

Stocktaking of Security Sector Roles in Climate and Environmental Security

Report on the occupied Palestinian Territory



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Acronyms

BST	British Support Team
CCA	Climate Change Adaptation
COGAT	Coordinator of Government Activities in the Territories (from Israel)
CSDP	Common Security and Defence Policy of the EU
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EQA	Environmental Quality Authority
EU	European Union
EUPOL COPPS	EU Coordinating Office for Palestinian Police Support
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HCCD	High Council of Civil Defence
NSF	National Security Forces
MoI	Ministry of Interior
OHCHR	Office of the United Nations High Commissioner for Human Rights
oPT	occupied Palestinian Territory
PA	Palestinian Authority
PARC	Palestinian Agricultural Relief Committee
PWA	Palestinian Water Authority
SOP	Standard Operating Procedure
SSG/R	Security Sector Governance and Reform
UN	United Nations Organisation
UNDRR	United Nations Office for Disaster Risk Reduction
UNEP	United Nations Environment Programme
UNODC	United Nations Office on Drugs and Crime
USSC	United States Security Coordinator for Israel and the Palestinian Authority

Executive Summary

The occupied Palestinian Territory is facing a range of climate and environmental risks which directly affect human security. From rising temperatures and increasing aridity to water scarcity and widespread pollution, the combined effects of climate change and human pressures on the environment are contributing to local tensions and increasing the fragility of both communities and local ecosystems in the West Bank, which was the geographic focus of this study.

While many of these risks require a response which extends well beyond the security sector, security institutions have an important and perhaps underappreciated role to play in this context. It is also worth noting that government responses (or lack thereof) to these risks – complicated by Israeli-Palestinian relations – clearly affect perceptions of the state and present an opportunity for security institutions to play a role in addressing human security concerns which matter greatly to local communities.

As climate change increases the risk of flooding, fires and other disasters, the role of the Palestinian Authority Security Forces in disaster risk reduction (DRR) will be increasingly important and offers a valuable opportunity for institutions including Civil Defence to work closely with communities as well as local government in order to better analyse and mitigate the risks of both sudden and slow-onset disasters. Likewise, the Environmental Police, Customs Police and Public Prosecutor have the potential to play a stronger role in preventing and prosecuting environmental crimes and other forms of harm to the environment. There are important links between these two functions, as problems such as illegal waste disposal not only have serious public health consequences, but also contribute to slow-onset disasters. This directly affects the health and resilience of the local environment upon which Palestinians depend for food and increasingly limited water supplies.

Overall, this stocktaking study has found significant potential for SSG/R programming to improve service delivery of security institutions with regards to mitigating the impact of climate and environmental risks on communities and the environment, as well as strengthening social cohesion and contributing to sustainable peace. While international partners in their SSG/R programming tend to not yet fully maximize the potential of this area, findings place SSG/R's role on climate and environmental security at the heart of the



Photo: DCAF

triple nexus between humanitarian needs, development and security. Moreover, working at this nexus is relevant in the context of the sustaining peace and prevention agenda, commitments to mainstream DRR into all sectors under the Sendai Framework, as well as the Paris Agreement's Global Goal on Adaptation.

In addition to the more practical recommendations for international donors as well as the Palestinian Authority which are included in the report, there are several conclusions that have broader relevance for SSG/R programming across a range of regional, environmental and security contexts, and will be further explored in the remaining countries in the stocktaking study:

Main Findings

- ▶ The Occupied Palestinian Territory is facing a range of multidimensional risks at the intersection of environmental and human security and across both the Prepare and Protect dimensions of this study. These risks interact in a way which continues to increase the vulnerability of Palestinians to the consequences of a changing climate for human security.

- ▶ In the area of waste disposal and pollution, violations of existing legislation are in some cases inextricably linked with community livelihoods. Even if law enforcement in this area is strengthened, harm to the environment is unlikely to cease without a focus on creating alternative, clean options for income generation.
- ▶ The Palestinian Authority has a relatively large number of security forces, with mandates which are not always entirely clear or distinct. There appear to have been specific disagreements, for example, as to the respective roles and functions of institutions including the Customs Police and the Environmental Police, as well as an absence of leadership and coordination on complex issues such as illegal waste disposal. In a context of many needs and limited resources, both gaps and overlapping mandates undermine the ability of state institutions to deliver the security services communities need most under the Prepare and Protect dimensions of this study.
- ▶ The political situation in the West Bank – and specifically restrictions on the movement and jurisdiction of security institutions – limits the ability of the security sector to realize its full potential in responding to climate and environmental (security) risks.

Entry points for SSG/R

- ▶ **Recognising and reinforcing climate security roles:** From a human and planetary security perspective, the international community should recognize the security sector's role in mitigating climate and environmental risks as a top priority for engagement.
 - This means a shift from the **delivery of humanitarian aid by the international community towards empowering national partners** to be the main service provider, and adopting a broader definition of the security sector that also includes institutions working on civil protection.
 - To be translated into SSG/R programming, relevant security sector functional areas should be included conceptually in thematic strategies and could become a focus for support in **country or regional engagement strategies** and through **multilateral missions**, such as UN and CSDP missions. In this regard, the EUPOL COPPS mandate on environmental crime is a unique pilot

with the potential to combine the mission's political access and support with technical capacity building, and would benefit from a lessons learning exercise in order to inform future missions.

- As this is an emerging area of focus for SSG/R, it will be important for future programmes to collect additional **data which can inform design and implementation** in areas including the link between security sector roles, peacebuilding and social cohesion.

- ▶ **Mandates and priorities:** It is clear that security institutions can do more to contribute to both DRR and environmental protection **within existing mandates**. Focusing on these areas also offers a new entry point to orient security institutions toward improved service delivery. The challenge may be to consider how these issues can be **prioritised** relative to other risks security institutions must manage, and how adequate resources can be dedicated to related tasks.

- It is also worth considering how taking on **less traditional tasks** might positively influence relationships between security institutions and local communities – for example, mitigating resource-related conflicts, contributing planning skills and methodologies to climate change adaptation efforts, raising awareness of environmental legislation and regulations, and supporting environmental remediation.

- ▶ **Waste disposal and pollution: Waste disposal and pollution are human security issues** which are likely to become more important in the coming years as climate change and demands for natural resources continue to put greater pressure on ecosystems. In addition to affecting public health, polluted land and water supplies diminish both food and water security. In a global context of tightening environmental regulations, security institutions in many regions may also need to strengthen their understanding of the transnational dimensions of illegal waste disposal.

- ▶ **Emphasising prevention:** A longer-term focus on **prevention** is critical for both DRR and environmental protection. **Risk-informed planning** of infrastructure and housing, for example, can make a significant contribution to mitigating future disaster risks but is not always well integrated with DRR functions. Here too, security institutions can offer scenario-based planning and other methodologies which may not

be commonly used across all sectors. Additionally, beyond being an environmental crime, widespread pollution is a **slow-onset disaster**, with potentially catastrophic consequences for future food and water security. A preventive approach is also essential in enforcing environmental legislation, as communities can ill afford the **loss of productive agricultural land, reduced supplies of clean drinking water**, and other consequences of environmental degradation.

- **Coordination & integration:** Tackling environmental crime and analysing disaster risks requires specific technical skills (for example in the area of environmental sampling to detect crimes) and its complexity requires especially **close coordination between security institutions and environmental and other government agencies** which may not traditionally work together. Integrated approaches are also essential; at the community level **environmental harm is often linked with livelihoods** and solutions which focus solely on enforcement are unlikely to succeed.

- **Comprehensive donor approaches:** Working effectively on DRR, environmental protection, and more broadly on the triple nexus, also requires donors to adopt a comprehensive approach. This means developing innovative funding instruments that can cover several hitherto separate sectors and policy areas, as well as the ability and willingness to engage with a wide range of national counterparts across sectors.

- **Supporting capable communities:** Working at the intersection of the environment and security – particularly in contexts of widespread challenges and limited security sector resources – also requires a realistic analysis of **what communities themselves can do as a first line of defence**, and where security institutions must play a role. In the West Bank, this is made even more important by the movement and jurisdictional restrictions which limit the ability of security institutions to respond to disasters and environmental harm.



SSG/R needs to mainstream climate and environmental risks so security sectors can help protect people, planet and peace

Photo: DCAF



1. Introduction

Background

This report is part of a larger stocktaking study funded by the Governments of Germany, the Netherlands, Sweden and Switzerland that explores the potential and roles of the security sector to support communities vis a vis the impacts of climate change and environmental degradation.

It combines two pertinent areas of interest for the security sector when looking at current and future environmental issues in four different countries. In focus here, as shown in Figure 1, are (i) the preparation for natural disasters, and (ii) environmental protection (with a specific focus on environmental crimes and conservation), which are not only interlinked themselves but also relate to questions of conflict, instability, fragility, and hence (human) security.

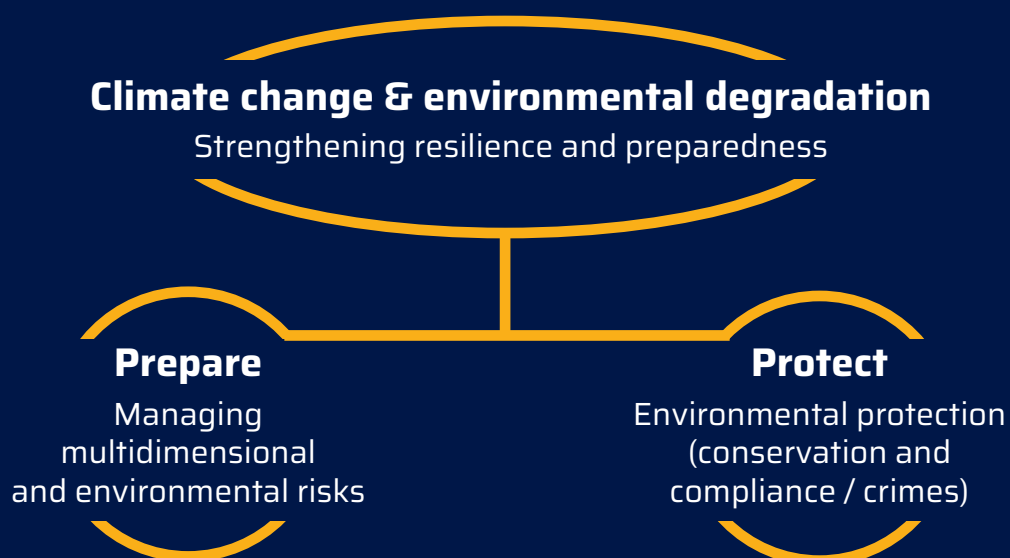
Multifaceted resource scarcity can have varied and interlinked impacts on migration and conflicts between communities, which then has the potential to further deteriorate the overall environmental situation as well as human adaptation to it.¹ The various security risks that states and populations are facing globally show how a broad approach to security also has implications for the roles of the security sector and for state expenditures.²

By assessing the security sector's capacities, priorities,

and resources to deal with the two focus areas introduced above, this report presents the findings of the first case at hand, the occupied Palestinian Territory (oPT). These insights will be complemented by similar report for Brazil, Sierra Leone, and the Philippines. In combination, the four country reports will be synthesised in an overarching report that aims to outline relevant insights, lessons learned, (in)effective arrangements, and promising recommendations for the security sector and related governance and reform programming. This is done using a two-pronged approach, scrutinising the security sector itself as well as community perspective, with the hypothesis that a well-governed, legitimate, and accountable security sector can help to break cycles of environmental degradation as well as conflict.

