

A Region in Motion:

Reflections

from West Asia-North Africa

320.956

A Region in Motion: Reflections From West Asia–North Africa / HRH Prince ElHassan Bin Talal ...[etc.al}].- Amman: The Company, 2018

() p.

Deposit No.: 2018/3/1414

Descriptors: /Policy//Asia//NorthAfrica/

يتحمل المؤلف كامل المسؤولية عن محتوى مصنفه ولا يعتبر هذا المصنف عن رأي دائرة المكتبة الوطنية أو أي جهة حكومية أخرى.

Published in 2018 by the WANA Institute and Friedrich-Ebert-Stiftung Jordan & Iraq

West Asia-North Africa Institute
Royal Scientific Society
70 Ahmad Al-Tarawneh St
Amman, Jordan
Email: info@wanainstitute.org
Website: www.wanainstitute.org

FES Jordan & Iraq
P.O. Box 941876
11194 Amman
Amman, Jordan
Email: fes@fes-jordan.org
Website: www.fes-jordan.org

© WANA Institute and FES Jordan & Iraq

All rights reserved. No part of this publication may be reprinted, reproduced, or utilised in any form or by any means without prior written permission from the publishers. The views and opinions expressed in this publication are solely those of the original authors. They do not necessarily represent those of the WANA Institute and Friedrich-Ebert-Stiftung or of the editors.

Editing: Luke Finley, Lien Santermans

Graphic Design: Yara Hindawi

Printing: Economic Press

Special thanks to all WANA Research Staff who directly or indirectly contributed to this publication: Reem Alhaddadin, Shaddin Alhajahmad, Esraa Alshyab, Dr Neven Bondokji, Juliet Dryden, Dr Erica Harper, Kamal Kakish, Dorsey Lockhart, Barik Mhadeen, Mahmoud Nabulsi, Lara Nassar, Alethea Osborne, Youssef Qahwaji, and Nadine Sayegh.

ISBN: 978-9957-8770-2-6

**A Region in Motion: Reflections
from West Asia-North Africa**

Table of Contents

Abbreviations	7
Foreword	
<i>His Royal Highness Prince El Hassan bin Talal</i>	9
Introduction	
<i>Dr Erica Harper</i>	11
1: Journey Mapping of Jordanian Foreign Fighters	
<i>Dr Neven Bondokji and Dr Erica Harper</i>	20
2: Towards a Unified Human Security and P/CVE Method in Jordan: Challenges and Changes	
<i>Dr Neven Bondokji and Nadine Sayegh</i>	41
3: Engendering Extremism: Gender Equality and Radicalisation in the WANA Region	
<i>Aletbea Osborne</i>	64
4: Jordan's Recent Economic Performance: Implications for Future Growth, Investment, Refugee Policy, and Refugees	
<i>Shaddin Albajabmad and Dorsey Lockhart</i>	77
5: Jordan's Syrian Refugee Labour Integration Policy: A One-Year Review	
<i>Shaddin Albajabmad and Dorsey Lockhart</i>	97
6: Higher Education Opportunities Available to Refugees from Syria	
<i>Juliet Dryden and Dr Erica Harper</i>	107
7: Civil Society and the Power Balance with Donors and the Government	
<i>Esraa Alshyab, Dr Erica Harper, and Mahmond Nabulsi</i>	123
8: Climate Change Adaptation in Jordanian Communities: Limitations, Opportunities, and Incentivisation	
<i>Lara Nassar</i>	140

9: Facilitating a Hima Resurgence: Understanding the Links between Land Governance and Tenure Security	
<i>Kamal Kakish</i>	156
10: Decoupling Water Needs for National Water Supplies: Insights and Potential for Countries in the Jordan Basin	
<i>Dr Michael Gilmont, Dr Erica Harper, Lara Nassar, Prof Dr Steve Rayner, Dr Hilmi Salem, Dr Mike Simpson, and Nadav Tal</i>	172
11: Sustainable Development Goals: Jordan and Beyond	
<i>Reem Albaddadin and Lara Nassar</i>	202
Conclusion	
<i>Dr Erica Harper</i>	235
Bibliography	242
Notes on Contributors	270

Abbreviations

CBO	community-based organisations
CM	cubic metres
CRiSTAL	Community-based Risk Screening Tool–Adaptation and Livelihoods
DoS	Department of Statistics
EUR	euro
FAO	Food and Agriculture Organization
GHG	greenhouse gas emissions
GWh	gigawatt hours
ICT	information and communications technology
IFC	International Finance Corporation
ILO	International Labour Organization
ILS	Israeli new shekel
(I)NGO	(international) non-governmental organisation
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IWRM	integrated water resource management
JOD	Jordanian dinar
JREEEF	Jordan Renewable Energy and Energy Efficiency Fund
MCM	million cubic metres
MDGs	Millennium Development Goals
MEMR	Ministry of Energy and Mineral Resources
MENA	Middle East and North Africa

MOA	Ministry of Agriculture
MOEnv	Ministry of Environment
MoPIC	Ministry of Planning and International Cooperation
MWI	Ministry of Water and Irrigation
NCARE	National Centre for Agricultural Research and Extension
NDCs	Nationally Determined Contributions
OECD	Organisation for Economic Co-operation and Development
P/CVE	Preventing/Countering Violent Extremism
PRA	Participatory Rural Appraisal
RoO	Rules of Origin
SDGs	Sustainable Development Goals
SPNL	Society for the Protection of Nature in Lebanon
ToC	Theory of Change
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees (“UN Refugee Agency”)
UNIDO	United Nations Industrial Development Organisation
USD	US dollar
VNR	Voluntary National Review
WAJ	Water Authority of Jordan
WANA	West Asia-North Africa
WASH	water, sanitation, hygiene
ZRB	Zarqa river basin

Foreword

HRH Prince El Hassan bin Talal

Chairman and Founder of the WANA Institute

I am delighted to present the second WANA yearbook, highlighting the best of the West Asia-North Africa (WANA) Institute's 2017 research and funded with the generosity of the Friedrich-Ebert-Stiftung (FES).

In 2008, when I first conceived of the idea for a regional initiative, I hoped to gather regional stakeholders from diverse backgrounds to work together—within and across disciplines—to address the social, environmental and economic issues facing the peoples of this region. I advocated for a definition of the West Asia-North Africa region less rooted in political geography and based more on an understanding of human geography, with shifting flows of people, resources and ideas. For this to happen, it became clear that we needed to build a regional knowledgebase.

This initial thought soon developed into an annual WANA Forum, in which authentic voices from the WANA region could promote innovative ideas and policies to jointly tackle our shared concerns. The strategy was two-fold: to facilitate the exchange of ideas, expertise and experiences between shared interest groups of public, private and civil society individuals and organisations, and to link existing regional and international initiatives and partnerships. This was an attempt to develop an economic and social conscience for good governance in the region.

The first annual WANA Forum took place over two days in April 2009 in Amman. It hosted over 70 high-profile representatives from the region and beyond, and offered a chance for state and civil society actors to come up with a fresh approach to the region. Over the course of this highly successful five-year initiative (2008–2013), it became apparent that there was an acute need for a more permanent regional resource which could delve deeper into the pressing issues affecting the region.

Some ten years later, the WANA Institute is fully established as one of the leading independent, non-profit policy think tanks in the region. Housed at the Royal Scientific Society, it promotes a transition towards evidence-based policy and programming to combat the development challenges of the region as well as provide a constructive forum for dialogue, analysis and idea sharing between academic, policy and development stakeholders.

True to the Forum's original objectives, the WANA Institute's motto is "knowledge from the region, for the region." With over 80 research projects to its name in the areas of human security, social justice and sustainable development, and a permanent staff of 22 seasoned academics, young researchers and development specialists, the WANA Institute has a growing reputation as the place to go to for independent evidence-based regional research and training, and as an arena for discussion and debate.

This second WANA yearbook brings together an edited volume of the Institute's finest research outputs from 2017. Carefully selected to display the wide range of WANA's work over the course of the year, the book includes chapters on the discourse around violent extremism, a study of Jordan's recent economic performance and reviews of Jordan's Syria refugee labour integration policy, higher education opportunities for Syrian refugees and civil society's balance of power with donors and government. There are also several chapters on the challenges the region faces with climate change adaptation, water needs and implementing the SDGs in the region. Included is a fascinating piece of research advocating for a Hima resurgence, a traditional rangeland management system dependent on sustainable land use patterns to combat scarce resources, particularly water.

There were, of course, many other highlights on the WANA Institute's 2017 calendar, not reflected in this edited volume. WANA produced no less than 21 research publications in 2017 alone and hosted 72 workshops, conferences, roundtable and focus group discussions with participants from throughout the region. Particular highlights were the Academia4Refugees roundtable held with UNHCR in April 2017 and the Youth Dialogues held with Wilton Park in October 2017. WANA Institute research findings have appeared 75 times in print and online media, TV and radio broadcasts—a reflection of the high regard many media outlets are now giving to WANA opinions. In addition, WANA researchers participated in conferences in France, Germany, Lebanon, Malta, the Netherlands, Thailand, Tunisia, Turkey, the UAE, the UK and the USA, sharing and disseminating the Institute's work and ethos of regional cooperation and dialogue.

I encourage you all to read, discuss and disseminate the research outcomes contained in this edited volume and to continue to give your full support to the WANA Institute in 2018 and beyond. It is an important regional instrument that provides evidence-based policy recommendations and vision in an increasingly troubled region.

Introduction

Dr Erica Harper

The West Asia-North Africa region has rarely been lacking in hardship. It sits at a complex crossroads where the impacts of chronic conflict, cultural fragmentation, and vested geopolitical interests collide in ways that threaten its stability and sustainability. Indeed, it is not difficult to view the region's future in pessimistic terms. Protracted human displacement, intractable conflict, violent extremism, and a youth bulge are all phenomena singularly associated with it. The year 2017 saw several of these trends evolve and manifest in disturbing ways. Other trends are emergent, and it remains to be seen whether they will edge the region towards indelible turmoil.

This research compilation builds on our previous edited volume *From Politics to Policy: Building Regional Resilience in West Asia and North Africa*, which unpacked the concept of fragility, specifically in the context of the emerging debate on resilience. Challenging the dominant narrative which centred around early warning and contingency planning, it told the story of how conflict, disaster, and adversity could be viewed equally as challenges and as opportunities.

The chapters put forward the idea that resilience was less about avoiding the unexpected than it was about the learning and strengthening that accompanies recovery. History provides myriad examples: an earthquake facilitates reconstruction using bespoke infrastructure, government collapse creates openings for the participation of civic-minded progressives, and an epidemic promotes research into preventative medicine.

Of course, prudent steps should always be taken to protect against known threats. To do otherwise would be negligent, and in some cases unlawful. Yet this should not imply that every negative outcome should be mitigated against. Such hyper-risk-aversion can result in a misallocation of resources and missed opportunities for experiential learning. In short, what makes us resilient is not shielding ourselves from all uncertainty—it is instead the experience of adversity and the growth that follows it.

Because governments, development agencies, and the donors that fund them are characteristically risk-averse, resources, thinking, and action around these trends have generally centred around the potential risks they pose, and how they can best be managed. This is understandable. The people of the region know better than any the consequences that follow from instability, war, and displacement. Likewise, the international community understands how these phenomena spill over, including in the forms of irregular migration and extremism. But as a consequence, rarely are new trends examined through a lens of opportunity—as pathways to strengthen geopolitical credibility or usher in a new era of growth and stability. The discussion below aims to stimulate a debate around this topic, and particularly on how stakeholders—civil society, policy-makers, donors, and development actors—can play a role in moving from being reactionary to seizing opportunities.

Technological Advancement

A first trend lies in the diverse ways in which technological advancement is changing the way we work, live, and relate to one another. The extent of this evolution is captured provocatively in Klaus Schwab's *The Fourth Industrial Revolution*. Schwab argues that humanity is sitting on a technological precipice, the implications of which cannot yet be envisaged. We have, of course, seen major tech-driven shifts before. In the 1930s, Keynes famously coined the term “technological unemployment”—warning that labour redundancy would outpace job creation, unleashing widespread and negative social outcomes.¹ Such fears did not materialise; indeed in each of the industrial revolutions, labour markets adapted and new economies evolved relatively smoothly and without significant social upheaval.² Today may be different, however, simply due to the speed at which innovation is transforming our lives: “contrary to previous industrial revolutions, this one is evolving at an exponential rate rather than linear pace.”³

For the people of the WANA region, perhaps the biggest win here rests with the consumer. Never before has a more diverse range of goods and services been available at lower cost. There is no better example than

¹ K. Schwab, *The Fourth Industrial Revolution* (Geneva: World Economic Forum, 2016), 35.

² *Ibid.*, 36.

³ *Ibid.*, 3.

computer technology; 1GB of storage currently costs around USD0.03 per year, compared to USD10,000 dollars 20 years ago.⁴ A further opportunity is the reduced entry barriers to entering new, high-growth markets. Today's "disruptor" companies—Uber, Facebook, Airbnb—were born from coupling ideas and connectivity, not capital. This is a significant levelling of the playing field, which could open up boundless opportunity for the youth of the region, as long as certain enabling conditions are available.

The problem is that these prerequisites are not present. Unfettered connectivity is still problematic, particularly in the region's low- and middle-income states. But perhaps more troubling is the absence of a regulatory framework that fosters innovation and entrepreneurialism. The World Bank's Ease of Doing Business Index illustrates this most succinctly, with access to credit, corruption, and government bureaucracy ranking among the highest constraints. Unable to exploit the opportunities on offer, the people of the WANA region have little armoury to offset the costs at which the innovation age will come. Chief among these will be unemployment. Research suggests that 45 per cent of existing jobs in the UAE, Bahrain, Egypt, Kuwait, Oman and Saudi Arabia could be automated today.⁵ Workforces inclined towards agrarianism and services, such as those of Jordan and Lebanon, risk being severely impacted. Indeed, among the top ten roles most prone to automation are farm labour, hotel and restaurant services, and secretarial and administrative work.⁶

The natural consequence of sector-specific redundancy is labour market polarisation and deepening inequality. Already, half of the world's assets are controlled by the richest 1 per cent of the population,⁷ and the region leads on global statistics, where average income inequality is 38.2 per cent.⁸ The dangers stemming from inequality are well-evidenced. Unequal societies are more conflict-prone; their citizens are more likely to suffer

⁴ K. Schwab, *The Fourth Industrial Revolution* (Geneva: World Economic Forum, 2016), 11-12.

⁵ Sarah Townsend, "World Government Summit: Almost Half of Middle East Jobs Could Be Automated Says Survey," *The National*, 11 February 2018.

⁶ C. B. Frey and M. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerisation?" Working paper for Oxford Martin Programme on Technology and Employment, 17 September 2013.

⁷ Schwab, *Fourth Industrial Revolution*, 92.

⁸ M. Ncube, J. Anyanwu, and K. Hausken, *Inequality, Economic Growth, and Poverty in the Middle East and North Africa*, Working Paper 195 (Tunis Belvédère, Tunisia: African Development Bank Group, 2013), 8.

from a mental illness or be obese; and they perform worse in terms of social cohesion, with lower levels of trust and higher levels of violence.⁹ Given that the people of the region are already disillusioned by weak governance, chronic conflict, and economic stagnation, the combined impact of further thwarted opportunity, unemployment, and inequality is likely to be uncontainable.¹⁰

Climate Change

A second trend concerns the impacts that climate change will have on the food security and economies of WANA states. As Lara Nasser notes in her chapter “Climate Change Adaptation in Jordanian Communities,” the science tells us that in addition to increased temperature and more frequent drought, sudden and extreme weather events will be more common. This will affect food production and security, the availability of water for human consumption and industrial purposes, and the sustainability of ecosystems. Dr Michael Gilmont’s chapter on water decoupling explains how the solutions required do not necessarily depend on scientific advancement, however. His work with farmers in the Jordan Valley revealed that they know how to conserve water and cultivate more efficiently, but they lack the enabling policy environment to do it. Flood irrigation, for example, is routinely used over drip irrigation, simply because farmers do not enjoy reliability and continuity in water supply, or accurate and timely data on weather patterns. Likewise, while yields could be increased with specialist equipment, farmers lack access to affordable credit, insurance is unavailable, and the regulatory framework disincentivises the formation of cooperatives.

The question is thus whether policy-makers will set in place the required framework. But setting the “right” path is not always easy. To ensure governments take on the arduous task of price reform and enforced efficiency is perhaps too much to ask the population, especially against the other challenges they face. Donors and political allies might agree. Likewise, to invest in modern agricultural infrastructure, data collection, and research—against other imperatives and a climate of uncertainty—may not be deemed feasible.

⁹ R. Wilkinson and K. Pickett, *The Spirit Level: Why Greater Equality Makes Societies Stronger*, quoted in Schwab, *Fourth Industrial Revolution*, 93.

¹⁰ Schwab, *Fourth Industrial Revolution*, 12–13.

Migration

A third trend is migration. The past five years have seen one of the largest forced displacement crises unfold. Approximately 10.3 million Syrians have been displaced, with 2.9 million registered by UNHCR in Turkey, over 1 million in Lebanon, 660,000 in Jordan,¹¹ 241,000 in the Kurdistan Region of Iraq, and 122,000 in Egypt.¹² While this was not the first such crisis to hit the region, the response tabled was almost entirely unique. The proposal sought to integrate refugees into local economies, thus providing the low-cost labour force needed to expand the industrial sector and lift host states out of economic stagnation. Donors and international organisations were quick to throw their support behind the initiative. From a humanitarian perspective, providing refugees with livelihoods was far preferable to the indignity and inefficiency of long-term humanitarian support. They also perhaps foresaw that funding would soon need to be scaled back, and that livelihoods might cushion this.

Yet the key stakeholders became frustrated when results did not accrue as quickly as anticipated. A cat-and-mouse game ensued, with donors withholding funds until progress (which arguably required funds) could be demonstrated. Indeed, the compact agreements were perhaps too optimistic and based on imperfect evidence. Our research, showcased in Shaddin Alhajahmad and Dorsey Lockhart's chapter reviewing Jordan's refugee labour integration policy, found that simply legalising and offsetting visa costs was insufficient to outweigh the monetary and non-monetary benefits of informal employment. Moreover, manufacturing firms did not want to employ workers that they saw as temporary: the in-house training required was simply too resource-heavy. Finally, the government probably set itself too high a target. Based on data collected by the WANA Institute in 2017, the combined male-female labour participation of Syrian refugees sits at around 163,000. This means that even if all males and females able and willing to participate in the labour market could find employment, Jordan would still only be able to reach around 80 per cent of its 200,000 work permit goal.

¹¹ UN, "Refugees," n. d., www.un.org/en/sections/issues-depth/refugees/index.html.

¹² UNHCR, *3RP Regional Refugee & Resilience Plan 2015–2019: In Response to the Syria Crisis. Regional Strategic Overview* (Geneva: UNHCR, 2017).

Admittedly, the compact agreements could have been better structured. But it is also the case that impatience, risk aversion, and an unwillingness to tweak the agreed-upon package prevented a more successful outcome. The situation has now come full circle. While employment has increased, most refugees live in poverty. Donors are now exhibiting “fatigue” and as cutbacks loom, host states may begin to flex their muscles by threatening to limit their hospitality. Jordan, in particular, fears being let down by the international community. After the country took in refugees and made the highly unpopular political decision to open its labour markets in a climate of slow growth and high unemployment, donors may be losing interest in supporting new markets with employment potential and growth opportunities. What will happen next is difficult to determine. It is likely, however, that states in the region, and further afield, will be far more cautious in extending livelihoods privileges to refugees in future protracted situations. This would be a missed opportunity for all stakeholders.

Unequal Power Relations

A fourth development is the impact the #MeToo social media campaign has had on gender relations worldwide, and the potential trickle-down effect this may have on the WANA region. Certainly, with the world’s highest gender gap (in 2017, the gap stood at 40 per cent),¹³ women’s empowerment is a sine qua non for economic growth, good governance and peacebuilding. Certain nexuses deserve specific attention. Despite strong gains in female education (the regional female-to-male primary enrolment ratio was 96 per cent in 2013, against 98.3 per cent worldwide), women’s participation in the public sphere and labour markets continues to lag. Women’s labour force participation in the region—at around 21 per cent in 2017—is among the lowest worldwide.¹⁴

Our research suggests that women’s exclusion from public, private sector, and civic life stems from an interwoven and reinforcing set of constraints. Chief among these is the absence of a legal framework that sufficiently

¹³ World Economic Forum, *The Global Gender Gap Report 2017* (Geneva: World Economic Forum, 2017), 18.

¹⁴ ILO, “Labor Force Participation Rate, Female (% of Female Population Ages 15+) (Modeled ILO Estimate),” ILOSTAT Database, World Bank, March 2017, <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=ZQ>.

protects women from discrimination, harassment, and violence. For example, our primary data collection highlighted that many women avoid the workforce due to fear of sexual harassment, and others seek to delay marriage due to fear of violence.

In redressing this situation, it is important to understand the linkages between gender inequality in the region and the broader phenomenon of power consolidation and its unregulated use. Unequal power relations exist not only between men and women, but also between tribes, economic classes, people of different religions, and young people and adults. In many ways, abuse of power at these latter levels is even less regulated and thus harder to address. Esraa Alshyab, Mahmoud Nabulsi, and my chapter on civil society empowerment highlights that power imbalances significantly hamper the work of grassroots actors. Only with robust laws (that transcend partnership jurisdictions) and reporting channels can such imbalances be rectified and can civil society become a determinative player in development.

Violent Extremism

Trends cannot be discussed without mentioning the impact of violent extremism. While the story of 2017 was the military defeat of Daesh, it would be naive to think that this marks its end. As researcher Barik Mhadeen expressed in his November 2017 op-ed,¹⁵ as long as the Daesh ideology remains unaddressed, the world will continue to see sporadic attacks. This is concerning, given that the approach to date has been largely skewed towards risk containment and prevention, as opposed to fighting the ideology that is behind attacks. Indeed, global response patterns epitomise what Al Gore has termed “fear’s crowding out of reason and rationality.” In WANA states, governments have hijacked the Daesh threat to tighten their grip on power, impose further restrictions on civil society’s operating space, and curtail civic freedoms such as free media. Similarly, in the West, elaborated legislation has encroached upon due process rights, including to judicial review and protection against arbitrary arrest, as well as fundamental civic rights including to privacy and a nationality.

¹⁵ Barik Mhadeen, “In the Wake of Its Military Defeat, Prepare for Daesh 2.0,” The Daily Star (Lebanon), 7 November 2017.

In our partnership with Terre des Hommes, we conducted research into the efficacy of such measures. It found that when individuals become the subject of such checks and controls, this can validate and compound feelings of marginalisation, and thus drive the violent radicalisation process.

A more strategic approach would be to craft responses around a nuanced and evidence-based understanding of what fuels extremism. And while debate has centred around drivers such as unemployment, poverty, and religious indoctrination, our work suggests that those who join extremist groups are rarely disempowered and often make reasoned choices (as shown in the chapter I co-authored with Dr Neven Bondokji). One commonality is that extremists are often reacting to or seeking redress for a grievance, whether this be Sunnis' shrinking political space, marginalisation by the state, or the acts of violence perpetrated against Syrians. Economy, religion, and psychology may thus play a role, but are rarely decisive. It should not be surprising, then, that interventions centring around alternative religious interpretations, job creation, and livelihoods have limited effectiveness. We need to think more creatively. As posited in the chapter by Dr Neven Bondokji and Nadine Sayegh, better solutions lie in the domain of community-level human security. CBOs, including youth centres, can be a fundamental source of resilience, and should be strengthened rather than form the subject of security oversight and monitoring. Likewise, providing spaces for civic action and peaceful dissent may prove catalytic for those whose frustrations make them vulnerable to recruitment.

Rise of Far-Right Politics

A final trend concerns the wave of far-right politics sweeping the globe, from the UK's decision to leave the EU to the election of Donald Trump and Austria's new right-wing leader. Alongside nationalistic thinking and anti-refugee sentiment, we have witnessed a massive transformation in the way that information and facts are used, manipulated, and withheld. "Fake news" and "alternative facts" have allowed leaders, policy-makers, and individuals to lie, promote hatred, and foster discrimination with little consequence.

The people of the WANA region are arguably among the worst affected. Anti-Muslim and anti-Arab sentiment has manifested in discrimination and violence, and the US's infamous travel ban has disrupted lives and fuelled political tensions. Cuts to the UN's budget, and particularly to UNRWA, along with policy moves such as relocating the US embassy to Jerusalem, may spark a new wave of instability in the WANA region, as well as perceptions of geopolitical marginalisation against which the people have no court to appeal to.

What we perhaps overlook, are the commonalities between Trump supporters and the disenfranchised people of the WANA region. Those who elected Trump felt marginalised and taken advantage of by the political and business elite, and angry at a government that was failing to provide them with decent livelihoods and the possibility of upward social mobility. This is very much the story of Arabs—especially young Arabs—today. They likewise have legitimate grievances, feel unprotected and unheard. In the US, this group exercised their anger by electing Trump. This raises the question of what the people of this region will do. The following chapters showcase selected pieces of work undertaken by the WANA Institute during 2017. They provide insight into the innovative work our staff are leading with the objective of promoting more effective, efficient, and evidence-based policy-making. They deal with the trends mentioned above, adding contextualisation, analysis, and policy recommendations. In the conclusion, I revisit these trends and try to offer constructive input into their transformative potential. As noted, depending on how they are dealt with, the outcomes may be increased fragility and divisiveness, or a new platform for progressive policy and good governance. Through these remarks, I will aim to explore these opportunities, their risks and limitations, as well as the actions we can all take to ensure that they unfold.

1: Journey Mapping of Jordanian Foreign Fighters

Dr Neven Bondokji and Dr Erica Harper

Despite increasing attention on radicalisation, scholarship and policy analysis are almost exclusively limited to drivers (“push” and “pull” factors), recruitment patterns, and gender variations. Less information is available on the in-group dynamics of violent extremist groups, battlefield strategy, or how powerholders maintain influence in an increasingly chaotic and dynamic theatre.

There is a critical knowledge deficit around the transitional relationship between radicalisation and violent extremism—more specifically, the processes, drivers, and enabling conditions at play when someone harbouring radical ideas decides to join an armed extremist group, or commit a violent extremist act.

Radicalisation should be understood as a process—triggered in response to contextual grievances, marked by a personal crisis in the search for a role and for meaning—that eventually leads the individual to support the use of violence against state actors and civilians to bring about ideologically defined social and political change. There is a distinction between radical ideology and violent behaviour; a radicalised individual might not directly engage in violence but may support its use, whereas someone who perpetrates a violent extremist act is assumed to be ideologically radicalised.¹

Various contextual circumstances and push and pull factors influence individuals to embrace radical ideology, and, in some cases, join armed radical groups. The circumstances, drivers, and influences that facilitate the transition from a non-violent to a violent state are less understood. There are good reasons for this. The numbers, whereabouts, and handling of returnees are highly sensitive, and closely connected to state security

¹ For a review of definitions, see Neven Bondokji, Kim Wilkinson, and Leen Aghabi, *Understanding Radicalisation: A Literature Review of Models and Drivers* (Amman: WANA Institute, 2016), 4–6.

imperatives. Individuals detained or imprisoned, in rehabilitation, or being reintegrated into their communities constitute vital assets for intelligence purposes, but also risks to the safety and security of society. Also, the reliability of returnee testimony is questionable; “staged defection” is a known Daesh strategy and returnees may be operating with pre-formulated, non-benign agendas.² These factors limit the “space” in which practitioners and policy-makers can learn from these individuals.

Despite the risks of engaging returnee fighters and defectors, better understanding the end stage of the radicalisation–violent extremism continuum is essential. Details of how fighters enter Syria, the conditions and events they are exposed to, and available modalities of return provide the foundation on which to design more effective resilience strategies in countries of origin, as well as sustainable rehabilitation and reintegration programmes. A lingering troublesome question is why—when the key drivers of unemployment, lack of opportunity, and weak governance are so pervasive—the majority of those with radical ideas do not act upon them. Insight into the characteristics and tipping points of those who do, may unlock the answers to these difficult questions. Finally, from a psychological perspective, unless the levels of battlefield trauma, ideological indoctrination, and coping strategies adopted by combatants are understood, it is very difficult to assess the risks that returnees pose.

This chapter sheds light on some of these questions, through journey mapping of individual Jordanians who joined a violent extremist group in Syria, from their radicalisation and recruitment through to their return to Jordan and current ideology. It draws conclusions that may guide policy-makers in designing and implementing Preventing/Countering Violent Extremism (P/CVE) interventions and reintegrating returnees.

The data collected was drawn from interviews pertaining to five fighters who left Jordan to join Jabhat Fateh al-Sham (formerly known as Al Nusra Front) in Syria. Three of these fighters have returned to Jordan, one was killed, and the other remains in theatre. Interviews were conducted in Arabic in Ma’an and Zarqa in May 2017 with the three returnees and the

² Wolfgang Mühlberger and Olli Ruohomäki, “Middle Eastern Terror in Flux: Mosul after Daesh, Daesh after Raqqa,” Finnish Institute of International Affairs (FIIA), 24 January 2017; Brian Michael Jenkins, *When Jihadis Come Marching Home: The Terrorist Threat Posed by Westerners Returning from Syria and Iraq* (California: RAND Corporation, 2014).

parents, siblings, other relatives, friends, neighbours, and teachers of all five fighters.

Journey mapping is a methodology commonly used in market research to identify the values and attitudes that influence consumers' purchasing decisions. This is the first application of this methodology to radicalisation research. Triangulating different insights and perspectives relating to the research subjects revealed important insights, including differences in how those connected to the fighters assessed their radicalisation, the motivations surrounding their return, and the current risk and vulnerability of returnees.

The number and geographic diversity of fighters studied was limited by security restrictions on the interviewing of returnees and their families in Jordan put in place following the Karak attacks in December 2016.³ However, interviewees were selected by the research team, not the authorities.

To summarise the key findings, the journey pathways of the fighters highlight the vulnerability of two types of youth: those who are ideologically orientated towards violent extremist behaviours, and those who empathise with female and child victims of the conflict in Syria. While the signs and speed of fighters' radicalisation differed, there were three commonalities: each was influenced by sensationalist media coverage, was recruited face-to-face and went to Syria with friends, and, despite desperate economic circumstances, paid significant amounts of money to smugglers to reach Syria.

Of those who returned, each lamented their decision to join the extremist group soon after arriving in Syria, as a result of the oppression they observed, the Muslim-against-Muslim nature of the conflict, and the realisation that they had been misled into participating in conflict. Family members encouraged their repatriation; returnees were particularly influenced by their mothers.

³ The findings, however, are consistent with and help to explain observations gathered through previous WANA Institute research. See, e.g., Neven Bondokji, Kim Wilkinson, and Leen Aghabi, *Trapped between Destructive Choices: Radicalisation Drivers Affecting Youth in Jordan* (Amman: WANA Institute, 2017); and two unpublished research reports on radicalisation drivers in Jordan (2016) and on policy gaps (2017).

Today the returnees are all practising Muslims, some more conservative than others. They are active in deterring others from joining the Syrian conflict and refuting recruiters' narratives. But weak reintegration and rehabilitation measures have led to their isolation in the community and contributed to their economic marginalisation, casting some doubt on the sustainability of their ideological positioning.

Understanding the Journey

Despite variation in the fighters' profiles and decisions, their journeys display key commonalities. They all went to Syria in their 20s. They were economically marginalised: although each was employed, their jobs were menial and seasonal, and/or their salaries were low (the highest was JOD200/USD282 monthly). Most were their family's principal breadwinner. While educational backgrounds varied—some were educated, others had not completed high school—none had an advanced graduate degree.

The ideological orientation of the fighters before radicalisation differed widely. At one extreme sits the fighter who was particularly conservative. Encouraged by a teacher, he engaged in preaching about Islam and good morals to his peers at school. At the other extreme is the fighter who was irreligious and reportedly had never prayed before. He worked in the public sector and by night danced and sang in a dabka band. The remaining fighters were neither fastidiously religious nor irreligious.

Radicalisation Drivers

Five factors appear to have influenced the fighters' radicalisation. First, each was influenced by sensationalist media coverage that in turn aroused the second factor, empathy and hameyyeh or faz'a—norms of protecting the weak and fighting injustice. These important Bedouin values are deeply rooted in the Arab cultural fabric. One fighter elaborated:

I was provoked by watching satellite news channels. The most important channel for me was Orient TV because it was focusing on the crimes of the Syrian army especially the kidnapping of women and raiding houses. Till today I cannot forget the coverage of how the Syrian army attacked one woman and killed her.⁴

He knew that he would most likely be killed, and that if he was, he would be a “martyr,” but he viewed himself principally as an agent of justice, regarding his decision-making as a product of his duty to protect the weak.⁵ Further research is needed to better explain the psyche of male fighters driven by such values and not influenced by religious ideology.

A third factor was peer influence. One fighter left Ma’an with five friends; ten other friends had already left for Syria.⁶ Another left with two friends; he returned, one friend was killed, and the other remains in Syria.⁷

A fourth factor was ideological indoctrination. One paramedic-turned-fighter had grappled with questions about his religious duty as a Muslim towards the civilians of Syria. Recruiters told him there were no hospitals or clinics for fighters; he thus went to Syria in the belief that he was performing jihad by providing medical services.⁸ Another fighter had ascribed to conservative religious beliefs since childhood, and was described by his neighbours as a “Salafi.”⁹ He and his family recalled his preoccupation from an early age with ideas of jihad and martyrdom.¹⁰ According to his parents, he was later “brainwashed” by sheikhs and recruiters.

A final factor was desperation. Fighters, their relatives, and their friends all drew attention to their difficult living conditions, financial constraints, and weak prospects for a better future or improved social status in Jordan.

⁴ Interview with fighter, Ma’an, 22 May 2017.

⁵ Interview with fighter, Ma’an, 22 May 2017.

⁶ Interviews with fighter, Ma’an, 28 May 2017, and his father, Ma’an, 29 May 2017.

⁷ Interview with fighter, Ma’an, 22 May 2017.

⁸ Interview with fighter, Zarqa, 27 May 2017.

⁹ It is unclear how people distinguish between Salafis and jihadi Salafis. The term was used here as derogatory one, referring to the latter. Interview with neighbour of a fighter, Ma’an, 30 May 2017.

¹⁰ Interviews with fighter, Ma’an, 28 May 2017, his mother, Ma’an, 28 May 2017, and his father, Ma’an, 29 May 2017.

They referred specifically to unemployment, low salaries, or irregular employment as factors driving their despondency; against such challenges, Syria appeared an attractive alternative.

Singularly or in combination, these factors outweighed fighters' responsibilities and emotional ties to their communities and families. One left his wife and daughter and another his new bride. The rest, who were single, left their families without alternative financial support. One woman described her husband's decision as selfish: "All what he cared about was meeting his goals according to his convictions, even if these were wrong."¹¹ One fighter applied for leave without pay from his public sector job. It was unclear whether this was to avoid detection, to keep his options open, or because he intended to fulfil his hameyyeh duty and then return.

Radicalisation Signs

Fighters' radicalisation had taken from one to six months, the length of time apparently correlating with fighters' existing orientation: the more conservative the individual, the longer the process took. This is consistent with other evidence that ignorance about Islamic values and principles can facilitate radicalisation.¹² It appears it is easier to convince someone who is ignorant about religious rules and precepts to subscribe to radical ideas; those more learned take longer to take on radical ideas because they first have to shed specific doctrinal learning. The fighter whose radicalisation took place in one month had no religious background; "he knew nothing about religion or jihad before he left," a neighbour clarified.¹³

While radicalisation signs are generally case-specific, some general tendencies can be identified. All fighters showed interest in regular prayer and in reading religious texts provided by recruiters. One explained: "I started praying regularly because I was going for jihad and I might die there."¹⁴

¹¹ Interview with wife of a fighter, Ma'an, 7 June 2017.

¹² For example, Ruth Manning and Courtney La Bau, *In and Out of Extremism: How Quilliam Helped 10 Former Far-Right and Islamists Change* (London: Quilliam Foundation, August 2015).

¹³ Interview with neighbour of a fighter, Ma'an, 25 May 2017.

¹⁴ Interview with fighter, Ma'an, 22 May 2017.

However, religious conservatives displayed different signs from those who were irreligious. Conservatives became short-tempered, rigid in their ideas, unopen to dialogue, and isolated:¹⁵ “I did not like talking to anyone except my friends that I was going with.”¹⁶ Some adopted aggressive behaviour and changed their appearance by growing beards and wearing long, flowing dress.¹⁷ The irreligious did not display any signs of rigidity or self-isolation, and the changes observed in them by their families were generally perceived positively, as signs of maturation: engaging in prayer, quitting smoking, avoiding loitering with friends, and returning home early.¹⁸

Critically, parents were either oblivious to their sons’ radicalisation, or lacked the tools to respond sufficiently to prevent them from leaving. In some cases, those close to the fighter claim to have observed no signs of radicalisation. In others, they failed to connect behavioural changes with the potential consequences. One mother explained:

His convictions about jihad were increasing daily before going to Syria for about two months. He was brainwashed about jihad, defending Syrian sisters, afterlife, heaven, and the virgins! ... I thought it was just ideas that he talks about, I never thought he would actually go to Syria.¹⁹

Others acted in non-constructive ways. The parents of one fighter decided to get him married to divert his attention from joining the fight.²⁰ There was no intra-familial discussion of his radical ideas, and no external help was sought. Two months later, he departed for Syria. Two other sets of parents reported observing their sons’ radicalisation, but not doing enough to stop them.²¹

¹⁵ Interviews with neighbour of a fighter, Ma’an, 25 May, 2017; fighter’s sister, Ma’an, 25 May 2017; and a friend of the fighter, Ma’an, 30 May 2017.

¹⁶ Interview with fighter, Ma’an, 28 May 2017.

¹⁷ Interview with sister of a fighter, Ma’an, 29 May 2017.

¹⁸ Interview with mother of a fighter, Ma’an, 23 May 2017; interview with neighbour of a fighter, Ma’an, 25 May 2017.

¹⁹ Interview with mother of a fighter, Ma’an, 28 May 2017.

²⁰ Interview with sister of a fighter, Ma’an, 25 May 2017.

²¹ Interview with brother of a fighter, Ma’an, 23 May 2017; interview with neighbour of a fighter, Ma’an, 25 May 2017.

In 2011 and 2012, there was no clarity around safe channels for informing authorities about such plans. Today, while parents and others may still lack confidence in official assistance, the level of awareness among the general public is higher, and there is more local help available, including from community and tribal elders.²²

Recruitment

Some interviewees considered the fighters to be victims of recruiters,²³ while others assessed them as active agents in their own radicalisation.²⁴ Recruiters, particularly in Ma'an, were well-known within their communities, with some interviewees referring to "known big names" who were ringleaders.²⁵ Some parents and friends observed the fighter-to-be spending time with or being driven home regularly by a recruiter.²⁶ The local context has changed significantly since, but at that time, local authorities were unable to stop these known figures from smuggling fighters into Syria: "The government had serious shortfalls in monitoring the Jordan–Syria border. There were children as young as 16 years old who crossed the borders."²⁷

Fighters expended significant amounts of money to be smuggled into Syria. One paid around JOD400 (USD564), another JOD300 (USD423). This challenges the accepted narrative that extremist groups are "all-facilitating." In fact, given that the subjects of this research faced extreme financial hardship, the transactional nature of their recruitment implies significant agency. It also suggests that, but for lack of resources, many more might travel to Syria to join violent extremist groups.

Interviewees also suggested a profit dimension to the recruitment. According to one fighter, those recruited would pay a smuggler to get to

²² As observed in 18 focus group discussions for an unpublished study by the WANA Institute, Oct 2016–Feb 2017.

²³ Interview with friend of a fighter, Ma'an, 31 May 2017; interview with mother of a fighter, Ma'an, 23 May 2017; interview with mother of a fighter, Ma'an, 28 May 2017.

²⁴ Interview with wife of a fighter, Ma'an, 29 May 2017; interview with wife of a fighter, Ma'an, 7 June 2017; interview with neighbour of a fighter, Ma'an, 30 May 2017; interview with sister of a fighter, Ma'an, 29 May 2017; interview with brother of a fighter, Ma'an, 23 May 2017.

²⁵ Interview with teacher of a fighter, Ma'an, 31 May 2017.

²⁶ Interview with sister of a fighter, Ma'an, 29 May 2017.

²⁷ Interview with fighter, Ma'an, 28 May 2017.

Syria. Separately, recruiters were also paid JOD500–1000 (USD705–1410) by radical groups.²⁸

We did not go with the help of sheikhs, but instead via smugglers that I met through my friends. The smuggler who took us to the borders was new to us. There were a very large number of smugglers who did this ... coordinated by one big man. It was a trade. They will take money from everyone who went to join the fight.²⁹

The extent of compensation given to fighters' families is contested. One fighter stated that financial incentives were paid only to the families of the first three fighters ever to leave Ma'an for Syria. This money was paid by "Salafis,"³⁰ who would collect JOD10 (USD14) from each of their members. These families received this monthly compensation only for a short period, however.³¹ On the contrary, in most cases families sent money to their sons in Syria.³²

Arrival in Syria

The fighters remained in Syria for three to seven months. Each narrated their shock upon arrival regarding the conditions, and their near-immediate regret. Such compunction was reiterated by family members and others who had been in direct contact with the fighters during their time in Syria. The most unexpected factor for the fighters was the Muslim–Muslim and Sunni–Sunni nature of the conflict. One recalled:

We killed people who said the *shabada* [Muslim declaration of faith] before they were killed ... I felt this cannot be right ... Some co-fighters attacked others and killed them unfairly and for pity reasons. I felt we did not go to Syria to defend the Syrians but to oppress them.³³

²⁸ Interview with fighter, Ma'an, 22 May 2017.

²⁹ Interview with fighter, Ma'an, 28 May 2017.

³⁰ Again, there is general confusion among interviewees between Salafis and jihadi Salafis. This refers to jihadi Salafis who were advocating for joining the fight in Syria.

³¹ Interview with fighter, Ma'an, 28 May 2017.

³² According to data collected by the WANA Institute for an unpublished study in Ma'an and Zarqa in 2016.

³³ Interview with fighter, Ma'an, 28 May 2017.

The paramedic who had been convinced by recruiters that there were no medical services in Syria, connected his regret to his realisation that he had been drawn to Syria under false pretences. He had immediately observed a number of clinics, a hospital, and several medical professionals: “I realised at that moment that they fooled me, and started thinking immediately of how I will go back to Jordan.”³⁴

Another fighter was disillusioned by the irreligious behaviour and double standards adopted by his group’s leaders. He explained that the *amir* (leader) was strict on minor religious matters, such as how to stand during prayer, but would badmouth other leaders and embezzle funds. He stated his realisation that these groups were only using Islam to mislead new recruits.³⁵

Fighters were isolated from their peers upon arrival, and then sent to different battalions and groups. “It was difficult to trust anyone there because every day you meet new people.”³⁶ While this tactic was presumably intended to isolate fighters from negative peer influence, in fact it intensified their feelings of alienation and shock, and manifested in regret.³⁷

Two fighters “made the mistake”³⁸ of informing their group of their desire to return to Jordan. One group reacted by exerting intense pressure on the fighter, combined with temptation through reward: “This included money, a new house, authority, and women. All combined.”³⁹ The other group exerted similar pressure, while also relocating the fighter to Ghouta, away from the Jordanian border.⁴⁰

Returning to Jordan

The returnee fighters availed themselves of various different strategies. The paramedic formed ties with a Syrian man whom he had saved. He escaped to the home of this man’s brother in another area of Syria, hiding

³⁴ Interview with fighter, Zarqa, 27 May 2017.

³⁵ Interview with fighter, Zarqa, 27 May 2017.

³⁶ Interview with fighter, Ma’an, 22 May 2017.

³⁷ Interview with fighter, Zarqa, 27 May 2017.

³⁸ *Ibid.*; interview with fighter, Ma’an, 22 May 2017.

³⁹ Interview with fighter, Ma’an, 22 May 2017.

⁴⁰ Interview with fighter, Ma’an, 22 May 2017.

there for two weeks. During this time, he communicated with his family in Jordan, who arranged with the General Intelligence Directorate for his return. He paid smugglers to take him to the border.⁴¹

The second fighter formed ties with a Syrian man who hosted new recruits upon their arrival in Syria. Asked by this man why he had joined the conflict, the fighter explained his religious duty to fight for justice and protect Syrian women, and his despair with life in Jordan. The man advised him to return to Jordan, telling him the conflict in Syria had nothing to do with such causes. After participating in the battle theatre and deciding he wanted to return, he escaped back to this man, and re-entered Jordan with the assistance of smugglers.⁴²

A third fighter was tasked with driving some injured people to the Red Crescent. Upon arrival, he felt he had two choices: surrender to the Jordanian authorities or the Syrian army. He chose the former, noting that the authorities treated him well and offered him food.⁴³ It remains unclear whether his return was opportunistic or self-orchestrated.

All fighters were in regular communication with their families during their time in Syria. This was instrumental in their decision to return. All fighters commented on their strong attachment to their mothers, before leaving and following repatriation: “Honestly the most important reason behind my return is my mother.”⁴⁴ Mothers explained that each time the fighters called, they pressured them to return and counselled that their actions were not jihad. The strong influence of mothers is consistent with other research findings highlighting their potential role in de-radicalisation.⁴⁵ It also underscores the significant value Islam places on parents’ approval of the conduct of sons and daughters.

⁴¹ Interview with fighter, Zarqa, 27 May 2017.

⁴² Interview with fighter, Ma’an, 28 May 2017.

⁴³ Interview with fighter, Ma’an, 22 May 2017.

⁴⁴ *Ibid.*; a similar statement was made by another returnee: interview with fighter, Ma’an, 28 May 2017.

⁴⁵ For example, Edit Schlaffer and Ulrich Kropiunigg, “A New Security Architecture: Mothers Included!” in *A Man’s World? Exploring the Roles of Women in Countering Terrorism and Violent Extremism*, ed. Naureen Chowdhury Fink, Sara Zeiger, and Rafia Bhulai (Abu Dhabi, UAE: Hedayah and The Global Center on Cooperative Security, 2016), 54–75.

Fathers likewise exerted pressure, but usually by expressing anger. Spouses and siblings levelled additional forms of emotional pressure. One wife encouraged her husband to return by falsely telling him she was pregnant with a male child;⁴⁶ a brother repeatedly referenced their father's deteriorating health;⁴⁷ and a mother blamed her son for his father's hypertension and diabetes, which she said had started after he had left for Syria.⁴⁸

Upon return to Jordan, all fighters were interrogated for between one week and three months. While those who returned in 2012 were not imprisoned, those who returned in or after 2014 were detained for three to five months, contingent upon them not having been engaged in military activities in Syria. Only one interviewee had attended a rehabilitation programme, run by the Preventive Security Unit; no details were shared regarding the curriculum, number of participants, or techniques applied.

Rehabilitation and Reintegration

Today, returnees feel widely ostracised within their communities. Their social engagement is limited to family relations, since friends and neighbours want to avoid security "hassles." Some, including former friends, are highly suspicious: "He [a returnee] has to prove to the government and to society that he has indeed changed to be able to live his life normally now."⁴⁹ A teacher added: "the government does not trust returnees and considers them a huge burden on society."⁵⁰

Returnees are considered by family and associates to be conservative, but no longer radical. Those who had always been religious conservatives now consider themselves traditional Salafis, but not jihadi Salafis, and strongly contest the validity of recruitment narratives.⁵¹ One interviewee assessed the current ideological convictions of his returnee friend:

⁴⁶ Interview with wife of a fighter, Ma'an, 7 June 2017.

⁴⁷ Interview with brother of a fighter, Ma'an, 23 May 2017.

⁴⁸ Interview with mother of a fighter, Ma'an, 28 May 2017.

⁴⁹ Interview with friend of a fighter, Ma'an, 30 May 2017.

⁵⁰ Interview with teacher of a fighter, Ma'an, 31 May 2017.

⁵¹ More specifically, they are understood to be traditional Salafis who prioritise religious text over reason, and who are strict in their approach to religious rituals. Salafism has six schools, one of which is the jihadi Salafism that gave rise to armed radical groups like al-Qaeda, al-Nusra, and Daesh. See Mohammad Abu Rumman, *I Am a Salafi: A Study of the Actual and Imagined Identities of Salafis* (Amman: Friedrich-Ebert-Stiftung, 2014), 33–50 (in Arabic).

I don't think my friend is a [jihadi] Salafi, because [jihadi] Salafis believe that the state and anyone working in a security force is a *kafir* [non-Muslim] that should be killed. I work in this field and I have never felt anything but care and love from him ... I feel safe in our friendship.⁵²

The returnee who had been irreligious is today a practising Muslim. He refuses to return to *dabka* dancing (generally associated with drinking, late nights, and smoking) because he believes this is against Islam.⁵³ His wife is supportive of this: she explained that his *dabka* band friends are irreligious and she dislikes their influence over him.⁵⁴

The wives and mothers of the three returnees believe that their principal concern now is their families' wellbeing. One wife commented: "he is a very understanding husband. I work and he encourages me to attend training courses ... The other day, my daughter asked him to bring her makeup and I was shocked that he did!"⁵⁵ None of the interviewees believed that the returnees would go back to Syria. One, however, remains in contact with the sheikhs who influenced his decision to go to Syria, and his wife feared that they might influence him again.⁵⁶

The returnees actively deter others planning to go to Syria. They engage in conversation with such individuals, and anyone expressing support for armed groups fighting in Syria.⁵⁷ One succeeded in stopping two friends from leaving to join a violent extremist group while he was still in theatre. He also tried to convince a fighter from Ma'an, whom he met at the border as he was being smuggled back, to return with him. The fighter continued to Syria, but they remained in contact; he subsequently communicated his regret and returned to Jordan a few months later.⁵⁸

Security restrictions on returnees limit their reintegration and financial wellbeing. They are subject to enhanced security assessment and protocols

⁵² Interview with friend of a fighter, Ma'an, 31 May 2017.

⁵³ Interview with fighter, Ma'an, 22 May 2017.

⁵⁴ Interview with wife of a fighter, Ma'an, 29 May 2017.

⁵⁵ Ibid.

⁵⁶ Interview with wife of a fighter, Ma'an, 7 June 2017.

⁵⁷ Interview with fighter, Zarqa, 27 May 2017.

⁵⁸ Interview with fighter, Ma'an, 28 May 2017.

at checkpoints when travelling inside Jordan, which deters friends from travelling with them or inviting them on trips.⁵⁹ “Every time we go to Aqaba to buy clothes for our daughters, he is questioned for a long time. Once it took them two hours ... I started hating going with him because of these measures,” said one wife.⁶⁰

One returnee, who needs to travel regularly to Aqaba to obtain supplies for the perfume and accessories shop where he works, lamented the disruptive impact the security questioning had on his life.⁶¹ One returnee’s wife noted that such restrictions had increased following the Karak attacks of December 2016.⁶² One returnee was prevented from taking up employment opportunities (in Bahrain and in UAE) because of travel restrictions imposed upon him.⁶³ These restrictions also apply to travel for recreation and religious purposes such as pilgrimage.⁶⁴

Security restrictions prevent returnees from being employed in the public sector,⁶⁵ as they cannot obtain the Certificate of Good Conduct required for most job opportunities in Jordan.⁶⁶ This leaves few options apart from the informal job market, limits social and economic integration, and contributes to frustrations.

All returnees agreed it was a mistake to join an armed radical group in Syria, but they differed in how they viewed their current life and prospects. One stated: “I regret coming back to Jordan because I have no dignity here due to security restrictions.”⁶⁷ The others were equally frustrated, but appear to be more accepting of their fate.

⁵⁹ Interview with fighter, Zarqa, 27 May 2017.

⁶⁰ Interview with wife of a fighter, Ma’an, 29 May 2017.

⁶¹ Interview with fighter, Ma’an, 28 May 2017.

⁶² Interview with wife of a fighter, Ma’an, 29 May 2017.

⁶³ Interview with fighter, Ma’an, 22 May 2017.

⁶⁴ Interview with fighter, Ma’an, 28 May 2017; interview with wife of a fighter, Ma’an, 29 May 2017.

⁶⁵ Interview with father of a fighter, Ma’an, 29 May 2017.

⁶⁶ Interview with fighter, Ma’an, 22 May 2017.

⁶⁷ Interview with fighter, Ma’an, 22 May 2017.

Types of Fighters

Fighters fall into two categories:

- The ideology-motivated ones, influenced by religious duty to correct injustice by taking part in jihad through military and non-military means. This ideology was influenced by developments in Syria in 2011–12, but questions about religious duty affected their lives earlier. They showed signs of radicalisation and talked openly about jihad and the situation in Syria.
- The hameyyeh-motivated ones sought to defend Syrian women and children suffering from Assad regime attacks. Their actions drew upon Arab norms and values. Their decision was sudden and they did not show any prior signs of radicalisation.

Two values influenced the fighters' decisions:

- A desire to act as agents of justice, an extension of either hameyyeh or jihad.
- Despair resulting from weak prospects for economic or social progression in Jordan.

Two sets of key actors influenced different stages of the journey:

- In the radicalisation stage, peers (and in some cases sheikhs) influenced fighters. Fighters left either with peers or in groups brought together by recruiters. Peers had a greater influence, but for the ideology-motivated ones the role of sheikhs in sanctioning their choices was crucial.
- The decision to return to Jordan was influenced by female relatives (mothers and wives), and to a lesser extent by fathers. They used emotional pressure and religious values that prioritise caring for parents over jihad. These methods were probably only successful, however, because fighters already regretted their decision.

All returnees regretted the decision to go to Syria, but isolation and stigma in local communities, socioeconomic position, and security restrictions resulted in two types:

- The Salafi-orientated, who powerlessly accept the status quo, with its limitations and frustrations, as the will of God.
- Those who regret their return due to the restrictions they face; while not ideologically radical, they may be inclined to engage in anti-social and anti-government behaviour.

Lessons Learned

No “Radical-Turned-Extremist” Typology

There is no set typology: motivations and previous convictions varied. This is problematic from a security and programming perspective. Indeed, the pervasiveness of lack of opportunity, fragmented social identity, and exposure to social injustice typecast the vast majority of youth in the region as vulnerable to extremism.

Behind the making of a violent extremist are complicated patterns of push factors within specific cultural and political contexts, coupled with a vulnerable person, who is then exposed to an extremist group’s ideology and social support. The most potent combination seems to be a level of achievement and resultant expectation, which is then frustrated, preventing attainment of higher life ambitions: for example, an individual who is properly educated and motivated, but cannot find employment due to nepotism, weak governance, or a failing economy. This is in line with the academic scholarship linking radicalisation to “relative deprivation”⁶⁸—the discrepancy between what one feels entitled to and what one is capable of acquiring and maintaining.⁶⁹

Other factors are chronic lack of opportunity, pessimism about the future, and the perception of having been failed by the government. Young men from rural and peri-urban areas, with no family connections, see no dividends in higher education, no possibility of a career, and—by extension—few possibilities for marriage.⁷⁰ The humiliation of being trapped in adolescent limbo, symbolised by the economic burden they represent to their families, should not be underestimated. Many regard martyrdom—and the heroism embedded in Daesh narratives—as preferable to the shame and dishonour of being unable to fulfil their core responsibilities as an Arab male.⁷¹

These nexuses of drivers should be at the centre of policy-making and preventative programming. Authorities should enable alternative means

⁶⁸ For example, see Ömer Taspınar, “Fighting Radicalism, Not ‘Terrorism’: Root Causes of an International Actor Redefined,” *SAIS Review of International Affairs* 29, no. 2 (Summer–Fall 2009): 77–79; Diego Gambetta and Steffen Hertog, “Why Are There So Many Engineers among Islamic Radicals?” *European Journal of Sociology* 50, no. 2 (August 2009): 201–30.

⁶⁹ Ted Robert Gurr, *Why Men Rebel* (Princeton, NJ: Princeton University Press, 1970), 23.

⁷⁰ Bondokji, Wilkinson, and Aghabi, *Trapped between Destructive Choices*, 9–17.

⁷¹ *Ibid.*; Guilain Denoeux with Lynn Carter, “Guide to the Drivers of Violent Extremism,” USAID, February 2009, 8–26.

of fulfilling life objectives such as marriage, financial independence, and starting a family.

The Agency of Recruits

The picture of fighters as active agents in their radicalisation has several implications. First, violent extremist groups are far from all-accommodating. They are selling a sought-after product that they outsource to recruiters and smugglers, who use sophisticated marketing techniques to “close deals” in this budding industry, with profits of up to JOD1000 (USD1410) per fighter.⁷²

Second, recruits have not necessarily been “brainwashed;” some are rational agents. The fighters studied, both mobilised the smuggler fee, and balanced competing Arab and religious norms—jihad, *hameyyeh* or *faz’a*, and family responsibility—before deciding to join an extremist group. It seems to be widely known that the families of fighters are not remunerated by the extremist group while they are in theatre.

Third, there may thus be many more individuals who might go to Syria, if they could mobilise the money or shed family commitments. It appears that the supply of fighters currently outweighs demand. If this changes, extremist groups may reduce or eliminate the current burdens, or add new incentives such as payments to families. Alternatively, extremist groups may attempt to use these ideologically inclined would-be fighters in-country.

Those who go to Syria based on a rational risk-return assessment (as opposed to ideological indoctrination) should be provided with non-violent, non-radical ways to address their needs and express their discontent. This may also work to neutralise the large numbers of would-be fighters who cannot mobilise the required resources or abandon family commitments to fight in Syria.

⁷² Interview with fighter, Ma’an, 22 May 2017.

Peer Influence and “Groupthink”

This research confirms the enormous impact of peer group dynamics on the fighters’ decisions.⁷³ Each fighter was recruited face-to-face, in groups, and departed for Syria in such groups. The “groupthink” hypothesis may help to explain this. This concept, well-documented in military psychology, is a form of dysfunctional decision-making in which group members make decisions based on their affiliative needs rather than a logical analysis of the situation. The decision made by the group is not the decision that the majority of the individuals would have made if they had been allowed to consider the issues free from peer influence.⁷⁴ The result is group-based, leader-driven decision-making on issues of justice or life direction, and a minimisation of the importance attached to other imperatives or realities.

Structural marginalisation (the “haves” versus the “have-nots” and the West versus Muslims) and duty-based cultural obligations may both promote groupthink-type responses among WANA youth. Thus, fighters’ decisions are based not solely on fact, but also on shared emotions such as vengeance, fear, or domination. A combination of respect for Islam with weak critical thinking skills and limited options for authenticating messages also provides the foundation for groupthink, leaving group members vulnerable to charismatic recruiters with religious knowledge and purported authority.

Interrupting professional recruiters who strategically use groupthink influences is thus essential. As this research demonstrates, recruitment takes place in secret or through highly discreet networks, and is thus very difficult to monitor or prevent. Young people should be taught practical skills to resist such influences, including critical thinking, constructive debate, and analysis, along with values such as tolerance and peaceful conflict resolution. Such reforms should include pedagogical techniques as well as curriculum content. Authoritarianism in the classroom and in homes, which tends to inculcate obedience and replicative thinking, should be replaced with environments promoting debate, safe idea experimentation, and mutually respectful dialogue.

⁷³ Scott Atran and Richard Davis, “Executive Summary,” in *Theoretical Frames on Pathways to Violent Radicalization*, (Washington, DC: ARTIS, 2009), 5–12; “Expert: Friends Recruit Most Islamic State Fighters,” *Associated Press*, 25 November 2015, www.voanews.com/content/ap-experts-friends-recruit-most-islamic-state-fighters/3073485.html.

⁷⁴ Charles V. Ford, *Lies! Lies! Lies! The Psychology of Deceit* (Arlington, VA: American Psychiatric Press Inc., 1996), 258–60.

Parental Awareness

A disturbing trend was that close relatives who did observe signs and interpret them correctly, took either non-constructive action or none at all, out of feelings of fear and helplessness.

Parents, siblings, spouses, children, teachers, Imams, and neighbours need better awareness of the signs of radicalisation and pre-departure planning. Some stakeholders also need incentives to seek assistance: parents will be naturally predisposed to protect their children, and diverse forms of assistance should be available, including state intervention, confidential telephone or SMS helplines, and early intervention networks of psychologists, Imams, social workers, and radicalisation experts.

In-Theatre Communication Channels

All fighters were in regular communication with family and friends while in Syria. These channels of communication are valuable, facilitating fighters' return—through either the levelling of family pressure or a negotiated agreement with the Jordanian authorities. They potentially help to improve knowledge about the battle theatre, including violent extremist groups' strategies, spheres of influence, and plans for expanding the conflict across borders. A further use may be in developing counter-narratives, given that each fighter experienced regrets, and realisations about the hypocrisy of the conflict and the deceptions practised by recruiters. Returnees' narratives are powerful tools of dissuasion, and they seem keen to engage in this role.

Authorities should forge relationships with the recipients of such information, by providing safe channels and ways to reconcile state security interests with the interests of families wishing to repatriate those in theatre.

Mothers in Radicalisation-Extremism Prevention

The disconnect between the interests of mothers—as well as fathers and spouses—and those of authorities must be acknowledged. It will be difficult to garner much policy attention or many resources to advance parents' aim of repatriating fighters. However, relatives and government should

recognise the role mothers play in the pre-radicalisation and resilience-building phase, and this influence should be more effectively harnessed. Mothers should be empowered with the proper tools and knowledge, including religious scriptures. The value Islam places on parental approval could also be more strategically leveraged, for example through the norm of *ghadab 'ala*—whereby a parent's anger counts as God's anger, and can decide one's fate in the afterlife.

