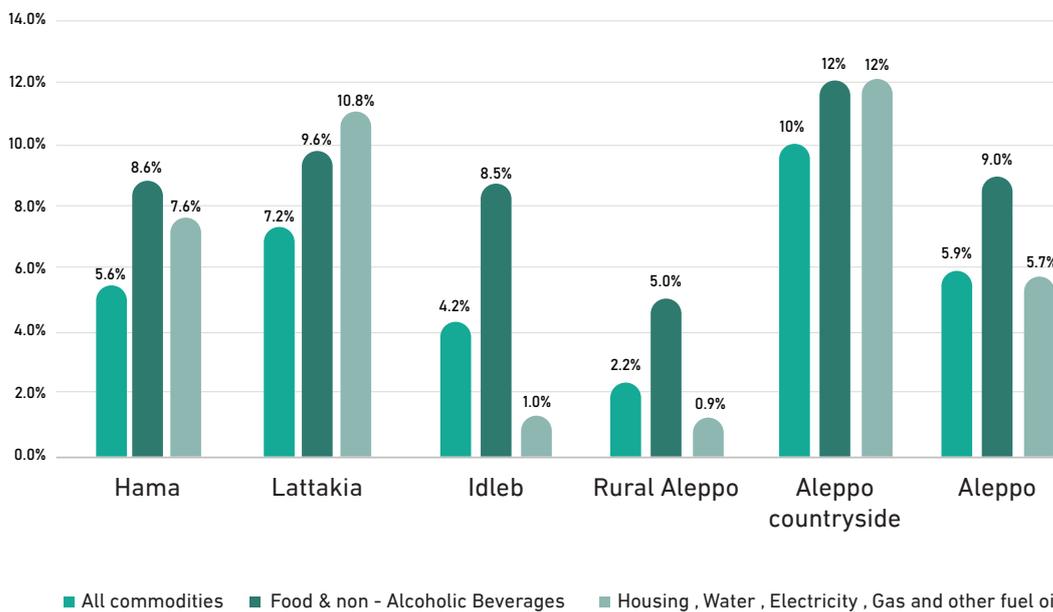
(1) The most affected cities in the Jisr-Ash-Shugur area by the earthquake are Badama, Al-Janoudiah, and Al-Malend.

2.2.4 Prices and Poverty Rates Hike

The inflationary pressures increased due to the earthquake, leading to a sharp rise in prices. The monthly inflation rate in GoS-controlled areas (Hama, Lattakia, and Jabal Sam'an) ranged between 5.6 percent and 10 percent after the earthquake compared to January 2023. Prices also increased in

Idleb governorate by 4.2 percent and in rural Aleppo by 2.2 percent (Figure 9). This represents a new deterioration in the real household income and deepens the gap and severity of poverty. It also leads to a rise in production costs, threatening further economic contraction.

Figure (9): Monthly inflation rates in the four affected governorates after the earthquake (percentage)



Source: Syrian Center for Policy Research. (2023). [SCPR'S Monthly bulletin for consumer price index and inflation in Syria January and February 2023, Issues 1 and 2.](#)

The results of the Consumer Price Index (CPI) issued by SCPR indicate a significant increase in food prices in all the governorates affected by the earthquake in Syria, with food inflation ranging between 8.5 percent and 9.6 percent after the earthquake. The city of Aleppo recorded the highest food inflation rate at 12 percent compared to the countryside of Aleppo, which recorded the lowest food inflation rate at 5 percent. It is noteworthy that meat prices of all kinds have increased significantly, as well as those of various

types of legumes. The cost of housing, water, and fuel also increased in Lattakia, Aleppo, and Hama by 12 percent, 10.8 percent, and 7.6 percent, respectively. However, the increase in rural Aleppo (0.9 percent) and Idleb (1 percent) was slight.

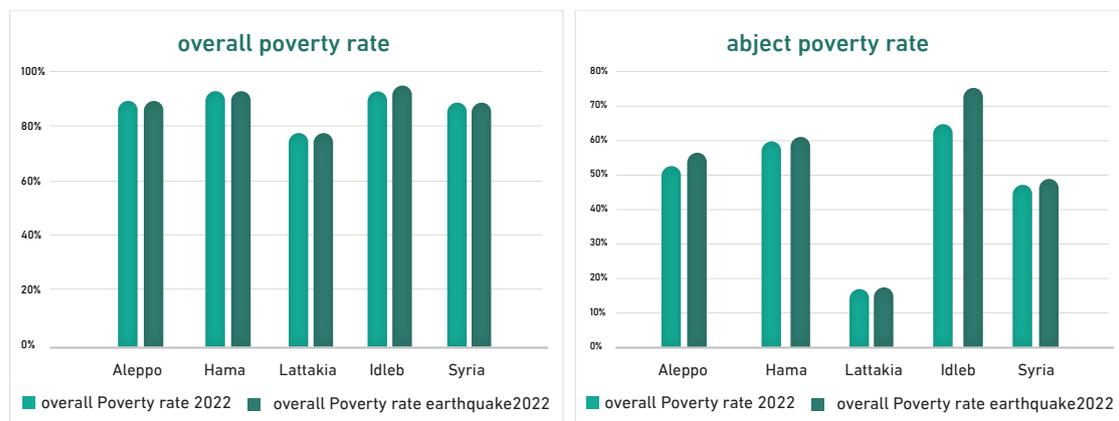
There has been a decline in the demand for rental housing in these areas due to people's fear of living in multi-story buildings and their preference for either non-multi-story houses or setting up tents near their homes. Meanwhile, rental fees

have increased in areas under the control of the GoS, especially in cities, except for the neighborhoods affected by the earthquake, such as the eastern neighborhoods of Aleppo, where many residents have been displaced to shelters or undamaged neighborhoods.