The connections between climate change adaptation (CCA), disaster risk reduction (DRR), and environmental protection have been underlined in various fora. Both DRR and CCA contribute to reducing vulnerability while enhancing societal capacity and therefore resilience. Moreover, good coordination as well as the division of labour and responsibilities between and within institutions in charge of DRR and CCA activities can increase effective responses, particularly in more vulnerable contexts.³ For instance, intact ecosystems have the potential to mitigate climate change impacts and disaster risks, underlining how a healthy environment contributes to lowering the cost of disasters and their related responses.⁴ Additionally, the nature of land use not only impacts overall livelihoods but also local climatic phenomena, such as wind patterns and temperature.⁵

Figure 1: Two pillars of action for the Security Sector in relation to climate change and environmental degradation.



Climate Change and the Environment in the occupied Palestinian Territory

As described in more detail below, in addition to severe economic challenges, the oPT is affected by environmental degradation, climate change and natural disasters of different types, as well as an arid climate. The challenges revolving around water supply, solid waste disposal, pollution, changing land use, and natural disasters are only partially met due to environmental governance gaps, which models project will be exacerbated by climate change in the future.⁶ In the recent past, the oPT has experienced both a rise in average and maximum temperature with at least high confidence as well as more temperature extremes. The evidence concerning a change or stability of rainfall patterns is too scarce to reach a confident conclusion at this time⁷ but the oPT's National Adaptation Plan outlines a range of possibilities associated with rising temperatures, the most extreme of which anticipates significantly increased risks of drought and flash flooding.⁸

Apart from these climate-related challenges, the population of around 5 million people also faces political and economic challenges. The oPT's economy is mostly made up by the service sector, while it is also grappling with economic restrictions due to the occupation. Moreover, while the Israeli settlements are growing both in population numbers and industry, contributing to degradation of water, soil, and air quality, the economy in the West Bank is growing more slowly than before and is shrinking in the Gaza strip.⁹

The Palestinian Authority (PA) has taken a number of steps to address climate change and protect the environment. Over the past twenty years, the PA has also drafted laws to protect the environment and has acceded to multiple international agreements related to environmental protection.¹⁰ In the National Policy Agenda for 2017-2022, goals related to limiting environmental pollution, maintaining biodiversity, and climate change adaptation were adopted. A National Adaptation Plan¹¹ and a Sustainable Consumption and Production National Action Plan have been launched and investments in green energy are on the rise. Within the National Adaptation Plan, the agricultural, energy, and food sector rank highly, as do questions related to water management.¹² Climate change mitigation measures have been mostly related to energy matters.¹³ In order for those measures to be successfully implemented, however, there exist significant constraints in terms of financing, technology, and capacity-building.¹⁴

Legal and Political Context in the occupied Palestinian Territory

Legal situation

The rules and regulations of the security sector in the oPT contain various complexities as they are influenced by different legal systems and traditions.¹⁵ Due to these different legal origins, governance overlaps and gaps, also in relation to the environment are not a rare occurrence. Further adding to complicating environmental governance are three factors.¹⁶ First, the territorial divide of the oPT as a State, with the West Bank having no land connection to Gaza. Second, political and financial instability pose significant hurdles for Palestinian action in support of environmental governance. Finally, (and further elaborated below) the different legal provisions and enforcement capabilities by Israel and the oPT and limited coordination between the corresponding authorities render implementation of measures more difficult. This complexity is increased by the fact that regulatory provisions were conceived in different historical periods and with different timelines, whereby some are still in use despite originally having been intended as temporary.¹⁷ Further adding to the complexity is the absence of a sitting legislative council, which means legislation is passed solely through executive orders/decrees.¹⁸

Political situation

Key stakeholders in addressing security issues in the oPT include the Israeli authorities and the Palestinian Authority. Israel has designated the Coordinator of Government Activities in the Territories Unit (COGAT) as the party responsible for implementing all Israeli policies in Gaza and the West Bank. The PA operates under tight working arrangements that originate in the Oslo Accords in 1993 (that divided the West Bank into Areas A, B and C). While the PA was granted full jurisdiction over areas A and partial jurisdiction over area B (generally around built-up Palestinian areas), Israel retained full security and administrative control in Area C, which represents 60% of the West Bank.

Area C is the only contiguous area of the West Bank separating areas designated as Area A and B. As a result, often, in order to travel from one village to another, transit through the Israeli controlled Area C is required. Additionally, Israel also controls all land crossings and entry points to the West Bank, meaning that no goods or people can enter or move within the West Bank unless approved by Israel. In the case of Gaza, the Israeli and Egyptian authorities have control over the access

of people and goods by sea and land, however, once inside Gaza and away from Gaza's boundaries, the local authorities control movement.

Palestinian institutions follow a system of coordination with COGAT when responding in or passing through Area C, with requests being passed along by Palestinian liaison officers. COGAT is responsible for access to and within the West Bank, and within COGAT there is an element responsible for overseeing the whole West Bank and the District Coordination Offices, who are in charge of the coordination at the district level. The time and effort that is required to effectively coordinate with the relevant Israeli institutions in emergencies has led to delays, which is an issue when activities are time-critical, such as search and rescue operations, medical evacuations or pursuit of criminals.

The Oslo Accords moreover list seven 'permanent status issues', including Jerusalem, refugees, settlements, security arrangements, borders, relations and cooperation with other neighbours, and other issues in which both have an interest in.¹⁹ Among the latter, the question of Palestinian Statehood and questions revolving around water are certainly highly salient. One attempt to tackle this lacuna in the Oslo Accords was as follows: In cases of general environmental governance, the Oslo Accords' annex III, too, includes agreements on, inter alia, environmental protection, nature reserves, water management as well as on how to deal with sewage and wastewater. Furthermore, the peace process in the mid-1990s foresaw various joint committees between Israel and the oPT taking care of environmental questions. However, after successful starts, their meetings became much more irregular or did not take place at all. Regarding the Joint Water Committee, however, a new agreement on taking up dialogue again was reached in 2017.²⁰

2. Methodology

The question at the core of the stocktaking study as introduced above is as follows. *How can international and national partners realise the full potential of the security sector in Climate Change Adaptation, Disaster Risk Reduction and environmental protection through concrete SSG/R programming?*

Hence, the study analysed the role and potential limitations of the security sector in a broad field of climate change and the environment through multiple steps and perspectives. The main goal throughout

the data collection and analysis was to focus on four dimensions of the two main pillars as depicted in Figure 1, DRR ("prepare") and environmental protection ("protect"). The four dimensions were (i) the context at hand, (ii) the coordination and integration of the different entities, (iii) an analysis of the respective capacities and consequently (iv) an analysis of impacts on communities, social cohesion and peacebuilding more generally.

In a first step, the team engaged in desk research to learn more about the political, legal, and environmental situation at hand in the West Bank. This was done through the consultation of reports by international organisations, such as UN agencies, governments, as well as academia. Similar actors were also contacted for a total of 8 virtual semi-structured interviews²¹. As such, both written and personal sources were used to identify relevant actors in the oPT with mandates around DRR and environmental protection through snowball sampling.

The second step consisted of a 10-day deployment to the oPT. During the field research phase, the team focused on the West Bank only due to constraints related to access to Gaza. To explore both security institution roles and perspectives and the perspectives and needs of communities through a specific case at hand, the team chose to focus on the practice of burning electronic waste to recover copper. This case is prevalent in several areas of the West Bank and has both security and environmental implications.

During the deployment, semi-structured interviews with a variety of security and environmental institutions as well as international representatives and representatives of local government were carried out, and meetings with civil society held.²² Roughly 5 interviews, took place for each distinct group mentioned above, while some academics were also met. Moreover, through the organisation of 4 community focus groups²³, equal focus was given to the different stakeholders and actors across sectors. Hence, both top-down as well as bottom-up insights were gained.

The interviews and focus groups were primarily intended to examine the role of the Palestinian security sector, in coordination with other actors, in disaster risk reduction and environmental protection. However, any study in the oPT – particularly one focused on security and governance – inevitably reveals issues related to the occupation and coordination with Israeli authorities. As the overall focus of the stocktaking study is to explore the role of national security institutions, constraints related to the occupation are mentioned where essential throughout the report

but are not explored in detail, as this would have gone far beyond the scope of the mandate. However, a brief overview of some of the more relevant characteristics of the Palestinian context is provided under the section on the legal and political context below.

3. Climate and Environmental Risks

Disaster Risks and Vulnerabilities

Natural Hazards

The oPT is vulnerable to a range of natural hazards²⁴. These include earthquakes, floods (including flash floods due to heavy rains), droughts (water scarcity being a chronic problem in the region) and landslides. Particularly the earthquake risk is associated with the tectonic plate boundary in the Jordan Valley known as the Dead Sea Transform. In addition, cold weather²⁵ and snow, or other extreme weather-related events could have an impact on the oPT. With regards to climate change as a risk multiplier for these natural hazards, the incidence of decreased precipitation and water scarcity, more frequent extreme weather events such as torrential rains are increasing;

at the same time, rising temperatures increase the risk for fires.²⁶

Man-made hazards

Among the man-made hazards, the one most closely linked to the environment is the pollution of water resources, (see table 1), described in more detail below.

Vulnerabilities

Access and Movement

With regards to vulnerabilities, access and movement restrictions such as checkpoints, gates, restricted roads and a permit regime regulating movement of Palestinian security and rescue forces poses a significant obstacle. The absence of an airport and tightly controlled entry points would make a quick delivery of international support very challenging. Therefore, the vulnerability of the oPT to disasters is classified as high because of the difficulty of movement for potential rescue gear and units²⁸. On the other hand, several interviewees indicated a certain degree of cooperation with Israeli counterparts on coordination and permits to enter; in exceptionally severe emergencies, interviewees reported also operational support from Israeli authorities.

Table 1: List of Hazards and their respective probability of occurrence and damage in the oPT²⁷

Disaster Group	Hazard type	Probability of occurrence	Probability of damage
Natural	Floods	Low	Low / limited
	Earthquakes	High	High
	Droughts	Medium	High in the long run
	Land/mudslides, rock falls and avalanches	Medium	Medium-high
	Epidemic outbreaks of disease	Low	Low
Technological	Industrial accidents	High	Medium-high
Man-made complex emergencies	Population displacement/ refugee influx	High	High
	Sea disasters	Medium	High in the long run
	Pollution of underground water	High	High
	Occupation, wars	High	High

(Source: UNEP, 2020)

Poor Infrastructure and Planning

Several reports and interviewees confirmed that risks are aggravated by dated and insufficient infrastructure such as insufficient or inexistent sewage systems, badly maintained roads and inadequate building regulations²⁹. The oPT relies on only two landfills (in Bethlehem and Jenin); interviewees highlighted that both are working above planned capacity and that the Jenin landfill was also poorly planned in terms of location and inability to prevent leaching of toxins into water supplies. It is unclear to what extent either facility is equipped to properly dispose of chemical, industrial, medical and other hazardous waste. For plastic waste, there is one recycling plant in the Bethlehem area. One facility to safely process electronic waste (see Waste Disposal & Pollution below) has been operating successfully for several years, while a second facility is not functional, reportedly due to issues related to capacity and profitability.

Other interviewees also spoke about the lack of flooding risk assessments before giving building permits. One neighbourhood in Ramallah was cited as an example, where a particularly impermeable type of stone meets with a level plain. Despite these risk factors, residential buildings were permitted there and subsequently are flooded on a regular basis.