Risks Presented by Returnees

Countries of origin need to prepare for a possible spike in the return of weapons-trained individuals. Most countries do not have the capacity or legal mechanisms that would be required, but even with such capacity there would be no risk-free options. Returnees may bring back violence-endorsing ideologies that are difficult to neutralise.⁷⁵ The “seeding” potential in incarcerating heavily indoctrinated individuals is high, as is the risk of releasing unsuccessfully rehabilitated returnees. Countries of origin also need to develop mechanisms to address the concern over staged defection.

The factors that drove fighters' radicalisation remain largely unchanged, and current security restrictions on and poor integration of returnees mean they remain economically marginalised and socially isolated. This research uncovered no evidence that returnees remained radicalised or posed a risk in terms of group-reattachment or returning to Syria. However, the fact that they remain vulnerable, frustrated, and marginalised, and at the same time have been exposed to dangerous and impulsive behaviours, is cause for concern. Some expressed this frustration openly.⁷⁶

A space must be crafted for constructive discourse and non-violent action on the issues that drove fighters to join an extremist group, including Muslim oppression and social injustices. This should be flexible enough to include religious conservatives, including non-violent Salafis, and needs to avoid creating perceptions among the wider population of preferential treatment of returnees, and instead enlist them in the fight against extremism.

⁷⁵ As was evident in the case of the Arab *mujahedin* in Afghanistan who returned to their home countries in West Asia with violent ideologies and later moved to Syria and Iraq to join armed radical groups there.

⁷⁶ Interview with fighter, Ma'an, 22 May 2017.

Policy-makers and civil society organisations should identify mechanisms for individuals to fight against perceived injustices in tangible and constructive ways, providing them with purpose and a common rallying point.

Mental Health

One fighter had nightmares and screaming attacks for months following his return⁷⁷—symptoms consistent with Post-Traumatic Stress Disorder (PTSD), a condition likely to be widespread among returnees. Those who have the space to tell their stories and feel welcomed fare better than those who do not.⁷⁸

More research is needed to understand the impact of PTSD and other mental health disorders on group-reattachment and other types of anti-social behaviour, and the coping mechanisms and psychological rehabilitation most applicable to the Jordan context.

Rehabilitation and Resilience

Finally, more needs to be known about what type of rehabilitation will prevent group-reattachment. The government should work with psychologists, sociologists, and security officials to develop a strategy for successful social and economic rehabilitation. Local authorities and civil society organisations enjoy more trust than central government, and should be key players in these efforts.

A better understanding of what insulates some people from radicalisation, and what prevents the vast majority of radicals from acting violently on their ideas, is essential. However, especially if numbers grow, authorities must also prioritise bolstering the resilience of those individuals who are most vulnerable to radicalisation.

⁷⁷ Interview with mother of a fighter, Ma'an, 23 May 2017.

⁷⁸ Bart Schuurman and Liesbeth van der Heide, *Foreign Fighter Returnees and the Reintegration Challenge*, RAN Issue Paper, Radicalisation Awareness Network Centre of Excellence, November 2016.

2: Towards a Unified Human Security and P/CVE Method in Jordan: Challenges and Changes

Dr Neven Bondokji and Nadine Sayegh

The paradigm bridging state security and human security has been examined across several different contexts. Less discussed is the relationship between human security programming and the drivers of radicalisation—arguably the security sector’s central challenge. The human security approach, in the global context, has fared poorly against the rise of violent extremism. Many states have reverted to state-centric security approaches,¹ tightening the space within which human security programming is conceptualised and rolled out.² Such trends can be observed in both the WANA region and established democracies.³

In the case of Jordan, a heavy-handed approach has been taken to the threats posed by radicalisation.⁴ An anti-terror law was passed in 2006, following the bombing of three hotels in Amman in 2005.⁵ This law was widened in 2014 to introduce “penalties for terrorist acts rang[ing] from 10 years in prison to the death penalty.”⁶ The definition of terrorism was expanded to include any act meant to create sedition, harm property, or

¹ For example, see “UK: Emergency Surveillance Law a Blow to Privacy”, Human Rights Watch, 14 July 2014; “France: Prolonged Emergency State Threatens Rights”, Human Rights Watch, 22 July 2016.

² Mohammed Nuruzzaman, “Human Security and the Arab Spring,” *Strategic Analysis* 37, no. 1 (2013): 52–64 (55).

³ The United States offers a prime example of the infringement of citizen rights to further security aims. Ken Klukowski, “Court Criticizes Obama Admin for Illegal Spying on U. S. Citizens—Breitbart,” Breitbart, 29 May 2017; “The Civil Liberties Implications of Counterterrorism Policies: Full Chapter,” Freedom House, 2017. On the UK and France, see “UK: Emergency Surveillance Law a Blow to Privacy,” Human Rights Watch; and “France: Prolonged Emergency State.”

⁴ Dr Heballah Taha, Research Associate, IISS Middle East, Expert Meeting for the Research on Challenges to an Integrated CVE and Human Security Approach in Jordan, organised by the WANA Institute, 30 July 2017, Amman.

⁵ See Hassan Fattah and Michael Slackman, “3 Hotels Bombed in Jordan; At Least 57 Die,” *The New York Times*, 10 November 2005. See also Nuruzzaman, “Human Security and the Arab Spring,” 55.

⁶ Areej Abuqudairi, “Jordan Anti-Terrorism Law Sparks Concern,” *Al Jazeera*, 25 April 2014.

jeopardise international relations, or using the internet or media outlets to promote “terrorist” thinking. The law was broadly criticised by the international community and human rights groups, principally due to concerns that it curtailed important civic rights.⁷

Given that the security-centric approach has dominated for over a decade, any discussion of how the human security space has been impacted by the threat of violent extremism will be limited, perhaps with the exception of the increasing restrictions on financial transfers introduced to guard against funding directed to violent extremist groups.⁸ Indeed, most research participants reported that state security policies had not affected their ongoing work, and highlighted the importance of policies geared towards countering violent extremism.⁹ As one interviewee put it, security policies are a double-edged sword: they are needed to confront legitimate threats, but risk overshadowing other important approaches to security. Interviewees highlighted how non-contextualised security policies can sometimes be counterproductive, for example when violent ideologies are propagated or spread in prison environments.¹⁰ Exemplifying this is Abu Musab al-Zarqawi, who was in detention for theft when he was introduced to and indoctrinated into violent extremism through al-Maqdisi. Zarqawi later established al-Qaeda in Iraq, the group that would eventually morph into Daesh.¹¹

While there is no direct link between human security programming and radicalisation drivers, it is widely accepted that lack of human security

⁷ “Jordan: Terrorism Amendments Threaten Rights,” Human Rights Watch, 17 May 2014. The government has, under the guise of national security, detained civilians and journalists en masse since the expansion of the anti-terror law. See for example “Jordan Anti-Terrorism Law Translates into Prosecution of Journalists,” *The Arab Weekly*, 15 July 2015. See also Abuqudairi, “Jordan Anti-Terrorism Law Sparks Concern.”

⁸ State-centric security policies have been implemented in Jordan for over a decade due to the growing terrorist threat. As such, most research participants have not seen the shift in policies and cannot measure the change. However, respondents did express the view that the government has not intervened counterproductively. This could, once again, indicate fear of the security apparatus and the state.

⁹ Interviews with Aysa Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017; and Dr Amer Bani Amer, General Director, Rased, Al Hayat Center, Amman, 4 June 2017.

¹⁰ Interview with Hussam Tarawneh, Director, Karak Creativity Club, Amman, 5 June 2017.

¹¹ Ḥasan Abū Hanīya and Muḥammad Abū-Rummān, *The “Islamic State” Organization* (Amman: Friedrich-Ebert-Stiftung Jordan & Iraq, 2015), 30–34. See also Joby Warrick, *Black Flags* (New York: Doubleday, 2015), 58–97.

provision and curtailment of human rights (intentional or otherwise) may fuel radicalisation. This is consistent with previous WANA Institute research,¹² as well as other investigations into the “push” and “pull” factors leading vulnerable groups to join radical organisations.¹³ Thus, insofar as human security programmes target unemployment, civic rights, access to basic resources, and protection from violence, it can be surmised that effective programming may deter radicalisation, while its absence (or poorly conceived programmes) might exacerbate drivers. It can likewise be inferred that insofar as state security policy impairs human security provision, radicalisation may be affected. For example, the one-year state of emergency imposed throughout the Ma’an Governorate (geared towards the arrest of one individual) resulted in multiple investigations and arrests, many deemed unjustified. This led to tensions between locals and security forces, as well as economic decline.¹⁴

Against such trends, this research seeks to understand how barriers to and failures of human security programming affect the drivers of radicalisation in Jordan. Specifically, it examines the extent to which human security programming and P/CVE efforts are mutually reinforcing, and the influence of this nexus in reducing populations’ vulnerability to security risks, including those associated with violent extremism. The research draws upon fieldwork including 15 semi-structured interviews with representatives from UN agencies, INGOs, and community-based organisations (CBOs) and one focus group discussion with 10 CBOs and INGOs, conducted in Arabic and English between April and June 2017. The recommendations benefited from input from regional and international experts convened to discuss a draft version of this chapter in July 2017. Research participants were categorised according to relevant human security pillars, i.e. economic, political, personal, and communal security. Those pillars not addressed in this research—environmental, food, and health security—should be the subject of future research. Research limitations included the sample size and geographic breadth of representation, and participants’ reluctance to speak freely about such

¹² Neven Bondokji, Kim Wilkinson, and Leen Aghabi, *Understanding Radicalisation: A Literature Review Of Models And Drivers* (Amman: WANA Institute, 2016).

¹³ Neven Bondokji, Kim Wilkinson, and Leen Aghabi, *Trapped between Destructive Choices: Radicalisation Drivers Affecting Youth in Jordan* (Amman: WANA Institute, 2017).

¹⁴ Interview with Lana Kreishan, Director, Annwar Charitable Association, 12 April 2017.

sensitive subject matter. A significant number of practitioners appeared compelled to uphold an official narrative, either connected to their agency or perhaps emanating from the government.

Thematic Challenges Affecting Human Security Provision in Jordan

The challenges below relate principally to social cohesion and the concerns of women and young people. Their importance was emphasised by the fact that they were noted by multiple respondents from a variety of specialisations.

Refugee and Host Communities

A number of concerns were aired about the relationship between local and refugee populations. This specifically affects host communities bearing the brunt of the mismanagement of the refugee crisis.

Theoretical concepts such as relative deprivation may help to make sense of these concerns. Relative deprivation is principally a measure of the gap between the living conditions one feels entitled to and the status quo. In certain cases, however, the sociological framework also involves a retaliatory aspect, in which an individual engages in deviant behaviour in an attempt to obtain what they consider themselves to have been deprived of.¹⁵

In Jordan, relative deprivation is increasingly visible,¹⁶ and is a particular concern in relation to populations who feel marginalised when they compare themselves with refugees in their community. Although programming has shifted to address the needs of both refugees and hosts in the last two years,¹⁷ disparities in aid have strained relations between refugees, and host populations who already face harsh economic conditions, and food¹⁸ and

¹⁵ Iain Walker and Thomas F. Pettigrew, "Relative Deprivation Theory: An Overview and Conceptual Critique," *British Journal of Social Psychology* 23, no. 4 (1984): 301–10.

¹⁶ Bondokji, Wilkinson, and Aghabi, *Understanding Radicalisation*, 17.

¹⁷ Interview with Dr Amer Bani Amer, General Director, Rased, Al Hayat Center, 4 June 2017.

¹⁸ "World Food Programme: Jordan", WFP, 2017, www1.wfp.org/countries/jordan.

waterinsecurity.¹⁹

Low-income Jordanians feel disenfranchised and discriminated against. Where local CBOs are perceived as enforcing the policies seen to have caused this, the strategic relationship between communities and community organisations that is a necessary basis for P/CVE is eroded. Even outside host communities, there is a perception that refugees have driven overcrowding, inflation, and competition for employment opportunities.²⁰

²¹ There is strong evidence that Syrians are prepared to work for longer hours and lower wages than nationals, and this is widely perceived to have placed downwards pressure on wages,²² even though refugees are more likely to have displaced previous waves of migrant labour. The local population, possibly due to the way information is presented to the public, generally understands the refugee crisis as a severe disruption and have an unsophisticated understanding of the implications and realities on the ground.

CBOs' views of this problem differ markedly from those of INGOs and UN agencies, probably due to the direct, contextualised relationship that CBOs have with both refugee and host communities. Drawing on his experience working in Irbid and Mafraq, a project coordinator from

¹⁹ "Water: Saving Every Drop", *Al Jazeera*, 2017, www.aljazeera.com/programmes/earthrise/2017/05/water-save-drop-170516072259788.html. This claim is best explained through an overview of economic insecurity in Jordan. The local population is concerned with the government incrementally raising taxes, along with high unemployment levels. In addition, a number of geopolitical factors have affected the country's trade. Tariff-free trade routes have been shut down due to the neighbouring civil war, as well as the effects on trade of the recent diplomatic rift between the Gulf States. This has left the Jordanian economy in an even more precarious state, relying on foreign aid to stay afloat. See "Increase in Female Unemployment to 33 Percent," *Al Ghad*, 2017 (in Arabic); "Syria Border Closure Cuts Off Key Jordan Trade Route," *The National*, 26 April 2015; John Reed, "Closure Of Syria's Last Border Crossing Hits Jordan Economy," *Financial Times*, 8 April 2015; Osama Al-Sharif, "Jordan in an Uneasy Place over Gulf Spat," *Al-Monitor*, 22 June 2017.

²⁰ Abdullah Obeidat, "Why Inequality Hampers Economic Growth," *Jordan Times*, 8 November 2015.

²¹ Interviews with Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017; Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, Amman, 15 June 2017; Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, Amman, 6 June 2017.

²² Interview with Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017; focus group participants, Amman, 24 May 2017.

UNIDO reported harmony between the two groups,²³ noting in particular blood ties that span the Jordan–Syria border. A participant from the Norwegian Refugee Council concurred: he had not observed any perceived competition between refugee and host communities.²⁴

In contrast, a CBO director from Zarqa noted that her Jordanian beneficiaries blame many of their current difficulties on refugees, including unemployment, inflation, and increased rent. She remarked that distrust and disdain can be seen in children from a young age, and that local schoolchildren frequently clash with their Syrian counterparts.²⁵ An interviewee from Ma'an shared a similar view, noting that donors had shifted their funds towards refugees, largely at the expense of programmes geared towards local livelihoods and female empowerment.²⁶

In terms of radicalisation, the dangers are twofold. First, those concerned understand the phenomenon not as an economic issue but as a political one—transforming poverty into a recognised driver of radicalisation.²⁷ This is supported by Taha, who argues that poverty, in this context, cannot be separated from its political dimensions and an associated fuelling of frustration and marginalisation.²⁸ Such dynamics are well reported in the literature,²⁹ including how such feelings are exploited in the process of recruitment into violent extremist groups.³⁰ A second issue is that Jordanians are not battling for water, housing, or employment with their compatriots, but rather against the “other.” As one participant put it, the different groups in the Kingdom (for example, Jordanians, Syrians, and Jordanians of Palestinian origin) are fighting the same fight, just separately, with little hope of uniting.³¹ “Otherisation,” particularly when coupled

²³ Interview with Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, 6 June 2017.

²⁴ Interview with Paul Fean, Youth Project Manager, Norwegian Refugee Council, Amman, 27 April 2017.

²⁵ Interview with Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017.

²⁶ Interview with Lana Kreishan, Director, Annwar Charitable Association, 12 April 2017.

²⁷ Dr Heballah Taha, Research Associate, 30 July 2017.

²⁸ *Ibid.*

²⁹ Bondokji, Wilkinson, and Aghabi, *Trapped between Destructive Choices*, 11–13.

³⁰ *Ibid.*

³¹ Interview with Morad al-Qadi, Consultant leading youth empowerment and civic engagement programme, anonymous INGO, Amman, 31 May 2017.

with marginalisation, is a recognised driver of radicalisation.³²

Youth Engagement

The youth in Jordan are understood, primarily, as a sector rather than a demographic, and as a “ticking time-bomb” rather than a vector for positive change.³³ This results in clashing views on how they should be categorised and defined.³⁴ Particularly from the perspective of radicalisation, interventions are required throughout the youth lifecycle,³⁵ but different youth segments have different needs, and thus support must be carefully nuanced. Despite this need, agencies are somewhat reluctant to incorporate P/CVE efforts into projects involving youth, both to avoid security sector attention and due to the risk of framing youth as a hostile, at-risk group. In addition, research indicates a programming gap for youth aged 10–15.³⁶ This is particularly problematic, as individuals in this age group are highly impressionable; idleness can lead them to engage with social media for entertainment, a prime recruitment setting for violent extremist groups.³⁷

The research interviews elucidated the extent of these vacuums. One participant working on youth employment opportunities in impoverished areas of East Amman noted that the majority of her beneficiaries attended sessions intoxicated, and only in order to collect their JOD5 (USD7) travel expenses. They chose to finance themselves on a daily basis rather than work, which would generally mean manual labour for 12 hours per day for around JOD250 (USD353) per month prior to deductions.³⁸ Unemployed,

³² See Bondokji, Wilkinson, and Aghabi, *Trapped between Destructive Choices*, 11–17; “From Jordan to Jihad: The Lure of Syria’s Violent Extremist Groups,” Mercy Corps, 2015, www.mercycorps.org/sites/default/files/From%20Jordan%20to%20jihad_0.pdf; USAID, *Factors Impacting Propensity and Influence Pathways toward Violent Extremism In Jordan* (Amman: USAID, 2016).

³³ Interview with Paul Fean, Youth Project Manager, Norwegian Refugee Council, 27 April 2017.

³⁴ Interviews with Paul Fean, Youth Project Manager, Norwegian Refugee Council, 27 April 2017; Morad al-Qadi, Consultant, anonymous INGO, 31 May 2017.

³⁵ Dr Valentina Mejia, First Economic Officer, ESCWA, Expert Meeting for the Research on Challenges to an Integrated CVE and Human Security Approach in Jordan, organised by the WANA Institute, 30 July 2017.

³⁶ Focus group participant, Amman, 24 May 2017.

³⁷ *Ibid.*

³⁸ Interview with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017.

university-educated youth are equally frustrated, and are characteristically disinterested, believing continuing unemployment to be the ultimate outcome of their studies.³⁹

Young people are increasingly turning to drugs; this is related to a lack of alternative forms of entertainment. While the Ministry of Youth has opened 180 youth centres across the country, only 12 are active and they are generally quite uninviting.⁴⁰ One participant noted that centres are underequipped, and some are staffed by only one employee.⁴¹ Several participants mentioned the increase in drug use—principally *hashish* and a synthetic derivative known as “joker.”⁴² A youth worker from Zarqa explained that, although the government may deny it, the crisis has reached proportions where young children are involved in drug sales.⁴³ Other CBOs believed that drugs were being sold in schools, including all-girl schools.⁴⁴ One participant described a government lecture given to students in Zarqa where one female student corrected the facilitator on the names of available recreational drugs, freely admitting that she and other members of her family were drug users. It was subsequently determined that 18 students in the 11th grade were drug users.⁴⁵

Some argued that drug prevention should out-prioritise P/CVE programming in particular locales.⁴⁶ But the linkages must be highlighted. Drug use encourages deviant behaviour, lowers the threshold of reluctance to engage in criminal activity, and leaves users more vulnerable to manipulation by radical recruiters. Investing in programmes countering the proliferation of drugs in Jordan may thus indirectly serve P/CVE

³⁹ Interview with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017.

⁴⁰ Interview with Morad al-Qadi, Consultant, anonymous INGO, 31 May 2017.

⁴¹ Interview with Hussam Tarawneh, Director, Karak Creativity Club, 5 June 2017.

⁴² Interview with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017.

⁴³ Interview with Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017.

⁴⁴ *Ibid.*; also supported by statements made by focus group participants, Amman, 24 May 2017.

⁴⁵ Focus group participants, Amman, 24 May 2017.

⁴⁶ *Ibid.* See Suzanna Goussou, “Drug Abuse Among University Students ‘on the Rise,’” *Jordan Times*, 11 February 2016; “3,126 Suspects in Drug Cases Arrested this Year,” *Jordan Times*, 8 November 2016.

efforts.⁴⁷ Such interventions should be designed with the knowledge that local needs are often best understood by CBOs;⁴⁸ currently, anti-drug programmes are the domain of the Public Security Directorate, which limits “softer,” more integrated approaches that could have greater impact.

Unemployment, idleness, and substance abuse have contributed to a culture of aggressive individualism. A founder of the education initiative iLearn JO highlighted that young people, especially in impoverished areas, decreasingly contribute to improving their communities.⁴⁹ This may also be symptomatic of feeling marginalised and excluded from society, and betrayed by the government and other actors. Many of those interested in social and political participation believe either that it is unattainable or that engagement is superficial.⁵⁰ Interviewees from the National Democratic Institute noted high levels of citizen distrust of state bodies, particularly among the youth, whose efforts to launch political activities through NGOs are often thwarted.⁵¹ Participants at a 2015 ActionAid conference in Amman summarised this clearly:

the youth remained excluded from the political process in Jordan due to legislative restrictions, the unfair electoral system, unemployment, poverty, undemocratic culture and practices among a section of citizens and political parties that instil fear in youth and citizens alike, keeping them out of politics.⁵²

⁴⁷ See Anne Barker, “Captagon: The Arab Amphetamine fuelling Islamic State,” *ABC News*, 25 November 2015; “Orly Airport Attack: Drugs and Alcohol Found in Gunman’s Blood,” *The Guardian*, 20 March 2017; “Changes in Modus Operandi of Islamic State Terrorist Attacks,” Europol Public Information, 18 January 2016, 6.

⁴⁸ Patrick Stahl and Julia Wilton, “The Future of Countering Violent Extremism: An Analysis of Current Programming in Jordan,” MSc, New York University, 2017, 20–21.

⁴⁹ Interview with Saddam Sayyaleh, Fellow, International Youth Foundation (founder at iLearn JO), Amman, 23 April 2017.

⁵⁰ Interviews with Saddam Sayyaleh, Fellow, International Youth Foundation, 23 April 2017; Morad al-Qadi, Consultant, anonymous INGO, 31 May 2017.

⁵¹ Interview with Nasser Mardini, Program Officer, and Ahmad Obeid, Senior Program Officer, National Democratic Institute, Amman, 27 April 2017.

⁵² Janet Asiimwe, “Actionaid ARI Seeks Jordan Guarantee on Youth Participation in Political Development,” Action Aid, 2015.

Again, the link with radicalisation⁵³ is tangible, as set out in the literature⁵⁴ and in the opinions of local practitioners.⁵⁵ In short, without fulfilling options available, and in light of structural issues such as unemployment, young people look for alternatives, and those who feel marginalised are more vulnerable to radicalisation.

Gender

Women's exclusion from political participation, limited economic power, and exposure to violence—including domestic and sexual violence and honour crimes—are well-discussed in the literature.⁵⁶ There are recorded cases of indecent exposure, rape, physical violence,⁵⁷ honour killings, child molestation,⁵⁸ and more.⁵⁹

In some population groups, gender biases and norms have been internalised. One research participant noted how, during awareness-raising sessions, women would agree that husbands had the right to hit their wives if they antagonised them.⁶⁰ A participant from Ma'an explained that most women resisted economic participation, even if programmes were available to them, and that there had been few successes. She attributed

⁵³ Note that "radical" in this sense is meant as "harbouring radical views," i.e. against the government, family structure, etc. This does not necessarily imply joining violent extremist groups, though this is one of the outcomes of radical thinking.

⁵⁴ Bondokji, Wilkinson, and Aghabi, *Trapped between Destructive Choices*, 11–17; "From Jordan to Jihad: The Lure of Syria's Violent Extremist Groups," Mercy Corps; USAID, *Factors Impacting Propensity*.

⁵⁵ Interview with Paul Fean Youth Project Manager, Norwegian Refugee Council, 27 April 2017.

⁵⁶ Diab M. Al-Badayneh, "Violence Against Women In Jordan", *Journal Of Family Violence* 27, no. 5 (2012): 369–79; *Gender Equality and Women's Empowerment in Public Administration: Jordan Case Study* (New York: UNDP, 2012); "Gender Equality And Female Empowerment: Jordan," USAID, 2017, www.usaid.gov/jordan/gender-equality-womens-empowerment; interview with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, Sayegh, 15 June 2017.

⁵⁷ Interview with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017; Nadine Sayegh, *Challenges to an Integrated CVE and Human Security Approach in Jordan* (Amman: WANA Institute, 2017), 14–15.

⁵⁸ For detail on crimes against children, see Jordan River Foundation, <http://jordanriver.jo/?q=content/jrcsp/overview>.

⁵⁹ For details on male and female dynamics and intimate partner violence, see Al-Badayneh, "Violence Against Women In Jordan;" Rana Hussein, "Only 3% Of Gender-Based Violence Victims Would Seek Police Help—Study," *Jordan Times*, 28 February 2016.

⁶⁰ Interview with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017.

this to an acceptance of a cultural norm that women's engagement should be limited to the private sphere.⁶¹

Other research participants felt that women were keen to participate through the channels available to them, including human security programmes and particularly economic empowerment programmes encouraging sustainable independence through small business development.⁶² One project coordinator noted that 60 per cent of 500 farmers participating in a UNIDO project building capacity, life skills, and technical skills were women.⁶³ In contrast, a CBO manager in Zarqa noted that a female beauty-therapy training course followed by a micro-fund of JOD700 (USD987) was largely unsuccessful, with funds spent outside their intended use. However, she emphasised that this was the result of the short duration of the training, and thus a failure in project design rather than the potential of the participants.⁶⁴

The conclusion many draw is that while programmes supporting women's economic and social empowerment have been prioritised in Jordan for several decades, gender roles and internalised misogyny continue to impede their reach and efficiency.⁶⁵ The implications for women's P/CVE programming are immense. It is now broadly accepted that women play a crucial role in radicalisation and de-radicalisation processes.⁶⁶ This was echoed by focus group participants⁶⁷ and by UN-Women and

⁶¹ Interview with Lana Kreishan, Director, Annwar Charitable Association, 12 April 2017.

⁶² Interviews with Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, 6 June 2017; Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, Amman, 8 June 2017; Sylvia Rognvik, Women, Peace and Security Specialist, UNWomen, Amman, 27 April 2017.

⁶³ Interviews with Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, 6 June 2017; Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, Amman, 8 June 2017; Sylvia Rognvik, Women, Peace and Security Specialist, UNWomen, Amman, 27 April 2017.

⁶⁴ Interview with Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017.

⁶⁵ Interview with Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, 8 June 2017.

⁶⁶ Interview with Sylvia Rognvik, Women, Peace and Security Specialist, UNWomen, 27 April 2017); focus group participant, Amman, 24 May 2017. See also in-depth investigations published by Hedayah and The Global Center on Cooperative Security that have found this to be true in Afghanistan, Nigeria, and the UK; Naureen Fink, Sara Zeiger, and Rafia Bhulai, *A Man's World? Exploring the Roles of Women in Countering Terrorism and Violent Extremism* (Washington, DC, New York, and London: Global Center on Cooperative Security, 2016).

⁶⁷ Focus group participants, Amman, 24 May 2017.

Kvinna-till-Kvinna representatives, who noted women's capacity to detect early warning signs, counter radicalisation, and engage in de-radicalisation.⁶⁸ Women's role in dissuading children from travelling to Syria or Iraq has been highlighted,⁶⁹ as has that of female preachers, who often have a more intricate understanding of the radicalisation process than their male counterparts.

An important nuance is that P/CVE programming is not designed to empower women, and there are legitimate arguments against incorporating P/CVE elements into empowerment programmes. One solution might lie in gendered P/CVE programmes that build women's capacity to detect radicalisation signals and deter potential radicals in their families. A more sustainable approach is enjoining women's human security programmes with P/CVE. This provides an opportunity to empower women in different social spaces, not solely restricted to P/CVE efforts. To date, social and political taboos have prevented such programming from being adequately tested.⁷⁰

Actor-Specific Challenges Affecting Human Security in Jordan

This section attempts to isolate variables affecting development sector actors, including power-holders such as government and donors, as well as recipients and civil society partners. The variables have clear relations with one another, indicating once again the necessity of cohesive efforts which include all parties.

Beneficiary Disengagement

Anecdotal accounts suggest that beneficiaries only show interest in projects—including P/CVE projects—if they are incentivised through

⁶⁸ Interviews with Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, 8 June 2017; Sylvia Rognvik, Women, Peace and Security Specialist, UN Women, 27 April 2017.

⁶⁹ Neven Bondokji, *A Journey Mapping of Jordanian Fighters* (Amman: WANA Institute, 2017).

⁷⁰ Previous research conducted by the WANA Institute found gender variation in drivers of radicalisation, including religious duty, the choice between the alternatives of jihad and self-destruction, and revenge, which is applicable mainly to Syrian women who have lost someone in the war. Bondokji, Wilkinson, and Aghabi, *Trapped between Destructive Choices*, 9.

food and transportation allowances.⁷¹ Agencies compensating beneficiaries for their time is not an unusual concept in the WANA region; however, participants suggested that beneficiaries are becoming more “demanding,” especially if a large donor is funding the project.⁷² While it is understood that there must be an exchange between agencies and beneficiaries, encompassed in a financial exchange, this approach is under duress.

When the project has a political dimension, participation is lower and the required incentives are higher.⁷³ Beneficiaries are less interested in working towards social impact, possibly indicating a slump in the culture of volunteerism and community engagement.⁷⁴ Such apathy may also be driven by programmatic failures. A project manager at Mercy Corps described a gravely mismanaged intervention conducted by another agency in Irbid, which carried over into scepticism and disinterest when Mercy Corps attempted to engage in a similar sector.⁷⁵

De-Contextualised Programme Design

Participants commented that many projects are structured in a “top-down” manner, with interventions pre-designed,⁷⁶ sometimes by individuals outside Jordan.⁷⁷ Disconnection from the community’s needs⁷⁸

⁷¹ Focus group participant, Amman, 24 May 2017; interviews with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017; Saddam Sayyaleh, Fellow, International Youth Foundation, 23 April 2017.

⁷² Focus group participant, Amman, 24 May 2017.

⁷³ Focus group participant, Amman, 24 May 2017.

⁷⁴ Interviews with Saddam Sayyaleh, Fellow, International Youth Foundation, 23 April 2017; Mohammed Noor Khrais, Counter Violent Extremism Officer, UN Development Programme, Amman, 23 April 2017; focus group participant, Amman, 2 May 2017.

⁷⁵ Interview with Zaid Hatokay, Leadership and Community Development Project Manager, Mercy Corps, Amman, 30 May 2017.

⁷⁶ Interviews with Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, 8 June 2017; Morad al-Qadi, Consultant, anonymous INGO, 31 May 2017; Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017; focus group participant, Amman, 24 May 2017.

⁷⁷ Interview with Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, 6 June 2017.

⁷⁸ Interview with Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, 8 June 2017.

reduces the efficiency of human security initiatives,⁷⁹ and compounds narratives of external interventionism and disenfranchisement. Some feel the humanitarian sector is plagued by a sequence of buzzwords into which donors direct money,⁸⁰ thereby vesting the human security agenda in externals and eroding its localised *raison d'être*.⁸¹ Such exercising of soft power is having multiple negative impacts, including causing divisions in society that may not have come into being otherwise. Trends in donor funding towards refugee populations and the knock-on impacts for social cohesion and “otherisation” are a salient example.⁸²

A further concern was the short-term lifecycles of interventions. When a food support project in Ma'an providing basic goods such as rice and sugar was discontinued at the end of the grant period, those who were genuinely dependent, were left in a worse situation, felt betrayed, and contested the perfunctory manner in which decisions had been made.⁸³ Another example is the inception of waste management programmes as part of the refugee response. For locals, waste management is a long-term, pressing issue. There are genuine concerns that addressing it as a problem of refugee management will result in only “sticking-plaster” solutions, leaving locals with an intensified problem with no tangible solution when refugees depart.⁸⁴

⁷⁹ Interview with Saddam Sayyaleh, Fellow, International Youth Foundation, 23 April 2017. In larger organisations, much of the staff consists of foreigners, particularly Westerners. While it is thorough and pragmatic to have outside perspectives on local matters, it can be a hindrance to work due to misunderstanding of cultural nuances, and language barriers. It also deprives locals of employment opportunities and, in a bleak economic climate, may cause resentment. For more see Ann Simmons, “Jordanians Seize ‘Shark Tank’-Like Opportunity amid Competition from Syrian Refugees for Work,” *LA Times*, 29 September 2017; “Kingdom Incurs More Than \$12B as Indirect Cost of Refugee Crisis—Study,” *Jordan Times*, 8 September 2016.

⁸⁰ Interview with Morad al-Qadi, Consultant, anonymous INGO, 31 May 2017.

⁸¹ Interview with Dr Amer Bani Amer, General Director, Rased, Al Hayat Center, 4 June 2017; focus group participants, Amman, 24 May 2017.

⁸² Focus group participants, Amman, 24 May 2017. This point was also raised in interviews with Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, 6 June 2017; Amane al-Diri, Executive Assistant, and Ahmad Siam, Director, National Society for Human Rights, Amman, 5 June 2017; Saddam Sayyaleh, Fellow, International Youth Foundation, 23 April 2017; Lana Kreishan, Director at Annwar Charitable Association, 12 April 2017; Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017; Morad al-Qadi, Consultant, anonymous INGO, 31 May 2017.

⁸³ Interview with Lana Kreishan, Director, Annwar Charitable Association, 12 April 2017.

⁸⁴ Interview with Mohammed Noor Khrais, Counter Violent Extremism Officer, UN Development Programme, 23 April 2017.

Weak Civil Society

While the P/CVE literature highlights the important role of civil society organisations in crafting interventions that are sensitive to local needs and engage hard-to-reach groups, the reach and strength of CBOs in Jordan is generally understood to be poor.⁸⁵ However, CBOs and more established agencies conceptualise the underlying drivers of such weakness differently.

CBOs lamented chronic lack of funding,⁸⁶ reduced donor engagement in initiatives targeting local communities since 2014, and rent hikes and increased operational costs.⁸⁷ Such constraints have limited CBOs' ability to respond protectively and innovatively to community challenges. Fuelling this frustration, some projects—particularly those with private donors—have targeted non-priorities, including building tribal halls and mosques.⁸⁸

Others argued that CBOs did not have the capacity to understand or adhere to the regulations attached to donor funding mechanisms, leaving the programming space accessible only to INGOs.⁸⁹ Such requirements include the in-depth nature of technical proposals, onerous reporting requirements, book-keeping, and audits. CBOs reported that their lack of capacity to meet such standards is often misinterpreted as indicating corruption.

International agencies perceived these difficulties in a different light. A UNDP programme officer suggested that some CBOs viewed the Syrian crisis as a financial opportunity, and that many grassroots organisations

⁸⁵ Stahl and Wilton, "The Future of Countering Violent Extremism." For more, see "Snapshot of Civil Society in Jordan," Civicus, June 2015.

⁸⁶ Interviews with Lana Kreishan, Director, Annwar Charitable Association, 12 April 2017; Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017; Amane al-Diri, Executive Assistant, and Ahmad Siam, Director, National Society for Human Rights, 5 June 2017; Saddam Sayyaleh, Fellow, International Youth Foundation, 23 April 2017; Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017. Also raised by focus group participant, Amman, 24 May 2017; interview with Hussam Tarawneh, Director, Karak Creativity Club, 5 June 2017.

⁸⁷ Interview with Aysha Khilfa, Director, Khawla Bint al-Azwar, 19 April 2017.

⁸⁸ *Ibid.*

⁸⁹ Interviews with Safiyyeh Abdurahim Mohammed, Project Manager, Family Development Association, 15 June 2017; Hussam Tarawneh, Director, Karak Creativity Club, 5 June 2017; focus group participant, Amman, 24 May 2017.

lack the skills and strength to work with large agencies or the government.⁹⁰ Corruption was another factor cited as hindering local human security programming.⁹¹ CBOs must improve their work standards, transparency, and accountability, but need capacity-building to achieve this.⁹²

Government Barriers

The government is instrumental in the volume and quality of human security programming. It provides approvals and oversight, and influences funding flows.⁹³ Some note that bureaucracy obstructs effective programming,⁹⁴ including the length of time involved in obtaining the necessary approvals. One interviewee cited an initiative promoting female inclusivity in the governorate elections of August 2017. Despite applying early in the year, approvals were only obtained in late May; this meant that only a handful of activities were conducted.⁹⁵ Others protested the system of funds being channelled through the Ministry of Planning and International Cooperation (MoPIC), leading to delays and opportunities for corruption.⁹⁶ International agencies, by contrast, felt that communication channels with the government were improving and that streamlining had

⁹⁰ Interviews with Mohammed Noor Khrais, Counter Violent Extremism Officer, UN Development Programme, 23 April 2017; Khalid Qubajah, National Project Coordinator, UN Industrial Development Organization, 6 June 2017.

⁹¹ Interviews with Hussam Tarawneh, Director, Karak Creativity Club, 5 June 2017; Mohammed Noor Khrais, Counter Violent Extremism Officer, UN Development Programme, 23 April 2017; Dr Amer Bani Amer, General Director, Rased, Al Hayat Center, 4 June 2017; focus group participants, Amman, 24 May 2017.

⁹² Interview with Dr Amer Bani Amer, General Director, Rased, Al Hayat Center, 4 June 2017.

⁹³ A sample of interviewees cited the Ministry of Planning, Investment, and Economic Development as a cause of project delay. However, the Ministry of Labour, Ministry of Political and Parliamentary Affairs, and Ministry of Youth also have delayed response times.

⁹⁴ Interviews with Mohammed Noor Khrais, Counter Violent Extremism Officer, UN Development Programme, 23 April 2017; Sylvia Rognvik, Women, Peace and Security Specialist, UNWomen, 27 April 2017; Paul Fean, Youth Project Manager, Norwegian Refugee Council, 27 April 2017; Zaid Hatokay, Leadership and Community Development Project Manager, Mercy Corps, 30 May 2017.

⁹⁵ Interview with Farah Mesmar, MENA Regional Advocacy Advisor, Kvinna till Kvinna, 8 June 2017.

⁹⁶ Interviews with Dr Amer Bani Amer, General Director, Rased, Al Hayat Center, 4 June 2017; Amane al-Diri, Executive Assistant, and Ahmad Siam, Director, National Society for Human Rights, 5 June 2017.

contributed to this.⁹⁷ This may be indicative of power disparities between stakeholders working on human security programming in Jordan, with UN bodies and INGOs enjoying strong leverage compared with local CBOs. The influence of the security apparatus in human security programming is also evident, with private donors refusing to fund P/CVE efforts or radicalisation-themed interventions because they fear increased security “observation.”⁹⁸

Developing a Theory of Change

Theory of Change (ToC) is a framework for identifying the particular activities and processes needed to generate a lasting positive impact⁹⁹ by mapping out causal relationships and highlighting barriers. The ToC developed here is intended to guide practitioners and policy-makers in integrating P/CVE projects into the paradigm of human security programmes in Jordan. A key conclusion of this research is that P/CVE efforts need to be perceived and funded as long-term development and human security goals. Donor and government perceptions of P/CVE programming must be realigned, and placed within the human security paradigm rather than existing alongside it.

Figure 2.1 captures the reimagined relationship between the three priority thematic areas (refugee and host communities, youth, and gender) identified by practitioners. The key challenges for each of these areas are first identified. In the next level, necessary changes in programme design and implementation, in which the cooperation of key stakeholders is imperative, are explained. These changes will lead to medium-term outcomes that positively enhance the ability of youth, women, and host communities to contribute to P/CVE efforts, while also enhancing their

⁹⁷ Interviews with Mohammed Noor Khrais, Counter Violent Extremism Officer, UN Development Programme, 23 April 2017; Sylvia Rognvik, Women, Peace and Security Specialist, UNWomen, 27 April 2017; Paul Fean, Youth Project Manager, Norwegian Refugee Council, 27 April 2017; Zaid Hatokay, Leadership and Community Development Project Manager, Mercy Corps, 30 May 2017.

⁹⁸ A head of a local CBO in Salt, in a focus group discussion with the WANA Institute, Salt, 5 January 2017.

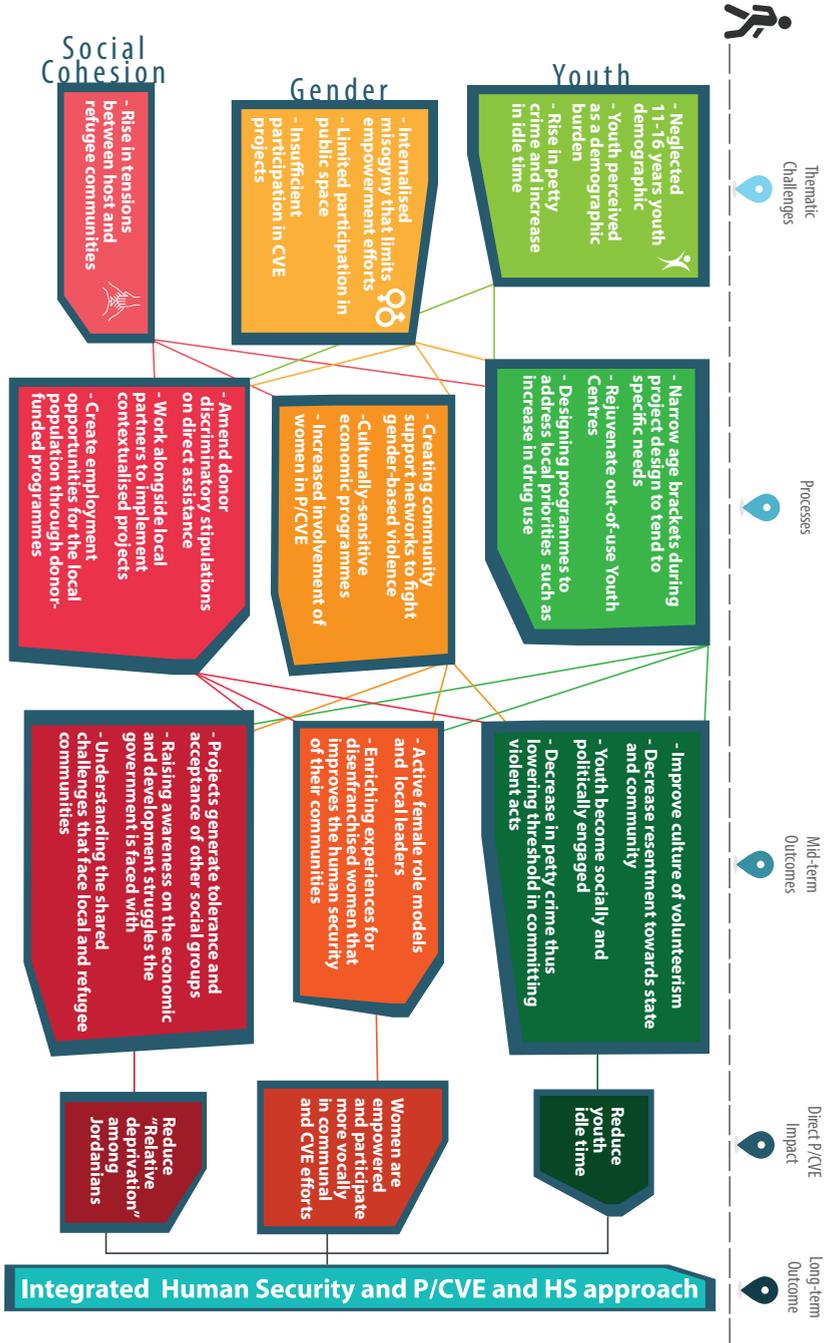
⁹⁹ Paul Brest, “The Power of Theories of Change (SSIR),” *Stanford Social Innovation Review*, Spring 2010; “What Is Theory of Change?” Centre for Theory of Change, 2017, www.theoryofchange.org/what-is-theory-of-change/.

individual and collective human security. In the long term, the changes will contribute to more integrated human security and P/CVE approaches.

The changes in each of the three thematic areas are strongly inter-linked. Programmatic changes in the youth sector, for example, cannot be implemented in isolation from changes at the community level, or in women's empowerment. The same applies to the changes needed to achieve longer-term objectives. For example, creating local support networks for women on gender-based violence will gradually promote women as active stakeholders in P/CVE programming.

Most challenges are transboundary, in that they affect all three actors, but with different degrees of impact. For example, streamlining the approval process for projects is the government's responsibility but ultimately affects all actors. Similarly, longer-term project design is mainly a concern for UN agencies and INGOs, but has knock-on effects for CBOs. These complex relations, captured in Figure 2.1, are also reflected in the policy recommendations in the next section of this chapter.

Figure 2.1: Theory of Change for an Integrated P/CVE and Human Security Approach



Pathways towards Integrating P/CVE into Human Security Programmes

The following recommendations are directed towards all stakeholders working in or regulating areas of human security. They are organised thematically and/or according to the relevant stakeholders.

Refugee and Host Communities

- Local populations should be involved in project implementation, both to create employment and to ensure that local priorities are met.
- Efforts should be actively pursued to foster a culture of community service, including through volunteerism and positive action.
- Project funding should prioritise marginalised, more populous, and high-unemployment governorates.

Youth Engagement

- Youth-directed human security programming should cater for all age groups, but with special focus on the 10–15 group.
- Unused youth centres should be transformed into spaces where young people can fill idle time, including as “one-stop-shops” with community service provision, assistance, and youth-centric activities.
- Older youth should be increasingly involved in the political process, including through youth political parties and power decentralisation projects.

Gender

- The central role of women in P/CVE efforts should inform and guide women’s empowerment programmes, focused on building relevant capacities.
- Public gender-disaggregated information should be collected and made available to feed project design, particularly in the P/CVE domain.

- Women's networks should be at the centre of engagement processes, in both the human security and the P/CVE sectors.
- The slow progress made in women's empowerment should be recognised; more impactful strategies should be designed that better accommodate cultural sensitivities and constraints.

Beneficiaries

- The negative impacts of incentivising beneficiary participation should be counterbalanced by efforts to promote volunteerism, community engagement, and civic action, alongside projects advocating tolerance, compassion, and human dignity.

Donors

- Donors should lead the way in promoting P/CVE efforts as integral components of human security programming, including by opening up funding pools and earmarked programmes.
- Donors should better coordinate with local CBOs in project design to address local challenges such as drug use, offer vocational opportunities, and create spaces for host and refugee communities to find common ground.
- Local stakeholders are best placed to advise on priorities and P/CVE threats and should be consulted from the project design phase.

Civil Society

- The positioning of civil society in relation to the local community is strong; this platform should be utilised in P/CVE efforts.
- Donors and CBOs need to craft more effective working relationships. Donors need to better contextualise project design and prioritise sustainable engagement, while CBOs need to streamline and professionalise, and eliminate corruption.

Government

- If P/CVE efforts are to be understood and implemented as a domain of human security programming, mechanisms need to be created to facilitate integrated planning and execution.¹⁰⁰ MoPIC should establish a working committee involving CBOs, UN agencies, INGOs, and donors, charged with developing a vision for integrated P/CVE-human security efforts, coordinating actors, and assessing impact.
- The government should introduce and publicise transparent processes for project funding, approvals, and monitoring.
- Anti-corruption measures should be implemented internally; an external non-governmental watchdog should be set up to ensure accountability.

Rethinking P/CVE Efforts

This research investigated the nature of human security programming in Jordan to understand how strengths and weaknesses contribute to or mitigate the drivers of radicalisation. From this, a ToC was developed for an integrated P/CVE and human security approach in Jordan. The changes required make for a web of interactions involving three main actors (the government, CBOs, and donors) and three areas of thematic focus (refugee and host communities, youth, and gender). There is a strong case for vesting the responsibility for better-integrated P/CVE-human security programming in a multi-stakeholder body, perhaps chaired by MoPIC.

De-contextualised, short-term projects have contributed to a polarisation of groups, particularly host communities and refugees. At the same time, young people in Jordan are growing increasingly restless. Research participants cited an increase in petty crime and drug use, and there is a gap in activities and support for pre-teens and young teens. Women's disempowerment is not so much a threat as a missed opportunity. Their exclusion from public and economic life means that their impact as influencers and agents of change in P/CVE is untapped.

¹⁰⁰ This question was raised by Dr Heballah Taha, Research Associate, 30 July 2017.

This chapter also discussed the major actors in the development sector. Donors need to better consider the local context at all stages of projects. The donor–CBO gap needs to be addressed, and CBOs need capacity-building so that they can meet the requirements of foreign donor funds. The government must carry out reforms to establish a cohesive procedural framework, including standardising approval processes and making available better data to inform project design.

As put forward in the ToC, a broader space needs to be carved out to allow agencies to assess targeted, age-appropriate, locally prioritised, and culturally nuanced points of intervention for P/CVE. A re-conceptualised understanding of P/CVE, placing it within the paradigm of human security, is imperative. A more detailed, evidence-based discussion is necessary to devise this re-conceptualisation. This chapter highlights the potential for such an approach, pathways forward, and starting points for a rethinking of P/CVE on the part of policy-makers, implementing partners, and donors.

3: Engendering Extremism: Gender Equality and Radicalisation in the WANA Region

Alethea Osborne

It has been suggested that 3,000 of the 20,000 foreign fighters who have travelled to join Daesh have been women, and while focus has primarily been upon those who came from the West, women from the WANA region were also drawn to the cause.¹ A discussion about the relationship between gender and violent extremism is therefore imperative, not only because women are affected by violent extremist groups in multiple ways, but because they play a vital role in P/CVE. This chapter explores these links by considering the ongoing impact of gender inequality in the WANA region, and Jordan in particular, not just on women but on society as a whole, and how this links to P/CVE.²

Gender gaps have been narrowing for decades, but men continue to outscore women globally on a range of development indicators, from educational enrolment and achievement to labour force participation, earning power, and infant mortality.³ The WANA region scores particularly poorly in many of these rankings. While the principle of gender equality has become entrenched in international human rights law, national action plans, global development objectives, and humanitarian best practice, there is often still resistance to change among traditional power-holders. All social structures and their practices and symbols are gendered; thus, consideration of gender is crucial for effective P/CVE programming.⁴

¹ Laura Sjoberg, "People Not Pawns: Women's Participation in Violent Extremism across MENA," USAID Research Brief, September 2015.

² I would like to thank Dr Erica Harper for research support, particularly for the section "Women as Agents of Violent Extremism and P/CVE," and Nadine Sayegh for research and drafting support on the section "Women's Disempowerment in Jordan."

³ Esther Duflo, "Women Empowerment and Economic Development," *Journal of Economic Literature* 50, no. 4 (2012): 1051–79.

⁴ Susan Mackay, "Women, Human Security, and Peace-Building: A Feminist Analysis," in *Conflict and Human Security: A Search for New Approaches of Peace-Building*, IPSHU English Research Report Series no. 19, ed. Hideaki Shinoda and Ho-Won Jeong (Hiroshima: Institute for Peace Science, Hiroshima University, 2004), 152–75.

To illustrate the inherent barrier that gender inequality presents to development, and the knock-on effect this has on violent behaviour and social cohesion, this chapter will first discuss what is meant by gender equality, in theory and in action. Second, it will consider how violent extremist groups appeal to women, and their roles within them. Many people, including Jordanian officials, refuse to acknowledge that women can become radicalised and involved in violent extremist groups; this is a potentially very dangerous oversight.⁵ Third, it will highlight some of the many ongoing manifestations of gender inequality in the WANA region, and Jordan in particular. While significant steps have been taken in Jordan, there are still extensive legal, social, and systemic barriers in place against women. Throughout, the argument will be made that gender equality should be a fundamental tenet of all development work, including P/CVE.

Gender Equality in Theory and Action

It has repeatedly been shown that addressing gender inequality benefits the broader society as much as the individual. Women's empowerment is both a way of thinking about gender equality and a means of achieving it. It understands gender inequality as rooted in power imbalances between men and women. Women engaging in the public sphere, accessing its opportunities and resources, and using their agency in meaningful, constructive ways are positive manifestations of women's empowerment through asserting control over their lives.⁶

There have been many attempts to quantify women's empowerment. This is inevitable when a concept becomes associated with donors, limited resources, and cost/benefit calculations.⁷ However, the need to measure results is potentially damaging to the authenticity of empowerment. Some argue the usefulness of the term is in its vagueness: as soon as it is associated with external instrumentalist programming the women in question become measurable objects, to be empowered in prescriptive

⁵ UN Women Jordan, *Women and Violent Radicalization in Jordan* (Amman: RASED and Search for Common Ground, March 2016).

⁶ "Important Concepts Underlying Gender Mainstreaming," Office of the Special Adviser on Gender Issues and the Advancement of Women, United Nations, 2001.

⁷ *Ibid.*, 18.

ways.⁸ If women's empowerment is linked to making choices, the danger of measurable women's empowerment programmes is that the choices on offer become controlled.

Many international organisations, such as the World Bank, take a pragmatic approach in which women's empowerment consists of acquiring and using agency in strategic fields relevant to development, including the control of economic assets.⁹ To realise this, women may be measured on their ability to access employment income, pensions, social security, and alimony, along with the rights to own and inherit land and make decisions over household finances.¹⁰ A second commonly used measure of empowerment is a woman's level of decision-making power in her family and personal life. Relevant indicators include the gender roles assigned to wives, how citizenship is determined and passed on, whether there are protections against violence and child marriage, women's rights within marriage, freedom of movement, and the ability to work and access identity documents.¹¹ Finally, empowerment can be seen as having a voice in society and policy, through political participation and representation or engagement in collective action.¹²

As with any donor-driven development goal there are often difficulties in ascertaining what is truly best for the individual, as opposed to what fits into a broader agenda. However, it is clear that empowering women, financially, socially, or politically, is beneficial both for women and for the broader community.

If women's empowerment can help to improve the situation for the broader community and is linked to the encouragement of peace, it should have a central role within P/CVE recommendations and programming. It has also been found repeatedly that women can be an invaluable source

⁸ Srilatha Batliwala, *Empowerment of Women in South Asia: Concepts and Practices* (New Delhi: Columbo, 1993).

⁹ "Facts and Figures: Economic Empowerment," UNWOMEN, www.unwomen.org/en/what-we-do/economic-empowerment/facts-and-figures.

¹⁰ World Bank, *Gender Equality and Development: World Development Report 2012* (Washington, DC: World Bank, 2011).

¹¹ UN Office of the High Commissioner, *Women's Rights Are Human Rights* (New York: United Nations, 2014).

¹² Pilar Domingo et al., "Women's Voice and Leadership in Decision-Making: Assessing the Evidence," Overseas Development Institute, April 2015.

of community information, and mothers are usually in one of the best positions to notice early stages of radicalisation.¹³ However, partly as a result of strict gender roles which map onto divisions between the private (female) and public (male) realms, women often feel disempowered, uninformed, or scared to come forward with such information, and thus early prevention opportunities are missed. In empowering women to speak more freely and providing civic space for such discussions, P/CVE could improve communities' ability to track radicalisation early on and respond appropriately.

Women as Agents of Violent Extremism and CVE

Much early scholarship on women's relationship to violent extremism exhibits gender-laden assumptions about their vulnerability to radicalisation and recruitment into violent extremist groups. It highlights the supposed ease with which women can be coerced and their desire to marry as principal push and pull factors. There is certainly evidence that in highly gendered contexts, dependent on men for their protection and livelihoods, women may have no choice but to acquiesce when their male relatives join a radical group, and are more vulnerable to physically coercive methods such as rape.¹⁴ Even in less virulent contexts such as Jordan, experts believe that pressures on women to conform and respect male family leaders can lead them to follow general social trends, including towards radicalisation.¹⁵ There is also evidence that women are targeted for strategic purposes: assumptions about women's lack of agency and reliability often rules them "out of suspicion," and so less likely to be apprehended by authorities.¹⁶ However, it would be misguided to imagine women incapable of using violence to express their beliefs, or that their participation in violent extremist groups is always involuntary.¹⁷ Evidence

¹³ UN Women Jordan, *Women and Violent Radicalization in Jordan*.

¹⁴ Ibid.

¹⁵ "The Role of Families Is Critical in Preventing Violent Extremism," Global Counterterrorism Forum, 2016.

¹⁶ Naureen Fink, Sara Zeiger, and Rafia Bhulai, *A Man's World? Exploring the Roles of Women in Countering Terrorism and Violent Extremism*, (Washington, DC, New York, and London: Global Center on Cooperative Security, 2016).

¹⁷ Ibid.

suggests that while some are pressured or forced, many—perhaps a majority—join violent extremist groups by choice.¹⁸ Whether they are pushed or pulled, it is clear that women, and in some cases girls, are being radicalised and actively recruited into such groups.¹⁹

More recent scholarship finds few or no gender variations in the dominant radicalisation drivers, and that the process of radicalisation is similar for men and women, with studies across Africa, Europe, and West Asia yielding consistent results.²⁰ One study concluded that context is more likely than gender to explain an individual's decision to join an extremist group—the implication being that P/CVE strategies should favour “balanced inclusion of both genders,” with careful attention to local conditions.²¹ However, while men and women may be driven by similar factors, the drivers may manifest differently and are usually bound up tightly with gender roles.

Extremist groups understand these nuances and tailor their propaganda accordingly. Techniques used to recruit women include both offline and online methods, such as encrypted messaging systems, to promote the concept of a caliphate.²² Such techniques use specific language such as promises of “sisterhood,” and show women fulfilling nurturing roles, caring for soldiers and raising the children of the new caliphate.²³ For example, Al-Qaeda propaganda has drawn upon Quranic verses “urging women to support their husbands, educate their children, and encourage them in their mission of jihad.”²⁴ Taliban messaging has targeted mothers of fallen soldiers, capitalising on their bereavement to reiterate the deficits of the state and garner support for their cause.²⁵

Daesh has been particularly effective at attracting women to its cause and its claim to offer a historically unprecedented opportunity to live a traditional Islamic life.²⁶ The participation of women in radical armed groups, as

¹⁸ Jayne Huckerby, “Why Women Join ISIS,” *Time*, 7 December 2015

¹⁹ Aryn Baker, “How ISIS Is Recruiting Women from around the World,” *Time*, 6 September 2014.

²⁰ Baker, “How ISIS Is Recruiting Women.”

²¹ *Ibid.*

²² Babatunde Taiwo, “Women and Violent Extremism in Somalia and the Horn of Africa: Background Note,” UNWOMEN, 2017.

²³ Fink, Zeiger, and Bhulai, *A Man's World?*

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ Fink, Zeiger, and Bhulai, *A Man's World?*

supporters, planners, and operatives, is by no means new,²⁷ but the roles of women in such groups have evolved. Initially, Al-Shabaab stated that it was “un-Islamic” to use female fighters in attacks²⁸ and Daesh used very conservative methods, confining women to roles as wives, mothers, teachers, domestic workers, or sex slaves.²⁹ In recent years, however, these roles have expanded significantly and, perhaps due to heavy battlefield losses, women are increasingly used in militant roles.³⁰ Key examples include Abu Bakr al-Baghdadi’s appointment of a female fighter to lead a new battalion in north-eastern Syria in 2016, and Daesh’s all-female Al-Khansa brigade in Raqqa.³¹ It has been suggested that Daesh actively decided to adopt a different attitude towards women to those of previous violent extremist groups, and invested in female agency in both the operational and the theological fields.³² Finally, the controlled anonymity social media offers women, coupled with their personal relationships with other women and younger adults, has allowed them to become effective recruiters, influencers, and couriers.³³

Can gender equality, and women’s empowerment, either prevent radicalisation and violent extremist acts, or aid in de-radicalisation, rehabilitation, and resilience-building? There is strong evidence that women’s participation, in the security sector and as pillars of their local community, leads to more effective violence reduction and conflict prevention.³⁴ Women have been found to have in-depth insights, differing from those available to men, into community dynamics, ideological patterns, and behavioural trends.³⁵ Women are also trusted confidantes;

²⁷ Naureen Chowdhury Fink, Rafia Barakat, and Liat Shetret, *The Roles of Women in Terrorism, Conflict and Violent Extremism* (Goschen, IN: Center on Global Counterterrorism Cooperation, April 2013).

²⁸ Taiwo, “Women and Violent Extremism in Somalia.”

²⁹ Fink, Zeiger, and Bhulai, *A Man’s World?*

³⁰ Ibid.

³¹ Ibid.

³² Mohamed Abu Ruman and Hasan Abu Hanieh, *Female Lover of Martyrdom: Formations of Feminist Jihadism from Al-Qaeda to ISIS* (Amman: Friedrich Ebert Stiftung, 2017) (in Arabic).

³³ Taiwo, “Women and Violent Extremism in Somalia.”

³⁴ Security Council, “‘Wherever There Is Conflict, Women Must Be Part of the Solution,’ Security Council Told in Day-Long Debate Urging Their Inclusion in Restoring Fractured Societies,” United Nations Media Coverage and Press Releases, 30 November 2012, www.un.org/press/en/2012/sc10840.doc.htm.

³⁵ See for example, UN Women Jordan, *Women and Violent Radicalization in Jordan*; Fink, Zeiger and Bhulai, *A Man’s World?*

woman preachers are often the first point of contact for women dealing with radical male relatives—mothers, in particular, seek their help and that of trusted local civil society activists.³⁶ Mothers are often able to recognise early signs of radicalisation, including anger, anxiety, and withdrawal,³⁷ and can use their traditional role to shape norms that promote tolerance, non-violence, and resilience or to assist radicalised youth in navigating challenges.³⁸ Mothers were the main force behind the return of some Jordanian fighters from Syria.³⁹ It is clear that women should be carefully targeted by P/CVE policies, and centrally involved in the design and implementation of such policies.

