



# Arab Risk Monitor: A Conceptual Framework



Shared Prosperity **Dignified Life**





Shared Prosperity **Dignified Life**



### **VISION**

ESCWA, an innovative catalyst for a stable, just and flourishing Arab region

### **MISSION**

Committed to the 2030 Agenda, ESCWA's passionate team produces innovative knowledge, fosters regional consensus and delivers transformational policy advice. Together, we work for a sustainable future for all.



**Economic and Social Commission for Western Asia**

# Arab Risk Monitor: A conceptual framework



United Nations  
Beirut

© 2023 United Nations  
All rights reserved worldwide

Photocopies and reproductions of excerpts are allowed with proper credits.

All queries on rights and licences, including subsidiary rights, should be addressed to the United Nations Economic and Social Commission for Western Asia (ESCWA),  
email: [publications-escwa@un.org](mailto:publications-escwa@un.org).

The findings, interpretations and conclusions expressed in this publication are those of the authors and do not necessarily reflect the views of the United Nations or its officials or Member States.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Links contained in this publication are provided for the convenience of the reader and are correct at the time of issue. The United Nations takes no responsibility for the continued accuracy of that information or for the content of any external website.

References have, wherever possible, been verified.

Mention of commercial names and products does not imply the endorsement of the United Nations.

References to dollars (\$) are to United States dollars unless otherwise stated.

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

United Nations publication issued by ESCWA, United Nations House,  
Riad El Solh Square, P.O. Box: 11-8575, Beirut, Lebanon.

Website: [www.unescwa.org](http://www.unescwa.org).

23-00081

# Acknowledgements

---

This publication was developed by the United Nations Economic and Social Commission for Western Asia (ESCWA), Governance and Prevention Cluster. This is the first of a three-paper series of the Arab Risk Monitor. The first paper introduces an action-oriented conceptual framework to unpack the risk of conflict, crisis and instability with a focus on the Arab region. The second paper presents the methodology utilized in quantifying risk, explaining different methods to normalize, scale and weight selected indicators. The third paper is the Arab Risk Monitor. It explores issues shaping conflict, crisis and instability in the Arab region, measuring vulnerabilities and resilience across risk pathways of conflict, climate and development.

The publications were implemented under the guidance of Tarik Alami, Cluster Leader, Governance and Conflict Prevention. They were

discussed in several iterations involving experts from academia, think tanks and civil service. These meetings included: The multi-stakeholder subcommittee to support the attainment of the Sustainable Development Goals (SDGs) in Arab conflict affected countries (7 December 2022); The Contribution of Development to the Enjoyment of All Human Rights (8–9 November 2022); The sustainability of natural resources in light of climate change: a perspective from public administration (12–13 December 2022) and Sustainable Solutions for Human Security, Regional Initiative on Climate Security for Arab States (26 October 2022).

The main contributing authors from the United Nations Economic and Social Commission for Western Asia were Raffaele Bertini, Julie Bryhn, Youssef Chaitani, Pattile Nahabedian and Pietro Tornese. Research support was provided by Jala El-Akoum and Tala Abdul Samad.



# Key messages

- 
- *The proposed conceptual framework consists of three risk pathways (conflict, climate and development), each leading to risk through a combination of two elements: increasing vulnerability and decreasing resilience.*
- 
- *The report defines vulnerability in terms of likelihood and structural exposure to shocks and resilience in terms of the policy-driven capacity to absorb the negative impact of shocks. For some countries, risk is driven by lower resilience (e.g., having less fiscal space or low food security). For others, it is driven by higher vulnerability (e.g., a neighbouring conflict).*
- 
- *Historical grievances are among the strongest predictors of future conflict.*
- 
- *The risk of future instability is compounded by a country's enabling security environment such as its degree of militarization and territorial control.*
- 
- *While climate change does not directly cause violence, its impact can affect the risk of conflict through a number of mechanisms.*
- 
- *Impacts of climate change, such as more frequent and intense extreme weather events, are increasingly felt in the Arab region which is already characterized by structural issues such as water scarcity.*
- 
- *Economic and social systems and institutional settings that are not capable of coping with structural and sudden shocks are at higher risk compared to those who have this capacity.*
-





# Contents

---

|   |     |
|---|-----|
| Acknowledgements                            | iii |
| Key messages                                | v   |
| Introduction                                | 1   |
| 1. A conceptual framework for conflict risk | 3   |
| A. The Conflict pathway                     | 6   |
| B. The climate pathway                      | 8   |
| C. The development pathway                  | 10  |
| 2. Conclusion                               | 15  |
| References                                  | 17  |



# Introduction

---

Protracted and complex crises have become increasingly common<sup>1</sup> and the Arab world has been the scene of much of the world's deadliest episodes of violence. In 2021, active conflicts<sup>2</sup> or fatal political violence had been reported in seven Arab countries,<sup>3</sup> while battle-related deaths had gone up for the first time in seven years.<sup>4</sup>

As conflicts continue to impact the region, the ramifications of hostilities on people and societies compounded by other shocks or mega trends such as the war in Ukraine, the COVID-19 pandemic and climate change, further exacerbate fragility and vulnerability. The Arab region is home to just 6 per cent of the world's population yet hosts 34 per cent of the world's internally displaced persons (IDPs) and 35 per cent of refugees. The region also hosts 31 per cent of the world's people in need of humanitarian assistance, as well as reports 16 per cent of global deaths resulting from conflict or fatal political violence. Such a state of affairs poses serious risks for sustainable development and peace efforts.

The growing human and economic costs of conflict have accelerated momentum for fragile countries and for the international community

to focus on improving efforts at prevention. The centrality of conflict prevention is underscored in the United Nations Charter involving a range of actors across the three United Nations pillars of peace and security, development and human rights. Prevention is extensively featured in the United Nations Secretary-General's 2021 landmark report *Our Common Agenda* whose *New Agenda for Peace* calls for more investments in prevention and peacebuilding, as well as better support to regional actors in sustaining peace. Furthermore, Ministerial Session resolutions 271 (XXIV) and 282 (XXV) request the United Nations Economic and Social Commission for Western Asia (ESCWA) to mitigate and address the impacts of conflict within the context of strengthening social and economic development within the Arab region. The League of Arab States' Multi-Stakeholders Subcommittee to Support the Attainment of the SDGs in Conflict-Affected Countries requested the preparation of an Arab report on fragility and asked ESCWA to present a preliminary study on this matter.

Prevention is defined by the twin 2016 General Assembly and Security Council resolutions on sustaining peace<sup>5</sup> as the avoidance of "the outbreak, escalation, continuation and

---

1 United Nations and World Bank, 2018.

2 A conflict is considered active if there are at least 25 fatalities per year from either State-based or non-State violence.

3 Egypt, Iraq, Somalia, State of Palestine, Sudan, Syrian Arab Republic, and Yemen.

4 ESCWA calculations based on data retrieved from the Uppsala Conflict Data Program's Georeferenced Event Dataset version 22.1.

5 (A/RES/70/262 and S/RES/2282, respectively).

recurrence of violent conflicts”.<sup>6</sup> While there is no shared conceptual understanding, an important distinction can be made between operational prevention such as early warnings and other actions to prevent imminent escalation of specific crises, and structural prevention or the need to address the economic, social and environmental root causes of conflict or violence.<sup>7</sup> Both operational and structural prevention are necessary conduits to avert the outbreak of potentially devastating crises.

Against this backdrop, the objective of ESCWA’s Arab Risk Monitor is to advance risk-informed policymaking and integrated response in the Arab region, which includes strengthening prevention capacities as well as awareness of development stakeholders including the member States of ESCWA (and the League of Arab States). To contribute towards this objective, the main goal of this paper – the first in a series of three – is to propose an action-oriented<sup>8</sup> conceptual framework to unpack the

risk of conflict, crisis and instability with a specific focus on the Arab region.

Drawing upon decades of empirical literature on drivers and predictors of conflict or fatal political violence, the framework identifies three “risk pathways” that are associated with a greater risk of crisis and instability in the Arab region. The framework is action-oriented as it distinguishes between “structural” risk factors over which a country can exercise limited control, and “policy-driven” factors that can be mitigated thereby allowing decision makers to effectively tailor response and prevention.

The remainder of this background paper is as follows. Section 2 introduces the authors’ conceptual framework. The rationale and justification for each component is then discussed in sections 2.1 to 2.3 with an overview of appropriate literature, as well as its relevance in the Arab context. Section 3 concludes.

---

6 Resolution 2282 (2016)/adopted by the Security Council at its 7680th meeting on 27 April 2016. Resolution A/70/262/adopted by the General Assembly on 27 April 2016.

7 Desai, 2020.

8 By “action” we consider both policies and programming.

# 1. A conceptual framework for conflict risk

---

The proposed conceptual framework consists of three risk pathways (conflict, climate and development), each leading to risk through a combination of two elements: increasing vulnerability and decreasing resilience. The risk pathways have been identified by drawing from decades of empirical research on conflict drivers and their relevance for the Arab region, while definitions of risk, vulnerability and resilience are adapted from the literature on economic vulnerability and disaster risk.