Key Environmental risks

Waste Disposal & Pollution

Safe and proper disposal of waste appears to be a growing problem in the oPT. In addition to infrastructure shortfalls noted above, illegal dumping of household and other forms of waste is an issue throughout the West Bank, contributing to pollution and affecting natural drainage, thereby exacerbating local risks of flooding. Reportedly, various industries including companies located in Israeli settlements, attempt to dispose of toxic, medical or even radioactive waste improperly, all of which can pose serious public health risks and contaminate both water and soil.³⁰ Soil and water are further contaminated by intensive use of pesticides, insecticides and chemical fertilisers for agriculture, as well as dust from stone quarries.³¹

The burning of waste is also a serious problem, which affects not only air but also water and soil quality. Regular domestic waste including tires is regularly burned rather than being collected and properly disposed in landfills. Perhaps most concerning is the burning of electronic waste, a practice which primarily involves burning cables to remove plastic and other components and recover copper, which can then be resold. A significant portion

of the electronic waste reportedly comes from Israel.³² While in some interviews this transfer of waste was characterised as trafficking, it is not entirely clear that this is a legally accurate description. It is however clear that both Palestinians and Israelis financially benefit from these transactions. Transferring waste to the West Bank allows Israeli stakeholders to avoid what are almost certainly higher costs of proper disposal in Israel; Palestinian stakeholders who transfer the waste are able to sell the copper recovered from the process.³³

The burning of electronic waste releases toxins and carcinogens, which subsequently affects air quality and contaminates the soil and water as ash is deposited. Communities in areas where this practice is prevalent (mainly in the governorate of Hebron) have reported increased rates of cancer, birth defects and respiratory diseases, key crops such as olives no longer being fit for human consumption, and effects on the health of local livestock.³⁴ There are also broader consequences for security, with some interviewees reporting the use of physical threats or intimidation in response to attempts by local communities and governments to stop the practice of burning, which constitutes a key means of generating income.

Water Management

In addition to the high levels of water pollution related to waste disposal and agricultural practices, as noted above, certain factors affecting the availability of water in the West Bank are related to the changing climate. At the same time, numerous human factors also affect water supplies. Communities in the West Bank rely on Israel for a significant portion of their water supply and the Israeli government also controls all water in the West Bank below a certain depth. An increasing population and rural-to-urban migration also put increasing pressure on water supplies, as do illegal water tapping throughout the West Bank and agricultural practices including a shift toward water-intensive cash crops.

There is also limited capacity to dispose of and/or treat wastewater. In at least some governorates, open sewage pits still exist, increasing the risk that water supplies will be contaminated, particularly when floods occur. Where wastewater treatment facilities exist, an integrated plan to effectively use the treated wastewater is lacking, diminishing the potential contribution of these efforts to addressing water scarcity. One expert noted that the PA is also lacking an integrated water management plan or water budget which realistically assesses demands for water across all sectors in order to inform sustainable decision making.

4. Prepare

The Palestinian system for managing disaster risk has come a long way in recent years; yet there is still some progress to be made. A UN report from 2014³⁵ noted the limitations of the Civil Defense Law no. 3 for enabling broad risk management and specifically recommended the integration of climate change risks into DRR structures – a new DRR draft law (Council of Ministers No. (16/142/17M.R/RG)) has been developed by the Council of Ministers since (but is still waiting for final approval by the President, most likely before the end of this year). Similarly, the report noted the potential of working at the local and community level, and the need to institutionalise and capitalise on good practices there (especially given the political constraints around access).

The stocktaking team found some promising developments where these recommendations are being taken forward to some extent, especially with regards to raising public awareness and including communities in mapping hazards and vulnerabilities. A fully functioning DRR system and reinforcing local capacities however meets with significant resourcing and organisational constraints.

DRR Structures and Stakeholders

In the oPT, several security sector institutions play a role with regards to disasters and emergencies. Several of those institutions were outside the scope of this stocktaking study³⁶. There are two parallel structures, one dealing with emergency management and a nascent one for longer term disaster risk management.

Civil Defence

The civil defence system as established by the Law of the Civil Defence is in principle attached to the Ministry of Interior (Mol), with the Minister heading the High Council of Civil Defence (HCCD). The Minister has the highest authority over the security forces and the Civil Defence, especially in case of emergency.³⁷ The High Council of Civil Defence is meant to be chaired by the Minister of Interior, and its members include all of the ministries and national authority bodies. Its responsibilities are of a more legalistic nature and include coordination, planning and training³⁸. However, the HCCD is not active.

In terms of the Mol's subordinate agencies, the **Directorate of the Civil Defense** is the main responsible entity in cases of emergency (coordination of HCCD related activities, preparation, education, cooperation, etc.). The exact roles and responsibilities of the other



Photo: DCAF

security agencies remain unclear; a 2014 UN report described “the security forces” as one actor, citing the following responsibilities³⁹:

- Responsible for isolating affected areas, by closing roads in vicinity of the accidents and diverting traffic.
- Prevent crowds from gathering near the affected areas.
- Safeguard public and private properties and maintain the general security of the people. Provide experts to deal with explosives.

No roles in analysis, planning or prevention are mentioned.

National DRM System

More recently, in addition to the architecture around civil defence, the oPT is also an engaged signatory of the Sendai Framework for Disaster Risk Reduction⁴⁰ and has taken significant steps in its implementation and the establishment of a national DRR structure.

In 2017, a National Disaster Management (DRM) System has been created. The system consists of several layers of coordination nodes.⁴¹ At the top is the **National DRM platform**, chaired by Prime Minister and including ministers, authority chairs and governors. Its purpose is

to give highest level officials platform to discuss, share information and decide on policies. This is supported by a **technical team**, chaired by the head of the **DRM Centre**, and consisting of a large variety of stakeholders (these include the Environmental Quality Authority, Civil Defence and also Ministries of Agriculture, Health etc.).

The DRM Centre (which has started operations in skeleton form, but is still waiting for the draft DRR law to be passed) is tasked with leading coordination of the various DRR activities. Its activities include managing national level risk analysis activities, monitoring and promoting mitigation activities, organising disaster preparedness, leading post-disaster learning and supporting other actors performing such activities.

Finally, there are **four disaster response groups**: First, on basic human needs, a second on infrastructure and services, a third for economy, culture and demographics as well as a fourth for recovery. Security agencies (MoI, Civil Defence, Police and National Security Forces) are represented in the group on basic human needs as well as on recovery.

Local Government and DRR

Additionally, at the regional level, each **governorate** under the supervision of the HCCD also installs a Governorate Emergency Committee. These committees can then implement civil defence policies in the governorates as well as coordinate with other governorates.⁴²

Municipalities seem to play a minor role with regards to DRR. Every municipality sends representatives to the governorate-level emergency committee. Interviewees spoke about some disaster preparedness activities in schools (having received training from Civil Defence) as well as sending reports about potential and actual disasters to Civil Defence in terms of risk mapping. There was no mention of the DRM Centre.

It was not possible to fully map out the different **civil society and community led initiatives** with regards to DRR. From the stakeholders interviewed, such as PARC (Palestinian Agricultural Relief Committee), who do entertain 74 community protection committees operating responses within 48 hours, it seems that the focus is very much on raising awareness rather than the provision of humanitarian assistance. There seem to be nascent efforts to use the available networks for mapping risks and vulnerabilities, and the lack of a unified national system to do this was criticised.

Structures on Climate Change

Outside of the DRR structures, the oPT is a Non-Annex I party of the United Nations Framework Convention on Climate Change⁴³. Moreover, the oPT has also established a national committee on climate change. However, during the interviews, none of the DRM or security actors mentioned the national committee on climate change. The committee would be chaired by the Environmental Quality Authority's (EQA) chair and principally overseeing climate change policy⁴⁴. But without having been able to explore these roles in detail, it raises the question as to whether DRM and climate change efforts are interlinked to the degree necessary. Consequently, while both DRM and CCA structures exist, and both have a mandate related to environmental questions, their potential for collaboration could be further developed. This is particularly the case for approaches that bridge gaps between the national, local, and civil society level and their respective integration.

Service Delivery

National Multistakeholder Platform on DRR

Good DRR is built upon partnerships between involved stakeholders.⁴⁵ In the oPT, coordination efforts are meant to be led by the DRM Centre. It describes itself not as an executive agency but tasked with coordinating and empowering others to do their work, such as increasing the roles of Civil Defence or the EQA. In addition to being attached to the Prime Minister's office, the Centre also has the advantage of working with a wide range of partners, including technical agencies such as the EQA or Ministry of Agriculture who were mentioned as some of the main partners, but also with civil society and academia. Among the agencies working under the MoI, the main partners are Civil Defence, Civil Police, Customs Police, Preventive Security⁴⁶ as well as National Security Forces (NSF), who support the Centre with coordinating operations of the various security agencies. All of this makes the DRM Centre a promising initiative, even more so once the draft DRM law is passed and the Centre can start full operations.

Prevention - Risk Analysis and Information Sharing

Following good DRR principles, prevention activities aim at reducing the likelihood of a disaster event occurring or the severity of an event. It is the joint responsibility of all stakeholders, and includes on the one hand analysis and understanding of disaster risks, community awareness and education, as well as the development of mitigation strategies (such as investments in infrastructure, land use planning and hazard specific control activities).

In the oPT, one of the main tasks of the DRM Centre is leading at the national level with regards to risk analysis and elimination. This was described as being done through an engagement with a wide range of stakeholders and groups, and is meant to include expertise the relevant technical institutions, security agencies, line ministries as well as dedicated experts and academia. For example, while the project is said to be drawing on historical data and scientific assessments, citizens also have the opportunity to input into the national databank on local risk factors, which then will be verified and analysed together with the other contributions. A similar analytical effort is the Centre's "Resilient Cities Project", which analyses land usage, housing and buildings and construction codes as well as infrastructure such as places that can be used as shelters like schools, hospitals and mosques. Finally, the Centre produces risk indicators for political decision making. These are laudable efforts to bring data from various actors together into one framework.

Moreover, the Centre intends to make data available at three levels: public (complete access for everyone), restricted (only to be used for planning purposes and not to be shared); and finally for the political level and decision makers. Plans for a public awareness campaign were also mentioned.

At the level of the executive agencies, Civil Defence interviewees indicated that they conduct risk analyses as well but it remains unclear how/ if they feed into the national DRM assessment. On the other hand, there seems to be a tendency to maintain a siloed approach to multidimensional risks such as solid waste and sewage. For example, the police view the waste problem only as a criminal phenomenon and enforcement challenge, while civil defence views waste as a flood risk. Both the connection between these two dimensions, implications on livelihoods as well as slow onset disasters such as pollution, biodiversity loss and health issues seem under analysed.

Preparedness and Planning

This section explores first planning and preparation with regards to concrete efforts to be ready to respond to a range of disaster scenarios based on the analysis mentioned above; and secondly mainstreaming DRR⁴⁸ into the strategic planning within the security sector with regards to its strategic objectives as well as the functions and priorities, necessary resources and capacities and reform activities needed to achieve them.

Preparedness activities include the development of comprehensive disaster management plans,

translating risks and resilience factors into concrete actionable guidelines.⁴⁹ This includes clarifying roles and responsibilities, establishing a permanent and ad-hoc disaster management infrastructure that can be activated, plan for the required resources and financing, as well as setting up communications to all stakeholders (including communities) and early warning systems.

The DRM Centre is about to launch the development of a national strategic DRM plan regulating the activities of all partners, including raising awareness of communities on DRR. Based on the broad stakeholder group reportedly consulted for the risk assessment, this effort will most likely take a comprehensive approach to disaster risk. A positive sign is already a high level of awareness on the gendered dimensions of DRR on the part of the DRM Centre, who are reported working closely with the Ministry of Women's Affairs as a key partner in order to make risk analysis and elimination efforts gender sensitive as well as to take gender into account for planning. What remains unclear is the extent to which it will include longer-term slow onset disasters and climate change related hazards.