Women in the WANA Region

Historically, women's position in the WANA region has been a political and religious bargaining tool, their status and rights primarily based on the desires of those in control. For there to be effective P/CVE efforts this needs to be addressed. It could also be beneficial to have counter-narratives highlighting violent extremist groups' manipulation and abuse of women for their own political goals.

Women's disadvantage in the region is exemplified in the global gender gap index; in 2017, the region had the world's widest gap, 40 per cent; at current rates, this would take 356 years to close.⁴⁰ While education is positively encouraged and supported, there are powerful barriers curtailing women's roles within the public spheres of politics and employment. The 2005 UN Arab Human Development Report noted that "the most important barrier to the future of a more prosperous and peaceful region was the lack of full participation of women in every sphere of society, but importantly in the economy."⁴¹ Over a decade later, the region still has

³⁶ As clarified in 16 focus group discussions with women, civil society activists, and female preachers in four cities in Jordan for an unpublished study.

³⁷ Anita Orav, Rosamund Shreeves, and Anja Radjenovic, with Sofía López, "Radicalisation and Counter-Radicalisation: A Gender Perspective," European Parliament Briefing, April 2016.

³⁸ Edit Schlaffer and Ulrich Kropiunigg, "Can Mothers Challenge Extremism?" Women Without Borders, 2015.

³⁹ Neven Bondokji, *Journey Mapping of Jordanian Fighters* (Amman: WANA Institute, 2017).

⁴⁰ World Economic Forum, *The Global Gender Gap Report 2017* (Geneva: World Economic Forum, 2017), 18.

⁴¹ Dina H. Powell and Jane Kinninmont, *Women's Economic Empowerment in the Middle East and North Africa* (London: Chatham House, 6 July 2015).

some of the lowest global rates for women's economic involvement, and faces vast security concerns.

Social expectations of women are limiting. A recent study found that “two-thirds to more than three-quarters of men support the notion that a woman's most important role is to care for the household” and that “women often internalise these same inequitable views,”⁴² potentially limiting women's willingness to engage in gender equality schemes. However, while the study found that men's views concerning gender roles do not differ significantly between generations, “younger women ... held more equitable views than their older counterparts ... [and] are yearning for more equality.”⁴³ While both men and women have reportedly claimed that gender equality is “not part of our traditions or culture,” there appears to be an increasing desire among young women for fairer opportunities, whether named as gender equality or not.⁴⁴

Women's empowerment is also limited by systemic and economic conditions. Gender inequality, poverty, and dysfunctional institutional structures are mutually reinforcing. For women in poverty or without local influence there are few of the genuine choices and alternatives necessary for empowerment.⁴⁵ Even without social judgements, a woman's choice to work, continue education, or exercise healthcare decisions is often contingent on a level of economic independence. Likewise, the opportunity for women to engage in public life may be overshadowed by the absence of a participatory system free of corruption and nepotism. Violent extremist groups can hold significant appeal by appearing to offer a genuine alternative.

The influence of Islam in many women's lives in the region has to be taken into consideration. However, religion is always interpreted through a certain cultural, social, or political lens; there is a need for a context-specific and gendered tailoring of P/CVE responses, taking account

⁴² S. El Feki, B. Heilman, and G. Barker, *Understanding Masculinities: Results from the International Men and Gender Equality Survey (IMAGES)—Egypt, Lebanon, Morocco, and Palestine: Executive Summary* (Cairo and Washington, DC: UN Women and Promundo-US, 2017), 8.

⁴³ *Ibid.*

⁴⁴ *Ibid.*

⁴⁵ Nabila Kabeer, “Discussing Women's Empowerment—Theory and Practice,” *Sida Studies*, no.3 (2000), 19.

of how traditional gender norms, and religious and social expectations, influence men and women's lives.

Violence against women has traditionally been linked to poverty, with women in lower wealth brackets reportedly more likely to face physical, sexual, and emotional abuse,⁴⁶ and children who grow up around violence are more likely to be violent later in life.⁴⁷ However, recent findings suggest that men with more education are more likely to carry out domestic abuse, and women with more education more likely to be victim to it.⁴⁸ Thus, it is impossible to make a clean link between poverty and domestic violence, something which has also been repeatedly found when trying to link poverty and support for violent extremist groups. Instead, it is important to focus on how violence can manifest as a result of relative deprivation, identity loss, and social injustice, and the frustrations they cause. Such issues are established drivers of violent extremism; thus, it is clear that the personal frustrations which can fuel desperation and violence are closely related to gender inequality concerns. Women who are victims of domestic violence may also be more susceptible to recruitment by violent extremist groups, which may appear to offer an exit from their current home lives when legal and social structures provide few other options.⁴⁹

In summary, women's disempowerment in the region is driven by complex, overlapping structural, legal, and socio-cultural factors. Deficiencies in legal protection are reinforced by traditional attitudes and norms supporting subservience and patriarchy.⁵⁰ This creates opportunities for, and normalises, rights violations. Likewise, women's economic rights are broadly incompatible with traditional conceptualisations of women's role. This sets up mutually reinforcing conditions that restrict women's participation in the labour market, disadvantaging society overall, but women in particular. Without significant workforce representation, particularly at senior levels, women cannot fight against the structural constraints maintaining the status quo, for example for culturally acceptable

⁴⁶ Paul Prettitore, "Poverty and Legal Problems in Jordan: Defining the Relationship," World Bank MENA Knowledge and Learning Quick Notes Series, no. 150 (September 2015).

⁴⁷ El Feki, Heilman, and Barker, *Understanding Masculinities*.

⁴⁸ *Ibid.*

⁴⁹ UN Women Jordan, *Women and Violent Radicalisation in Jordan*.

⁵⁰ Annalisa Bezzi, *Women and The Law in Jordan: Islam as a Path to Reform* (Amman: WANA Institute and Friedrich-Ebert-Stiftung, October 2016).

and affordable transport and childcare, maternity rights, and protection against workplace harassment. Moreover, poor workforce participation prevents the accumulation of assets, with knock-on effects for agency within the home and in public life. This combination can make women feel desperate, just as large-scale unemployment and rampant corruption reportedly affect young men. In both cases, individuals can become increasingly susceptible to propaganda from groups appearing to offer an alternative life and purpose.

Women's Disempowerment in Jordan

Jordan has long been associated with tribal rule, with certain areas of the country dominated by large families. Unofficially, the rules of the tribe are implemented socially within set areas of control. Women are often viewed as untouchable objects representing honour, much like land. Traditional male and female roles are thus ingrained in the fabric of society through tribal rule as well as religious cultures. The position of women is plagued by different forms of oppression. There are multiple visible and hidden ways in which the socioeconomic and political participation of women is strongly discouraged, if not outwardly prevented. Even where women are portrayed as being in charge, it is often ultimately men that have control, both socially and legally. For example, women have a dominant role in child-rearing, but in most cases the male has the “final say” in household matters. Gender-based violence is a longstanding issue in Jordan. Notwithstanding the daily harassment all women face in the streets, other crimes include indecent exposure, rape, physical (domestic) violence, honour killings, and child molestation.

The Jordanian legal framework is generally unsupportive of women's rights; this extends to inheritance, marriages, and domestic violence.⁵¹ There has been some headway in creating a safer society for women. For example, protests in front of the Jordanian Parliament building on 1 August 2017 may have influenced the final decision to abolish Article 308 of the Penal Code. The controversial article allowed a rapist to marry his

⁵¹ Khetam Malkawi, “Personal Status Law among World's ‘Highly Discriminatory’ Laws against Women,” *Jordan Times*, 5 May 2015.

victim, with her permission, in order to avoid charges.⁵² This abolishment is a much-needed change, but only time will tell what difference it makes to attitudes on the ground, and it is likely only certain socioeconomic strata will benefit. As male dominance is engrained in the judiciary, the abolishment will mean little to those in impoverished rural areas where the rule of law is not fully implemented.

While there are developments in the legal sphere, there are painful reminders of ongoing failures. During the first four months of 2017, seven women were recorded as having been murdered in cases of gender-based violence.⁵³ The true number is probably higher. Lenience is often shown over such matters: honour killing often attracts a lighter sentence than other murders, for example. According to Yara al-Wazir, “Article 340 of Jordan’s Penal Code reduces the penalty if a man kills or attacks a female relative if she commits adultery. This is further extended under article 98 of the penal code, which reduces the penalty for murder if the killer is in a ‘state of great fury.’”⁵⁴ Such laws are an important reminder of women’s social status as objects of ownership. It is of little surprise, then, that some women are susceptible to promises of a more empowered or independent life presented by violent extremist groups or others.

A separate indication of the lesser status of women in Jordan is the inability of mothers to pass on citizenship to their children. While this law may be in place for political reasons,⁵⁵ the fact remains that a mother is not permitted to share her national identity because she is female. This may fuel feelings of disenfranchisement among women and contribute to the appeal of invitations to women, such as those of Daesh, to help build and parent a new idealised Muslim caliphate.

⁵² It is worth noting that new research is revealing that many of the rape-marriage laws were created and passed on by colonial powers, namely France. For more see, “Rape Laws Aren’t Part of Islam, but Colonialism: Study,” *Telesur*, 3 August 2017.

⁵³ “Seven Murdered in Gender-Based Violence in 2017,” *Jordan Times*, 11 April 2017.

⁵⁴ Yara al-Wazir, “Jordan Abolishes Rape Law, It Must Follow Suit with Honor Killing Law,” *Al Arabiya English*, 30 April 2017.

⁵⁵ There is a similarity between Jordan and Lebanon in this respect. Multiple sources cite authorities’ concerns about passing on nationality to children and husbands for fear of disturbing power shares and demographic balance. For more, see Elisa Oddone, “Jordanian Progeny Gain Ground in Nationality Fight,” *Al Jazeera*, 5 May 2015.

Three main push factors have been highlighted as influencing women's radicalisation: "religious duties, the search for alternatives to the repressive environments they live in, and revenge."⁵⁶ Some women express a religious duty to follow their husband's instructions, including following him to Syria for jihad if asked to.⁵⁷ For other women with limited options, the only option for escape might be suicide, in which case jihad can appear an acceptable route to self-destruction.⁵⁸ It is therefore clear that female desperation and frustrations over limited socioeconomic opportunities are parallel to those of men in Jordan, perhaps even heightened by increased social limitations. Furthermore, women, particularly Syrian refugees who have lost family members, cite revenge as a reason for joining jihad more than men do.⁵⁹

Involving Women in Shaping P/CVE Policy

Human development literature highlights that women's empowerment increases economic prosperity; empowering women is thus beneficial for the community and the country, as well as for individuals. What constitutes women's empowerment has been standardised by various implementing and funding bodies, and typically consists of a woman's ability to be economically, socially, politically, and judicially independent, without undue pressure and influence from those around her. However, despite the logic of encouraging this, barriers are reinforced when those in control have little interest in changing the status quo or see such a change as a threat to their power. Such barriers are particularly strong in the WANA region, where tribal values of honour and shame, reinforced by religious traditions, are perceived as the central strand of society's moral fibre.

While the example of Jordan shows an encouraging shift taking place in certain areas of gender equality, such as access to education or healthcare, along with a growing trend for abolishing "marry-your-rapist" laws, there

⁵⁶ Neven Bondokji, Kim Wilkinson, and Leen Aghabi, *Trapped between Destructive Choices: Radicalisation Drivers Affecting Youth in Jordan* (Amman: WANA Institute, 2017), 8.

⁵⁷ Neven Bondokji, Kim Wilkinson, and Leen Aghabi, *Trapped between Destructive Choices: Radicalisation Drivers Affecting Youth in Jordan* (Amman: WANA Institute, 2017), 8.

⁵⁸ *Ibid.*, 8.

⁵⁹ *Ibid.*, 19.

are still worryingly high rates of gender-based violence, domestic abuse, and political marginalisation, and a lack of legal rights for women. There is a dearth of appropriate human security programming to address such issues, and support for victims of gender injustice usually falls to informal groups or NGOs.

Women face many of the same socioeconomic frustrations as men, and sometimes even more so, so it is unsurprising that they are also susceptible to the drivers of radicalisation. While women are undoubtedly vulnerable to physical, economic, or sexual pressures from men, it is also evident that they can be attracted to violent extremist groups of their own free will and not only through coercion or trickery. Such groups capitalise on traditional tropes, offering a pious and meaningful life to male and female recruits along with a purpose and freedom which may be lacking at home. The propaganda of violent extremist groups suggests a nuanced awareness of how women are influenced by push and pull factors and the ongoing difficulties, limitations, and pressures which they may face in their home communities. It is therefore imperative that P/CVE programming follows suit: it would be mistaken and damaging to continue shaping policy without considering the needs of the whole population, and not simply men alone.

4: Jordan's Recent Economic Performance: Implications for Future Growth, Investment, Refugee Policy, and Refugees

Shaddin Alhajahmad and Dorsey Lockhart

The past six years have been transformative for Jordan. As a result of the civil war in Syria, according to the United Nations High Commissioner for Refugees (UNHCR), the country has absorbed more than 660,000 Syrian refugees. The official census in December 2015 estimated the number as much higher: 1.265 million, approximately 13 per cent of the country's total population.¹ In February 2016, the landmark Jordan Compact was signed between Jordan and a range of donor countries and international organisations. The agreement—one of the first of its kind—took an innovative approach to humanitarian response, bringing diverse actors into a multi-year agreement aimed at providing tangible economic outcomes for both Syrian refugees and the host community.

These pivotal events must be understood against two, largely unrelated, narratives that are at the core of the country's modern economic history. The first is Jordan's longstanding goal of positioning itself as a high-value-added, knowledge-based economy within the WANA region. The second is the apparent divergence between investment and employment growth that has recently been noted in five industrial sectors, according to Jordan Chamber of Industry data. The positioning of the two narratives vis-à-vis the Syrian refugee crisis presents new questions for Jordan, and for the international financial institutions whose job it is to advise Jordan on its medium- to long-term economic growth strategy. This chapter provides a first step towards untangling these questions and sets an agenda for additional research that should inform the future designation of priority sectors and investments.

¹ Mohammad Ghazal, "Population Stands at Around 9.5 Million, Including 2.5 Million Guests," *The Jordan Times*, 30 January 2016.

The Jordan Compact and Employment Creation

By June 2017, 660,785 Syrian refugees had registered with UNHCR. Of this number, 518,454 live in urban areas, outside established camps. In April 2016, the Government of Jordan embarked on a programme to create opportunities, and grant formal working rights in specific occupations, for registered Syrian refugees in exchange for increased access to European export markets. Since then, Jordan's Ministry of Labour has granted 50,909 work permits to Syrian refugees in the agriculture, construction, manufacturing, wholesale and retail trade, food and beverage, and other sectors.

This programme was in part a response to calls to reconceptualise the refugee crisis as an opportunity to develop a high-value-added manufacturing sector.² In December 2015, Jordan's Minister of Planning and International Cooperation Imad Fakhoury stressed the need for a "holistic approach ... that gets [Jordan] out of this crisis to reach a win-win situation that would help the Kingdom economically, create job opportunities and, at the same time, alleviate the refugee burden on the international community."³ The WANA Institute made a significant contribution to the discussion, publishing a white paper on the Jordanian economy for MoPIC and conducting a viability assessment on Syrian refugee labour integration in April 2016.

Following Jordan's adoption of the refugee economic inclusion policy, international organisations and NGOs have begun to develop programmes addressing the issue of work and livelihood opportunities for Syrian refugees. Many entities working in this space have undertaken an approach similar to that of the UK's Department for International Development in its *Sustainable Livelihoods Framework*:

² These calls were an outcome of a series of private interviews conducted as part of a viability assessment of Jordan's pledge to create 200,000 jobs under the Jordan Compact.

³ Khetam Malkawi, "Integration of Syrian Refugees in Workforce Hinges on New Investments," *The Jordan Times*, 21 December 2015.

A livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.⁴

Such an approach to job creation places people, rather than resources, at the centre and seeks to convert their strengths into livelihood outcomes. Livelihoods approaches focus on activities that can be harnessed to enable an individual to earn an income for his or her household. Positive livelihood outcomes include improved food security and more sustainable use of natural resources. Examples in Jordan include Jordan Lens's training of local community members to serve as adventure guides for the Jordan Trail; improvement of the quality and productivity of olive production in target governorates; and supporting a cluster of community-owned and -managed enterprises serving the tourism sector. The International Rescue Committee has highlighted the case of a female Syrian refugee turned business owner who was able to develop a successful beekeeping and honey business thanks to its training and small business grant programme. Other NGOs have developed livelihoods programmes around home-based businesses, enabling individuals and groups, often female, to produce marketable goods from home.

Livelihoods approaches tend to favour micro- and small enterprises and are more orientated towards enhancing existing assets by strengthening horizontal and vertical linkages than towards creating new job opportunities. They aim to maximise the asset base already present within a community, while reducing the vulnerability of those who extract their living from those assets. Livelihoods approaches tend to channel smaller amounts of donor financing into their target enterprises than would a larger-scale investment programme, while also seeking to integrate them into the local business ecosystem. Thus, the kinds of larger-scale investment and job creation programmes that could be advocated for under the Jordan Compact, represent a significant departure from typical livelihoods approaches.

⁴ "DFID's Sustainable Livelihoods Approach and Its Framework," GLOPP, 2008.

Another common policy approach to job creation is the “supply side versus demand side” analysis framework, in which the supply side seeks to measure the total amount of goods and services an economy is capable of producing. Related analysis may consider the ability of sectors that have been selected as strategic to absorb workers with relevant skill sets. The demand side is based on the Keynesian doctrine that consumers’ demand for goods and services is the fundamental driver of economic growth and job creation. Analysis focuses on job creation projections based on anticipated levels of consumption. The WANA Institute’s viability assessment on Syrian refugee labour integration, mentioned above, employed this framework, with the supply side assessment consisting of aligning Syrian refugee skill sets with open occupations in strategic sectors and the demand side assessment consisting of matching open occupations with government job creation forecasts. Notably, the analysis on the demand side of this framework is based on the status quo investment scenario and does not assume an injection of capital to stimulate production or consumer demand.

A widely debated but less formulated approach to employment generation is the so-called “investment-led” approach. This contrasts with a “consumption-led” approach and emphasises investment in long-term technology projects and other wealth-generation initiatives. Such an approach has been scantily considered in the context of foreign assistance; it is more often utilised in high-income economies where a large tax base or revenues from the commercialisation of natural resources generate capital for state-sponsored investment programmes. In this regard, former World Bank economist Jeffrey Sachs recently called for a shift to investment-led growth, positing that traditional stimulus packages do nothing for long-term growth.⁵

The changing humanitarian assistance architecture, illustrated in the Jordan Compact, provides a unique opportunity to apply such an approach to a foreign assistance and refugee host state context. The thought-leaders and implementers behind the Jordan Compact continually call for the reconceptualisation of the refugee crisis as a development opportunity by which Jordan could attract new investment while creating jobs for

⁵ Jeffrey Sachs, “Why We Need to Shift to Investment-Led Growth: Sachs,” *CNBC*, 22 January 2014.

Jordanians and Syrian refugees. Within the framework of the Jordan Compact, donor assistance could be packaged and channelled into private sector investment funds designed to stimulate productivity gains that would generate long-term employment growth. However, little exploratory work has been done with regard to the sub-sectorial investment needs of the private sector and what vehicle(s) could deliver such investment.

The remainder of this chapter assesses the recent investment trends and performance of various agricultural and industrial sub-sectors in Jordan, then analyses the implications for future growth, investment, refugees, and refugee policy. The growth trends of key sectors in the context of the Jordan Compact are considered, to highlight the challenges and the additional research necessary for private sector investment and employment creation within this new paradigm.

Jordan's Knowledge Economy Strategy

Jordan has long envisioned its future as a knowledge-based economy. Economic development strategies have continually stressed education and prioritised skills-based sectors such as healthcare, life sciences, renewable energy, and information and communications technology (ICT). Jordan's pharmaceutical sector, established in the 1960s, enjoys certain competitive advantages over its regional counterparts.⁶ The World Bank ranked Jordan the top medical tourism destination in the region, with revenues from this sector exceeding JOD709 million (USD1 billion) in 2007.⁷

There is extensive literature on the relationship between productivity gains and employment generation. A report by the International Finance Corporation (IFC) highlights the trade-off between job and value-added creation, noting that macroeconomic case studies from Jordan and Ghana have found that for every million dollars of investment, sectors such as agribusiness and trade generate high numbers of low-value-added jobs, while other sectors that generate less overall employment create jobs

⁶ Amwal Invest, *Pharmaceutical Sector in Jordan* (Amman: Amwal Invest, August 2010).

⁷ "Jordan: Global Ranking: 33rd," Medical Tourism Index, 2016, www.medicaltourismindex.com/destination/jordan/.

in which there is higher value-added per worker.⁸ This trade-off poses a challenge to policy-makers and donors seeking to channel investment towards the knowledge economy while simultaneously prioritising immediate job creation.

However, in the medium- to long-term, there are exceptions. When investment leads to productivity gains that bring about a drop in production costs, the target firm can produce more goods for a more competitive price. When there is sufficient domestic or external demand for the product, the company will hire additional workers to meet it.⁹

The IFC discusses four types of job creation: direct, indirect, induced, and second-order growth effect jobs. Direct jobs manifest in the company experiencing productivity gain, indirect jobs among the company's suppliers and distributors, and induced jobs as a result of increased spending by direct and indirect employees of the company. Jordan stands to gain from investments that facilitate productivity gains because of this potential to create direct, indirect, and induced jobs.

The focus on skills-based, high-value-added sectors has certain limitations. Since the start of the Syrian refugee crisis in 2012, Jordan has absorbed more than 290,000 working-age individuals, many lacking the skills to compete in a knowledge-based economy. This comes on top of a population growth rate that creates 60,000 new labour market entrants yearly.¹⁰ As a result, high-value-added sectors requiring more skilled than unskilled labour may not solve Jordan's unemployment problem in the short term.

Some analysts view the Jordan Compact as a potential framework for additional private sector investment. The partnership between donors and host governments, and commitment to common goals certainly provides

⁸ *IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction* (Washington, DC: IFC, January 2013), <http://documents.worldbank.org/curated/en/157191468326714061/IFC-jobs-study-assessing-private-sector-contributions-to-job-creation-and-poverty-reduction>.

⁹ *IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction* (Washington, DC: IFC, January 2013), <http://documents.worldbank.org/curated/en/157191468326714061/IFC-jobs-study-assessing-private-sector-contributions-to-job-creation-and-poverty-reduction>.

¹⁰ International Labour Office and Ministry of Planning, *Decent Work Country Programme 2012–2015* (Beirut: ILO, March 2012).

a promising platform for new investment flows. However, the prospect of increased attention to the private sector presents the dilemma of whether objectives should be short- or long-term and should target the creation of high-skilled or low-skilled employment.

Jordan's Economic Structure, Growth, and External Trade Trends

Economic Structure

Jordan's economy has undergone significant reforms over the past three decades, beginning with the liberalisation and reform agenda undertaken by His Majesty King Hussein. These reforms focused primarily on diversification and stimulation of higher-value-added economic activity. During the 2000s, His Majesty King Abdullah implemented further reforms expanding foreign trade and privatising state-owned enterprises. This brought increased foreign investment and contributed to an average GDP growth rate of 8 per cent between 2004 and 2008.¹¹

In the years following these reforms, a range of policy initiatives and visions have sought to bring investment and drive the growth of high-value-added sectors. *Jordan 2025*, a 10-year economic and social development blueprint launched in May 2015, emphasises trade with regional partners and focuses on “priority clusters” such as construction and engineering, transport and logistics, tourism and events, healthcare, life sciences, digital and business services, educational services, and financial services.¹² The *Jordan Economic Growth Plan 2018–2022*, developed by the Economic Policy Council and implemented alongside the IMF Extended Fund Facility Program, underscores the policy interventions necessary in the infrastructure and economics sectors to sustain a 5 per cent growth rate over four years. Those sectors include hospitality and tourism, agriculture, manufacturing, electricity and water, transport, ICT, and construction.

However, Jordan remains a service-based economy; trade and services accounted for approximately 66 per cent of GDP in 2016, followed by

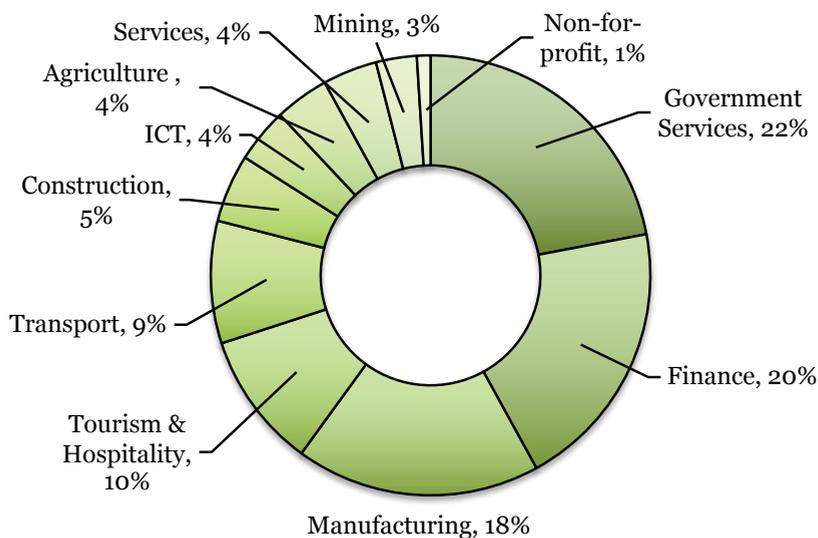
¹¹ CIA, “The World Factbook. Middle East: Jordan,” 30 May 2017, <https://www.cia.gov/library/publications/the-world-factbook/geos/jo.html>.

¹² *Jordan 2025: A National Vision and Strategy* (Government of Jordan, 2015).

industry at 29.6 per cent and agriculture at 4.2 per cent. Manufacturing accounted for just 18 per cent of GDP, construction 5 per cent, agriculture 4 per cent, and mining 3 per cent (see Figure 4.1).¹³

The agriculture, construction, and non-profit sectors underwent the highest growth rates in 2015, approximately 16 per cent, 16 per cent, and 15 per cent respectively; manufacturing grew at a moderate rate of 6.5 per cent, hospitality at just 2.5 per cent (see Figure 4.2). Manufacturing, services, transport, mining, hospitality, electricity, government services, and domestic services all experienced a significant slowdown compared to their 2010–15 compound annual growth rates.¹⁴ This reflects Jordan’s slowing GDP growth rate over the same period, which is due to ongoing regional instability.

Figure 4.1: Sectorial Contribution to GDP, 2016

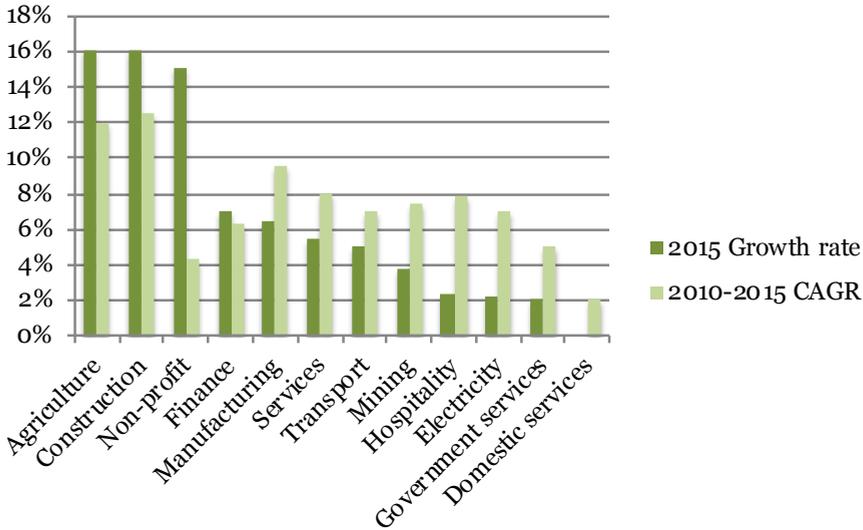


Source: Jordan Department of Statistics.

¹³ The Economic Policy Council, *Jordan Economic Growth Plan: 2018–2022* (Amman: The Economic Policy Council, 2017).

¹⁴ Ibid.

Figure 4.2: Growth Rates by Sector



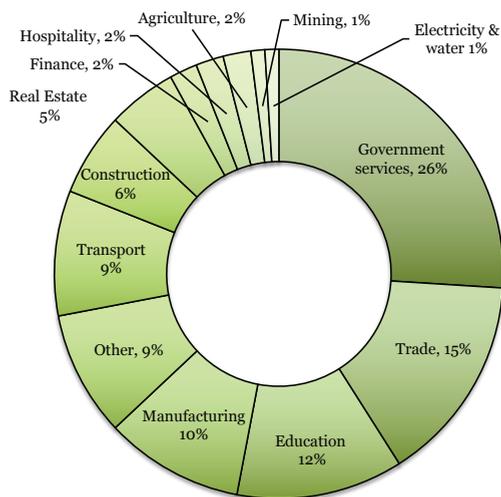
Source: Jordan Department of Statistics.

In addition, there is a longstanding concern that the country is constrained by a bloated public sector. Department of Statistics data corroborates this: government services (26 per cent) employ the most Jordanians, followed by trade (15 per cent), and education (12 per cent).¹⁵ These figures, in comparison with sectorial contribution to GDP, point to certain peculiarities and trade-offs underpinning Jordan’s labour market and long-term economic strategy. Government services account for a greater proportion of Jordanian employment than of GDP but, conversely, finance, manufacturing, and tourism account for a much larger share of GDP than of employment. In the finance sector, this may reflect the fact that, while less capital-intensive than certain industrial sub-sectors, productivity gains—particularly investments in automation and technology—have reduced the average contribution to employment. In the manufacturing sector, the trend is towards greater capital intensity across the principal industrial sub-sectors in Jordan. Or, it may evidence

¹⁵ Jordan Economic Growth Plan.

the underlying tendency to employ non-Jordanians.¹⁶ Similarly, the tourism and hospitality sector demonstrates a sizeable difference in contribution to employment and to GDP, perhaps reflecting an inclination towards non-Jordanian employment in that sector too (See Figures 4.3 and 4.4).

Figure 4.3: Jordanian Employment by Economic Activity, 2016

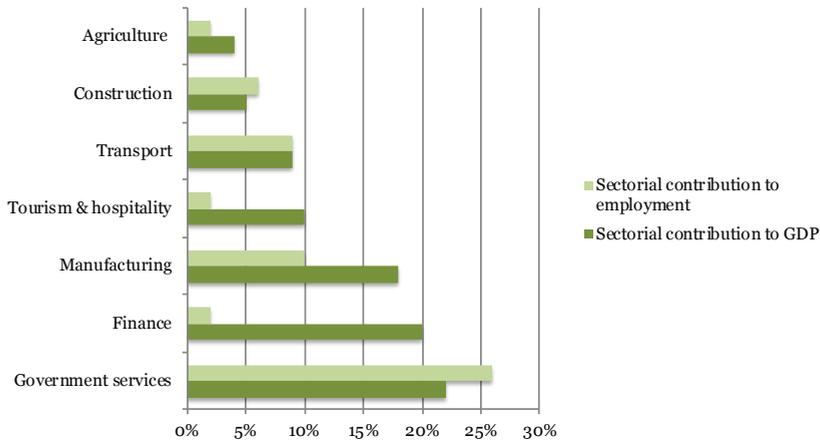


Source: Jordan Department of Statistics

Alongside these trends, Jordan’s unemployment rate has steadily risen since mid-2015, reaching 18.2 per cent in the first quarter of 2017 (13.9 per cent for men; 33 per cent for women), the highest rate since the series began in 2005. Many attribute this to the influx of Syrian refugees and the deterioration in Jordan’s external trade position due to the overall political situation in the region. The growing unemployment numbers are partly attributable to changes in how the figure is calculated: in early 2017, Jordan adopted the more rigorous OECD method for calculating unemployment, which includes migrant workers and excludes unpaid domestic workers.

¹⁶ In 2015, 75% of textile and garment workers in Jordan were from Bangladesh, India, Sri Lanka, Myanmar, and Madagascar; Sara Elizabeth Williams, “Made in Jordan: Inside the Unexpected Powerhouse of Garment Manufacturing,” *Business of Fashion*, 15 September 2015.

Figure 4.4: Ratio, Contribution to GDP–Contribution to Employment, Selected Sectors



Source: Jordan Department of Statistics

External Trade

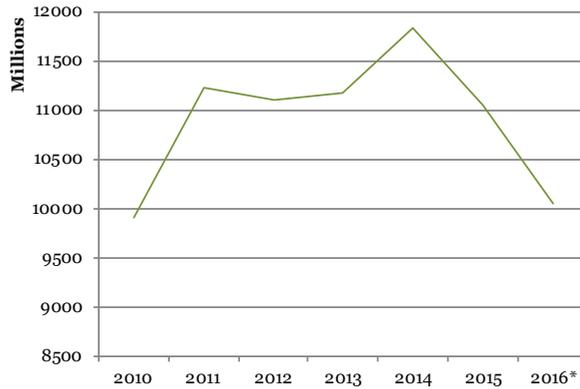
Analysts continue to underscore the WANA region's ill-fated political context and its negative impact on Jordan's external trade capacity. Indeed, Jordan's economy is better integrated within the regional market than those of many of its neighbours. As highlighted in the World Bank's "Ease of Doing Business Report," Jordan has established an edge in time and cost to market, outranking neighbouring Syria and Iraq by a large margin.¹⁷ While promising for the long term, this further highlights that the ongoing conflicts in Syria and Iraq have constrained Jordan's export growth. In 2016, exports fell 9 per cent on 2015, to their lowest level since 2010 (see Figure 4.5). Declining trade with Iraq and Syria was a key factor behind this drop.

Jordan exports industrial and agricultural products to a wide range of countries. According to the UN COMTRADE database on international trade, Jordan's largest trading partners in 2016 included the US, Saudi Arabia, Iraq, India, the UAE, Kuwait, Lebanon, Palestine, Qatar, and France (see Figure 4.6). As noted previously, prior to the escalation of violence and resultant border closures, Jordan enjoyed a fruitful trade

¹⁷ Jordan 2025.

relationship with both Iraq and Syria. In 2013, Iraq accounted for 18 per cent for Jordan’s total exports. By 2016, the value of Iraq-bound products had decreased by more than 50 per cent (see Figure 4.7). Similarly, 4 per cent of Jordan’s total exports were to Syria in 2011, but by 2016 this had fallen to just 1 per cent.

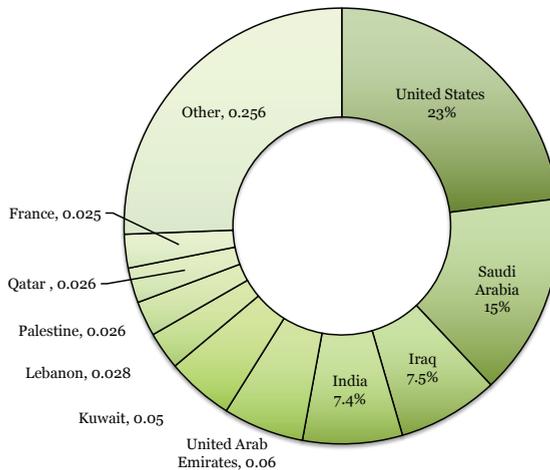
Figure 4.5: Jordan Exports, 2010–16, Millions JOD



Note: *CIA World Factbook estimate.

Source: World Bank.

Figure 4.6: Jordan Exports by Country, 2016



Source: Trading Economics.

Despite these losses, there have been significant gains in certain product categories and among certain key partners. Textile¹⁸ exports, 88 per cent of them bound for the US market, have increased by 87 per cent in US dollar values since 2009. Pharmaceutical products, whose primary markets include Saudi Arabia (24 per cent), Algeria (14 per cent), and Iraq (12 per cent), expanded by approximately 38 per cent in US dollar terms in the same time period. Jordan's US-bound exports increased by nearly 350 per cent between 2009 and 2016, while Saudi Arabia-bound exports increased by 54 per cent. These noteworthy gains demonstrate growing competitiveness in certain industries.

Figure 4.7: Exports to Iraq as Share of Total Exports



Source: Trading Economics.

¹⁸ The UN COMTRADE database on international trade specifies four categories of textiles. The category referred to here is articles of apparel, knitted or crocheted.

Implications for Jordan's Future Growth and Development

The prevalence of waning industrial employment amid increases in overall investment raises questions about the links between investment and job creation. Moreover, the influx of lower-skilled Syrian refugees and consequent need for large-scale creation of lower-value-added jobs in the short to medium term, has disrupted some of the assumptions underpinning Jordan's knowledge-based economic strategy. Should Jordan shift its focus to lower-value-added sectors in order to employ larger numbers of people in the short to medium term? This would be precipitant and most likely would not produce the desired result. Nonetheless, the changing policy environment should alert stakeholders to the question of the trade-off between employment and value-added in the Jordanian context.

Agriculture

As of May 2017, approximately 16,037 Syrian refugees had gained the formal right to work in agriculture. The sector currently employs a small proportion of Jordanians and does not stand out as a strong contributor to value-added. However, its 2015 growth rate outranked its performance during the previous five-year period. Efforts to foment greater integration of technology in this sector could capitalise on this upward trend, as mechanisation would increase production while creating jobs for highly skilled workers and potentially sustaining jobs for lower-skilled workers.

A stronger focus on technology investments and marketing capacity may set the stage for the modernisation of Jordan's agriculture sector while increasing value-added and indirect job creation. Sector leaders have noted that the industry is undergoing a landmark digital transformation. Between 2015 and 2020, 27 per cent of the jobs created in the technology-intensive US agriculture sector will be concentrated in science, technology, engineering, and mathematics disciplines.¹⁹ While Jordan's agriculture sector

¹⁹ Jeff Daniels. "Agriculture Job Growth to Boom Over Next Five Years," *CNBC*, 20 May 2015.

is significantly less technology-based than that of the US, its potential—under the appropriate conditions—to create highly skilled jobs should not be overlooked.

Unlike EU countries, WANA countries do not have rigorous quality and packaging requirements for fruit and vegetable products, although Gulf Cooperation Council countries may be adopting higher standards that could disrupt Jordan's agriculture trade flows. Investment and capacity-building efforts to improve technology, standards, and packaging processes could help to stabilise Jordan's hold on its traditional agriculture export partners while opening up access to more sophisticated markets, and boosting contributions to employment and GDP.

Industry

No industrial sector discussed in this report has registered an increase in employment, while five of the seven explored sectors registered decreasing employment alongside increasing investment. The fact that these trends have occurred in parallel is counterintuitive, but may be explained by slumping confidence levels resulting from the adverse political conditions in the region. The situation does not bode well for future industrial employment creation.

Ultimately, the industrial sector's success as a driver of growth will depend on its ability to produce, market, and sell goods of desirable quality. Sales growth results from product competitiveness and domestic demand. Demand and consumer confidence will be a challenge in the current political context, as will the market for exports among traditional trading partners. Department of Statistics figures indicate that the industrial sector's growth rate has slowed. If the sector is to achieve growth in the current environment, it will have to either access new markets or produce goods for which demand is steady despite adverse market conditions. Greater access to capital may facilitate this, but, as recent trends suggest, increased investment does not necessarily create greater work opportunities. Analysts and policy-makers may therefore have to identify other means of supporting industrial job creation.

Implications for Investors

Additional research is needed to understand the impact that investment growth has had and could have on agricultural and industrial output. The growth and employment generated by additional investment depends on characteristics unique to the relevant sub-sector, firm, and new activity supported. Investors seek to support projects promising the maximum financial return, although in certain cases, they consider non-financial factors such as social and environmental impact.

The fact that increased rates of investment in Jordan's industrial sector have coincided with decreasing levels of employment should not, in itself, deter investors. Investments that yield high returns by facilitating increased mechanisation and reductions in labour costs often have no trouble attracting investors. However, the fact that several industrial sub-sectors have reported increased levels of registered capital alongside a slowing industrial growth rate could discourage investors. The current political context's dampening effect on domestic demand and export markets will also hinder investors' interest in the region for the near term.

To capitalise on the Jordan Compact to boost its private sector, Jordan must highlight the importance of factors beyond financial returns. This is not to say that investments in Jordan's agricultural and industrial sectors bring disproportionate risks. Rather, the potential social impact of supporting Syrian refugee livelihoods, the continued development of the knowledge economy in the region, and enhanced environmental sustainability (especially within the agriculture sector), combined with the potential financial return on investments in target sectors, should merit investor attention. To make the case for this, policy-makers and private sector leaders must present a clear, evidence-based storyline explaining the relationship between investment, job creation, and growth, and the trade-off between value-added and employment.

Implications for Refugee Policy and Refugees

Refugee policy-makers are charged with ensuring that individuals displaced by conflict, natural disaster, and persecution enjoy adequate levels of protection. In recent years, the right to sustainable livelihoods has become a key tenet of refugee protection conventions, as demonstrated by UNHCR and other actors' successful lobbying for partial labour integration rights of Syrian refugees in Jordan.

The challenges facing Jordan's economy and its ability to create employment and absorb unskilled labour pose a threat to the government's ability to deliver on its pledge to create 200,000 jobs. As of June 2017, the Ministry of Labour had granted more than 50,000 work permits to Syrian refugees across the agriculture, construction, manufacturing, wholesale and retail trade, and food and beverage sectors. In many cases this means jobs formalised rather than newly created. Nonetheless, the slowing economic growth, deteriorating external trade position, and decreasing levels of industrial employment suggest that Jordan's continued ability to create jobs en masse may be limited at best.

The Jordan Compact has been praised as an innovative framework by which the host government and the donor community participate in a mutually beneficial partnership that drives economic growth while ensuring refugee protection. The prospect of increased private sector investment has been a key incentive since the agreement was developed in early 2016. If investment proves to be an ineffective tool for growth and employment creation in the current context and no other job creation tool is identified, recent emphasis on labour integration among refugee policy-makers may be undercut. Are communities hosting refugees inherently low-growth environments? The protracted conflict that leads to forced migration certainly does not contribute positively to the conditions necessary for market expansion and enhanced prosperity.

Low- and medium-skilled migrants make a disproportionate contribution to global GDP when they move to higher-productivity settings.²⁰ This, combined with the case of Jordan's falling employment levels and rising investment, is an argument for expanding refugee resettlement programmes and lessening the burden on struggling host state economies. However, further research assessing the nature and impact of recent investment in Jordan's industrial sector is needed in order to be able to draw this conclusion firmly.

Jordan's commitment to create 200,000 jobs for Syrian refugees was based on assumptions that the economy would continue to create jobs and that investment could be leveraged to drive further growth. If these assumptions prove to be unsubstantiated and traditional investment tools become ineffective in facilitating growth, the labour market may fail over the long term to provide Syrian refugees with adequate options for sustainable livelihoods. Ultimately, it is refugees who stand to lose the most from such a scenario. However, the resultant harm would be felt by the host community and refugee policy-makers too. This should serve as a reminder that the stakes of a successful labour integration programme are high for all parties.

Towards a Deeper Understanding

A key premise behind this assessment is the need to reconcile investment in capital-intensive industries central to the development of the knowledge economy with the need for job creation in the short to medium term. To advocate for increased private sector investment within the framework of the Jordan Compact, academics, NGOs and private sector thought-leaders need data—qualitative and quantitative—that calibrates the trade-off between job creation and value-added. This assessment has provided an overview of growth trends, investment and employment levels, and external trade potential. More research is needed to gain a deeper understanding of how investments in these sub-sectors would be directed, what levels of employment should be created, the skill sets needed to drive increased performance, and the additional steps necessary to ensure that investment leads to employment growth. Three areas for future research are highlighted.

²⁰ Jonathan Woetzel et al., *People on the Move: Global Migration's Impact and Opportunity* (McKinsey Global Institute, December 2016).

Quantify the Relationship between Investment and Employment Creation at the Sub-Sectorial Level

All sectors and firms absorb investment differently. In some sectors, JOD709,000 (USD1 million) will lead to the creation of 20,000 jobs; in others the same investment would lead to far fewer jobs. Market access and conditions play an important role. A number of industrial sub-sectors have registered an increase in investment combined with a decrease in employment. A better understanding of what drives this relationship on a sub-sectorial basis is essential. Are investments in mechanisation making workers redundant? Are firms scaling back on hiring in the current political context because of slumping confidence levels? Are firms refraining from hiring even if they have the resources to do so? Do they lack access to the pool of talent they need to take advantage of their investment dollars? Exploring these questions systematically will lead to a better understanding of how private sector investment should be targeted.

Map Skill Levels on a Sub-Sectorial Basis

A comprehensive assessment of the breakdown in skill sets necessary to achieve full capacity has been conducted for the wood and furniture sector. Such analysis is needed for the agriculture sector and the remaining six industrial sectors discussed here. Under the right market conditions, increased investment in agriculture and industry will lead to job creation. However, companies' need for skilled or less-skilled workers will vary depending on production-line technology, product mix complexity, and the firm's operating model. Mapping skill levels on a sub-sectorial basis would illustrate how investment could improve Jordan's employment rate in the short to medium term.

Employ a Market Systems Approach

The agriculture and industrial sectors do not operate in a vacuum. Investment allows them to improve product lines, and operational capacity can drive growth. However, a firm's ability to grow will in part be determined by domestic and external market conditions. A sector's point on the value chain, upstream or downstream, must be weighed along with other factors. Where there are adequate market conditions, investment in an upstream sector has the potential to drive growth in a related downstream

sector. Likewise, an investment in a thriving downstream sector can create a market for a related upstream sector. These linkages must be considered.

Future Projects

The WANA Institute intends to further explore the questions around sub-sector-level investment, job creation, and other market and industry trends that have arisen in this assessment. Beginning in August 2017, the Institute is conducting a series of follow-up interviews with agricultural and industrial sector representatives. This may be followed by additional discussions with market leaders across both sectors. This research will be qualitative in nature, although discussions will have a quantitative component as private sector thought-leaders will inevitably have a view of sector-level growth rates and investment-to-job-creation ratios.

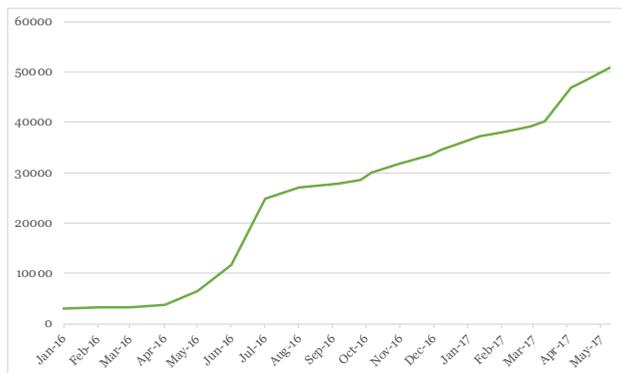
5: Jordan's Syrian Refugee Labour Integration Policy: A One-Year Review

Shaddin Alhajahmad and Dorsey Lockhart

How is the Policy Working?

By August 2017, 660,422 Syrian refugees had registered with UNHCR in Jordan. According to the Department of Statistics' November 2015 census, the official number may be as high as 1.265 million. Since the government elaborated a new policy framework that extended limited labour rights to Syrian refugees in April 2016, the Ministry of Labour has granted 54,871 work permits. It has also extended four times the grace period during which work permit application fees are waived. Fees range between JOD120 (USD169) and JOD900 (USD1,269). The number of formalised Syrian refugee workers has thus grown by a factor of 16 (see Figure 5.1). However, various stakeholders are concerned that these figures may overstate the number of currently active work permits. More precise information is needed on the breakdown of new work permits, renewed work permits, and short-term work permits.

Figure 5.1: Work Permit Allocation, January 2016–May 2017



Source: Jordan Ministry of Labour

Work Permit Distribution

Work permits for Syrian refugees have overwhelmingly pertained to the agricultural sector. The reasons for this vary, but include the establishment of cooperatives that have helped to catalyse the process of acquiring permits. According to Ministry of Labour figures, approximately 32 per cent of permits have been allocated to agricultural workers, 20 per cent to manufacturing workers, 16 per cent to wholesale and retail trade workers, 14 per cent to food and beverage workers, and 9 per cent to construction workers. The remaining 9 per cent have been allocated to utilities, transport, education, domestic, health and other administrative, professional, and service workers.

This distribution does not align with other estimates of the breakdown of Syrian refugee labour participation across sectors. Analysis of UNHCR data suggests that as many as 33 per cent of economically active Syrian refugees are employed in the construction sector, and as few as 10 per cent in the agriculture sector. The same dataset suggests that only 4 per cent of economically active Syrian refugees are employed in the food and beverage sector, and 2 per cent in the manufacturing sector. While this data is not definitive and should be viewed as one piece of a broader information set, the fact that formalisation efforts have not fallen in line with the underlying pattern of sectorial distribution of workers suggests that significant challenges remain for certain sectors.

Informality is endemic in construction as a result of the temporary nature of work in this sector. The agriculture sector also hosts high numbers of undocumented workers; however, the Ministry of Labour's collaboration with cooperatives to distribute permits for construction work has proven highly effective. In August 2017, the International Labour Organization (ILO) announced that permits for construction sector workers would be facilitated through the General Federation of Jordanian Trade Unions. This approach aims to jumpstart the formalisation of a large section of the Syrian refugee construction worker population by offering permits through a single provider rather than individual employers. Construction sector work permits are now attached to the sector rather than the individual employer, meaning that workers can move between employers without having to apply for new authorisation. Agriculture sector work permits operate in a similar way.

The formal workforce participation of female Syrian refugees has remained modest since the work permit grace period was first implemented. Nonetheless, there have been considerable efforts by donor states and NGOs to raise female Syrian refugee worker awareness of the availability of work permits. At present, 2,522—5 per cent—of the total 54,871 work permits have been granted to female Syrian refugees. In August 2016, this number stood at 389, meaning that in one year the number of formalised female Syrian refugees workers has grown by a factor of six.

Despite this progress, challenges remain, resulting from a myriad of misperceptions around work permits requirements and benefits. Research conducted by the ILO explores why certain Jordanian employers and Syrian refugees are averse to applying for a work permit. In some cases, employers prefer to pay fines for employing undocumented workers rather than the (more expensive) work permit renewal fees. In other cases, employers do not want to pay social security or simply do not believe that work permits are necessary. Some Syrian refugees fear that applying for a work permit will endanger their access to food or cash assistance, while others feel it is unnecessary for temporary and short-term work.¹ A range of actors are engaged in the effort to raise awareness and dispel these various misperceptions. These initiatives are invaluable and should continue.

Job Creation

According to Department of Statistics (DoS) data, Jordan's economy created approximately 50,000 jobs per year between 2011 and 2015. This level of job creation is sufficient to absorb neither the estimated 60,000 Jordanians entering the job market each year, nor the number of Syrians who have arrived since 2011.

An ILO-FAFO survey published in April 2015 estimated that approximately 51 per cent of male Syrian refugees who resided outside of camps participated in the Jordanian labour market.² If this proportion is applied to 2017 figures, this would mean that in addition to the 60,000 Jordanian

¹ Susan Razzaz, *A Challenging Market Becomes More Challenging: Jordanian Workers, Migrant Workers and Refugees in the Jordanian Labour Market* (Beirut: ILO, 2017).

² Svein Erik Stave and Steve Hillisund, *Impact of Syrian Refugees on the Jordanian Labour Market* (Geneva: ILO, 2015).

young people entering the job market each year, there are an estimated 59,000 Syrian refugees who have sought both formal and informal jobs since the crisis began in 2011.

Moreover, the sectors that are considered key for Syrian refugee employment, such as agriculture and construction, have seen little expansion in recent years. DoS 2015 data sets the agriculture sector's net job creation rate at 1.4 per cent, the construction sector's at 1.5 per cent, and the accommodation and food service sector's at 5.1 per cent. During the same year, manufacturing and wholesale and retail trade—which also include occupations open to Syrian refugees—witnessed net job creation rates of 12.8 and 8.6 per cent, respectively. The government sector, generally closed to non-Jordanians, demonstrated the highest level of growth, with a net job creation rate of 34.8 per cent.

This suggests that the ability of the Jordanian economy to absorb the nearly 300,000 working-age Syrian refugees present outside of and within the camps is severely limited.

Trade with European Union Countries

A cornerstone of the Jordan Compact is enhanced access to European export markets under a more favourable Rules of Origin (RoO) framework. According to this agreement, manufacturers operating in 18 designated Jordanian economic zones and industrial areas whose workforce is 15 per cent Syrian (25 per cent, beginning in 2019) will be allowed to export to Europe under a less stringent RoO framework. As of March 2017, however, only seven companies had been authorised under this new arrangement.

While Jordan's exports to EU markets have, over the past decade, grown by approximately 46 per cent,³ EU countries accounted for less than 3 per cent of Jordanian exports in 2016.⁴ To take advantage of the favourable access provided under the Jordan Compact, government and non-government actors must find a way to help Jordanian manufacturers gain a more secure foothold in EU markets. Some observers have called

³ Bassem Neme, "Jordan's Burden," Carnegie Middle East Center, 21 March 2017, <http://carnegie-mec.org/diwan/68330>.

⁴ "Jordan Exports by Country," Trading Economics, 2017, <https://tradingeconomics.com/jordan/exports-by-country>.

for further relaxation of the RoO framework and an adjustment to the requirement that a certain percentage of the manufacturers' workforce be Syrian. These considerations are valid and would be most effectively implemented alongside technical assistance that helps manufacturers meet quality standards and identify commonly used market access channels.

Worker Rights and Refugee Welfare

The awarding of formal working rights to Syrian refugees is a landmark policy that has gained much attention among international donors and refugee policy-makers. As would be expected, households with a family member in formal work report higher levels of both monthly income and monthly spending than households without a working family member.

On the other hand, there is a considerable body of research that suggests that the informal work of one family member has little impact on the welfare of the entire family. A 2016 World Bank study questioned the value of informal work, concluding that returns are so low that participation in the informal economy has little statistical impact on a household's chance of surpassing the poverty line.⁵

The data available through UNHCR's Vulnerability Assessment Framework partly corroborates this; among households reporting a working family member, incomes are tightly clustered around the median monthly wage of JOD150 (USD212). For households of more than one member, this level of monthly income is unequivocally low.

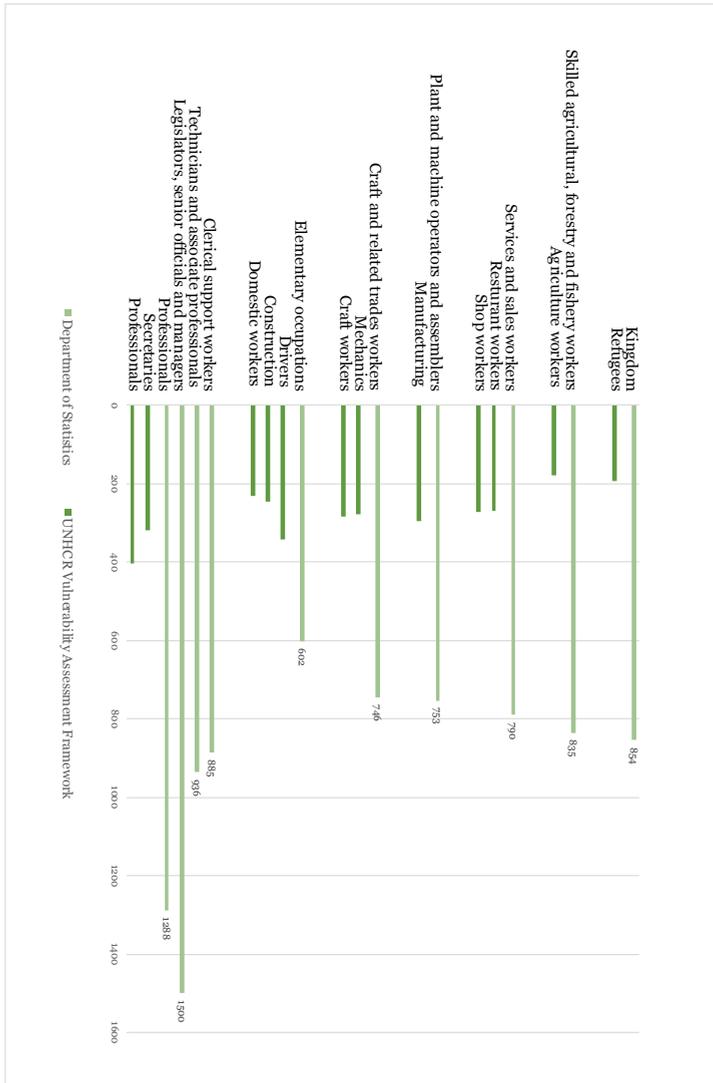
Monthly Expenditures across Sectors

As is evident from comparisons of surveys assessing Kingdom-wide financial outcomes, Syrian refugee income and expenditure levels are well below those of their Jordanian counterparts. On average, Jordanian household expenditure is four times higher than that of Syrian refugee households. This disparity is unambiguous when viewed at the occupational level. Differences are most pronounced in the agricultural sector and least

⁵ Paolo Verme et al., *The Welfare of Syrian Refugees: Evidence from Jordan and Lebanon* (Washington, DC: The World Bank, 2016).

pronounced when comparing Syrian refugee drivers with elementary occupations. There also appear to be considerable differences in monthly expenditures between Syrian refugee households with family members employed in the manufacturing, retail, and restaurant sectors, and their Jordanian counterparts.

Figure 5.2: Mean Expenditure across Occupational Sectors (Kingdom Average vs Syrian Refugee Average, JOD)



Source: Jordan DoS, UNHCR Vulnerability Assessment Framework 2016

These comparisons corroborate the need for continued cash and food voucher assistance programmes that work to smooth monthly spending capacity, alongside formal working rights. While initial efforts to provide Syrian refugees with formal work opportunities represent an essential first step to creating sustainable livelihoods, continued efforts remain necessary to ensure their smooth integration into the formal workforce.

Leading Economic Indicators

The influx of more than 660,000 registered Syrian refugees has coincided with a general slowdown in the Jordanian economy. Between 2005 and 2009, Jordan enjoyed consistently high rates of GDP growth. However, beginning in 2010, in the aftermath of the global financial crisis, these rates went into consistent decline. Between 2010 and 2016, Jordan's quarterly GDP growth rate averaged 2.6 per cent and did not surpass 3.1 per cent.

Alongside slowing GDP growth, Jordan's unemployment rate has steadily risen since mid-2015, reaching 18.2 per cent in first quarter of 2017, the highest rate since the series began in 2005. Many link this to the deterioration in Jordan's external trade position resulting from the adverse political situation in the WANA region.

While the region's political situation has created the conditions for sluggish growth, refugee influxes have not in themselves led to a worsening of Jordan's macroeconomic situation. Despite this, a range of international organisations and NGOs have raised the question of whether certain economic indicators have been negatively affected by the Syrian crisis. The relationship between recent performance on certain indicators and the influx of refugees is explored below.

Labour Force Participation

The concern that the informal employment of Syrian refugees was pervasive enough to drive down wages was central to the push for formal working rights. The economic research concludes, however, that the negative effects of the refugee crisis are more closely linked with a shrinking labour force participation rate among Jordanians than with declining wage levels. Indeed, an ILO-FAFO survey conducted in 2014

found that Syrian refugees were more willing than Jordanians to accept lower wages and harsher working conditions. Syrian refugees thus do not directly drive down wages, but rather claim new, low-wage jobs and thereby crowd out potential Jordanian entrants.

Consistent with this, Jordan's employment rate has hovered between 30 and 35 per cent throughout the period between 2007 and 2016. A slight downward trend began in 2012, and the most recently recorded figure is 30 per cent, the lowest since 2009. It is worth noting that the average employment rate for OECD countries is more than two times that observed in Jordan, at approximately 67 per cent.

GDP per Capita

Jordan's GDP per capita has been in steady decline since 2010. The fact that this trend began prior to the escalation of tensions in Syria suggests that it was not, at least initially, the result of the adverse political situation. However, the subsequent closure of borders with Syria and Iraq, shrinking levels of commerce in the region, and the sudden population growth resulting from the influx of refugees all contributed to it.

A wide range of stakeholders are eager to observe any relevant changes in Jordan's output that may result from the country's recent population surge of nearly 15 per cent. DoS data tracks quarterly GDP for selected sectors of the economy including agriculture, construction, manufacturing, and services. None of these sectors have registered a significant increase that can be confidently linked to incoming refugees.

GDP from agriculture appeared to be on a positive trajectory until 2012, when it contracted by nearly 10 per cent, most likely as a result of slowing trade with Iraq, Jordan's most important trade partner for agriculture exports. GDP from construction also experienced steady growth between 2007 and 2009, followed by steady decline from 2010 until 2015. GDP from manufacturing has neither grown significantly nor experienced a precipitous decline, although this sector may be approaching a period of stagnation. Finally, GDP from services has witnessed modest but consistent expansion. Current growth rates for this sector exceed the national average, further substantiating the claim that services is a highly active economic sector.

Human Development Index

Since 2010, Jordan's Human Development Index (HDI) has remained consistent, with only a minor decrease in 2011, followed by a recovery in 2012, and then a slight improvement in 2014. While this steady performance suggests that Jordan's HDI has not been adversely affected by the refugee population, the country's position in comparison with similar countries has dropped by six places.

The Jordan Compact: A Work in Progress

Despite the apparently negligible impact of the Syrian refugee crisis on Jordan's leading macroeconomic indicators, it is unlikely that the influx of so many people has had no effect on economic conditions. In order to optimise stakeholders' understanding of the evolving situation, changes in output, consumption, employment rates, and prices would be better assessed at the governorate and municipal rather than the national level. This would create the evidence base for more targeted interventions by government, international organisations, and NGOs.