The decline in GDP and the rise in prices have led to an increase in poverty rates. The increase in poverty rates in the affected areas was estimated using a microsimulation

model. The results indicate increased abject poverty rates due to the earthquake by about 10.5, 3.8, 0.4, and 0.1 percentage points in Idleb, Aleppo, Hama, and Lattakia, respectively. Similarly, extreme poverty rates increased by about 4.6, 1.9, 0.04, and 0.2 percentage points for the same areas, while the overall poverty rates increased by 2.3, 1.1, 0.02, and 0.2 percentage points for the same areas (Figure 10).

Figure (10): Abject and overall poverty rates before and after the earthquake in the affected areas (2023)

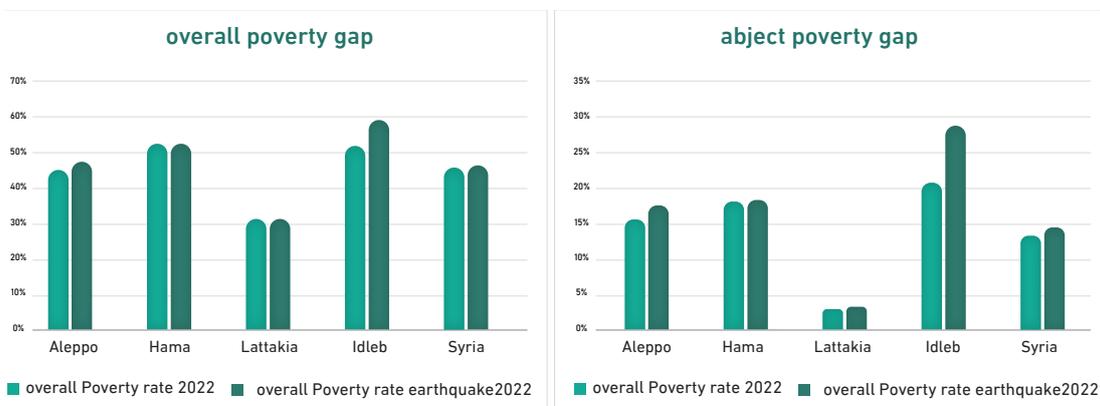


Source: Syrian Center for Policy Research. (2023). [Poverty calculations based on the monthly survey of consumer goods prices in Syria.](#)

The impact is concentrated mainly in Idleb and Aleppo in terms of the increase in the number of individuals living in poverty. In addition, the gap between the average spending of poor households and the overall

poverty lines widened. The overall poverty gap increased from 52 percent to 59 percent in Idleb and from 45 percent to 47 percent in Aleppo, while the increase was slight in both Hama and Lattakia (Figure 11).

Figure (11): Impact of the Earthquake on the Poverty Gap in the most affected governorates (2023)



Source: Syrian Center for Policy Research. (2023). [Poverty calculations based on the monthly survey of consumer prices in Syria.](#)



3.

**Response to the Earthquake:
Failure of Political Powers and
Continuation of War Foundations**

The most dangerous foundations of conflict are the formation of forces that seize power based on violence, domination, exclusion, and external support. These forces compete to expand their influence and consolidate their political, social, and economic systems. As reviewed in the section on the impacts of conflict, the controlling political powers have adopted strategies based on violence, military force, despotism, resource exploitation, exclusion/targeting of societal powers, and the distortion of public institutions in favor of the power elite and subservience to external supporting forces. The authoritarian nature of the local forces in the earthquake-affected areas, their reliance on military and security forces and external support, and the low human and financial resources resulting from the conflict determined their response to the earthquake disaster.

The **Syrian government's (GoS)** response was characterized by discrimination, politicization, evasion of responsibility, and lack of effectiveness. The government delayed in mobilizing resources to address the impacts of the earthquake or resorting to international mechanisms to help the affected districts, and the work of institutions was marred by poor coordination and lack of efficiency. Corruption spread while providing aid, and civil initiatives that attempted to mobilize donations and volunteers and deliver aid to the affected were constrained

by requesting security approvals or restricting aid to institutions close to the authorities.⁽¹⁾ However, the most dangerous aspect was the government's disregard for direct response in areas outside their control (especially since the most affected areas were in Idlib and rural Aleppo) or requesting the implementation of international support mechanisms in those areas. The GoS politicized the disaster by requesting concessions from political forces in exchange for facilitating the opening of crossings or by exaggerating the focus on the issue of sanctions and considering them the main factor hindering response capabilities. With this response, the GoS missed an important opportunity for reconciliation, solidarity, and bringing all Syrians together around the earthquake disaster.⁽²⁾

The earthquake catastrophe accelerated the steps of Arab and Turkish openness towards normalizing relations with the Syrian government, whose signs began before the disaster. These trends can consolidate the system of tyranny and exclusion and abort attempts to reach a just and sustainable solution to the conflict.

(1) Syrian Center for Policy Research. (2023). [SCPR Field Survey to Track the Earthquake's Impacts: Monitoring local and international response to the earthquake.](#)

(2) Jabbour S, Abbara A, Ekzayez A, Fouad FM, Katoub M, Nasser R. (2023). [The catastrophic response to the earthquake in Syria: the need for corrective actions and accountability.](#) *Lancet*. Mar 11; 401(10379): 802-805

The **Interim (SIG) and the Salvation (SSG) governments** could not perform their duties as governing authorities in responding to the earthquake. They did not adopt a clear strategy to confront the disaster and demonstrated a weak ability to coordinate or mobilize resources, including the military, to assist the affected population. They also shifted the burden onto civil society and international organizations. The interventions of the SIG were characterized by relying on individual initiatives from its members, focusing on media campaigns, and appealing to the international community to send aid and medical teams to the affected areas, with modest efforts in the health sector and assistance for the displaced. The field research conducted by the SCPR revealed the weak role played by both the SIG and SSG in responding to the earthquake. field research revealed the central role of civil society in filling the gap left by public institutions. The SIG and SSG continued to use the catastrophe to deepen division and refused to open space for cross-regional solidarity. For example, the SIG refused aid from the Autonomous Administration, considering it a means of political exploitation. The earthquake also revealed the extent of dependence on Turkish authorities and the inability to prioritize public issues based on community priorities.