At the practical level, operational planning seems to happen mainly at the governorate level, where all governorates are meant to develop emergency management plans. These planning efforts remain at the immediate risk level and are developed jointly with Civil Defence. Similarly, at the individual agency level, none of the interviewees mentioned ongoing integrated planning efforts as part of prevention or preparedness; only once a crisis has hit, does joint planning at the operational level come into play. Of similar importance, no early warning mechanisms were mentioned. Overall, interviewees took quite a critical view with regards to the planning capacities of the Palestinian DRM and civil defence system. Several obstacles were mentioned why the Palestinian DRR system is not further advanced with regards to integrated planning: the main obstacle highlighted by interviewees was the lack of financial resources; other areas mentioned were the fact that there is no institutional memory nor the necessary checks and balances to ensure planning is being done in an integrated manner.

Despite clear operational roles in emergency response, the security agencies interviewed for this study did not seem to be involved at Mol level to discuss priorities and resourcing needs for their contributions to DRM preparedness. Even so, there seems to be a considerable disconnect between activities of the DRM Centre and the security sector. Notably, the DRM Centre was not involved in discussion on the new Mol strategic plan until 2023 and respective planning on what resources would

be needed for DRR. This means that the MoI, as the responsible line ministry of the majority of the security agencies, does not seem to plan across its subsidiary agencies when it comes to resource allocation and operational requirements for current and future DRR functions.

This may be due to the fact that natural disaster hazards are comparatively mild, as well as piling in comparison to the risks associated with the political situation. (One interviewee mentioned that with regards to emergencies, the oPT always is in state of emergency.) Moreover, interviewees cited some structural issues within the sector including a top-heavy rank structure in the security forces as well as a need for technical capacity building on environmental and disaster risk expertise. At the same time, current approaches seemingly fail to take into account the significant cascading risks between climate change related water scarcity, population pressure and environmental degradation and pollution. This differs from good practice that calls for an integrated view⁵⁰ and also from the significance accorded to the related risks by both communities (who reported serious food security, livelihood and health impacts) and municipalities and governorates.

Response/Joint operations

Disaster response operations are operations based on the disaster plans to bring immediate relief in case of a disaster event.⁵¹ In the West Bank, the NSF have a role in leading all joint operations (through the joint operations committees at the governorate level), although Civil Defence has a leading operational role for disaster response, maintains a database of all disaster response partners, and conducts periodic risk assessments.

Photo: DCAF

Civil defence interviewees highlighted a working mechanism for emergencies which is under their leadership and specifies modes of collaboration with the police, line ministries and other stakeholders in order to respond quickly and articulate mission specific responsibilities as needed. The system described by interviewees means that in case of an incident, for smaller emergencies, the first respondents consist of the Civil Police, Civil Defence and the Red Crescent. Citizens can call three different emergency numbers (101, 102 or 103 – e. g. 102 being Civil Defence); an appropriate response will then be determined by the joint operations committee and may involve a joint response by several security forces.

For larger scale emergencies, from the NSF operations room, a committee under NSF coordination manages the emergency. Again, depending on the nature of emergency, various actors may be involved in the response. Interviewees reported the existence of bilateral agreements between agencies, such as a memorandum of understanding between the EQA and Civil Defence. Several stakeholders also reported the creation of new national committee on firefighting, especially to tackle forest fires in protected areas. The need of an additional committee on this specific issue, including Police, Civil Defence, NSF, Customs and the EQA, remains unclear.

Internal to the West Bank, collaboration and coordination appear to be working well. Interviewees agreed there is a good partnership between Civil Defence and the Civil Police with regards to emergency response and that these institutions frequently operate together. Moreover, they highlighted that other security forces are also available to provide support as needed. However, interviewees also noted that one obstacle to effective responses is



the absence of a mechanism to move assets between governorates to provide a surge capacity.

Views seem to vary as to whether civil defence capacities are adequate to meet local needs. Anecdotally, civil protection actors noted they are under-resourced and under-equipped; civil defence interviewees mentioned their plan to expand the number of stations from currently 48 stations to 78 in order to provide more rapid responses. There are only two fire stations (one in Hebron, one in Nablus). Other actors such as governorate level reported that the civil defence function is adequately resourced. Moreover, while most interviewees indicated that civil defence operations also were hindered by limited access to Area C, some reported a “call and go” system specifically for Civil Defence, which allows them to quickly obtain the required permission and respond more rapidly in case of emergencies.

A large-scale capacity building effort is currently being undertaken by international partners, led by the US (through the USSC) and UK (through the BST). The aim of the effort is to build a 911 capability that can respond to any kind of problem citizens might be facing, including emergencies and criminal activities. An IT based system is meant to allow for the “call and go” approach described above; on the other hand, the system would allow an exact tracking of response times and link the time required to obtain entry permission to geographical areas as well as by type of incident. This could help to more clearly illustrate the real costs of a cumbersome system of requesting permission each time security forces are called to respond to an incident. The project is meant to function through baskets of activities led by individual donors, such as the World Bank providing funding for the establishment of a telecommunications call centre, GIZ for a training school, the EU and Japan for a civil defence component and the USSC providing radio equipment. The project is also connected with a strategic risk assessment currently being conducted by the PA and local academic institutions. The output of this assessment – an analysis of the main risks for the coming 5-10 years - is expected to be presented during a workshop chaired by the President’s office before the end of the year.

Working with Civil Defence Volunteers

Communities are an important resource with regards to disaster risk response. In addition to providing key insights on local risk factors and vulnerabilities and being partners in developing prevention solutions, they are a key

resource for delivering emergency services – especially when there are access and movement restrictions. This ability to arrive earlier than other stakeholders is particularly important in the Palestinian context.

At the strategic level, the DRM Centre fully recognises this potential of working with volunteers and strengthening community-based response capacities as an extension of state capacity for service delivery. Once the risk assessment exercise is completed, it will be important to give the volunteer model a commensurate role in the national DRM plan as well as adequate resources.

At the operational level, the civil defence volunteers are being organised by Civil Defence. Civil Defence reported working closely with communities and civil defence volunteers as an extension of their services; they reported actively recruiting and training citizens, who then work under the supervision of the closest Civil Defence station. Anecdotally, Civil Defence prioritises the volunteer model especially in remote areas where the PA does not have a presence, and saw further potential in expanding strategically to cover more areas that cannot be accessed to fill the gap. Training was indicated to include first response skills, firefighting, car accidents and first aid.

Among the communities visited, there was a range of sentiments on the success of this model. The majority of communities seemed to share the sentiment that disaster preparedness and response is primarily a responsibility of the state. With regards to the role of communities and civil defence volunteers, there were various views. In some, there did not seem to be a strong sense of agency, and they reported feeling abandoned by the central government; similarly, others criticised the fact that Civil Defence is under-resourced and takes several hours to arrive on site. Yet others seemed to be ready to take up a larger role themselves, and mentioned the lack of resources and support to local and community based civil defence efforts.

Regional Coordination

With regards to regional coordination, although the difficulties of collaboration were consistently stressed, there were reports about dialogue between Jordan, Israel and the oPT to facilitate access for humanitarian aid during disasters as well as on earthquakes (funded by the EU and led by COGAT, but not yet implemented). The DRM Centre is also engaged on coordination with Jordanian, Egyptian and Syrian stakeholders.

Findings

The **DRM Centre** looks like a promising initiative and step towards a comprehensive disaster risk reduction effort. For donors to identify concrete areas deserving targeted support, there remain several areas that require further exploration:

- One area of great importance is **inclusive service delivery**. With regards to risk assessment and planning inclusive of marginalised groups, some promising steps seem to have been taken by the close cooperation between the DRM Centre and the Ministry of Women's Affairs. Nevertheless, it will be important to ensure this intent translates into practice. Similarly, when extending state services through community volunteers, it remains unclear to what extent the DRM Centre can play an oversight and accountability role to ensure that this is done in a way that empowers community and ensures the inclusion of the needs of vulnerable and marginalised groups.⁵²
- The success of the DRM Centre relies on its ability to **impact service delivery and knowledge at the local level**. Anecdotally, none of the stakeholders at governorate, municipal or village level mentioned it as a partner or even an actor. Hence, the question to what extent the DRM Centre (noting that it is not yet fully operational) is known outside of the central government requires further exploration. Going forward, making sure that the DRM Centre's activities are accompanied by a public awareness campaign and sensitisation efforts will be essential.
- Finally, on the information sharing side, **for risk data to be useful, it needs to be accessible and practical to all stakeholders**. According to interviews, none of the local and community level stakeholders mentioned either the existence or utility of the collected data, which might be due to the fact that the exercise is still ongoing. Still, it would be important to pay close attention to make sure that this data is made available and relevant to inform local risk management approaches.

The security sector appears engaged and willing to **increase their engagement on DRR beyond civil defence and emergency management**. For donors to consider investing further, there remain several areas that require further exploration for a full understanding:

- The claim of being **understaffed and under-resourced** expressed by the security agencies was confirmed by communities in so far that many did

not receive adequate services. Whether this is due to actual lack of resources or because of inefficient utilisation of available resources remains unclear and any future capacity building efforts in this area would need to be based on a more thorough assessment.

- The **concrete data needed for this performance and needs analysis** could include strategic and planning documents, staffing and equipment tables, data on the types of training and specialisations of staff, as well as financial information on available funds and budget lines. This would need to be complemented by data on performance and use statistics on frequency, type of and location of incidents with data on benchmark performance indicators, such as level of precision, timeliness and effectiveness of early warning, response times, percentage of communities served by a Civil Defence station and effectiveness of community disaster volunteers.
- Beyond DRR functions, it could also be useful to explore how the **integration of climate and environmental risks in security sector planning** could better enable security institutions in their traditional mandates, for example in predicting unrest or even crime. Additionally, interviewees stressed the **security sector's capacities for integrated and scenario-based planning** as one asset the security sector brings to the table; being able to draw on this asset in a variety of areas such as water management or climate change adaptation could enable improved joint efforts.

To **maximise efficiency** and create synergies, there remain several areas that deserve further exploration:

- The stocktaking study learned about a variety of promising **analytical exercises which are currently underway**, such as the DRM Centre's risk assessment, UNDRR's mid-term review of the Sendai Framework implementation, and the PA's strategic security risk assessment. To minimise the risk of duplication and also enable synergies between the various efforts, a mapping could help stakeholders to better understand which exercises are ongoing, which areas they cover, and where there may be overlap or a need to share data.
- A second area where there might be more opportunities for efficiency is with regards to a **clear distinction of roles and responsibilities**. It will be important to ensure in the DRM law itself and its implementation that coordination mechanisms and respective mandates of institutions are clarified.

- All available data point to a **lack of integration of DRM with climate change adaptation planning**; ensuring integration of these processes in the future could help to facilitate a more comprehensive analysis of risks and a better-informed allocation of resources.
- Finally, the mechanisms governing **joint operations** could be another area to further analyse, particularly questions on regulations for chains of command during operations or joint standard operating procedures (SOP), as well as instances of regular joint trainings and exercises. As part of this, a centralised system that allows moving resources among locations to provide a surge capacity could also be explored.

Social cohesion and Peacebuilding

Perception of the State

Issues around protection from the impact of disasters (man-made and natural) are at the forefront of communities' concerns. When speaking with the different community focus groups, it is evident to what extent severe water scarcity and drought, as well as exposure to flood and fire risks are linked to questions around people-centred security, such as health, economic livelihoods and food security.