On the whole, the implementation of the Jordan Compact remains a work in progress, particularly in relation to the expansion of industrial exports to EU countries. Stakeholders need to accept that, as with all bilateral agreements, the arrangement contains certain limitations that could, with proper engagement from both sides, be overcome.

As noted above, some observers have called for further adjustments to the RoO framework and the phased requirements to hire Syrian refugees. These recommendations are constructive and should be the subject of further policy discussion. Similarly, parties on both sides should recognise that advancing trade relations with Europe is no small task and will require both long-term commitment and investment by industrial leaders.

The notable progress that has been made in the formalisation of Syrian refugee labour should be applauded, and programmes by the Ministry of Labour, the ILO and NGOs to formalise Syrian refugee workers and to ensure that day-to-day labour conditions remain up to standard should

continue. By reducing informality, these efforts will serve to neutralise the forces that drive down wage levels and working conditions for all workers in Jordan, not just Syrian refugees.

6: Higher Education Opportunities Available to Refugees from Syria

Juliet Dryden and Dr Erica Harper

This chapter summarises higher education opportunities available to refugees from Syria in Jordan.¹ The information was derived from a range of sources, including: (1) publicly available data; (2) survey research with universities and higher education colleges in Jordan; (3) administrative records from universities and higher education colleges; (4) interviews with university officials and students; (5) interviews Ministry of Higher Education and Scientific Research officials; (6) interviews with UN agencies (UNHCR, UNICEF, and UNESCO); and (7) field visits to six universities and three community colleges in Amman, three universities and two community colleges in Irbid, two universities and two community colleges in Zarqa, two universities and two community colleges in As-Salt, and one university in Al Mufraq.

Higher Education in Jordan

The higher education system in Jordan comprises 10 public universities, 19 private universities, 1 online university, the World Islamic University (which was established by Royal Decree), and 51 private and public community colleges. They are all (with the exception of the online university and the World Islamic University) controlled by the Ministry of Higher Education and Scientific Research, and subject to the National Accreditation Board.

Higher education institutions have proliferated in recent years as part of a national policy drive to develop a knowledge-based economy. The first public university in the Kingdom—the University of Jordan—was opened in 1962, followed in 1976 by the University of Yarmouk. In 1989, the Ministry of Higher Education authorised Jordan’s first private university, now known as the University of Amman. The first community colleges

¹ This chapter is an extract of a wider report commissioned by the British Council, which includes other WANA countries. The WANA Institute undertook the study for Jordan. The full study has not yet been published, so the content of the report may vary slightly once the final report is formally released.

were established in 1981, following a decision to convert and expand the existing network of teaching colleges. These colleges were designed to offer specialised career-orientated training to prepare students for mid-level roles such as junior civil servant, hotel receptionist, administrative clerk, account assistant, and so on.

Over time, increases in demand and supply have seen tertiary enrolments grow at 14 per cent annually. The gross enrolment rate increased from 38.8 per cent in 2006 to 44.9 per cent in 2015, the most recent year for which data is available, with rates for women higher than those for men (47.3 per cent compared with 42.5 per cent in 2015). Enrolment rates in Jordan are higher than regional averages. During the 2000/01 academic year, 77,481 students were enrolled in universities and community colleges; this increased more than fourfold to 384,730 by 2013/14. In parallel, enrolments at community colleges have declined, with young people increasingly favouring university education and desiring academic qualifications over vocational ones.

In 2017, according to uniRank, the University of Jordan was the highest-ranked university in Jordan. Seven of the top 10 universities in the country were public (see Table 6.1). Jordan holds the 9th and 13th places among West Asia’s top-ranking institutions.

Table 6.1: University Rankings in Jordan

1	University of Jordan	Public
2	Jordan University of Science and Technology	Public
3	Yarmouk University	Public
4	Philadelphia University	Private
5	Tafila Technical University	Public
6	University of Petra	Private
7	The Hashemite University	Public
8	Al-Balqa’ Applied University	Public
9	Al al-Bayt University	Public
10	Princess Sumaya University of Technology	Private

Universities

Public universities in Jordan favour traditional academic disciplines in the sciences (medicine, engineering, etc.) and humanities (education, economics, law, etc.), whereas private universities offer more diverse subjects, ranging from engineering and commerce to more modern subjects such as ICT, design, animation, and tele-marketing. Medicine, dentistry, and veterinary sciences are only taught at public universities, which are considered to offer a higher quality of education than their private counterparts. Public universities are less expensive for Jordanians, and thus more competitive in terms of entrance requirements. Private universities impose slightly lower entry requirements, and offer one price to all students; as a result, they have a higher proportion of international students. Further information is provided in Table 6.2.

There are two entry routes to universities for Jordanians. Prospective students can apply through a national competition run by the Ministry of Higher Education and Scientific Research, in which they submit applications online, listing 30 universities and subjects in order of preference. Places are awarded based on secondary school exam results, and prices vary according to university, course, and the number of hours needed to complete a module. A French degree at the University of Jordan requires 132 hours of study over four years at JOD16 (USD23)/hour; a pharmacy degree at the same university requires 216 hours of study at JOD50 (USD71)/hour.

The second route is through the parallel (or second-chance) system. Prospective students can lodge an unlimited number of applications, at a cost of JOD25 (USD35) per application, to different universities and courses. If they are offered a place, the course fee is at least three times that offered via the national competition. A French degree at the University of Jordan costs JOD65 (USD92)/hour in the parallel system.

Students can apply for financial scholarships² if they meet certain criteria related to income level and parental profession (for example, government employees, military personnel, and teachers). Student loans are available and must be repaid within five years of graduation (students whose parents die or suffer illness are exempted from these repayment requirements).

² "Overview of Scholarships for Higher Education—Syria Situation," Education Unit, UNHCR Education Unit, 2013, <https://data.unhcr.org/syrianrefugees/download.php?id=3475>.

Overall, the reputation of Jordanian universities has suffered in recent years, driven by perceptions of low-quality teaching standards, as a result of high unemployment rates among graduates. Nevertheless, absolute enrolments have continued to rise, as noted above.

Table 6.2: Overview of Universities and Community Colleges in Jordan, 2016

Type	Public universities	Private universities	Community colleges
Number	10	19	51 (29 public and 22 private)
Number of students	201,495 national students; 15,052 international (1,094 Syrian)	66,655 national students; 13,670 international (1,852 Syrian)	42,456 students (28,265 public; 14,191 private)
Price	Varies according to entry method, but cheaper than private universities for Jordanians	One price for all	Cheaper than universities
Courses offered	Medicine, dentistry, and veterinary science only offered at public universities; most popular undergraduate degree is business and commerce, followed by engineering	Most popular undergraduate degree is business and commerce, but private universities also offer non-traditional subjects such as animation and tele-marketing	Range of subjects in the arts, sciences, management, business admin, and engineering; vocational courses such as ICT, design, interior design, business, and culinary courses
Entry requirements	High average grade required; typically less strict for international students (including refugees) enrolled on parallel programmes	Lower average grade required	Secondary school certificate of any grade required
Types of degree offered	Undergraduate, masters, doctoral degrees, and teacher training qualifications	Undergraduate, masters, doctoral degrees, and teacher training qualifications	Vocational or technical diploma

Source: Adnan Badran, “New Trends in Higher Education in Jordan 2014”

Vocational Education

Jordan's 51 community colleges fall under the jurisdiction of the Ministry of Higher Education and Scientific Research and are administered by Al-Balqa' Applied University. They are open to any holder of a General Education Certificate, i.e. those completing secondary education. Community colleges used to offer vocational courses only, but in recent years have expanded their range of subjects to attract students. They offer two-year programmes (a 72-hour maximum course requirement) in a wide range of subjects, as well as vocational courses. At the end of the programme, students who pass exam (*al-shamel*) receive a vocational or technical diploma.

The reputation of community colleges is relatively poor, Jordanian families preferring their children to attend university rather than acquire a vocational education. Lower entry requirements at private universities may have contributed to a reduction in demand for community college places, with private institutions accepting large numbers of Jordanian students who might once have attended community colleges. Arguably, this deprives the labour market of an important source of human capital. Community colleges also lose out to the Technical and Vocational Education and Training (TVET) system, which offers vocational training from the age of 16 to those wishing to pursue a vocational rather than an academic secondary school education. This too has a negative image among the population; a recent independent assessment identified a number of weaknesses, including limited links between labour market needs and Jordan's vocational training institutes; poor instructor qualifications; lack of proper equipment for training; and lack of official occupational standards validated by employers to ensure a clear frame of reference for training programmes. This is a missed opportunity: it is economically unsound that children unlikely to pursue a career requiring academic qualification should remain at school for another two years before entering a community college, rather than entering a TVET college at 16 to pursue vocational training. Recently, some donors have shown an interest in investing in the vocational training sector, at both TVET colleges and community colleges. The EU recently signed a EUR52 million (JOD44 million) programme with the Ministry of Labour to support vocational education and training.

A random sampling of three universities and two community colleges shows the comparable costs of enrolling under different entry schemes (see Table 6.3).

Table 6.3: Costs of Enrolment at Jordanian Universities and Community Colleges

	Type	Accounting	Arabic	Special needs education
University of Jordan	Public university	JOD20 national	JOD16 national	JOD16 national
		JOD70 parallel	JOD45 parallel	JOD50 parallel
		USD210 international	USD140 international	USD140 international
Al-Balqa' Applied University	Public university	JOD35 national	JOD20 national	JOD16 national
		JOD55 parallel	JOD35 parallel	JOD35 parallel
		USD200 international	USD150 international	USSD150 international
Petra University	Private university	JOD85	JOD85	
Islamic Community College	Private college	JOD18	JOD16	JOD16
Hatten College	Private college	JOD25	JOD24	JOD24

Notes: University courses are 4–5 years long, requiring 132–250 hours of study. Two-year community college courses require 72 hours of study. All costs are per hour.

Lifelong Higher Education

These courses are offered at private and public universities and community colleges, in engineering, industry, agriculture, foreign languages, computer sciences, managerial sciences, secretarial studies, physical education, and other high-demand subjects. Courses last between one week and six months, at the end of which successful students obtain a Certificate of Achievement or Attendance. Some courses are designed for specific jobs, and in some cases require the student to have already completed work experience in the relevant field.

Education for Foreign Students

Foreign students are an important source of financing for tertiary education in Jordan. Education is an important regional export: more than 10 per cent of students enrolled in public and private universities are foreign (see Table 6.4).

Table 6.4: Enrolment of Foreign Students at Selected Jordanian Universities and Community Colleges

2017	Type	No. of students enrolled	% who are foreign students
University of Jordan	Public	26,532	17
Jordan University of Science and Technology	Public	24,889	20
Hashemite University	Public	29,803	1
Al Quds Community College	Private	1,751	13
Khawarizmi College	Private	1,142	21
Islamic Community College	Private	477	25
Arab Community College	Private	954	19
Irbid College	Public	1,144	2
Zarqa	Public	913	4

Source: DoS, Jordanian Ministry of Higher Education and Scientific Research.

Most international students are from Arabic-speaking countries, such as Palestine, Kuwait, Iraq, and Syria, attracted by relatively high quality at a more affordable price than Gulf universities. Competition for international student places is low: foreigners enrolling in public universities pay high prices, typically 200–300 per cent more than Jordanian nationals, and in some cases face lower entry requirements. In comparison, private universities impose a single fee structure and have more lenient entry requirements, making them an attractive option for foreign students.

Prospective international students must have their applications approved by the Ministry of Foreign Affairs and their own country's embassy before

applying for a Jordanian student visa. Some scholarships are available through students' domestic governments: for example, the Embassy of Yemen subsidises up to 24 course hours per year for Yemenis studying in Jordan.

Overall, there are three incentives for universities and community colleges to welcome foreign students: the high fees offset university running costs; university rankings depend on the ratio of national/international students; and, at least in the case of Syrians and other refugee groups, there is a sense of humanitarian responsibility for Jordanians to support their Arab neighbours.

Policy and Regulations on Refugees and Higher Education

At August 2017, 660,422 Syrian refugees were registered with UNHCR in Jordan, around 18.5 per cent of them (120,000 people) aged 15–24. Despite this, only 13.3 per cent of Syrian refugees aged 19–23 were enrolled in higher education courses in 2016. This is much lower than the gross enrolment rate in tertiary education in Syria in the years leading up to the crisis, which averaged 24.6 per cent between 2007 and 2011.

There is no policy or regulatory framework pertaining to refugees and higher education in Jordan. Jordan is not a signatory to the 1951 Refugee Convention, and its 1998 Memorandum of Understanding with UNHCR makes no explicit reference to higher education, stating only that “refugees should receive treatment as per the international accepted standard” (article 5). This might be regarded as corresponding to Refugee Convention article 22(2):

The Contracting States shall accord to refugees treatment as favourable as possible, and, in any event, not less favourable than that accorded to aliens generally in the same circumstances, with respect to education other than elementary education and, in particular, as regards access to studies, the recognition of foreign school certificates, diplomas and degrees, the remission of fees and charges and the award of scholarships.

Jordan has effectively subscribed to this article: Syrian refugees are not distinguished in any way from other international students, by the Ministry of Higher Education and Scientific Research or by universities and colleges, apart from the fact that they may have access to more assistance from donors. This complicates efforts to disaggregate data on refugee participation in higher education. The exact number of Syrian refugees participating was mostly not available in the surveys and field visits conducted during this research: available data is detailed in Table 6.5, giving the number of Syrian students where other data is not available.

Table 6.5: Syrian Participation in Universities and Community Colleges

	Total registered	Syrian refugees	Syrian students	Percentage male/female
Jadara University	3,000	101		50/50
Ajloun University	739	10		50/50
Al Quds Community College, Amman	1751		87	59/41
Khawarizmi College	1142		128	53/47
Islamic Community College	477		58	0/100
Talal Abu Ghazaleh University		210		57

The data summarised in Table 6.5 suggests that universities and colleges in the north of Jordan, relatively close to the Syrian border, have larger numbers of Syrian refugees than those elsewhere in the country. This would include Yarmouk University, Jordan University of Science and Technology, and the Jadara in Irbid, Al al-Bayt University in Al Mafraq, and Jarash University in Jarash. Other universities with higher numbers of Syrian refugees include Amman and Talal Abu Ghazaleh (TAG) universities, which offer online courses.

Like any international students, Syrian refugees must present their secondary education certification, in this case the Syrian General School Certificate, to apply for a university place. Syrian refugees holding foreign education certificates such as the British GCSE, American SAT, or International Baccalaureate must present their qualifications to the Ministry of Higher Education, which then issues authorisation to the institution of choice. This poses problems for students who have fled their country of origin without their educational documentation. Anecdotal evidence suggests that some Syrian students have hired agents to obtain originals or copies of the required documentation from Syria.

Some universities are sympathetic to this challenge. Al al-Bayt University, for example, indicated that it would be prepared to offer placement tests for prospective students. This proposal was rejected by the Ministry of Higher Education and Scientific Research. Instead, in collaboration with Jordanian higher education institutes, the Ministry agreed to allow refugees to enrol onto courses and attend classes on the condition that they would not be able to graduate or obtain a degree/diploma until all required documentation had been submitted. Only TAG University appears to have found an exemption to this: students without the necessary documentation can apply for a one-term “qualifying programme,” at the end of which they take an exam. Based on their marks, they can apply for online degree courses thanks to a partnership between TAG University and Amity University in India. Most recently, the Ministry of Higher Education and Scientific Research approved the development of a qualification (placement) exam equivalent to the Jordanian high school diploma, which will allow Syrian students without original certificates to access higher education and training. Syrian refugees can now also use UNHCR certificates and Ministry of Interior service cards as ID for enrolment in lieu of passports.

Overall, private universities seem more willing than public universities to offer Syrian refugees flexible payment terms, such as payment by instalment or payment deferrals. Special discounts are offered by some universities, as detailed in the following section.

University and Donor Support for Syrian Refugees

As the Syria crisis has continued, the international community has increasingly recognised the importance of supporting refugee higher education.³ UN agencies and other higher education groups established a Tertiary Education Coordination Group (TECG) at the end of 2015. The 2016 call for funds emphasised higher education (including vocational education) as an integral component of the education sector. This recognition has been shown too by the higher education sector in Jordan, in line with Hashemite traditions of hospitality and offering refuge. The Jordan Response Plan⁴ recognises the role of higher education in longer-term resilience programming, alongside life-saving humanitarian assistance.

Numerous agreements between donors and individual universities have resulted in a range of scholarships being made available to Syrian students. They are typically enrolled under the parallel track, and hence pay higher fees, although some universities have taken steps to reduce fees in line with those for national students. Details of the different schemes available are summarised below. The main donors are:

- The EU's EDU-SYRIA initiative, funded through the Madad Trust Fund, which aims to engage 1,390 students in higher education, targeting Syrian refugees and a smaller number (300) of underprivileged Jordanians⁵

³ See for example "Co-Hosts Declaration from the Supporting Syria & the Region Conference, London 2016," Supporting Syria and the Region London 2016 conference, London, 4 February 2016; UNESCO. *Draft Preliminary Report Concerning the Preparation of a Global Convention on the Recognition of Higher Education Qualifications* (Paris: UNESCO, 2015).

⁴ Ministry of Planning and International Cooperation, *Jordan Response Plan for the Syria Crisis: 2016–2018* (Amman: MoPIC, 2015).

⁵ "EDU-SYRIA—A Scholarship Program," EDU-Syria, 24 February 2016, <http://edu-syria.eu/>.

- The Deutsche Akademische Austausch Dienst/German Academy Exchange Service (DAAD), in partnership with German development agency GIZ, which has supported 40 Syrians and 40 Jordanians to date⁶
- DAFI (the UNHCR/Albert Einstein German Academic Refugee Initiative Fund), which provided scholarships to 17 Syrians in 2013, 42 in 2014, and 59 in 2015 to study in Germany⁷
- The Institute of International Education (IIE) Syria Consortium of Higher Education in Crisis Fund, which has provided scholarships for 333 Syrian students to further their education in Jordan and the US⁸
- The US online University of the People and exam assistance association Kaplan Prep, which each established 500 scholarships in 2015 for Syrian refugees to study in the US⁹
- Kiron University, a German institution, which provides free online language and university courses for refugees and funding for students' final year at various universities

⁶ "Master's Scholarships for Jordanians and Syrians in Jordan: DAAD," Office of International Relations, the Hashemite University, 26 February 2015, http://hu.edu.jo/OIR/f_news.aspx?news_id=26801; "Scholarship Database," DAAD, 2 March 2016, www.daad.de/deutschland/stipendium/datenbank/en/21148-scholarshipdatabase/?status=3&origin=89&subjectGrps=F&daad=1&q=&page=1&detail=57194683; "New Perspectives for Young Syrians and Jordanians," DAAD, 2 March 2016, www.daad-jordan.org/en/27348/index.html.

⁷ UNESCO, *DAFI 2013 Annual Report* (Geneva: UNHCR, 2013); *DAFI 2014 Annual Report* (Geneva: UNHCR, 2014); *DAFI Annual Report 2011* (Geneva: UNHCR, 2012); *DAFI Annual Report 2012* (Geneva: UNHCR, 2013); *DAFI: Higher Education in Emergencies* (Geneva: UNHCR, 2014); "DAFI Programme," UNHCR, 1 January 2016, www.unhcr.org/pages/49e4a2dd6.html; "DAFI: UNHCR Tertiary Education Scholarship Program," UNHCR, 2015, www.unhcr.org/568bc62b9.html.

⁸ "IIE Syria Consortium for Higher Education in Crisis," Institute of International Education, 2016, www.iie.org/Programs/Syria-Scholarships; "Syria Scholarships. Universities: Join the Consortium," Institute of International Education, 1 October 2015, www.iie.org/Programs/Syria-Scholarships/Join-the-Consortium.

⁹ "University in a Box': American University Opens Gates to 500 Syrian Refugees," University of the People, 8 September 2015, www.uopeople.edu/about/worldwide-recognition/press-releases/#faq_answer_1_2.

Public Universities

At the University of Jordan, 30 places are available to Syrian refugees sponsored by DAAD. Another 13 are sponsored by the Jubilee Centre for Excellence in Education, and up to 100 by UNESCO, via the parallel programme. However, only 25 Syrians enrolled with UNESCO's support in 2017. The reasons for this low take-up are unclear.

At Yarmouk University, DAAD sponsors a number of Syrian students via the parallel programme, in partnership with EU HOPES. UNESCO also supports a number of students at the Queen Rania Centre for Jordanian Studies and Community Service at the university. 174 scholarship diplomas have been made available, as well as 74 single-semester scholarships for currently enrolled refugee students.

At the Jordan University of Science and Technology, DAAD sponsors 21 Syrian refugees. At the Hashemite University, 12 Syrian students are sponsored by the Jubilee Centre for Excellence in Education and one by UNHCR. The Hashemite University also offers any Syrian refugee a 25 per cent discount on fees.

Al al-Bayt University has signed a memorandum of understanding with UNHCR to offer 100 refugee students sponsorship over a wide range of programmes. Similarly, a five-year agreement has recently been signed between King's College London, the American University in Beirut, Kiron in Germany, and Future Learn in the UK to offer refugees a wide range of free online education packages. An agreement has also been signed between Al al-Bayt University, UNHCR, and the Reboot Kamp, offering intensive IT education to Syrian refugees with a focus on programming and web design. In cooperation with UNHCR and the British Council, new computer labs were provided to support Syrian refugees with IT skills and education.

UNHCR is sponsoring four Syrian refugees through courses at Al Hussein Bin Talal University.

Private Universities

At Amman Arab University, refugee students receive discounts of up to 75 per cent, and UNHCR-DAFI funding is available for a limited number of Syrian refugees. At Jadara University, Syrian refugees receive a 50 per cent discount. At Zarqa University, 500 scholarships have been offered by the EU; refugees enrolling through donor-funded programmes receive discounts. UNHCR-DAFI, the Emirates Red Crescent, the Amal Foundation, the EAP (English for Academic Purposes) Foundation, the Sheikh Fawaz Al Hokair Scholarships, the Al Ghara'a Association, the Yad Al Aown Association, and the Al-Zarka Educational and Investment Scholarships all offer scholarships; details of the numbers benefiting are unavailable. Jerash University introduced reduced fees in 2016/17. Ajloun National University offers reduced fees to students coming through donor agencies. The EU supports 250 students at TAG University.

Community Colleges

Twenty community colleges were contacted regarding scholarships and financial assistance for Syrian refugees during this research. Only one, Al Quds, confirmed that, in partnership with other Jordanian universities, it offers 250 scholarships. Those wanting to pursue technical and vocational training at Al Quds can do so through the EU and the EDU-SYRIA 1 and EDU-SYRIA 2 projects.

Challenges for Students

Education Gaps

Perhaps the main challenge for refugees wishing to enter higher education is lack of continuity in schooling. In principle, the Jordanian government offers education to all Syrian refugees living in Jordan. Syrian children are offered places in Jordanian schools, although many are oversubscribed and run on double-shift systems, but many Syrian children are not enrolled, and consequently do not obtain the secondary school certification necessary to enter university or community college. It is essential to build in systems to allow those with education gaps to re-enter the

higher education system. The Norwegian Refugee Council¹⁰ and the UN Population Fund, for example, run youth centres in Za'atari and Azraq. UNESCO has recently launched a BTEC “Youth Skills Development and Mentoring” project, providing targeted skills training to enable students to enter higher education or the workforce. However, many interventions are project-based, with short-term programming cycles and insufficient investment in systems.

Future Opportunities

For many Syrian refugees, uncertainty about their future (whether they can return to Syria and what this will entail) and lack of employment opportunities reduce motivation to enter higher education. Many refugees are preoccupied with day-to-day living needs, particularly finding employment, rather than future-driven educational investments.

Mobility

Camp-based refugees attending university need permission to leave their camp. They can obtain a yearly license depending on the course they are enrolled in. However, even when they are admitted to a course, the financial burden of transport is often an issue.¹¹

Cost and Continuity

Financial limitations remain a key barrier. Although there are many scholarships available, they are not widely publicised. Additionally, not all donors support an entire programme of study; many support students on an annual or termly basis. Unless there is full financial support for the duration of a course, many Syrians are reluctant to commit.

Access to Information

Lack of information on eligibility, enrolment procedures, and financial assistance has led to low levels of uptake for certain programmes. In response, UNESCO initiated the Jami3ti (“My University”) Initiative

¹⁰ Norwegian Refugee Council, *Drivers of Despair: Refugee Protection Failures in Jordan and Lebanon* (Oslo: Norwegian Refugee Council, 2016).

¹¹ Daniela Z. Kaisth and James R. King, “Syrian Refugees in Jordan—From Camps to Campus,” *University World News*, 19 September 2014.

in 2015,¹² an online Arabic database listing around 2,000 scholarship opportunities and other information resources.

¹² UNESCO and the EU, *UNESCO-EU Jami3ti Initiative: Mapping of Higher Education Needs & Opportunities for Syrian Refugees* (Jordan: UNESCO, May 2015); “Jami3ti: Linking Refugee and Vulnerable Youth to Higher Education & Training,” UNESCO, 1 December 2015, <https://amman.unesco.org/home/index?lang=1>.

7: Civil Society and the Power Balance with Donors and the Government

Esraa Alshyab, Dr Erica Harper, and Mahmoud Nabulsi

This chapter discusses the value that civil society organisations (CSOs), particularly community-based organisations (CBOs), can add to their local communities in Jordan. It reviews the literature, defining and describing the state of civil society in West Asia and North Africa. It details the birth of civil society in Jordan, and the evolution of political movements from 1923 until 2017. It goes on to analyse the impact of CBOs in Jordan and identify constraints. It also highlights opportunities for civil society. Lastly, it looks at the relationship between the state and civil society and presents recommendations to strengthen CBOs' impact in Jordanian communities.¹

Civil Society: A Definition

While references to civil society date back to ancient Greek philosophy, the modern concept of an autonomous space, distinguishable from and at least partially independent of the state, is first found in Thomas Paine's political theories.² It has been argued that this new conceptualisation of citizens in terms of their own interests, expectations, and vision reflected changed economic conditions brought on by the industrial revolution, and evolving social conditions inspired by the American and French revolutions.³ The concept re-emerged in the late twentieth century, with renewed vigour and anticipation. The role of citizenry and non-government groups in the democratisation movements of the 1980s and 1990s demonstrated civil

¹ The chapter relies on primary and secondary data, including data collected as part of the WANA Institute's Jordan Civil Society Initiative, which aims to support Jordan's civil society sector to be more active and have greater impact. The Institute conducted focus group discussions and study groups with CBOs, think tanks, CSOs, activists, and youth initiatives between March and July 2017.

² Aisha Ghaus-Pasha, "Role of Civil Society Organizations in Governance," December 2004, paper prepared for the 6th Global Forum on Reinventing Government, 24–27 May 20015, Seoul, Republic of Korea.

³ T. Carothers, "Civil Society," *Foreign Policy*, Winter 1999–2000.

society's potential. This influenced the development agenda: civil society was increasingly viewed as a tool for extending essential state services, combating poverty, and promoting social and economic reform.⁴

One impact of this broad evolution is that the term “civil society” lacks a clear, undisputed definition. As a philosophical concept, it speaks to the social contract between the state and its people—a civic space separated from the government and private markets.⁵ This is perhaps best captured by de Tocqueville, who defined civil society as an “autonomous area of liberty incorporating an organisational culture that builds both political and economic democracy.”⁶ As a politico-development concept, however, civil society may be better understood in either structural or functional terms.

Structurally, civil society can be seen as composed of five main groups:

1. Professional organisations such as labour unions, guilds, or syndicates, which provide economic and social services to their membership.
2. Service delivery organisations, commonly known as not-for-profit or non-government organisations, whose work augments or substitutes state services, charity, or development.
3. CBOs, with similar objectives to service delivery organisations but generally smaller, more localised, less formal, and likely to be self-funded and reliant on volunteers, and to have less interaction with the state sector.
4. Non-profit religious institutions.
5. Organisations promoting good governance, including democratisation, through activities such as civic education, training, advocacy, and applied research.⁷

⁴ Ghaus-Pasha, “Role of Civil Society Organisations.”

⁵ Mohammed Marwan, “What is Social Contract?” Mawdoo3.com, 31 August 2014 (in Arabic).

⁶ G. Walton, “Civil Society and Development: Moving from de Tocqueville to Gramsci,” Development Policy Blog, 17 August 2015, <http://devpolicy.org/civil-society-and-development-moving-from-de-tocqueville-to-gramsci-20150817/>; for further definitions see Ghaus-Pasha, “Role of Civil Society Organisations.”

⁷ A. Hawthorne, *Middle Eastern Democracy: Is Civil Society the Answer?* Carnegie Papers 44 (Washington, DC: Carnegie Endowment for International Peace, March 2004).

Box 7.1: Definitions of Civil Society

The **World Bank** has classified civil society as “a large group of non-governmental organisations, trade and labour unions, indigenous groups, charitable organisations and non-profit religious organisations that have a presence in the public sphere, and express the interests and values of its members and others, based on ethical, cultural, political, scientific, religious or charitable considerations.”

A group of **Jordanian scholars** have defined civil society as “applying best practices of social participation between individuals and the state.”

Sources: World Bank, “Civil Society,” 2017, www.worldbank.org/en/about/partners/civil-society; Mustafa Kushaim, “Civil Society between Theory and Practice,” *Dirasat Magazine*, no. 24 (n. d.).

Functionally, three purposes of civil society can be identified:

- 1. Service provider:** benefiting the poor, those living in isolated areas, or those who cannot avail themselves of state services because the state is unwilling or unable to provide them.⁸ Globally, service provision accounts for the largest proportion of civil society’s budget and labour force.⁹ It is often ideally situated to perform this role in developing, conflict-, or disaster-affected environments where state entities are unable to. In other cases, CSOs operate more efficiently than government, especially where corruption and bureaucracy is rife. CSOs also enjoy trust and access, and can forge innovative solutions due to close connections with the community.
- 2. Agent of good governance:** essential in connecting people, public sphere, and private sector. Through consultation and advocacy, civil society feeds local perspectives into policy-making and implementation. It also educates on civic rights and participation in public affairs, and mobilises and facilitates collective action. This fuels the development of “social capital”—“the web of associations, networks and norms

⁸ Ghaus-Pasha, “Role of Civil Society Organisations.”

⁹ Education and social services dominate, with a share of about 43% of the service function; the service functions of civil society on average absorb the largest share of CSOs’ workforce in developed and developing countries (64% and 63% respectively). Ibid.

(such as trust and tolerance) that enable people to cooperate with one another for the common good” which Robert Putnam has termed a *sine qua non* of good governance and sustainable development.¹⁰

- 3. Oversight:** a check and balance on government, monitoring public sector performance, actions, and decision-making. Civil society can promote accountability, efficiency, and responsiveness in democratic and non-democratic contexts; advocate for reform, transparency, and democratisation; and monitor human rights protections and civic freedoms.

Whether understood as a philosophical concept, a set of structures, or in terms of its functional value, civil society’s proliferation and strength of influence is unquestionable. A study by the Johns Hopkins Comparative Nonprofit Sector Project showcased the sector’s economic power: in 36 developed, developing, and transitional states, sector expenditure equated to 5.4 per cent of combined GDP, and 4.4 per cent of total employment.¹¹

Civil society also constitutes a potent political force. Organised popular action has played a pivotal role in political transitions across the globe, and has led to key areas of rights reform, including in LGBT rights, gender equity, and minority protection. Aisha Ghaus-Pasha offers two insights into this escalation in influence. First, the information revolution, particularly individuals’ ability to collect, share, and publicise images, data, and video, has transformed how rights-holders and duty-bearers are monitored and protected. Second, civil society possesses the unique currency of ethical and moral authority, because it represents the “*public* or the *general* interest against official- or power-driven interests of the state or of the economy.”¹²

It is thus not surprising that civil society has been imbued with a panacea-like quality. Dubbed the “world’s new superpower” by then-UN Secretary-General Kofi Annan in 2005,¹³ civil society is now seen as having the potential to drive political reform and poverty reduction and to lead on global challenges such as climate change. Whether this is premature,

¹⁰ Education and social services dominate, with a share of about 43% of the service function; the service functions of civil society on average absorb the largest share of CSOs’ workforce in developed and developing countries (64% and 63% respectively). *Ibid.*

¹¹ Ghaus-Pasha, “Role of Civil Society Organisations.”

¹² *Ibid.*

¹³ “‘New Superpower’ Seeks ‘Better World,’” press release, Inter Press News, 3 June 2005, www.globalpolicy.org/component/content/article/177/31634.html.

overly ambitious, or an injudicious transfer of responsibilities away from government is the subject of intense academic and policy debate. It also raises a serious question about the limits of civil society's reach and impact in one of the regions arguably most in need: West Asia-North Africa. Specifically, why, given the proliferation of CSOs and the amount of donor funding injected into this sector, has it had such limited influence on public policy, governance, and the lives of the poor?

Civil Society in West Asia-North Africa

Civil society certainly exists in the WANA region, in each of the structural forms discussed above. The evolution of Arab civil society comprises phases of expansion-liberation and contraction-regulation, based on political forces and trends.¹⁴ Modern forms of civil society such as professional associations, trade unions, and cultural clubs evolved during the colonial period. Political organisations, such as the Muslim Brotherhood, were also born, and would go on to play important roles in nationalist struggles and in supporting pan-Arab causes.

The post-independence phase witnessed a first contraction of civil society. Larger, more powerful organisations morphed into state institutions; those remaining were subject to strict regulation and oversight. Fledgling governments “feared that pluralistic, independent associative life would undermine national unity and threaten their own attempts to consolidate power.”¹⁵ This was consistent with the mapping out of the Arab social contract, whereby governments bore responsibility for citizens' food security, education, healthcare, and livelihoods, in return for political acquiescence.

The latter part of the twentieth century saw liberalisation and diversification. Professional organisations, societies, and guilds became more common, while CBOs and service-providing NGOs expanded their reach. This was a response to economic liberalisation packages, which constrained states' capacity to provide services. International aid flows increased, and CSOs stepped up as a safe, reliable conduit. In some cases, external influences such as the human rights and democracy movements also played a role

¹⁴ Hawthorne, *Middle Eastern Democracy*.

¹⁵ *Ibid.*

in organisations' expanded operational space—a calculated pressure-value move intended to give the appearance of offsetting state largesse. These factors explain why civil society proliferation occurred more in relatively poor, aid-abundant Arab states (Egypt, Jordan, Yemen, Morocco, Tunisia) than in the Gulf states (Oman, Qatar, Saudi Arabia, and UAE), with their oil wealth, where independent citizen organisations were, and remain, essentially prohibited and those that do exist are closely connected to or operate as quasi-state organisations or Islamic charities.¹⁶

Although there are some exceptions, civil society throughout the region can be classified as weak, non-influential, and operating under strict state control. In more moderate environments, organisations are subject to restrictive legal frameworks that regulate formation, funding, operational decision-making, and reporting. In more severe contexts, organisations face periodic forced closure, judicial and security sector harassment, and detention of staff.

Civil society is controlled and regulated by being made a literal extension of the state. A Carnegie report gives examples of states where CSOs are government-funded, established by former state employees, or led by government appointees. In Kuwait, for example, all registered voluntary associations receive meeting space and annual subsidies. Government-NGOs and Royal-NGOs—CSOs run by senior officials or members of the executive as a vehicle for monitoring civic groups or re-routing development funding—are part of Arab vernacular. On one hand, such “intertwining relationships make those civil society groups reluctant to take actions that could jeopardise their ties to the officials who facilitate them.” On the other, their organic composition means that their mission is not to challenge systems or institutions, but to “provide the services and socioeconomic development necessary to maintain social stability.”¹⁷

Professional associations sometimes have more independent leaderships, but their members, like union members, are largely state employees or depend on government goodwill for their economic survival. Chambers of commerce are dominated by businesspeople who similarly rely on close economic and personal ties to government officials. Many think

¹⁶ Also, the currently conflict-affected Libya and Syria.

¹⁷ Hawthorne, *Middle Eastern Democracy*.

tanks, staffed by private citizens but funded by government, are not truly independent. More nefariously, security services have infiltrated the pro-democracy sector, creating organisations that duplicate the work of and siphon donor funds from genuinely independent groups. Donors have difficulty distinguishing these front organisations from the real thing.¹⁸

In short, the nature, reach, and influence of civil society in the region is more often than not determined by the state. The sector thus represents almost the antithesis of how civil society is commonly understood, i.e. as an organic, independent outgrowth of the citizenry in response to their needs, expectations, and aspirations. State control was perhaps most clearly demonstrated following the so-called Arab Spring, regarded by many as the consequence of governments allowing the civic space to grow too liberally. Some states such as Jordan saw liberalising reforms pertaining to civic freedoms,¹⁹ but the broader result was clampdowns on individuals and organisations representing threats to the state monopoly on power. States have also used exogenous events—e.g. rise of Daesh—as a pretext to increase restrictions and state oversight.

Civil Society in Jordan

A series of local, regional, and global events contributed to the establishment of the Jordanian state in 1921 and the formation of political life in the country. New organisations, parties, and associations were founded, for example, with the aim of ending the British mandate, while others evolved to offer support for and solidarity with the people of Palestine.²⁰

The concept of civil society first emerged in a Jordanian newspaper article in 1923, which defined CSOs and lobbied the government to abandon traditional social ties such as tribalism and transition towards modern

¹⁸ Hawthorne, *Middle Eastern Democracy*.

¹⁹ Including the formation of a Constitutional Court and an Independent Election Commission to oversee elections, and reform of the Political Parties Law, Electoral Law, and Public Gatherings Law; A. M. Awad and E. Sarayra, *Enabling Environment National Assessment. Country Report: Jordan* (Amman: Phenix Center for Economic and Informatics Studies, 2015).

²⁰ The Balfour Declaration (1917) voiced Britain's support for the establishment of a national home for the Jewish people in Palestine. It was followed by the British mandate over Palestine in 1921. Kushaim, "Civil Society between Theory and Practice."

civil society engagement.²¹ With fledgling undertones of democratic governance, a Legislative Council was established (1929–46), allowing CSOs and parties to participate in public life. This paved the way for the formation of social and political movements, including chambers of commerce, social associations, and sports, cultural, and political clubs. Their number did not exceed 50 at the time, and most political parties lacked a clear vision and were not active for long. The same is true of the women's associations that emerged in the late 1940s.²²

The period 1950–74 saw fundamental changes. The entry of large numbers of Palestinian refugees into Jordan in 1948 changed the nature of CSOs' work from policy to charity, with a sharp increase in entities providing humanitarian relief and social aid. Despite clashes within the government and regional geopolitical instability in the early 1950s,²³ the 1952 Constitution Article 16 put in place a right to establish civic organisations. Law no. 33 regulating social organisations was not passed until 1966, however, and was very restrictive. In 1967, the executive branch enacted an emergency law dissolving the elected parliament. Parliamentary elections were again suspended in 1974.

Positive steps were taken in 1978, when a Consultative Council was created to provide a voice for people's concerns. The Council ran until 1984. Economic downturn commencing in 1985 meant that political development waned and professional associations became less active.²⁴

Popular protests in 1989 resulted in more political openness, democratisation, a return to active parliamentary life, and the abolition of martial law. The new political climate reinstated civil society's growth and people's participation in policy development and state affairs.²⁵ The National Charter, based on a political reconciliation between opposition forces and the state, was promulgated in 1991.²⁶ It called for political and legislative reforms, including in the areas of political multiplicity and media participation; legislation governing the work of CSOs followed.

²¹ Awad and Sarayra, *Enabling Environment*.

²² Muhammad Jrabieea, *Civil Society and the State in Jordan* (Kuwait: Transparency Society, 2013). See also Awad and Sarayra, *Enabling Environment*.

²³ This led to a suspension of political parties, and the arrest of several party leaders. Awad and Sarayra, *Enabling Environment*.

²⁴ Jrabieea, *Civil Society and the State*.

²⁵ *Ibid.*

²⁶ Awad and Sarayra, *Enabling Environment*.

A breakthrough was the Companies Act no. 22 of 1997 allowing the establishment of not-for-profit companies.²⁷ Following this, the number of NGOs, CBOs, Islamic charities, professional associations, and political organisations grew steadily. In 2008, the Law of Societies no. 51, regulating charities and social organisations, was promulgated, reducing the minimum number of people required to form an association from 50 to 7 and leading to a marked increase in the number of active organisations. Amendments in 2009 loosened restrictions further.

The civil society environment has waxed and waned in sync with political events. As noted above, the Arab Spring spurred reforms, but subsequently some regression has taken place. The emergent threat of violent extremism ushered in new legislative amendments (to the Anti-Terrorism Law and the Press and Publications Law), arguably curtailing civil society freedoms.²⁸ Some argue that public order, national security, and anti-terror laws give broad scope for politicised and selective interpretation. Others argue that these are necessary, prudent measures to protect society from tangible threats.

Impact Analysis of Civil Society in Jordan

In 2017, the number of registered Jordanian associations was 5,628,²⁹ with a further 595 not-for-profit companies registered at the Ministry of Industry and Trade.³⁰ The most common form of CSO is Islamic charities, which are generally well-regarded for delivering material assistance to poor and isolated areas. NGOs, typically internationally funded and Amman-based, are significantly outnumbered by CBOs operating at sub-governorate level. The latter, while poorly resourced, are vital sources of community protection and assistance, and enjoy among the highest levels of trust of all

²⁷ Not-for-profit companies are registered subject to Regulation no. 73 of 2010 of the Not-for-Profit Companies Act, issued by virtue of Article 7, paragraph D of the Companies Law (No. 22) of 1997. Ibid.; Civicus, *State of Civil Society Report 2017* (Johannesburg: Civicus, 2017).

²⁸ Ibid.

²⁹ Laila Azzeh, "Ministry to Restrict Funding to Societies 'Improving Citizens' Wellbeing,'" *The Jordan Times*, 22 August 2017. In 2015 there were 4,482 associations, with around 1.5 million members, equivalent to 43% of the working-age population. Around one-quarter are social and charitable societies, accounting for around half of CSO membership; Awad and Sarayra, *Enabling Environment*.

³⁰ Saad Eddin Ibrahim, *Civil Society and Democratic Transformation in the Arab World*, Ibn Khaldun Center for Development Studies (Cairo: Dar Qabaa, 1999).

organised groups. There are many youth and women's organisations, many of which are highly active and enjoy decades-long operational legacies. Cooperative societies provide cash to poor or crisis-prone households and facilitate activities based on communities' economic needs, such as producing pickles, milk, cheeses, apple cider vinegar, and olive oil; sewing; or ceramics. Income-generating kitchens, providing affordable food cooked by women from local communities, form an integral part of community empowerment. A head of one charity noted: "we rely on economic development programmes such as selling soap and traditional clothing that generate income for many poor families."

Societies managed by or closely connected to members of the royal family are also significant players. While few in number, they tend to be better resourced and professionally managed. Positive examples include the King Hussein Cancer Foundation, the Royal Scientific Society, and the Jordan River Foundation.³¹ Pro-democracy and media organisations are less numerous but have grown significantly over the last two decades. An Amman-based CSO, for instance, is tasked with monitoring local parliamentary and municipal elections, parliamentary performance, and local government plans for enhancing transparency, accountability, and public participation.³² Others lobby for changes to laws such as the labour law, women's right to work and equal opportunities, property law, and women's rights to maternity leave and inheritance.

This paints a positive picture of the sector, yet these organisations are low-impact in terms of service delivery, promoting good governance, and public sector oversight. Three mutually reinforcing factors contribute to an overall environment of institutional disempowerment.

First, in most cases, CSOs have extremely low operational capacity. Most lack efficient governance structures and clear, coherent strategies, and their work methodologies do not reflect modern development paradigms.

A second constraint is funding. Corporate social responsibility, philanthropy, and volunteerism are low-scale and underdeveloped. The Society Support Fund of the Ministry of Social Development channels

³¹ Awad and Sarayra, *Enabling Environment*.

³² "Our Programs: Accountability, Governance and Participation – RASED (The Observer)," Al-Hayat Centre for Civil Society, 2017.

meagre resources, and its protocols are difficult to navigate.³³ “There are resources and opportunities, but we do not get access to them through local governments,” said a young male CBO worker interviewed for this research. International donors provide the largest source of funding, but low capacity limits the ability of NGOs and CBOs to attract significant or sustainable financing. In a vicious cycle, without civil society capacity, strategic vision, or collective strength, priorities are largely set by donors. The development trajectory thus often reflects donor interests, not community development imperatives or target group needs. Many donors consulted as part of this research referred to CSOs as having a “chameleon” quality—fundamentally transforming their mandate to become eligible for an available funding pool.

Too often civil society assistance [is] designed around an American agenda of what issues NGOs should focus on and how. Financially strapped NGOs usually try to be responsive to such donor agendas in the hope of receiving funding, even when the recommended activities do not have much local resonance. This phenomenon is evident in the large numbers of Arab NGOs working on the environment and on women’s issues, recent donor favorites, as well as in the launching of advocacy campaigns by service NGOs that have never before undertaken such activities.³⁴

Third, networking and cooperation is lacking. While the few exceptions have yielded highly positive results, alliances are rarely sustained beyond the temporal limits of donor funding. The Integrated Social Aid Network (INSAN) contributed to the UN Human Rights Council’s Universal Periodic Review (UPR), and a network of women’s rights CSOs issued a shadow report alongside the government’s report to the Committee for the Elimination of Discrimination against Women (CEDAW).³⁵ These reports brought important rights-based challenges to the international

³³ Awad and Sarayra, *Enabling Environment*.

³⁴ Hawthorne, *Middle Eastern Democracy*.

³⁵ Awad and Sarayra, *Enabling Environment*.

community's attention and opened communication channels between stakeholders capable of initiating reforms. Both networks were made possible by donor funding, but neither were sustained. Some feel funding competition drives this lack of cooperation, but a lack of strategic vision, broad goals, and collective appetite for change in the sector is arguably the pivotal issue.³⁶

Thus, civil society unsurprisingly has little impact on government policy-making, and the few initiatives that have been launched have enjoyed varying levels of success. In 2009 the Jordan Economic and Social Council was established, with aims including enhancing multi-stakeholder dialogue with government, civil society, unions, and professional associations; but few of those interviewed for this research were aware of the Council's work. A more successful example is the *Jordan 2025* strategy developed by the government with tangible civil society input. In general, however, government–civil society relations entail a mutual air of ambivalence around each other's contribution. Interviews conducted for this research suggest that government views civil society as unable to constructively inform its policy agenda, while civil society regards the state as uninterested in the development of a robust civil society. Both of these perspectives have a measure of validity.³⁷

The State–Civil Society Relationship

Regionally, state approaches to civil society might be labelled “transparently authoritarian” and the sector is rigidly controlled. Four pertinent examples from Jordan are discussed below.

Approvals for establishment: Associations created under the Societies Law require prior government approval.³⁸ Over a 20-month period in 2013–14, 120 applications for registration out of 1,031 (12 per cent) were refused.³⁹ The Societies' Registrar need not provide the grounds for rejection,

³⁶ Ghaus-Pasha, “Role of Civil Society Organisations;” Awad and Sarayra, *Enabling Environment*. Recently, a coalition of 13 Jordanian CSOs—Himam—was established to promote democracy. It aims to develop a common code of conduct, foundational documents, and by-laws that could be adopted widely by Jordanian CSOs.

³⁷ Awad and Sarayra, *Enabling Environment*.

³⁸ Article 11 of the Societies Law; the registrar for Ministry of Social Development gives approval.

³⁹ Civicus, *State of Civil Society*.

making it difficult to launch an appeal. Not-for-profit companies require no such prior permission, but can only operate in the areas of education, health, micro-finance, and training.⁴⁰

Operational decision-making: Associations are required to inform the Registrar in advance of a general assembly meeting (which an observer from the Ministry of Social Development will usually attend), and to send copies of any decisions made within 15 days.

Activities: The General Statistics Law (2012) requires all associations and research centres to obtain government pre-approval on the content of any survey, including questions posed, methodology, and target group; approval is also required before results are published.⁴¹ A Zarqa CBO manager interviewed for this research highlighted the difficulties this created, noting that funding from donor institutions depends on the involvement of groups from the local community. They “strive to involve the voices of target groups in our papers as much as we can through interviews and focus groups.”⁴² Permissions, however, are a recurrent challenge.

Funding: Government approval is needed before associations and not-for-profit companies can receive international funding or undertake domestic fundraising campaigns or funded activities.⁴³

These restrictions are complex and poorly understood by civil society leaders, leaving them vulnerable to reprimands, fines, or closure. This research found that 40 per cent of CSOs were unaware of the legal frameworks governing their work. Collectively, the requirements contribute to an environment encouraging civic entities to operate within known boundaries and refrain from activities that would compromise state legitimacy and policies.⁴⁴ The regulatory framework arguably fails to

⁴⁰ Registration is handled by the Department of Companies Registration in the Ministry of Industry and Trade.

⁴¹ Awad and Sarayra, *Enabling Environment*.

⁴² Focus group, Civil Society and Youth, Amman, WANA Institute.

⁴³ Awad and Sarayra, *Enabling Environment*.

⁴⁴ Awad and Sarayra, *Enabling Environment*.

correspond with international standards on civic organisation.⁴⁵ In this Jordan is consistent with other regional states and the social contract underpinning the Arab governance model. Yet in many ways Jordanian civil society enjoys unusual independence and freedom, with a space where social and political activists can express their views, albeit in a judicious and strategic manner. In some other countries in the region, independent civic activity is outlawed, organisations can engage only in social welfare and cultural activities, or organisation members need to be vetted by the security services.⁴⁶

Conditions for an Impactful Civil Society

In these circumstances, CSOs will not necessarily generate changes in governance or policy-making: “the zone of civil society in Arab countries *can* be a source of democratic change, but it is not *inherently* one.”⁴⁷ For civil society to have an impactful role, certain conditions are needed that WANA states do not currently possess. The importance of a state that is at least open to the idea of a robust civil society has already been discussed. There are two other important conditions.

First, it is questionable whether there is sufficient popular support for an active and vocal civil society. The Arab social contract engrained in the socio-cultural fabric life still operates largely according to tribal hierarchies and clan networks. Decades of authoritarianism and unrest have driven a climate of political apathy. Prior to the 2011 Arab Uprisings, the participation rate in any form of civic grouping was under 4 per cent; membership in political parties and participation in volunteerism were even lower, both at 1 per cent.⁴⁸ One CBO worker interviewed stated, “I can’t not volunteer, volunteering has become an essential part of my daily life and has enriched my humanitarian values.” But he acknowledged that his view was unusual. Lack of interest in participatory politics is an extension of protracted authoritarian governance. Another explanation

⁴⁵ As set out in the Universal Declaration of Human Rights (1948), the International Convention on Civil and Political Rights (1966) with its two Optional Protocols, the International Convention on Economic, Social and Cultural Rights (1966), and International Labour Organization Convention no. 87 (1948). Awad and Sarayra, *Enabling Environment*.

⁴⁶ Hawthorne, *Middle Eastern Democracy*.

⁴⁷ *Ibid.*

⁴⁸ Civicus, *State of Civil Society*.

is that civil society has not developed a sufficiently attractive alternative to the Arab social contract that appeals to people's real-life concerns and cultural imperatives. Part of this is that the general population is highly suspicious of any agenda that might be depicted as Western, democratic, or rights-based.⁴⁹ It also contributes to a cycle of disenfranchisement. The lack of a "unifying vision for social and political transformation" among civil society actors prevents alliance-building, collaborative strengthening, and progressive influence.⁵⁰

Second, despite the rhetoric, it is questionable whether there is sufficient interest from donors or the international community in a 'game-changing' or 'superpower' civic sector. The dominant development paradigm strongly favours nationally led strategising, prioritisation, and implementation. The mandate of organisations such as UNDP dictates that the government is their principal interlocutor. This creates challenges when government interests cannot be reconciled with civil society growth. Moreover, more than wanting to see a reformed, politically liberal WANA region, the international community wants to see peace. Any moves that might reduce stability are staunchly avoided.

In short, civil society, under current conditions, has limited capacity to act as a change-maker for political reform and good governance, or as a service provider. It simply does not enjoy enough of the enabling conditions, and the strength of oppositional vested interests is too great.

Yet the importance of a competent, empowered, robust civil society cannot be questioned. In contexts of weak governance, chronic conflict, and inequality, civil society can play a fundamental role in empowering citizens, elaborating basic rights, and shaping policy innovatively and constructively. Stakeholders must move beyond calls for a mere "strengthening" of the civil society sector, and instead embark on an exercise of envisioning what a responsive, impactful civil society might look like in the WANA region. We need to let go of the assumption that a Western-style, people-powered civil society is the best solution. As donors have repeatedly discovered, attempts to use foreign constructs as development solutions are rarely effective. The version of civil society will need to be palatable to the current

⁴⁹ Hawthorne, *Middle Eastern Democracy*.

⁵⁰ Hawthorne, *Middle Eastern Democracy*.

ruling bargains. This is not a sell-out: it is pragmatism and prudence. No entity—government, international actor, or population—wants conflict or instability. To aid the process, discussions on the evolving nature of the Arab social contract should be at the fore. Civil society can both be a key driver of this process and a pillar in its composition. This new set of ruling bargains must take into account diversified forms of income, the interests of the youth bulge, and environmental protection. State–populace relations need to be forged—a unified vision for Arab socio-political transformation that civil society, governments, and international stakeholders can get behind. Until something worth fighting for is on the table, expecting civil society to deliver it is too great an ask. We close this chapter with some key recommendations of civil society leaders interviewed for this research:

1. Establish several councils consisting of state and civil society actors equipped to tackle various issues. There could be a council on human rights, one on culture, one on labour rights—including the establishment of new trade unions—etc. These councils would promote the principle of joint action and responsibility, create a culture of dialogue, and help civil society to recognise the state’s vision and attitudes. They should produce clear unified national plans that identify all needs and resources available, as well as joint working mechanisms. Legislation governing civil society should be amended to reflect this partnership.
2. Educate public sector employees and the general population about the role and importance of civil society. Develop a joint media strategy for civil society and the state to highlight their partnership and raise awareness of the contributions of civil society.
3. Develop the capabilities and skills of organisations to carry out their tasks efficiently, effectively, and continuously; the technical skills to develop an identity, image, mission, and vision; and internal management processes.

4. Enhance inter-organisational networking skills to build relationships and alliances among the community, government, non-governmental, and private sectors.
5. Enhance women's participation, particularly on administrative boards.⁵¹

⁵¹ Center of Secular Studies and Research, "Civil Society Organisations, the Establishment of Mechanisms and Work Tools and the Achievement of Goals," SSRCAW, 31 July 2009, www.ssraw.org/ar//print.art.asp?aid=179782&ac=2.

8: Climate Change Adaptation in Jordanian Communities: Limitations, Opportunities, and Incentivisation

Lara Nassar

Jordan's climate is changing. Average temperatures are increasing, while rainfall is declining. These trends are projected to worsen, and will not be limited to progressive changes such as heat and drought: sudden and extreme weather events will be more common, meaning a likely increase in flash-flooding and unexpected frosts.¹ Jordan is already one of the world's 10 water-poorest countries,² perhaps even the second poorest.³ Increased temperatures and worsening drought⁴ will affect Jordan's food production and security, the availability of water for human consumption and industrial purposes, and the stability and sustainability of ecosystems. Prioritising climate change adaptation is thus vital to realising development goals such as poverty reduction, improving infrastructure and reducing environmental risks.⁵

This chapter offers a case study of the capacity of one rural Jordanian community to adapt. The data collection tools used, empowered community members to assess the changes taking place in their communities, and their impacts on their livelihoods. The tools thus represent a framework with strong upscaling potential that should be considered by policy-makers as implementation begins of both the Sustainable Development Goals (2015) and the Paris Agreement (2016).

¹ USAID, *Climate-Resilient Development: A Framework for Understanding and Addressing Climate Change* (Washington, DC: USAID, 2014).

² "About Jordan," UNDP, n. d., www.jo.undp.org/content/jordan/en/home/countryinfo.html.

³ Hana Namrouqa, "Jordan World's Second Water-Poorest Country," *The Jordan Times*, 22 October 2014; "World Water Resources by Country," FAO Corporate Document Repository, n. d., www.fao.org/docrep/005/y4473e/y4473e08.htm.

⁴ UN-Water, *Climate Change Adaptation: The Pivotal Role of Water* (Geneva: UN-Water, 2010).

⁵ Mohan Munasinghe and Rob Swart, *Primer on Climate Change and Sustainable Development: Facts, Policy Analysis, and Applications* (Cambridge: Cambridge University Press, 2005).

Climate Change Vulnerability and Adaptation

Adapting to climate change cannot replace global measures to reduce greenhouse gas (GHG) emissions. However, it is now broadly accepted that mitigation measures will not prevent at least some significant climate change over the coming century.⁶ As such, “adaptation and mitigation are complementary strategies for reducing and managing the risks of climate change.”⁷

The IPCC defines climate change vulnerability as “the degree to which a system is susceptible to, or unable to cope with, the adverse effects of climate change, including climate variability.”⁸ This is based on a framework proposed by CARE International’s Poverty Environment and Climate Change Network,⁹ which understands vulnerability as an interplay of three main factors:

- Exposure (to climate variability and change)
- Sensitivity (to climate stress)
- Adaptive capacity (a system’s ability to adjust to moderate potential damage, take advantage of opportunities, and cope with the consequences)

The aim of increased adaptive capacities is thus to decrease climate change vulnerability and create more resilient societies.

⁶ UNEP defines climate change mitigation as “efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behavior.” See “Mitigation,” UNEP, n. d., www.unep.org/climatechange/mitigation/.

⁷ Munasinghe and Swart, *Primer on Climate Change*, 17.

⁸ See “Conceptual Framework for the Identification and Assessment of Key Vulnerabilities,” *Climate Change 2007: Working Group II: Impacts, Adaptation and Vulnerability*, IPCC, www.ipcc.ch/publications_and_data/ar4/wg2/en/ch19s19-1-2.html.

⁹ Angie Dazé, *Understanding Vulnerability to Climate Change: Insights from Application of CARE’s Climate Vulnerability and Capacity Analysis (CVCA) Methodology* (Care PECCN, November 2011).

While the framework does not enjoy universal consensus,¹⁰ it is a valuable tool for assessing a community's capacity to adapt to climate change impacts. As it sets out, to reduce vulnerability it is necessary to decrease one of its driving factors. But while interventions to reduce sensitivity or increase adaptive capacity are possible, a system's exposure is fixed. If a local community has only one water resource available for agriculture, it will be highly sensitive to the impacts of water shortages. Adaptation measures such as integrated water resource management and water-saving technologies will reduce overall sensitivity, and hence vulnerability. A community lacking knowledge about climate change and dependent on one means of income generation (e.g. agriculture) will have a low adaptive capacity, which should be augmented to help decrease overall vulnerability.

Reducing climate change vulnerability and promoting adaptation might seem to be two sides of the same coin. However, climate change adaptation interventions in developing countries can sometimes actually increase vulnerability, particularly when policy decisions lead to incentives for communities to continue activities that made them vulnerable in the first place.¹¹ For example, digging an extra well to cope with drought—and thereby over-extracting groundwater—may mean the community will forego measures aimed at better conserving water or developing other income streams, thus increasing overall vulnerability.

In summary, interventions to augment adaptive capacity should be tailored to community needs; top-down assistance is not enough. If communities are to become truly resilient, they must be supported to adapt to future as well as immediate crises, and to unexpected as well as relatively predictable crises. To enable this, communities must be empowered to make informed decisions, have access to information and technologies, and be connected to a variety of income streams and markets.

There is a pressing need to assess what such a path looks like in Jordan. This chapter provides an empirically grounded starting point for addressing this need, seeking to highlight how policy interventions could incentivise

¹⁰ Maximillian Ashwill, Cornelia Flora, and Jan Flora, *Building Community Resilience to Climate Change: Testing the Adaptation Coalition Framework in Latin America* (Washington, DC: World Bank, 2011).

¹¹ *Ibid.*

agricultural communities to build their adaptive capacity.¹²

Methodology

The case study for this research was selected in consultation with local practitioner experts and academics. Sabha in the Northern Badia of Jordan was identified as a representative highly vulnerable community, yet one that was reasonably accessible (70km from Amman) and not the subject of a previous climate change assessment. A desk-based literature review isolated the five principal requirements for adaptive capacity. For each requirement, a numerical ranking system was created, with heuristic descriptions to guide rank assignment.¹³ The requirements and ranking systems are set out in Tables 8.1 and 8.2.

Table 8.1: Principal Requirements for Adaptive Capacity

Information and (local) knowledge	This is necessary so that a community can make the best use of its resources in the event of new climatic conditions. It might use climatic data to inform the selection of agricultural activities, or temperature and weather data to decide when to cover crops during frost seasons.
Innovation	This means being able to devise new practices suitable to changed conditions.
Community leadership and organisation	This relates to whether a local community can work together to advocate for its rights and find new ways to solve problems, which depends partly on strong, active CBOs with channels of communication to government authorities in the area, able to empower locals to adopt adaptive measures.
Access to subsidies and emergency assistance	This can drastically increase a community's adaptive capacity in severe climatic conditions. It might include providing extra fodder or subsidised water to livestock owners during drought.
Income diversity	This is key to reducing vulnerability. A community overly dependent on one form of economic activity, agriculture, or crop is poorly placed to cope with hazards resulting from climate change.

¹² The approach taken in this chapter is similar to that in Maggie Ibrahim and Nicola Ward, *Promoting Local Adaptive Capacity* (London: World Vision, August 2012). However, none of the cases featured in that report concerns a country in the WANA region.