The **international response** was distressing, as the intervention of the United Nations and donor countries clearly differentiated between Turkey and Syria on the one hand and between different controlled areas inside Syria on the other. The UN did not make necessary pressure to open cross borders to the affected areas, nor did it send equipment and rescue teams, despite the legality of such actions in cases of disasters. Additionally, United Nations organizations did not launch a campaign to explain their inability to access or mobilize international forces to reach the affected people on time. Instead, from the first day of the earthquake, it was claimed that international organizations had launched an emergency response plan and carried out their work on the ground⁽¹⁾ without distinguishing between their roles in Syria and Turkey.

(1) UNDP. (February 06, 2023). [UN agencies launch emergency response after devastating Türkiye and Syria quakes.](#)

The intervention took more than a week after the earthquake for the first UN aid convoy to enter Syria through the Bab al-Salamah cross border, and the al-Rai cross border was opened two weeks later, where a decision was awaited to allow the use of crossings by the UN Security Council.⁽¹⁾ The Bab al-Hawa cross border (the official crossing for aid to enter Syria) was not damaged but stopped working for three days after the earthquake from the Turkish side.⁽²⁾ Its operation partially resumed on the fourth day, when UN trucks (scheduled before the earthquake) entered. Many civil powers called for an investigation into the UN's performance during the response to the earthquake to hold the UN system accountable and evaluate its performance.⁽³⁾

The failure of the United Nations was linked to the weak governance of the UN system, which was heavily influenced by dominant political forces, evident in the disparity in response between the Damascus and Gaziantep offices. The difference in the flow of material aid was one of the worst manifestations of political fragmentation, represented by hindering access to the northwestern areas most affected by the disaster. Meanwhile, planes and trucks loaded with aid began arriving at airports and crossing borders in the GoS-controlled areas within hours of the disaster.⁽⁴⁾

The **Turkish government's** response to the aftermath of the earthquake in northern Syria was limited due to a shift in priorities toward responding to the disaster in Turkey. Especially since the Turkish government dominates decision-making in the SIG and significantly impacts the SSG's decisions. One of the decisions that hindered the response was the closure of the Bab al-Hawa border crossing for three days immediately after the disaster, delaying the arrival of humanitarian aid at the most critical times. While it was possible to make greater efforts to facilitate the delivery of emergency aid, especially search and rescue teams and equipment, either using secondary roads or through the mobilization of larger logistics capabilities.

The response of many countries was similar to that of the United Nations, as the United States announced on February 19th that the value of emergency aid to Syria and Turkey had reached USD 185 million to address the aftermath of the devastating earthquake that hit both countries. However, their focus was on Turkey, where response and rescue teams were sent to assist in the south of Turkey, and the Incirlik Air Base was used for relief and rescue operations.⁽⁵⁾

The European response was also delayed, as rescue teams were sent to Turkey, but

(1) Al-Arabi Al-Jadeed. (February 08, 2023). [Statement of the Head of the Negotiations Body, Badr Jamous, regarding the aid received from Turkey.](#)

(2) According to the media office director of Bab al-Hawa Crossing. Statement to Al Jazeera channel.

(3) Jabbour S, Abbara A, Ekzayez A, Fouad FM, Katoub M, Nasser R. (2023). [The catastrophic response to the earthquake in Syria: the need for corrective actions and accountability.](#) Lancet. Mar 11; 401(10379): 802-805

(4) Syrian Arab News Agency (SANA). <https://www.sana.sy/?p=1850257>

(5) Office of the Spokesperson for the US Department of State. (February 19, 2023). [U.S. Assistance to Emergency Earthquake Response Efforts in Türkiye and Syria](#)

no action was taken to send rescue teams to the affected Syrian areas. However, the European Union contributed to organizing a donor conference for Turkey and Syria in March to help the two countries overcome the repercussions of the earthquake.⁽¹⁾ The European Commission provided 3 million Euros as initial emergency aid to enhance response efforts in the affected countries. It also announced the provision of Euros 3.5 million as initial emergency aid to Syria to assist those in need in accessing shelter, water, sanitation, and various healthcare supplies through its partners, non-governmental organizations, and United Nations agencies. Several planes from the European Union's humanitarian stockpile were sent to Turkey, where the International Organization for Migration delivered them to northwestern Syria. Twelve European countries provided in-kind assistance to Syria through the EU Civil Protection Mechanism.⁽²⁾ The **flow of humanitarian in-kind aid** has increased steadily after the earthquake, with 1042 trucks loaded with relief materials crossing the Bab al-Hawa crossing during February.⁽³⁾ As for the Bab al-Salama and al-Rai crossings, preliminary statistics show that 1318 trucks have crossed them by the end of March.⁽⁴⁾ Meanwhile, the

number of planes carrying humanitarian aid that landed at Damascus, Aleppo, and Lattakia airports by the end of February was 256, carrying 7200 tons of relief aid.⁽⁵⁾ Regarding the funding of aid, data from the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) shows that more than 95 percent of the total funding requested by UN organizations, amounting to USD 397.6 million, to address the impacts of the earthquake in Syria has been committed. About 45 percent of it has already been paid as of early April 2023. More than 42 percent of these commitments come from countries and organizations in the European Union.⁽⁶⁾ The data also shows that less than 5 percent of the emergency aid promised to cover humanitarian needs has been directed to local humanitarian organizations.⁽⁷⁾