The first risk pathway is through conflict. Historical grievances are among the strongest predictors of future conflict.<sup>9</sup> The risk of future instability is compounded by a country's enabling security environment such as its degree of militarization and territorial control.<sup>10</sup> The conflict pathway is crucial to the Arab region as it has been the scene of most of the world's deadliest conflicts.

The second risk pathway is through climate. While climate change does not directly cause

violence, its impact can affect the risk of conflict through a number of mechanisms.<sup>11</sup> Impacts of climate change, such as more frequent and intense extreme weather events, are increasingly felt in the Arab region which is already characterized by structural issues such as water scarcity.

The third risk pathway is through social, economic and institutional development. This pathway represents all the complex set of dynamics that in most of the cases are direct or indirect causes of risk in the Arab region. Economic and social systems and institutional settings that are not capable of coping with structural and sudden shocks are at higher risk compared to those who have this capacity.

Borrowing from the literature on economic vulnerability to shocks,<sup>12</sup> the proposed framework then defines each "risk pathway" as the combination of two elements: vulnerability and resilience.

---

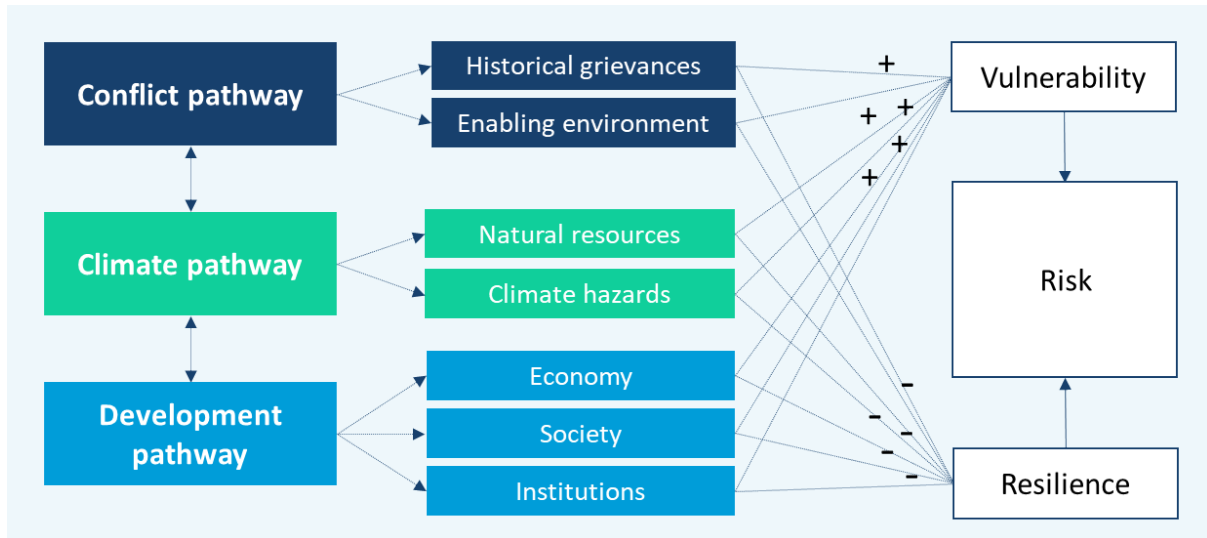
9 Collier, 2003.

10 Risse and Stollenwerk, 2018.

11 For further details about the transmission mechanisms see Uppsala – Peace Research Institute Oslo (PRIO) & ESCWA, 2021.

12 Briguglio and others, 2008.

### ESCWA conceptual framework for conflict risk



**Source:** Compiled by the Economic and Social Commission for Western Asia (ESCWA).

The concept of vulnerability has long existed in relationship to the sustainable development of countries. An economic and environmental vulnerability index is notably used by the United Nations Committee for Development Policy as one of the criteria for identifying the Least Developed Countries (LDC) as mandated by the United Nations Economic and Social Council and the United Nations General Assembly (UNGA).<sup>13</sup> A multitude of conceptualizations of vulnerability and related terms, such as fragility, have since been developed either to classify countries according to their scores, or as a means to determine foreign aid allocation.<sup>14</sup>

While initially focused on economic shocks, definitions of vulnerability have increasingly been adapted to account for the growing awareness of shocks such as climate change. In the context of disaster risk reduction (DRR), for example, the United Nations defines vulnerability as “the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards”.<sup>15</sup> The definition was notably spread through the work of the Intergovernmental Panel on Climate Change (IPCC)<sup>16</sup> and the Sendai Framework for

13 LDC Identification Criteria & Indicators \_ Department of Economic and Social Affairs. <https://www.un.org/development/desa/dpad/least-developed-country-category/ldc-criteria.html>.

14 For an overview see United Nations, 2021 Possible Development and Uses of Multidimensional Vulnerability Indices, Analysis and Recommendations.

15 Vulnerability \_ UNDRR. <https://www.undrr.org/terminology/vulnerability>.

16 Intergovernmental Panel on Climate Change (IPCC), 2012 – Field, C.B. and others Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, England, pp. 582.

Risk Reduction 2015–2030,<sup>17</sup> and used in the development of risk management tools for climatic hazards.<sup>18</sup>

However, the DRR framework does not account for shocks such as conflict and violence which are specifically excluded in the UNGA-endorsed<sup>19</sup> report produced by the intergovernmental expert working group.<sup>20</sup> In the DRR context, hazards include only “biological, environmental, geological, hydrometeorological and technological processes and phenomena”.

Another feature of the disaster-based framework is that it does not disentangle between structural and non-structural factors of risk. Structural risk factors are those that are independent of present policymaking either resulting from past choices or inherent to the economic structure, which are relatively stable over time and therefore cannot be attributed to poor policy or governance. Examples of such factors include a country’s reliance on food and energy imports, or an ongoing conflict in a neighbouring country. Non-structural risk factors are those over which a government has control which enable a country to withstand, rebound or avoid the negative impact of a shock. Such an ability is enhanced if, for example, the country has effective public institutions, a skilled labour force and/or a strong fiscal position. The literature on conflict drivers finds both structural and non-structural factors to be associated with risk.

In the context of conflict prevention, then, the distinction between “structural” and “non-structural” factors has a distinct advantage. It allows policymakers to understand and

unpack risk, not only by its thematic components (e.g., economic vs. social factors) but also by the extent to which it is subject to public policy. By doing so, this framework supports policy formulation showing what a country can and cannot do to mitigate or exacerbate its risk, and ultimately helping to tailor prevention and response policy and programming.

For all the reasons aforementioned, this report defines vulnerability in terms of likelihood and structural exposure to shocks, and resilience in terms of the policy-driven capacity to absorb the negative impact of shocks. For some countries, risk is driven by lower resilience (e.g., having less fiscal space or low food security). For others, it is driven by higher vulnerability (e.g., a neighbouring conflict).

This conceptualization is in line with UNGA resolution A/RES/75/215, calling for a multidimensional index of vulnerability to shocks (not hazards) for small island developing States, and the subsequent work carried out by the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States which underlines the difference between structural and non-structural factors.<sup>21</sup>

The remainder of this section discusses the rationale and justification for each of the three risk pathways through an overview of appropriate literature as well as its relevance in the Arab context.

---

17 The Sendai Framework for Disaster Risk Reduction 2015–2030.

18 INFORM Risk. <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk>.

19 A/RES/71/276. <https://daccess-ods.un.org/access.nsf/Get?OpenAgent&DS=A/RES/71/276&Lang=E>.

20 A/71/644.

21 <https://www.un.org/ohrls/mvi/why-need-an-mvi.html>.

## A. The conflict pathway

The Arab region has been the scene of much of the world's deadliest episodes of violence. Between 2010 and 2021, just four Arab countries – Iraq, Somalia, Syrian Arab Republic, and Yemen – accounted for 55 per cent of the world's conflict-related deaths.<sup>22</sup> Drawing from empirical literature, the conflict pathway to risk identifies two key factors as having the greatest potential to affect future conflict risk in the Arab region: the legacy of prior conflicts and the enabling security environment.

### 1. Historical grievances

Literature finds that countries who have experienced conflict in the past are much more likely to return to war than are countries that have been at peace.<sup>23</sup> Protracted conflicts, especially civil wars, lead to divided and fractionalized societies.<sup>24</sup> The legacy of hatred and mistrust resulting from past conflict persists long after it has ended and can be hard to overcome, as conflict leaves behind a divided society and serves as a catalyst for policy and political institution deterioration, leading to a higher risk of recurrence.<sup>25</sup> This is particularly true in the absence of a meaningful reconciliation process.<sup>26</sup>

In addition, prior conflicts exacerbate those factors that make countries vulnerable to wars in the first place by weakening their

economies and State capacities, causing skilled citizens and civil servants to flee, and destroying physical infrastructure, amongst other things.<sup>27</sup> Civil wars also leave behind organizational legacies and social bonds – the ties that former combatants form with one another, and with key stakeholders – making post-conflict countries more vulnerable to future conflict.<sup>28</sup> These patterns of reoccurrence have been referred to as the “conflict trap”, stemming from the irresolution of fundamental issues that fuelled the conflict, underlying dynamics and unresolved grievances.<sup>29</sup>

### 2. Enabling security environment

In addition to the legacy of prior conflict, literature finds that a country's broader security environment – such as a State's ability to provide security, the extent to which it maintains control of the territory and the pressure of forcibly displaced populations – can also affect the risk of conflict.