¹³ These criteria are based on Ibrahim and Ward, *Promoting Local Adaptive Capacity*, and Hashemite Kingdom of Jordan, *Jordan's Third National Communication on Climate Change*, submission to the UNFCCC (Amman: Hashemite Kingdom of Jordan, 2014).

Table 8.2: Assessing the Adaptive Capacity of a Local Community

Adaptive capacity factors	Low 1	Slight 2	Moderate 3	Good 4
Information and Knowledge	Local community has low awareness of climate change and impacts on natural resources; no climatic/ environmental data available for geographic area	Local community is aware of climate change but has little to no knowledge regarding impacts on resources; climatic/ environmental data available but not easily accessible	Local community is aware of climate change impacts on natural resources; climatic/ environmental data available, but local community has little knowledge regarding use and interpretation	Local community has access to all data and possesses knowledge required to manage resources in the face of climate change impacts, with help from relevant directorates
Innovation	Climatic/ environmental data is unavailable; local communities do not find ways to adapt	Climatic/ environmental data is available; local communities do not find ways to adapt	Climatic/ environmental data is available; local communities use subsidies and compensation to adapt	Climatic/ environmental data is available; local communities use subsidies and compensation, and create new ways to adapt
Community leadership and organisation	No CBOs or community leaders; no affiliations to government institutions	CBOs present but inactive	CBOs active in advocacy and adaptive measures	CBOs cooperate and work with governmental authorities in empowering locals with adaptive measures
Access to subsidies and emergency assistance	Access to subsidies during extreme climatic conditions	Access to compensation during extreme climatic conditions	Access to compensation and subsidies during extreme climatic conditions	Access to extra governmental services during extreme climatic conditions through systematic, efficient, and reliable insurance service
Income diversity	Community depends on one major source of income that is sensitive to climate change	Community depends on different sources of income that are sensitive to climate change	Community depends on different sources of income, both sensitive and not sensitive to climate change	The community depends on different sources of income not immediately sensitive to climate change

Two data collection tools were employed: Participatory Rural Appraisal (PRA), and the Community-based Risk Screening Tool—Adaptation and Livelihoods (CRiSTAL). PRA is an approach that enables a local community to share, enhance, and analyse its knowledge of the current situation, problems, and potential for change. Data collection tools are designed by a team of community and non-community members;¹⁴ community members themselves collect the data—promoting local ownership over the results—and the analytics are done jointly by the PRA team and local facilitators. CRiSTAL, a project planning tool that helps users design activities to support community-level climate adaptation, complements the PRA approach well.¹⁵

PRA and CRiSTAL had obvious merits in the context of this research, and community facilitators had previously been trained by other international organisations in using the tools. The output from the tools was collected through 100 interviews with community members.

Climate Change in Jordan

Jordan is a resource-poor middle-income country facing complex developmental challenges and turbulent regional geopolitics.¹⁶ It is almost entirely semi-arid or arid: 90 per cent of governorates receive an annual rainfall of less than 200mm.¹⁷ Inefficient agricultural practices use more than half of the nation's water while generating less than 10 per cent of GDP.¹⁸ At 147CM/person/year, current use exceeds the renewable supply of 130CM/person/year. As a result, Jordan is digging into non-renewable aquifer sources. If the supply remains constant, per capita domestic consumption is projected to fall to 90CM/person/year by 2025.¹⁹

¹⁴ "PRA Tool Box," FAO Corporate Document Repository, n. d., www.fao.org/docrep/003/x5996e/x5996e06.htm.

¹⁵ *CRiSTAL User's Manual Version 5: Community-Based Risk Screening Tool—Adaptation and Livelihoods* (Canada: The International Institute for Sustainable Development, 2012), 8–9.

¹⁶ Ministry of Water and Irrigation, *Jordan National Water Strategy 2016–2025* (Amman: MWI, 2016).

¹⁷ *Ibid.*

¹⁸ Hashemite Kingdom of Jordan, *Jordan's Third National Communication on Climate Change*, 109.

¹⁹ *Ibid.*, 14.

Climate change is expected to have varied impacts on Jordan. Annual precipitation is decreasing by 1.2mm per year, while temperatures are increasing by at least 0.03 degrees per year.²⁰ It is extremely likely that Jordan will see warmer summers and a generally drier climate. Weather pattern predictions have likewise concluded that drought events will become more likely, with longer periods of consecutive dry days.²¹

In response to these threats, governorates and municipalities provide extra governmental services free of charge or at a subsidised rate to communities suffering climate change impacts such as drought and frost. This might include providing extra fodder or subsidised water to livestock owners. The Agricultural Risk Management Fund, managed by the Ministry of Agriculture, provides financial compensation for drought damage incurred by farms.

Subsidies and compensation help communities in immediate and practical ways. However, if such methods reward practices that use resources inefficiently, they can do more harm than good. For example, farmers who receive subsidised water will be disincentivised from developing more water-efficient working methods or alternative income streams.²²

This raises difficult policy choices. In the long term, state policies to foster growth in adaptive capacity will have to shift to rewarding positive innovation, rather than risk-averse conservatism. This shift is unlikely to be popular among poor communities more concerned with immediate need than long-term planning. One solution is for state aid to be delivered on the model of an insurance scheme. Where such schemes cushion farmers from real market costs, they can provide flexible, light-footed support. This allows for the possibility of “redesign[ing] products not merely as a risk transfer mechanism, but as a potent device to reduce risk and crop loss by inducing desirable proactive and reactive responses in insurance users.”²³

²⁰ Hashemite Kingdom of Jordan, *Jordan's Third National Communication on Climate Change*, 109.

²¹ *Ibid.*, 19.

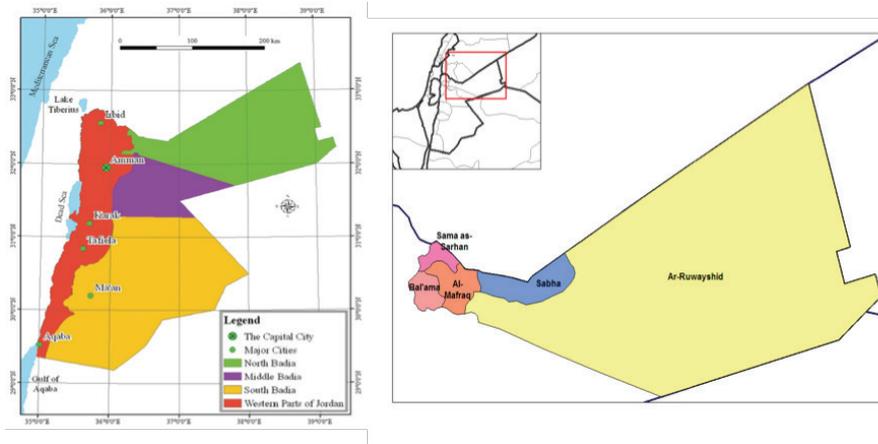
²² See e.g. David Pearce and Donata Finch, “Advancing Subsidy Reform: Towards a Viable Policy Package,” in *Finance for Sustainable Development: Testing New Policy Approaches*, United Nations Development of Economic and Social Affairs (New York: United Nations, 2002), 181

²³ Mamata Swain, *Crop Insurance for Adaptation to Climate Change in India* (London: Asia Research Centre, 2016).

Sabha, Al Mafraq Governorate: Study Area

The Mafraq Governorate is divided into three administrative districts—Ruwayshid, Northern Badia, and Northwest Badia—and into seven sub-districts—Sama As-Sarhan, Hosha, Dair Al-Kahf, Sabha, Um al Jimal, Um Al-Quttain, and Al-Khaldiyah (see Figure 8.1). The community of Sabha belongs to the Sabha sub-district, 35km east of Al Mafraq city.

Figure 8.1: Mafraq Governorate



Source: Alaa Abu Sada, Mahmoud Abu-Allaban, and Ahmad Abdel-Haleem Al-Malabeh, “Temporal and Spatial Analysis of Climate Change at Northern Jordanian Badia,” *Jordan Journal of Earth and Environmental Sciences* 7, no. 2 (December 2015), 87–93.

Sabha is the most populous settlement in its sub-district, with a range of cultivable land suitable for improved agriculture and livestock production.²⁴ Nonetheless, the area faces challenges including under-employment, employment in unproductive activity, and limited income diversity. Excessive drought seasons and regular overgrazing have contributed significantly to land degradation.²⁵ The community is highly dependent on agriculture and animal husbandry, along with public sector

²⁴ Abu Sada, Abu-Allaban, and Al-Malabeh, “Temporal and Spatial Analysis of Climate Change.”

²⁵ “Jordan Badia,” The Hashemite Fund for Development for Jordan Badia, n. d., www.badiafund.gov.jo/en/node/310.

employment. Agricultural activities include fruit, vegetable, wheat, and barley production.²⁶ Livestock production is also an essential part of the community's income, with an estimated 12,500 head of sheep and goats grazing in the area.²⁷ These activities are highly sensitive to climate change impacts, including temperature increase, rainfall decrease, drought, and changes in the arrival of the rainy season.²⁸

Water and Wastewater Networks

The municipal water supply network covers almost all of Sabha, but supply is intermittent and limited to only once a week for each household. Interruptions significantly increase in periods of high water demand, such as the summer and drought seasons. During these periods, families may receive running water only once every three weeks. The water supply network in the area is old and dilapidated, leading to high levels of water loss and reduced water quality.²⁹

The area is not connected to the municipal sewage system, forcing people to use on-site sanitation solutions such as septic tanks or holes, which in many cases do not meet environmental and health standards and/or are not repaired regularly. The absence of well-aligned and regularly maintained septic tanks poses significant environmental and health hazards. Such systems can malfunction, potentially contaminating soil and groundwater resources and causing sewage-borne diseases.

Groundwater

Sabha, on the Zarqa river basin (ZRB), is the second main tributary to the River Jordan after the Yarmouk River, and one of the most depleted basins in Jordan. The total water used for agriculture from the ZRB is estimated at 166.3MCM/year. Climate change modelling and prediction scenarios suggest that if the temperature increases by 1°C, total agricultural production will decrease by 3.5 per cent, and water consumption will

²⁶ Based on data collected through the PRA conducted for this area by the WANA Institute.

²⁷ Based on an interview with the Veterinary Department of the Northern Badia Agricultural Directorate.

²⁸ Hashemite Kingdom of Jordan, *Jordan's Third National Communication on Climate Change*.

²⁹ Based on data collected through the PRA conducted for this area by the WANA Institute.

increase by 3.8 per cent.³⁰ This is particularly significant for Sabha; groundwater resources are the cornerstone of agricultural production³¹ and most rain-fed agriculture cannot survive in areas with precipitation of less than 200mm per year.

With decreasing annual agricultural production (driven by decreased water availability), locals are expanding their cultivated areas. Producing crops on open fields, however, is even less efficient and known to require more water to produce good-quality crops. Interviewees noted that some illegal wells are operational, and unsustainable agricultural techniques such as flood irrigation are frequently employed.³² Locals also pump extra water from licensed wells, storing water unused in winter (using artificial lakes) for use in summer, and further depleting the aquifer and limiting its capacity for natural replenishment.

Assessing the Adaptive Capacity of Sabha

The local community faces three major climate change impacts; frost, drought, and an increase in temperature. For analytical purposes, drought and increases in temperature were combined, as they produce similar effects.

- Drought and increases in temperature: Droughts are periods when precipitation falls well below the yearly average—in the case of Sabha, less than 150mm per year. As well as directly affecting crop production, drought can result in a longer-term decrease in soil moisture, in turn decreasing crop quality.³³ A decrease in urban water supply, where households do not have available water for periods of a week or more,

³⁰ UNDP, *Assessment of Direct and Indirect Impacts of Climate Change Scenarios—Climate Change Adaptation in the ZRB* (Amman: UNDP, 2013), 6

³¹ Based on data collected through the PRA.

³² Based on data collected through CRISTAL, conducted for this area by the WANA Institute.

³³ There is no set definition for drought, but the Normalized Difference Vegetation Index (NDVI) is used by researchers to monitor drought in Jordan; see “The Drought Warning Unit,” NCARE, n. d., www.ncare.gov.jo/body.aspx?id=271 (in Arabic). The NDVI is a way to determine the density of green on a patch of land, and observe the distinct colors (wavelengths) of visible and near-infrared sunlight reflected by the plants; John Weier and David Herring, “Measuring Vegetation (NDVI & EVI),” *Earth Observatory*, 30 August 2000.

is also considered to be drought.³⁴ Increases in temperature, which can occur independently from drought, can result in crops needing more water than anticipated, or water demand exceeding structural supply capability.

- Frost: In winter, temperatures can drop unexpectedly overnight to below zero, affecting both agriculture and vegetative cover for grazing.³⁵ As it cannot be scientifically verified, classifying frost as a climate change impact may seem controversial. However, during interviews locals repeatedly referred to sudden, unexpected frost becoming more common over the past 20–30 years, and their struggle to cope with this.

Figures 8.2 and 8.3 illustrate an analysis of the community's capacity to adapt to increased temperature/drought and frost. While the community is strong in knowledge and innovation in relation to increased temperature/drought, its overall adaptation capacity is limited by weak community organisation and leadership, dependence on agriculture, and particularly lack of access to subsidies and emergency assistance. Adaptive capacity during times of frost was relatively stronger, due to higher levels of innovation and access to assistance and a lower impact from income diversity.³⁶ The specific areas of investigation are discussed in Table 8.3.

³⁴ A decrease in urban water supply turns water into a scarcer commodity which can be bought from private well owners.

³⁵ The critical temperatures needed for damage to occur may vary depending on how long temperatures remain below freezing. For example, fruit tree buds may be damaged if exposed to -2°C for more than 24 hours, but may survive if exposed to -6°C for less than two hours. Thus the critical temperature for a radiative frost lasting for only a few hours in the early morning may be lower than that of frost which continues overnight and for some daytime hours. "Freeze Protection Methods for Crops," Ministry of Agriculture, Food and Rural Affairs (Canada), August 2009, www.omafra.gov.on.ca/english/crops/facts/85-116.htm.

³⁶ It was originally hypothesised that the local community would find it hard to adapt to frost conditions, especially farmers who have suffered financial loss in the past.

Figure 8.2: Adaptive Capacity Against Increases in Temperature/ Drought

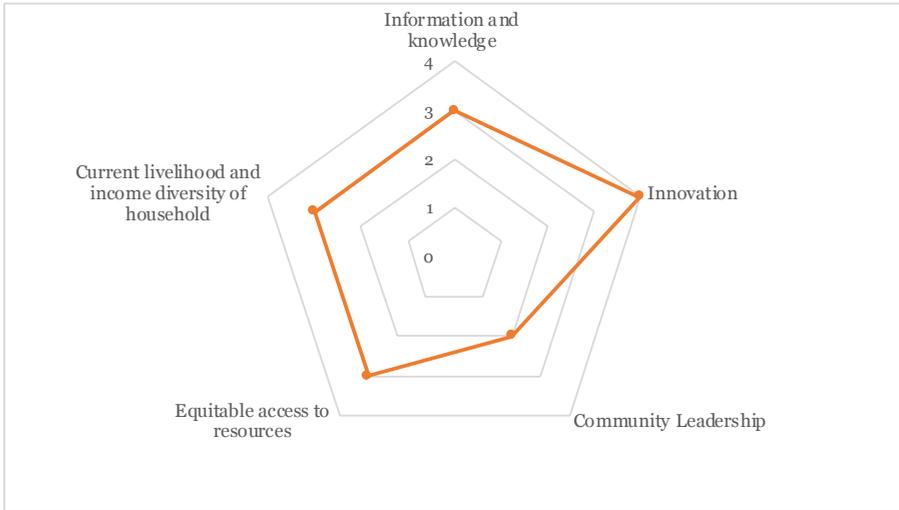


Figure 8.3: Adaptive Capacity Against Frost

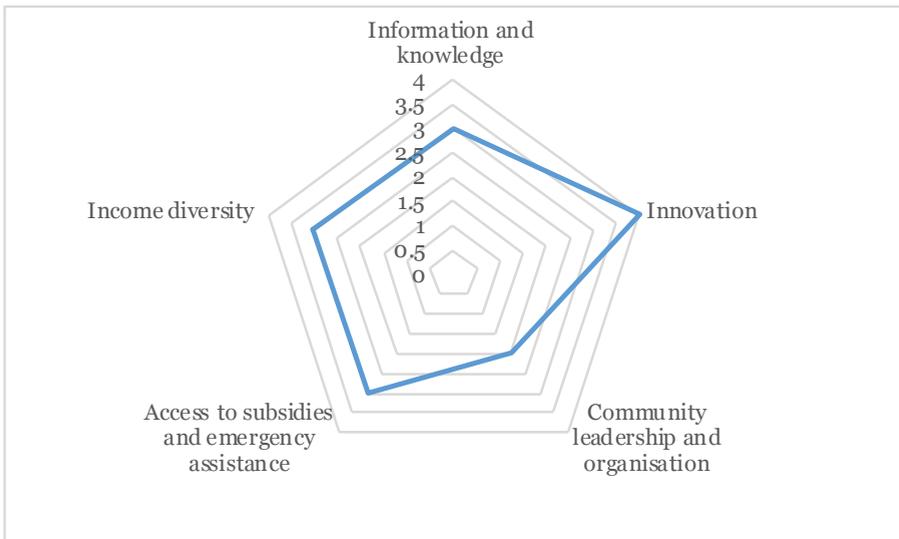


Table 8.3: Assessing the Adaptive Capacity of Sabha

	Increased temperature/drought	Frost
Information and knowledge	<p>Information about local climatic changes, such as precipitation data, is available from governmental directorates, but difficult to obtain due to the scattered nature of villages and inefficient transportation services. Furthermore, information is provided with minimal explanation, creating a risk of misinterpretation. This may help to explain why farmers still produce barley and wheat, despite evidence that higher temperatures and lower precipitation mean lower-quality annual yields. Perhaps the most useful tool for planning climate change adaptation strategies is the database at the National Centre for Agricultural Research and Extension drought monitoring unit; locals, however, did not appear to be aware of this.</p> <p>Community members may not understand the specific scientific reasons behind increased temperatures and drought, but they do understand that these changes affect their crop production and sources of income. They have observed that over time the maturity and quality of crops has declined, incidences of livestock disease and death have increased, and some species of medicinal plants are dying out.</p>	<p>Information on frost is advanced in Jordan and is freely available from local area directorates and television weather forecasts. Such news warns farmers about frost possibilities at least two days in advance and provides adaptation options.</p> <p>Over the years, farmers and livestock owners have observed the impacts of frost and are aware of the consequences for their livelihoods. However, they do not always use this information to their benefit. Over the years, many warnings have been issued and a lot of farmers decided to disregard this information, hoping for the slight chance that it might prove inaccurate.</p>
Innovation	<p>Despite observable impacts, there is little evidence of contingency planning or innovation in response. Farmers still cultivate wheat and barley in affected areas, requiring a massive increase in irrigation to maintain quality,³⁷ and increased use of pesticides to combat pests that multiply in dry, hot weather. Only a small number of farmers have adopted greenhouse farming.</p>	<p>Farmers use various techniques in response to frost conditions, including covering fruit trees with plastic or mesh, or burning tyres to increase the humidity and temperature around their farms. Burning tyres also covers plants with a thin layer of tar which, while environmentally damaging, reduces the risk of freezing.</p> <p>One factor preventing adaptation appeared to be lack of financial capacity.</p>

<p>Community leadership and organisation</p>	<p>Sabha is home to only four CBOs, none of which are engaged in information dissemination or capacity-building around climate change adaptation.</p>	
<p>Access to subsidies and emergency assistance</p>	<p>The government provides no financial compensation for damage caused by drought. Livestock owners (but not arable farmers) can purchase water at a subsidised rate of JOD4–6 (USD5.6 – 8.5) per 6m³ tank all year round through the Ministry of Agriculture.³⁸ During drought periods, community members can purchase extra water from non-government sources. The cost is JOD20–35 (USD28 – 49) per 6m³ tank during normal times, but this can increase to JOD50 (USD 71) during drought.³⁹</p>	<p>The Agricultural Risk Management Fund provides financial compensation for frost-damage to crops based on a per dunum loss calculation.⁴⁰ In 2016, it provided compensation of over 50 per cent if the damage was to uncovered vegetables, medicinal plants, and fruit trees, 30 per cent in the case of covered vegetables.⁴¹ During one frost incident in 2015, no compensation was paid because the government had issued a frost warning along with proper precautionary measures.⁴²</p>
<p>Income diversity</p>	<p>All income-generating activities are affected. Farmers face declining crop quality. Livestock owners may have little to no land or water on which to graze and water their livestock, and livestock relies on fodder. Even government employees may pay spend more on energy for air-conditioning and fans. Therefore, even those whose income is not directly affected by climate change impacts are likely to be poorer as a result of expenditures that these impacts force on them.</p>	<p>Income generated from arable farming is highly affected by frost. Overnight, farmers can lose crops worth thousands of JOD. However, income generated from raising livestock is not sensitive to frost since farmers shelter their livestock during winter. Additionally, livestock in this area mostly rely on fodder and are less dependent on natural vegetation which could be lost during frost.</p>

³⁷ Victor O. Sadras, Patricio Grassini, and Pasquale Steduto, *Status of Water Use Efficiency of Main Crops: SOLAW Background Thematic Report—TRO7* (Rome: FAO, n. d.).

³⁸ Based on an interview with officials from the Agricultural Directorate in the Northern Badia.

³⁹ Based on data collected through the PRA.

⁴⁰ Raed Omari, “MPs Approve Senate’s Version of Bill on Agricultural Fund,” *The Jordan Times*, 25 August 2015.

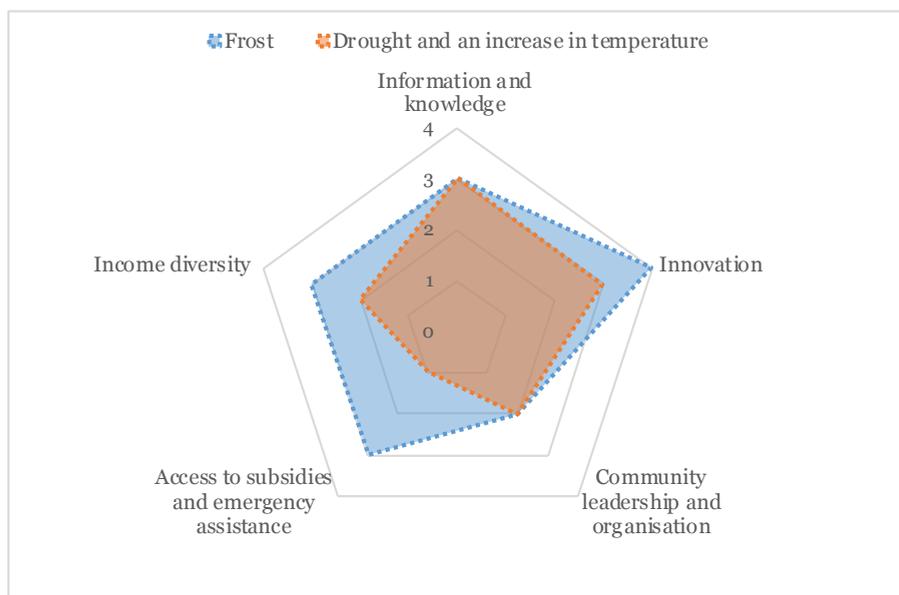
⁴¹ “Jordan: Compensation for Farmers Affected by Frost,” Zeraiah.net, February 2016, www.zeraiah.net/index.php/home/news/17964-2016-02-02-20-20-35.

⁴² “No Compensation for Those Affected by Frost Yet,” *Al Rai*, 2015, www.jordanzad.com/print.php?id=5389.

Moving Towards More Resilient and Adaptive Societies

This research demonstrated that the adaptive capacity of a specific local community was greater in responding to frost than to drought and increasing temperatures (Figure 8.4). This could be because frost is simpler to adapt to, and occurs less frequently than drought in Jordan. A key deficit was that despite having access to sufficient data and knowledge, the behaviour of local community members has not changed with regard to agriculture and livestock grazing. Moreover, farmers in Sabha rely on agriculture and livestock for income and show reluctance to develop new income streams. A final deficit was in community leadership: CBOs can advocate for community rights, be hubs for capacity-building and provide links with government institutions. Such leadership is currently lacking in Sabha, and will remain so as long as existing subsidy and compensation arrangements continue.

Figure 8.4: Comparison of Adaptive Capacity during Frost and during Drought



Better ways to adapt to climate change need to be found, including through using adaptive technologies. Appropriate drought adaptation measures include building rainwater harvesting systems, planting drought-resistant crops, and crop contingency planning. Drought early warning systems and relief plans can also play a vital role. Innovative adaptation might also include engaging in divergent activities that are less sensitive to climate change (but not necessarily phasing out agriculture or livestock). It was apparent during interviews that locals were aware of such measures. When asked why they were not implementing them, they routinely cited insufficient financial resources.

The government has implemented schemes providing financial compensation or subsidies to farmers suffering from damaged crops—albeit to a limited and variable extent. While important from an immediate poverty-avoidance perspective, such measures tend to support existing, vulnerable farming practices. Moreover, community members complained about the inconsistency of these compensation payments, and did not seem to regard government support as a mechanism for helping them to adopt practices better suited to future climatic conditions. This underscores the importance of measures that motivate local communities to become more resilient.

One approach is to move away from compensation and subsidies towards a form of government-backed insurance, subsidising insurance packages tailored to the needs of livestock owners and farmers experiencing extreme climatic episodes. Such a model might reward adaptive efforts by requiring certain adaptive conditions to be met, such as frost protection, rainwater harvesting systems, or drought- and frost-resistant crops. Compensation for fodder should be phased out in favour of incentives to find ways to regenerate natural vegetative cover for grazing. The creation of new *himas*⁴³ might help to achieve this.

Understanding the factors underpinning communities' ability to adapt to climate change is immaterial without commitment to action, which must emanate from communities themselves. The research reported here indicates that to better adapt to climate change, rural Jordanians need not so much new knowledge or skills as new incentives and better leadership in the form of strengthened local organisations. Only by tackling this problem will Jordan become—as it must—a more resilient society.

⁴³ See Chapter 9.

9: Facilitating a Hima Resurgence: Understanding the Links between Land Governance and Tenure Security

Kamal Kakish

Over the past century, there has been a decline in traditional community-based systems of land management, driven by urbanisation, decreasing land productivity, and changing land governance policies. Rangelands have become of higher utility and less inhabitable, and the knowledge required to run such traditional systems has often been lost. This has consequences for land sustainability, and the livelihoods and welfare of those depending on such lands. In some areas, increased land scarcity and commoditisation has precipitated a breakdown of the rules governing equitable, sustainable use of common resources that had formerly protected lands and the rights of vulnerable groups.¹

Some efforts have been made to revive traditional systems as tools for poverty reduction, habitat protection, and species conservation. Under traditional systems, strict community rules ensured that land was equitably, sustainably managed. Today, while tribes still occupy the land, state authorities generally own it. Having lost their rights and responsibilities, communities no longer have sufficient vested interest in lands' proper governance.

This chapter argues that re-vesting the rights and responsibilities connected to land governance in communities and decentralised government frameworks are essential to reviving traditional systems. One such system is the hima, which has operated in the Arab region for thousands of years. The chapter draws on observational data from three hima sites in

¹ Admos Chimhowu and Phil Woodhouse, "Customary vs Private Property Rights? Dynamics and Trajectories of Vernacular Land Markets in Sub-Saharan Africa," *Journal of Agrarian Change* 6, no. 3 (July 2006): 346–71 at 359; Lorenzo Cotula and Salmana Cissé, "A Case Study: Changes in 'Customary' Resource Tenure Systems in the Inner Niger Delta, Mali," in *Changes in "Customary" Land Tenure Systems in Africa*, ed. Lorenzo Cotula (London: International Institute for Environment and Development, 2007), 81–101 at 89.

Jordan and Lebanon and one provisional site in Egypt. The hypothesis is tested that the strength of land tenure rights is positively correlated with a community's good governance of land resources, in turn facilitating enhanced agricultural and pastoral productivity.²

Land tenure security was measured by assessing a hima community's rights of access, withdrawal, management and exclusion, and alienation.³ Land governance was measured by assessing the awareness and knowledge, access to benefits, organisation, women's participation,⁴ and claim-making power in a community.⁵

These indicators were selected based on desk research and expert interviews and evaluated against observational data gathered through interviews and focus groups with stakeholders from Hima Bani Hashem (Jordan), Hima Anjar and Kfar Zabad (Lebanon), and an Egyptian delegation in Amman from the provisional hima site in Mersa Matrouh, Egypt. Participants included representatives from governmental organisations and NGOs, research centres, and community leadership. Focus groups engaged a randomised selection of community members, taking age and gender into account. Site selection, based on expert consultation, aimed to isolate three of the most successful hima sites in the WANA region.⁶

Traditional Land Management Systems

Traditional land management systems generally comprise a complex mesh of overlapping, time-limited claims, some held privately and

² Pedro Herrera, Jonathan Davies, and Pablo Baena, eds., *The Governance of Rangelands: Collective Action for Sustainable Pastoralism* (New York: IUCN and Routledge, 2014), 243.

³ *Ibid.*, 244.

⁴ See FAO, *Management of Natural Resources Including Medicinal & Aromatic Plants to Benefit Rural Women in the Near East Region: Case Study of Egypt* (Cairo: Desert Development Center, the American University in Cairo, 2005).

⁵ IUCN, *Management and Ownership of Drylands: An Accountability Report for "The Securing Rights & Restoring Lands for Improved Livelihoods Project in Jordan"*, (Amman: IUCN, 2011).

⁶ Further detail of the measurement and analysis and results for each site are available in an online appendix. URL to be added for online appendix.

others communally.⁷ Other areas may be left open for the use of future generations, or to accommodate shifting patterns of agriculture due to fluctuations in rainfall and soil fertility and changing community needs.

Land rights are primarily derived from membership of a given group or allegiance to a specific political authority. Tribal leaders usually approve new grants of land within the community, with families sub-granting land to other individuals or families through inter-familial arrangements similar to leasing or share-cropping. Secondary rights may also exist, such as rights of way; use of natural resources located on shared lands; seasonal access to particular areas; and rights to enter areas for religious reasons.⁸

Evidence suggests that traditional land management systems can contribute to sustainable development and optimised resource management. They tend to protect natural resources effectively and efficiently, with social benefits for vulnerable groups and future generations.⁹ The community-based land management system practised in the WANA region has been identified by the FAO and the World Bank as a principal factor in preserving rural community livelihoods. For these reasons, the importance of community participation in land management has gained increasing attention. Today, it is broadly accepted that bottom-up frameworks actively involving local communities are a prerequisite for sustainable development.¹⁰

Community land management systems are not risk-free. Local power asymmetries can be exacerbated by growing land scarcity and competition, resulting in breakdowns in the traditional rules governing land holdings and common resources. This creates risks of environmental exploitation and heightened vulnerability for marginalised rights-holders, such as women, pastoralists, and tenants.

⁷ See Benjamin Cousins, "More Than Socially Embedded: The Distinctive Character of Communal Tenure," *Journal of Agrarian Change* 7 no. 3 (2007): 281–315; Lorenzo Cotula, "Introduction," in *Changes in Customary Land Tenure Systems in Africa*, ed. Lorenzo Cotula (London: International Institute for Environment and Development, 2007), 5–14 at 11; Christopher Tanner, *Law Making in an African Context: The 1997 Mozambican Land Law*, (Rome: FAO, 2002).

⁸ *Ibid.*

⁹ Chimhowu and Woodhouse, "Customary vs Private Property Rights," 359.

¹⁰ Leonard Chirenje, Richard Giliba, and Emmanuel Musamba, "Local Communities' Participation in Decision-making Processes through Planning and Budgeting in African Countries," *Chinese Journal of Population Resources and Environment* 11, no. 1 (2013): 10–16.

The Hima

The *hima* (“protected area”) is the most widespread traditional land management system in the WANA region. It evolved more than 1,400 years ago in the pre-Islamic Arabian Peninsula, at that time denoting land covered with vegetation, with access for grazing purposes limited to local tribes.¹¹ Over time, its meaning evolved to describe a rangeland reserve set aside seasonally to facilitate regeneration.¹²

Following the advent of Islam, religious values and norms were incorporated into the *hima* system.¹³ It changed to become property dedicated to the wellbeing of the surrounding community.¹⁴ According to Islamic scholarship, the Prophet Mohammad transformed the *hima* from a private enclave into a public asset, distributing shares to all community members, consistent with their religious duty as stewards (*khulafa*)¹⁵ of God’s natural world.¹⁶ One of the first *himas*—Hima al-Naqi’was established by the Prophet near al Medina. The Prophet also declared Mecca and al Medina inviolable sanctuaries (*haram*), prohibiting hunting and the destruction of plants within “safe zones” around al Medina.¹⁷

The system expanded and flourished under tribal governance until the first half of the twentieth century. In Saudi Arabia alone, an estimated 3,000 *himas* existed until the 1960s, considered among the best-managed lands in the Arabian Peninsula.¹⁸

¹¹ J. Chehod, “Hima,” *Encyclopaedia of Islam*, vol. 3 (1971), 393, quoted in Gari Lutfallah, “Ecology in Muslim Heritage: A History of the Hima Conservation System,” *The White Horse Press* 12, no. 2 (May 2006): 213–28.

¹² John W. Bruce, *Legal Bases for the Management of Forest Resources as Common Property* (Rome: FAO, 1999), 48.

¹³ See generally: Hala Kilani, Assaad Serhal, and Othman Llewlyn, *Al-Hima: A Way of Life* (Amman and Beirut: IUCN and SPNL, 2007).

¹⁴ Lutfallah, “Ecology in Muslim Heritage.”

¹⁵ *Khulafa* is the plural form of *khalifa*, a name or title used among various Islamic religious groups, meaning “successor” or “steward.”

¹⁶ Tom Verde, “A Tradition of Conservation,” *Aramco World* 59, no. 6 (November/December 2008).

¹⁷ Richard Foltz, Fredrick Denny, and Azizan Baharuddin, eds., *Islam and Ecology*, 212–15, quoted in Lutfallah, “Ecology in Muslim Heritage.”

¹⁸ Lutfallah, “Ecology in Muslim Heritage.”

The Decline of the *Hima*

Over the past century, community-based land management in the WANA region has been strongly influenced by changing policies. From an environmental perspective, the most significant development took place during the second half of the twentieth century, when nomadic populations came under the control of central governments and tribal lands were nationalised. Bedouin¹⁹ families and tribes adopted a new form of semi-nomadism.²⁰ Some policies, such as education, were indirect drivers while others, such as the creation of state borders, directly transformed nomadism, limiting Bedouin options for livestock migration.

In Saudi Arabia, the government took over responsibility for managing land, resulting in a decline in local decision-making and participation in *hima* management.²¹ In Syria, following independence in 1946, the government pressured nomads to urbanise, culminating in the abolition of the tribal administration system and the end of tribe-controlled *himas*.²² In Lebanon, municipalities continued to manage *hima* lands until the 1975 civil war. Rural-to-urban migration, however, resulted in a severe decline in the number of *himas*.²³ In other countries, lack of regulation led to the decline of *himas*; in several Jordanian rangelands, for example, grazing expanded virtually uncontrolled.²⁴

These developments entailed both environmental and social externalities. First, Levantine Bedouins traditionally facilitated the regeneration of natural vegetative cover by moving between Jordanian, Syrian, Saudi Arabian, and Iraqi lands: the transition to more sedentary lifestyles

¹⁹ "Bedouin" is used to describe Arab people living mainly in the Arabian and Syrian deserts, the Sinai Peninsula of Egypt, and the Sahara Desert who adopt a form of nomadic pastoralism. See Elizabeth Losleben, *The Bedouin of the Middle East* (Minneapolis, MN: Lerner Publications, 2003); Dawn Chatty, *Nomadic Societies in the Middle East and North Africa* (Boston: Brill, 2006), 239–79 at 240.

²⁰ Ghazi Bin Muhammad, *The Tribes of Jordan at the Beginning of the Twenty-first Century* (Jordan: Rutab, 1999).

²¹ Lutfallah, "Ecology in Muslim Heritage."

²² Bruce, *Legal Bases for the Management of Forest Resources*, 113.

²³ FAO (based on the work by Fady Asmar) *The "Hima": A Revived Traditional Forest Protection and Management System: The case of Lebanon* (Rome: FAO, 2009), 15.

²⁴ R. Blench, *Rangeland Degradation and Socio-Economic Changes among the Bedu of Jordan: Results of the 1995 IFAD Survey* (Rome: FAO, 1995), 4.

increased pressure on already-depleting resources.²⁵ Second, as Bedouin tribes were increasingly required to follow new land tenure systems, use of traditional knowledge diminished.

Today, rapid population growth has resulted in more extensive land use, sometimes pushing communities out of rangelands. Climate change has exacerbated rangeland degradation, fuelling migration to cities.²⁶ For communities attempting to maintain traditional lifestyles, complex frameworks and regulations concerning land ownership and urban planning have had negative impacts. Some communities have been dispossessed of their land. Thus, communities' sense of accountability towards land resources has declined. While the *hima* tradition still exists in various forms, it is increasingly at risk, with declining numbers of young people involved in related activities.

Revitalising the Hima Concept

More than 35 per cent of the Arab region is occupied by rangelands.²⁷ With 70 per cent of these lands either degraded or destroyed,²⁸ it is important to identify ways to promote more sustainable governance. Some experts posit that strengthening traditional community land management systems can facilitate this. Several organisations have studied and sought to revive traditional systems, particular the *hima*, including the International Union for Conservation of Nature (IUCN) and the Society for the Protection of Nature in Lebanon (SPNL).

The argument is that *himas* have strong potential to rehabilitate rangelands due to their effectiveness in conserving natural resources and promoting user-led management. Experts link *hima* systems to improved livestock production, the protection of hydrological cycles and water catchments, and the capturing of atmospheric carbon as a result of increased

²⁵ Raed Al-Tabini, Khalid Al-Khalidi, and Mustafa Al-Shudiefat, "Livestock, Medicinal Plants and Rangeland Viability in Jordan's Badia: Through the Lens of Traditional and Local Knowledge," *Pastoralism: Research, Policy and Practice* 2, no. 4 (2012): online at 2.

²⁶ Lutfallah, "Ecology in Muslim Heritage."

²⁷ Land supporting indigenous vegetation that is grazed or has the potential to be grazed, and is managed as a natural ecosystem.

²⁸ Asma Abahussain, Anwar Abdu, Waleed Al-Zubari, Nabil El-Deen, and Mahmmod Abdul-Raheem, "Desertification in the Arab Region: Analysis of Current Status and Trends," *Journal of Arid Environments* 51, no. 4 (2002): 521–45 at 536.

vegetative cover.²⁹ *Himas* may also be important for biodiversity and habitat preservation. According to Llewellyn, “[m]any *himas* are located in areas of high species diversity or support woodlands and other key biological habitats.”³⁰ Large-scale rangeland restoration can also have economic benefits for communities.³¹ In the WANA region, the commercialisation of natural resources such as medicinal herbs has enhanced local employment opportunities.

Furthermore, the *hima* system integrates nature conservation with human wellbeing, in a holistic approach to natural resource management and social justice.³² Both men and women play essential roles; there are plentiful examples of women managing economic activities within more established *himas*.³³ In short, the *hima* is a “comprehensive package of governance, science and market that builds on and reinforces social, culture and human capital.”³⁴ Since present-day practices tend to overrule traditional *hima*, a hybrid model is perhaps necessary, using *hima* to promote sustainability within modern technology-driven systems.

Facilitating a Hima Resurgence: Tenure Security and Land Governance

Having established the benefits of the *hima*, the question is how to strengthen such traditional systems in the context of land degradation, urbanisation, climate change, and food production demands. Key to this is the balancing of the rights and responsibilities of users. This balance has been altered under modern land management frameworks: communities have been disempowered and excluded from decision-making, losing their stake in managing resources sustainably.

²⁹ Foltz, Denny, and Baharuddin, *Islam and Ecology*, quoted in Lutfallah, “Ecology in Muslim Heritage,” 215.

³⁰ Lutfallah, “Ecology in Muslim Heritage.”

³¹ Vanja Westerberg and Moe Myint, *An Economic Valuation of a Large-Scale Rangeland Restoration Project through the Hima System in Jordan* (Bonn: ELD Initiative, 2015).

³² See further Kilani, Hala, and Llewlyn, *Al-Hima: A Way of Life*; “The Amman Declaration on Innovating Hima—Endorsed,” IUCN, 25 June 2014, www.iucn.org/content/amman-declaration-innovating-hima-endorsed.

³³ “Hima Women Guideline Manual,” SPNL, 31 March 2016, www.spnl.org/hima-women-guideline-manual/.

³⁴ “The Amman Declaration on Innovating Hima.”

The framework under which land rights and responsibilities are managed, is broadly referred to as land tenure. Land tenure rights can be formal (state-based), informal, customary, or traditional in nature, and can include leasehold, freehold, use rights, and private ownership.³⁵ The strength of one's land rights hinges on a combination of legal definitions of property rights, local social convention, and other factors. Land tenure comprises not only ownership rights but also access and use rights,³⁶ extending to the right to occupy, use, and develop land; sell or bequeath land; lease or grant use rights to land; restrict others' access; and use the land's natural resources.

Land tenure “security” is the reasonable guarantee of ongoing land rights, supported by confidence that such rights will be recognised by others and protected legally and socially. Legal systems—state, customary, or religious—define rights and obligations in relation to land and determine how land rights are to be administered and enforced.

When land tenure rights are protected, rights-holders are more likely to assume accountability and use resources sustainably. Over the long term, this can translate into improved health, education, and living standards. Land tenure rights are thus key to environmental conservation and broader socioeconomic goals.³⁷ Where traditional systems enjoy security, similar benefits result. Tenure security supports communal, overlapping, and secondary rights-holders, and poor and vulnerable community members. It may help to foster local economic growth and sustainable management. If rangelands are protected and secure, communities can capitalise upon their income-generating potential.

It follows that *hima* efforts need to include ways of strengthening land tenure security, and hence people's stake in their land.

³⁵ FAO, *Land Tenure Studies 3: Land Tenure and Rural Development* (Rome: FAO, 2002), 7.

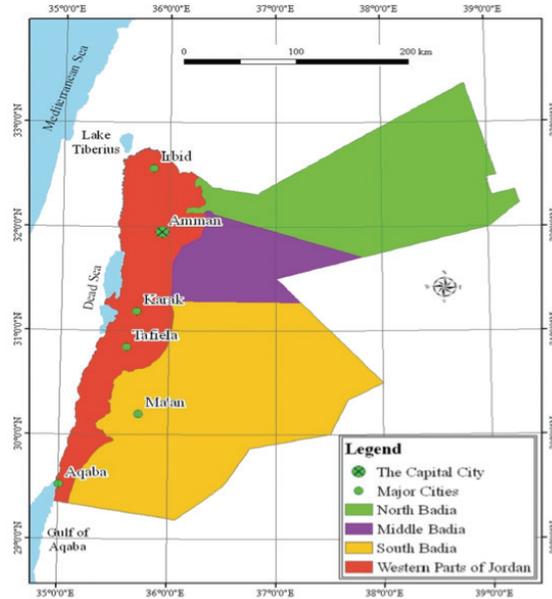
³⁶ IUCN, *Management and Ownership of Dry Lands*, 2.

³⁷ *Ibid.*, 2.

Country Site Analyses and Mapping

Hima Bani Hashem, Jordan

Figure 9.1: Jordan Badia



Source: Alaa Abu Sada, Mahmoud Abu-Allaban, and Ahmad Al-Malabeh, “Temporal and Spatial Analysis of Climate Change at Northern Jordanian Badia,” *Jordan Journal of Earth and Environmental Sciences* 7, no. 2 (December 2015): 87–93 at 88.

Rangelands are defined as “all lands registered as such and any other state-owned lands where annual rainfall is below 200mm and that do not have sustainable irrigation, or the lands confined for public use.”³⁸ In Jordan they are mainly state- or treasury-owned, but can also be owned individually or by a group of people, or be registered in the name of a government institution.³⁹ Owners can grant tenure rights to individuals, families or clans, who then enjoy some control over the land and its resources.

The area known as the Badia constitutes 80 per cent of Jordan (see Figure 9.1). It is predominantly arid with low average rainfall, although parts are

³⁸ Ministry of Agriculture, *Updated Rangeland Strategy for Jordan* (Amman: IUCN, 2013), 10.

³⁹ Husam Madanat, “Land Tenure in Jordan,” *Land Tenure Journal* 1 (2010): 143–70 at 156.

semi-arid and exhibit extensive plant and animal life. Most of the land is used for pastoralism.⁴⁰

Some areas are considered “traditional,” with land rights exercised by the inhabiting tribe. This has resulted in conflicts over land use and resistance to state efforts to regulate grazing.⁴¹ The Hashimiyyah rangelands in Zarqa Governorate, for example, are on state-owned and -administered land. Because of this, community members saw the government as holding sole responsibility.⁴² At the same time, efforts by the Ministry of Agriculture to protect rangelands through fencing and by limiting grazing had limited impact.⁴³

In 2011, 100 hectares of rangeland were allocated to be administered by the Hima Bani Hashem Cooperative.⁴⁴ The site features steppe vegetation, with average rainfall of 120–220mm/year.⁴⁵ Hashimiyyah district is classified by MoPIC as a poverty pocket:⁴⁶ up to 20 per cent of the population depend entirely on livestock for their income.⁴⁷

With the establishment of the *hima*, the community was given land governance rights. The Cooperative has management, coordination, and dispute resolution responsibilities. The director is elected by the community, and is accountable to an Executive Board. Cooperative members are drawn from all social groups, with women in the majority. Working with the local community, the Cooperative has successfully advocated for good governance and assistance from the local municipality.

IUCN and the Ministry of Agriculture supported the *hima* revival, training community members in project and land management techniques and stakeholder engagement methodologies. Meetings between community members, local governors, and MOA staff enhanced understanding

⁴⁰ Mahmoud Al-Jaloudy, *Country Pasture/Forage Resource Profiles: Jordan* (Rome: FAO, 2006), 7.

⁴¹ Ministry of Agriculture, *Updated Rangeland Strategy for Jordan*, 12.

⁴² IUCN, *Al Hima: Possibilities Are Endless* (Amman: IUCN, 2014).

⁴³ Hima Management Committee, *Community Management Plan for Hima Bani Hashem 2013–2017* (Amman: IUCN, 2013).

⁴⁴ IUCN, *Al Hima: Possibilities Are Endless*.

⁴⁵ Hima Management Committee, *Community Management Plan for Hima Bani Hashem*.

⁴⁶ Poverty pockets are communities clustered around the poverty line of JOD680/person/year; UNDP, *Thinking Differently about the Poor* (Amman: UNDP and MoPIC, 2012).

⁴⁷ Hima Management Committee, *Community Management Plan for Hima Bani Hashem*.

of concepts such as conservation, restoration, and sustainable land management. This high level of commitment by the MOA was crucial to the success of the initiative.

Our research suggests that local land governance has improved since the establishment of the *hima*. The community (assisted by the MOA and other law enforcement authorities) maintains evenly distributed grazing systems, protecting the land from nearby tribes and overgrazing. Community members have good levels of awareness about their land resource situation, and the skills to identify and prioritise problems. The *hima* supports the livelihoods of many community members and has opened up new opportunities. One group of women established a herbal plant workshop using a small business loan from the Bani Hashem Cooperative. Many former sceptics are now strong advocates of the *hima* system. One community characteristic that may have contributed to this success is the presence of strong tribal norms; community leadership has always played a significant role in decision-making processes, and traditional knowledge of natural resource management is highly valued.

Following on from the effectiveness of the *hima* experiment, in 2014 the MOA included in its Rangelands Strategy the following recommendations:

- Creating community-based organisations to manage designated land
- Redefining pastoral land rights, specifically in the Badia
- Local capacity-building and awareness-raising to revive the *hima* concept⁴⁸

Hima Anjar and Hima Kfar Zabad, Lebanon

Once, 74 per cent of Lebanon was forested; today 65 per cent of the country's woodlands are classified as degraded.⁴⁹ Forests are principally

⁴⁸ Ministry of Agriculture, *Updated Rangeland Strategy for Jordan*, 13.

⁴⁹ Ministry of Environment (Lebanon), *Safeguarding and Restoring Lebanon's Woodland Resources* (Beirut: Ministry of Environment, 2008).

emiri land: state-owned land managed by the Ministry of Agriculture.⁵⁰ The main threats are the impacts of protracted forest exploitation (uncontrolled grazing, illegal logging), the expansion of agro-pastoral activities, and rapid urbanisation.⁵¹ Loss of natural vegetation has decreased soil fertility and caused erosion and loss of ecosystem integrity, resulting in reduced agricultural productivity.

At the heart of these challenges is the governance framework overseeing forest management. The Rural Development and Natural Resources Directorate of the Ministry of Agriculture is legally responsible for the forest sector, including rangelands and protected forests. The Ministry of Environment is in charge of managing protected areas and public lands that are forested or afforested.⁵² In practice, however, management and use rights over *emiri* land are usually vested in municipalities that then coordinate decisions with the Ministry of Agriculture. There is insufficient political ownership: responsibility is highly decentralised, delegated to local actors with weak capacity and authority. A key example is that the prohibition on overgrazing in forests is poorly enforced. This leaves communities with few economic incentives to sustainably manage the lands they occupy.

The *hima* concept was practised in Lebanon until 1975.⁵³ Most, however, are no longer functioning, mainly because of urban migration.⁵⁴ The past decade has seen a transition from mobile grazing to sedimentary animal production: a result of urbanisation and overgrazing. Livestock owners now rely on feed blocks and supplements instead of natural vegetative cover, adding to production costs.⁵⁵

⁵⁰ Four forms of land ownership exist in Lebanon: *emiri* refers to state-owned land managed by the Ministry of Agriculture; *mach'a* refers to communal land, owned and managed by municipalities; *waqf* lands are owned and managed by religious authorities; and *mulk* refers to privately owned land. Ownership, however, does not imply usership: a range of constructs, including rents, usufructs, and customs, facilitate the management of land by different groups.

⁵¹ Talal Darwish, Faycel Chenini, and Moujahed Achouri, *Country Study on Status of Land Tenure: Planning and Management in Oriental Near East Countries: Case of Lebanon* (Rome: FAO, 2012), 73.

⁵² See also Ministry of Agriculture (Lebanon), *National Report to the Third Session of the United Nations Forum on Forests: Lebanon*, (Beirut: Ministry of Agriculture, January 2003).

⁵³ Fady Asmar, *Country Pasture/Forage Resource Profiles: Lebanon* (Rome: FAO, 2011).

⁵⁴ FAO, *The "Hima,"* 39.

⁵⁵ Herrera, Davies, and Baena, *The Governance of Rangelands*, 152–54.

The Ministry of Agriculture has acknowledged the importance of decentralised rangeland administration systems involving the local community, NGOs, and the scientific community.⁵⁶ Aiming to improve the livelihoods of herders and resilience of rangelands,⁵⁷ SPNL, in cooperation with local municipalities, has created several *himas*. The Hima Kfar Zabad was announced in 2005, the Hima Anjar three years later. They comprise agricultural lands, forests, and wetlands, and are home to many migratory waterfowl.⁵⁸ The main land uses are agriculture, fishing, hunting, and pastoralism. Around 50 per cent of the *hima* habitat comprises the Bekaa Valley's last publicly owned wetland.⁵⁹

The *himas* sit on municipality-owned land, managed by the Municipal Council. The SPNL and the Council jointly developed a vision for a “clean and environmentally protected area” structured around cooperation between community members and external stakeholders. They conducted training and meetings to promote the *hima* concept and build site management skills. SPNL also worked directly with the municipalities on a community-based management system and ways to bring together local authorities and community members. An action plan was developed, defining problem-solving procedures and ways to promote women as active members of the *hima* community.⁶⁰ Specific efforts have included training on women's rights and leadership and biodiversity conservation, and workshops on how to produce and market local products. Some workshops targeted young people and women from both *himas*, facilitating knowledge-sharing between the two communities.

The WANA Institute found similar levels of local land governance in the two *himas*. Hima Anjar exhibited a slight advantage in terms of awareness, knowledge, and women's empowerment. The women of both *himas* were active in decision-making processes; in Anjar, women had formed their own cooperative entities. Poorer awareness in Hima Kfar Zabad might be explained by its history of political conflict, in contrast to the more unified Anjar community. In Lebanon, different political views and affiliations play

⁵⁶ FAO, *The “Hima.”*

⁵⁷ Herrera, Davies, and Baena, *The Governance of Rangelands*, 152–54.

⁵⁸ “Hima Kfar Zabad,” SPNL, n. d., www.spnl.org/hima/hima-kfar-zabad.

⁵⁹ The Beqaa is located about 30km east of Beirut; the fertile valley is considered Lebanon's most important farming region.

⁶⁰ “Hima Women Guideline Manual.”

a determining role in local culture and tradition and thus local approaches to resource management.

Mersa Matrouh, Egypt

Formal land tenure in Egypt is divided into five main categories: private ownership, public ownership, public leasing, trust land (*wafq*), and encroachment (*wad al ayad*). The Civil Code allows the possessor or user of a plot of land to gain ownership if it is occupied continuously for 15 years without the owner asserting their rights.⁶¹ All desert lands (“undeveloped land”) are deemed state property. The government, however, informally recognises usufruct (use rights).⁶² Individual tribesmen can legally gain title over land they have cultivated, even if it was originally state-owned. Rangelands are either communal or allocated by usufruct between tribes, clans, and lineages.

Over recent decades, droughts, a rise in nomad settlement, and sheep husbandry in marginal zones have increased pressure on land resources and reduced soil fertility. This has contributed to transforming ecologically balanced pastoral lands into unsustainable sedentary agricultural areas. In the north-west coastal zone, however, the traditional tribal structure is still very much alive.

In this zone, the Matrouh Governorate, spanning 212,112 square km, is home to around 427,000 people. The capital, Mersa Matrouh, is bounded by the Mediterranean Sea to the north and the Sahara to the south. The habitat comprises dry to very dry rangeland, with average annual rainfall of 140mm. The main livelihood activities are agriculture and livestock production—although drought in recent years has decreased productivity. Around 85 per cent of the population is Bedouin, depending on an extensive dryland production system involving sheep, goats, and barley tree (fruit) crops. It is estimated that over 80 per cent of land holdings in Matrouh exist without legal title, with customary law regulating local administration and dispute adjudication. Recently, official land-titling

⁶¹ For more information, see “Egypt,” USAID, September 2010, <https://usaidlandtenure.net/country-profile/egypt/>.

⁶² The Ministry of Defence, however, is able to take over land for strategic purposes, including without providing for involuntary resettlement; this section draws on Ministry of Agriculture and Land Reclamation (Egypt), *Second Matrouh Resource Management Project: Project Appraisal Document* (Cairo: Ministry of Agriculture and Land Reclamation, 2003).

run by the Ministry of Agriculture and Land Reclamation has increased, probably in response to escalating land values.

Community-based organisations representing the area's tribes liaise with state authorities, but lack a unified strategy and wield limited power. Platforms from which to advocate for land resource rights and enhance local awareness regarding sustainable resource management are also limited. But despite low levels of education and capacity-building, the community has sound knowledge about managing scarce resources, stemming from their reliance on the land and strong knowledge transfer between generations. Women, although they are engaged in small-scale land activities, such as herb cultivation, and have high literacy levels, have particularly limited access to skills-building and decision-making processes.

The geography, demographics, and challenges of the area provide a strong case for establishing a *hima* in the village of Abu Murgiq, in rangeland containing various pastoral shrubs, medicinal and aromatic plants, and around 46,000 square metres of fertile habitat suitable for barley production.

Holistic Approach to Effective and Sustainable Natural Resource Management and Social Justice

In the three *hima* sites, it appears that challenges of poor management and unsustainable land use have been overcome. Each community exhibited awareness and managerial competencies in relation to the lands they managed, and enjoyed two or more of the four indicators of land tenure security. There is no absolute proof that this could not have been achieved without the *himas*, but on their own terms it is clear that *himas* function well. These findings are consistent with research in Africa, establishing links between traditional land management systems and positive outcomes.⁶³ They may serve as a baseline for testing future efforts to improve localised land governance.

⁶³ See Rachael Knight, *Best Practices in Community Land Titling: Inception Paper* (Rome: International Development Law Organization, 2010).

Where the goal is to enhance sustainable use of communally managed land resources, tenure security rights are a prerequisite. The establishment of *hima* systems is one of the few ways to effectively enhance tenure security at a community level, due to the political and legislative complexities preventing the vesting of ownership rights in communities in the WANA region. In short, where security of land tenure facilitates more sustainable land usage, *himas* are a viable alternative to government management of rangeland, particularly where central capacity is weak and budgets constrained.

Himas can provide new economic opportunities and are consistent with contemporary thinking on how to bolster resilience. One study predicted that a large-scale *hima* rangeland restoration system in the ZRB could provide net benefits to Jordanian communities equivalent to JOD144–289 million (USD203 – 408 million) over a 25-year period, and save up to JOD16.8 million (USD23.7 million) on fodder purchases.⁶⁴

This said, reviving communal systems such as the *hima*, can be a long, costly process, requiring sustained investment in building community members' capacity. Government support is key to the success and sustainability of this.

The *hima* approach fosters sustainable livelihoods and environmental protection. In addition to its positive impact on livestock production, it helps to protect the hydrological cycle and water catchments, and carbon sequestration in soil. Today, in the context of land degradation, urbanisation, and climate change, there is a need for innovative, strategic ways to strengthen community-based resource management models. Supported by proper legal frameworks, planning, incentives, and improvement of policies and programmes, traditional-communal systems like *himas* offer a holistic approach to effective and sustainable natural resource management and social justice.

⁶⁴ Vanja Westerberg and Moe Myint, *Costs and Benefits of Communal Rangeland Rehabilitation in Jordan: An Economic Valuation of a Large-Scale Rangeland Restoration Project through the Hima System within the Zarqa River Basin in Jordan* (Bonn: ELD Initiative, 2014), 2.

10: Decoupling Water Needs for National Water Supplies: Insights and Potential for Countries in the Jordan Basin

Dr Michael Gilmont, Dr Erica Harper, Lara Nassar, Prof Dr Steve Rayner, Dr Hilmi Salem, Dr Mike Simpson, and Nadav Tal

This chapter compares the water allocation and management experience of Jordan and Israel through the lens of economic and resource decoupling. Jordan faces extreme water scarcity and potential food insecurity. Israel, which shares a similar geography, has adopted policy and technological interventions that have allowed it to largely overcome such pressures. In economic terms, Israel has ‘decoupled’ its social and economic water demands¹ from water resource availability. Jordan has likewise identified ways to achieve regionally unmatched productivity levels for certain crops.

This research considers how the good practices behind these developments can be transferred between the two countries, and to others facing similar pressures. It gauges the scope for decoupling as a means of decreasing pressure on water resources, increasing agricultural water productivity, and allowing more productive use of new and existing water resources. The potential productivity gains from increased effluent reuse and adopting agricultural best practices are calculated for key crops, and the potential volumetric gains of decoupling are considered. Farm-level interview data is used to verify the national assessment and highlight the different knowledge pathways and concerns within agricultural communities.²

¹ Social water use includes domestic and associated non-economic uses, including medical and educational. Economic water use includes industrial and tertiary sector use, including offices and other economic activities (e.g. tourism).

² This research was funded by the Middle East STREAM programme of the British Council. The British Council also supported valuable regional networking. The researchers thank the farmers and policy and academic stakeholders in Jordan and Israel who contributed time, knowledge, and experience; the anonymous consultant who played a crucial role in data collection in Jordan; and regional associates for data collection and farmer contacts. Finally, the research team thanks all managers, colleagues, and support staff, including individuals at EcoPeace (Tel Aviv, Bethlehem, and Amman); the WANA Institute; and the Institute for Science Innovation and Society and the Environmental Change Institute, University of Oxford.

The analysis suggests that improved agricultural productivity could reduce water consumption by up to 168MCM/year in Jordan. Strategic import substitution could further add 52.5MCM/year to the volume of water available for agricultural use, and 140MCM/year could be mobilised through enhanced effluent reuse. This could eliminate the supply/demand gap forecast by 2025 and keep Jordan within sustainable limits. The work also highlights changes required in regulatory frameworks, water infrastructure, and agricultural practice in order to realise these gains, and the political, social, and institutional barriers. It concludes by evaluating opportunities to promote decoupling in Jordan.

Water Resource Decoupling Theory

The Concept of Decoupling

Resource decoupling—the idea that economic growth can be realised without a reciprocal growth in natural resource consumption and environmental impact—has become a key concept in the global discourse on natural resource management.³ Existing models, however, lack the analytical power to efficiently address national water scarcity against the sectorial consumption of natural water. In response, Gilmont⁴ developed a model of (i) food trade and (ii) water recycling/desalination as ways to “decouple” water needs from national water resource consumption, further refining this model⁵ to include (iii) economic diversification leading to water consumption being moved to sectors with the highest economic return on water, or ‘dollar per drop’. This research adds a final decoupling mechanism: (iv) agricultural water use productivity, whereby the volume

³ Tim Jackson, *Prosperity without Growth: Economics for a Finite Planet* (London: Earthscan, 2009); OECD, “Decoupling Environment from Economic Growth,” paper presented at OECD forum, “The Transition to Sustainable Development: Are We Making Progress in Decoupling Economic Growth from Environmental Degradation?” 14 May 2001; UNEP International Resource Panel, *Decoupling Natural Resource Use and Environmental Impacts from Economic Growth* (Nairobi: UNEP, 2011); UNEP International Resource Panel, *Measuring Water Use in a Green Economy* (Nairobi: UNEP, 2012).

