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# **The effectiveness for policy frameworks for addressing climate-induced risks to human security and conflict – report on stakeholder perspectives and demands (short version)**

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**Abstract**

This is the short version of a longer analysis of the effectiveness of policy frameworks for addressing hydro-climatic hazards and their impacts on human security and conflict, which is based mainly on interviews conducted with policy-makers and experts in Ethiopia, Morocco, Israel and the occupied Palestinian Territories (oPT), as well as representatives of the EU and the UN.

# 1 Introduction

The Mediterranean, Middle East and Sahel region is a climate change “hot spot” and is expected to experience large changes in climate mean and variability. Warnings have been voiced that as natural resources become scarcer, new conflicts may arise in the region.<sup>1</sup> Whether or not climate change undermines human security and/or creates conflict or cooperation over water resources depends – amongst other factors – on the institutions in place and policies adopted in these areas. Thus, the two main questions that this report seeks to answer are, first, whether current policy frameworks are effective in mitigating, within countries, water-related risks to human security<sup>2</sup> as well as preventing or reducing potential conflicts<sup>3</sup> over water that may be caused or exacerbated by climate change and second, what demands and expectations policy-makers and experts have for their improvement.

Generally, a country’s adaptive capacity<sup>4</sup> is determined by a diverse set of factors. Technology, economic development and human and social capital, for example, have all been discussed in the literature as important determinants of adaptive capacity to climate change.<sup>5</sup> In the past decade, institutions and policies have been put forward as additional factors that can influence a country’s adaptive capacity.<sup>6</sup> This is a corollary of the insight that overall adaptive capacity of societies depends, inter alia, on institutions that can manage risks associated with climate

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<sup>1</sup> Oli Brown and Alec Crawford, *Rising Temperatures, Rising Tensions – Climate Change and the Risk of Violent Conflict in the Middle East*, IISD: Winnipeg, (Winnipeg: IISD, 2009).

<sup>2</sup> “Human security” was famously defined by UNDP in 1994 in the following way: “Human security can be said to have two main aspects. It means, first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life – whether in homes, in jobs or in communities. Such threats can exist at all levels of national income and development.” UNDP, *New Dimensions of Human Security*, Human Development Report (UNDP: New York, 1994), 23, <http://hdr.undp.org/en/reports/global/hdr1994/> Human security has sub-dimensions such as water security and food security that can be defined as a situation where an individual consistently has access to water/food in a sufficient quality and quantity.

<sup>3</sup> For “conflict” we use the definition by Marisa Goulden, Declan Conday, and Aurelie Persechino, “Adaptation to Climate Change in International River Basins in Africa: a Review / Adaptation Au Changement Climatique Dans Les Bassins Fluviaux Internationaux En Afrique: Une Revue,” *Hydrological Sciences Journal* 54, no. 5 (2009): 806 according to which conflict does not just encompass armed conflict between nations, but also involves “a range (of) negative interactions that encompass mild verbally-expressed discord and cold interstate relationships, as well as hostile acts or declarations of war”. Indeed, only one type of conflict relevant to our study – the one between Israel and Palestine – also has a dimension of armed conflict to it. In many other cases, the conflicts we talk about in this study are conflicts where people merely express disagreement over a certain issue as a result of entrenched, long-term differences of opinion on those water related issues that Kallis (2008) included in his definition of water conflict. He defined water conflicts as conflict between individuals, groups, nations stemming from incompatible claims over water resources and ways to manage them, or from the side effects of hydrological hazards, such as droughts and floods, see Giorgos Kallis, “Droughts,” *Annual Review of Environment and Resources* 33, no. 1 (2008): 85–118.

<sup>4</sup> Adaptive capacity is defined by the IPCC as “the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences”, see Intergovernmental Panel on Climate Change, *Climate Change 2001: Overview of Impacts, Adaptation, and Vulnerability to Climate Change 2001, Working Group II: Impacts, Adaptation and Vulnerability, IPCC Third Assessment Report* (Cambridge: Cambridge University Press, 2001), 6, [http://www.grida.no/publications/other/ipcc\\_tar/](http://www.grida.no/publications/other/ipcc_tar/).