Firstly, security is one of the most essential services that a government provides to its citizens. A State's security sector ensures its monopoly over violence, ability to ensure sovereignty, control over territory and public safety.<sup>30</sup> Poorly managed or ineffective security systems can often result in instability and insecurity, signalling that those countries with large and far-reaching security forces are less

22 ESCWA calculations based on data retrieved from the Uppsala Conflict Data Program's Georeferenced Event Dataset, version 22.1.

23 Gates and others, 2016.

24 Palik and others, 2022.

25 Collier, 2003. p. 22; Kaufmann, 1996.

26 Bloomfield and others, 2003.

27 ESCWA, 2020; Walter, 2004.

28 Daly, 2012; Christensen, 2008.

29 Collier, 2003. p. 83.

30 Collier and others, 2009.



prone to conflict.<sup>31</sup> Armed forces that are untrained and undisciplined can facilitate the escalation of violence due to their limited ability to protect and mitigate security concerns.<sup>32</sup> Weak security systems can lead to several negative consequences as the State is placed in a position of disadvantage. For example, the absence of effective State security could lead to armed militias and competition which would result in further conflict or acceptance of violence as a dispute resolution method. The presence of effective State security limits the incentives for people to join militant groups as a means of protection.<sup>33</sup> To this avail, a disciplined security force that practices human rights, international conventions and rule of law in its security operations can help ensure that a State's monopoly on violence is maintained and sufficient to prevent either the demand for more militant groups or the proliferation of violence;<sup>34</sup> and in addition deter any foreign aggression.

Secondly, a lack of effective territorial control is associated with extensive periods of violence.<sup>35</sup> The extent to which a State controls its territory impacts its ability to deliver basic services to its citizens and execute its monopoly of force. For a State to be able to provide security to its citizens, it first needs to maintain a monopoly of organized violence within different local communities<sup>36</sup> and secure it through its ability to dissuade potential challengers or armed

groups.<sup>37</sup> Therefore, professional military capabilities with reach into rural and secluded areas are required for the State to be able to project its authority across its territory and impose order within its jurisdiction.<sup>38</sup> When a State lacks territorial authority its legitimacy is impaired which can lead to distrust towards the government and its services.<sup>39</sup>

Finally, people flee conflict areas in search of safety, their displacement and subsequent settlement in host communities may pose a risk factor contributing to societal fragility. Forcibly displaced people are made vulnerable through a loss of land, assets, livelihoods and social capital.<sup>40</sup> Additionally, many suffer from trauma and are victims of sexual and gender-based violence. Heightened security concerns and the inflow of refugees can also increase tensions in host communities. This is because displaced populations can have significant destabilizing effects in fragile contexts as their sudden influx may increase political tension, insecurity and vulnerability. Often States and communities hosting IDPs, and refugees themselves, are already affected by conflict or crises and the additional stresses and shocks resulting from an influx of displaced persons can lead to tensions and outbreaks of violence in these communities.<sup>41</sup> Sudden significant inflows of displaced persons into a State, and particularly into crowded urban areas, can have a negative

---

31 Hegre and Sambanis, 2006.

32 Humphreys and Weinstein, 2006.

33 Ball, 2005.

34 Fearon, 2011.

35 De la Calle and Sánchez-Cuenca, 2015.

36 Naudé and others, 2011.

37 Collier and Hoeffler, 2004.

38 Herbst, 2004.

39 Schmelzle and Stollenwerk, 2018.

40 Corral and others, 2020.

41 Landry, 2013.

effect on State stability due to the economic, environmental and security-related stresses experienced by the host community as well as an increased strain on basic resources and services.<sup>42</sup> As an increase in refugee populations can lead to resource competition, this might increase tensions with host communities and contribute towards an (re)emergence of civil war.<sup>43</sup>

## B. The climate pathway

The impacts of climate change are increasingly felt across the Arab world with 21 different natural disasters taking place in 2021 affecting almost 20.8 million people.<sup>44</sup> The region is already suffering from water scarcity<sup>45</sup> and land degradation, which may be exacerbated by climate change.<sup>46</sup> Climate change-induced water scarcity might, for example, lead gross domestic product to drop by up to 14 per cent by 2050.<sup>47</sup> The region's exposure to climate impact is also affected by large employment in agriculture<sup>48</sup>

and the prevalence of rainfed agricultural land<sup>49</sup> in several countries. Despite this, there are indications that adaptation measures are less numerous in the Arab region than elsewhere.<sup>50</sup>

### 1. Climate hazards

While climate change does not directly cause violent conflict, it can affect the risk of conflict through several transmission mechanisms namely loss of livelihoods, competition for resources, migration and displacement, macroeconomic contraction and food insecurity.<sup>51</sup> Loss of livelihoods due to climate change, for example, can lead to relative deprivation, frustrations and decreased opportunity cost of violence.<sup>52</sup> Climate-induced migration might contribute to increased risk of conflict if tensions and contestation between hosts and newcomers arise. Competition over resources, between climate-induced migrants and host communities, or due to acute scarcity is another mechanism that can lead to increased risk, though the likelihood for escalation is

42 Stockholm International Peace Research Institute, 2017.

43 Young, Stebbins and others, 2014.

44 Authors' calculation based on EM-DAT, Centre for Research on the Epidemiology of Disasters/UC Louvain, Version: 2022-10-28. Note: Geophysical natural disasters are excluded as well as epidemics. Total affected may include people affected in 2022 for the three disasters that started in 2021 but continued into 2022. The aggregates for the Arab region include all 22 League of Arab States members for which a natural disaster according to the above has been recorded. For an event to be included in the dataset, at least one of the following criteria needs to be met: (a) Ten or more people reported killed, (b) One hundred or more people reported affected, (c) Declaration of a state of emergency, (d) Call for international assistance. See <https://public.emdat.be/about> for further details.

45 ESCWA, 2019.

46 World Bank, 2020.

47 World Bank, 2018. Please note the report refers to the Middle East and North Africa; Duenwald and others, 2022. Please note that the report refers to MENAP thus including Afghanistan and Pakistan.

48 Based on data from the World Bank (code: SL.AGR.EMPL.ZS). Note that the agriculture sector consists of activities in agriculture, hunting, forestry and fishing.

49 ESCWA and others, 2017; For the region overall, 70 per cent of agricultural production is rainfed (Arab Geographical Information Room, 2019) though regional differences exist: Mashreq 57 per cent, Maghreb > 80 per cent (Nejdawi, 2020).

50 Based on an assessment of adaptation actions documented in scientific journals, and may thus have a reporting bias, as well as adaptation projects reported by the Organization for Economic Co-operation and Development (OECD) from the top 10 bilateral donors. See United Nations Environment Programme (UNEP), 2021.

51 For further details about the framework, see Uppsala – PRIO & ESCWA, 2021.

52 Uppsala – PRIO & ESCWA, 2021.

greater if it coincides with larger fault lines in society and institutions.<sup>53</sup> Both increasing food prices and reduced availability of food due to climatic impacts on agricultural output can also contribute to an increased risk of violence.<sup>54</sup> Indeed, lack of food has been one of the drivers of several past and recent conflicts.<sup>55</sup> Negative macroeconomic impacts of climate change are more likely in countries where sectors exposed to climate change, such as agriculture, play an important role.<sup>56</sup> This might affect social unrest and conflict risk in a variety of ways through competition for resources, widening gaps between expectations and realities in the labour market, and reduced moderating capacity of States.<sup>57</sup>

While climate change can contribute to increased risk, this is not a necessary outcome and is influenced by a variety of other factors that strengthen or reduce overall resilience. Coping and adaptive capacities are key to this. While adaptation to climate change focuses on moderating the adverse impacts or exploiting opportunities related to the impacts of climate change, coping capacity relates to the ability to manage or overcome the adverse effects.<sup>58</sup> As such, they importantly influence the extent to which climate hazards may have adverse impacts that translate into risk through the identified transmission mechanisms. Adaptation needs vary depending on context and can

include water management and the introduction of different crop varieties including ones more resilient to climate hazards, amongst others.<sup>59</sup> In addition, several moderating – or exacerbating – factors affect how and to what degree risk from climate change impact is transferred through the identified transmission mechanisms. These are the efficacy of institutions, relative State capacity and social cohesion or cleavages.<sup>60</sup> For example, the risk of competition for resources escalating to conflict is higher when it coincides with pre-existing fault lines in society or becomes politicized.<sup>61</sup> In the same manner, good governance and responsive, fair institutions can help reduce the risk of escalation to conflict.

## 2. Renewable natural resources

The link between scarcity of renewable resources such as water and land, and conflict is complex. Pre-existing environmental vulnerabilities and scarcities can increase exposure to climate impacts or reduce the ability to cope with them and affect the transmission of risk through the aforementioned transmission mechanisms. For example, while rainfed agriculture is more exposed to climate impact, already scarce water resources made scarcer by climate change can reduce their availability for crops irrigation.<sup>62</sup> At the same time, structural environmental scarcities may directly lead to competition for

---

53 Uppsala – PRIO & ESCWA, 2021.

54 International Security and Development Center, 2016.

55 Bora and others, 2010.

56 United Nations General Assembly, Climate change and its possible security implications: report of the Secretary-General, A/64/350 (11 September 2009). <https://digitallibrary.un.org/record/667264?ln=en>.