Less than 2 percent of the total committed amounts have been allocated to early recovery efforts. On the other hand, participants in the donors' conference held by the European Union in March 2023 pledged to allocate Euros 911 million in aid to support humanitarian needs and early recovery efforts in Syria after the earthquake.⁽⁸⁾ The United Nations seeks to implement new mechanisms for intervention in the northwest regions

(1) European Commission. (February 08, 2023). [European Commission and Swedish Presidency of the Council will organise a Donors' Conference for the people of Türkiye and Syria affected by the earthquake.](#)

(2) European Commission. (February 17, 2023). [Earthquake: disaster response operations in Syria and Türkiye continue.](#)

(3) Approximately 20040 tons of aid were transported, with around 60 percent being food aid, while the rest was distributed among medical, health, clothing, and logistical supplies, according to the management of the Bab al-Hawa crossing.

(4) Distributed among food, medical supplies, clothing, and shelter materials according to the Syrian Interim Government.

(5) Distributed among relief, food, emergency, medical supplies, hospital equipment, and ambulances, according to the Syrian Arab News Agency.

(6) UN-OCHA. (2023). [Syria Earthquake Flash Appeal 2023.](#)

(7) Oxfam, CARE Denmark, Danish Refugee Council, Malteser International, WFP, Save the Children.

(8) European Commission. (March 21, 2023). [Together for the people in Türkiye and Syria.](#)

as an alternative to the coordination previously carried out through the UN-OCHA organization. However, the recurring challenge is the focus on humanitarian relief aid at the expense of development and the absence of linking aid to overcoming conflict foundations, such as developing effective governance and community participation and promoting social solidarity and sustainability.

Despite previous commitments, the financial contributions provided by major donors remained limited compared to the overall economic losses resulting from the earthquake. They amounted to less than 20 percent of these losses, according to the SCPR's estimates. **Civil society's response** was the most effective and dynamic, as the civil organizations and initiatives, particularly in northwest Syria, contributed to mobilizing volunteers and saving thousands of lives despite the severe shortage of resources and equipment. Local organizations such as the White Helmets took on the responsibility of organizing, coordinating, and rescuing to fill the gap left by weak governance mechanisms of political forces and the absence of the role of the United Nations. These organizations and initiatives often operate in a restricted civil space restricted by the arbitrary policies and bureaucracy of the de facto forces, with tightened security surveillance that aligns with the political agendas of these forces. They suffer from a significant shortage of resources, lack of governance structures,

monitoring mechanisms, and codes of conduct, and many of them suffer from inconsistency in the provision of services, irregularity, and primitive frameworks that make them unable to meet growing needs.⁽¹⁾

(1) Syrian Center for Policy Research. (2023). [SCPR Field Survey to Track the Earthquake's Impacts: Monitoring local and international response to the earthquake.](#)

The way humanitarian aid is utilized in disaster and conflict-affected areas can significantly impact overcoming the consequences of these crises, especially in areas where there is a lack of basic governance mechanisms for humanitarian and developmental work, as is the case in earthquake-affected areas in Syria. As relying on institutions or businesses directly linked to the main warring parties to implement humanitarian interventions increases the risks, considering that they have greater access to limited available resources and higher flexibility in overcoming bureaucratic obstacles that may hinder emergency response at the expense of other actors in civil society or the private sector.⁽¹⁾ The Center provided an analysis of the complex relationship between non-governmental organizations and the conflict economies in Syria, whether directly or indirectly. It concluded that relying on humanitarian aid reinforces conflict dynamics and increases dependency.⁽²⁾ The risks associated with humanitarian aid include an excessive focus on relief efforts. A glance at the nature of the planned projects to be funded reveals that the majority are linked to relief efforts, disregarding the need for an effective institutional framework that frames humanitarian and development interventions and places them in their proper context. Building the foundations of development, peace, or solidarity is thus complicated. Linking civil and volunteer work to external grants and aid also

affects these organizations and initiatives, turning them into a business system that implements projects without community participation or impacts sustainability.

The community response to mitigate the damages of the earthquake was a positive aspect amid the catastrophic conditions that Syrians are going through. Despite the lack of trust and limited solidarity among citizens in general due to the long-standing conflict, security concerns, political instability, repeated human rights violations, sectarian, ethnic, and religious divisions, political polarization, social fragmentation, loyalty to primary identities, ideological affiliations, and the collapse of the economic and living reality, cooperative, supportive, and volunteer activities have expanded significantly. The above was evident in the response to the earthquake disaster, especially with the failure of the United Nations and political powers to respond effectively in northwestern Syria.

(1) UNU-WIDER. (2021). [Deals and Development in Fragile and Conflict-affected States](#).

(2) Syrian Center for Policy Research (2019). [Development Policy Forum the role of civil society in dismantling conflict economies](#).

Social solidarity to face the earthquake impacts was characterized as humanitarian solidarity, and it was reflected in a high response from civil society, local initiatives, and the private sector,⁽¹⁾ reflecting the culture of social solidarity in facing crises. This solidarity provided a model for overcoming the political, geographic, and cultural polarization the warring actors have long fueled. This solidarity is essential in overcoming the social degradation that has affected Syrians throughout the conflict.

Traditional community relationships, such as tribal, family, and religious ties, supported social solidarity, evident in several governorates such as Deir-ez-zor, Ar-Raqqa, Daraa, Sweida, and Hama. Community based initiatives (such as «Fazaa») were used to promote the process of solidarity. Solidarity took on other forms beyond traditional relationships among Syrians across regions, among expatriates and residents, and through civil organizations and initiatives. However, the state of solidarity was affected by the differences in the control areas and the nature of the social relationships in the region.