<sup>5</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Impacts, Adaptation and Vulnerability* (Cambridge: Cambridge University Press, 2007), [http://www.ipcc.ch/publications\\_and\\_data/publications\\_ipcc\\_fourth\\_assessment\\_report\\_wg2\\_report\\_impacts\\_adaptation\\_and\\_vulnerability.htm](http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg2_report_impacts_adaptation_and_vulnerability.htm), section 17.3.1.

<sup>6</sup> Ibid., section 17.3.1.

change<sup>7</sup> and on policies to enhance the resilience of vulnerable groups within societies. Adaptation to climate change requires collective action; governance mechanisms and institutions play a very important role in enabling such collective action.<sup>8</sup> By contrast, a lack of such policies may impede adaptation or increase the vulnerability of certain groups.<sup>9</sup> There is evidence that governance settings in which government agencies cooperate with local stakeholders are particularly good at promoting adaptive capacity in natural resources management.<sup>10</sup> The protection of public goods and services is a primary government function that becomes especially important for adaptation.<sup>11</sup> Public goods like robust natural resources<sup>12</sup> and public services such as education, health care, food aid and employment programs<sup>13</sup> increase a population's capacity to, for example, access food and water, learn about climate change and adaptation strategies, maintain health and nutrition, and begin or switch to livelihoods that fit the challenges and limitations of their environments. In essence, many public goods and services help populations maintain an adequate level of opportunity and stability for sustaining their livelihoods in the face of climate variability and change.<sup>14</sup> In a more normative vein, it can also be argued that it is, above all, the government's responsibility to manage risk on behalf of all populations, especially those perceived to be the poorest and most vulnerable.<sup>15</sup> Thus, state-driven policies are an essential part of adaptation efforts.

Hence, our focus is on the analysis of policy frameworks and their effectiveness in addressing climate-induced risks to human security and conflicts caused or exacerbated by climate change. By policies, we understand different types of overarching action undertaken or supported by governments or public actors such as international organizations (e.g. laws, strategic programs or long-term and consistent approaches on how to deal with certain issue). The term "policy framework" is somewhat broader than policies in that it seeks to capture if/how in a given polity different individual policies (e.g. a water law or an adaptation strategy) are adopted as well if/how they are coordinated or integrated; thus, looking at policy frameworks rather than

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<sup>7</sup> Barry Smit and Olga Pilifosova, "From adaptation to adaptive capacity and vulnerability reduction," in *Climate Change, Adaptive Capacity and Development*, ed. Joel B. Smith, Richard J. T. Klein, and Saleemul Huq (Imperial College Press, 2003), 23.

<sup>8</sup> Neil Adger, "Social aspects of adaptive capacity," in *Climate Change, Adaptive Capacity and Development*, ed. Joel B. Smith, Richard J. T. Klein, and Saleemul Huq (Imperial College Press, 2003).

<sup>9</sup> Masego Madzwamuse, *Climate Governance in Africa: Adaptation Strategies and Institutions* (Berlin: Heinrich-Böll-Foundation, 2010), <http://www.boell.de/worldwide/africa/africa-climate-governance-in-africa-adaptation-strategies-and-institutions-10914.html>.

<sup>10</sup> Tompkins, Emma L. and Adger, Neil, "Does Adaptive Management of Natural Resources Enhance Resilience to Climate Change?," *Ecology and Society* 9, no. 2 (2004): 10–24, <http://www.ecologyandsociety.org/vol9/iss2/art10/>.

<sup>11</sup> Jon Barnett and W. Neil Adger, "Climate Change, Human Security and Violent Conflict," *Political Geography* 26, no. 6 (2007): 646.

<sup>12</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Impacts, Adaptation and Vulnerability*, section 17.4.1.

<sup>13</sup> Intergovernmental Panel on Climate Change (IPCC), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, Special Report of the Intergovernmental Panel on Climate Change (Cambridge University Press, 2012), 346; Elizabeth Bryan et al., "Adaptation to Climate Change in Ethiopia and South Africa: Options and Constraints," *Environmental Science & Policy* 12, no. 4 (June 2009): 424.

<sup>14</sup> Barnett and Adger, "Climate Change, Human Security and Violent Conflict," 646; Intergovernmental Panel on Climate Change (IPCC), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, 346.