57 Koubi, 2019; Uppsala – PRIO & ESCWA, 2021.

58 IPCC, 2022.

59 Food and Agriculture Organization (FAO), 2016.

60 Uppsala – PRIO & ESCWA, 2021.

61 Uppsala – PRIO & ESCWA, 2021.

62 Shayanmehr, S. and others, 2022.

resources and can exacerbate risk in already fragile contexts. While there is little evidence of conflicts triggered only by competition over scarce resources, there is a higher risk if such competition is politicized or coincides with other factors.<sup>63</sup> Deterioration of arable or fertile land can result in competition between different groups over limited resources and this can lead to localized or broader tensions among competing stakeholders. For instance, competition over land and water resources between pastoralist and non-pastoralist/farmer communities can be a source of violence.<sup>64</sup> While most water-related events in the region have had cooperative rather than conflictive outcomes, 37 per cent of international events and 19 per cent of domestic events have been conflictive.<sup>65</sup>

The management of such renewable resources can either contribute to increase or decrease risk. Unclear, overlapping or contradictory laws and rights, as well as poor enforcement and lack of dispute resolution, can be a source of conflict and tension. At the same time, the policies and laws governing the resources can be discriminatory in themselves and distribute access unequally between groups. Indeed, perceived injustice, inequity and marginalization due to unequal or restricted access can increase the risk of conflict.<sup>66</sup> On the other hand, well-functioning, sustainable and fair resource management, governance and dispute settlement processes can help reduce the risk.

## C. The development pathway

It is widely understood that conflict is interconnected with social, economic and institutional factors. Development challenges<sup>67</sup> make countries more prone to conflict, which in turn weakens their social, economic and institutional fabric, thus increasing the risk of conflict relapse.

### 1. Economic factors

Economic development is an important factor in explaining shifting trends in conflicts both among and within countries. On one hand, economic growth increases the relative value of capital and decreases the value of land, reducing incentives for land acquisition through conquest.<sup>68</sup> This pacifying effect is reinforced by geographical clustering, as more neighbouring countries experience economic growth.<sup>69</sup>

On the other hand, economic growth can provide States with the capacity to project power and engage in conflict, which they previously lacked.<sup>70</sup> Higher growth can also lead to an increase in States' perception of their own capabilities in foreign policy.<sup>71</sup> Studies have suggested an inverse U-shaped relationship between economic development and conflict<sup>72</sup> where the likelihood is highest among middle income countries, and decreases in lower income countries due to poor capacity to project

---

63 Uppsala – PRIO & ESCWA, 2021.

64 Jobbins and others, 2021.

65 Borgomeo and others, 2021.

66 United Nations Interagency Framework Team for Preventive Action, 2012.

67 ESCWA, 2022.

68 Gilpin, 1981; Rosecrance, 1986; and Gartzke, 2007.

69 Gleditsch and others, 2005.

70 Boehmer, 2010.

71 Blainey, 1988.

72 Boehmer and Sobek, 2005; Frederick, 2012; Frederick and Hensel, 2012.

power and higher income countries owing to little interest in pursuing conflict.<sup>73</sup>

A large body of literature has also explored the effect of globalization on conflict between States with somewhat opposite findings.<sup>74</sup> As international trade has grown in recent decades, interstate conflicts have become less common. The relationship between economic interdependence and conflict is, however, ambiguous. Literature has pointed at a number of transmission mechanisms. Strategic trade might offer countries more incentives to cooperate, and the economic losses occurring from trade disruptions could offer less incentives to pursue conflict with their trading partners.<sup>75</sup> Trading allows countries to access and control natural resources without resorting to conquest.<sup>76</sup> Domestic interest groups with financial investment in trade are interested in preserving peace and lobby the State to that end.<sup>77</sup> However, higher bilateral trade flows increase the likelihood for trade disputes, some of which could escalate to violence.<sup>78</sup>

Conflict has also been associated with dependence on primary commodities. Over-reliance on food and energy resources that are

traded on international markets can increase vulnerability to price shocks as well as to supply shocks caused by environmental factors.<sup>79</sup>

In many commodity-dependent developing countries, civil wars are related to disputes over non-renewable natural resources.<sup>80</sup> The risk of conflict is highest in countries where over one quarter of national income comes from commodity exports.<sup>81</sup>

International financial flows have also been studied in relationship with the risk of conflict, particularly for countries with a poor capacity to mobilize domestic resources. Higher taxes can enable national governments to finance expenditures and cushion the impact of fragility.<sup>82</sup> Countries that are integrated in the global financial markets are also less likely to pursue interstate conflict.<sup>83</sup> Capital market integration reduces the incentives of conflict by imposing costs to countries at the beginning of a crisis.<sup>84</sup> However, dependence on international capital, including foreign aid, can also leave receiving countries vulnerable to foreign shocks<sup>85</sup> including economic crises in countries of origin, as well as global shocks such as commodity price shocks, climate change and pandemics. Exposure to these global shocks is

---

73 Gartzke and Rohner, 2010.

74 Russett and Oneal, 1999; Barbieri, 2002.

75 Polachek and McDonald, 1992; and Doyle, 1997.

76 Rosecrance, 1986. Allan and Allan, 2002; Allan, 1998; Klare, 2001.

77 Verdier, 1994; Risse-Kappen, 1995; and Russett and Oneal, 1999.

78 Mearsheimer, 1992; Grieco, 1988; Wallensteen, 1976; Hirschman, 1945.

79 Humphreys and others, 2007.

80 Collier and Hoeffler, 1998.

81 Collier, 1999.

82 The three principal sources of external financial flows to developing countries are remittances, official development assistance and foreign direct investment. The key role of international finance for sustainable development, including both public and private sources, has been formalized at policy level in the 2015 Addis Ababa Action Agenda. International Monetary Fund (2022).

83 Gartzke, 2007.

84 Gartzke and Li, 2003.

85 Bettin and others, 2014.

associated with a higher risk of violence.<sup>86</sup> Negative shocks in foreign aid have been associated with outbreaks of violence as potential rebels gain bargaining strength vis-à-vis the government when the latter is unable to provide resource transfers.<sup>87</sup>

Food prices and availability have also been studied extensively in relation to conflict.<sup>88</sup> Food is one of the most basic resources for survival and can lead to great hostilities to assure it. Food insecurity can lead to outbreaks of social unrest and thus increase the likelihood of conflict.<sup>89</sup> Demonstrations, riots and civil conflict are more likely when food prices rise internationally and domestically.<sup>90</sup> Conflict can also induce food insecurity whereby competition arises over aspects of food production, such as land and water, as well as the contamination of arable land used for agriculture.<sup>91</sup> While the likelihood of rebel groups engaging in conflict to secure food resources increases when availability is limited, their opportunity cost to keep fighting increases when it is more accessible.<sup>92</sup>

## 2. Social factors

A number of global social trends have been identified as possible reasons for shifting conflict patterns and as drivers of future risk.

Factors of particular relevance for the Arab region include identity, inequality, education and demography.

Identity and ethnicity are two concepts whose association with conflict have been extensively studied. However, ethnic and sectarian identity alone does not act as a societal cleavage. Identity is an inherent part of human existence, and most of the world includes different ethnic groups sharing the same borders. Scholars who argued for the role of identity as a cause of conflict have rather looked at ethnicity as a major determinant of group behaviour, and at the latter as a driver of violence, rebellion and intrastate conflict. Ethnicity has been used strategically as an opportunity to mobilize for a cause and as leverage to recruit group members.<sup>93</sup> Ethnicity is also associated with conflict outbreak in instances where group belonging becomes the basis of unequal distribution and access to resources.<sup>94</sup> Similarly, if a group is territorially based and has separatist or secessionist demands, group identity is likely to increase the risk of conflict.<sup>95</sup> The probability of identity-driven conflict also depends on the extent to which borders were drawn in the past, with evidence showing how unresolved border conflicts due to overlapping identity territorial claims are a strong predictor for future conflicts.<sup>96</sup> Empirical research has suggested that conflicts with an identity

---

86 Raga and Pettinotti, 2022.

87 Nielsen and others, 2011.

88 Koren and Bagozzi, 2016; Koren and Bagozzi, 2017.

89 Bora and others, 2011.

90 Dube and Vargas, 2013; Hendrix and Haggard, 2015; Arezki and Brueckner, 2014.

91 IPCC (2022); Koubi, 2019; Duenwald and others, 2022. Please note that the publication refers to MENAP thus includes Afghanistan and Pakistan.