Civil society played a significant role in promoting solidarity in northeastern and northwestern Syria, despite restrictions on fundraising in Hasakah and Ar-Raqqa that required approval. In northwest Syria, factions directed people to send their aid to specific institutions and did not allow

them to donate directly to the affected people. Restrictions were even more severe in GoS-controlled areas, where the GoS managed the solidarity process according to its political agenda, and solidarity with regions outside its control was undermined. Activists in solidarity initiatives faced threats and intimidation, and the GoS followed a discriminatory approach between their regions, including concealing statistics such as the damage in Aleppo. In addition, it monopolized the civil role played by affiliated institutions such as the Syrian Trust for Development.⁽²⁾

(1) Syrian Center for Policy Research. (2023). [SCPR Field Survey to Track the Earthquake's Impacts: Social solidarity following the earthquake.](#)

(2) Ibid.



Discussion and Recommendations: Developmental Options

The report provides a framework for analysing the impacts of the earthquake disaster on Syria within the context of the Syrian conflict, the roles of actors, and the nature of the existing political and economic systems. The report focuses on estimating the earthquake's impacts on the affected areas by briefly analysing the developmental status of these areas before and during the conflict. The report also estimates the earthquake's direct economic and developmental losses by relying on field research, SCPR surveys, studies, and secondary data issued after the earthquake.

An earthquake is a natural phenomenon in its first moments. Then it turns into **a political, social, and developmental issue**, which depends on how the existing governmental systems and the active forces respond to the effects of the disaster. The earthquake struck a country ravaged by over twelve years of war, suffering from political and social fragmentation, and whose developmental and economic foundations were wasted. The challenges in Syria are not limited to issues such as poor participation and transparency, widening inequality, and weak competence and accountability. During the conflict, the priorities of political forces, especially the Syrian regime, have shifted into entrenching tyranny over the public sphere using violence, targeting Syrians, and squandering their capabilities, rights, and opportunities. The distorted power structure resulting from the conflict exacerbated the negative effects of the earthquake. It can be seen

in the failure of the local political forces to respond to the disaster, its politicization, and narrow interests while continuing to consolidate tyranny, conflict economies, and the politicization of identity and dependence on external powers. They added new evidence of the inability of these forces to guarantee stability or the minimum requirements for a decent life in the areas under their control. Thus, a just and sustainable political solution that consolidates the transition towards fair, democratic, participatory, and accountable institutions committed to the rights and freedoms of citizens becomes a priority for any effective response to the consequences of the earthquake or future risks.

The earthquake resulted in huge human and material losses, in terms of life and injuries, in addition to the displacement of hundreds of thousands and the control of fear of a recurrence of the disaster, and the exposure of activities, economic wealth, and infrastructure to severe damage, which led to the deterioration of living conditions and the loss of job opportunities and sources of income. The earthquake also caused significant environmental damage, represented by pollution caused by rubble and water and sewage systems. These losses carry an additional dimension, as the damage was concentrated in northwestern Syria, which exacerbated the disparity between regions, as the development situation deteriorated sharply in the areas most affected by the earthquake. Most of these areas are among the most affected by the

conflict, such as Idleb and Aleppo. The impact also varied between women and men, residents and displaced persons, and those affected directly and indirectly. New levels of inequality threaten to deepen the marginalization and exclusion of those most affected by the conflict.

Social solidarity among Syrians is considered the most prominent positive aspect in facing the disaster, despite the bloody legacy of the conflict and the deep societal divisions. The human dimension between individuals and societies exceeded the agendas of the conflict forces and the fighting fronts. Many civil and community-based initiatives emerged that sought relief for those affected, in addition to the main role of civil society organizations and civil initiatives that tried to fill the gap left by the conflict forces in rescue operations, providing aid, advocacy, and coordinating relief efforts. However, the inflationary needs and the weak capabilities of these organizations and initiatives increased the dependence of the Syrians on aid and assistance. They exposed them to exploitation by political forces and the economic elite of the conflict. On the global level, several manifestations of solidarity with those affected by the earthquake emerged, as individuals, humanitarian institutions, and civil organizations worldwide contributed to providing donations and aid, in addition to the official assistance provided by countries. However, the absence of an effective institutional framework for receiving and distributing aid led to confusing support operations, and many

people preferred direct aid through international NGOs or UN organizations.

The prevailing economic model, including the humanitarian aid economy, aggravates inequalities and empowers the conflict elite. The behavior of the economic elite associated with conflict forces during the response to the earthquake showed their continued adoption of exploitative economic systems that fuel conflict economies. Furthermore, the huge amount of international aid spent on the Syrian economy has weak developmental effectiveness. Most of it is focused on the relief aspects from an emergency perspective. The reasons vary, including the status of instability and absence of the rule of law; the sanctions that consider the GoS will exploit the developmental investment in what it calls "reconstruction"; and international organizations preferring relief projects compared to development projects to avoid clashes with warring parties as development interventions require high levels of governance, accountability, and coordination. Therefore, reviewing the strategy of the United Nations and relief organizations is necessary in Syria and conflict contexts generally. Overall, despite the vital importance of aid in helping the victims of the conflict, humanitarian aid within the existing systems will remain incapable of overcoming the effects of the earthquake to a large extent.

In the context of these results, the report presents developmental approaches within a sustainable response to the effects of the earthquake:

The deterioration of the social and economic conditions and the inability of the political forces to confront the effects of the earthquake constitutes a threat to the security and military forces themselves and to the countries that support them. The conflicting powers also suffer from a humiliating dependence on the external powers that dominate military, political, and economic decisions. This may provide an opportunity for the positions of tyranny to recede in the event of concerted pressure by societal forces and with serious support from the UN and external forces aimed at overcoming the conflict and achieving peace and justice. Initiatives such as the steps of Arab normalization with GoS do not serve the direction toward a sustainable political solution. Rather, they normalize conflict forces and perpetuate the foundations of conflict. Thus, reconsidering the societal role in pushing for a political solution becomes necessary.