<sup>15</sup> Intergovernmental Panel on Climate Change (IPCC), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, 346 McBean (2008); O'Brien et al. (2008); CCCD (2009).

policies should lead to a more comprehensive assessment of how effectively the above issues are addressed by the responsible political institutions in a certain country.

The present study<sup>16</sup> looks at selected country case studies in greater depth to assess policy-makers' and experts' insights of the effectiveness of existing policy frameworks for addressing these challenges and to collect perspectives on how these frameworks should develop in the future. Here, we have studied policy frameworks in Ethiopia, Morocco, Israel and the occupied Palestinian Territories (oPT) as well as at the UN and EU levels.<sup>17</sup> These countries were selected because they are at different stages of economic development: Israel is a developed country, Morocco and the oPT are lower middle income countries according to the OECD Development Assistance Committee (DAC) classification, and Ethiopia is a least-developed country.<sup>18</sup> This is relevant because of the likelihood that more developed countries have more resources and capacity to invest in formulating and implementing policies; at the same time, human security in these countries is, generally, often less at risk than in less developed countries.

The assessment of the effectiveness of policies are mainly based on semi-structured interviews carried out in the case study countries and via phone, carried out between September 2011 and March 2012.<sup>19</sup> It is thus a strongly perception-based assessment. It should be noted that such a methodology is not unusual in policy analysis; indeed, it has been claimed that the complexity of political decision-making cannot be understood properly without taking into account the perceptions of the actors involved therein.<sup>20</sup>

## **2 Links between climate change – water – human security and conflict**

In the case study countries, the climate change impacts considered most significant are essentially an intensification of existing phenomena, such as drought. Interviewees demonstrated concern for environmental risks, yet in many cases were dismissive of the comparative importance of climate change in light of existing drought and environmental conditions, socioeconomic capacities and political tensions. Depending on the context, its importance was considered marginal in comparison to existing stressors (an opinion commonly

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<sup>16</sup> This is a short version of a longer study available at [www.clico.org](http://www.clico.org) or <http://ecologic.eu/4884>.

<sup>17</sup> Case studies on Israel/the occupied Palestinian Territory, Morocco, Ethiopia, the UN and the EU will also be available for download at <http://ecologic.eu/4884>.

<sup>18</sup> OECD, DAC List of ODA Recipients, Effective for reporting on 2011, 2012 and 2013 flows, [http://www.oecd.org/document/45/0,3746,en\\_2649\\_34447\\_2093101\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/45/0,3746,en_2649_34447_2093101_1_1_1_1,00.html)

<sup>19</sup> Altogether, 75 interviews were conducted. Interviewees included policy-makers from institutions responsible for the environment, agriculture, development and water, among others. Moreover, representatives from NGOs working on these topics were also interviewed, as were academics working on environmental issues, climate change, water etc. A list of interviews can be found in Annex I. Interviews were based on a standard questionnaire which was, however, adapted to local circumstances and the respective interviewee. The questionnaire is contained in Annex II. On the basis of the interviews, the case studies on Israel/Palestine, Morocco, Ethiopia, UN and the EU (see Annex III) were drafted and have served as input for compiling the present summary report.

<sup>20</sup> Jesko Hirschfeld, Linda Krampe, and Christiane Winkler, *RADOST Akteursanalyse - Teil 1: Konzept und methodische Grundlagen der Befragung und Auswertung*, RADOST (Berlin: Institut für ökologische Wirtschaftsforschung, 2012), <http://www.klimzug-radost.de/publikationen/berichtsreihe>.

expressed in Israel), as secondary to more important issues such as political and natural factors related to water (Palestine), as important in future but not that much at present, and taking second row to other national challenges such as development (Morocco), or as of central importance and having the potential to disrupt both huge number of livelihoods and national development efforts (Ethiopia).