92 Koren, 2019; Koren, 2017.

93 Fearon, 1995; Fearon and Laitin, 2003; De Figueiredo and Weingast, 1999; Jenne and others, 2007.

94 Gurr, 1970.

95 Vasquez, 1993; Holsti, 1991.

96 Vasquez and Valeriano, 2009.

component are longer and more intense than are others, with ethnicity and sectarian divides playing a magnifying role, raising the level of violence<sup>97</sup> and making disputes more difficult to resolve.<sup>98</sup>

The concept of inequality has been associated with an increased incidence of violent conflict.<sup>99</sup> Income inequality and inequality in accessing basic services has in some cases been linked to one-sided government repression as governments of highly inequitable societies resort to repression to maintain social order.<sup>100</sup> The combined effect of economic “vertical” inequalities with horizontal inequalities<sup>101</sup> is a powerful predictor of violent conflict.<sup>102</sup> Income inequality exacerbates overall poverty in the general population and impedes long term economic growth, particularly in fragile settings.<sup>103</sup> It can also cause or exacerbate underlying tensions and group differences to the detriment of social cohesion, leading to State fragility, the erosion of trust and an increased risk of conflict.<sup>104</sup>

Education has also been associated with income inequality as an interacting variable in explaining conflict rates. Literacy rates can reduce fragility by offering larger pools of

individuals the possibility to participate in the labour force and a chance to improve their standard of living.<sup>105</sup> Increases in education have also been shown to improve economic growth.<sup>106</sup> Investments in education can reduce the likelihood of conflict by providing support to poor strata of the population.<sup>107</sup>

Different demographic patterns can also affect conflict through a number of mechanisms. Radicalization and conflict can be magnified by urbanization and population density, and are likely to occur in urban centres as they are often more prone to instability, crime and grievances.<sup>108</sup> Population growth may increase pressure on resources, such as water, leading to competition and increasing the likelihood of conflict.<sup>109</sup> A growing population without increasing resources might make it harder for a government to provide basic services, thus resulting in a rise in poverty and grievances that can increase tensions and make it easier for militants to recruit.<sup>110</sup>

Youth bulges, or large young male population segments, are also linked to a higher likelihood of conflict, especially if they are unemployed or face economic difficulties through lower opportunity cost to join rebel groups.<sup>111</sup>

---

97 Ganguly and Taras, 2002; Walter, 2009; Coleman, 2000.

98 Huth, 1996; Harbom and Wallensteen, 2005; Fearon, 2004; Collier and others, 2003.

99 Krueger and Maleckova, 2003.

100 Muller, 1985.

101 Stewart, 2001.

102 Cederman and others, 2011.

103 Stewart, 2008.

104 Jones, 2013.

105 Gyimah-Brempong and others, 2006.

106 Hanushek, 2016.

107 Burgoon, 2006; Taydas and Peksen, 2012.

108 Liotta and Miskel, 2004; Urdal, 2006.

109 Urdal, 2002; Choucri, 1974; Hauge and Ellingsen, 2001; Gleick, 1993.

110 Bruckner and Ciccone, 2008.

111 Collier and others, 2006; Goldstone, 2001; Moeller, 1968; Cincotta and others, 2003; Choucri, 1974; Braungart, 1984.

Declining birth rates have shown to decrease the likelihood of conflict as society becomes reluctant to commit their soldiers and support military conflicts that endanger their offspring.<sup>112</sup> Another factor that might contribute to conflict is a shift in the balance of power between religious or ethnic groups, especially if one group's population grows quickly, creating dissatisfaction within the groups.<sup>113</sup>

### 3. Institutional factors

In recent decades, the Arab region has experienced a series of events that have contributed to deterioration and, in some cases, even to a complete collapse of formal State authorities leading to limited accountability and poor capacity of national and subnational institutions.<sup>114</sup>

Literature finds a strong relationship between institutions, governance and armed conflict. Institutions have an essential role in

development; strong institutions are the backbone of policy effectiveness, while low institutional capacity has been associated with the likelihood of conflict.<sup>115</sup>

Weak governance exacerbates the risk of conflict in several ways. The inability of the government to provide the necessary services and security leads to grievances and makes space for non-State actors to grow and recruit.<sup>116</sup> Poorly governed States lack the institutional capacity and security services to prevent violence,<sup>117</sup> while protracted violent events continue to exist when crucial issues of governance remain unsettled. Effective governance, however, contributes to preventing violence and this is essential in achieving human security. Strong governments that sustain the rule of law and promote higher degrees of equality among citizens have been proved to have lower levels of violence<sup>118</sup> and can promote peacebuilding.

---

112 Regan and Paskeviciute, 2003.

113 Toft, 2002.

114 Richmond, 2014.

115 Buhaug, 2006.

116 Fearon 2011; Collier and Hoeffler, 2004.

117 Fearon, 2011 and Sambanis, 2004.

118 Fajnzylber, Lederman and Loayza, 2002; Vieraitis, 2000.



## 2. Conclusion

---

This paper has introduced an action-oriented conceptual framework for conflict risk in the Arab region. The framework identifies three pathways – conflict, climate change and development – through which Arab countries may face increasing risks of conflict, crisis and instability. It has been developed to advance risk-informed prevention policymaking and integrated response in the Arab region.

The first pathway is conflict. Countries who have experienced conflict in the past are much more likely to experience renewed conflict than countries who have been at peace. The second pathway is climate change. While climate change does not directly cause violence, its

impact can affect the risk through a number of mechanisms. The third pathway is social, economic and institutional development, representing the complex pathway between socio-economic conditions and institutional settings.

Importantly, the framework is action-oriented in that it distinguishes between structural risk drivers which are intrinsic to an economy, from more “policy-driven” factors that can be addressed, improved or mitigated. By doing so, it offers a conceptual framework to better understand the nature of risk in the region that can effectively help tailor response and prevention efforts.



# References

---

- Addis Ababa Action Agenda of the Third International Conference on Financing for Development (2015). UN General Assembly Resolution. A/RES/69/313 <https://sustainabledevelopment.un.org/frameworks/addisababaactionagenda>.
- Allan, John Anthony and Tony Allan (2000). *The Middle East Water Question: Hydropolitics and the Global Economy*. vol. 2. London, UK: I.B. Tauris.
- Allan, Tony (1998). *Watersheds and Problemsheds: Explaining the Absence of Armed Conflict over Water in the Middle East*. Middle East, vol. 2, No. 1, p. 50.
- Arab Geographical Information Room (2019). *Geographical Information towards Building Risk Resilience in the Arab Region (Water, Food and Social Vulnerability Nexus)*. TR No.1. [https://www.arabwatercouncil.org/images/Technical-Reports/AGIR\\_Report\\_Final\\_30-10-2019.pdf](https://www.arabwatercouncil.org/images/Technical-Reports/AGIR_Report_Final_30-10-2019.pdf).
- Arezki, R. and M. Brueckner (2014). Effects of International Food Price Shocks on Political Institutions in Low-Income Countries: Evidence from an International Food Net-Export Price Index. *World Development*, vol. 61, Issue C, pp. 142–153.
- Ball, Nicole (2005). Strengthening Democratic Governance of the Security Sector in Conflict-Affected Countries. *Public Administration and Development*, vol. 25, No. 1, pp. 25–38.
- Barbieri, Katherine (2002). *The Liberal Illusion: Does Trade Promote Peace?* Ann Arbor, Mich.: University of Michigan Press.
- Bettin, G., A.F. Presbitero and N.L. Spatafora (2014). Remittances and vulnerability in developing countries. Policy Research Working Paper, No. 6812, World Bank. <https://openknowledge.worldbank.org/handle/10986/17727>.
- Blainey, Geoffrey (1998). *The Causes of War*, New York: The Free Press.
- Bloomfield, D., T. Barnes and L. Huyse, eds. (2003). *Reconciliation After Violent Conflict. A Handbook*. Handbook Series. Stockholm.
- Boehmer, Charles R. (2010). Economic Growth and Violent International Conflict: 1875–1999. *Defence and Peace Economics*, vol. 21, No. 3, pp. 249–268.
- Boehmer, Charles R. and David Sobek (2005). Violent Adolescence: State Development and the Propensity for Militarized Interstate Conflict. *Journal of Peace Research*, vol. 42, No. 1, pp. 5–26.
- Bora, S. and others (2010). *Food Security and Conflict*. Agriculture and Rural Development Department, World Bank. [https://openknowledge.worldbank.org/bitstream/handle/10986/9107/WDR2011\\_0031.pdf?sequence=1&isAllowed=y](https://openknowledge.worldbank.org/bitstream/handle/10986/9107/WDR2011_0031.pdf?sequence=1&isAllowed=y).
- Borgomeo, E. and others (2021). *Water in the Shadow of Conflict in the Middle East and North Africa. Ebb and Flow*, vol. 2, Washington, D.C.: World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/36090/9781464817465.pdf?sequence=9&isAllowed=y>.
- Braungart, Richard G. (1984). Historical and Generational Patterns of Youth Movements: A Global Perspective. *Comparative Social Research*, vol. 7, No. 1, pp. 3–62.
- Briguglio I. and others (2008). *Economic Vulnerability and Resilience Concepts and Measurements*. UNU, WIDER, Helsinki, Finland. <https://www.econstor.eu/bitstream/10419/45146/1/571437761.pdf>.
- Bruckner, Markus and Antonio Ciccone (2008). *Growth, Democracy, and Civil War*. CEPR Press Discussion Paper, No. 6568.
- Buhaug, H. (2006). Relative Capability and Rebel Objective in Civil War. *Journal of Peace Research*, 43(6), pp. 691–708.
- Burgoon, Brian (2006). On Welfare and Terror: Social Welfare Policies and Political-Economic Roots of Terrorism. *Journal of Conflict Resolution*, vol. 50, No. 2, pp. 176–203.
- Cederman, L. E., N.B. Weidmann and K.S. Gleditsch (2011). Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison. *American Political Science Review*, 105(3), pp. 478–495.
- Choucri, Nazli (1975). *Population Dynamics and International Violence; Propositions, Insights, and Evidence*. Lexington, Mass., Lexington Books.