Citizens see these areas as clear responsibilities of the state as duty bearer and service provider. Yet, these expectations towards the state are not being met, diminishing trust in the PA and widening the gap between state and communities. Communities interviewed for this stocktaking acknowledged the obstacles posed by the occupation for effective government responses to many of the risks described above. However, there was general agreement that despite these difficulties, much more could and should be done to support them.

This dissatisfaction goes beyond practical disaster response and includes also the inadequacy of the financial compensation and insurance side. According to the Farmers' Union, in 2013 a Palestinian Agricultural Disaster Risk Reduction Fund has been established to compensate farmers for losses due to natural disasters as well as to provide agricultural insurance. However, the fund is unable to compensate all claims being made, and people are still waiting for claims as far back as made in 2016.

Similarly, the allocation of resources across sectors is also a point of contention. Interviewees highlighted

that the security sector receives closer to 22% of the national budget (which has already been reduced from around 28% in 2013 and 2014⁵³). At the same time, only 0.1 % are made available for environmental protection and reportedly, the ministry of agriculture only receives 1%⁵⁴. This high level of fiscal investment in the security sector additionally raises the expectations with regards to service delivery.

All of this means that there is a widespread sense of frustration and feeling abandoned by the PA. This feeling of helplessness is further aggravated by the fact that there does not seem to be a functioning system of accountability, either through elections, complaints mechanisms, oversight bodies or a strong media and civil society landscape putting pressure on the PA. Notably, several interviewees also indicated the complicity of international donors, who continue providing support to the PA despite these obvious shortfalls.

Within the security sector, there seems to be a recognition of this growing distance to the population and the need to bridge that gap. This makes the Palestinian security agencies in principle open to reflections on roles that might put them in a more positive light and closer to communities. Community interviewees mentioned the fact that security institutions so far understand security very narrowly with regards to national security, and that there is a need for them to adopt a wider human security approach.

Findings

Communities do seem to see a role for the state and the security forces with regards to protecting them from the impact of natural and man-made emergencies and emergencies. Moreover, they seemed open to working with state agencies as well as **welcoming different roles and involvement of the security sector**. Notably, none of the communities mentioned specific risks or seemed hesitant towards increasing the security sector's presence and range of activities on DRR. This appears to be an important opportunity and efforts to provide better services and empower and support communities could be a good way to strengthen social cohesion.

Other opportunities exist for security institutions to take on **non-traditional roles which could contribute to positive perceptions of the security sector** and the state more broadly.

- As several interviewees noted, there is room for security institutions to **raise awareness regarding disaster preparedness**, for example, in schools.

These awareness campaigns could be accompanied by small quick impact projects on environmental protection measures (recycling, greening the school), in recognition of the role environmental degradation plays in contributing to slow onset disasters. This could help to raise awareness from an early age about environmental protection, climate change and disaster preparedness.

- ▶ Security institutions can also contribute **analytical and predictive capabilities** with regards to meteorological data, harvest forecasting and early warning, building on previous positive examples of the use of security sector GIS capabilities to track COVID and an outbreak of foot and mouth disease.
- ▶ From a human security perspective, **food security** is a fundamental concern for communities. In the West Bank, over 20% of the population lives in food insecurity.⁵⁵ According to one interviewee, the security forces could put their purchasing power to good use by buying their food exclusively from local farmers, many of whom are struggling due to water scarcity, competition from other providers including Israel, and limited access to markets. Members of the National Security Force also described how the NSF already provides food aid to families in need, a practice which could be continued and perhaps increased in the future.

5. Protect

Environmental protection in the oPT is a complex undertaking which requires the involvement of a range of governmental and non-governmental stakeholders, as well as a wide range of technical skills and a deep understanding of the multiple factors which put pressure on (or conversely build resilience in) local ecosystems. Related duties and responsibilities clearly extend well beyond the role of the security sector and a focus on environmental crime, particularly when considering that serious forms of harm to the environment are not always criminalised. Consistent with the exploratory nature of the stocktaking study, the analytical framework below is used to examine the role of the security sector not only in enforcement related to what can strictly be considered an environmental crime but also in detecting and preventing a wider range of practices which are both harmful to the environment and detrimental to human security.

As noted in the section on risks, a range of environmentally harmful practices are contributing to environmental

degradation in the oPT, with illegal waste dumping, widespread pollution (including through the burning of electronic waste) and unsustainable water use regularly cited as top environmental concerns.

Legal Framework

Article 34 of the oPT's Basic Law establishes the right to a clean environment. The oPT's Law on the Environment, originally adopted in 1999, was updated in 2021 in order to include specific references to climate change and articulates more specific prohibitions and obligations related to the protection of the environment. Of note, the law states that international treaties related to the environment, such as the Basel or Stockholm Conventions, come into force immediately in the oPT and do not require separate ratification. It also establishes the obligation to develop specific standards related to waste disposal and the handling of hazardous materials; water quality and the collection, treatment, reuse and disposal of wastewater; and protection of marine areas and natural and historical sites.⁵⁶

The law differentiates between solid waste and toxic or hazardous waste. For solid waste, it specifically prohibits disposal of all solid waste outside of designated areas. Penalties, which may include fines or imprisonment, vary according to the severity of the violation and its consequences (for example, if it contributes to the spreading of disease). The law establishes a responsibility on the part of the EQA to conduct inspections and develop related regulations. Regarding toxic and hazardous waste, the law prohibits storage, treatment, production, importation, distribution, use or disposal unless done so according to standards set by the EQA. Penalties regarding violations concerning toxic/hazardous waste are significantly higher.⁵⁷ The EQA is also responsible for developing and regularly updating a list of toxic/hazardous substances.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is also relevant to the protection of the environment. The Basel Convention aims to protect human health and the environment against the adverse effects of hazardous wastes, and specifically to address the "toxic trade" which has grown out of the fact that stricter environmental regulations in the industrialised world have led companies to seek cheaper hazardous waste disposal options in the developing world.⁵⁸ Given the disputed status of the borders, it is not entirely clear the extent to which the convention can be considered to be applicable to the

movement of toxic waste between Israel and the West Bank. However, Israel is a signatory to the treaty, which in addition to restricting transboundary movements of hazardous wastes also aims to reduce hazardous waste generation and promote environmentally sound management of hazardous wastes regardless of where they are disposed of.⁵⁹

Stakeholders

Environmental protection in the oPT involves a wide range of stakeholders, from civilian agencies and municipal governments to the criminal justice chain to communities themselves. While in some areas there is evidence of effective cooperation among these stakeholders, in others a lack of clarity regarding roles and responsibilities appears to contribute to ineffective responses to issues which have negative consequences for human and environmental security.

The EQA is responsible for all monitoring and implementation related to the protection of the environment, to include maintaining and protecting the environment, addressing depletion of natural resources and desertification, preventing pollution, protecting human health, and promoting environmental awareness and sustainable environmental development.⁶⁰ The Palestinian Water Authority (PWA) is responsible for integrated management, protection and preservation of water resources, to include balancing the availability of water against demand.⁶¹

Municipal governments also play a role in preventing harm to the environment, to include collecting and transporting trash to landfills, issuing fines for practices such as burning or dumping waste, and preventing illegal tapping of water supplies.⁶² Joint councils for waste management have also been established. The private sector and civil society are also involved at the local level, from running the limited number of recycling facilities in the West Bank to the “self-policing” role described later in this section and protesting environmentally harmful practices, such as non-compliance of landfills with environmental legislation.

On the security side, the Environmental Police, established in 2018, are responsible for addressing violations of the Law on the Environment. For reasons which are not entirely clear, the Environmental Police are not a separate division within the Civil Police, but instead environmental duties have been added to the portfolio of the Tourism and Antiquities Police. This may

cause confusion with external stakeholders, as some interviewees seem to associate the Environmental Police mainly with the prevention of wildlife smuggling rather than the full range of environmental crimes. Additionally, the Civil Police help to protect water supplies by working with the PWA to address incidents of illegal drilling of wells, destruction of water infrastructure, and occasionally in addressing non-payment of water fees.

The Customs Police also have a key role to play. Broadly, their mandate includes enforcing standards related to commercial and agricultural goods entering the West Bank and seizing and confiscating prohibited goods, as well as generating tax revenue. Regarding environmental protection, they help to protect the population, economy and environment by preventing illegal agricultural products and hazardous waste from entering the West Bank.⁶³

Finally, the Office of the Public Prosecutor has a section dedicated to economic and environmental crimes, which only began focusing on environmental crimes three years ago. According to interviews, this section currently receives a relatively limited number of environmental crime referrals, which come from the EQA as well as the Customs and Environmental Police. Citizens also occasionally refer crimes directly.

Service Delivery

The following three functions related to combatting environmental crime offer a useful framework for analysing the role of the security sector in environmental protection, as well as possible entry points for future reforms: detection of violations, imposition of sanctions (or other actions) against perpetrators, and prevention of future harm.⁶⁴

Detection

Within the security sector, both the Environmental Police and the Customs Police have an important role to play in detecting and assessing the extent of violations of the Law on the Environment.

The **Environmental Police** already accompanies the EQA on inspections; EQA officials expressed appreciation for this role and suggested increased support is needed. However, most officials at the level of the governorates and municipalities noted they had never seen, and in some cases never heard of, the Environmental Police.

While the **Customs Police** are limited in their ability to control what enters the West Bank, particularly Area C,

Customs Police officers explained that they are able to check vehicles entering Areas A and B and periodically apprehend drivers with environmentally hazardous materials, including toxic and radioactive waste. They also expressed a need for additional capacity related to the detection and handling of these materials. Separately, several civil society stakeholders noted that the Customs Police should be doing more to detect prohibited agricultural goods (for instance from Israeli settlements) which are entering Palestinian markets.

Several experts highlighted the **lack of reliable data** as a key obstacle to improved enforcement of environmental legislation. Effective detection of environmental crimes requires an understanding of the risks, patterns, and nature of specific violations in order to better guide the use of scarce human and financial resources when it comes to planning for inspections and investigations. The **inability of security forces to operate freely across the West Bank** also poses an obstacle to the detection of violations. Finally, multiple interviewees noted that **security institutions lack the awareness of environmental risks and specialised skills** which would allow them to play a more effective role in detection.

Sanctions and Remediation

The imposition of sanctions ranges from practical, immediate solutions to the imposition of fines or time in prison. The Environmental Police, for example, noted that in some cases of illegal dumping they have forced the owner of the site to level the dump and plant trees to support regeneration of the local environment. The Customs Police also described several cases in which they successfully prevented toxic waste from entering the West Bank and ensured it was immediately returned to Israel. However, between the constraints to security force operations in Area C and the apparently limited capacity of the Environmental Police to operate across the West Bank, it is not clear whether these sanctions are applied systematically enough to increase the perceived costs or risks of violations. The Economic and Environmental Crimes section of the Public Prosecution also highlighted shortfalls in procedures and basic knowledge within institutions regarding establishing proper records of seizure, referrals and transfers of evidence to the prosecution, testimony, and technical records, all of which undermine effective prosecution and application of sanctions for environmental crimes.

Most interviewees also agreed that the **penalties associated with many environmental violations are not high enough to serve as an effective**

deterrent. Several indicated that the law is sufficient, but implementation of specific provisions is lacking and should be improved prior to any consideration of amending the law, citing the need for additional policy and regulations in order to strengthen implementation. In some cases, the law also provides significant discretion to judges to determine appropriate penalties, which was highlighted by one interviewee as presenting a risk of corruption within the judiciary.

One expert noted that **limited attention is currently given to remediation** of harm which has already occurred. Both the Water Law and the Law on the Environment include provisions related to remedying harm. However, it is unclear whether this is achieved through physical remediation, payment of fines, or some other means. In the context of accelerating environmental degradation in the West Bank, it is important to note that full remediation of polluted or contaminated areas can be complex and expensive, underscoring the need for continued emphasis on the prevention of violations.

