5 CLIMATE FRAGILITY RISKS IN ISRAEL, JORDAN AND PALESTINE

Five critical pathways that link climate change to fragility in Jordan, Palestine and Israel are:

1. **Risk 1: Water scarcity and conflicts**
   Water (in)security is at the front and centre of the climate change-security connection: increased temperatures, decreased rates of precipitation, decreased groundwater levels, and salinization of water resources, equates more competition over natural water resources between sectors and groups. The ramifications are far-reaching across the agricultural, food, health, energy, and economic sectors.

2. **Risk 2: Food and livelihood insecurity**
   The negative impact of less available natural water due to climate change is most pronounced in the agricultural sector, which consumes the highest amount of water in all three countries. Impacts on rain-fed agricultural practices, degradation of agricultural land, protracted water shortages, and more frequent extreme weather events will reduce agricultural yields and raise costs of agricultural inputs, which will hurt small to mid-sized farmers in particular. Agricultural problems may aggravate social discontent by increasing unemployment levels, triggering internal migration from rural to urban areas and even fomenting uprisings and protests, with clear security implications.

3. **Risk 3: Energy insecurity**
   In a vicious cycle, climate change both affects the energy sector and is affected by it. This is particularly evident when looking at the interdependence of water and energy, as energy is a key input in water production and water is a key input in energy production. Less available water due to climate change leads to increased use of energy for desalination and water treatment, which in turn deepens dependence on fossil fuels, increasing greenhouse gas emissions. With energy being an essential component of the functioning of a state, energy insecurity is perceived as a high-stakes threat to national and regional security.

4. **Risk 4: Disrupted transport and damaged infrastructure**
   Extreme weather events could contribute to the collapse of essential services like transport and electricity, which can have far-reaching implications for national and regional security.

5. **Risk 5: Human Health risks**
   Projected increases in the rate of diseases threaten overall public health, which in turn undermines economic activity and perpetuates poverty. In conflict settings, the collapse of medical infrastructure further reinforces negative health outcomes, creating further internal discontent. Infectious diseases can also spread across borders, threatening regional security.

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**CLIMATE CONTEXT**

Jordan, Palestine, and Israel share a territory of about 120 thousand km². This area is characterized by an arid-to-semi-arid climate and one of the lowest per capita water availabilities in the world. Rainfall is already quite low in some areas and has begun to decline on average per annum. The IPCC has identified the region as a climate change hotspot.

Climate change is projected to affect the region in a number of ways, including:

- A general temperature rise of ~3°C, including up to 4°C in summer by the end of the century.
- Further decrease in precipitation by 10-20%, reducing water availability.
- Trend towards more frequent extreme weather events such as heatwaves, flash floods and droughts.

Some segments of the population are already suffering from climate-related problems, including extreme weather events, water stress and poor health outcomes.

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**SOCI-ECONOMIC FACTS**

- The standard of living, poverty rates and inequality levels vary both between and within countries.
- Adaptive capacity is uneven. Palestine, already dealing with high poverty and unemployment rates combined with a precarious political situation, is far less adaptable to climate shocks and stresses.
Outbreaks of conflict reduce states’ adaptive capacity. Climate change contributes to conflict across many sectors, exacerbating problems of weak governance structures, frustration with the status quo, and a lack of future prospects.

Large refugee populations are already putting strain on Jordan’s economy and infrastructure. This exacerbates resource scarcity, increases competition for employment, and raises internal tensions.

There is a high level of pre-existing tension between Israel and Palestine. The political stalemate and perpetual conflict between Israel and Palestine reduces the capacity for cooperation.

5 ENTRY POINTS TO ADDRESS CLIMATE FRAGILITY RISKS

The Middle East is in dire need of a holistic, multi-dimensional approach to climate-related security risks, integrating national and regional measures. The implications of not moving beyond the agreements and regulations set forth in the Israel-Jordan Peace Agreement and Oslo II interim accords can already be witnessed today, and they will be exacerbated by the impact of climate change. The repercussions of climate change will be felt on multiple dimensions - from global outcomes to national, regional, and local reverberations. An approach to mitigating and adapting to climate change has to be multi-dimensional, incorporating a clear strategy for all players in the region.

The leadership of all three countries needs to embrace a paradigm shift away from viewing climate security as a zero-sum game and towards a real possibility for a tangible, mutually beneficial outcome that can not only strengthen the region’s climate resilience, but also comes with an invaluable peace dividend.

Regional cooperation is of vital importance in ensuring stability and avoiding conflict. These entry points promote cooperation:

1. **Promote a paradigm shift to integrate climate change considerations into the national security agenda of each country** to integrate environmental considerations into the decision-making process at all levels.

2. **Resolve final status natural water allocations between Israel and Palestine** to provide much-needed support to the vital Palestinian agricultural sector.

3. **Devise strategies to effectively upgrade and improve water infrastructure and tariffs in Jordan and Palestine** and provide much needed water supply and revenue, and mitigate against future water loss.

4. **Create a roadmap for a regional approach to address climate change adaptation and mitigation issues** to provide a platform for important regional cooperation, and build trust and confidence among regional stakeholders.

5. **Foster political integration through economic cooperation and international investments** to minimise trade-offs between sectors, increase efficiencies and prevent security threats.

The immediate threat of climate change is too great for the process of dealing with the dangers to be held up by negotiations in other intractable areas of the Israel-Palestine dispute. In fact, cooperation on environmental issues could be used as a springboard for further negotiations, as it builds trust between communities and nations over common resources.