- Christensen, Maya M. and Mats Utas (2008). Mercenaries of Democracy: The 'Politricks' of Remobilized Combatants in the 2007 General Elections, Sierra Leone. *African Affairs*, vol. 107, Issue 429, pp. 515–539.
- Cincotta, Richard P., Robert Engelman and Daniele Anastasion (2003). *The Security Demographic: Population and Civil Conflict After the Cold War*. Washington, D.C.: Population Action International.
- Coleman, Peter, Morton Deutsch and Peter Coleman, eds. (2000). *Intractable Conflict. The Handbook of Conflict Resolution: Theory and Practice*, San Francisco, Calif.: Jossey-Bass Inc.
- Collier, Paul (1999). *Doing Well out of War*. Conference on Economic Agendas in Civil Wars, London, vol. 26, p. 27.
- \_\_\_\_\_ (2003). *Breaking the Conflict Trap: Civil War and Development Policy*. World Bank Publications.
- Collier, Paul and Anke Hoeffler (1998). On economic causes of civil war. *Oxford Economic Papers*, vol. 50, No. 4, pp. 563–573.
- \_\_\_\_\_ (2004). Greed and grievance in civil war. *Oxford Economic Papers*, vol. 56, No. 4, pp. 563–595.
- Collier, Paul, Anke Hoeffler and Dominic Rohner (2006). *Beyond greed and grievance: feasibility and civil war*, CSAE WPS/2006–10, Oxford, UK: University of Oxford.
- \_\_\_\_\_ (2009). *Beyond greed and grievance: feasibility and civil war*. *Oxford Economic Papers, New Series*, vol. 61, No. 1, pp. 1–27.
- Collier, Paul and others (2003). *Breaking the Conflict Trap: Civil War and Development Policy*. Washington, D.C.: World Bank and Oxford University Press.
- Corral, Paul and others (2020). *Fragility and Conflict: On the Front Lines of the Fight against Poverty*. World Bank Publications.
- Daly, Sarah Zukerman (2012). Organizational Legacies of Violence: Conditions Favoring Insurgency Onset in Colombia, 1964–1984. *Journal of Peace Research*, vol. 49, No. 3, pp. 473–491.
- De Figueiredo, Rui J.P. and Barry R. Weingast (1999). The Rationality of Fear: Political Opportunism and Ethnic Conflict. *Civil wars, insecurity, and intervention*, pp. 261–302.
- De la Calle, Luis. and Ignacio Sánchez-Cuenca (2015). How Armed Groups Fight: Territorial Control and Violent Tactics. *Studies in Conflict & Terrorism*, 38(10), pp. 795–813.
- Desai, H. (2020). *Conflict prevention in fragile contexts*. OECD Development Co-operation Working Papers, No. 78, OECD Publishing, Paris. <https://doi.org/10.1787/041cbaf0-en>.
- Doyle, Michael W. (1997). *Ways of War and Peace: Realism Liberalism, and Socialism*. New York: W.W. Norton and Company.
- Dube, O. and J.F. Vargas (2013). Commodity Price Shocks and Civil Conflict: Evidence from Colombia. *The Review of Economic Studies*, vol. 80, Issue 4, pp. 1384–1421.
- Duenwald, C. and others (2022). *Feeling the Heat: Adapting to Climate Change in the Middle East and Central Asia*. International Monetary Fund, DP/2022/008. <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2022/03/25/Feeling-the-Heat-Adapting-to-Climate-Change-in-the-Middle-East-and-Central-Asia-464856>.
- Economic and Social Commission for Western Asia (ESCWA) (2016). *Land Degradation Neutrality in the Arab Region – Preparing for SDG Implementation*. [https://archive.unescwa.org/sites/www.unescwa.org/files/publications/files/land-degradation-neutrality-arab-region-english\\_1.pdf](https://archive.unescwa.org/sites/www.unescwa.org/files/publications/files/land-degradation-neutrality-arab-region-english_1.pdf).
- \_\_\_\_\_ *Moving towards Water Security in the Arab Region*. E/ESCWA/SDPD/2019/2. <https://archive.unescwa.org/sites/www.unescwa.org/files/publications/files/moving-towards-achieving-water-security-arab-region-english.pdf>.
- \_\_\_\_\_ *The economic cost of the Libyan conflict*. E/ESCWA/CL6.GCP/2020/3. <https://www.unescwa.org/publications/economic-cost-libyan-conflict>.
- \_\_\_\_\_ *Development Challenges Index: statistical measurement and validity*. E/ESCWA/CL6.GCP/2021/TP.11. <https://www.unescwa.org/publications/develpomet-challenges-index-measurement-robustness>.
- ESCWA and others (2017). *Arab Climate Change Assessment Report: Main Report*. Beirut, E/ESCWA/SDPD/2017/RICCAR/Report. [https://www.unescwa.org/sites/default/files/event/materials/riccar\\_main\\_report\\_2017\\_0.pdf](https://www.unescwa.org/sites/default/files/event/materials/riccar_main_report_2017_0.pdf).
- Fajnzylber, Pablo, Daniel Lederman and Norman Loayza (2002). What causes violent crime? *European Economic Review*, vol. 46, Issue 7, pp. 1323–1357.
- Food and Agriculture Organization (FAO) (2016). *The State of Food and Agriculture. Climate Change, Agriculture and Food Security*. Rome, Italy. <https://www.fao.org/3/i6030e/i6030e.pdf>.