Prevention

The role of the security sector in preventing environmental crimes and other forms of harm to the environment appears to be relatively weak. As noted above, the Environmental Police seem to be virtually unknown to the stakeholders involved in waste management and other environmental protection activities in governorates and municipalities. Members of the PA also noted that some of the most concerning violations – from the burning of electronic waste to damage to water lines and illegal drilling of wells – occur in Area C, where the PA has neither security nor civil jurisdiction.

Prevention of environmental crimes and other environmentally harmful practices also requires understanding why these practices occur.⁶⁵ In the case of the oPT, two drivers in particular were mentioned by the majority of interviewees:

Livelihoods: First, in cases such as the burning of electronic waste, local communities rely on the income generated by this practice (and specifically the profits made by selling the copper after other materials have been removed). Several interviewees at the community level noted that alternative means of generating income must be part of any sustainable solution, with one noting that greater engagement from the security sector would be welcome, but that it is not practical to arrest the 70% of residents who are engaged in these activities. Second, as the population in the West Bank grows, demands

related to both agricultural and household use of water will also increase. It therefore seems likely that without better plans to manage water supplies, illegal tapping of water lines and drilling of wells will only increase.

Lack of resources/infrastructure: Several municipal stakeholders noted they do not have the capacity to deal with normal waste, let alone specialised waste disposal, as in some cases they are lacking even the trucks required to move basic household waste to landfills. The two landfills which serve the West Bank are also operating well over capacity, but the construction of additional facilities has reportedly been prevented by both Israeli restrictions and protests by local residents.⁶⁶ Wastewater treatment facilities are also limited, with a significant proportion of the West Bank still using cesspits in lieu of being connected to a sewage system.⁶⁷

A previous donor-funded project was cited by multiple interviewees as a good example of an approach to preventing the burning of e-waste, which was **effective in part because it directly addressed several of these constraints**. First, a facility was established to provide a clean alternative to burning (instead stripping/grinding plastic from the copper found in electrical cables). Second, local residents who observed burning could make an anonymous report to a hotline. Municipal volunteers staffing the hotline would then drive to the site and not only ensure burning was stopped but also interview those involved to develop a better sense of incentives and alternatives. Third, basic remediation/removal of contaminated soil was undertaken, preceded by a survey and outreach by a local women's group to ensure remediation would not be immediately followed by recontamination.⁶⁸ Together, these steps reportedly resulted in an up to 80% reduction in burning incidents.⁶⁹ However, local officials noted that over time the number of volunteers dropped due to both intimidation by those who wished to continue the practice of burning and a general lack of resources (funding and vehicles to support and institutionalise the work of volunteers).

Interviewees also highlighted another factor undermining prevention: **inadequate or ineffective governance**. Several noted that addressing problems related to the disposal of toxic and electronic waste appears to “get lost between Ministries.” Without a clear lead agency, various stakeholders can claim that someone else is responsible, with the end result being a continuation of practices which have serious consequences for human and environmental security. Multiple experts in water management also questioned the effectiveness of the

approach taken by the PWA, which in some cases seems to conflict with what may previously have been more effective community-based approaches to managing water shares.⁷⁰ Some also expressed concern that the PA has not developed a “water budget” (which assesses demands for water across all sectors and balances them against a realistic projection of water likely to be available to Palestinians in the coming years) or a clear plan for making better use of treated wastewater.

Findings

The **Environmental Police** appear to be playing a relatively limited role, which could be strengthened in order to realise the full potential of this part of the police to contribute to environmental protection.

- ▶ The EQA reported effective cooperation with the Environmental Police but expressed a need for greater support, for example through **more regular accompaniment on EQA inspections**.
- ▶ The Environmental Police appear to be virtually **unknown in governorates and municipalities**, undermining any role they might play in detecting and deterring violations – a shortfall worth addressing when considering the importance of not just responding to but also preventing serious harm to the environment.
- ▶ It could be particularly helpful to identify **concrete pilot projects related to the prevention of environmental crime** which could raise the profile of the Environmental Police across the West Bank and strengthen their relationship with local communities.

The **Customs Police** also have a significant role to play in stopping and seizing hazardous materials including waste which is likely to be dumped illegally.

- ▶ It is worth exploring options to **increase their capacity to detect and safely dispose of environmentally harmful materials**, although improvements to operational capacity will to some degree be constrained by the movement and jurisdictional restrictions described above.

The realities of restrictions in the West Bank are such that communities, particularly in Area C, can count on only limited (immediate) support from security forces when crimes occur. The “**self-policing**” approach described above seems to have shown initial promise as a practical solution to a local problem of environmental protection.

- ▶ The intimidation reportedly experienced by volunteers certainly highlights the potential limits to

these responses, but also an entry point for **greater cooperation between police and communities**. While security forces may be limited in their ability to quickly respond to incidents, they may be able take longer-term action to help communities monitor for and prevent retaliatory action against volunteers.

While opinions on the adequacy of the **legal framework** related to environmental protection varied, all interviewees agreed that enforcement of the Law on the Environment should be strengthened.

- A formal **review of current enforcement of the law** could be helpful in identifying and addressing potential gaps including missing policy and regulatory guidance, inspection capacity, penalties commensurate with the seriousness of violations, and the data required to support investigation of violations and make informed decisions regarding priorities for enforcement.

Social cohesion and peacebuilding

Environmental factors have the potential to negatively affect human security and to contribute to local tensions and conflict in the oPT. When considering water scarcity, for example, one interviewee noted that **disagreements over access to water** are already contributing to increased tensions at the community level and representatives from multiple PA environmental agencies expressed concern that the scarcity of water will play an increasing role in local conflicts. The **burning of waste**

is also a source of tension, as community members are caught between the pressure to generate income and the desire to address the serious health consequences resulting from the burning. Most interviewees, whether from municipal governments, local communities, or security institutions, acknowledged the serious health risks but also highlighted the importance of addressing the livelihood dimension as part of any sustainable solution. Also ever present are tensions related to the role Israel and Israeli settlements play in both the disposal of waste and the depletion of water sources.

Security forces are obviously not the only solution to these problems. However, given the importance of these issues to the Palestinian population, there is certainly **potential for greater engagement in environmental protection to strengthen trust in security institutions** and the PA more broadly. This is particularly important at a time when trust in security institutions is at a low ebb, with one interviewee noting that the security forces have become completely disconnected from the population they are there to serve.

Residents of several of the villages visited as part of the study made it clear that they have learned to expect no support from the PA in times of crisis or hardship. One interviewee also described being threatened by security institutions when working to expose potentially harmful or illegal practices at a local landfill and noted that security forces forcefully suppressed related protests by local residents.

Photo: DCAF



Of note, **all community focus groups stated that they would welcome greater engagement by security officials** on these issues. One interviewee suggested that security forces might need to play a role in addressing local conflicts related to water. Further analysis would be needed to understand how this might complement any existing local mechanisms for managing conflicts. Members of security forces indicated that they already occasionally play a mediation role in family and other community conflicts, although it was not possible to validate this with other stakeholders. Interestingly, of all the institutions interviewed, those with an environmental rather than a security mandate were the ones to highlight the potential of climate and environmental factors to serve as drivers of instability, insecurity and conflict.

Findings

At a time when Palestinian trust in security institutions seems to be decreasing, it is worth considering whether security institutions can strengthen their relationship with local communities and contribute to social cohesion through **non-traditional contributions to environmental protection**.

- Many interviewees from across academia, civil society and local government indicated that there is still much work to be done when it comes to educating Palestinians on the importance of protecting the environment. While this requires the involvement of a wide range of civilian stakeholders, several interviewees noted that security institutions could partner with civilian counterparts to **raise awareness** on the Law on the Environment and **support pilot projects** (for examples in schools) which promote environmentally sound and legally compliant practices in areas including water management and waste disposal.
- While deterrence of and response to environmental crimes was discussed in detail, most interviewees placed considerably less emphasis on questions of **remediation**, such as what to do with sites which have become so polluted that they are no longer fit for agriculture. While remediation may in some cases be the responsibility of perpetrators, there could also be innovative roles for security institutions (which often have significant logistical capacities) to play in working with communities and other government institutions to ensure polluted sites can be restored for future, more sustainable use.

It is unclear whether the PA Security Forces fully appreciate the potential of climate and environmental factors to contribute to instability and conflict.

- There may be value in **sensitising security institutions** to these risks.
- It is also important to bear in mind that any efforts to address violations of the Law on the Environment must be undertaken with sensitivity to the **livelihoods dimension of environmental crimes** and other forms of harm to the environment. If not, security institutions are likely to face resentment and resistance and could easily exacerbate existing tensions.

6. Conclusion

Recommendations

Disasters and environmental degradation have a visible impact on human security in the West Bank and, particularly in the context of climate change, deserves greater attention in future efforts to strengthen Palestinian security sector governance. While security sector actors are certainly not the only stakeholders involved in disaster risk reduction and environmental protection, they do have an important and perhaps underappreciated role to play in both preparing for disaster, responding to and preventing harm to the environment which will ultimately affect public health, livelihoods, and social cohesion.

International partners should:

- Consider the recommendations for the various Palestinian institutions as a way to inform their own programming and possible as a roadmap for support to the oPT.
- Explore ways in which DRR can serve as an entry point to clarify the roles and mandates of the various different security sector agencies, identifying efficiencies and synergies and develop proposals for how to shape roles and mandates of the various agencies in a more service oriented and resource efficient manner.
- Encourage security forces to use service delivery performance indicators.
- Recognising the specific restrictions faced by PA Security Forces in the West Bank, prioritise programmes which concurrently build the capacity of security institutions, civilian agencies, and communities to work together in managing and responding to disaster risks.
- Ensure future programmes to build the capacity of PA Security Forces are informed by an understanding of

the ways in which environmental degradation directly affects human security in the oPT.

- Support comprehensive approaches to tackling environmental violations by:
 - Combining programmes which aim to strengthen law enforcement with a focus on environmental awareness raising and alternative means of income generation.
 - Working across multiple institutions (for instance the Environmental Police, Customs Police, and EQA) to develop approaches which leverage the unique capacities, mandates and expertise of each institution.
 - Ensuring all programmes are underpinned by a thorough political economy analysis which examines the drivers and incentives for environmentally harmful practices.
- Recognising the specific restrictions faced by PA Security Forces in the West Bank, prioritise programmes which concurrently build the capacity of security institutions, civilian agencies, and communities to work together in protecting the environment.
- Review EUPOL COPPS support to the PA in addressing environmental crime in order to: maximise learning from this important pilot; shape similar, future efforts in other CSDP missions; and identify opportunities to further strengthen EUPOL COPPS contributions in this area.

The Palestinian Authority should:

- Ensure that the DRM law is passed and clearly maps and clarifies the mandates, roles and responsibilities of all actors involved in DRR, to include the structures and capacities of relevant actors at the local government level.
- Once the DRM Law is passed, prioritise the development of the national DRM plan.
- Ensure that DRR and climate change adaptation efforts are well integrated and fully account for the impacts of slow-onset disasters such as pollution and water scarcity.
- Strengthen the prevention and preparedness components of DRM activities (including early warning).
- Provide further support to the 911 capability project, to include potentially developing a surge capacity mechanism to share resources among governorates and developing basic service delivery indicators to

analyse the progress of security forces in moving toward greater responsiveness to community needs.