However, the added pressure of climate change, combined with key social (e.g. development needs, lack of financial capacity, population growth) and political (e.g. state conflict, existing resource disputes, mistrust) factors, was commonly seen as amplifying human security and conflict risks. Prior disagreements over water between users and uses are anticipated to increase the likelihood of and the basis for potential conflict under changing environmental conditions. Interviewees repeatedly expressed that “the conflict exists already,” and “climate change increases the conflict”. When conflicts and tensions already exist between parties, competing demands for water resources are more likely to result in conflict. Thus, it was expected by most interviewees that if future conflicts over water are to arise, it would be in relation to existing tensions, non-environmental conditions and forces. However, this is obviously not automatic, because measures mitigating the impacts of climate change are sometimes already in place (e.g. producing water from non-conventional sources in Israel). Also, generally, conflict is not the only possible scenario when natural resources become scarcer, as has been amply shown in academic literature.<sup>21</sup>

Whereas predicted climate change impacts are more or less similar in nature in the four case study countries<sup>22</sup> (increased incidence of droughts, increased seasonal variability, increases in floods), their expected socio-economic consequences vary strongly between countries. There were also striking differences in the level of uptake of climate change in the policy processes, ranging from very high in Ethiopia to quite low in Israel, due to the different dependency on natural water resources.

### **3 Current policy frameworks and their effectiveness**

In terms of policies addressing explicitly potential impacts of climate change on human security and conflict, a previous analysis of policies in nine countries as well as at the UN and EU level has led to the conclusion that while links between climate change and conflict as well as human security are addressed in high-level political resolutions and calls, there is hardly any concrete policy at the national level that explicitly refers to human security or conflict in the context of climate change or explicitly addresses these issues.<sup>23</sup> A marked contrast can be observed in this regard between the more discursive, “soft” parts policy-making (e.g. through high-level

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<sup>21</sup> See for examples from the water-related literature Aaron T. Wolf et al., “Managing Water Conflict and Cooperation,” in *State of the World 2005 - Redefining Global Security*, by Worldwatch Institute (Washington DC: W. W. Norton & Company, 2005), 80–208, [www.worldwatch.org/node/3846](http://www.worldwatch.org/node/3846); Thomas Bernauer et al., *Water-Related Intrastate Conflict and Cooperation (WARICC) (2011): A New Event Dataset*, CLICO Working Paper, 2011, [www.clico.org](http://www.clico.org).

<sup>22</sup> Counting Israel and the occupied Palestinian Territories as different countries; however, both were addressed in a joint case study.

<sup>23</sup> Christiane Gerstetter et al., *Review of International and National Policies and Institutional Frameworks*, CLICO Working Paper (Berlin: Ecologic Institute, 2011).

declarations at the international level) and the situation in the countries: Issues such as human security, environment and security or climate change and conflict do appear in a number of resolutions and debates of political institutions at the international level, and the UN has established quite a number of programmes and initiatives mandated with addressing them. However, that is largely not mirrored at the national level.

This, however, does not constitute a gap in the existing framework: rather than being a self-standing political issue to be addressed through specific policies, human security is, implicitly, addressed by existing policies, e.g. on agriculture or water.

The fact that climate change was, at worst, an “add-on” to existing issues of human security and conflict translated into a situation where interviewees considered – with the exception of the very specific case of the oPT – the existing policy-frameworks in their countries to be effective in addressing water-related changes from climate change, and thus, implicitly, impacts on human security and conflict potentially associated with them. In both Ethiopia and Morocco, this position related, however, to an emerging policy-framework that yet has to be implemented fully despite its effectiveness “on paper”. In regions where climate change was viewed with less urgency, the reasons for interviewees to consider the existing policy frameworks to be effective seemed to be that the phenomena (e.g. drought or issues with water availability) were already known and were being mastered quite competently, with only secondary issues requiring attention. In regions where climate change was seen as posing significant threats to human security, the satisfaction seemed to be related to the recent history of serious efforts and strong improvements in addressing the main phenomena. However, many challenges and areas of support were identified by interviewees, mostly relating to policy implementation (particularly funding and human-resources and institutional capacity), but also to policy formulation (e.g. capacity for research-based input into policy).

## **4 Expectations and demands**

Demands and expectations were mostly not related to policies specifically addressing human security or conflict specifically, even though all countries face problems relating to human security or existing conflicts. Rather demands and expectations focused on improving or fully implementing different existing sectoral policies e.g. on water. Given that the issues that such policies seek to address, e.g. a lack of water or lack of income of farmers translate into human security issue and may lead to conflict, this focus is not necessarily surprising. However, there was a remarkable absence in interviewees’ comments of demands and expectations that are targeted primarily at enhancing the socio-economic status and social security of poor people vulnerable to climate change and thus enhancing their resilience. For example, no interviewee made demands related to developing insurance schemes for drought risks, income generation schemes or the improvement of social security systems in general.