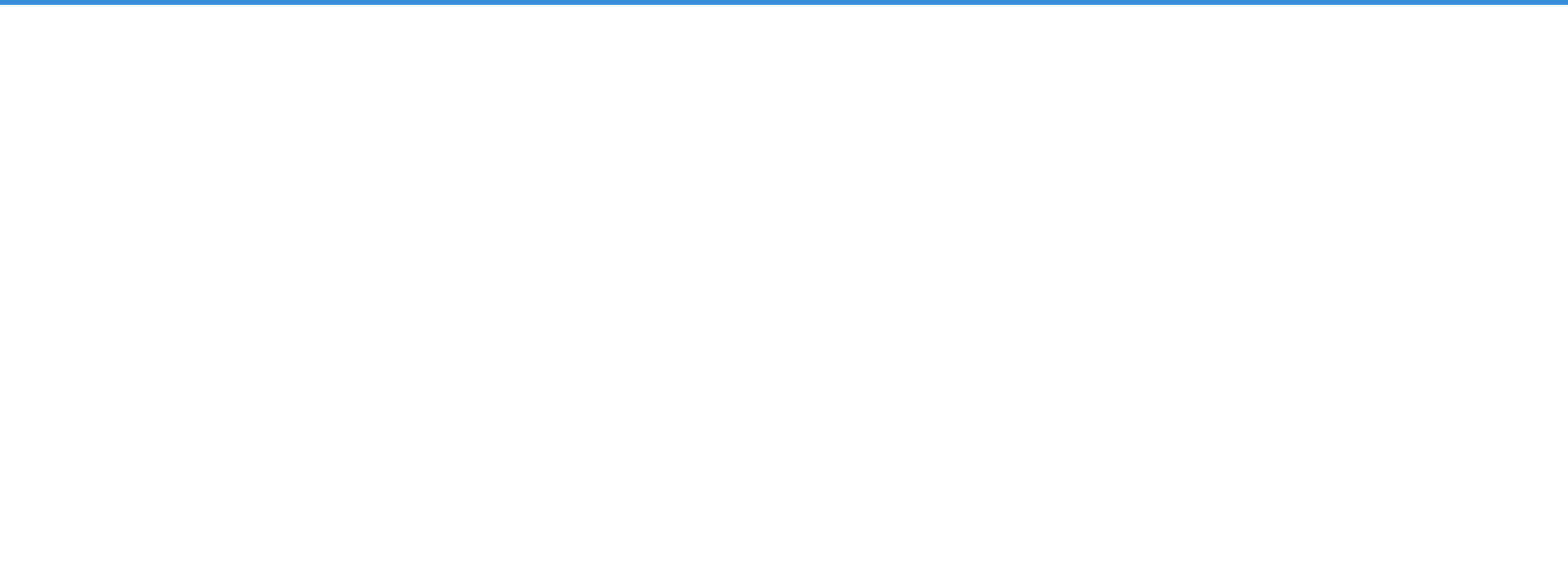
- Fearon, James D. (1995). Rationalist explanations for war. *International Organization*, vol. 49, No. 3, pp. 379–414.
- \_\_\_\_\_ (2004). Why Do Some Civil Wars Last So Much Longer Than Others? *Journal of Peace Research*, vol. 41, No. 3, pp. 275–301.
- \_\_\_\_\_ (2011). Two States, Two Types, Two Actions. *Security Studies*, 20(3), pp. 431–440.
- Fearon, James D. and David D. Laitin, (2003). Ethnicity, Insurgency, and Civil War. *American Political Science Review*, vol. 97, No. 1, pp. 75–90.
- Frederick, Bryan A. (2012). *The Sources of Territorial Stability*, dissertation, Washington, D.C.: Johns Hopkins University School of Advanced International Studies, OCLC: 814397500.
- Frederick, Bryan and Paul R. Hensel (2012). *Regional Variations in Territorial Claims, 1816–2008*. Paper presented at the International Studies Association–Midwest, St. Louis, Missouri.
- Ganguly, Rajat and Raymond Taras (2002). *Understanding Ethnic Conflict: The International Dimension*. London: Longman Publishers.
- Gartzke, Erik (2007). The Capitalist Peace. *American Journal of Political Science*, vol. 51 No. 1, pp. 166–191.
- Gartzke, Erik and Dominic Rohner (2010). *Prosperous Pacifists: The Effects of Development on Initiators and Targets of Territorial Conflict*. Zurich, Switzerland: Institute for Empirical Research in Economics, University of Zurich, p. 6.
- Gartzke, Erik and Quan Li (2003). All's Well That Ends Well: A Reply to Oneal, Barbieri and Peters. *Journal of Peace Research*, vol. 40, No. 6, pp. 727–732.
- Gates, Scott, Håvard M. Nygård and Esther Trappeniers (2016). *Conflict Recurrence*. *Conflict Trends*, 2.
- General Assembly Resolution 70/262 (2016). Review of the United Nations peacebuilding architecture, A/RES/70/262. <https://undocs.org/A/RES/70/262>.
- Gilpin, Robert (1981). *War and Change in World Politics*, Cambridge, UK: Cambridge University Press.
- Gleditsch, Nils P., Håvard Strand and Mirjam E. Sørli (2005). Why Is There So Much Conflict in the Middle East? *Journal of Conflict Resolution*, vol. 49, Issue 1.
- Gleick, Peter H. (1993). *Water in Crisis: A Guide to the World's Fresh Water Resources*. Oxford, UK: Oxford University Press, Inc.
- Goldstone, Jack A. (2002). Population and Security: How Demographic Change Can Lead to Violent Conflict. *Journal of International Affairs*, vol. 56, No. 1, pp. 3–23.
- Grieco, Joseph M. (1988). Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism. *International Organization*, vol. 42, No. 3, pp. 485–507.
- Gurr, Ted Robert (1970). *Why Men Rebel*, Princeton N.J.: Princeton University Press.
- Gyimah-Brempong, Kwabena, Oliver Paddison and Workie Mitiku (2006). Higher education and economic growth in Africa. *The Journal of Development Studies*, vol. 42, Issue 3, pp. 509–529.
- Hanushek, Erik A. (2016). Will more higher education improve economic growth? *Oxford Review of Economic Policy*, vol. 32, No. 4, pp. 538–552.
- Harbom, Lotta and Peter Wallensteen (2005). Armed Conflict and Its International Dimensions, 1946–2004. *Journal of Peace Research*, vol. 42, No. 5, pp. 623–635.
- Hauge, Wenche I. and Tanja Ellingsen (2001). Causal Pathways to Conflict in Paul F. Diehl and Nils Petter Gleditsch, eds. *Environmental Conflict*, Boulder, Colo.: Westview Press, pp. 36–57.
- Hegre, Håvard and Nicholas Sambanis (2006). Sensitivity Analysis of Empirical Results on Civil War Onset. *Journal of Conflict Resolution*, vol. 50, Issue 4, pp. 508–535.
- Hendrix, Cullen S and Stephan Haggard (2015). Global food prices, regime type, and urban unrest in the developing world. *Journal of Peace Research*, vol. 52, Issue 2: pp. 143–157.
- Herbst, Jeffrey (2004). African Militaries and Rebellion: The Political Economy of Threat and Combat Effectiveness. *Journal of Peace Research*, vol. 41, No. 3, pp. 357–369.
- Hirschman, Albert O. (1945). *National Power and the Structure of Foreign Trade*, Berkeley, Calif.: University of California Press, vol. 17.
- Holsti, K.J. (1991). *Peace and War: Armed Conflicts and International Order, 1648–1989: Cambridge Studies in International Relations, Series No. 14*, New York: Cambridge University Press.

- Humphreys, Macartan and J.M. Weinstein (2006). Handling and Manhandling Civilians in Civil War. *American Political Science Review*, vol. 100, Issue 3, pp. 429–447.
- Humphreys, Macartan, Jeffrey D. Sachs and Joseph E. Stiglitz (2007). What Is the Problem with Natural Resource Wealth? in Macartan Humphreys, Jeffrey D. Sachs, and Joseph E. Stiglitz, eds. *Escaping the Resource Curse*, New York: Columbia University Press.
- Huth, Paul K. (1996) *Standing Your Ground: Territorial Disputes and International Conflict*. Ann Arbor, Mich.: University of Michigan Press.
- Inter-Agency Standing Committee and the European Commission (2022). *INFORM REPORT 2022; Shared evidence for managing crises and disasters*, EUR 31081 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-52775-6, doi:10.2760/08333, JRC129343.
- Intergovernmental Panel on climate change (2022). Annex II: Glossary [Möller, V., R. van Diemen, J.B.R. Matthews, C. Méndez, S. Semenov, J.S. Fuglestedt and A. Reisinger (eds.)]. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem and B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 2897–2930, doi:10.1017/9781009325844.029.
- International Monetary Fund (2022). Revenue Mobilization for a Resilient and Inclusive Recovery in the Middle East and Central Asia <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2022/06/30/Revenue-Mobilization-for-a-Resilient-and-Inclusive-Recovery-in-the-Middle-East-and-Central-513773>.
- International Security and Development Center (2016). The Relationship between Food Security and Violent Conflict. <https://isdc.org/wp-content/uploads/2019/08/Food-Security-and-Conflict-2016-12-22.pdf>.
- Jenne, Erin, Stephen M. Saideman and Will Lowe (2007). Separatism as a Bargaining Posture: The Role of Leverage in Minority Radicalization. *Journal of Peace Research*, vol. 44, No. 5, pp. 539–558.
- Jobbins, Mike, Leif Brottem and Andrew McDonnell (2021). *Pastoralism and Conflict: Tools for Prevention and Response in the Sudano-Sahel*, 2nd ed. Washington, D.C.: Search for Common Ground.
- Jones, Hannah (2013). *Negotiating cohesion, inequality and change: uncomfortable positions in local government*. Policy Press.
- Kaczan, David J. and Jennifer Orgill-Meyer (2020). The impact of climate change on migration: a synthesis of recent empirical insights. *Climatic Change*. vol. 158, pp. 281–300. <https://link.springer.com/article/10.1007/s10584-019-02560-0>.
- Kaufmann, Chaim (1996). Possible and Impossible Solutions to Ethnic Civil Wars. *International Security*, vol. 20, No. 4, pp. 136–175.
- Klare, Michael T. (2001). The New Geography of Conflict. *Foreign Affairs*, pp. 49–61.
- Koren, Ore (2017). Hunger Games: Food Security and Strategic Preemptive Conflict (No. 253). *Households in Conflict Network*.  
 \_\_\_\_\_ Food Resources and Strategic Conflict. *Journal of Conflict Resolution*, vol. 63, Issue 10, pp. 2236–2261.
- Koren, Ore and Benjamin E. Bagozzi (2016). From global to local, food insecurity is associated with contemporary armed conflicts. *Food Security*, vol. 8, Issue 5, pp. 999–1010.
- \_\_\_\_\_ (2017). Living off the land: The connection between cropland, food security, and violence against civilians. *Journal of Peace Research*, vol. 54, Issue 3, pp. 351–364.
- Koubi, Vally (2019). Climate Change and Conflict. *Annual Review of Political Science*. vol. 22, pp. 343–360. <https://www.annualreviews.org/doi/10.1146/annurev-polisci-050317-070830>.
- Krueger, Alan B. and Jitka Maleková (2003). Education, Poverty and Terrorism: Is There a Causal Connection? *Journal of Economic Perspectives*, vol. 17, no. 4, pp. 119–144.
- Landry, Joe (2013). Displaced populations and their effects on regional stability. *Forced Migration Review*, (43).
- Liotta, P.H. and James F. Miskel (2004). *Dangerous Democracy? American Internationalism and the Greater Near East*.
- Mearsheimer, John J. (1992). Disorder Restored in Graham Allison and Gregory F. Treverton, eds., *Rethinking America's Security*, New York: W.W. Norton and Company.
- Moeller, H.G. (1968). Corrections and the Community: New Dimensions. *Federal Probation*, vol. 32, p. 25.
- Muller, Edward N. (1985). Income Inequality, Regime Repressiveness, and Political Violence. *American Sociological Review*, vol. 50, No. 1, pp. 47–61.
- Naudé, Wim, Amelia U. Santos-Paulino and Mark McGillivray, eds. (2011). *Fragile States: Causes, Costs, and Responses*. Oxford University Press.