It is necessary to **work on reinforcing social solidarity, restoring the role of society both internally and externally**, transforming the role of civil society from a service provider to an effective political and developmental actor in the public sphere, expanding the accountability mechanisms for political and military forces, and developing the role of civil society organizations and initiatives

in building governance structures that oppose conflict, oppression, and fragmentation. It also includes elevating civic action by creating public participation spaces and developing informal policies that guarantee rights and freedoms and confront the policies of conflict forces. Reviewing civil society work in Syria requires greater independence from authoritarian forces, building peer relationships with donors, and deepening relationships with local communities. In addition, it requires including interdisciplinary and intersectoral participatory development approaches in every activity or project.

The social solidarity economy is considered one of the possible alternatives to shift away from conflict economies and focus on investing material and human resources away from exploitation, militarization, and environmental depletion. It requires developing economic options through broad community participation and enhancing collective economic work through joint initiatives and projects between individuals, civil and private institutions committed to implementing economic activity under participatory and transparent governance, in addition to promoting social solidarity, equality, overcoming conflict and polarization factors, and respecting environmental sustainability. Prioritizing these commitments over profit and wealth accumulation is essential for enabling society to transform the economy into a system of peace and prosperity. This approach paves the way for Syrians

to participate in economic activities that oppose economies of conflict and strengthen the foundations of democracy and justice.

The suggested alternative developmental approach requires coordinating political, social, and economic work and relying primarily on the Syrian community. It also requires enhancing the developmental foundations of society to enable it to influence the path of overcoming conflict and the impacts of the earthquake. This approach is based on collaboration and participation without getting caught up in narrow localism, as working with local communities should not be separated from cross-regional and cross-sector work. Instead, integrated work will be a driving force in reducing divisions and fragmentation. Humanitarian aid can drive sustainable development if invested in governance designed to dismantle conflict relationships, rebuild the institutional system based on efficiency, equality, and sustainability, and consolidate cross-cutting social relations. Consequently, the current system must be changed as it is subject in many aspects to political forces and provides a truncated treatment of development by focusing on relief and relying on «aid brokers» from intermediary international humanitarian organizations and private companies, with an absence of actual accountability.

Developing independent, critical, and collaborative research and statistical work is central to identifying realistic evidence-based challenges resulting from

the earthquake and forming a mechanism to represent the priorities and aspirations of the Syrian community regarding how to overcome the impacts and alleviate the suffering of the affected. Joint efforts must be made to develop methodologies, establish collaborative research, adhere to research ethics, and make information available to everyone. Independent research and statistics are fundamental in developing knowledge production liberated from political polarization and exploitation and provide thoughtful solutions that consider rights, freedoms, justice, and sustainability while promoting interactive collaboration between implementing organizations, local communities, and research institutions.

Activating the developmental role of civil society and local initiatives

according to the alternative approach to confronting the effects of the earthquake requires taking the initiative to lead the humanitarian aid system by civil forces across the regions, to be responsible for partnership with society and capable of setting priorities and implementation in the light of social accountability. Moreover, a participatory scientific identification of damages and available options is needed through coordination between research institutions, communities, institutions, and civic initiatives. In this regard, designing a system for intervention priorities and potential impacts becomes essential.

Designing earthquake damage reconstruction on a participatory democratic basis with the affected

communities, designing work and projects to be owned by a wide societal segment, and avoiding the military and security forces and the monopolies of the conflict elite.

Focusing on linking interventions with the development of governance for community interventions and confronting the forces of tyranny, and focusing on democracy and accountability of institutional construction associated with overcoming the effects of the earthquake. The above should be associated with creating community spaces to evaluate projects' performance and holding unsustainable or discriminatory interventions accountable.

The alternative approach also requires community forces to adopt integrated development work across sectors to link economic interventions to developmental and environmental sustainability. It should go hand in hand with crossing the internal borders of the conflict, including the flow of energy, water, and food, and the abolition of royalties, smuggling, and looting, as a first step towards lifting internal economic obstacles. Interventions must be designed to lead to the gradual abandonment of aid and subsidies by building the foundations of production and a sustainable and decent environment for work.

As for what is required politically from the international actors interested in ending the conflict, in addition to the United Nations, is to confirm the commitment of any Arab or Turkish opening process with the Syrian government to the rights and freedoms of the Syrians and to ensure the transition

from the system of tyranny, oppression and exploitation towards democracy, justice, and peace. Pressure must also be increased to divert a major part of military and security expenditures towards overcoming the effects of the earthquake, stopping military and security violations against civilians, stopping monopolizing imports and main commodities in local markets, and stopping encroaching on the lands and property of Syrians.