⁴ Michael Gilmont, “Decoupling Dependence on Natural Water: Reflexivity in the Regulation and Allocation of Water in Israel,” *Water Policy* 16, no. 1 (2014): 79–101.

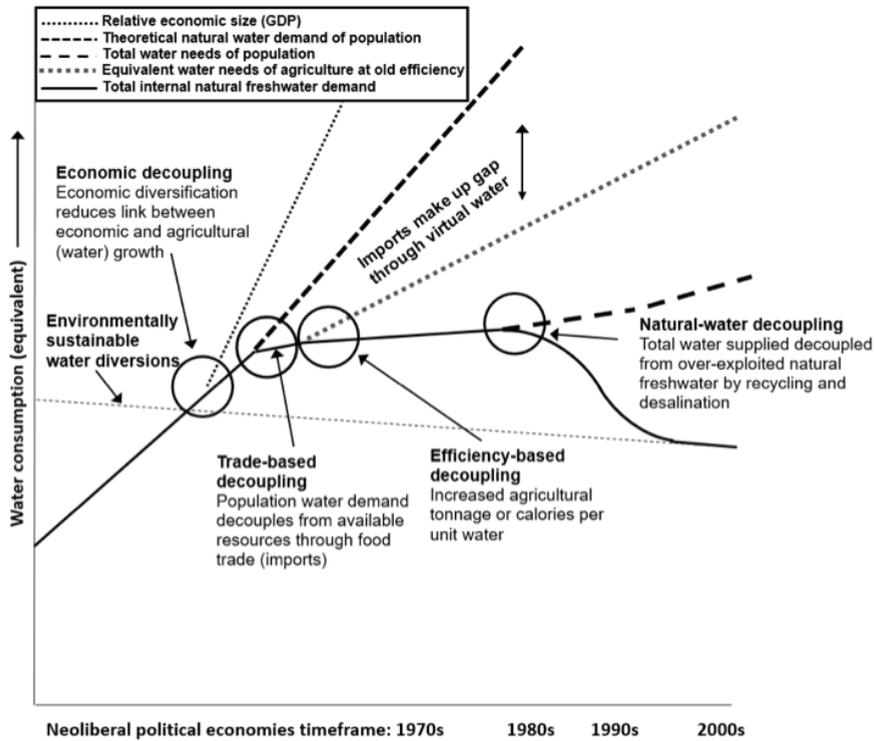
⁵ Michael Gilmont, “Drivers of Food Trade: Water Resource Decoupling in the MENA as a Mechanism for Circumventing National Water Scarcity.” *Food Security* 7, no. 6 (2015): 1113–31; Michael Gilmont, *Analysing the Economic Development Impact of Semi-Arid Lands, and Mitigation by Food-Trade Water Resource Decoupling* (London: PRISE Overseas Development Institute, April 2016).

and value of crop production grow with constant or reduced agricultural levels of water consumption (see Figure 10.1).

The Mechanisms of the Water Decoupling Model

- *Economic decoupling:* Greater returns per unit of water can usually be obtained in the industrial and service sectors than in the agricultural sector. Growth in these areas thus results in less water-intensive national economic output. Reducing agriculturally driven economic growth also allows for greater allocations to the domestic sector, improving quality of life and economic and social development.
- *Trade-based decoupling:* Where national food security is met through domestic supply, population growth necessitates increased agricultural production, and thus water use. One solution is to import food, hence “virtual water,” thus increasing the economy’s total water supply. Since the 1970s, many West Asia countries have increased their dependency on food imports.
- *Efficiency-based decoupling:* This enables agricultural production to increase within existing water supply limits, or in some cases with reduced supply, by investing in improved agriculture water productivity and new technical, educational, and institutional capacity.
- *Natural-water decoupling:* Where existing natural resources are being used beyond their sustainable yield, this can restore sustainable offtake, while maintaining or enhancing overall volumes of national supply. Examples include seawater desalination and recycled domestic wastewater.

Figure 10.1: Revised Water Resource Decoupling Model



Source: Developed from Gilmont, “Decoupling Dependence” and “Drivers of Food Trade.”

Decoupling Challenges

Decoupling strategies are not risk- or cost-free. First, reduced domestic food production, e.g. through import substitution, affects agricultural livelihoods. Second, the agriculture sector and the production of certain crops play important roles in cultural and national identity: date and olive production in West Asia economies are prime examples. Third, the logic of diverting water into higher-value sectors, such as industrial production, assumes the existence of untapped growth potential, markets, and other requisite factors. In Jordan, tourism is a profitable sector, but there are natural limits on its expansion, and regional security and stability play a pivotal role in its profitability. Similarly, in order for Jordan’s technology and service sectors to grow, prerequisites include a pool of suitably educated workers, and regional and global market demand. Fourth, increased “crop

per drop” methods involve large-scale investment in irrigation technology and crop management knowledge and practice.⁶ Such outlay is harder to justify where water prices are low, and the financial savings from water productivity investment are therefore limited. Likewise, desalination and wastewater recycling require expensive infrastructural investments and pose technological challenges. In Jordan’s case, limits to brine discharge into the Red Sea severely curtail the volume of water that can be safely desalinated. The reuse of wastewater may also be resisted on religious and cultural grounds.⁷

Comparing Water Challenges

Israel

Israel is a high-income country spanning several climate zones, including desert, cold and warm semi-arid areas, and a warm Mediterranean zone. Rainfall varies from less than 100mm/year in the south to over 700mm/year in the north, averaging 435mm/year. Total natural renewable water availability is 1,800MCM/year. In 2014, including water generated by desalination and recycling, Israel’s water resources were 2085MCM, providing an available water volume per capita of 251CM.⁸

Israel’s economy is dominated by services and industry,⁹ with agriculture contributing only 1.3 per cent of GDP and employing 1.1 per cent of the labour force in 2016.¹⁰ Despite this, agriculture consumes 55 per cent of Israel’s water (43 per cent of fresh water in 2014). As a “world leader in

⁶ Likewise, supplying crops with their exact water needs can result in soil degradation and salinity build-up.

⁷ Although the increasing normalisation of reuse often mitigates this obstacle.

⁸ Water supply for the domestic and business sectors in 2014 was 91CM/person/year (248 litres per day). Israel is also obligated to supply water to the Palestinian authority under the Israeli–Palestinian Interim Agreement Annex III, and to Jordan under the Israel–Jordan Peace Treaty Annex 2. Since 1993, the estimated average annual rainfall decrease has been 9 per cent, with an increase in extreme (low and high) rainfall years. Israeli experts estimate that overall renewable water resources will decline by up to 25 per cent by 2100, compared with 1961–90 averages, as a result of climate change, exacerbating related challenges such as decreased flow to the River Jordan; OECD, *Water and Climate Change Adaptation: Israel* (Paris: OECD, 2013).

⁹ Services: 82 per cent of the labour force, 80 per cent of GDP; industry: 16 per cent of the labour force, 18 per cent of GDP (as of 2014).

¹⁰ OECD, *Agriculture Policy Monitoring and Evaluation 2016* (Paris: OECD, 2016).

the area of irrigation water management in arid environments,”¹¹ Israel’s agriculture sector has proven adaptive and resilient. The country has leveraged its meagre water resources strategically, balancing food/water needs and the need for water conservation against a growing population,¹² and meeting increased water demand from a modernising economy. Since the mid-1980s, farmers have made use of treated wastewater, and improved irrigation technologies, crop varieties, and cropping patterns. There has also been a shift towards higher-value crops. As a result, yields have increased and freshwater consumption in agriculture has decreased over the past 30 years.

Israel’s Water Sector Development

Between 1985 and 1991, the Israeli government cut agricultural water allocations significantly, encouraging more innovative farming methods and greater water productivity, and began to substitute freshwater allocations with recycled urban wastewater.

Beginning in 1986, Israel invested in programmes to treat urban effluent for agricultural use.¹³ This was initially restricted to tree crops and crops tolerant to low-quality water, but technological improvements have allowed use to be extended. Local treatment plants have been connected to regional effluent grids, giving agriculture access to larger quantities of water more cheaply. Effluents are priced up to 50 per cent lower than fresh water as treatment costs are met by urban wastewater producers, and larger quantities of wastewater are allocated in exchange for farmers surrendering access to fresh water. Today, a bloc rate tariff system applies, structured to discourage excessive consumption. Above quota, additional charges are imposed, so farmers can exceed their quota, but at significant cost.¹⁴

¹¹ International Bank for Reconstruction and Development and World Bank, *Water Resources Management in an Arid Environment: The Case of Israel* (Washington, DC: World Bank, 2006), 18.

¹² Israel’s population in 2016 was 8.8 million, growing at an average of 1.9 per cent, with a density of 391 persons/square km.

¹³ Prompted by the Barcelona Convention (Convention for the Protection of the Mediterranean Sea Against Pollution) of 1976, which regulated effluent discharge into the Mediterranean.

¹⁴ Yoav Kislef, *The Water Economy of Israel* (Jerusalem: Taub Center, November 2011).

Water prices in Israel vary according to how much of the farmers' allocation quota is used; as of 2010, the price of fresh water was ILS1.6–2.4/CM (USD0.46-0.69/CM). High-quality treated wastewater is priced at ILS0.934/CM (USD0.27/CM), while other lower quality effluents are charged at ILS0.803/CM (USD0.23/CM). Urban water supplies use a block tariff varying between ILS7.7/CM (USD2.23/CM) and ILS12.5/CM (USD3.62/CM).¹⁵

Effective public information campaigns in the 1990s and 2000s helped to achieve efficiencies, as did installing government-funded water-saving devices such as flow aerators in homes. Together, public sensitisation, price increases, and water-saving devices reduced domestic consumption by up to 10 per cent.¹⁶ Block rate tariffs were increased during the 2009–13 period, peaking at an average of ILS12/CM (USD3.47/CM) in July 2013.

Most recently, aided by falling desalination costs and in an effort to develop a climatically independent water supply, Israel rolled out an extensive seawater desalination programme from 2005. By 2016, the desalination production capacity was 700MCM/year, although production has been scaled back in recent (wetter) years.

Finally, Israel closely regulates water allocation. All water is state-owned; the importance of this unique legal status and the operational practices it enables cannot be overestimated. The Water Authority determines the total amount of water available and sector and geographical allocations annually. The Ministry of Agriculture then sets allocations among the different agricultural regions and regional “Water Unions”—umbrella bodies representing groups of agricultural water users. In some cases, Water Unions were allowed to buy “bulk water” to sell to farmers, but a 2016 legislative amendment required that all allocations from the state be retailed through the national water company, Mekorot. There is no formal mechanism for trading allocations, but small-scale trade occurs among users in the same Water Union. Central control of water allocation and changing government priorities have ensured that since 1985, agricultural allocations have dramatically reduced from 1465MCM/year to around 1110MCM/year, with treated wastewater now comprising 40 per cent of all agricultural water supply (as of 2014).

¹⁵ Water Authority, *Water and Sewage Rates for Domestic Consumers in Municipal Water and Sewage Corporations* (Tel Aviv: Water Authority, 2016).

¹⁶ Gilmont, “Decoupling Dependence on Natural Water.”

Israel's Decoupling Story

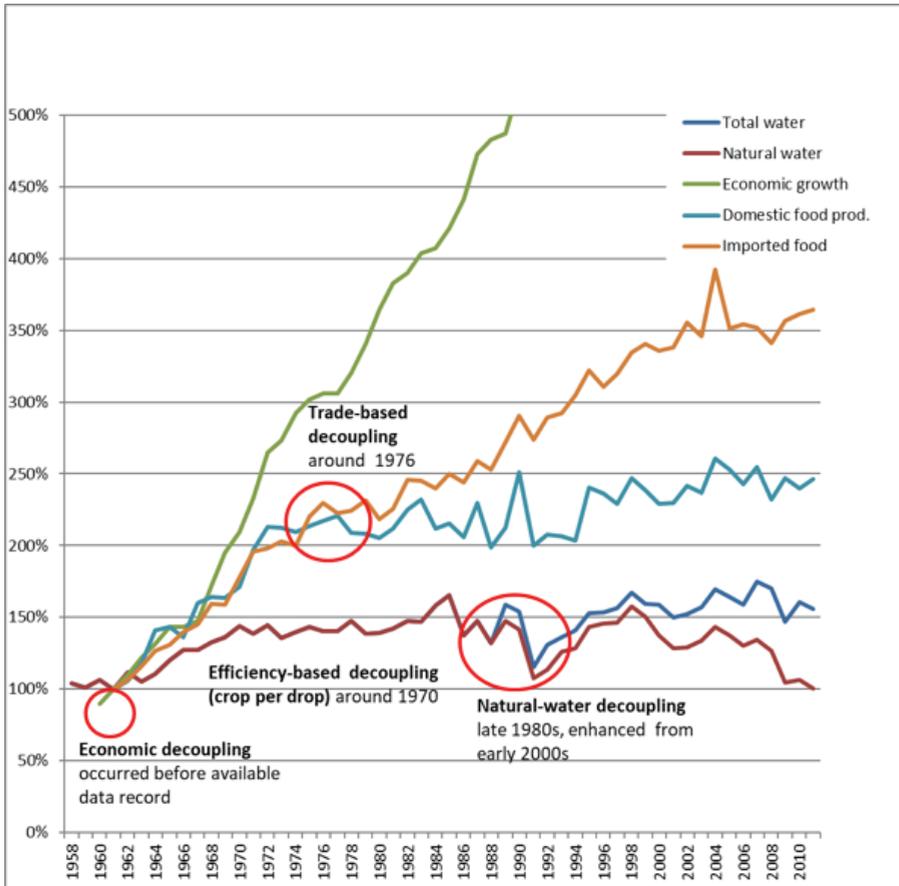
Each of the four decoupling instruments were pivotal in achieving the results described above (see Figure 10.2).

- Economic decoupling: Israel increasingly diverted fresh water away from agriculture, into the industrial and service sectors, where GDP/unit of water input is higher. Since the mid-1980s, volumes of naturally derived water used by the economy have reduced, back to 1960 levels since 2009.
- Trade-based decoupling: A rise in the volume of food imports and a change in import composition towards water-intensive products, such as meat, have reduced impact on natural-water resources.¹⁷
- Efficiency-based decoupling: Agricultural technology, especially irrigation and crop varieties, have facilitated an increase in output faster than that in water consumption, without reducing the amount of water going to agriculture¹⁸ and, from 1985, increased output with absolute reductions in agricultural water.
- Natural-water decoupling: Since 2010, Israel has used recycled effluent in agriculture and desalination. Usage levels from 2009 onwards have been comparable to 1959–64 levels.

¹⁷ John Allan, *The Middle East Water Question* (London, I. B. Tauris, 2001).

¹⁸ David Katz, "Undermining Demand Management with Supply Management: Moral Hazard in Israeli Water Policies," *Water* 8, no. 4 (2016): 159–72.

Figure 10.2: Relative Growth and Resource Use Trajectories in Israel



Israel’s decoupling advancements have not been cost- or risk-free, and this must be considered when evaluating the scope for uptake in other contexts. Israel’s trade-based decoupling enabled the “import” of considerable volumes of virtual water.¹⁹ In theory, this switch to externally sourced staple foods²⁰ could have affected employment patterns and economic structures. In practice, it evolved alongside a natural shift of labour towards higher-value industries, and economic growth outside the agricultural sector.

¹⁹ Allan, *The Middle East Water Question*.

²⁰ Absolute tonnages of imported, plant-based foodstuffs increased fourfold from 1961 to the mid-1990s.

Government efforts to reduce water use involved politically and technically challenging adjustments, often resisted by the agricultural community. Allocation cuts proved politically possible in the early 1990s under severe drought conditions, but could not be sustained when rains returned. Increased agricultural water allocations until the next drought crisis in 1998 can be linked to sympathetic stakeholders high up in the Water Commission hierarchy.²¹

Reversals of previous allocation cuts were also influenced by a policy of brinkmanship, including running stores low in anticipation of future rain. This served to maximise supply and to minimise water held in surface and groundwater storage. It was only in the late 1990s, when the brinkmanship policy once again failed under severe drought, that significant changes in natural-water and sectorial allocations could be achieved. The enhancement of wastewater recycling and the introduction of desalination at this point was, however, combined with a policy of reducing natural freshwater use. Thus, while total national water volumes are now at record levels, use of natural-water resources has reduced: since 2009, it has stabilised at levels comparable with the early 1960s of around 1,300MCM/year.

Jordan

Jordan's Water Context

Jordan is a resource-poor, middle-income country facing complex environmental challenges.²² It is almost entirely semi-arid or arid, with 90 per cent of governorates receiving less than 200mm of rain annually.²³ This rainfall is concentrated in the north-west, and unevenly concentrated between October and May. Jordan has annual renewable water resources of less than 100CM/capita/year, significantly below the global average of 500CM/capita/year.²⁴ In 2015, its total national water supply was 106CM/capita/year, with domestic supply capacity at 48CM/capita/year (131 litres/capita/day).²⁵

²¹ Eran Feitelson, Itay Fischhendler, and Paul Kay, "Role of a Central Administrator in Managing Water Resources," *Water Resources Research* 43, no. 11 (2007): 1–11.

²² Ministry of Water and Irrigation, *Jordan National Water Strategy 2016–2025* (Amman: MWI, 2016).

²³ M. Van Aken et al., *Historical Trajectory of a River Basin in the Middle East: The Lower Jordan River Basin (in Jordan)* (Amman: International Water Management Institute and French Regional Mission for Water and Agriculture, 2007).

²⁴ MWI, *Jordan National Water Strategy*.

²⁵ The per capita figures are based on official population estimates for 2015 (9.532 million), and MWI data on water supplied by sector (456.6MCM/year domestic).

These challenges have been exacerbated by steady population growth and unanticipated population surges. The country currently hosts over 660,000 Syrian refugees registered with UNHCR, placing unprecedented pressure on water resources, water infrastructure, and solid waste management capacities. Refugee camps are located upon the two largest aquifers, the long-term consequences of which have not been fully established. As a result, Jordan is drawing upon its non-renewable aquifer sources, leading to deteriorating water quality and declining supply. If supply levels remain constant, domestic consumption is projected to fall to 90 litres/capita/day by 2025.²⁶

Climate change is expected to exacerbate these challenges. Annual precipitation is decreasing by 1.2mm/year, while temperatures are increasing by at least 0.03 degrees/year.²⁷ Dynamical downscaling models suggest that Jordan is extremely likely to see warmer summers and a generally drier climate. Drought events will be more likely, with longer periods of consecutive dry days.

Jordan is one of the smallest economies in the WANA Region, and one of the few without oil and gas reserves. It relies heavily on external rents, including foreign aid, remittances, and foreign direct investment.²⁸ Its economy remains mostly service-based: trade and services account for 68.3 per cent of economic activity, followed by industry (29.2 per cent), and agriculture (3.8 per cent).²⁹ Cycles of economic slowdown have hampered poverty reduction efforts and public sector efficiency improvements.³⁰ Jordan is also heavily reliant on food imports. Vulnerability to international market prices has impeded proper fiscal planning and exposed the economy to external shocks. Price shocks are either passed on to consumers,³¹ or absorbed by the government through subsidies, driving a high budget deficit.

²⁶ MWI, *Jordan National Water Strategy*.

²⁷ Hashemite Kingdom of Jordan, *Jordan's Third National Communication on Climate Change*, submission to the UNFCCC (Amman: Hashemite Kingdom of Jordan, 2014).

²⁸ Erica Harper, Sean Thomas, and Mays Abdel Aziz, *Forging New Strategies in Protracted Refugee Crises: Syrian Refugees and the Host State Economy* (Amman: WANA Institute, 2015).

²⁹ CIA, "The World Factbook. Middle East: Jordan," 30 May 2017, <https://www.cia.gov/library/publications/the-world-factbook/geos/jo.html>.

³⁰ *Ibid.*

³¹ Harper, Thomas, and Abdel Aziz, *Forging New Strategies*.

Also relevant is Jordan's high rate of unemployment: around 13.6 per cent (11 per cent for men; 22 per cent for women) at the end of 2015.³² However, productive capacity is supported by a large pool of migrant workers (324,410 in 2014) willing to undertake low- and semi-skilled jobs, with 33 per cent of work permits for foreign labourers going to the agricultural sector.³³

The agricultural sector plays a somewhat incongruous role within Jordan's economic framework. Only 5 per cent of lands receive adequate rainfall,³⁴ and agriculture is Jordan's heaviest water consumer, accounting for up to 60 per cent of national allocations. Moreover, while irrigation accounted for 497.5MCM in 2014, farmers irrigate less than 10 per cent of total agricultural land.³⁵ Thus, agriculture accounts for more than half of the nation's water use while generating around 4 per cent of GDP as at 2015.³⁶

It is widely recognised that for the Kingdom to meet its economic potential, it must move its economy towards activities generating value-added. At the same time, it needs to create new opportunities to accommodate the youth "bulge," ensure that workforce competencies meet sectorial needs, and nationalise the workforce by making certain occupations more attractive. A critical step is to direct water away from sectors offering low employment opportunities and GDP contribution, towards sectors with high growth potential and economic value-added, such as tourism and industry.

Agriculture accounts for most of the water used in the Jordanian economy, although this is declining in favour of domestic allocations (see Figures

³² Ministry of Labour, *Annual Report* (Amman: Ministry of Labour, 2014), in Arabic.

³³ According to multiple personnel interviewed in the Ministry of Labour, a large percentage of Egyptian workers work in other sectors despite holding a work permit to work exclusively in agriculture. Nonetheless, the sector has the highest share of foreign workers; Ministry of Labour, *Annual Report*, 43. The official data was anecdotally supported during fieldwork, which confirmed that Syrian refugees fill jobs Jordanians do not want, such as farm labour. Many farmers reported difficulties retaining Jordanian farm labour for more than a few months, whereas Syrians welcomed the employment opportunity.

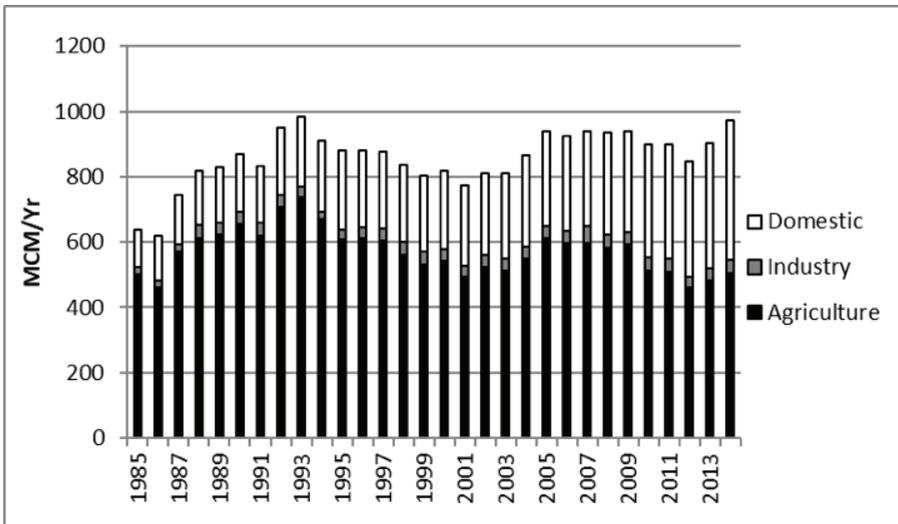
³⁴ MWI, *National Water Strategy*.

³⁵ *Ibid.*

³⁶ This is often contested by the farming community and the Ministry of Agriculture, since it is calculated as the direct sales of agricultural commodities, not taking into account all the associated services and professions that agriculture generates. Van Aken et al. report in *Historical Trajectory of a River Basin* that, taking into account all relevant industries, agriculture actually constitutes 25 per cent of the GDP of Jordan.

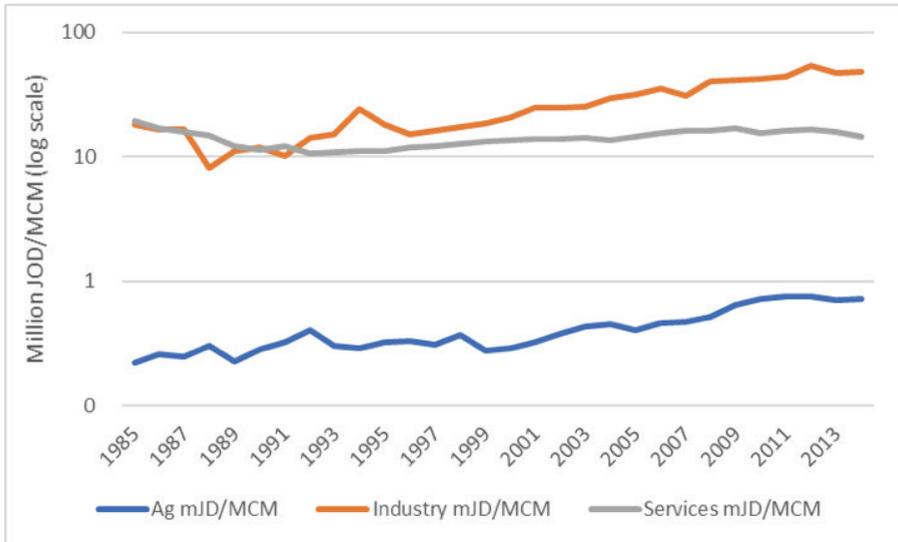
10.3 and 10.4).³⁷ However, the economic return on water is highest in the industrial and service sectors. Official statistics do not disaggregate domestic and economic/commercial water uses. This prevents a calculation of the economic productivity of water solely used by the service sector, but given that much of the “domestic” water allocation is used at the household level, the real economic productivity of water in the service sector is likely to be much higher than in all other sectors. This means that the largest economic opportunity for new water resource application lies in the non-agricultural sector. In 2014, economic returns on water in industry were 66 times those in agriculture, and in the domestic/service sector they were 20 times higher.

Figure 10.3: Jordan Water Use, 1985–2014



Note: Agriculture includes the sub-category “livestock,” which comprises on average 1.5 per cent of agricultural water. Source: 1993–2014 data, MWI; 1985–2001 data: Nortcliff et al., *Jordan’s Water Resources*.

³⁷ This is one of the longest available time series to be derived covering recent years. The MWI only has available data back to 1993. This has been spliced with earlier data quoted by Nortcliff et al., *Jordan’s Water Resources: Challenges for the Future* (Reading: University of Reading, 2008), to create a time series for 30 years, 1985–2014.

Figure 10.4: Economic Output per Unit of Water

Note: “Service” sector includes domestic water supply.

This is not to say that Jordan should not produce food. A strategically composed nationally produced food basket is essential for any country. West Asia states are particularly susceptible to food insecurity and thus to international price fluctuations. Small changes in commodity prices can have a disproportionate impact on the cost of staple foodstuffs. The 2008 food price hike created an additional 4 million undernourished people in Arab countries³⁸ and drove an estimated 44 million more people into poverty.³⁹ Moreover, agriculture plays an important socio-cultural role and provides a lifeline to some of the most marginalised economic groups.

But the scope and structure of food production must use Jordan’s natural resource assets strategically, and make available the necessary water resources to accommodate a growing population and economy. This requires investment in water infrastructure, new water technologies, improved knowledge, and more strategic allocation of water resources and institutional coordination.

³⁸ World Bank, International Fund for Agricultural Development, and FAO, *Improving Food Security in Arab Countries* (Washington, DC: World Bank), xii.

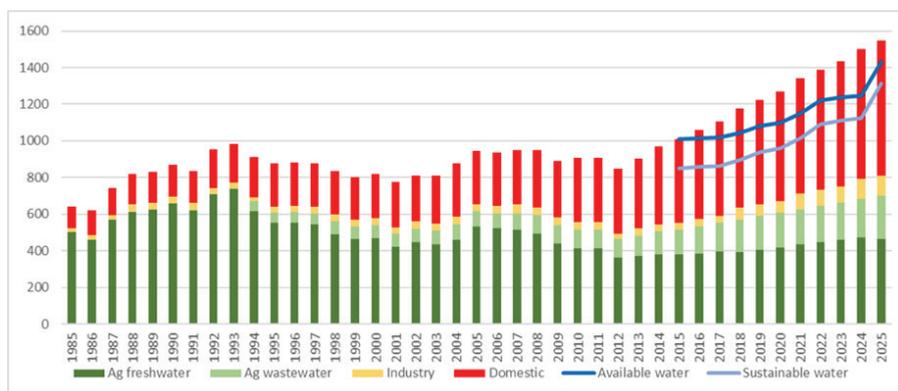
³⁹ World Bank and FAO, *The Grain Chain: Food Security and Managing Wheat Imports in Arab Countries* (Washington, DC: World Bank, 2012).

Jordan's Decoupling Story

Limited long-term data prevents a full analysis, but does show both historic and ongoing water resource decoupling occurring in Jordan. Food imports rose dramatically up to 1975, allowing Jordan to externalise much of its food-water needs. Economic diversification, especially in tourism and technology, appears to have decoupled economic growth from water resource mobilisation since 1993. Also in the early 1990s, agricultural productivity increased despite relatively constant water allocation. The development of recycled water has enabled limited natural-water decoupling, which will be increased under plans for additional wastewater reuse and desalination from the Red-Dead project.

The 2016 MWI Water Plan includes additional recycled wastewater and new desalination capacity that will enhance decoupling trends to 2025. However, it also increases allocations to domestic and agricultural uses to 700 and 703MCM/year respectively. Assuming a linear increase from the current supply of 466 and 514MCM/year, there will be a deficit of 115MCM/year between forecast demand and supply by 2025, and the gap between demand and sustainable supply is projected to be 233MCM/year (see Figure 10.5). Bridging this gap will require either additional increments in supply, or demand management, including through enhanced decoupling. The following sections examine the scope for this and the possible benefits in terms of resolving supply and demand discrepancies.

Figure 10.5: Projection of Jordanian Water Allocation per Sector beyond 2015



Potential for Enhanced Decoupling

If Jordan could achieve similar water productivity levels to Israel, how much water could be saved? Three areas of potential advancement are examined below: (i) expanding total water supply through wastewater recycling (natural-water decoupling); (ii) realigning food import composition in favour of water-dense products (trade-based decoupling); and (iii) integrating new technologies to increase agricultural production using the same amount of water (efficiency-based decoupling). Focused allocation of new water resources and reallocating agricultural water to domestic and service sectors could enhance economic decoupling. Desalination is not considered beyond the capacity already planned: although Israel's recent water achievements have been derived from desalination, this solution is contingent on sea access, which for Jordan is limited. The viable extent of desalination is already planned for in Jordanian policy through the Red-Dead initiative.⁴⁰

Wastewater Recycling (Natural-Water Decoupling)

Between 2010 and 2014, Israel reused just over 60 per cent of the 750MCM consumed by the domestic sector—representing reuse of close to 90 per cent of sewage captured.⁴¹

Jordan commenced wastewater recycling in the 1980s; since then, Jordan Valley water from the King Abdullah Canal has been sent to Amman in exchange for treated effluent. In 2014, Jordan's domestic water supply was 428.2MCM, 29 per cent of which was resupplied as wastewater to agriculture. MWI estimates see wastewater production growing in line with domestic supply by 2025, with approximately 30 per cent of domestic water reused in agriculture. If 60 per cent recovery could be achieved, Jordan could recover 257MCM/year (140MCM above current

⁴⁰ MWI, *National Water Strategy*. Jordan's capacity for seawater desalination is limited by the environmental impact of brine discharge into the Red Sea. The Red-Dead Project circumvents this, allowing brine to flow to the Dead Sea. Direct water supply and water swaps with Israel (to provide Jordan with water closer to Amman) will result in 233MCM/year by 2025.

⁴¹ Water and Wastewater International. "Israel Reuses Nearly 90% of its Wastewater," Water and Wastewater International, 2 December 2016.

rates).⁴² However, these figures may not capture the entire story. Of the water supplied to the domestic sector, an estimated 50 per cent is lost in leakage and illegal abstraction (non-revenue water). Taking this into consideration, Jordan is already achieving a reuse rate of around 60 per cent. To increase recycling further, in addition to increased connections to the sewage system, leakage and abstraction need to be reduced. Increased recycling capacity currently means that every cubic metre saved through reduced leakage is worth 1.6CM to the Jordanian water economy.

The wastewater potential changes as domestic supply increases to meet population growth up to 2025, and estimates of potential water recycling volume should be revised upwards. The MWI intends to meet growing irrigation needs using wastewater, and envisages sending treated wastewater to large industrial establishments; this will require changes in the physical and regulatory acceptance of treated effluent in industry. Jordan's most recent Water Plan estimates 738MCM of domestic allocation by 2025, with a 30 per cent recovery rate for wastewater to agriculture. However, assuming that leakage and non-revenue abstraction are minimised and the 60 per cent reuse benchmark is maintained, a 443MCM/year effluent yield might be secured.

Tree crops in Jordan (those most suited to recycled wastewater) currently use 279MCM/year, most of which is fresh water. Assuming all of the 2014 supply of 125MCM is used in tree crops, a further 154MCM/year natural fresh water could be released to other uses through additional wastewater supply. A long-term 60 per cent recovery of 443MCM would be sufficient for current tree and field crops, while allowing expansion of these crops to meet growing domestic needs, and potentially export earnings, within available wastewater volumes.

Strategic Food Trade

In 2014, Jordan imported 62 per cent of its food,⁴³ and 64 per cent of plant-based food. This high dependence allows water to be focused on crops for

⁴² Importantly, this 60 per cent target is close to the 240MCM/year that Jordan plans to recycle by 2025; MWI, *National Water Strategy*. Current Jordanian policy is closely aligned to regional best practice.

⁴³ Based on 2013 FAO values. Jordan has one of the most import-dependent food economies in the MENA region; Gilmont, "Drivers of Food Trade."

which there is local demand and that cannot be easily imported. Table 10.1 sets out the water consumption of six highly import-dependent crops.⁴⁴ Potatoes and bananas, for example, require moderately high amounts of water and lend themselves to transport and storage: a strong case for increased import substitution. Wheat, currently 98 per cent imported, is another case in point given its low economic value and relative water intensity. More detailed research is needed to identify a food import basket that optimises water productivity, while still allowing domestically derived food security. However, for illustrative purposes, Table 10.1 includes the water savings that could accrue if production of the six crops was halved and substituted with imports.

Table 10.1: Water Use of Six Import-Dependent Crops and Potential Further Water Savings

Crop	Average water use 2009–14 (MCM/year)	2014 import dependency	Saving (MCM/year) if domestic production halved
Banana	25.8	56%	12.9
Apples	18.8	53%	9.4
Dates	23.4	64%	11.7
Wheat	3.5	98%	3.5 (1)
Onion	7.1	57%	3.5
Potato	23	36%	11.5
Total	101.7		52.5

Note: All savings assume 50 per cent cut in domestic production and commensurate increase in imports, except for wheat, where total import substitution is proposed due to very small production relative to national needs.

⁴⁴ Central Bureau of Statistics (Israel), “Annual Data—2016: Table 21.4: Water Production and Consumption.”

Agricultural Water Productivity

Assessment of Relative Agricultural Water Productivity

To estimate agricultural water productivity differences, a simulation of annual agricultural water use was carried out on 47 Israeli⁴⁵ crops and 56 Jordanian⁴⁶ crops, with inflation of the Israeli numbers ensuring a conservative estimate. The Jordanian simulation overestimated agricultural water use, by almost exactly the amount of recent reduction in illegal agricultural wells.⁴⁷ Full analysis was carried out on 14 crops, together representing 86 per cent of Jordan's agricultural water needs.

Table 10.2 sets out the potential savings if Israeli levels of agricultural water productivity were applied to Jordanian crops. The analysis suggests that 168MCM could be recovered of the average 508MCM water consumed by the 14 crops. Savings relate particularly to olives, tomatoes, apples, and clover. Potato and cucumber production, by contrast, appeared more water-productive in Jordan than in Israel: however, in the case of potatoes the difference is slight and in the interests of setting conservative targets, this data has been excluded.

Israel does not irrigate clover due to its low commercial value and the retail and opportunity cost associated with agricultural water. If Jordan similarly moved to rain-fed clover production, savings of 71MCM could be achieved.⁴⁸ This would involve relocating some production, and require farmers who traditionally grow their own feed to purchase rain-fed crops instead. Such challenges would need to be considered against the possible savings.

⁴⁵ Derived from official statistics from the Israeli Ministry of Agriculture's Agricultural Extension Service.

⁴⁶ International Resources Group, *Institutional Support and Strengthening Program (ISSP) Water Valuation Study: Disaggregated Economic Value of Water in Industry and Irrigated Agriculture in Jordan* (Washington, DC: USAID, 2012).

⁴⁷ Omar Obeidat, "Ministry Ends Large-Scale Water Theft in Jordan Valley," *Jordan Times*, 3 September 2016.

⁴⁸ To make detailed recommendations, further research is needed into Israeli varieties and rainfall conditions. However, initial desk analysis suggests that Israel is growing clover without irrigation within similar climate limits as exist in Jordan; Boller et al., *Report of a Working Group on Forages. Eighth Meeting, 10–12 April 2003. Linz, Austria* (Rome: International Plant Genetic Resources Institute, 2005); Mahmoud Al-Jaloudy, *Country Pasture/Forage Resource Profiles: Jordan* (Rome: FAO, 2006). Only 3 per cent of Jordan's area is cultivated, indicating potential to further develop rain-fed crops in the marginal zone.

Table 10.2: Relative Agricultural Water Productivity, Jordan and Israel

	Jordan water use MCM (2010)	Jordan average tonnage, '000s (2009–14)	Jordan water/crop ton	Jordan average water use MCM/Year (2009–14)	Israel water/crop ton at 142% inflation	% of present scenario	Water used under new scenario (MCM)	Water saved/year
Clover	84.0	190.1	376	71.41	Rain-fed	0%	0	71.4
Olives	167.1	110.5*	1,627	179.75	1,278	79%	141.2	38.6
Tomatoes	74.1	753.6	100	75.73	75	75%	56.3	19.4
Banana	26.6	42.4	609	25.81	449	74%	19.0	6.8
Apples	15.0	36.1	522	18.82	187	36%	6.7	12.1
Dates	24.6	10.7	2,187	23.44	1879	86%	20.1	3.3
Watermelon	14.8	117.6	96	11.33	81	84%	9.5	1.8
Grapes	14.6	34.7	491	17.02	426	87%	14.8	2.3
Wheat	3.5	21.6	160	3.46	57	35%	1.2	2.2
Onion, dry	4.2	27.0	265	7.14	185	70%	5.0	2.2
Citrus	35.1	108.7	293	31.89	227	77%	24.7	7.2
Eggplant	11.7	106.6	111	11.87	99	89%	10.6	1.3
Potato	25.2	159.8	144	23.00	189	132%	30.3	-
Cucumber	7.1	191.4	41	7.75	68	168%	13.0	-
Total	507.5	1,910.7		508.42				168.4

Note: * Olive tonnages are the irrigated proportion of total production, calculated from data in International Resources Group, Institutional Support and Strengthening Program.

The Potential for Improved Water Productivity

To verify the secondary data used in the above analysis, interviews were conducted with farmers of the 14 crops (18 in Jordan and 12 in Israel). For both countries, interview data was largely consistent with the disparities observed in the secondary data.

The findings for six crops in particular (tomatoes, bananas, apples, wheat, onions, citrus) are very reliable—that is, discrepancies in water productivity are confirmed in both the primary and secondary data. These are all crops where significant gains in agricultural water productivity could be achieved in Jordan. For the other crops, the primary and secondary data are less consistent.

Dollar-Per-Drop Water Valuation

Interviews confirmed that crop prices are generally comparable across Jordan and Israel, and that water productivity is the main reason for differences in “dollar per drop” value (Table 10.3). Improving the productivity of onion production, for example, could result in a near fivefold financial return. It also strengthens the case for enhanced import substitution: those crops with the lowest return per unit water (onions, wheat, apples, bananas, and perhaps clover) should be increasingly imported, allowing reallocation of water to other sectors or production of more efficient crops. Dates and olives require special mention. Jordanian dates command almost twice the price of Israeli equivalents.⁴⁹ Despite this, Jordanian farmers appear to rely predominantly on rainfall, using small volumes of supplementary irrigation. Interview results suggest that Israeli farmers irrigate dates and olives based on the rationale that this is the only way to obtain a profitable market price. The Jordanian evidence challenges this notion—an important observation for Israeli farmers.

⁴⁹ The olive oil tonnage and price data was converted to the fruit equivalent at an approximate rate of 30 per cent (so 1kg olives prices 300ml of oil). Prices for olives sold as fruit and oil were generally similar, so a higher ratio of oil production does not explain the higher price in Jordan.

Table 10.3: Summary of Average Prices, Average Crop Yields, and Equivalent Revenue per Unit Water

Crop	Jordan USD/kg	Israel USD/ kg	Jordan CM/t	Israel CM/t	Jordan USD/ CM crop water	Israel USD/ CM crop water
Clover	0.31	0.24	ND	-	ND	Rain-fed
Olives	1.62	1.37	50.2	675	32.24	2.02
Tomato	0.32	1.99	61.2	38	5.24	52.30
Banana	0.78	0.83	544	217	1.43	3.81
Apples	0.39	1.33	354	156	1.10	8.49
Dates	3.10	1.63	486	767	6.38	2.13
Watermelon	0.28	0.48	96	150	2.95	3.18
Grapes	1.35	0.66	130	75	10.39	8.83
Wheat	0.52	0.32	350	200	1.48	1.59
Onion	0.50	0.53	422	92	1.18	5.76
Citrus	0.63	0.68	342.9	203	1.85	3.35
Eggplant	0.28	ND	143	ND	1.97	ND
Potato	0.55	0.32	125	83	4.37	3.83
Cucumber	0.51	0.80	113	77	4.47	10.32

Note: USD, 1 September 2016 market conversion rate.

Overcoming the Challenges of Water Scarcity and Food Insecurity

This research seeks to address the challenge of water scarcity and resultant food insecurity in Jordan and Israel. Based on current projections, Jordan will face a continuing deficit between demand and supply, and a consequential overdraft of groundwater resources. As well as reversing this trend, Jordan needs to increase agricultural production to support a growing population, and free up water resources for other sectors where the return value is higher. The impact of climate change is likely to exacerbate these challenges.

Both economies employ techniques to address water scarcity—including economic diversification, wastewater recycling, strategic food import, and increasing agricultural water productivity—which “decouple” national water needs from economic and population growth. A further form of decoupling—natural-water decoupling—is playing a growing role in both countries. Desalination plants in Israel already have the capacity to produce 700MCM/year, while Jordan is investing in a desalination project in Aqaba with a 260MCM/year capacity and a pipeline to convey brine to the Dead Sea.

Currently, higher levels of water productivity have been achieved in Israel than in Jordan. Through policy, regulatory, and technological advances, Israel has contained its water security challenges. If Jordan can achieve similar levels of water productivity, how much water might be freed up for alternative purposes? Our principal finding is that Jordan could equal Israeli benchmarks on wastewater recycling and agricultural water productivity, combined with strategic food import substitution, it could make available approximately 168MCM/year of water (see Table 10.4).

Table 10.4: Potential New Resource Capacity or Equivalence through Enhanced Decoupling in Jordan

Wastewater recycling potential (60% reuse benchmark)	257MCM/year (current domestic use)
	443MCM (2025 domestic use)
Import substitution	52.5MCM/year
Water efficiency	168MCM/year

- **Wastewater recycling:** If the Israeli benchmark of 60 per cent reuse could be achieved, Jordan could recycle 257MCM/year rather than the current 125MCM. If domestic supply increases in line with government projections, up to 443MCM might be produced by 2025. This is conditional on reducing non-revenue water. New recycled water supplies could be fed into tree crops, recovering 145MCM fresh water for crops requiring higher-quality water. As crop demand increases with population growth, the production of tree crops that suit recycled wastewater could be increased. The reliability of wastewater supplies would buffer these crops from drought impact.
- **Food import substitution:** Importing high-water-content crops is a water-efficient means of meeting domestic food needs. Jordan already imports a high proportion of its food, and over-exposure to volatile international markets carries risks; impacts on livelihoods must also be considered.⁵⁰ However, there may be scope for a strategic rebalancing of Jordan's imported food basket. The exact composition of this requires further analysis, but simply substituting domestic production of water-intensive foods with imports by 50 per cent would save 52.5MCM of water per year, based on current production levels.
- **Water productivity:** The research found reliable evidence that Israel enjoys greater agricultural water productivity than Jordan in six crops, and semi-reliable evidence for a further eight crops. If Jordan could achieve Israeli water productivity levels in these 14 crops, it could maintain agricultural output but reduce agricultural water allocation by 50–168MCM/year.

⁵⁰ Primary data highlighted cost barriers to increased food trade, both import and export. Poor infrastructure and accountability at ports and airports regarding handling perishable cargos were also highlighted as hindering trade.

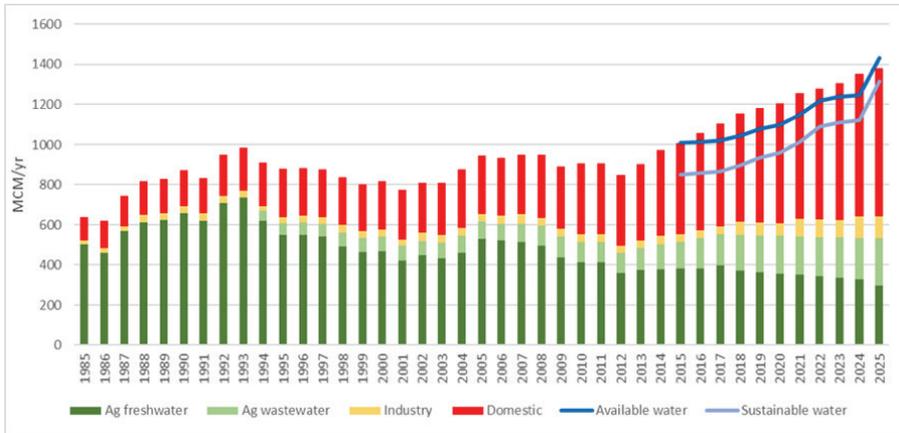
Jordan must not only reduce agricultural water consumption but also increase yields for crops that are not easily importable, to support a growing population. Again, the research found that replicating Israeli benchmarks could result in sustainable water consumption for certain crops, including tree crops with increased production facilitated by greater volumes of recycled water.

One notable finding was that for two crops (olives and dates) Jordan enjoys greater water productivity than Israel. This suggests scope for the exchange of knowledge and techniques between countries, rather than a one-way transfer, in the effort to improve regional water security.

Current policy aims to significantly increase agricultural water allocations to redress the perceived deficit in agricultural water and meet future food needs. This research questions the notion that increased supplies of agricultural water are necessary to increase agricultural capacity; it should be possible to maintain current production with less water, or increase production within current limits, given a technical and policy environment that promotes more water-efficient practices. Positively, there is considerable adaptability on the part of farmers in both economies: a significant percentage had relevant graduate qualifications, potentially suggesting easy uptake of new technologies and crop management approaches.

Figure 10.6 reworks Jordan's future water resource trends, incorporating improved agricultural water productivity. The simulation not only eliminates the supply deficit, but also significantly reduces the unsustainable element of Jordan's water supply. Adopting the proposed food import substitution brings supplies within sustainable limits. Agricultural water supplies are maintained at levels comparable with present real supply, and water productivity is anticipated to facilitate output growth.

Figure 10.6: Projection of Jordan’s Water Needs, Incorporating Agricultural Water Productivity Gains



Enabling Future Decoupling

Given the potential to mitigate water scarcity through a combination of increased wastewater production, strategic food imports, and enhanced agricultural water efficiency, the next question is how to realise such gains. Israel is a wealthy country with a robust governance architecture; this undoubtedly facilitated investment in this field. It also introduced comprehensive policy reforms, some of which caused political backlash and necessitated stepping back and iterative reworking. At the same time, the Israeli agricultural sector created its own momentum in water productivity, generating economic opportunities and other spin-off benefits.⁵¹ By contrast, Jordan faces significant internal and external challenges, water/food security being just one of them. Moves towards Israeli benchmarks will be financially costly and involve some painful reforms, including changes in livelihoods. These benefits need to be evaluated against the costs. The remainder of this section sets out changes needed to facilitate this transition, and how the associated challenges might be overcome.

Achieving optimum levels of wastewater recycling would involve adjustments in the national crop mix, and be contingent on reducing non-revenue water. Improved connectivity of household wastewater to

⁵¹ Jon Fedler, *Israeli Agriculture—Coping with Growth* (Jerusalem: Ministry of Foreign Affairs, Israel, 2002).

central collection systems, water treatment, and agricultural distribution networks would also be needed, requiring infrastructural investment and institutional support.

Food import substitution should be approached cautiously, due to the potential impacts on employment and livelihoods. Irrespective of the economic rationale, certain crops are difficult to phase out for cultural reasons.⁵² A food import basket that balances food security and water productivity would need to be calculated based on future food needs, import/export behaviours, and trade-offs in terms of unemployment. Import substitution can reduce the size of the agricultural sector to free up water resources for domestic purposes or for sectors with higher GDP/unit of water input, but this needs to be evaluated against the social and environmental roles agriculture plays in the country, as well as its contribution to the national food supply.

The precise mechanisms by which Jordan could replicate Israeli water productivity benchmarks are beyond the scope of this research. It is clear, however, that irrigation techniques, crop selection, soil conditioning, plant husbandry, and other agricultural technology are all relevant, along with appropriate methods for transfer of science to farmers and engagement between farmers, government agencies, agricultural scientists. It is important to evaluate potential gains against costs. For example, if Jordan transitions from irrigated to rain-fed clover, some production would need to be relocated and farmers growing their own feed would need to purchase rain-fed crops from other producers. In all cases, carefully planned adjustments, minimising social disruption and replacing social and economic opportunity, are imperative.

⁵² Hanna Namrouqa, "Raising Irrigation Water for Date Palms, Vineyards Good for Agriculture, Economy-Sector Insiders." *Jordan Times*, 11 April 2016. Current policy is geared to an increase in domestic date production, with a significant portion of total Jordanian date crops (domestic and imports) being exported. A significant proportion of date imports are from the Gulf, which are then re-exported after value-adding activities. Any further import substitution in dates therefore needs a holistic understanding of the value chain.

Policy Interventions for a More Water-Productive Agricultural Sector

Increased Sectorial Productivity

Across both countries, the agricultural sector faces the challenge of more attractive opportunities in other sectors, underscoring the need for strategic policy reform to encourage the development of a more cost-effective sector. It is likely that some reduction in the size of the sector would be beneficial; the challenge will be to manage this shrinkage in order to realise an optimally sized sector that operates efficiently and competitively. This requires investment in new technologies and equipment, technical and knowledge support, and an enabling environment for the production of higher-value crops. The specific steps required should be the subject of further research.

Information

Alongside technical measures, there is strong potential for information pathways to spread knowledge of improved water productivity. The information and advice supplied by the Ministry of Agriculture to Israeli farmers is effectively provided and well-received. By contrast, interview data showed scepticism among Jordanian farmers towards governmental and NCARE advice, highlighting the value of investment in government-led agricultural knowledge-sharing. Benchmarking and targets for water use and crop yield in particular areas would be beneficial. There appears to be a tradition of social and neighbourly learning, which could prove an effective way to share good practices at community level.

Diplomacy and Knowledge Transfer

Of the two countries studied, Israel exhibits greater water productivity for many crops, but Jordan also has promisingly high productivity in some areas. There is considerable scope for direct learning in terms of on-farm practices and technologies, and wider understanding of different regional water allocation and management experience. There is also potential for farmers to learn best practices within their communities, given the considerable variation in water use and crop yield between individual farmers. Identifying such practices and promoting avenues for learning and

dissemination would further enhance decoupling. Developing a national network and promoting avenues for indigenous improvements in water productivity would help build capacity and innovation within agricultural sectors. Consideration should be given to mechanisms of international knowledge exchange, without creating dependency on external parties. Improved water decoupling would also enhance efforts to meet many of the UN Sustainable Development Goals.

Policy Recommendations for Enhanced Decoupling

- **Price and supply reform:** The most straightforward way to incentivise water efficiency is price control. Subsidies make the agricultural water in Jordan very cheap, so there is little incentive for farmers to improve productivity. Israel, by contrast, has imposed price reforms, passing more accurate water cost on to users. An alternative is to cap agriculture supply allocation. The key challenge is likely popular discontent; in Jordan, agriculture is already perceived to be receiving less water than it needs. Indeed, farmers appear to be using less water than is currently allocated: 500–600MCM/year of the agricultural allocation rather than the 700MCM/year benchmark of the 2016 Water Plan.
- **Financial incentives:** Tax breaks, low-cost loans, or tailored insurance schemes are possible mechanisms for incentivising water-saving techniques such as rainwater harvesting, hydroponics, and purchasing irrigation equipment and technologies. Incentives could also apply to the use of wastewater for suitable crops, or zoning of agricultural land based on crop suitability. Conversely, farmers might be punitively taxed or charged on water used to grow unsuitable crops, or on growing crops in unsuitable areas.
- **Augmenting supply:** Illegal groundwater use needs to be curtailed. Minimising leakage by investing in upgrading and repairing water infrastructure should be also prioritised. In addition to planned measures, investment in rainwater harvesting should be considered.
- **Improved policy coordination:** Jordan has contradictory or overlapping regulations and departmental responsibilities, particularly relating to land use. An overarching policy is needed for water and food security that understands water as a key input of the agricultural, domestic,

and industrial sectors, and a crosscutting issue in relation to land use, food production, industry, trade, and the environment. It should be based on comprehensive evaluations of national food security and of how production or import of particular crop types affects water needs, and should synthesise the interests and priorities of different government authorities, particularly the Ministries of Water and Agriculture. The MOA, for example, currently opposes reallocating water from agriculture to other uses. Lessons from Israel might prove instructive; there, reforms enabled a robust symbiosis between the Water Authority and farmers.⁵³ It must be highlighted, however, that Israel's institutional capacity, monitoring, and control of water is almost unique in global terms.

- More efficient practices: New approaches and technologies could enable a more cost-effective sector, and this should be the subject of further research. A seed bank or catalogue supporting the production of drought-resistant and water-productive crops, together with a knowledge base on their cultivation, was suggested by policy stakeholders.

⁵³ However, Israel has recently seen tensions between the government and the agricultural sector, especially over changes to water prices in January 2017 and concerns over commodity prices.

11: Sustainable Development Goals: Jordan and Beyond

Reem Alhaddadin and Lara Nassar

On 27 September 2015, the United Nations adopted 17 Sustainable Development Goals (SDGs), officially known as “Transforming Our World: the 2030 Agenda for Sustainable Development.” This was an outcome of a three-year process following the Millennium Development Goals (MDGs),¹ involving the UN’s 193 Member States and global civil society. The SDGs synthesise the environmental, social, and economic dimensions of development in order to address poverty and equality for all in a healthy environment.

Jordan was one of the first countries to work towards achieving the MDGs. Considerable progress was made.² However, Jordan still faces dire environmental challenges, such as having one of the lowest levels of water resource availability in the world.³ It is also one of the few energy-resource-poor countries in West Asia, which has contributed to high government debt levels. In seeking ways to fill the 80 per cent energy gap, another USD6 billion (JOD4.254 billion) has been added to the deficit since 2011.⁴ The country is prone to climate change impacts as well, with forecasts predicting longer, dryer seasons and less precipitation in the future.⁵ This difficult environmental situation is further exacerbated by a large influx of refugees.

¹ At the Millennium Summit in September 2000, the largest gathering of world leaders in history adopted the UN Millennium Declaration, committing to a new global partnership to reduce poverty and setting out time-bound targets, with a deadline of 2015, that became known as the MDGs.

² “Jordan,” Sustainable Development Knowledge Platform, 2017, <https://sustainabledevelopment.un.org/memberstates/jordan>.

³ “Jordan: Water Is Life,” The Health and Environment Linkages Initiative (HELI), WHO, 2017, www.who.int/heli/pilots/jordan/en/.

⁴ USAID, *Jordan Country Development Cooperation Strategy 2013–2017*, (Amman: USAID, 2015), 1

⁵ Hashemite Kingdom of Jordan, *Jordan’s Third National Communication on Climate Change*, submission to the UNFCCC (Amman: Hashemite Kingdom of Jordan, 2014).

Together with the Friedrich-Ebert-Stiftung, the WANA Institute implemented a project titled “Pathways towards the Sustainable Development Goals in Jordan” which focused on three SDGs crucial to Jordan’s environmental development: Goal 6—Ensure access to water and sanitation for all; Goal 7—Ensure access to affordable, reliable, sustainable, and modern energy for all; and Goal 13—Take urgent action to combat climate change and its impacts. This chapter, the project’s final product, will:

- Describe current (global) knowledge of the three SDGs, gaps, and prerequisites for implementation
- Take stock of the current implementation status of the three SDGs in Jordan
- Provide practical guidance to decision-makers on ways to bridge the gaps between policy and practice in Jordan

The Sustainable Development Goals

The world is facing imminent environmental threats, including water scarcity, climate change, and loss of biodiversity, all of which are worsened by poor governance and conflict. The 2030 Agenda for Sustainable Development responds by adopting sustainable development as the overarching principle for global cooperation on social inclusion, economic development, and environmental sustainability, with a commitment to reducing inequalities within and among countries and an aspiration to “peace, fair governance and justice.”⁶ The agenda calls for action under five themes; People, Planet, Prosperity, Peace, and Partnerships (Figure 11.1).

⁶ Jens Martens, “The 2030 Agenda: A New Start towards Global Sustainability?” in *Spotlight on Sustainable Development*, ed. Barbara Adams et al. (Beirut: Development Alternatives with Women for a New Era, Third World Network, Social Watch, Global Policy Forum, and Arab NGO Network for Development, 2016), 11–15 at 11.

Figure 11.1: The Five Key Themes of the SDGs



Source: <http://colombo.sites.uniconnetwork.org/files/2015/09/SDG-pics.png>.

The 17 SDGs comprise 169 targets with qualitative and quantitative objectives to be reached by 2030 (Figure 11.2) and indicators to monitor compliance.⁷ The targets are global, taking into account different national realities, policies, and priorities. The need for countries to work together is central, challenging the assumption that “development is a phenomenon that occurs only in countries of the global south while the global north is already developed.”⁸ While much was achieved through the MDGs, which focused on halving extreme poverty, many countries made insufficient progress on environmental sustainability; the SDGs continue the process.

⁷ Sustainable Development Solutions Network, *Getting Started with the Sustainable Development Goals: A Guide for Stakeholders* (Paris and New York: SDSN, December 2015), 6.

⁸ Martens, “The 2030 Agenda,” 11.

Figure 11.2: The Sustainable Development Goals



Source: <http://unsdsn.org/wp-content/uploads/2016/06/sdgs-list-en.jpg>

SDG 6: Clean Water and Sanitation

Worldwide water extraction grew approximately twice as fast as the global population in the twentieth century. Big businesses, including large-scale agricultural activities, need greater water supplies to sustain economic growth and development. However, more than 700 million people still remain without access to improved sources of drinking water and 2.5 billion without access to adequate sanitation.⁹ The FAO predicts that if current consumption patterns persist, two-thirds of the world population could be living in water-stressed countries by 2050.

The SDGs treat water supply and sanitation as a human right, emphasising that local communities should have sovereignty over their natural resources and universal access to public water and sanitation services. The SDG 6 targets (Table 11.1) reflect this. However, studies¹⁰ conclude that some of the language used, such as “efficiency,” “substantially increase,” or

⁹ “Sustainable Development Goals. 6: Clean Water and Sanitation,” FAO, 2017, www.fao.org/sustainable-development-goals/goals/goal-6/en/.

¹⁰ Meera Karunanathan, “Whose Rights to Water Will the 2030 Agenda Promote?” in *Spotlight on Sustainable Development*, ed. Adams et al., 54–59 at 58.

“substantially decrease,” is either not specific enough or too ambitious, which does not help in holding governments accountable.

SDG 6 focuses on implementing integrated water resource management (IWRM), defined by the Global Water Partnership (GWP) as “a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.” The UN and the GWP regard this as the best management solution, combining social equity, economic efficiency, and ecological sustainability. However, sceptics fear that the concept is a vague “one-size-fits-all” strategy that may ignore local knowledge and cultural realities,¹¹ which must be integrated into a “human rights water management” approach to ensure right-holders’ inclusion in decision-making.

Table 11.1: SDG 6 Targets for 2030

6.1	Achieve universal and equitable access to safe and affordable drinking water for all
6.2	Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
6.3	Improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
6.4	Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
6.5	Implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
6.6	Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
6.a	Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
6.b	Support and strengthen the participation of local communities in improving water and sanitation management

¹¹ Karunanathan, “Whose Rights to Water Will the 2030 Agenda Promote?,” 58

The Global Need to Implement SDG 6

Access to safe drinking water and sanitation is crucial to eradicating poverty and to sustainable development. It is also a human right.¹² Water insecurity and deficient hygiene affect food security, livelihoods, and educational opportunities. The approximately 22.5 million refugees—over half under 18—living in refugee camps or elsewhere in host countries¹³ further increase pressure on access to adequate safe water, sanitation, and hygiene.

There are direct and indirect benefits of implementing SDG 6. Many young women and girls walk long distances—sometimes after the sun sets—to fetch water, putting them at risk of sexual violence. Improved water access thus better protects them. Water access and sanitation also play a huge role in health and nutrition, and are linked with food security and livelihoods. Sustainable agriculture, e.g. more efficient use of irrigation, can address water scarcity. Finally, implementing SDG 6 can improve education. Each day, nearly 1,000 children die due to preventable water- and sanitation-related diarrhoeal diseases that can be spread in schools.¹⁴ WASH (water, sanitation, hygiene) programmes address this, providing better toilet facilities and access to drinking water in schools.