- Nejdawi, Reem (2020). Impacts of Climate Change on Water Resources, Agriculture and Food Security in the Arab region. Presentation made at Koronivia Joint Work on Agriculture Virtual Regional Workshop, 27 July 2020. [https://www.unescwa.org/sites/default/files/event/materials/cc\\_impact\\_on\\_water\\_resources\\_and\\_agriculture\\_in\\_the\\_arab\\_region\\_27\\_july\\_-\\_rn.pdf](https://www.unescwa.org/sites/default/files/event/materials/cc_impact_on_water_resources_and_agriculture_in_the_arab_region_27_july_-_rn.pdf).
- Nielsen, Richard A. and others (2011). Foreign Aid Shocks as a Cause of Violent Armed Conflict. *American Journal of Political Science*, vol. 55, No. 2, pp. 219–232.
- Organization for Economic Co-operation and Development (OECD) (2022). *States of Fragility 2022*, OECD Publishing, Paris, <https://doi.org/10.1787/c7fedf5e-en>.
- Palik, Júlia, Anna Marie Obermeier and Siri Aas Rustad (2022). *Conflict Trends: A Global Overview, 1946–2021*. PRIO Paper. Oslo: PRIO.
- Polachek, Solomon W. and Judith McDonald (1992). Strategic Trade and the Incentive for Cooperation. *Disarmament, Economic Conversion, and Management of Peace*, pp. 273–284.
- Raga, Sherillyn and Laetitia Pettinotti (2022). Economic Vulnerability to the Russia-Ukraine War: which low- and middle-income countries are most vulnerable? ODI Emerging Analysis. London: ODI. <https://odi.org/en/publications/economic-vulnerability-to-the-russiaukraine-war-which-low-and-middle-income-countries-are-most-vulnerable/>.
- Regan, Patrick M. and Aida Paskeviciute (2003). Women's Access to Politics and Peaceful States. *Journal of Peace Research*, vol. 40, No. 3, pp. 287–302.
- Richmond, Oliver P. (2014) *Peace: A Very Short Introduction*, Oxford, Oxford University Press.
- Risse, Thomas and Eric Stollenwerk (2018). Legitimacy in Areas of Limited Statehood. *Annual Review of Political Science*, vol. 21, pp. 403–418.
- Risse-Kappen, Thomas (1995). *Bringing Transnational Relations Back In: Non-State Actors, Domestic Structures and International Institutions*. Cambridge, UK: Cambridge University Press, vol. 42.
- Rosecrance, Richard N. (1986). *The Rise of the Trading State: Commerce and Conquest in the Modern World*. New York: Basic Books, vol. 386.
- Russett, Bruce M. and John R Oneal (1999). *Triangulating Peace: Democracy, Interdependence, and International Organizations*. New York: W.W. Norton and Company.
- Sambanis, N. (2004). Poverty and the Organization of Political Violence. In *Brookings Trade Forum* (pp. 165–211). Brookings Institution Press.
- Schmelzle, C. and E. Stollenwerk (2018). Virtuous or Vicious Circle? Governance Effectiveness and Legitimacy in Areas of Limited Statehood. *Journal of Intervention and Statebuilding*, vol. 12, Issue 4.
- Shayanmehr, Samira and others (2022). The Impacts of Climate Change on Water Resources and Crop Production in an Arid Region. *Agriculture*, 12(7), 1056.
- Stewart, Frances (2001). *Horizontal Inequalities: A Neglected Dimension of Development*. Centre for Research on Inequality, Human Security and Ethnicity. Working Paper 1. Oxford: CRISE.
- Stewart, Q.T. (2008). The shape of inequality: racial disparities in age-specific mortality. *Biodemography and Social Biology*, 54(2), pp. 152–182.
- Stockholm International Peace Research Institute (2017). *SIPRI Yearbook 2017: Armaments, Disarmament and International Security*.
- Taydas, Zeynep and Dursun Peksen (2012). Can states buy peace? Social welfare spending and civil conflicts. *Journal of Peace Research*, vol. 49, Issue 2, pp. 273–287.
- The Fund for Peace (2022). *Fragile States Index Annual Report 2022*. <https://fragilestatesindex.org/2022/07/13/fragile-states-index-2022-annual-report/>.
- The United Nations Interagency Framework Team for Preventive Action (2012). *Toolkit and guidance for preventing and managing land and natural resources conflict: Renewable Resources and Conflict*. [https://www.un.org/en/land-natural-resources-conflict/pdfs/GN\\_Renew.pdf](https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Renew.pdf).
- Toft, Monica Duffy (2002). Indivisible Territory, Geographic Concentration, and Ethnic War. *Security Studies*, vol. 12, No. 2, pp. 82–119.
- United Nations Environment Programme (UNEP) (2021). *The Gathering Storm: Adapting to climate change in a post-pandemic world*. Adaptation Gap Report 2021. <https://www.unep.org/resources/adaptation-gap-report-2021>.

- United Nations High Commissioner for Refugees (UNHCR) (2017). Quick guide – Climate Change and Disaster Displacement. <https://www.unhcr.org/protection/environment/591d46907/quick-guide-climate-change-disaster-displacement.html>.
- United Nations and the World Bank (2018). Pathways for Peace: Inclusive Approaches to Preventing Violent Conflict. Washington, D.C.
- United Nations General Assembly (2009). Climate change and its possible security implications: report of the Secretary-General, A/64/350. <https://digitallibrary.un.org/record/667264?ln=en>.
- United Nations Security Council Resolution 2282 (2016). [https://undocs.org/S/RES/2282\(2016\)](https://undocs.org/S/RES/2282(2016)).
- Uppsala – PRIO and ESCWA (2021). Understanding the potential linkages between climate change and conflict in the Arab region. Beirut, ESCWA. E/ESCWA/CL6.GCP/2021/TP.9. <https://www.unescwa.org/publications/potential-linkages-climate-change-conflict-arab-region>.
- Urdal, Henrik (2006). A Clash of Generations? Youth Bulges and Political Violence. *International Studies Quarterly*, vol. 50, No. 3, pp. 607–629.
- \_\_\_\_\_. The Devil in the Demographics: How Youth Bulges Influence the Risk of Domestic Armed Conflict, 1950–2000. New Orleans, La.: International Studies Association 43rd Annual Convention.
- Vasquez, John A. (1993). *The War Puzzle*. Cambridge Studies in International Relations, No. 27, Cambridge University Press.
- Vasquez, John A., and Brandon Valeriano (2009). Territory as a Source of Conflict and a Road to Peace in Jacob Bercovitch, Viktor Kremenyuk, and I. William Zartman, eds., *The Sage Handbook of Conflict Resolution*, Los Angeles, Calif.: Sage, pp. 193–209.
- Verdier, Daniel (1994). *Democracy and International Trade: Britain, France, and the United States, 1860–1990*. Princeton, N.J.: Princeton University Press.
- Vieraitis, Lynne M. (2000). Income Inequality, Poverty, and Violent Crime: A Review of the Empirical Evidence. *Social Pathology*, 6(1), p. 24.
- Wallensteen, Peter (1976). Scarce Goods as Political Weapons: The Case of Food. *Journal of Peace Research*, vol. 13, No. 4, pp. 277–298.
- Walter, Barbara F. (2004). Does Conflict Beget Conflict? Explaining Recurring Civil War. *Journal of Peace Research*, vol. 41, Issue 3, pp. 371–388.
- \_\_\_\_\_. (2009). *Reputation and Civil War: Why Separatist Conflicts Are So Violent*. Cambridge, UK and New York: Cambridge University Press.
- World Bank (2018). *Beyond Scarcity: Water Security in the Middle East and North Africa*. MENA Development Report. Washington, D.C.: World Bank. <https://openknowledge.worldbank.org/handle/10986/27659>.
- \_\_\_\_\_. *Water in the Balance: The Economic Impacts of Climate Change and Water Scarcity in the Middle East – Summary for Policy Makers*. World Bank, Washington, D.C.
- Young, William and others (2014). *Spillover from the Conflict in the Syrian Arab Republic: An Assessment of the Factors that Aid and Impede the Spread of Violence*. Rand Corporation.





The Arab world has been the scene of much of the world’s deadliest episodes of violence. As conflicts continue to impact the region the ramifications on people and societies, compounded by external shocks, further exacerbate vulnerability. These growing human and economic costs of conflict have accelerated momentum for the international community to focus on prevention.

The main goal of this paper is to propose an action-oriented conceptual framework to assess the risk of conflict, crisis and instability in the Arab region. Drawing upon decades of empirical literature on drivers and predictors of conflict or fatal political violence, the proposed framework identifies three “risk pathways” that are associated with a greater risk of crisis and instability in the Arab region. The rationale and justification for each component is discussed with an overview of appropriate literature, as well as its relevance in the regional context. The framework is action-oriented as it distinguishes between “structural” risk factors over which a country can exercise limited control, and “policy-driven” factors that can be mitigated, thereby allowing decision makers to effectively tailor response and prevention.