References

- Assistance Coordination Unit. (February 26, 2023). Humanitarian Situation in North-West Syria Following the Devastating Earthquake. (in Arabic)
- Central Bureau of Statistics. (2009). Household Health Survey in Syria 2009. (in Arabic)
- Central Bureau of Statistics. (2010). Labor Force Surveys in Syria 2009-2010. (in Arabic)
- Central Bureau of Statistics. (2023). Statistical Yearbook of Syria (2011-2022). (in Arabic)
- Central Bureau of Statistics. (2010). The household income and expenditure survey in Syria for the year 2009. (in Arabic)
- European Commission. (February 08, 2023). European Commission and Swedish Presidency of the Council will organise a Donors' Conference for the people of Türkiye and Syria affected by the earthquake.
- European Commission. (February 17, 2023). Earthquake: disaster response operations in Syria and Türkiye continue.
- European Commission. (March 21, 2023). Together for the people in Türkiye and Syria.
- Jabbour S, Abbara A, Ekzayez A, Fouad FM, Katoub M, Nasser R. (2023): The catastrophic response to the earthquake in Syria: the need for corrective actions and accountability. Lancet. Mar 11; 401 (10379): 802-805.
- Lackner, Stephanie (2018). Earthquakes and economic growth, FIW Working Paper, No. 190, FIW - Research Centre International Economics, Vienna.
- Office of the Spokesperson for the US Department of State. (February 19, 2023). U.S. Assistance to Emergency Earthquake Response Efforts in Türkiye and Syria.
- REACH. (February 15, 2023). Earthquake Response Rapid Needs Assessment.
- Syrian Center for Policy Research. (2020). Conflict Economies in Syria: Roots, Dynamics, and Pathways for Change.
- Syrian Center for Policy Research. (2021). Determinants of forced displacement in the Syrian conflict.
- Syrian Center for Policy Research. (2022). Dialogue workshops on conflict economics and social solidarity economy in Syria. (in Arabic)
- Syrian Center for Policy Research. (2019). Development Policy Forum the role of civil society in dismantling conflict economies. (in Arabic)
- Syrian Center for Policy Research. (2022). "Hope Under Siege" Voices of Adolescents on Education and ICT during the Syrian Conflict.

- Syrian Center for Policy Research. (2022). Identity Politics in Syria.
- Syrian Center for Policy Research. (2020). Justice to Transcend Conflict.
- Syrian Center for Policy Research. (2010). Poverty in Syria 2009. (in Arabic)
- Syrian Center for Policy Research (2022). Socio-economic assessment surveys in Syria from 2020 to 2022. (in Arabic)
- Syrian Center for Policy Research. (2023). SCPR'S Annual bulletin for consumer price index and inflation in Syria 2022, Issue 1.
- Syrian Center for Policy Research. (2023). SCPR'S Monthly bulletin for consumer price index and inflation in Syria January 2023, Issue 1.
- Syrian Center for Policy Research. (2023). SCPR'S Monthly bulletin for consumer price index and inflation in Syria February 2023, Issue 2.
- Syrian Center for Policy Research. (2023). SCPR Field Survey to Track the Earthquake's Impacts: estimating the number of deaths and damaged buildings. (in Arabic)
- Syrian Center for Policy Research. (2023). SCPR Field Survey to Track the Earthquake's Impacts: Monitoring local and international response to the earthquake. (in Arabic)
- Syrian Center for Policy Research. (2023). SCPR Field Survey to Track the Earthquake's Impacts: Social solidarity following the earthquake. (in Arabic)
- Syrian Center for Policy Research. (2013). Socioeconomic Roots and Impact of the Syrian Crisis 2013
- Syrian Center for Policy Research. (2022). The devastating of Right to Health during Syrian Conflict.
- Syrian Network for Human Rights .(2023). On International Women's Day, the Devastating Earthquake that Hit Northwestern Syria Has Exacerbated the Dire Situation of Women, With No Fewer than 35,000 Women Losing Their Homes.
- UNDP. (February 06, 2023). UN agencies launch emergency response after devastating Türkiye and Syria quakes.
- UN-OCHA. (February 25, 2023). North-West Syria: Situation Report.
- UN-OCHA. (2023). Syria Earthquake Flash Appeal 2023.
- UNU-WIDER. (2021). Deals and Development in Fragile and Conflict-affected States.

Appendices

Appendix (1): Methodology for the analysis of the earthquake disaster in Syria

The earthquake disaster analysis methodology is based on a composite framework of the political economy and capabilities approaches, as well as a multidisciplinary participatory methodology in the design and implementation. The report used the previous studies conducted by SCPR which contains four main indices to measure the development status before the earthquake: 1) the Human Development Index (HDI) consists of three sub-indicators, education, health, and food security; 2) Social Capital Index (SCI) consists of three sub-indicators, the social network and participation, the trust, and the common values; 3) Economic Activity Index (ECO) consists of three sub-indicators, the employment opportunity, the income, and the poverty; 4) the Living Conditions Index (LCI) consists of 7 sub-indicators, housing quality, household appliances, fuel, electricity, sanitation, communication, and transport.

Several studies and surveys were used to analyse the development status before the conflict, including Poverty in Syria 2009 by the SCPR, which was based on the household income and expenditure survey conducted in Syria in 2009; the Labour Force Surveys in Syria 2009-2010; Household Health Survey in Syria 2009, and Statistical Abstract of Syria 2011, published by the Central Bureau of Statistics (CBS).

In the conflict period, the study relied on the studies and surveys of the Syrian Center for Policy research: socio-economic assessment surveys in Syria 2020-2021, the devastating of right to health during Syrian conflict 2022, the citizenship survey 2022, the justice assessment 2022, as well as the 2014 population status survey. These studies and surveys are based on in-depth interviews with key informants from all Syrian regions.

Furthermore, the report used the results of the Development Policy Forum (2019-2022), which is a participatory space for in-depth and methodical discussion amongst a group of experts and specialists. The Forum included a series of sessions focusing on the dismantling conflict economy, as well as discussions about social solidarity, identity politics, Syria's justice system assessment, alternative justice systems and developing participatory alternatives for conflict resolution.

In February and March 2023, the SCPR conducted a field survey to track the earthquake's impacts in Idleb, Aleppo, Der-ezzor, Ar-Raqqa, Al-Hasakeh, Latakia, Hama, Tartous, Homs, Damascus, Rural Damascus, and As-Sweida. It included 91 in-depth interviews on three themes: 1) solidarity following the earthquake (16 interviews); 2) estimating the number of deaths and damaged buildings (59 interviews), and 3) Monitoring local and international response to the earthquake (16 interviews).