It also appears that expectations and demands are to a large extent shaped by existing agendas. In most countries, demands were in line with the existing current policy focus: in the case of Ethiopia on climate change adaptation, in Morocco on agricultural policy and development, and in the oPT on the ongoing conflict with Israel which tends to dominate the Palestinian political agenda. Israeli and EU interviewees had few demands regarding the improvement of their



respective policy framework. The extent to which climate change adaptation is taken up in different countries also appears to be influenced by the way it interacts with existing policy agendas (in addition to the degree of vulnerability of a country). EU interviewees suggested using existing agendas (e.g. response to the economic crisis) to gaining attention and funding for issues such as water and adaptation. This could have implications for countries who want to appeal to donors at EU and UN level for funds and support

Some interviewees doubted the usefulness of, e.g. the term human security, for the formulation and implementation of concrete policies. Reservations related to a range of aspects, including the difficulties of developing the kind of integrated policy-responses that the objective of enhancing human security requires, and doubts about the usefulness of broad, and regularly changing, concepts for achieving anything on the ground. The EU is an interesting example in this regard as climate change and security issues were discussed by the Council, but a reluctance of the Commission to take the issue up was noticed – i.e. at the discursive, agenda-setting stage of policy-making the climate change/security nexus was given attention, but the institution responsible for taking the initiative on proposing concrete policies did not take up the issue. Also at a more general level some interviewees expressed reservations concerning the use of political buzz-words like human security, first, because they questioned their practical value for on the ground policies, second because it required developing countries to frequently to adapt their strategies and funding proposals to such new buzzwords.

The following box shows an overview of demands and expectations related to national policy frameworks.

**Box 1: Demands relating to national policy frameworks**

- Increase public awareness on the impacts of climate change with regards to risk (e.g. building on flood plains) as well as the need for changes in water use (e.g. alternative sources and reduction in demand).
- Carry out regulatory reforms to integrate the prevention of risk in land use planning.
- Focus on demand-side management water resources, but take care to target key users of the resource.
- Coordinate preservation of and knowledge sharing regarding indigenous mechanisms for water management.
- Increase awareness, coordination and effective use of resources and mainstreaming of flood risk into planning processes through multi-sectoral approaches to policy-making.
- Strengthen national and regional research capacity to develop precise and detailed data and climate models to understand the impacts on water and support systems for policy makers to take informed decisions.
- Build capacity and raise awareness amongst government officials at middle and regional levels to ensure understanding of key policy messages and widespread dissemination.
- Train competent staff to reinforce collaboration and information exchange along with capacity building to prepare authorities and citizens to enable fast responses to catastrophes and risk.



The EU and UN were considered to be particularly important in placing issues on the agenda, in the provision of capacity-building and guidance, and for the funding of initiatives, as evident from the overview of related demands.

**Box 2: Demands from national actors relating to international policy frameworks**

- Contribute to a positive outcome for water management and regional stability in the Middle East by highlighting the benefits of joint water resource management based on international law.
- Act as a neutral third party to mediate between communities in conflict in discussions over water resources
- Put forward conditions for beneficiaries to abide by, in the case of a water project taking place in a conflict situation.
- Provide large-scale funding for climate change adaptation.
- Provide technical support and capacity building to meet the sometimes complex and expensive requirements for obtaining climate finance.
- Systematise the support from the international community and make this continuous rather than focused on scattered interventions.
- Assist with livelihood diversification to reduce support for illegal migration and develop cooperative and transboundary infrastructure for supporting those who do migrate (e.g. through provision of food and water).
- Provide global level information-exchange and guidelines for climate change adaptation.
- Ensure aid is in line with the Paris Declaration on Aid Effectiveness and increasingly align donors' and recipients' strategic frameworks, wishes and needs
- International NGOs and donors should lobby for better cooperation between states over water management.
- Ratify, globally respect and implement international agreements on water and climate change with equal involvement and contributions from all countries

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