Box 11.1 showcases a sustainable agriculture project in Jordan that contributes to meeting SDG 6 targets.

¹² UN-Water, “The Human Right to Water and Sanitation,” United Nations Media Brief, n. d., www.un.org/waterforlifedecade/pdf/human_right_to_water_and_sanitation_media_brief.pdf.

¹³ “Figures at a Glance,” UNHCR, n. d., www.unhcr.org/uk/figures-at-a-glance.html.

¹⁴ “SDG 6: Clean Water and Sanitation,” United Nations in India, n. d., <http://in.one.un.org/page/sustainable-development-goals/sdg-6/>.

Box 11.1: The Sahara Forest Project: Resilient Sustainable Agriculture in Jordan

The Sahara Forest Project is a new environmental solution originally piloted in Doha to utilise scarce resources to produce food in desert ecosystems.

The 3-hectare facility in Aqaba, Jordan, uses sun, saltwater, desert areas, and CO₂ to produce food, fresh water, and clean energy. Saltwater-cooled greenhouses provide excellent conditions for producing high-quality vegetables such as cucumber and tomatoes. Photovoltaic panels provide power. Outdoor growing zones contribute to greater yields of various crops while also storing atmospheric CO₂ in vegetation on degraded land. A desalination unit with a capacity of 10,000 litres of fresh water per day will provide the water needed for the greenhouse and outdoor vegetation. Annual production could reach up to 130,000kg of vegetables.



Source: "Jordan," Sahara Forest Project, n. d., www.saharaforestproject.com/jordan/.

SDG 7: Affordable and Clean Energy

Between 1990 and 2010, the number of people with access to electricity increased by an estimated 1.7 billion. However, around 2.9 billion people still have no access to “modern energy” services; over 1.1 billion have no electricity.¹⁵ Demand for affordable energy will keep increasing due to a growing global population. Global development of clean energy production means that over 20 per cent of power is generated from renewable sources as of 2011.¹⁶ Yet the energy sector is still the dominant contributor to climate change, producing around 60 per cent of Greenhouse Gas (GHG) emissions worldwide.¹⁷ The challenge lies in meeting the need for modern energy while decreasing its impact on natural resources and climate change. All five SDG 7 targets (Table 11.2) are equally important to achieve this.

Table 11.2: SDG 7 Targets for 2030

7.1	Ensure universal access to affordable, reliable and modern energy services
7.2	Increase substantially the share of renewable energy in the global energy mix
7.3	Double the global rate of improvement in energy efficiency
7.a	Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
7.b	Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support

The Global Need to Implement SDG 7

Energy is essential to all SDGs, sustainable development, climate change, and human wellbeing. Expanding infrastructure and upgrading technology to provide clean energy in developing countries is crucial for growth as well as for the environment.

¹⁵ “Sustainable Development Goal 7—Post 2015 Sustainable Development Agenda,” Sustainable Energy for All, n. d., www.se4all.org/sdg7.

¹⁶ “Goal 7: Affordable and Clean Energy,” UNDP, 2017, www.undp.org/content/undp/en/home/sustainable-development-goals/goal-7-affordable-and-clean-energy.html.

¹⁷ “Sustainable Development Goal 7—Post 2015 Sustainable Development Agenda.”

Energy Access and Social Development

Access to sustainable, affordable energy has far-reaching implications for human well-being and socioeconomic development. Most economic activities are impossible without adequate, reliable modern energy services. Developing renewable energy services can create revenue sources for rural areas in developing countries. Energy production can also create employment opportunities, increasing standards of living.¹⁸ Energy access is a prerequisite for delivering services such as education and health.¹⁹

People living in poverty are less likely to have access to energy services, and overcoming “energy poverty” is not possible if energy services are available only for short periods, when a community is grid-connected but individual households are not, or when energy is too expensive.²⁰ Small-scale community renewable energy projects have been directly linked to reducing poverty in developing countries.²¹

SDG 7 and the Paris Agreement

In 2015, another major international agreement was concluded alongside the SDGs: the Paris Agreement, a new international climate agreement under the United Nations Framework Convention on Climate Change (UNFCCC). The signing of the Paris Agreement in October 2016 was a significant step forward in the global response to climate change. It calls on countries to keep global temperatures from rising more than 2°C this century, to set ambitious Nationally Determined Contributions (NDCs),²² and to report on emissions and implementation efforts.

¹⁸ OECD, *Linking Renewable Energy to Rural Development* (Paris: OECD, October 2012).

¹⁹ Isabella Alloisio, Andrea Zucca, and Samuel Carrara, *SDG 7 as an Enabling Factor for Sustainable Development: The Role of Technology Innovation in the Electricity Sector* (Milan: FEEM and ICSD, 2017).

²⁰ Indicators usually used for energy access are the number of people/households who are connected and use energy regularly; UN Economic and Social Commission for Asia and the Pacific, *Statistical Yearbook for Asia and the Pacific 2015. 7: Renewable Energy* (Bangkok: UN ESCAP, 2015).

²¹ Julia Terrapon-Pfaff et al., “A Cross-Sectional Review: Impacts and Sustainability of Small-Scale Renewable Energy Projects in Developing Countries,” *Renewable and Sustainable Energy Reviews* 40 (December 2014): 1–10.

²² This refers to countries’ reductions in GHG emissions. Once the Paris Agreement is ratified, NDCs will be the first GHG targets under the UNFCCC that are applied equally to both developed and developing countries.

If not addressed, climate change has the potential to slow down and even reverse progress on all SDGs. While there is no formal relationship between the Paris Agreement and the SDGs, the 2030 Agenda acknowledges the need for a global response to climate change through SDG 13 and an increase in renewable energy through SDG 7, and all SDG 7 targets are aligned with climate change actions within the Paris Agreement and the intended NDCs.²³ Thus, there is enormous potential for mutually supportive implementation of SDG 7 and the Paris Agreement.

SDG 13: Climate Action

Climate change has been recognised as the single biggest threat to development.²⁴ Countries around the world, but especially the poorest and most vulnerable communities, are now experiencing its effects, from extreme droughts to floods. These effects continue to grow with increasing GHG, which have doubled since 1990.²⁵

Urgent action is needed to mitigate and adapt to climate change in order to be able to effectively implement all SDGs. At the same time, implementing certain SDGs will contribute to fighting climate change. For example, ensuring universal access to affordable electricity (SDG 7) means investing in clean energy sources such as solar, wind, and thermal. Adopting cost-effective standards for a wider range of technologies could reduce electricity consumption in buildings and industry by 14 per cent,²⁶ equivalent to cutting the GHG emissions of around 1,300 medium-sized fossil fuel power plants.²⁷

²³ Eliza Northrop et al., *Examining the Alignment between the Intended Nationally Determined Contributions and Sustainable Development Goals* (Washington, DC: World Resource Institute, 2016).

²⁴ "Sustainable Development Goal 13," Sustainable Development Knowledge Platform, 2017, <https://sustainabledevelopment.un.org/sdg13>.

²⁵ "13: Climate Action," UNDP, 2017, www.undp.org/content/undp/en/home/sustainable-development-goals/goal-13-climate-action.html.

²⁶ Ibid.

²⁷ Ibid.

Table 11.3: SDG 13 Targets for 2030

13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
13.2	Integrate climate change measures into national policies, strategies and planning
13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
13.a	Implement the commitment undertaken by developed-country parties to the UNFCCC to a goal of mobilising jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalise the Green Climate Fund through its capitalisation as soon as possible
13.b	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalised communities

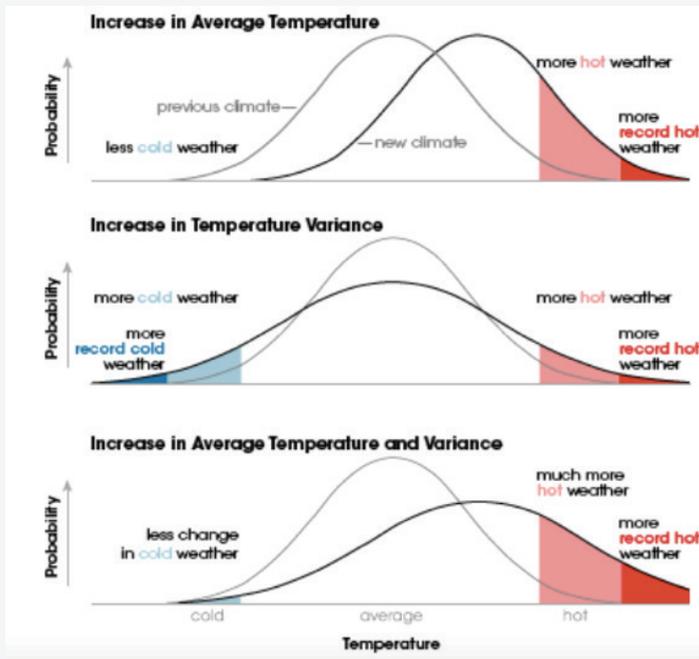
The Global Need to Implement SDG 13

While scientists disagree on certain details, most models (see Box 11.2) predict a dark future. According to the IPCC, an increase in GHG will boost temperatures over most land surfaces. This has been directly linked with drought risk and the frequency and intensity of storms. Other environmental changes include melting glaciers and ice caps, causing rising sea levels and making coastal flooding more severe.²⁸ It is estimated that climate change affected 211 million people and caused an annual average of 83,000 deaths between 2000 and 2013.²⁹

²⁸ "The Impact of Climate Change on Natural Disasters," *Earth Observatory*, n. d., https://earthobservatory.nasa.gov/Features/RisingCost/rising_cost5.php.

²⁹ As natural disasters have increased in frequency and intensity, more people have been affected; see "Goal 13: Take Urgent Action to Combat Climate Change and Its Impacts," UNSTATS, 2017, <https://unstats.un.org/sdgs/report/2016/goal-13/>.

Box 11.2: Climate Change and Weather-Related Disasters



Climate change affects *average* global temperatures and *extreme* temperatures, increasing the likelihood of weather-related disasters.

If climate change causes increasing average global temperatures, there will be a greater probability of hot weather, and less cold weather (top graph).

If temperature variance increases, this will extend extreme events, causing both more record hot weather and more record cold weather (middle graph).

If both average temperature and variance increase, this will have little effect on the extremity of cold weather but will greatly increase the likelihood of it and record hot weather (bottom graph).

Source: "The Impact of Climate Change on Natural Disasters," *Earth Observatory*, n. d., https://earthobservatory.nasa.gov/Features/RisingCost/rising_cost5.php.

The UNDP has estimated that USD6 billion (JOD4.254 billion) is needed annually in disaster risk reduction over 15 years, to help avoid USD360 billion (JOD255.24 billion) in losses and damage caused by climate change disasters such as floods and tropical cyclones. It aims to mobilise USD100 billion (JOD70.9 billion) annually by 2020 to address the needs of developing countries and help mitigate climate change.³⁰

An increase in natural disasters hinders sustainable development. Since 2009, one person has been displaced by a climate- or weather-related disaster every second: an annual average of 22.5 million people. However, climate change does not need to cause calamities to impact sustainable development. It amplifies risks to ecosystems, human welfare, and health, and jeopardises efforts to combat diseases. It enhances poverty, and temperature increases and changes in precipitation are directly linked to crop yields and the spread of vector-borne diseases such as malaria.³¹

As a side-effect of reducing GHG, USD286 billion (JOD202.774 billion) has been invested globally in renewable energy since 2015, making it twice as commercially attractive as fossil fuels.³² This transition will have an impact on other sectors, for example by leaving them with so-called “stranded assets” that unexpectedly lose value, such as those related to fossil fuel extraction. The value of global financial assets at risk from climate change has been estimated at USD4.2 trillion (JOD2.98 trillion). Therefore, there is a significant financial incentive to address climate change while contributing to sustainable development.³³

³⁰ “Climate Action: Why it Matters,” UN, n. d., www.un.org/sustainabledevelopment/wp-content/uploads/2017/07/16-00055m_Why-it-Matters_Climate-Action_3p.pdf; “Climate Action: Why it Matters to Business,” UN, n. d., www.un.org/sustainabledevelopment/wp-content/uploads/2016/07/16-00055_Why_it_Matters_Climate_Action_Business_letter_size_1p.pdf.

³¹ USAID, *Climate-Resilient Development*, 1.

³² “Climate Action: Why it Matters to Business.”

³³ Ernest and Young, *Climate Change: The Investment Perspective* (EYCM, 2016).

SDG Implementation in Jordan

Jordan was relatively free from environmental problems until the 1970s, but this has changed rapidly since then. Together with economic, social, and political transformations, environmental challenges emerged because of population growth and increasing urbanisation and development.

Jordan is at the centre of a volatile region and has experienced influxes of refugees from conflict in neighbouring countries. According to the 2015 census, Jordan's population is 9.5 million; 30 per cent are non-Jordanians, more than 1.3 million of them Syrians.³⁴ This places huge pressure on water and energy resources. Yet the country has seen significant developmental achievements over the past decade.

Since 2015, the government has sought to incorporate the SDGs into national development plans. In 2016, it launched a 10-year socioeconomic blueprint, *Jordan 2025*, aimed at creating a resilient economy deepened by reform and inclusion.³⁵ It was also one of the first countries in the region to produce a Voluntary National Review (VNR):³⁶ a roadmap to sustainable development aiming to strengthen policies and institutions of government and mobilise support to implement the goals. The Ministry of Planning and International Cooperation (MoPIC) plans to create a “dashboard” of data on SDG implementation, further enhancing transparency and accountability.³⁷ However, these commitments are situated within a highly challenging landscape.

The following sections describe the status of SDG implementation, assess the gaps and challenges identified by different stakeholders, and conclude by formulating guidance to policy-makers on how to better implement the SDGs.

³⁴ Ministry of Planning and Cooperation, *Jordan's Way to Sustainable Development* (Amman, MoPIC: 2017).

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ Described in the panel discussion on 19 October 2017.

Approach

In 2017, the WANA Institute consulted key stakeholders on the current implementation of the three examined SDGs and the challenges and opportunities for future implementation. A focus group was planned for each SDG, involving 15 key people from different stakeholder groups. Due to a low rate of participation in the first group, the methodology shifted to focus on one-on-one interviews.

Interviews took place with 20 stakeholders from the energy and water sectors, representing the public, academia, donors, and civil society. Interviews lasted 45–60 minutes and discussed three questions: (1) What is your organisation doing to help implement the three targeted SDGs? (2) What do you see as the challenges and opportunities for the implementation of these SDGs in Jordan? (3) What are your key recommendations for better implementation? Finally, a panel discussion was held involving 50 experts from three sectors and representatives of MoPIC, the UN SDG group, civil society, and the scientific community.

All interviews were transcribed verbatim and the key outcomes of the panel discussion were summed up. Out of the 20 interviews, 17 were selected based on their applicability and added value. Relevant information was extracted and used to analyse the Jordanian situation. Additional data was collected through a literature review, and maps and figures representing aspects of the water and energy sector were created in-house.

SDG 6: Clean Water and Sanitation in Jordan

Water per capita in Jordan is 88 per cent below the international water poverty line.³⁸ Ninety per cent of the country receives an annual rainfall of less than 200mm. The agricultural sector uses up to 60 per cent of the total national water supply, while 36 per cent goes to municipal use.

Under MDG 7, Jordan increased access to water supply, although intermittently. It was also successful in increasing access to sanitation to 63 per cent (from 48 per cent in 2000).³⁹ However, population increases

³⁸ "Jordan," World Vision, n. d., www.wvi.org/sites/default/files/WASH%20-%20Jordan.pdf.

³⁹ Ministry of Water and Irrigation, *Establishing the Post-2015 Development Agenda. Sustainable Development Goals (SDG) towards Water Security: The Jordanian Perspective* (Amman: MWI, 2016).

exacerbate the pressure, and satisfactory results for SDG 6 will take a long time for Jordan to achieve. The *Jordan National Water Strategy 2016–2025* (“MWI Strategy”) includes indicators and targets for the MWI and the Water Authority of Jordan (WAJ). Nationalised indicators build on MDG drinking water and sanitation targets, which overlap with the first three SDG 6 targets, but lack a focus on the other (new) SDG 6 targets; the MWI plans to nationalise the remaining targets in 2018. Table 11.4 illustrates nationalised targets and indicators for the first three SDG 6 targets.

Jordan was chosen by the UN-Water Integrated Monitoring Initiative as a pilot country for SDG 6 implementation. Using the FAO water information system AQUISTAT, Jordan will start monitoring SDG 6 implementation in 2018. The MWI has produced a water baseline for Jordan as a starting point for monitoring and evaluation until 2030, and has formed a national committee to plan initiatives to help reach the targets, consisting of members of MOEnv, MOA, and MoPIC, and civil society.⁴⁰

⁴⁰ Ministry of Water and Irrigation, *Establishing the Post-2015 Development Agenda. Sustainable Development Goals (SDG) towards Water Security: The Jordanian Perspective* (Amman: MWI, 2016).

Table 11.4: Jordan Targets and Indicators for SDG 6

	SDG 6 targets	National targets	Indicators
6.1	Achieve universal and equitable access to safe and affordable drinking water for all	Universal access to safe and affordable drinking water	Percentage of population with access to safely managed drinking water services
6.2	Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	Achieve access to adequate sanitation; end open defecation Achieve access to hygiene for all	Percentage of population with access to safely managed sanitation services Percentage of population with access to hygiene
6.3	Improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	Improve water quality Halve the proportion of untreated wastewater Increase recycling and safe reuse by X per cent	Water Quality Index Percentage of wastewater (domestic and industrial) safely treated Percentage of municipal wastewater safely reused and industrial wastewater recycled

Source: Ministry of Water and Irrigation, *Jordan National Water Strategy 2016—2025* (Amman: MWI, 2016).

Universal Access to Safe and Affordable Drinking Water (Target 6.1)

Jordan's water distribution reaches over 94 per cent of the population, yet around 65 litres/capita/day are lost due to water theft and leakage.⁴¹

The MWI is combating water theft by conducting inspections and detecting and shutting down illegal water operations,⁴² reporting 30,000 violations since 2013, and intensifying efforts since the start of the SDG process.⁴³ Miyahuna—a national company fully owned by WAJ—is working to decrease water losses through infrastructure repairs, installing

⁴¹ Ministry of Water and Irrigation, *Jordan National Water Strategy 2016—2025* (Amman: MWI, 2016); interview with anonymous senior official, Amman, 11 July 2017.

⁴² Interview with anonymous senior official, Amman, 11 July 2017.

⁴³ Hana Namrouqa, "Authorities Tackle 3000 Violations," *Jordan Times*, 6 May 2017.

digital meters, and improved monitoring of leaks.⁴⁴ It also partners with the MWI to prevent water theft from the domestic system.

MWI introduced a Water Allocation Policy in 2016 which augments water supply and controls water allocation. The MWI Strategy aims to increase the water budget by approximately 552.5MCM by 2025, 422.5MCM of it drinking water supply, 94MCM treated wastewater, and 36MCM marginal water.⁴⁵ The Red-Dead Sea Project⁴⁶ will contribute 235MCM by 2025. The Strategy specifies additional drinking water resources and their respective relative contributions.⁴⁷ It also promotes effective partnerships with civil society and other stakeholders to build awareness of efficient use and conservation of water and protect water infrastructure from theft.

Achieve Access to Adequate Sanitation and Access to Hygiene for All (Target 6.2)

The massive influx of Syrian refugees meant the MWI had to address the emerging needs of specific host communities in Jordan in relation to sanitation and hygiene. The Jordan Response Platform for the Syria Crisis created a taskforce to help improve WASH services throughout Jordan and in host communities, including by mobilising municipalities to support schools and develop WASH learning and practice centres. The MWI strategy includes plans for a framework covering IWRM and WASH, with legal and regulatory requirements for the whole water sector.

⁴⁴ Interview with Ghazi Khalil, CEO, Muhammad Ouran, Customer Service Director, and Mohammad Kharbsheh, Senior Engineer, Miyahuna, Amman, 9 July 2017.

⁴⁵ Marginal water contributes to wastewater from urban areas and saline and agricultural drainage into groundwater.

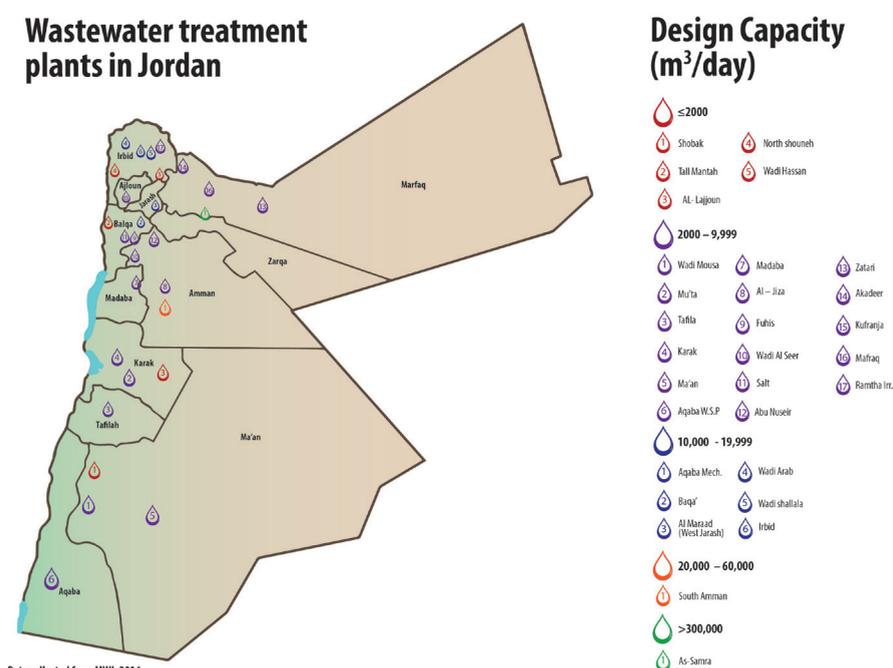
⁴⁶ Sometimes called the Two Seas Canal, this project is a planned pipeline running from Aqaba by the Red Sea to the Lisan area by the Dead Sea. It will provide potable water to Jordan, Israel, and Palestine, stabilise the Dead Sea water level, and generate electricity to support the project's energy needs.

⁴⁷ MWI, *Jordan National Water Strategy 2016—2025*.

Halving the Proportion of Untreated Wastewater; Increasing Recycling and Safe Reuse (Target 6.3)

The government is exploring new ways to harness treated wastewater and desalinated brackish water and seawater. Thirty wastewater treatment plants are in use, treating 98 per cent of collected wastewater (Figure 11.3), which provides 95 per cent of water used for agriculture in the Jordan Valley.⁴⁸

Figure 11.3: Waste Water Treatment Plants in Jordan



Challenges in Implementing SDG 6

Six challenges are discussed below: scarce natural water resources, demographics, infrastructure, social issues, data availability and accuracy, and institutional issues.

⁴⁸ Interviews with anonymous senior official, MWI, 11 July 2017; and Ghazi Khalil, CEO, Muhammad Ouran, Customer Service Director, and Mohammad Kharbsheh, Senior Engineer, Miyahuna, 9 July 2017.

Scarce natural water resources

Despite the intention to increase water supply by adding additional drinking water resources, it is anticipated that Jordan will still need to over-abstact from already depleted aquifers. The country had a water supply gap of 386MCM in 2017⁴⁹ and will report a national water deficit of 88MCM in 2025.⁵⁰ This affects all sectors, with the biggest gap in the agricultural sector. Much could be done to use agricultural water more efficiently. Improved productivity could reduce water consumption by up to 168MCM/year; import substitution of water-intense crops could save 52.5MCM/year.⁵¹

Demographics

Since 2001, UNRWA and UNHCR have registered 2.8 million refugees in Jordan—the largest proportion of refugees to host population of any country.⁵² This increases pressure on the water sector,⁵³ with an estimated water cost per refugee per year of JOD440 (USD621).⁵⁴ In the strategy preceding the 2016 National Water Strategy, the government had planned to pump 100MCM/year from the Disi Aquifer⁵⁵ to compensate for water extracted from the over-exploited Azraq aquifer. But due to an increase in demand since the influx of refugees in 2011, the Azraq aquifer is still being over-exploited rather than left to replenish.⁵⁶

⁴⁹ MWI, *Jordan National Water Strategy 2016—2025*.

⁵⁰ Ibid. Interviews with anonymous senior official, MWI, 11 July 2017; Ghazi Khalil, CEO, Muhammad Ouran, Customer Service Director, and Mohammad Kharbsheh, Senior Engineer, Miyahuna, 9 July 2017; HE Khaldoun Khashman, Secretary General, Arab Countries Water Utilities Association, Amman, 19 July 2017; anonymous respondent, Swiss Cooperation Office, Amman, 18 July 2017.

⁵¹ Michael Gilmont et al., *Decoupling National Water Needs for National Water Supplies: Insights and Potential for Countries in the Jordan Basin* (Amman: WANA Institute, 2017).

⁵² MoPIC, *Jordan's Way to Sustainable Development*.

⁵³ Interviews with anonymous senior official, MWI, Amman, 11 July 2017; Ghazi Khalil, CEO, Muhammad Ouran, Customer Service Director and Mohammad Kharbsheh, Senior Engineer, Miyahuna, 9 July 2017; HE Khaldoun Khashman, Secretary General, Arab Countries Water Utilities Association, 19 July 2017; anonymous respondent, Swiss Cooperation Office, 18 July 2017.

⁵⁴ Ministry of Water and Irrigation, *Jordan Water Sector Facts and Figures* (Amman: MWI, 2016).

⁵⁵ "Disi Water Conveyance (Private Sector Project)," MWI, 14 April 2014, [http://waterjo.mwi.gov.jo/En/Updates/Pages/Disi-Water-Conveyance-\(private-sector-project\).aspx](http://waterjo.mwi.gov.jo/En/Updates/Pages/Disi-Water-Conveyance-(private-sector-project).aspx).

⁵⁶ Interview with anonymous senior official, MWI, 11 July 2017.

Infrastructure

Although the government has been working on theft and water losses, several stakeholders⁵⁷ still deem the resultant savings too modest. Water meters are outdated, possibly yielding incorrect readings and further adding to unaccounted-for water. Jordan's infrastructure also lacks a leakage monitoring system, which may further add to water loss.

Social issues

Implementing water-use policy on the ground in a coherent, socially sensitive manner is a challenge. Even with programmes dedicated to increasing awareness about water scarcity, consumption patterns have not changed significantly over the past decade.⁵⁸ On the contrary, efforts to decrease water wastage and theft have been met with resistance, in some cases violently.⁵⁹ Breaches include using illegal wells, either previously licensed ones whose license has not been renewed, or illegally dug ones for domestic purposes, and selling illegally pumped water in drought seasons.⁶⁰ Illegal activities and resistance to behavioural change may result partly from communities' lack of ownership over their natural resources.⁶¹

Data availability and accuracy

To set targets and indicators, accurate, nationally approved baseline data is needed. A water baseline should include information about supply and demand, WASH, agricultural and other needs, and opportunities to increase water-use efficiency. Unfortunately, Jordan does not have a database with accurate information on these topics.⁶² Global indicators for water quality and quantity require specific methods of assessment and data collection. Yet, some stakeholders feel that the MWI and MOA may

⁵⁷ Interviews with anonymous senior official, MWI, 11 July 2017; Ghazi Khalil, CEO, Muhammad Ouran, Customer Service Director, and Mohammad Kharbsheh, Senior Engineer, Miyahuna, 9 July 2017.

⁵⁸ Interview with anonymous senior official, MWI, 11 July 2017.

⁵⁹ Hama Namrouqa, "Water Authority Employees Shot At, Car Rammed at Illegal Drilling Well Site," *Jordan Times*, 14 May 2017.

⁶⁰ Interviews with anonymous senior official, MWI, 11 July 2017; Ghazi Khalil, CEO, Muhammad Ouran, Customer Service Director, and Mohammad Kharbsheh, Senior Engineer, Miyahuna, 9 July 2017.

⁶¹ Interview with anonymous respondent, Swiss Cooperation Office, 18 July 2017.

⁶² Interviews with anonymous respondent, Swiss Cooperation Office, 18 July 2017; HE Ms Constanza Farina, UNESCO Representative, 17 July 2017.

lack the skills needed to collect this information.⁶³ Various anonymous sources also doubted the accuracy of currently available national water data.

Institutional issues

Directorates within the MWI, MOA, and MOEnv are all working on water-related issues, resulting in institutional gaps and an overlap between responsibilities, institutional regulations, and policies. One example is the jurisdiction of the MWI in the agricultural sector. The MWI controls water supply nationally, allocating a certain amount to the agricultural sector. However, it is only responsible for supplying the water per season, not for controlling water usage within farms' perimeters. The MOA can only suggest types of crops to be cultivated, and does not have the authority to control crop allocation.⁶⁴ Farmers therefore have the freedom to cultivate any crop at any season, resulting in either a surplus or a shortage of water being allocated to farmers, depending on the season and the crop. Farmers are driven to sell extra water or over-pump illegally, and/or use water unfit for irrigation.⁶⁵

Another institutional concern, voiced by anonymous sources, is the lack of meritocracy in the appointment of ministry staff, which may lead to positions being filled by staff who lack the necessary qualifications. Furthermore, there is no system in place that allows civil society to hold ministries accountable for their natural resource (mis)management.

All of the above-mentioned challenges will pose an even greater problem over the next two decades, as the population is expected double and precipitation will become more uncertain and variable due to climate change.

⁶³ Interviews with anonymous respondent, Swiss Cooperation Office, 18 July 2017; HE Khaldoun Khashman, Secretary General, Arab Countries Water Utilities Association, 19 July 2017.

⁶⁴ Cultivating certain crops in areas with higher temperatures can push farmers to use more water for irrigation.

⁶⁵ Interviews with anonymous senior official, MWI, 11 July 2017; Amer Maadat, Senior Field Officer, International Union for Conservation of Nature, Amman, 15 August 2017.

SDG7: Affordable and Clean Energy in Jordan

Jordan's energy consumption—16,177.6GWh in 2015⁶⁶—is expected to rise yearly by 6.2 per cent. In recent years, Jordan has imported almost 97 per cent of its energy needs, consuming 52.8 per cent of the country's export revenue.⁶⁷ Jordan's debt has increased due to rising natural gas and petroleum prices, and a high transmission and distribution electricity loss rate. In 2013, the transmission and distribution loss rate amounted to 14 per cent of all generated electricity (the international average is 8.1 per cent), accounting for a JOD343.8 million (USD484.91 million) deficit.⁶⁸ A large portion could be due to electricity theft.⁶⁹

Energy security, diversification and efficiency, and investing in renewable technologies are therefore top priorities. The energy sector will be integral to growing Jordan's economy, and is already showing outstanding momentum in generating renewable energy (6 per cent of national energy production). The main contributor to the energy mix in 2017 was petroleum, followed by natural gas, coal, and renewable energy. It is expected that by 2025, Jordan will add oil shale and nuclear energy, together accounting for 28 per cent.⁷⁰ Jordan also has an abundance of solar radiation: 1600–2300 kWh/m²/year on horizontal surfaces.⁷¹ The annual average wind speed is 4–6.5m/second, also offering huge renewable energy potential.⁷²

Despite the importance of achieving the SDG 7 targets, the Ministry of Energy and Mineral Resources (MEMR) lacks a specific SDG 7 strategy, and has not internalised the targets and indicators. There is no directorate or department working directly on the targets. Some may have been achieved through projects in renewable energy and energy efficiency, rather than as a result of conscious effort towards implementing SDG 7.

⁶⁶ "Consumption by Sector," Ministry of Energy and Mineral Resources, 2017, <http://eis.memr.gov.jo/2016-04-03-07-04-42/2016-04-03-07-10-16/consumption-by-sector>.

⁶⁷ EDAMA, *Jordan Clean Technology Sector—Report 2016* (Amman: USAID: 2016)

⁶⁸ Jordan Independent Economy Watch, *Energy Sector in Jordan 1: Gas and Electricity* (Amman: Identity Center, June 2015).

⁶⁹ *ibid*

⁷⁰ EDAMA, *Jordan Clean Technology Sector—Report 2016*.

⁷¹ A. Al-Salaymeh, "Modelling of Global Daily Solar Radiation on Horizontal Surfaces for Amman City," *Emirates Journal for Engineering Research* 11, no.1 (2006): 49–56.

⁷² Ali M. Baniyounes, "Renewable Energy Potential in Jordan," *International Journal of Applied Engineering Research* 12, no. 19 (2017): 8323–31.

Jordan has, however, embarked on action plans to increase its renewable energy and energy efficiency.⁷³ The Renewable Energy and Energy Efficiency Law (2012) has further supported this,⁷⁴ and NGOs and international organisations have introduced initiatives to change consumer behaviour, resulting in decreased power usage and reduced energy bills. A major aim is to increase the contribution of renewable energy to 10 per cent of the energy mix by 2020.⁷⁵ Wind energy projects include those operating in Ma'an (total generated energy 133MW) and Tafleeh (216MW). Solar projects in Ma'an and Mafraq generate 197MW and 1,260MW respectively.⁷⁶

The Jordan Renewable Energy and Energy Efficiency Fund (JREEEF) is a leading stakeholder in this field,⁷⁷ created by MEMR in 2012 to provide technical and financial support to scale up renewable energy. JREEEF works with donor agencies, NGOs, the private and public sectors, scientific societies, research centres, and academic institutions and individuals, any of which can apply for funding for renewable projects. The main goal is to increase awareness in civil society and the private sector about the ability of renewable energy to decrease economic and financial burdens on the government and, more importantly, to indirectly achieve SDG 7 targets.⁷⁸

⁷³ Ministry of Energy and Mineral Resources, *Jordan Energy Efficiency Action Plan* (Amman: MEMR, 2013) and *Master Strategy of Energy Sector in Jordan for the Period (2007–2020)* (Amman: MEMR, 2007); *Jordan 2025: A National Vision and Strategy* (Government of Jordan, 2015).

⁷⁴ "Jordan's Energy Sector," USAID, 2014, <http://escb-jordan.org/jordan-energy-sector/>.

⁷⁵ Ministry of Energy and Mineral Resources, *Jordan Energy Sector Strategy 2015–2025* (Amman: MEMR, 2015) (in Arabic).

⁷⁶ Total energy generated in each governorate based on data from 2016, gathered from different sources including JREEEF, MEMR, and the *Jordan Times*.

⁷⁷ "Jordan Renewable Energy and Energy Efficiency Fund JREEEF: Duties and Obligations," MEMR, 2015, www.memr.gov.jo/Pages/viewpage.aspx?pageID=264.

⁷⁸ "Jordan Renewable Energy and Energy Efficiency Fund—JREEEF," Facebook, n. d., www.facebook.com/pg/JREEEF/about/?tab=page_info.

The Energy and Mineral Regulatory Commission⁷⁹ plans to reduce the distributional loss rate to 10 per cent by 2020, working with distribution companies to detect transmission losses and theft.⁸⁰

Challenges in Implementing SDG 7

The challenges in implementing SDG 7 in Jordan mainly relate to social and institutional issues.

Social issues

A major challenge is the lack of knowledge in civil society and among non-practitioners about the regulations regarding the installation of small-scale renewable technology. In some cases, energy efficiency is more feasible and cost-efficient than installing renewable energy, or vice versa,⁸¹ but decisions about the most appropriate technology are hindered by a limited understanding of the difference between renewable energy and energy efficiency.

Jordan's push to increase energy efficiency has resulted in changed consumer behaviour, but the country still witnesses energy violations, with 17,289 electricity theft violations documented between January and July 2017.⁸² In one case, theft included illegal installation of invertors and connections at an estimated cost of more than JOD300,000 (USD423,131), not including the cost of the stolen electricity.⁸³ This may point to the absence of local community accountability and sense of ownership over energy resources.⁸⁴

⁷⁹ A governmental body that possess a legal personality with financial and administrative independence, considered the legal successor to the Electricity Regulatory Commission, the Jordan Nuclear Regulatory Commission, and the Natural Resources Authority in relation to its regulatory tasks according to law no. 17 for the year 2014 regarding the restructuring of institutions and governmental organisations.

⁸⁰ Jordan Independent Economy Watch, *Energy Sector in Jordan 1*.

⁸¹ Interviews with Safaa Jayousi, Director, IndyAct, Amman, 13 August 2017; Ruba al Zubi, energy expert, Amman, 14 August 2017; Ramzi Sabella, USAID, Amman, 8 August 2017; anonymous project manager, NERC, Amman, 9 August 2017; Nidal Oaran, Environmental Analyst, UNDP, Amman, 14 August 2017.

⁸² "17,289 Electricity Theft Cases Recorded since January," *Jordan Times*, 5 October 2017, www.jordantimes.com/news/local/17289-electricity-theft-cases-recorded-january.

⁸³ "Historic Electricity Theft Discovered in Eastern Desert," *Jordan Times*, 4 October 2017, www.jordantimes.com/news/local/historic-electricity-theft-discovered-eastern-desert.

⁸⁴ Anonymous sources have suggested that the lack of local community ownership contributes significantly to natural resource mismanagement and abuse.

Institutional issues

A major concern in the energy sector is enforcing energy regulations and laws such as energy audits on public and private buildings. Other concerns result from conflicting energy strategies, for example on electricity tariffs. Energy is highly subsidised, and most subsidies are granted to the social category with the lowest energy consumption, which includes over 50 per cent of the population. This creates a false energy value, discouraging energy efficiency. Subsidies therefore do not support the overall national strategy.⁸⁵

Investment in renewable energy has become a major opportunity. However, thorough investigation of the practical effects on the energy sector are needed to avoid jeopardising future renewable energy production. Huge amounts of renewable energy could affect the grid if it is not ready to cope with such an energy load.⁸⁶

There is a lack of monitoring and evaluation of renewable energy projects. A database of all initiatives and their contribution to the goals would be beneficial.⁸⁷ Anonymous sources express concern over the bureaucratic, time-consuming procedures for implementing projects, the lack of meritocracy in the appointment of ministry staff, and the lack of accountability of ministries to civil society for their natural resource (mis)management.

SDG 13: Climate Action in Jordan

Jordan is witnessing increasing average temperatures and declining average precipitation—trends projected to worsen, with longer, dryer seasons and more intense heatwaves, more flash floods and unexpected frosts.⁸⁸ The ZRB has been used as a case study to demonstrate climate change effects. Modelling scenarios show that an increase of only 1°C would reduce agricultural production by 3.5 per cent, increase water costs by

⁸⁵ Interviews with Ruba al Zubi, energy expert, 14 August 2017; Nidal Oaran, Environmental Analyst, UNDP, 14 August 2017; HE Malik Kabariti, energy expert, former Minister of Energy in Jordan, Amman, 24 August 2017.

⁸⁶ *Ibid.*

⁸⁷ *Ibid.*

⁸⁸ Lara Nassar, *Climate Change Adaptation in Jordanian Communities: Limitations and Opportunities* (Amman: WANA Institute, 2016); Ministry of Environment, *2013–2020 National Climate Change Policy of Jordan* (Amman: MOEnv, 2013).

4.3 per cent, and reduce agricultural GDP in the ZRB by 5 per cent.⁸⁹ With lower GDP and income, local communities are not able to adapt to these impacts. Families are unable to replace water and agricultural supplies where this requires financial outlay, such as purchasing drip irrigation or supplementary water tanks.

Jordan has not internalised the SDG 13 targets and indicators; the MOEnv lacks a specific strategy for them and there is no directorate or department directly working on them. However, some targets are being achieved indirectly as a result of certain policies and strategies. In 1997, before any other country in the region, Jordan submitted its first national communication report to the UNFCCC. Since then, it has submitted several other national communication reports to the UN, most recently the Third National Report in 2014.⁹⁰ It was the first country in the region to launch a national policy on climate change (2013–20), which accommodates all national priorities for climate change action and provides a policy reference point for future strategies.⁹¹ Subsequently, the MOEnv produced a Climate Change Strategic Plan (2014–16) and created a National Committee on Climate Change, headed by the ministry itself and including other ministries such as MEMR, MoPIC, and MWI. This committee advises on the work conducted by the ministry's Climate Change Unit. Though Jordan only contributes about 0.06 per cent of worldwide GHG, it has taken action to combat climate change effects.⁹² Actions are driven by institutions, NGOs and various programmes mostly guided by the MOEnv Climate Change Unit.

Regarding mitigation, Jordan submitted its intended NDCs to the UNFCCC in 2015, committing to reducing GHG emissions by 14 per cent by 2030, and an additional 12.5 per cent subject to the availability of international funds and implementation support.⁹³ Achieving the 14 per cent target will cost an estimated USD5.7 billion (over JOD4 billion), of which the government had already secured over USD542 million

⁸⁹ Ministry of Environment, *Assessment of Direct and Indirect Impacts of Climate Change Scenarios (Socioeconomic Study: Vol. II)* (Amman: MOEnv, 2013).

⁹⁰ Hashemite Kingdom of Jordan, *Jordan's Third National Communication on Climate Change*.

⁹¹ MOEnv, *2013–2020 National Climate Change Policy of Jordan*.

⁹² GIZ and the Ministry of Environment, *Policy Brief 2: Climate Change Mitigation Plans in Jordan* (Amman: MOEnv, 2015).

⁹³ *Ibid.*

(JOD384 million) in 2015.⁹⁴ The target is planned to be achieved by implementing over 70 projects, of which installing renewable energy and implementing energy efficiency will be a considerable part. Another measure is to increase the cost of fuel by abolishing fuel subsidies, thus discouraging the transportation sector—identified as the second largest source of GHG in 2006.

The Ministry is working on a National Climate Change Adaptation Plan, including creating an appropriate coordination structure for stakeholder consultation and a methodology to integrate adaptation into planning procedures. Other schemes are aimed at assisting water governance and management.⁹⁵

Challenges in Implementing SDG 13

Challenges in implementing SDG 13 are closely linked to those in the water and energy sectors. There are, however, some specific challenges, mainly related to the socioeconomic and institutional context.

Socioeconomic issues

The Jordanian government is reforming subsidies and taxes in different sectors, including energy subsidies, income tax, and sales tax. However, the country faces persistent macroeconomic vulnerabilities because of its energy import dependency. Regional tensions affect the Jordanian economy through widened trade deficit and weaker investor confidence, resulting in high unemployment.⁹⁶ This situation particularly affects lower-income families, making it harder to prioritise adaptation or mitigation schemes.⁹⁷

Institutional issues

Because the climate change sector is highly interlinked with other sectors, governmental institutions are highly fragmented in relation to it. The MOEnv Climate Change Unit takes the lead on climate change

⁹⁴ GIZ and the Ministry of Environment, *Policy Brief 2: Climate Change Mitigation Plans in Jordan* (Amman: MOEnv, 2015).

⁹⁵ An interview with the MOEnv Climate Change Unit could not be undertaken due to lack of availability.

⁹⁶ UNDP and UNICEF, *Socio-Economic Inequality in Jordan* (Amman: UNDP and UNICEF, 2015).

⁹⁷ Interview with Safaa Jayousi, Director, IndyAct, 13 August 2017.

internationally and nationally, but with little to no cooperation from other ministries. It is seen to be a weak ministry in the cabinet and is not taken seriously in regard to achieving climate change goals.⁹⁸ More than one Jordanian ministry attends UNFCCC negotiations, with no clear shared goal or mission, weakening Jordan's position and creating gaps in implementation.⁹⁹

Overcoming the Challenges

Operationalising the SDGs presents considerable challenges for the different sectors in Jordan, but there is willingness to tackle them. Many reports¹⁰⁰ discuss the urgent need for concrete steps towards implementation. One outlines five steps: (1) nationalising the SDGs into plans, budgets, and strategies; (2) creating institutional and coordination mechanisms; (3) ensuring “no one is left behind;” (4) strengthening data systems; and (5) creating accountability.¹⁰¹

The short- and medium-term recommendations below are grouped under these steps. They concern all sectors relevant to the three selected SDGs and are directed towards policy-makers and decision-makers. They either were directly voiced in interviews or are derived from the challenges that emerged from these interviews.

Nationalising the SDGs into Plans, Budgets, and Strategies

This is a critical step in national ownership of implementation: goals gain more traction when they are incorporated into national plans and aligned with existing national priorities.¹⁰² For Jordan, suggestions relating to this step were:

⁹⁸ Interview with Safaa Jayousi, Director, IndyAct, 13 August 2017.

⁹⁹ Ibid.

¹⁰⁰ E.g., Róisín Hinds, *From Agreement to Action: Delivering the Sustainable Development Goals* (London: Save the Children, 2016); Sustainable Development Solutions Network, *Getting Started*.

¹⁰¹ Róisín Hinds, “5 steps towards Implementing the SDGs,” Deliver 2030.org, 17 March 2016, <http://deliver2030.org/?p=6833>.

¹⁰² Hinds, *From Agreement to Action*.

- Adapt water, energy, and climate change SDG targets and internalise them into national priorities that also address civil society needs. This could be done through aligning and monitoring the SDG targets within each ministerial strategy according to nationalised indicators.
- Re-examine current MOA, MOI, and MOEnv policies and regulations on water productivity and energy efficiency, in particular identifying overlap and gaps.
- Strengthen future implementation policies.
- Set up action plans for new research to bridge the gap between policy and practice.
- Encourage and engage with local municipal councils in rolling out the SDGs in coordination with MoPIC.

Creating Institutional and Coordination Mechanisms

Institutions play a critical role in delivering the services needed to create space for ambitious implementation. Strong institutions are essential, and should have the resources—financial and human—necessary to roll out the SDGs. Coordination mechanisms are particularly important to bridge gaps and avoid overlaps between key ministries. For Jordan, suggestions related to this step were:

Strengthening within institutions

- Assess MOEnv, MoPIC, MEMR, MOA, and MWI capacities, readiness, and internal and external relationship channels. Identify gaps and overlap hindering implementation.
- Strengthen ministerial capacities by creating incentives to improve staff willingness to address and communicate co-benefits and contribute in open transparent debates.
- Provide more thematic training courses and workshops to ministerial staff about the connection between water, energy, and climate change, particularly on implementing socially and culturally sensitive projects in this regard.

- Establish links and means of communication between the public and private sector that go beyond financial dependence, introducing partnership based on trust and mutual understanding of roles, mandates, and competences.

Better coordination among institutions

- Invest in studying the national and local interlinkages involved in implementing the SDGs, to help determine how each SDG can interact with the others during implementation.
- Introduce coordination between MoPIC, MOEnv, MOI, MEMR, and MOA to address policy and regulation gaps with regard to water, energy, food security, and climate change.
- Combine the ministerial committees on water, energy, and climate change into one committee with an SDG environmental goal.
- Introduce new SDG focal points within the ministries to better coordinate ministerial activities and plans.

Ensuring “No One Is Left Behind”

The MDGs were criticised for failing to tackle social inclusion and inequality. This increases the need to address the 2030 Agenda commitment to “leave no one behind” and have goals targeting all segments of society. In Jordan, this requires targeted approaches aimed at strengthening and empowering civil society. Suggestions were voiced as follows:

- Consider the current socioeconomic situation as integral to policy- and decision-making. Ensure that policies are socially practical and can be implemented.
- Provide more capacity-building courses on renewable energy and energy efficiency regulations and fit-for-purpose technologies, targeting local communities and small business owners.
- Reform school and university curricula to include water-, energy-, and climate-related challenges and demonstrate their interconnectedness.
- Add components on social marketing and behavioural change to

implementation projects that go beyond awareness and education, specifically about water and energy efficiency.

- Enhance the role of NGOs and civil society in the decision-making process, and specifically within ministerial committees which have the mandate to set sector plans.
- Instil values of active citizenship and a sense of belonging, to develop an understanding of shared national resources and minimise or eradicate water/electricity theft and violations.

Strengthening Data Systems

Good data is a must for adequate planning and implementation, and for monitoring progress, transparency, and accountability. It is necessary to know who is affected most, where they reside, what specific problems they experience, and what the national aim is. Recommendations relating to this are as follows:

- Create plans to monitor and evaluate progress against nationalised indicators. This will provide qualitative indices to be used for reporting both nationally and internationally.
- Speed up the process of creating the dashboard planned by MoPIC to encourage transparency and credibility in SDG implementation. The dashboard should act as a unified platform sharing accurate national data on water, energy, and climate change.

Creating Accountability

Finally, successful implementation of the 2030 Agenda depends on holding the Jordanian government accountable for SDG progress, and civil society for its meaningful engagement. Stakeholders asked for enhanced transparency to educate the public about efforts to achieve the SDGs. Most of the recommendations in sections above also relate to this step.

The SDGs: An Opportunity for Jordan

While the research conducted for this chapter was time- and resource-limited, the outcomes demonstrate that there are many direct and indirect benefits to implementing SDGs 6, 7, and 13 in Jordan. Several benefits are already being realised, some as the fruit of deliberately designed strategies and others as the result of unconscious efforts, through implementing existing strategies and/or ad hoc donor-funded projects.

Stakeholders voiced many concerns about issues hindering implementation, mainly relating to social and institutional challenges. They raised the lack of strategies or directorates within ministries that are specifically dedicated to achieving SDG targets. They observed overlap and gaps between sectors and ministries' mandates, and noted that social inclusion, accountability, and ownership by society and institutions are still missing. While MoPIC has taken the lead in achieving the SDGs in Jordan, developing a "roadmap for implementation," greater institutional courage will be needed to fulfil the 2030 Agenda commitments. It is not enough to enthusiastically produce a VNR, if practical considerations such as financial viability are not taken into account.

The SDGs can be a tool complementing international and national law. A stronger national policy is therefore crucial, and this should include services that reach those citizens furthest behind or "forgotten." Related to this, there is a need to improve the public's understanding of the complexity of the SDGs, and invest in inspiring the public and private sector to promote integrated thinking that furnishes accountability. Working on a continuous participatory approach with civil society is key to harmonising existing approaches and building new implementation opportunities while targeting social needs. This should be complemented by a mechanism which strengthens inter- and cross-sectorial work.

The environmental and social challenges Jordan faces are unprecedented and inter-sectorial. While setting the stage for SDG implementation, it should be kept in mind that the SDGs are a remarkable opportunity to address these challenges, as they take into account different national realities, policies, and priorities.

Conclusion

Dr Erica Harper

The foregoing chapters have showcased research undertaken by the WANA Institute, including in the areas of human security, violent extremism, climate change, and refugee labour market integration. These chapters reflect upon six trends that have become central to development, security, and social cohesion in the region.

In the introduction, I discussed how these trends have been understood and managed predominately in terms of the threats they pose. This is a product of both the region's aversion to conflict and the strong geopolitical interests in maintaining stability and preventing spillovers. Such tendencies are natural, prudent, and to be encouraged. But I also argued that hyper-risk-aversion constitutes a missed opportunity. Modern conceptualisations of resilience purport that buried within adversity exist pathways to strengthening infrastructure, communities, and institutions. This is not to say that WANA states should not prepare for and avoid disease outbreak, breakdowns in social cohesion, or mass migration flows. It is to say, however, that when adversity strikes or is unavoidable, it is incumbent upon us to look for hidden opportunities and learning experiences. In this conclusion, I explore what elements within the identified trends might be harnessed and built upon, and the role that different stakeholders might play in moving towards a better balancing of risk management with resilience-building.

Competing in the Innovation Age

The main trend of interest is the advent of the “innovation revolution,” a phenomenon that is already impacting the people of the region in various ways. Product availability has increased, connectivity has linked individuals socially and in business, and new forms of “on-demand economy” are making lives easier and more efficient. In cities, people increasingly order takeaway food or groceries online, travel using Uber or Careem (although they remain unauthorised in many locations), and conduct business through virtual forums. But innovation will also bring redundancy, with

those whose livelihoods are connected to their labour most impacted. Because these groups are principally lower- and middle-income—industrial labourers, agriculturalists, and service providers—deepening inequality will result unless urgent corrective action is taken.

The counterbalance to sectorial unemployment is that new markets will open up, creating myriad forms of opportunity. Such jobs will predominately appear in the information and technology sectors, with engineering, computer science, analytics, cognitive, and creative skill sets being of highest relevance. Emergent trends also seem to favour low-capital entrepreneurialism:

Uber, the world's largest taxi company, owns no vehicles. Facebook, the world's most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world's largest accommodation provider, owns no real estate.¹

For the educated youth of the WANA Region, this is a potential game changer. No longer dependent on large-scale investment or credit, the global marketplace is now open to anyone with a computer, an internet connection, and an idea. The question is whether the governments of the region will embrace this transition—perhaps delivering a solution to both the youth “bulge” and the diversification imperative—or seek to disable it.

To embrace it, governments will have to do three things. First, they must provide an agile, enabling regulatory framework that supports innovation and entrepreneurialism, and with all the necessary trappings such as accessible credit, connectivity, and minimal bureaucracy. Second, they will need to prioritise educational reform. To compete in the innovation age, individuals need both technical *and* cognitive skills—principally, the ability to think critically, experiment, innovate, and continuously learn and adapt to changing conditions.² Many would argue that the hallmarks of Arab education frameworks stand in antithesis to this. Third, data deficits need to be closed. Without reliable, accurate, and accessible data, Arab

¹ Tom Goodwin, Techcrunch March 2015, quoted in K. Schwab, *The Fourth Industrial Revolution* (Geneva: World Economic Forum, 2016), 20.

² *Ibid.*, 45.

innovators will be unable to compete. This requires reform in how data is collected, verified, and stored, as well as a lifting of constraints that regulate how it is shared and used.³

While this decision may seem easy, such reforms will come at a price. It is no accident that WANA states do not have a strong and liberal private sector; that the education system discourages innovation, creativity, and free thinking; and that data is heavily guarded and, in some cases, manipulated. These features are integral to the Arab social contract, and are tools by which power-holders maintain stability. Phrased another way, embracing the innovation age and exploiting the opportunities therein equally means embracing citizen empowerment and a power transfer from state to non-state actors. As traditional modes of governance become increasingly less effective, states will need to either find new ways of asserting their authority or accept the possibility of dissent and the uncertainty that this connotes.

Footing the Unpaid Bill

A second opportunity lies in the migration crisis. The unsung story of the “compact experiment” was the role that the Europe migrant crisis played in donor engagement. Indeed, at the same moment that host states were negotiating for a relaxation in rules of origin, loans, and grants, Europe was desperate to pull the brakes on the unregulated flow of non-nationals into its territories. There is no doubt that the link between stemming this flow and providing better livelihoods opportunities in countries of first displacement was determinative. To an extent this worked; these donors bought their way out of an increasingly desperate situation. But by doing so, Europe showed its cards. Despite having international obligations, European states had no interest in hosting refugees on the same scale as Jordan, Turkey, and Lebanon. Moreover, they were willing to pay a high price to maintain the status quo. Host states have arguably not taken full advantage of this.

The WANA Institute has previously written about the deficits in the current humanitarian framework—specifically, the absence of binding

³ Tom Goodwin, Techcrunch March 2015, quoted in K. Schwab, *The Fourth Industrial Revolution* (Geneva: World Economic Forum, 2016), 77.

rules on burden sharing to balance the peremptory norm of non-refoulement. More simply, while host states are compelled to accept refugees, there is no reciprocal obligation for non-host states to offset these costs. The system would work if refugee flows were geographically balanced, but they are not; the vast majority of refugees enter low- and middle-income countries. This has allowed high-income donor states to maintain the rhetoric that refugee crises are a global responsibility but at the same time offer their support with no strings, meaning they can—and do routinely—scale back aid once an emergency phase has passed. This is why the European migrant experience was such a game changer.

Indeed, the most recent scholarship suggests that host states, as opposed to donors, bear the majority of the costs associated with forced displacement. A cost–benefit analysis undertaken by the WANA Institute and the Institute for Economics and Peace in 2016 estimated the cumulative costs of hosting refugees in Jordan between 2011 and 2016 at JOD15.8 billion (USD22.3 billion). Of this amount, JOD10.7 billion (USD15.1 billion) was borne by Jordan (68 per cent) and JOD5.1 billion (USD7.2 billion) by the international community (32 per cent).⁴ With such evidence, host states can launch a powerful argument: if refugees are indeed a global responsibility that rich states would prefer to cost-share rather than host-share, then Jordan, Lebanon, Iraq, and Turkey have an unpaid bill that should be called in.

A similar logic could be extended to states hosting irregular migrants. The WANA Institute has recently completed research examining the costs of irregular migrants in Egypt, and their impact is not too dissimilar to that of refugees. Because they do not fall under the international classification of refugees, their differences are often difficult to discern. It is difficult to argue that someone fleeing climate-change-induced food insecurity, or innovation-induced livelihoods insecurity is unworthy of international protection. These are, after all, phenomena driven by global forces, and indeed mainly from the West. The global political climate is such that the definition of refugee is unlikely to be elaborated, regardless of the logic in play. But this does not mean that countries like Egypt should not call out this illogic and leverage the international community for assistance.

⁴ Based on a forthcoming WANA Institute publication on the topic.

A New Arab Social Contract

A third opportunity lies in the faltering Arab social contract and the structures and forces that might rehabilitate it. It is well-established that this contract has lost much of its structural logic. Economic conditions mean that governments are increasingly unable to deliver livelihoods and other material goods and services to their populations. Against lack of opportunity and declining living standards, people are becoming hungry for economic empowerment, elaborated rights, and participation in governance. This is one reason that Daesh has been so effective in attracting recruits: its promise of something positive.⁵ Arguably, Arab states should replace the current ruling bargain with the promise of something that is equally appealing, *and* that can be delivered. An opportunity thus exists for the states of the WANA region to articulate what they stand for—the cultural norms they extol, the rights they will fight for, and the values they admonish.

An elaborated social contract would have manifold purposes and benefits. First, it is perhaps the strongest armoury with which to fight violent extremism. It would also provide Arab states with an entry ticket to more actively participate on the global stage. One rarely discussed opportunity presented by the current state of American politics is that it no longer occupies centre stage as a global superpower or voice of moral authority. The playing field has been levelled and Arab states might choose to help fill the current leadership deficit, just as Canada, France, and China have been doing—perhaps securing for themselves fairer bargaining power and a voice in matters that concern them.

Enabling Civil Society

The chief difficulty in developing a renewed social contract is that WANA states do not have much to offer—economies are stagnating, corruption is

⁵ “Voice from the Women’s Peacebuilding Movement,” interview with Sanam Naraghi-Anderlini, Co-Founder and Executive Director of the International Civil Society Action Network (ICAN), *On Violent Extremism* podcast, Centre for Strategic and International Studies, 14 June 2016.

deeply entrenched, and power-holders are not willing to risk the instability that would likely accompany a self-ceding of their authority, or a “clean-up” of the system. What they can offer is civil society: as a conduit of elaborated freedoms, a mechanism to augment government service provision, and a check and balance on the public sector.

This would need to be a version of civil society that is strong enough and enabled to fulfil these tasks, but also one that governments would be comfortable with. As discussed, WANA lacks a generation of critically thinking, innovating entrepreneurs, for the same reason it lacks a robust and vocal civil society sector. Both are inimical to the governance structures that maintain stability. Donors buy into this because, as much as governments do not want to lose power, they do not want conflict in the region.

But a controlled augmentation of civil society is unlikely to pose a significant risk, especially when balanced against the opportunities. The vast majority of organisations have no aspirations to overthrow the government and bring in Western-style democracy; they are simply trying to provide protection to the most vulnerable and promote development. What such a version of civil society and accompanying social contract might look like, is something that the WANA Institute has been interested in for some time. A project concept which we named “A Model for Poly-Centric Governance” aims to set out a model for a form of democracy that takes into account the nuances, imperatives, constraints, and histories of WANA, and places stability at the fore. It would structurally map out roles for both civil society and the private sector, along with a quantification of the benefits (such as social cohesion, economic development, etc.) and risks (instability, expanded bureaucracy, etc.). To date, however, this project has not roused sufficient interest within the donor, agency, or foundation community to come to fruition.

Some might argue that a civil society sector that is palatable to government is a contradiction in terms, and that the people of the region should not be denied the possibility of the Western model. Those positing such an argument would include some of those that favour “not rocking the boat.” This ambiguity within the international policy discourse hampers progress. Moreover, I would argue that, far from “selling out,” what the

people of the region need, is pragmatic solutions, and that incrementalism is far more likely to bring more rights to more people quickly in a less risky way than pedestal-sitting.

Another argument is that, post-Arab Spring, states have little incentive to move towards liberalisation. The threats posed by violent extremist groups such as Daesh and the ongoing conflicts in Syria and Yemen have cemented their position and given new license to curb any perceived threat. But I believe that these realities actually make states increasingly open to seeing a developed civic sector as in their interest. History tells us that in situations of authoritarianism and autocracy, a moderate “middle space” is vitally important, whether this is in the form of a middle class or civil society. Where there is no such space, over time, people move to the extreme—a space that is harder to restrict as it operates more covertly. More and more, the Daesh experience adds another chapter to this history. Indeed, as I noted in the introduction, there is evidence that opportunities for peaceful dissent might have prevented some civically minded, frustrated individuals from joining violent extremist groups. In short, civil society might just be the concession that states need to make to maintain stability. As British diplomat Chris Patten has said, “sometimes things have to change to remain the same.”

Donors can play a key role here by more actively supporting, enabling, and defending the civil society space. They particularly need to empower the thinkers—the think tanks, researchers, academics, and writers—that epitomise the middle space. These actors are the tools that will map out the pathways to a region that is conflict-free, economically stable, and able to fight violent extremism, promote the Sustainable Development Goals, and bestow prosperity.