- Invest in closing the gap between the state and population by delivering services around civil protection and disaster risk reduction consistently across the territory, in a non-discriminatory and inclusive way. This may for example include building on the work already done by the DRM Centre to ensure the needs and capacities of women, youth and marginalised groups are given a prominent role in DRR.
- Review implementation of the Law on the Environment to identify gaps in enforcement and develop a prioritised, data-driven approach to addressing those gaps which have the greatest consequences for human and environmental security.
- Work with environmental agencies, security institutions, governorates and municipalities to develop a sustainable solution to the problem of illegal waste disposal. This includes providing resources to support decentralised, municipality-led solutions where needed.
- As part of broader security planning and climate adaptation efforts:
 - Strengthen integrated, cross-sectoral planning in the area of water management to ensure a realistic picture of water use and the associated potential for conflict.
 - Carefully assess how to balance centralised, local/municipal as well as community approaches to water governance in order to reduce local risks of tension and conflict.
- Engage with oversight actors including the Anti-Corruption Commission in order to address any potential risks of corruption which may undermine enforcement of the Law on the Environment.

The Ministry of Interior and Security Forces should:

- Streamline DRM into their strategies and planning.
- Assess analytical, planning and response capacities for DRR across the security forces.
- Put an emphasis on disaster risk specific training.
- Strengthen coordination through joint analysis, information sharing, planning, training and SOPs.
- Make analytical and planning capabilities available to support DRM and climate change adaptation efforts (for instance in the areas of food security or water management).

- Ensure the Environmental Police, as a key source of technical expertise within the security forces, is fully integrated in the DRR system and can help to make the links between DRR, environmental protection and longer-term risk factors associated with climate change.
- Explore non-traditional roles of the security sector including DRR awareness raising and support to local farmers and families facing food shortages.
- Review the current priorities, activities and capacities of the Environmental Police, with a view to strengthening their presence across the West Bank in order to better prevent future harm to the environment.
- Coordinate with the Economic and Environmental Crimes section of the Public Prosecutor to ensure police officers have the technical capacity and training required to properly detect environmental crimes, manage records of seizure, transfer evidence to the Prosecutor, draft technical reports, and complete all other steps required to ensure serious environmental crimes can be successfully prosecuted.
- As part of a broader strategy to improve trust in the PA Security Forces, work with the EQA, PWA and other agencies with environmental expertise to:
 - Across security institutions, strengthen understanding of environmental legislation, as well as the role climate and environmental factors play in human security, instability and conflict.
 - Develop a programme of awareness raising which engages security officials in educating citizens on environmental legislation and presenting good practices in areas including waste disposal and water management.
 - Identify new opportunities to leverage security sector planning, analytical and logistical capabilities to better support civilian authorities in the area of environmental protection.

The DRM Centre should:

- Play a leading role in integration of DRM and climate change adaptation and mitigation efforts.
- Increase the visibility of its efforts and lead on a comprehensive sensitisation effort on disaster and environmental risks, including state institutions at the national and local level as well as communities.
- Adopt an open data policy: make all data publicly available without access restrictions (and in formats

which are relevant for different audiences including communities) and strengthen data sharing between agencies.

- Assess existing accountability mechanisms for community led initiatives and especially community disaster volunteers.

Opportunities and Entry Points

- The establishment of the National DRM Centre and the focus on a civilian-led, integrated and multi-sectoral approach to disaster risk management that takes into account local and community perspectives is encouraging and creates opportunities to better connect Prepare, Protect and broader climate change adaptation efforts.
- The National Disaster Risk Management Centre has been conducting a formal assessment of disaster risks and vulnerabilities with the final report expected to be published in 2022. Any subsequent consultations could be an entry point to highlight the ways in which environmental factors contribute to slow-onset disasters, as well as practical mitigation and protection measures which can be implemented as part of broader efforts to strengthen local resilience to disasters. Implementation of recommendations from the report should also provide concrete openings for Civil Defence and possibly other security institutions to work more closely with communities on disaster risk reduction.
- The PA is also conducting a comprehensive strategic risk assessment to inform the future priorities of the security sector, as well as other government sectors. This process could offer another important opportunity to highlight the need to address climate and environmental risks as a matter of priority for human security.
- The training of disaster response volunteers at the community level is encouraging, particularly in a context in which security institutions face significant constraints in responding promptly to both crimes and emergencies.
- Despite the challenges of access and jurisdiction which affect the security sector as a whole, the Customs Police appears to be leveraging its broad mandate and presence throughout the country and manning strategic checkpoints to play a key role in the detection and deterrence of illegal waste smuggling and disposal.

- While it is clear more work needs to be done to ensure the Environmental Police can play an active role, their establishment is an encouraging sign of an increasing focus on environmental crimes. Likewise, the EUPOL COPPS mandate on environmental crime is an important opportunity to support PA institutions in this area and could provide useful insights and lessons for future missions.
- The “self-policing” approach piloted in an area where e-waste burning is prevalent seems to have been initially successful in putting communities in a leading role in addressing environmental harm and its consequences for human security. While the positive effects of this approach have reportedly diminished over time, there are opportunities for the PA, security institutions and local communities to work together to address the factors which incentivise the continued burning of e-waste.
- Municipal governments and local community groups have been creative in seeking locally effective ways to reduce environmental harm, from fencing off unused land to prevent dumping, to interviewing violators of environmental legislation, to using theatre to teach local citizens and youth about the dangers of practices such as e-waste burning. There may be opportunities for security institutions to partner with local governments and community groups to learn from and reinforce these approaches.
- Security forces are reportedly aware of a growing gap between their institutions and the population they are mandated to serve. This may create an opportunity to re-examine the priorities of individual security institutions and better align at least some of their activities with the needs of communities. In the context of climate change and widespread environment degradation, these needs certainly include a healthy local environment, food and water security, and greater resilience to future disasters.

Implications for SSG/R

- **Recognising and reinforcing climate security roles:** From a human and planetary security perspective, the international community should recognise the security sector’s role in mitigating climate and environmental risks as a top priority for engagement.
 - This means a shift from the **delivery of humanitarian aid by the international community towards empowering national partners** be the main service provider, and adopting a broader definition of the security sector that also includes institutions working on civil protection.
- To be translated into SSG/R programming, relevant security sector functional areas should be included conceptually in thematic strategies and could become a focus for support in **country or regional engagement strategies** and through **multilateral missions**, such as UN and CSDP missions. In this regard, the EUPOL COPPS mandate on environmental crime is a unique pilot with the potential to combine the mission’s political access and support with technical capacity building, and would benefit from a lessons learning exercise in order to inform future missions.
- As this is an emerging area of focus for SSG/R, it will be important for future programmes to collect additional **data which can inform design and implementation** in areas including the link between security sector roles, peacebuilding and social cohesion.
- **Mandates and priorities:** It is clear that security institutions can do more to contribute to both disaster risk reduction and environmental protection **within existing mandates**. Focusing on these areas also offers a new entry point to orient security institutions toward improved service delivery. The challenge may be to consider how these issues can be **prioritised** relative to other risks security institutions must manage, and how adequate resources can be dedicated to related tasks.
 - It is also worth considering how taking on **less traditional tasks** might positively influence relationships between security institutions and local communities – for example, resolving resource-related conflicts, contributing planning skills and methodologies to climate change adaptation efforts, raising awareness of environmental legislation and regulations, and supporting environmental remediation.
- **Waste disposal and pollution: Waste disposal and pollution are human security issues** which are likely to become more important in the coming years as climate change and demands for natural resources continue to put greater pressure on ecosystems. In addition to affecting public health, polluted land and water supplies diminish both food and water security. In a global context of tightening environmental regulations, security institutions in

many regions may also need to strengthen their understanding of the transnational dimensions of illegal waste disposal.

- **Emphasising prevention:** A longer-term focus on **prevention** is critical for both DRR and environmental protection. **Risk-informed planning** of infrastructure and housing, for example, can make a significant contribution to mitigating future disaster risks but is not always well integrated with DRR functions. Here too, security institutions can offer scenario-based planning and other methodologies which may not be commonly used across all sectors. Additionally, beyond being an environmental crime, widespread pollution is a **slow-onset disaster**, with potentially catastrophic consequences for future food and water security. A preventive approach is also essential in enforcing environmental legislation, as communities can ill afford the **loss of productive agricultural land, reduced supplies of clean drinking water**, and other consequences of environmental degradation.
- **Coordination & integration:** Tackling environmental crime and analysing disaster risks requires specific technical skills (such as in the area of environmental sampling to detect crimes) and its complexity requires especially **close coordination between security institutions and environmental and other**

government agencies which may not traditionally work together. Integrated approaches are also essential; at the community level **environmental harm is often linked with livelihoods** and solutions which focus solely on enforcement are unlikely to succeed.

- **Comprehensive donor approaches:** Working effectively on DRR, environmental protection, and more broadly on the triple nexus, also requires donors to adopt a comprehensive approach. This means developing innovative funding instruments that can cover several hitherto separate sectors and policy areas, as well as the ability and willingness to engage with a wide range of national counterparts across sectors.
- **Supporting capable communities:** Working at the intersection of the environment and security – particularly in contexts of widespread challenges and limited security sector resources – also requires a realistic analysis of **what communities themselves can do as a first line of defence**, and where security institutions must play a role. In the West Bank, this is made even more important by the movement and jurisdictional restrictions which limit the ability of security institutions to respond to disasters and environmental harm.