A workshop on the earthquake was held on 7 February 2023, which brought together Syrian organizations and institutions working in public sphere and experts and activists in the field of development and relief to diagnose the effects of the disaster, discussing the main questions and challenges associated with the earthquake, and developing options and alternatives.

Capital stock losses due to the earthquake were calculated based on pre-conflict stock estimates, which were based on a calculation of the net real cost of capital stock using the perpetual inventory method; and during the conflict capital stock estimates, by calculating the total net investment and capital stock destruction based on the economic and social surveys for the years 2020, 2021, and 2022. To calculate the capital stock at the regional level, it was distributed based on the number of buildings in each region, and the percentage of building destruction (destroyed buildings to total buildings in each region) was used as an indicative indicator to calculate the impact of the earthquake on the capital stock. The replacement cost of the capital stock was estimated based on the actual cost of construction, cladding and engineering studies in 2022.

Household furniture and equipment losses were calculated using an indicative index of housing damage; and household wealth estimates in 2010 and 2022, based on the 2009 Household Income and Expenditure Survey and SCPR surveys.

The GDP losses resulting from the earthquake were estimated on district level using the elasticity of capital stock to GDP during the conflict period and estimates of GDP at district level before and during the conflict, where the number of workers and worker productivity in each sector were used as a proxy for calculating GDP based on the 2009 and 2010 labour force surveys, Population Status Survey 2014 and socio-economic surveys (2020-2022).

Appendix (2): Distribution of earthquake impacts by governorate, administrative division of the governorate, and control area.

	Controlling Powers	Victims	Injuries	Destroyed Buildings	Partially Damaged Buildings
Aleppo		2,521	3,671	1,182	4,065
Jebel Saman	GoS	991	1,802	552	445
Atareb	SSG	235	370	83	190
Al-Bab	SIG	19	177	7	825
Afrin	SIG	1,201	1,017	466	2,359
A'zaz	SIG	65	275	54	200
As-Safira	GoS	-	-	5	10
Jarablus	SIG	10	30	15	36
Hama		51	260	17	444
Hama Center	GoS	40	260	7	170
As-Suqaylabiyah	GoS	11	-	4	94
As-Salamiyeh	GoS	-	-	2	70
Masyaf	GoS	-	-	3	84
Muhradah	GoS	-	-	1	26
Lattakia		835	1,356	225	768
Lattakia Center	GoS	416	791	84	320
Jablah	GoS	346	457	88	261
Al-Haffa	GoS	11	17	38	114
Al-Qardaha	GoS	62	91	14	73
Idleb		2,985	6,542	1,252	4,808
Idleb center	SSG	67	228	86	551
Al Ma'ra	GoS	-	-	76	487
Harim	SSG	2493	5687	641	2,488
Jisr-Ash-Shugur	SSG	242	343	443	1,230
Ariha	SSG	183	284	6	52
Tartus (Dreikish)	GoS	-	-	15	20
Syria		6,392	11,829	2,691	10,105

Source: Syrian Center for Policy Research's 2023 earthquake impact field survey, data from the Ministry of Health in Syrian government-controlled areas, data from the ACU in interim government and salvation government areas, and SCPR estimates based on cross-referenced data.

Appendix (3): Earthquake's direct and indirect impact framework*

	Possible direct effects	Relief response (local and international)	Indirect impacts
Developmental /Social	Victims (dead, missing, and injured)	Search and rescue, treatment, and documentation	Losses of human capital, chronic physical or psychological injuries.
	Exacerbation of poverty and deprivation	Food and living aid	High rates of poverty in affected and unaffected areas
	Displacement and fragmentation of families and communities	Temporary shelter/host communities and basic livelihoods	Burdens of displacement conditions on the displaced and host communities
	Fear and instability	Psychosocial assistance	Migration, fear of return, and uncertainty
	Solidarity and cooperation	Initiatives and networks for solidarity, material and immaterial assistance and empathy	Civil networks and solidarity institutions
Institutional	Suspension/disruption of public and private services: Health system, educational system, and utilities	«Activating the Disaster Response System» Redirecting human and material resources towards the healthcare system and utilizing the capabilities of unaffected areas (hospitals, equipment, medical teams). Maintenance teams for energy and water, opening roads, and restoring communications.	Damage to the public services system in terms of readiness, efficiency, and justice over the medium and long terms. Or, developing disaster response systems.
	Disruption of the function of public institutions and the rule of law	Coordinating efforts, setting priorities, allocating resources, and taking emergency measures to avoid violations.	Reforming public institutions with a change in priorities.
	Inability to meet the needs.	Requesting international and local relief aid.	Increasing dependence on aid.
	Political exploitation.	Monitoring and follow-up campaigns by civil forces, representative institutions, and media.	Neglect, exploitation, favoritism, and marginalization of the affected people.
Environmental	Deterioration or pollution of natural resources.	Assessing the damage and prioritizing based on the most critical impact on affected communities.	Water pollution or loss of groundwater. Soil retrogression, land subsidence, and air pollution. Loss of underground resources.
Economic	Decline in the gross domestic product (GDP)/ value-added	Humanitarian aid, temporary alternatives to markets, trade routes, emergency compensation for affected workers and economic institutions	Decline in physical and non-physical growth sources, loss of economic networks and a portion of local demand
	Prices hike	Providing subsidized goods	High production costs
	Destruction of infrastructure	Providing equipment and teams to save lives, protecting individuals from the risks of damaged infrastructure, and assessing the damages.	Long-term damages
	Damage to equipment, furniture, and machinery.	Providing minimum alternatives, especially for displaced and affected people.	Loss of wealth and equipment
	Damage to equipment, furniture, and machinery.	Providing minimum alternatives, especially for displaced and affected people.	Loss of wealth and equipment

* The nature, severity, and persistence of damage depend on the affected country's institutional, social, and economic capacities.

Source: Syrian Center for Policy Research. (2023)