Bibliography

- “3,126 Suspects in Drug Cases Arrested this Year.” *Jordan Times*, 8 November 2016. www.jordantimes.com/news/local/3126-suspects-drug-cases-arrested-year%E2%80%99.
- Abahussain, Asma, Anwar Abdu, Waleed Al-Zubari, Nabil El-Deen, and Mahmmod Abdul-Raheem. “Desertification in the Arab Region: Analysis of Current Status and Trends.” *Journal of Arid Environments* 51, no. 4 (2002): 521–45.
- Abu Haniya, Hasan, and Muhammad Abu-Rumman. *The “Islamic State” Organization*. Amman: Friedrich-Ebert-Stiftung Jordan & Iraq, 2015.
- Abu Rumman, Mohammad. *I Am a Salafi: A Study of the Actual and Imagined Identities of Salafis*. Amman: Friedrich-Ebert-Stiftung, 2014. In Arabic.
- Abu Rumman, Mohammed, and Hasan Abu Hanieh. *Female Lover of Martyrdom: Formations of Feminist Jihadism from Al-Qaeda to ISIS*. Amman: Friedrich Ebert Stiftung, 2017. In Arabic.
- Abu Sada, Alaa, Mahmoud Abu-Allaban, and Ahmad Abdel-Haleem Al-Malabeh. “Temporal and Spatial Analysis of Climate Change at Northern Jordanian Badia.” *Jordan Journal of Earth and Environmental Sciences* 7, no. 2 (December 2015), 87–93.
- Abuqudairi, Areej. “Jordan Anti-Terrorism Law Sparks Concern.” *Al Jazeera*, 25 April 2014. www.aljazeera.com/news/middleeast/2014/04/jordan-anti-terrorism-law-sparks-concern-201442510452221775.html.
- Adams, Barbara, Roberto Bissio, Chee Yoke Ling, Karen Judd, Jens Martens, and Wolfgang Obenland, eds. *Spotlight on Sustainable Development*. Beirut: Development Alternatives with Women for a New Era, Third World Network, Social Watch, Global Policy Forum, and Arab NGO Network for Development, 2016.

- Al-Badayneh, Diab M. "Violence Against Women in Jordan." *Journal of Family Violence* 27, no. 5 (2012): 369–79
- Al-Jaloudy, Mahmoud. *Country Pasture/Forage Resource Profiles: Jordan*. Rome: FAO, 2006.
- Allan, John. *The Middle East Water Question*. London: I. B. Tauris, 2001.
- Alloisio, Isabella, Andrea Zucca, and Samuel Carrara. *SDG 7 as an Enabling Factor for Sustainable Development: The Role of Technology Innovation in the Electricity Sector*. Milan: FEEM and ICSD, 2017. <http://ic-sd.org/wp-content/uploads/sites/4/2017/01/AlloisioUpdate.pdf>.
- Al-Salaymeh, A. "Modelling of Global Daily Solar Radiation on Horizontal Surfaces for Amman City." *Emirates Journal for Engineering Research* 11, no.1 (2006): 49–56. www.Eng.Uaeu.Ac.Ae/En/Research/Journal/Issues/V11/Pdf_Iss1_11/P5.Pdf.
- Al-Sharif, Osama. "Jordan in an Uneasy Place over Gulf Spat." *Al-Monitor*, 22 June 2017. www.al-monitor.com/pulse/originals/2017/06/jordan-qatar-gulf-crisis-relations.html.
- Al-Tabini, Raed, Khalid Al-Khalidi, and Mustafa Al-Shudiefat. "Livestock, Medicinal Plants and Rangeland Viability in Jordan's Badia: Through the Lens of Traditional and Local Knowledge." *Pastoralism: Research, Policy and Practice* 2, no. 4 (2012): online.
- Al-Wazir, Yara. "Jordan Abolishes Rape Law, It Must Follow Suit with Honor Killing Law." *Al Arabiya English*, 30 April 2017. <http://english.alarabiya.net/en/views/news/middle-east/2017/04/30/Jordan-abolishes-rape-law-it-must-follow-suit-with-honor-killing-law.html>.
- Amwal Invest. *Pharmaceutical Sector in Jordan*. Amman: Amwal Invest, August 2010. <http://inform.gov.jo/Portals/0/Report%20PDFs/3.%20Strategic%20Sector%20Development/ii.%20Healthcare&Pharmaceuticals/2010%20Zawya-Pharmaceutical%20Sector.pdf>.

- Arlosoroff, Saul. "The Public Commission on the Water Sector Reform (the General Ideas underlying Its Recommendations)." *International Water and Irrigation Review* 5 (1997): 1–9.
- Ashwill, Maximillian, Cornelia Flora, and Jan Flora. *Building Community Resilience to Climate Change: Testing the Adaptation Coalition Framework in Latin America*. Washington, DC: World Bank, 2011.
- Asiimwe, Janet. "Actionaid ARI Seeks Jordan Guarantee on Youth Participation in Political Development." Action Aid, 2015. www.actionaid.org/arab-region/2015/09/actionaid-ari-seeks-jordan-guarantee-youth-participation-political-development.
- Asmar, Fady. *Country Pasture/Forage Resource Profiles: Lebanon*. Rome: FAO, 2011.
- Atran, Scott, and Richard Davis. "Executive Summary." In *Theoretical Frames on Pathways to Violent Radicalization*. Washington, DC: ARTIS, 2009. www.artisresearch.com/articles/ARTIS_Theoretical_Frames_August_2009.pdf.
- Awad, A. M., and E. Sarayra. *Enabling Environment National Assessment. Country Report: Jordan*. Amman: Phenix Center for Economic and Informatics Studies, 2015.
- Azzeh, Laila. "Ministry to Restrict Funding to Societies 'Improving Citizens' Wellbeing.'" *The Jordan Times*, 22 August 2017. www.jordantimes.com/news/local/ministry-restrict-funding-societies-improving-citizens'-wellbeing'.
- Badran, Adnan. "New Trends in Higher Education in Jordan 2014." Arab Thought Forum, Amman, Jordan, 26–27 October 2014. www.uop.edu.jo/En/News/Documents/New%20Trends%20in%20Higher%20Education%20in%20Jordan%202014.pdf.
- Baker, Aryn. "How ISIS Is Recruiting Women from around the World," *Time*, 6 September 2014, <http://time.com/3276567/how-isis-is-recruiting-women-from-around-the-world/>.

- Baniyounes, Ali M. "Renewable Energy Potential in Jordan." *International Journal of Applied Engineering Research* 12, no. 19 (2017): 8323–31. www.ripublication.com/ijaer17/ijaerv12n19_44.pdf.
- Barker, Anne. "Captagon: The Arab Amphetamine fuelling Islamic State." *ABC News*, 25 November 2015. www.abc.net.au/news/2015-11-24/captagon-the-drug-that-kept-the-paris-attackers-calm/6970464.
- Batliwala, Srilatha. *Empowerment of Women in South Asia: Concepts and Practices*. New Delhi: Columbo, 1993.
- Bezzi, Annalisa. *Women and The Law in Jordan: Islam as a Path to Reform*. Amman: WANA Institute and Friedrich-Ebert-Stiftung, October 2016. <http://wanainstitute.org/sites/default/files/publications/WLE%20-%20OCT%2031%20-%20FULL%20PDF%20.pdf>.
- Bin Muhammad, Ghazi. *The Tribes of Jordan at the Beginning of the Twenty-first Century*. Jordan: Rutab, 1999.
- Blench, R. *Rangeland Degradation and Socio-Economic Changes among the Bedu of Jordan: Results of the 1995 IFAD Survey*. Rome: FAO, 1995. www.fao.org/WAIRDOCS/LEAD/X6188E/x6188e00.htm.
- Boller, B., E. Willner, L. Maggioni, and E. Lipman. *Report of a Working Group on Forages. Eighth Meeting, 10–12 April 2003. Linz, Austria*. Rome: International Plant Genetic Resources Institute, 2005.
- Bondokji, Neven. *A Journey Mapping of Jordanian Fighters*. Amman: WANA Institute, 2017.
- Bondokji, Neven, Kim Wilkinson, and Leen Aghabi. *Trapped between Destructive Choices: Radicalisation Drivers Affecting Youth in Jordan*. Amman: WANA Institute, 2017. <http://wanainstitute.org/en/publication/trapped-between-destructive-choices-radicalisation-drivers-affecting-youth-jordan>.

- Bondokji, Neven, Kim Wilkinson, and Leen Aghabi. *Understanding Radicalisation: A Literature Review of Models and Drivers*. Amman: WANA Institute, 2016. <http://wanainstitute.org/en/publication/understanding-radicalisation-literature-review-models-and-drivers>.
- Brest, Paul. "The Power of Theories of Change (SSIR)." *Stanford Social Innovation Review*, Spring 2010. https://ssir.org/articles/entry/the_power_of_theories_of_change.
- Brown, Lester R. "The New Geopolitics of Food." *Foreign Policy*, 25 April 2011. <http://foreignpolicy.com/2011/04/25/the-new-geopolitics-of-food/>.
- Bruce, John W. *Legal Bases for the Management of Forest Resources as Common Property*. Rome: FAO, 1999.
- Carothers, T. "Civil Society." *Foreign Policy*, Winter 1999–2000.
- Central Bank of Jordan. *Annual report (2015)*. Amman: Central Bank of Jordan, 2016.
- Central Bureau of Statistics (CBS, Israel). "Statistical Abstract of Israel 2016: Annual Data—2016. Table 21.4: Water Production and Consumption." CBS, 2016. <http://cbs.gov.il/reader/>.
- "Changes in Modus Operandi of Islamic State Terrorist Attacks." Europol Public Information, 18 January 2016, https://www.europol.europa.eu/sites/default/files/documents/changes_in_modus_operandi_of_is_in_terrorist_attacks.pdf.
- Chatty, Dawn. *Nomadic Societies in the Middle East and North Africa*. Boston: Brill, 2006.
- Chimhowu, Admos, and Phil Woodhouse. "Customary vs Private Property Rights? Dynamics and Trajectories of Vernacular Land Markets in Sub-Saharan Africa." *Journal of Agrarian Change* 6, no. 3 (July 2006): 346–71.

Chirenje, Leonard, Richard Giliba, and Emmanuel Musamba. "Local Communities' Participation in Decision-making Processes through Planning and Budgeting in African Countries." *Chinese Journal of Population Resources and Environment* 11, no. 1 (2013): 10–16.

CIVICUS. *State of Civil Society Report 2017*. Johannesburg: CIVICUS, 2017.

"The Civil Liberties Implications of Counterterrorism Policies: Full Chapter." Freedom House, 2017. <https://freedomhouse.org/report/todays-american-how-free/civil-liberties-implications-counterterrorism-policies-full-chapter>.

"Co-Hosts Declaration from the Supporting Syria & the Region Conference, London 2016." Supporting Syria and the Region London 2016 conference, London, 4 February 2016. <https://2c8kkt1ykog81j8k9p47oglb-wpengine.netdna-ssl.com/wp-content/uploads/2016/02/FINAL-Supporting-Syria-the-Region-London-2016-4-Feb.pdf>.

Cotula, Lorenzo. "Introduction." In *Changes in Customary Land Tenure Systems in Africa*, edited by Lorenzo Cotula, 5–14. London: International Institute for Environment and Development, 2007.

Cotula, Lorenzo, and Salmana Cissé. "A Case Study: Changes in 'Customary' Resource Tenure Systems in the Inner Niger Delta, Mali." In *Changes in "Customary" Land Tenure Systems in Africa*, edited by Lorenzo Cotula, 81–101. London: International Institute for Environment and Development, 2007.

Cousins, Benjamin. "More Than Socially Embedded: The Distinctive Character of Communal Tenure." *Journal of Agrarian Change* 7 no. 3 (2007): 281–315

CRiSTAL User's Manual Version 5: Community-Based Risk Screening Tool—Adaptation and Livelihoods. Canada: The International Institute for Sustainable Development, 2012.

Daniels, Jeff. "Agriculture Job Growth to Boom Over Next Five Years." *CNBC*, 20 May 2015. www.cnn.com/2015/05/20/agriculture-fertile-ground-for-job-seekers.html.

Darwish, Talal, Faycel Chenini, and Moujahed Achouri. *Country Study on Status of Land Tenure: Planning and Management in Oriental Near East Countries: Case of Lebanon*. Rome: FAO, 2012.

Dazé, Angie. *Understanding Vulnerability to Climate Change: Insights from Application of CARE's Climate Vulnerability and Capacity Analysis (CVCA) Methodology*. Care PECCN, November 2011.

Denoeux, Guilain, with Lynn Carter. "Guide to the Drivers of Violent Extremism." USAID, February 2009, 8–26. http://pdf.usaid.gov/pdf_docs/Pnadt978.pdf.

"DFID's Sustainable Livelihoods Approach and Its Framework." GLOPP, 2008. www.glopp.ch/B7/en/multimedia/B7_1_pdf2.pdf.

Domingo, Pilar, Rebecca Holmes, Tam O'Neil, Nicola Jones, Kate Bird, Anna Larson, Elizabeth Presler-Marshall, and Craig Valters. "Women's Voice and Leadership in Decision-Making: Assessing the Evidence." Overseas Development Institute, April 2015. www.researchgate.net/profile/Pilar_Domingo/publication/282133333_Women%27s_Voice_and_Leadership_in_Decision-Making_Assessing_the_Evidence/links/57ed005c08ae92eb4d27d443/Womens-Voice-and-Leadership-in-Decision-Making-Assessing-the-Evidence.pdf.

Duflo, Esther. "Women Empowerment and Economic Development." *Journal of Economic Literature* 50, no. 4 (2012): 1051–79.

The Economic Policy Council. *Jordan Economic Growth Plan: 2018–2022*. Amman: The Economic Policy Council, 2017. <https://rhc.jo/sites/default/files/JEPGReportEn.pdf>.

EDAMA. *Jordan Clean Technology Sector—Report 2016*. Amman: USAID: 2016.

El Feki, S., B. Heilman, and G. Barker. *Understanding Masculinities: Results from the International Men and Gender Equality Survey (IMAGES)—Egypt, Lebanon, Morocco, and Palestine: Executive Summary*. Cairo and Washington, DC: UN Women and Promundo-US, 2017. <https://imagesmena.org/wp-content/uploads/sites/5/2017/05/IMAGES-MENA-Executive-Summary-EN-16May2017-web.pdf>.

Ernest and Young. *Climate Change: The Investment Perspective*. EYCM, 2016. [www.ey.com/Publication/vwLUAssets/EY-climate-change-and-investment/\\$FILE/EY-climate-change-and-investment.pdf](http://www.ey.com/Publication/vwLUAssets/EY-climate-change-and-investment/$FILE/EY-climate-change-and-investment.pdf).

European Commission. *European Union Regional Trust Fund in Response to the Syrian Crisis, the “Madad Fund.” Q&A with Additional Information for Partners*. Brussels: European Commission, 2015. http://ec.europa.eu/enlargement/neighbourhood/countries/syria/madad/20150715_eutf_madad_qa_3_0_final_july_2015.pdf.

FAO. “Food Balance Tables 1961–2011.” FAOSTAT, n. d. www.fao.org/faostat/en/#home.

FAO (based on the work by Fady Asmar). *The “Hima”: A Revived Traditional Forest Protection and Management System: The case of Lebanon*. Rome: FAO, 2009.

FAO. *Land Tenure Studies 3: Land Tenure and Rural Development*. Rome: FAO, 2002.

FAO. *Management of Natural Resources Including Medicinal & Aromatic Plants to Benefit Rural Women in the Near East Region: Case Study of Egypt*. Cairo: Desert Development Center, the American University in Cairo, 2005. <http://collaborationplatform.net/Pages/GoodPracticeDetails.aspx?id=33&lang=EN&I=0&DIId=0&CIId=0&CMSId=5003309>.

Fattah, Hassan, and Michael Slackman. “3 Hotels Bombed in Jordan; At Least 57 Die.” *The New York Times*, 10 November 2005. www.nytimes.com/2005/11/10/world/middleeast/3-hotels-bombed-in-jordan-at-least-57-die.html?_r=0.

Fedler, Jon. *Israeli Agriculture—Coping with Growth*. Jerusalem: Ministry of Foreign Affairs, Israel, 2002. <http://mfa.gov.il/MFA/AboutIsrael/IsraelAt50/Pages/Israeli%20Agriculture-%20Coping%20with%20Growth.aspx>.

Feitelson, Eran, Itay Fischhendler, and Paul Kay. “Role of a Central Administrator in Managing Water Resources.” *Water Resources Research* 43, no. 11 (2007): 1–11.

Fink, Naureen, Rafia Barakat, and Liat Shetret. *The Roles of Women in Terrorism, Conflict and Violent Extremism*. Goschen, IN: Center on Global Counterterrorism Cooperation, April 2013. http://globalcenter.org/wp-content/uploads/2013/04/13Apr11_Women-and-Terrorism-Prevention_Final.pdf.

Fink, Naureen, Sara Zeiger, and Rafia Bhulai. *A Man’s World? Exploring the Roles of Women in Countering Terrorism and Violent Extremism*. Washington, DC, New York, and London: Global Center on Cooperative Security, 2016. www.globalcenter.org/publications/a-mans-world-exploring-the-roles-of-women-in-countering-terrorism-and-violent-extremism/.

Ford, Charles V. *Lies! Lies! Lies! The Psychology of Deceit*. Arlington, VA: American Psychiatric Press Inc., 1996.

“France: Prolonged Emergency State Threatens Rights.” Human Rights Watch, 22 July 2016. www.hrw.org/news/2016/07/22/france-prolonged-emergency-state-threatens-rights.

Frey, C. B., and M. Osbourne. “The Future of Employment: How Susceptible Are Jobs to Computerisation?” Working paper for Oxford Martin Programme on Technology and Employment, 17 September 2013. www.oxfordmartin.ox.ac.uk/downloads/academic/future-of-employment.pdf.

Gambetta, Diego, and Steffen Hertog. “Why Are There So Many Engineers among Islamic Radicals?” *European Journal of Sociology* 50, no. 2 (August 2009): 201–30, [http://eprints.lse.ac.uk/29836/1/Why_are_there_so_many_Engineers_among_Islamic_radicals_\(publisher\).pdf](http://eprints.lse.ac.uk/29836/1/Why_are_there_so_many_Engineers_among_Islamic_radicals_(publisher).pdf).

- Gender Equality and Women's Empowerment in Public Administration: Jordan Case Study*. New York: UNDP, 2012. www.undp.org/content/dam/undp/library/Democratic%20Governance/Women-s%20Empowerment/JordanFinal%20-%20HiRes.pdf.
- Ghaus-Pasha, Aisha. "Role of Civil Society Organizations in Governance." December 2004. Paper prepared for the 6th Global Forum on Reinventing Government, 24–27 May 20015, Seoul, Republic of Korea.
- Ghazal, Mohammad. "Population Stands at Around 9.5 Million, Including 2.5 Million Guests." *The Jordan Times*, 30 January 2016.
- Gilmont, Michael. *Analysing the Economic Development Impact of Semi-Arid Lands, and Mitigation by Food-Trade Water Resource Decoupling*. London: PRISE Overseas Development Institute, April 2016.
- Gilmont, Michael. "Decoupling Dependence on Natural Water: Reflexivity in the Regulation and Allocation of Water in Israel." *Water Policy* 16, no. 1 (2014): 79–101.
- Gilmont, Michael. "Drivers of Food Trade: Water Resource Decoupling in the MENA as a Mechanism for Circumventing National Water Scarcity." *Food Security* 7, no. 6 (2015): 1113–31.
- Gilmont, Michael, Steve Rayner, Erica Harper, Lara Nassar, Nadav Tal, Mike Simpson, and Hilmi Salem. *Decoupling National Water Needs for National Water Supplies: Insights and Potential for Countries in the Jordan Basin*. Amman: WANA Institute, 2017.
- GIZ and the Ministry of Environment. *Policy Brief 2: Climate Change Mitigation Plans in Jordan*. Amman: MOEnv, 2015.
- Goussous, Suzanna. "Drug Abuse Among University Students 'on the Rise'." *Jordan Times*, 11 February 2016. www.jordantimes.com/news/local/drug-abuse-among-university-students-rise%E2%80%99.

- Government of Jordan. "The Jordan Compact: A New Holistic Approach between the Hashemite Kingdom of Jordan and the International Community to deal with the Syrian Refugee Crisis." Supporting Syrian and the Region London 2016 conference, London, 4 February 2016. <https://reliefweb.int/report/jordan/jordan-compact-new-holistic-approach-between-hashemite-kingdom-jordan-and>.
- Gurr, Ted Robert. *Why Men Rebel*. Princeton, NJ: Princeton University Press, 1970.
- Hällström, Niclas. "Energy at a Crossroad." In *Spotlight on Sustainable Development*, edited by Barbara Adams, Roberto Bissio, Chee Yoke Ling, Karen Judd, Jens Martens, and Wolfgang Obenland, 60–67. Beirut: Development Alternatives with Women for a New Era, Third World Network, Social Watch, Global Policy Forum, and Arab NGO Network for Development, 2016.
- Harper, Erica, Sean Thomas, and Mays Abdel Aziz. *Forging New Strategies in Protracted Refugee Crises: Syrian Refugees and the Host State Economy*. Amman: WANA Institute, 2015.
- Hashemite Kingdom of Jordan. *Jordan's Third National Communication on Climate Change*. Submission to the UNFCCC. Amman: Hashemite Kingdom of Jordan, 2014. <http://unfccc.int/resource/docs/natc/jornc3.pdf>.
- Hawthorne, A. *Middle Eastern Democracy: Is Civil Society the Answer?* Carnegie Papers 44. Washington, DC: Carnegie Endowment for International Peace, March 2004.
- Herrera, Pedro, Jonathan Davies, and Pablo Baena, eds. *The Governance of Rangelands Collective Action for Sustainable Pastoralism*. New York: IUCN and Routledge, 2014.
- Hima Management Committee. *Community Management Plan for Hima Bani Hashem 2013–2017*. Amman: IUCN, 2013.

- Hinds, Róisín. *From Agreement to Action: Delivering the Sustainable Development Goals*. London: Save the Children, 2016. www.savethechildren.org.uk/content/dam/global/reports/advocacy/from-agreement-to-action.pdf.
- Huckerby, Jayne. “Why Women Join ISIS.” *Time*, 7 December 2015. <http://time.com/4138377/women-in-isis/>.
- Husseini, Rana. “Only 3% Of Gender-Based Violence Victims Would Seek Police Help—Study.” *Jordan Times*, 28 February 2016. www.jordantimes.com/news/local/only-3-gender-based-violence-victims-would-seek-police-help-%E2%80%94-study.
- Ibrahim, Maggie, and Nicola Ward. *Promoting Local Adaptive Capacity*. London: World Vision, August 2012.
- Ibrahim, Saad Eddin. *Civil Society and Democratic Transformation in the Arab World*. Ibn Khaldun Center for Development Studies. Cairo: Dar Qabaa, 1999.
- IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction*. Washington, DC: IFC, January 2013. <http://documents.worldbank.org/curated/en/157191468326714061/IFC-jobs-study-assessing-private-sector-contributions-to-job-creation-and-poverty-reduction>.
- “Important Concepts Underlying Gender Mainstreaming.” Office of the Special Adviser on Gender Issues and the Advancement of Women, United Nations, 2001. www.un.org/womenwatch/osagi/pdf/factsheet2.pdf.
- “Increase in Female Unemployment to 33 Percent.” *Al Ghad*, 2017. <http://alghad.com/m/articles/1714832-18-2-%D9%86%D8%B3%D8%A8%D8%A9-%D8%A7%D9%84%D8%A8%D8%B7%D8%A7%D9%84%D8%A9-%D9%81%D9%8A-%D8%A7%D9%84%D8%A3%D8%B1%D8%AF%D9%86>. In Arabic.

Inter-Agency Network for Education in Emergencies. *Understanding and Using the INEE Minimum Standards for Education in Emergencies, Chronic Crises and Early Reconstruction Workbook*. New York: INEE, March 2006. www.equip123.net/docs/e1-MSEE_workbook_ver_4.pdf.

International Bank for Reconstruction and Development and World Bank. *Water Resources Management in an Arid Environment: The Case of Israel*. Washington, DC: World Bank, 2006.

International Labour Office and Ministry of Planning. *Decent Work Country Programme 2012–2015*. Beirut: ILO, March 2012. <http://inform.gov.jo/en-us/By-Date/Report-Details/ArticleId/38/Jordan-Decent-Work-Country-Programme-2012-2015>.

International Resources Group. *Institutional Support and Strengthening Program (ISSP) Water Valuation Study: Disaggregated Economic Value of Water in Industry and Irrigated Agriculture in Jordan*. Washington, DC: USAID, 2012.

IUCN. *Al Hima: Possibilities Are Endless*. Amman: IUCN, 2014. http://cmsdata.iucn.org/downloads/hima_case__1_.pdf.

IUCN. *Management and Ownership of Drylands: An Accountability Report for “The Securing Rights & Restoring Lands for Improved Livelihoods Project in Jordan*. Amman: IUCN, 2011. www.iucn.org/sites/dev/files/import/downloads/accountability_report__2011_final.pdf.

Jackson, Tim. *Prosperity without Growth: Economics for a Finite Planet*. London: Earthscan, 2009.

Jenkins, Brian Michael. *When Jihadis Come Marching Home: The Terrorist Threat Posed by Westerners Returning from Syria and Iraq*. California: RAND Corporation, 2014.

Jordan 2025: A National Vision and Strategy. Government of Jordan, 2015. <http://inform.gov.jo/en-us/By-Date/Report-Details/ArticleId/247/Jordan-2025>.

“Jordan Anti-Terrorism Law Translates into Prosecution of Journalists.” *The Arab Weekly*, 15 July 2015. www.thearabweekly.com/Mena-Now/1159/Jordan-anti-terrorism-law-translates-into-prosecution-of-journalists.

Jordan Independent Economy Watch. *Energy Sector in Jordan 1: Gas and Electricity*. Amman: Identity Center, June 2015. <http://identity-center.org/sites/default/files/Energy%20Sector%20in%20Jordan%20-%20Gas%20and%20Electricity.pdf>.

“Jordan: Terrorism Amendments Threaten Rights,” Human Rights Watch, 17 May 2014. www.hrw.org/news/2014/05/17/jordan-terrorism-amendments-threaten-rights.

Jrabeia, Muhammad. *Civil Society and the State in Jordan*. Kuwait: Transparency Society, 2013.

Kabeer, Nabila. “Discussing Women’s Empowerment—Theory and Practice.” *Sida Studies*, no.3 (2000). www.sida.se/contentassets/51142018c739462db123fc0ad6383c4d/discussing-womens-empowerment---theory-and-practice_1626.pdf.

Kaisth, Daniela Z., and James R. King. “Syrian Refugees in Jordan—From Camps to Campus.” *University World News*, 19 September 2014. www.universityworldnews.com/article.php?story=20140916145546614.

Karunanathan, Meera. “Whose Rights to Water Will the 2030 Agenda Promote?” In *Spotlight on Sustainable Development*, edited by Barbara Adams, Roberto Bissio, Chee Yoke Ling, Karen Judd, Jens Martens, and Wolfgang Obenland, 54–59. Beirut: Development Alternatives with Women for a New Era, Third World Network, Social Watch, Global Policy Forum, and Arab NGO Network for Development, 2016.

Katz, David. “Undermining Demand Management with Supply Management: Moral Hazard in Israeli Water Policies.” *Water* 8, no. 4 (2016): 159–72..

- Kilani, Hala, Assaad Serhal, and Othman Llewlyn. *Al-Hima: A Way of Life*. Amman and Beirut: IUCN and SPNL, 2007.
- “Kingdom Incurs More Than \$12B as Indirect Cost of Refugee Crisis—Study.” *Jordan Times*, 8 September 2016. www.jordantimes.com/news/local/kingdom-incurs-more-12b-indirect-cost-refugee-crisis-%E2%80%94-study.
- Kislev, Yoav. *The Water Economy of Israel*. Jerusalem: Taub Center, November 2011.
- Klukowski, Ken. “Court Criticizes Obama Admin for Illegal Spying on U. S. Citizens—Breitbart.” Breitbart, 29 May 2017. www.breitbart.com/big-government/2017/05/29/court-criticizes-obama-admin-for-illegal-spying-on-u-s-citizens/.
- Knight, Rachael. *Best Practices in Community Land Titling: Inception Paper*. Rome: International Development Law Organization, 2010. www.files.ethz.ch/isn/139540/Land_InceptionPaper.pdf.
- Kushaim, Mustafa. “Civil Society between Theory and Practice.” *Dirasat Magazine*, no. 24 (n. d.).
- Loriska, Irene, Leon Cremonini, and Malaz Safar Jalani. *European Union Delegation to the Syrian Arab Republic: Study to Design a Programme/ Clearinghouse Providing Access to Higher Education for Syrian Refugees and Internal Displaced Persons*. The European Union, 2015. www.utwente.nl/bms/cheps/news/finalreportstudyhighereducationsyrianrefugeesandidp.pdf.
- Losleben, Elizabeth. *The Bedouin of the Middle East*. Minneapolis, MN: Lerner Publications, 2003.
- Lutfallah, Gari. “Ecology in Muslim Heritage: A History of the Hima Conservation System.” *The White Horse Press* 12, no. 2 (May 2006): 213–28. www.muslimheritage.com/article/ecology-muslim-heritage-history-hima-conservation-system.

- Mackay, Susan. "Women, Human Security, and Peace-Building: A Feminist Analysis." In *Conflict and Human Security: A Search for New Approaches of Peace-Building*, IPSHU English Research Report Series no. 19, edited by Hideaki Shinoda and Ho-Won Jeong, 152–75. Hiroshima: Institute for Peace Science, Hiroshima University, 2004. http://pdf2.hegoa.efaber.net/entry/content/511/women_human_security_peacebuilding_feminist_analysis.pdf.
- Madanat, Husam. "Land Tenure in Jordan." *Land Tenure Journal* 1 (2010): 143–70. www.fao.org/nr/tenure/land-tenure-journal/index.php/LIJ/article/view/12/6.
- Malkawi, Khetam. "Integration of Syrian Refugees in Workforce Hinges on New Investments." *The Jordan Times*, 21 December 2015.
- Malkawi, Khetam. "Personal Status Law among World's 'Highly Discriminatory' Laws against Women." *Jordan Times*, 5 May 2015. www.jordantimes.com/news/local/personal-status-law-among-world%E2%80%99s-highly-discriminatory%E2%80%99-laws-against-women%E2%80%99.
- Manning, Ruth, and Courtney La Bau. *In and Out of Extremism: How Quilliam Helped 10 Former Far-Right and Islamists Change*. London: Quilliam Foundation, August 2015. www.researchgate.net/profile/Ruth_Manning2/publication/282611461_In_and_Out_of_Extremism/links/5613ef6208ae4ce3cc635f19/In-and-Out-of-Extremism.pdf.
- Martens, Jens. "The 2030 Agenda: A New Start towards Global Sustainability?" In *Spotlight on Sustainable Development*, edited by Barbara Adams, Roberto Bissio, Chee Yoke Ling, Karen Judd, Jens Martens, and Wolfgang Obenland, 11–15. Beirut: Development Alternatives with Women for a New Era, Third World Network, Social Watch, Global Policy Forum, and Arab NGO Network for Development, 2016.

Mhadeen, Barik. "In the Wake of Its Military Defeat, Prepare for Daesh 2.0." *The Daily Star* (Lebanon), 7 November 2017. www.dailystar.com.lb/Opinion/Commentary/2017/Nov-07/425406-in-the-wake-of-its-military-defeat-prepare-for-daesh-20.ashx.

Ministry of Agriculture. *Updated Rangeland Strategy for Jordan*. Amman: IUCN, 2013.

Ministry of Agriculture (Lebanon). *National Report to the Third Session of the United Nations Forum on Forests: Lebanon*. Beirut: Ministry of Agriculture, January 2003. www.un.org/esa/forests/pdf/national_reports/unff3/lebanon.pdf.

Ministry of Agriculture and Land Reclamation (Egypt). *Second Matrouh Resource Management Project: Project Appraisal Document*. Cairo: Ministry of Agriculture and Land Reclamation, 2003.

Ministry of Energy and Mineral Resources. *Jordan Energy Efficiency Action Plan*. Amman: MEMR, 2013.

Ministry of Energy and Mineral Resources. *Jordan Energy Sector Strategy 2015–2015*. Amman: MEMR, 2015. www.memr.gov.jo/EchoBusV3.0/SystemAssets/PDFs/AR/General/new%20strategy.pdf. In Arabic.

Ministry of Energy and Mineral Resources. *Master Strategy of Energy Sector in Jordan for the Period (2007–2020)*. Amman: MEMR, 2007.

Ministry of Environment. *2013–2020 National Climate Change Policy of Jordan*. Amman: MOEnv, 2013. www.moenv.gov.jo/AR/PDFs/Climate%20change%20policy_PDF.pdf.

Ministry of Environment. *Assessment of Direct and Indirect Impacts of Climate Change Scenarios (Socioeconomic Study: Vol. II)*. Amman: MOEnv, 2013.

Ministry of Environment (Lebanon). *Safeguarding and Restoring Lebanon's Woodland Resources*. Beirut: Ministry of Environment, 2008. www.undp.org/content/dam/lebanon/docs/Energy%20and%20Environment/Projects/1454.pdf.

- Ministry of Labour. *Annual Report*. Amman: Ministry of Labour, 2014.
In Arabic.
- Ministry of Planning and International Cooperation. *Jordan Response Plan for the Syria Crisis: 2016–2018*. Amman: MoPIC, 2015.
- Ministry of Planning and International Cooperation. *Jordan's Way to Sustainable Development*. Amman, MoPIC: 2017. <https://sustainabledevelopment.un.org/content/documents/16289Jordan.pdf>.
- Ministry of Water and Irrigation. *Establishing the Post-2015 Development Agenda. Sustainable Development Goals (SDG) towards Water Security: The Jordanian Perspective*. Amman: MWI, 2016.
- Ministry of Water and Irrigation. *Jordan National Water Strategy 2016–2025*. Amman: MWI, 2016.
- Ministry of Water and Irrigation. *Water Facts and Figures*. Amman: MWI, 2016.
- Mühlberger, Wolfgang, and Olli Ruohomäki. “Middle Eastern Terror in Flux: Mosul after Daesh, Daesh after Raqqa.” Finnish Institute of International Affairs (FIIA), 24 January 2017. www.css.ethz.ch/en/services/digital-library/articles/article.html/844d8c73-c3b7-490e-aad7-2d01a6c6b961.
- Munashinghe, Mohan, and Rob Swart. *Primer on Climate Change and Sustainable Development: Facts, Policy Analysis, and Applications*. Cambridge: Cambridge University Press, 2005.
- Namrouqa, Hana. “Authorities Continue Crackdown on Water Theft.” *Jordan Times*, 4 June 2016.
- Namrouqa, Hana. “Authorities Tackle 3000 Violations.” *Jordan Times*, 6 May 2017, www.jordantimes.com/news/local/authorities-tackle-30000-violations-water-resources-2013.

- Namrouqa, Hana. "Jordan World's Second Water-Poorest Country." *The Jordan Times*, 22 October 2014. www.jordantimes.com/news/local/jordan-world%E2%80%99s-second-water-poorest-country.
- Namrouqa, Hana. "Raising Irrigation Water for Date Palms, Vineyards Good for Agriculture, Economy-Sector Insiders." *Jordan Times*, 11 April 2016.
- Namrouqa, Hana. "Water Authority Employees Shot At, Car Rammed at Illegal Drilling Well Site" *Jordan Times*, 14 May 2017. www.jordantimes.com/news/local/water-authority-employees-shot-car-rammed-illegal-drilling-well-site.
- Nassar, Lara. *Climate Change Adaptation in Jordanian Communities: Limitations and Opportunities*. Amman: WANA Institute, 2016. <http://wanainstitute.org/en/publication/climate-change-adaptation-jordanian-communities-limitations-opportunities-and>.
- Nassar, Lara. *A Guidance Note for SDG Implementation in Jordan: Water, Energy, and Climate Change*. Amman: WANA Institute, November 2017.
- Ncube, M., J. Anyanwu, and K. Hausken. *Inequality, Economic Growth, and Poverty in the Middle East and North Africa*. Working Paper 195. Tunis Belvédère, Tunisia: African Development Bank Group, 2013.
- Nortcliff, Stephen., Gemma Carr, Robert B. Potter, and Khadija Karmame. *Jordan's Water Resources: Challenges for the Future*. Geographical Paper No. 185. Reading: University of Reading, 2008.
- Northrop, Eliza, Hana Biru, Sylvia Lima, Mathilde Bouye, and Ranping Song. *Examining the Alignment between the Intended Nationally Determined Contributions and Sustainable Development Goals*. Washington, DC: World Resource Institute, 2016. www.wri.org/sites/default/files/WRI_INDCs_v5.pdf.
- Norwegian Refugee Council. *Drivers of Despair: Refugee Protection Failures in Jordan and Lebanon*. Oslo: Norwegian Refugee Council, 2016. www.nrc.no/globalassets/pdf/reports/drivers-of-despair.pdf.

- Nuruzzaman, Mohammed. "Human Security and the Arab Spring," *Strategic Analysis* 37, no. 1 (2013): 52–64.
- Obeidat, Abdullah. "Why Inequality Hampers Economic Growth." *Jordan Times*, 8 November 2015. <http://ftp.jordantimes.com/opinion/abdullah-obeidat/why-inequality-hampers-economic-growth>.
- Obeidat, Omar. "Ministry Ends Large-Scale Water Theft in Jordan Valley." *Jordan Times*, 3 September 2016.
- Oddone, Elisa. "Jordanian Progeny Gain Ground in Nationality Fight." *Al Jazeera*, 5 May 2015. www.aljazeera.com/news/2015/05/jordanian-progeny-gain-ground-nationality-fight-150504100629097.html.
- OECD. *Agriculture Policy Monitoring and Evaluation 2016*. Paris: OECD, 2016.
- OECD. "Decoupling Environment from Economic Growth." Paper presented at OECD forum "The Transition to Sustainable Development: Are We Making Progress in Decoupling Economic Growth from Environmental Degradation?" 14 May 2001.
- OECD. *Linking Renewable Energy to Rural Development*. Paris: OECD, October 2012. www.oecd.org/regional/regional-policy/Renewable-rural-energy-summary.pdf.
- OECD. *Water and Climate Change Adaptation: Israel*. Paris: OECD, 2013. www.oecd.org/env/resources/Israel.pdf.
- Omari, Raed. "MPs Approve Senate's Version of Bill on Agricultural Fund." *The Jordan Times*, 25 August 2015. www.jordantimes.com/news/local/mps-approve-senate%E2%80%99s-version-bill-agricultural-fund.
- Orav, Anita, Rosamund Shreeves, and Anja Radjenovic, with Sofía López. "Radicalisation and Counter-Radicalisation: A Gender Perspective." European Parliament Briefing, April 2016. [www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2016\)581955](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2016)581955).

“Orly Airport Attack: Drugs and Alcohol Found in Gunman’s Blood.”
The Guardian, 20 March 2017. www.theguardian.com/world/2017/mar/20/orly-airport-shooting-drugs-and-alcohol-found-in-gunmans-blood.

Pearce, David, and Donata Finch. “Advancing Subsidy Reform: Towards a Viable Policy Package.” In *Finance for Sustainable Development: Testing New Policy Approaches*. United Nations Development of Economic and Social Affairs. New York: United Nations, 2002.

Powell, Dina H., and Jane Kinninmont. *Women’s Economic Empowerment in the Middle East and North Africa*. London: Chatham House, 6 July 2015. www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20150706Women%27sEconomicEmpowerment.pdf.

Prettitore, Paul. “Poverty and Legal Problems in Jordan: Defining the Relationship.” World Bank MENA Knowledge and Learning Quick Notes Series, no. 150 (September 2015). <http://siteresources.worldbank.org/INTMENA/Resources/QN150.pdf>.

“Rape Laws Aren’t Part of Islam, but Colonialism: Study.” *Telesur*, 3 August 2017. www.telesurtv.net/english/news/Rape-Laws-Arent-Part-of-Islam-but-Colonialism-Study-20170803-0024.html.

Razzaz, Susan. *A Challenging Market Becomes More Challenging: Jordanian Workers, Migrant Workers and Refugees in the Jordanian Labour Market*. Beirut: ILO, 2017. www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_556931.pdf.

Reed, John. “Closure of Syria’s Last Border Crossing Hits Jordan Economy.” *Financial Times*, 8 April 2015. www.ft.com/content/c0df376a-dd27-11e4-a772-00144feab7de.

“The Role of Families Is Critical in Preventing Violent Extremism.” Global Counterterrorism Forum, 2016. www.thegctf.org/Portals/1/Documents/Toolkit-documents/English-The-Role-of-Families-in-PCVE.pdf.

- Sachs, Jeffrey. “Why We Need to Shift to Investment-Led Growth: Sachs.” *CNBC*, 22 January 2014. www.cnbc.com/2014/01/22/why-we-need-to-shift-to-investment-led-growth-sachs.html.
- Sadras, Victor, O., Patricio Grassini, and Pasquale Steduto. *Status of Water Use Efficiency of Main Crops: SOLAW Background Thematic Report—TR07*. Rome: FAO, n. d. www.fao.org/fileadmin/templates/solaw/files/thematic_reports/TR_07_web.pdf.
- Sayegh, Nadine. *Challenges to an Integrated CVE and Human Security Approach in Jordan*. Amman: WANA Institute, 2017.
- Schlaffer, Edit, and Ulrich Kropiunigg. “Can Mothers Challenge Extremism?” *Women Without Borders*, 2015. www.women-without-borders.org/files/downloads/CAN_MOTHERS_CHALLENGE_EXTREMISM.pdf.
- Schlaffer, Edit, and Ulrich Kropiunigg. “A New Security Architecture: Mothers Included!” In *A Man’s World? Exploring the Roles of Women in Countering Terrorism and Violent Extremism*, edited by Naureen Fink, Sara Zeiger, and Rafia Bhulai, 54–75. Abu Dhabi, UAE: Hedayah and The Global Center on Cooperative Security, 2016.
- Schuurman, Bart, and Liesbeth van der Heide. *Foreign Fighter Returnees and the Reintegration Challenge*. RAN Issue Paper, Radicalisation Awareness Network Centre of Excellence, November 2016. https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/networks/radicalisation_awareness_network/ran-papers/docs/issue_paper_foreign_fighter_returnees_reintegration_challenge_112016_en.pdf.
- Schwab, K. *The Fourth Industrial Revolution*. Geneva: World Economic Forum, 2016.
- “Seven Murdered in Gender-Based Violence in 2017.” *Jordan Times*, 11 April 2017. <http://jordantimes.com/news/local/seven-murdered-gender-based-violence-2017%E2%80%99>.

- Simmons, Ann. "Jordanians Seize 'Shark Tank'-Like Opportunity amid Competition from Syrian Refugees for Work." *LA Times*, 29 September 2017. www.latimes.com/world/global-development/la-fg-global-jordanian-shark-tank-snap-story.html.
- Sjoberg, Laura. "People Not Pawns: Women's Participation in Violent Extremism across MENA." USAID Research Brief, September 2015. <https://drive.google.com/file/d/0BycIINu-Y8d-TXFsNWdq1pXWIU/view>.
- "Snapshot of Civil Society in Jordan." *Civicus*, June 2015. www.civicus.org/images/Snapshot_of_CS_in_Jordan.pdf.
- Stahl, Patrick, and Julia Wilton. "The Future of Countering Violent Extremism: An Analysis of Current Programming in Jordan." MSc, New York University, 2017.
- Stave, Svein Eric, and Steven Hilisund. *Impact of Syrian Refugees on the Jordanian Labour Market*. Geneva: ILO, 2015. www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_364162.pdf.
- Sustainable Development Solutions Network. *Getting Started with the Sustainable Development Goals: A Guide for Stakeholders*. Paris and New York: SDSN, December 2015.
- Swain, Mamata. *Crop Insurance for Adaptation to Climate Change in India*. London: Asia Research Centre, 2016.
- "Syria Border Closure Cuts Off Key Jordan Trade Route." *The National*, 26 April 2015. www.thenational.ae/world/middle-east/syria-border-closure-cuts-off-key-jordan-trade-route.
- Taiwo, Babatunde. "Women and Violent Extremism in Somalia and the Horn of Africa: Background Note." UNWOMEN, 2017.
- Tanner, Christopher. *Law Making in an African Context: The 1997 Mozambican Land Law*. FAO Legal Papers no. 26. Rome: FAO, 2002.

Taspinar, Ömer. “Fighting Radicalism, Not ‘Terrorism’: Root Causes of an International Actor Redefined.” *SAIS Review International Affairs* 29, no. 2 (Summer–Fall 2009): 77–79, www.brookings.edu/~media/research/files/articles/2009/9/summer%20fall%20radicalism%20taspinar/summer_fall_radicalism_taspinar.pdf.

Terrapon-Pfaff, Julia, Carmen Dienst, Julian König, and Willington Ortiz. “A Cross-Sectional Review: Impacts and Sustainability of Small-Scale Renewable Energy Projects in Developing Countries.” *Renewable and Sustainable Energy Reviews* 40 (December 2014): 1–10.

Townsend, Sarah. “World Government Summit: Almost Half of Middle East Jobs Could Be Automated Says Survey.” *The National*, 11 February 2018. www.thenational.ae/business/world-government-summit-almost-half-of-middle-east-jobs-could-be-automated-says-study-1.703620.

“UK: Emergency Surveillance Law a Blow to Privacy.” Human Rights Watch, 14 July 2014. www.hrw.org/news/2014/07/14/uk-emergency-surveillance-law-blow-privacy.

UN Economic and Social Commission for Asia and the Pacific. *Statistical Yearbook for Asia and the Pacific 2015. 7: Renewable Energy*. Bangkok: UN ESCAP, 2015. www.unescap.org/sites/default/files/SDGs_07_SYB2015.pdf.

UN Office of the High Commissioner. *Women’s Rights Are Human Rights*. New York: United Nations, 2014. www.ohchr.org/Documents/Events/WHRD/WomenRightsAreHR.pdf.

UN Women Jordan. *Women and Violent Radicalization in Jordan*. Amman: RASED and Search for Common Ground, March 2016. <https://drive.google.com/file/d/0BycIINu-Y8d-YzhEUC1leEJiaUk/view>.

UNDP. *Assessment of Direct and Indirect Impacts of Climate Change Scenarios—Climate Change Adaptation in the ZRB*. Amman: UNDP, 2013.

- UNDP. *Thinking Differently about the Poor*. Amman: UNDP and MoPIC, 2012. www.undp.org/content/dam/jordan/docs/Poverty/Jordan_Poverty%20Pocket%20Report.pdf.
- UNDP and UNICEF. *Socio-Economic Inequality in Jordan*. Amman: UNDP and UNICEF, 2015. www.jo.undp.org/content/dam/jordan/docs/Poverty/UNDP%20Socio%20economic%20Inequality%20in%20Jordan%20English.pdf.
- UNEP International Resource Panel. *Decoupling Natural Resource Use and Environmental Impacts from Economic Growth*. Nairobi: UNEP, 2011.
- UNEP International Resource Panel. *Measuring Water Use in a Green Economy*. Nairobi: UNEP, 2012.
- UNESCO. *Draft Preliminary Report Concerning the Preparation of a Global Convention on the Recognition of Higher Education Qualifications*. Paris: UNESCO, 2015. <http://unesdoc.unesco.org/images/0023/002347/234743E.pdf>.
- UNESCO and the EU. *UNESCO-EU Jami3ti Initiative: Mapping of Higher Education Needs & Opportunities for Syrian Refugees*. Jordan: UNESCO, May 2015. www.reachresourcecentre.info/system/files/resource-documents/reach_jor_unesco_education_report_20151409_en.pdf.
- UNHCR. *3RP Regional Refugee & Resilience Plan 2015–2019: In Response to the Syria Crisis. Regional Strategic Overview*. Geneva: UNHCR, 2017. <http://reporting.unhcr.org/sites/default/files/Syria%203RP%20Regional%20Strategic%20Overview%202018-2019%20%28December%202017%29.pdf>.
- UNHCR. *DAFI 2013 Annual Report*. Geneva: UNHCR, 2013. www.unhcr.org/568bd18f2e7.html.
- UNHCR. *DAFI 2014 Annual Report*. Geneva: UNHCR, 2014. www.unhcr.org/568bd4a59.html.
- UNHCR. *DAFI Annual Report 2011*. Geneva: UNHCR, 2012. www.unhcr.org/5326cf0a9.html.

- UNHCR. *DAFI Annual Report 2012*. Geneva: UNHCR, 2013. www.unhcr.org/5326cf419.html.
- UNHCR. *DAFI: Higher Education in Emergencies*. Geneva: UNHCR, 2014. www.unhcr.org/568bc6789.html.
- UN-Water. *Climate Change Adaptation: The Pivotal Role of Water*. Geneva: UN-Water, 2010.
- USAID. *Climate-Resilient Development: A Framework for Understanding and Addressing Climate Change*. Washington, DC: USAID, 2014.
- USAID. *Factors Impacting Propensity and Influence Pathways toward Violent Extremism In Jordan*. Amman: USAID, 2016. https://jordankmportal.com/organizations/2?resources_page=5.
- USAID. *Jordan Country Development Cooperation Strategy 2013–2017*. Amman: USAID, 2015.
- Van Aken, M., R. Courcier, J. P. Venot, and F. Molle. *Historical Trajectory of a River Basin in the Middle East: The Lower Jordan River Basin (in Jordan)*. Amman: International Water Management Institute and French Regional Mission for Water and Agriculture, 2007.
- Verde, Tom. “A Tradition of Conservation.” *Aramco World* 59, no. 6 (November/December 2008). <http://archive.aramcoworld.com/issue/200806/a.tradition.of.conservaion.htm>.
- Verme, Paulo, Chiara Gigliarano, Christina Wieser, Kerren Hedlund, Marc Petzoldt, and Marco Santacroce. *The Welfare of Syrian Refugees: Evidence from Jordan and Lebanon*. Washington, DC: The World Bank, 2016. <https://openknowledge.worldbank.org/bitstream/handle/10986/23228/9781464807701.pdf?sequence=21&isAllowed=y>.
- Walker, Iain, and Thomas F. Pettigrew. “Relative Deprivation Theory: An Overview and Conceptual Critique.” *British Journal of Social Psychology* 23, no. 4 (1984): 301–10.
- Warrick, Joby. *Black Flags*. New York: Doubleday, 2015.

- Water and Wastewater International. *Israel Reuses Nearly 90% of Its Wastewater*. Waterworld, 2 December 2016. www.waterworld.com/articles/wwi/2016/12/israel-reuses-nearly-90-of-its-water.html.
- Water Authority, *Water and Sewage Rates for Domestic Consumers in Municipal Water and Sewage Corporations*. Tel Aviv: Water Authority, 2016.
- Weier, John, and David Herring. "Measuring Vegetation (NDVI &EVI)." *Earth Observatory*, 30 August 2000. <http://earthobservatory.nasa.gov/Features/MeasuringVegetation/>.
- Westerberg, Vanja, and Moe Myint. *Costs and Benefits of Communal Rangeland Rehabilitation in Jordan: An Economic Valuation of a Large-Scale Rangeland Restoration Project through the Hima System within the Zarqa River Basin in Jordan*. Bonn: ELD Initiative, 2014. www.iucn.org/sites/dev/files/import/downloads/eng__policy.pdf.
- Westerberg, Vanja, and Moe Myint. *An Economic Valuation of a Large-Scale Rangeland Restoration Project through the Hima System in Jordan*. Bonn: ELD Initiative, 2015.
- Williams, Sara Elizabeth. "Made in Jordan: Inside the Unexpected Powerhouse of Garment Manufacturing." *Business of Fashion*, 15 September 2015. www.businessoffashion.com/articles/global-currents/made-in-jordan-garment-manufacturing-industry.
- Woetzel, Jonathan, Anu Madgavkar, Khaled Rifai, Frank Mattern, Jacques Bughin, James Manyika, Tarek Elmasry, Amadeo Di Lodovico, and Ashwin Hasyagar. *People on the Move: Global Migration's Impact and Opportunity*. McKinsey Global Institute, December 2016. www.mckinsey.com/global-themes/employment-and-growth/people-on-the-move.
- World Bank. *The Cost of Irrigation Water in the Jordan Valley*. Washington, DC: World Bank, 2016.

- World Bank. *Gender Equality and Development: World Development Report 2012*. Washington, DC: World Bank, 2011.
<https://siteresources.worldbank.org/INTWDR2012/Resources/7778105-1299699968583/7786210-1315936222006/Complete-Report.pdf>.
- World Bank. *West Bank and Gaza: Assessment of Restrictions on Palestinian Water Sector Development. Sector Note, April 2009*. Washington, DC: World Bank, 2009.
- World Bank, and FAO. *The Grain Chain: Food Security and Managing Wheat Imports in Arab Countries*. Washington, DC: World Bank, 2012.
- World Bank, International Fund for Agricultural Development, and FAO, *Improving Food Security in Arab Countries*. Washington, DC: World Bank, 2009.
- World Economic Forum. *The Global Gender Gap Report 2017*. Geneva: World Economic Forum, 2017. http://www3.weforum.org/docs/WEF_GGGR_2017.pdf.

Notes on Contributors

His Royal Highness Prince El Hassan bin Talal

His Royal Highness Prince El Hassan bin Talal is a direct descendant of the Prophet Muhammad (PBUH) and is the brother of His late Majesty King Hussein and the uncle of HM King Abdullah II of Jordan, serving as Jordan's Crown Prince from 1965 until 1999. A pluralist and staunch campaigner for the rights of all to live in peace and dignity, HRH is a pioneer of interfaith dialogue and understanding. Prince Hassan's international commitments have included co-chairing the Independent Commission on International Humanitarian Issues and his current membership of the Commission on Legal Empowerment of the Poor. Prince Hassan has long had an active engagement with environmental organisations, having recently served as the Chairman of the UN Secretary-General's Advisory Board on Water and Sanitation. Prince Hassan currently chairs the High-Level Forum for the Blue Peace Middle East plan. HRH established the Arab Thought Forum, the Royal Institute for Interfaith Studies, the Higher Council for Science and Technology, the Royal Scientific Society and the West Asia-North Africa (WANA) Institute.

Reem Alhaddadin

Reem Alhaddadin is a junior researcher in the WANA Institute's Sustainable Development team. Previously, Reem interned with Engineers Without Borders in Regensburg, Germany, as a water engineer. Her task consisted of designing an inlet channel and contributing to a manual for a hydropower plant project based in Cameroon. Reem's engineering background taught her how to integrate science with practice. She holds a Bachelor of Engineering in Water and Environmental Engineering from the German Jordanian University.

Shaddin Alhajahmad

Shaddin Alhajahmad is an economics researcher with an interest in refugee empowerment through strengthening access to labour markets. She joined the WANA Institute's Human Security Economics team to support efforts to strengthen refugee policy through her strong background in quantitative

research and a passion for economic development in the Middle East. She holds a Bachelor of Arts in Economics from the American University of Sharjah.

Esraa Alshyab

Esraa Alshyab is the training and project design specialist in the WANA Institute's Civil Society team. Previously, she worked on women's democratic empowerment for Al Hayat Center for Civil Society Development. She also worked as a journalist for various news outlets. Esraa holds a Bachelor of Science in Environmental Applied Geology from the University of Jordan.

Neven Bondokji

Dr Neven Bondokji is an expert in peace studies and conflict transformation with special emphasis on the nexus between Islam, violence and peacebuilding. As a senior researcher, she leads the WANA Institute's Human Security Countering Violent Extremism (CVE) team. She is also the author of *Hamas: Social Identity, Violent Resistance and Power Politics*, and *The Muslim Brotherhood in Jordan: Time to Reform*. Her professional experience includes a Visiting Fellowship at Brookings Doha Center, and teaching at Qatar University and University of Sydney.

Juliet Dryden

Juliet Dryden is the WANA Institute's Director of Programme, with over 20 years of experience in international relations, specialising in programme management, development and donor relations. She began her career at the International Institute for Strategic Studies (IISS) and Chatham House (RIIA) in London before moving to the United Nations, where she held a number of positions in Cairo, Gaza and Jerusalem with OHCHR, UNRWA and OCHA. She has also worked for the London School of Economics (LSE IDEAS). She holds a Master in International Relations from the University of East Anglia.

Michael Gilmont

Dr Michael Gilmont is a Research Fellow in Water Security at Oxford University. Michael has over a decade of research experience in water resource management and resource politics in West Asia. He also recently worked on a UK government Department for International Development (DFID)-funded programme on transboundary water resources in China, and a research project on water/economic growth interdependencies in India funded by the Oxford Martin School. Over the past 20 months, he has coordinated and provided research leadership on a tri-lateral water and food security research programme led by Oxford's Institute for Science, Innovation and Society. The project focuses on the potential to enhance the 'decoupling' of national water needs from economic growth in Jordan Basin countries, as a means to circumvent water scarcity and environmental stress. He has previously carried out consultancy work for the Overseas Development Institute and DFID, and his work on water resource decoupling has been cited by the World Bank. He holds a Bachelor of Arts in Geography (University of Cambridge), a Master of Science in Hydrology (Imperial College London) and a PhD in Geography (King's College London).

Erica Harper

Dr Erica Harper was appointed by HRH Prince El Hassan bin Talal as the Executive Director of the WANA Institute in 2014. Prior to this, she was the Senior Rule of Law Advisor for the International Development Law Organisation in Geneva, where she ran a portfolio of legal empowerment projects spanning 13 countries in the areas of customary justice, community land titling and child protection. During this period, she was also seconded to UNHCR as Chair of the Global Protection Cluster Taskforce on Natural Disasters. Dr Harper has worked for various international organisations, including UNHCR and UNDP, as well as NGOs and academic institutions in Indonesia, the Philippines, Switzerland, Italy and Australia. Dr Harper is the author of six books on international legal issues, and has been published in more than 15 academic journals. She holds a Bachelor of Commerce (Economics), Bachelor of Laws (Hons), and PhD in Philosophy (International Law). Dr Harper is a thought leader and regular commentator on international criminal law and

the state–civil society compact; she has worked as an advisor and speech writer for political leaders and former heads of state in Europe and Asia.

Kamal Kakish

Kamal Kakish's work with the WANA Institute centred around the proportionality between local accountability and good governance within different communal land systems in the WANA region. Kamal holds a Bachelor of Science in Water and Environmental Engineering from the German Jordanian University, where he also earned a Certificate of Excellence, and is a proud recipient of the Gold Award for the El Hassan Youth Award programme. Previously, he worked with Stulz-Planaqua GmbH in Germany on water and wastewater management projects. After spending two years as a researcher in the Sustainable Development team, Kamal is currently pursuing his Master in Land and Water Systems from the University of British Columbia in Vancouver, Canada.

Dorsey Lockhart

Dorsey Lockhart is an economics researcher focused on refugee economic inclusion as well as the wider-ranging issue of job creation in the WANA region. She joined the WANA Institute as the senior researcher and team leader of the Human Security Economics team, bringing to the role more than seven years of experience in policy and programming related to economic growth and sustainable wealth creation. Dorsey holds a Master in Business Administration from IE Business School in Madrid and a Master in Development Studies from Georgetown University.

Mahmoud Nabulsi

Mahmoud Nabulsi manages the Civil Society team at the WANA Institute. Mahmoud has 11 years of professional experience in various youth development and participation projects. He worked in Palestinian refugee camps, in conflict and post-conflict states such as Yemen and Sudan, and with various refugee communities in Jordan. His experience ranges from capacity-building, management, consultation, assessment and research to developing training manuals in Jordan, Yemen, Sudan, the UAE and Kuwait. Before joining the WANA Institute, Mahmoud worked as the Jordan Country Director for Tammey for Human Development, Programme Manager for LOYAC Jordan and Project Officer for the Royal

Health Awareness Society. He was also a freelance trainer for the Princess Basma Youth Recourse Center for three years. Mahmoud holds a Master in Sustainable International Development from Brandeis University in the United States.

Lara Nassar

Lara Nassar is an environmental scientist who joined the WANA Institute as the Senior Researcher leading the Sustainable Development pillar. She has over 9 years of experience in working with international organisations and NGOs. Lara previously worked on local community sustainable development with the International Union for Conservation of Nature – Regional Office for West Asia, UNDP and GEF. At the IUCN, she worked on water, climate change resilience and adaptation, land degradation and desertification. She also worked on environmental communications both regionally and internationally. Lara holds a Master in Environmental Management of Urban Land and Water from the University of Sheffield in the UK and an environmental Bachelor of Science from the American University of Beirut, Lebanon.

Alethea Osborne

Alethea Osborne is a researcher in the Human Security CVE team at the WANA Institute, having completed a Master of Philosophy in Modern Middle East Studies from Oxford University. Some of her other research interests include gender relations and the role of youth in political and social development.

Nadine Sayegh

Nadine Sayegh is a researcher in the WANA Institute's Human Security CVE team. She has previous experience as a journalist covering the Arab world through a political, social and cultural lens. She intends for her work to assist in creating policy that will advance the quality of life of all citizens in the WANA region and counter the efforts of violent groups.

The West Asia-North Africa region sits at a complex crossroads where the impacts of chronic conflict, cultural fragmentation, and geopolitical interests collide. It is easy to think of the region's future in pessimistic terms, yet while conflict and disaster provide a myriad of challenges, they also contain lessons to be learned.

A Region in Motion: Reflections from West Asia-North Africa, an anthology of research conducted by the WANA Institute, highlights the potential for experiential learning that accompanies motion. Chapters relating to pressing issues such as climate change, human displacement, the rise of violent extremism, and the faltering social contract encourage policy-makers and development actors to seize the opportunities contained in motion when mapping out the pathways to a conflict-free, economically stable, and sustainable region.