Photo: DCAF



Bibliography


- Brzoska, Michael, Wuyi Omitoogun, and Elisabeth Sköns. 2022. *The Human Security Case for Rebalancing Military Expenditure*. Stockholm International Peace Research Institute. Available at <<https://www.sipri.org/publications/2022/other-publications/human-security-case-rebalancing-military-expenditure>>. Accessed 26 July 2022.
- Davis, John-Michael, Grace Akese, and Yaakov Garb. 2019. Beyond the pollution haven hypothesis: Where and why do e-waste hubs emerge and what does this mean for policies and interventions? *Geoforum* 98. Elsevier: 36–45.
- Davis, John-Michael, and Yaakov Garb. 2019. Extended responsibility or continued dis/articulation? Critical perspectives on electronic waste policies from the Israeli-Palestinian case. *Environment and Planning E: Nature and Space* 2 (2): 368–389.
- Davis, John-Michael, and Yaakov Garb. 2020. Toward Active Community Environmental Policing: Potentials and Limits of a Catalytic Model. *Environmental Management* 65 (3): 385–398.
- DCAF PRD. 2021. *Climate Change and its Impact on Security Provision - The Role of Good Security Sector Governance and Reform*. Geneva: DCAF - Geneva Centre for Security Sector Governance. Available at <https://www.dcaf.ch/sites/default/files/publications/documents/Climate_Change_SSGR_DCAF.pdf>. Accessed 12 September 2022.
- European Commission. Directorate General for Environment. 2021. *Combating environmental crimes and related infringements: environmental compliance assurance : guidance document*. LU: Publications Office. Available at <<https://data.europa.eu/doi/10.2779/035969>>. Accessed 25 April 2022.
- European Council on Foreign Relations. 2018. *Palestinian Legislative Council (PLC) – Mapping Palestinian Politics – European Council on Foreign Relations*. Palestinian Legislative Council (PLC) – Mapping Palestinian Politics – European Council on Foreign Relations. Available at <https://ecfr.eu/special/mapping_palestinian_politics/palestine_legislative_council/>. Accessed 15 August 2022.
- Geneva Centre for the Democratic Control of Armed Forces, ed. 2008. *The security sector legislation of the Palestinian National Authority*. Geneva: Geneva Centre for the Democratic Control of Armed Forces (DCAF).
- Green Climate Fund. 2019. *Country Programme - State of Palestine*. GCF Documentation. State of Palestine. Available at <<https://www.greenclimate.fund/sites/default/files/document/country-programme-state-palestine.pdf>>. Accessed 27 July 2022.
- Ikhmais, Hadeel. 2021. Climate Change in Palestine. *This Week in Palestine*. Available at <<https://thisweekinpalestine.com/climate-change-in-palestine/>>. Accessed 18 July 2022.
- IPCC. 2019. *Summary for Policymakers — Special Report on Climate Change and Land*. Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Available at <<https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/>>. Accessed 8 July 2022.
- Karlstedt, Cecilia, Torbjörn Öckerman, Muna Dajani, and Suleiman Daifi. 2014. Organisational Review of the Palestinian Environment Quality Authority (EQA). SIDA. Available at <<https://erc.undp.org/evaluation/managementresponses/keyaction/documents/download/411>>. Accessed 30 September 2022.
- Ma'an Development Center. 2015. Food Security in the Occupied Palestinian Territories - occupied Palestinian territory. Available at <<https://reliefweb.int/report/occupied-palestinian-territory/food-security-occupied-palestinian-territories>>. Accessed 18 July 2022.
- Nehren, Udo, Karen Sudmeier-Rieux, Simone Sandholz, Marisol Estrella, Mila Lomarda, and Tania Guillén. 2014. *The Ecosystem-based Disaster Risk Reduction - Case Study and Exercise Source Book*. Geneva and Cologne: Partnership for Environment and Disaster Risk Reduction and Center for Natural Resources and Development. Available at <https://postconflict.unep.ch/publications/Eco-DRR/Eco-DRR_case_study_source_book_2014.pdf>. Accessed 19 July 2022.
- OCHA. 2017. *United Nations Office for the Coordination of Humanitarian Affairs - occupied Palestinian territory | Emergency response preparedness (ERP) and disaster risk management (DRM)*. United Nations Office for the Coordination of Humanitarian Affairs - occupied Palestinian territory. Available at <<http://www.ochaopt.org/content/emergency-response-preparedness-erp-and-disaster-risk-management-drm>>. Accessed 10 May 2022.
- Persson, Victor. 2016. Palestine's Ratification of International Treaties: A Back Door to Independence? Lund: Lund University. Available at <<https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=8873670&fileId=8879741>>. Accessed 27 July 2022.
- Queensland Government. 2022a. Prevention Preparedness, Response and Recovery Disaster Management Guideline. *Government Website*. Available at <<https://www.disaster.qld.gov.au/dmg/Pages/DM-Guideline-2.aspx#5>>. Accessed 14 July 2022.
- Queensland Government. 2022b. Prevention Preparedness, Response and Recovery Disaster Management Guideline - 5 Response. *Government Website*. Available at <<https://www.disaster.qld.gov.au/dmg/Response/Pages/default.aspx>>. Accessed 14 July 2022.

-
- Smithers, Richard, Mike Harrison, Ziad Mimi, Khaled Hardan, Sadiq Abdelall, and Afif Hasan. 2016. *National Adaptation Plan (INCR)*. Ramallah: Environmental Quality Authority of Palestine.
- State of Palestine. 2018. Type and Nature of Actions to address Loss & Damage for which finance is required. UNFCCC. Available at <https://unfccc.int/sites/default/files/resource/Addressing%20Loss%20and%20Damage%20UNFCCC_Palestine_final.pdf>. Accessed 27 July 2022.
- State of Palestine - Water Authority. 2017. About PWA | PWA. Government Website. Available at <<http://www.pwa.ps/page.aspx?id=5W6F7La2541180510a5W6F7L>>. Accessed 30 September 2022.
- The Coalition for Accountability and Integrity (AMAN). 2020. *The Palestinian Security Sector Budget 2019: Basis of the internal missions (miscellaneous spending) in Operating Expenses*. Ramallah, Palestine: AMAN. Available at <<https://www.aman-palestine.org/cache/uploads/download/2021/01/20/security-budget-english-translation-1611148250.pdf>>. Accessed 18 July 2022.
- UNDAC. 2014. UNDAC Disaster Response Preparedness Mission to the State of Palestine. Available at <https://www.ochaopt.org/sites/default/files/UNDAC_mission_report.pdf>. Accessed 10 May 2022.
- UNDP. 2017. *Palestinian Disaster Risk Management System*. United Nations Development Programme. Available at <<https://info.undp.org/docs/pdc/Documents/PAL/00088464-DRM%20Final%20report%20Nov.%202017.pdf>>. Accessed 9 May 2022.
- UNDRR. 2015. Sendai Framework for Disaster Risk Reduction 2015 - 2030. United Nations Office for Disaster Risk Reduction (UNDRR). Available at <https://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf?_gl=1*1sdl20u*_ga*MTIzOTU1ODYxOS4xNjU0NTk1OTc4*_ga_DDU0NjM0Ny4xLjAuMTY2NDU0NjM0Ny4wLjAuMA..>. Accessed 30 September 2022.
- UNEP. 2020. *State of Environment and Outlook Report for the occupied Palestinian territory 2020*. Nairobi, Kenya: United Nations Environment Programme (UNEP). Available at <<https://wedocs.unep.org/bitstream/handle/20.500.11822/32268/SEORP.pdf?sequence=1&isAllowed=y>>. Accessed 25 April 2022.
- UNISDR. 2013. Factsheet Overview of Disaster Risk Reduction in the Arab Region. Available at <https://www.preventionweb.net/files/31693_drrfactsheetarabregionfinal.pdf>. Accessed 5 May 2022.
- UNTC. 2016. Paris Agreement - United Nations Treaty Collection. Available at <https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en>. Accessed 17 May 2022.
- UNTC - Basel Convention. 1992. Overview of the Basel Convention. Available at <<http://www.basel.int/TheConvention/Overview/tabid/1271/Default.aspx>>. Accessed 30 September 2022.
- Watson, Geoffrey R. 2000. International Law and the 'Permanent Status' Issues. In *The Oslo Accords*, 267–307. 1st ed. Oxford University Press Oxford. Available at <<https://academic.oup.com/book/36110/chapter/313594249>>. Accessed 12 September 2022.
- World Bank. 2014. *Area C and the Future of the Palestinian Economy*. Edited by Orhan Niksic, Nur Nasser Eddin, and Massimiliano Cali. Washington, D.C.: The World Bank. Available at <<http://elibrary.worldbank.org/doi/book/10.1596/978-1-4648-0193-8>>. Accessed 19 July 2022.
- World Bank. 2018. *Securing Water for Development in West Bank and Gaza*. Washington, D.C.: World Bank. Available at <<http://hdl.handle.net/10986/30252>>. Accessed 30 September 2022.
- World Bank. 2019. *West Bank and Gaza Environment Priorities Note*. World Bank. Available at <<https://openknowledge.worldbank.org/bitstream/handle/10986/33935/West-Bank-and-Gaza-Environment-Priorities-Note.pdf?sequence=1&isAllowed=y>>. Accessed 19 July 2022.
1999. Palestinian Environmental Law. Available at <<https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8559.pdf>>. Accessed 30 September 2022.
2022. Co-Chairs' Summary: Bali Agenda for Resilience. Available at <<https://www.preventionweb.net/publication/co-chairs-summary-bali-agenda-resilience>>. Accessed 7 July 2022.
-

Endnotes

1. DCAF PRD 2021.
2. Brzoska, Omitoogun, and Sköns 2022.
3. Co-Chairs' Summary: Bali Agenda for Resilience 2022.
4. Nehren et al. 2014.
5. IPCC 2019.
6. World Bank 2019; UNEP 2020.
7. Smithers et al. 2016.
8. Ibid.; UNEP 2020.
9. World Bank 2014; World Bank 2019.
10. UNEP 2020.
11. Smithers et al. 2016.
12. UNEP 2020; Smithers et al. 2016.
13. UNEP 2020, 102–103.
14. State of Palestine 2018.
15. Geneva Centre for the Democratic Control of Armed Forces 2008.
16. UNEP 2020.
17. Persson 2016.
18. European Council on Foreign Relations 2018.
19. Watson 2000.
20. UNEP 2020.
21. With EUPOL COPPS, UNEP, UNODC, OHCHR, Ecopeace Middle East, An-Najah National University, UNDRR
22. This includes the Ministry of Health, Coordination Unit with Israel, Civil Police, Custom Police, National Security Forces, Palestinian General Prosecution/Environment Prosecution, Water Authority, Environment Quality Authority, Civil Defence, National Centre for Disaster's Risk Management, Hebron Municipality Environment and Solid Waste Division, the Governor of Hebron, Joint Council for Solid Waste Management in Hebron Governorate, Hebron University, Water and Environmental Studies Institute of Birziet University, Palestinian Hydrology Group, Farmers Union, Palestinian Agricultural Relief Committee, UNODC, UNOCHA, and EUPOL COPPS.
23. Held in Tuubaz, Beit Awwa, Der Sameth, and Idhna
24. UNDAC 2014.
25. UNISDR 2013.
26. Ikhmais 2021.
27. UNEP 2020, 137.
28. OCHA 2017.
29. UNDAC 2014.
30. Multiple interviews, West Bank, June 2022
31. UNEP 2020.
32. Davis and Garb 2020; Davis, Akese, and Garb 2019.
33. Davis and Garb 2019.
34. Davis and Garb 2020; interviews June 2022.
35. UNDAC 2014.
36. Security institutions not reviewed were Preventive Security, Civil Police, Environmental Police and the Military Coordination Unit between Israel and the oPT; civilian institutions include the Ministry of Health, Local Government, Finance, Agriculture and Women's Affairs.



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37. UNDAC 2014, 22.
 38. Ibid., 21.
 39. Ibid.
 40. UNDRR 2015.
 41. UNDP 2017.
 42. Geneva Centre for the Democratic Control of Armed Forces 2008, 248.
 43. UNTC 2016.
 44. Green Climate Fund 2019.
 45. UNDRR 2015; Art. 19 (b) Disaster risk reduction requires that responsibilities be shared by central Governments and relevant national authorities, sectors and stakeholders, as appropriate to their national circumstances and systems of governance; Art. 19 (e) Disaster risk reduction and management depends on coordination mechanisms within and across sectors and with relevant stakeholders at all levels, and it requires the full engagement of all State institutions of an executive and legislative nature at national and local levels and a clear articulation of responsibilities across public and private stakeholders, including business and to ensure mutual outreach, partnership, complementarity in roles and accountability and follow-up.
 46. The exact role of Preventive Security remains interesting to explore.
 47. Queensland Government 2022a.
 48. UNDRR 2015; Art. 27 (a) To mainstream and integrate disaster risk reduction within and across all sectors and review and promote the coherence and further development, as appropriate, of national and local frameworks of laws, regulations and public policies.
 49. Queensland Government 2022a.
 50. UNDRR 2015, Art. 19 (h).
 51. Queensland Government 2022b.
 52. UNDRR 2015; Art. 19 (d) Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens.
 53. The Coalition for Accountability and Integrity (AMAN) 2020.
 54. Stakeholder interview, West Bank, June 2022
 55. Ma'an Development Center 2015.
 56. Ibid.
 57. Palestinian Environmental Law 1999.
 58. UNTC - Basel Convention 1992.
 59. Ibid.
 60. Karlstedt et al. 2014.
 61. State of Palestine - Water Authority 2017.
 62. Multiple interviews with Palestinian Authority and municipal officials, June 2022
 63. Interview with Customs Police, 14 June 2022
 64. European Commission. Directorate General for Environment. 2021.
 65. Ibid.
 66. Multiple interviews, West Bank, June 2022.
 67. World Bank 2018.
 68. Davis and Garb 2020.
 69. Ibid.
 70. Virtual interview, Geneva, May 2022
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