
Experts' Workshop

Water in Post-Conflict Situations and the Role of the Security Council

15-16 February 2018, Main University Building, Lund University (Room 206)

Key points and recommendations from the discussion

- Water and security are **linked to a multitude of factors, such as energy, food and ecosystems services.**
- **Climate change further exacerbates water scarcity and worsens existing security threats.** Sudden-onset and slow-onset events impacted by climate change also have different impacts on **migration, which adversely affects access to water.**
- **International law has limits in how it can address issues mainly** relating to accountability and compliance. Even when explicit and systematic violation of the law is documented, there is limitation in the mechanisms to enforce the law.
- **Data and information access** is critical. This is outlined in e.g. the Report of Global High-Level Panel on Water and Peace, tools of the World Resources Institute, UN Environment rapid assessment in Iraq, and further evidence-base was called for by several presenters. The need for data and information access relates to foreseeing the impacts of targeting of water infrastructure, including the indirect and reverberating effects. This may justify a need to re-assess the application of the proportionality principle within international humanitarian law in relation to water infrastructure.
- **Coordination among different fora as well as different expertise (technical engineers/political science/law) should be ensured** as no one has a silver bullet for integrated challenges and risks. Coordination beyond clusters is needed also to better transition from humanitarian relief to development. Currently, the situation is fragmented among more than 30 actors working on water specifically. An institutional home for water and security risks with support from experts and academia could perhaps be one solution for improved coordination.
- Such coordination is particularly critical as an array of different fora looking at water and security from different facets (e.g. UN Security Council, UN General Assembly, UN Environmental Assembly). **These fora all have specific limitations and opportunities**, including effects that were perhaps not intended (such as e.g. interplay between International Law Commission and UN Environment Assembly resolutions). Resolutions are important also as they can justify work and data-gathering on these issues in the field.
- **Different regions** were highlighted during the discussions, including Mali, Iraq, Syria, Jordan, Afghanistan, Kosovo, DR Congo, which demonstrate the global nature of the issue. The importance of moving beyond classical cases and see risks in varying regions, including Latin America and Europe, was also highlighted.
- **Gender awareness and awareness about intersectional vulnerabilities in connection to water and security are critical**, particularly in connection to water and sanitation issues in fragile contexts.

Developing a corresponding “UN Security Council resolution 1325” for climate change and water could be a tool to this end. **Lessons from human rights institutions could be used to further environmental protection**, good governance of natural resources and compliance with environmental law. Equitable access as part of peace agreement provides one such solution, including through developing equity in international law. This also includes the work on the human right to water more broadly.

- **The focus on water in post-conflict should be rights-based and not need-based.**
- The human right to water could be integrated in improved **early warning systems in relation to water and security.**



Welcome and introduction

In his welcome note, **Ulf Maunsbach** (Head of the Law Department, Lund University) reflected upon the luxury afforded to him and people like himself in countries such as Sweden with unlimited resources of water. In order to improve access to water, he underlined that collaborations with people from academia, governmental agencies, UN organs, NGOs etc., such as those present at the Conference was critical.

Britta Sjöstedt (Lund University) and **Mara Tignino** (University of Geneva/ Geneva Water Hub) noted that the reflections on water in post-conflict situations began after a workshop in Geneva two years ago (14 June 2016, more information available here). Two aspects were highlighted, the impact of armed conflict on water but also the impact of the conflict on the environment more broadly. The role of the UN Security Council was underlined in this context.

François Münger (Director of the Geneva Water Hub) provided an overview of the work of the Geneva Water Hub, as well as the [recommendations of the Global High-Level Panel on Water and Peace](#).

The Panel was launched by 15 co-convening countries in November 2015. Following four main sessions of the panel (in Switzerland, Senegal, Costa Rica and Jordan, respectively), the recommendations from these sessions are included in the report “A Matter of Survival”.

Mr. Münger provided a brief summary of each chapter of the report. He noted that the document is specific in that not only transboundary conflicts are mentioned, but also inter-sectorial conflicts connected to water at the domestic level. In addition, although cooperation is critical for water management, existing financial instruments do not often support the risks and costs related to design of projects in transboundary waters.

It was noted that there is no dedicated global financial fund for such cooperation.

Session 1: Armed conflict and its Impacts on Water

The session was moderated by **Natasha Carmi** (Palestinian Negotiations Support Project), who introduced the topic by noting that action of the UN on these issues had been limited in the Middle East, and called for a more active role beyond condemnation and information gathering.

Charlie Iceland (World Resources Institute) presented on Water and Global Security and provided case studies on how water pressures have led to different types of conflicts. He noted that much of the world is experiencing high levels of water stress and that in highly industrialised areas, large quantities of water are being used to provide electricity. In addition, most climate change models agree that there will be areas in the world which will experience much less rainfall.

For instance, increasingly stressed water and productive land resources in the **Lake Chad** region have put a strain on livelihoods, triggered destabilizing migration, and made the area ripe for recruitment by terrorist groups such as Boko Haram. A key concern is that the natural resources in the area might not be able to accommodate the growing populations. Mr. Iceland underlined that he is not arguing that drought caused the conflict in Lake Chad region, but that it might have affected the timing and the severity.

As a second example, Mr. Iceland highlighted how **Syria's** food self-sufficiency policies led to a dramatic increase in food production beginning in the 1960s, but these policies were not sustainable, as they required more water than is available on an average annual basis. This led to dramatic over-exploitation of groundwater and falling groundwater tables. When Syria's worst drought in recorded history hit in 2006-2011, Syria was highly vulnerable and woefully unprepared. The result was the migration of up to 1.5 million farmers and their families from the countryside to Syrian cities. This was a destabilizing force which some argue contributed to the timing and severity of Syria's civil war, which began in 2011.

Regarding **Somalia**, Mr. Iceland noted that nearly 260,000 people died during the famine which hit Somalia from 2010 and 2012, and that Somalia is currently experiencing another drought.

The current crisis in **Cape Town** was presented as another example. Mr. Iceland remarked that this crisis is the result of a devastating three-year drought, poor water demand management, and lack of alternative sources of water supply (e.g. from aquifers or desalination plants).

Regarding **Ethiopia**, Mr. Iceland noted that the plans for the Grand Renaissance Dam have implications for Ethiopia's relations with neighbouring states such as Egypt.

Finally, Mr. Iceland noted that in 2016, attacks on water and power infrastructure throughout **Yemen** deprived nearly 20 million people of reliable access to clean water.

In summary, he noted that we know what types of interventions are needed for solving these problems: for example, developing robust data and information systems; a cap on water usage etc. However, implementation and capacity building is lacking.

Tobias Von Lossow (Clingendael - Netherlands Institute of International Relations) spoke on the topic of *The Control of Dams in Recent Armed Conflicts*. He noted that water resources and infrastructures have been used for attacks and military aims; these acts can be intended or unintended. "Weaponizing" water in various ways has therefore been an important tool in wars as well as post-conflict situations, especially in connection to the control of dams.

The militia repeatedly used the control of water infrastructure systematically in Syria and Iraq and incorporated this in its day-to-day operations. In April 2014, ISIS gained control over Mosul dam and thus managed to take control of Iraqi banks and certain institutions. ISIS hampered the parliamentary elections by dismembering two thirds of the voting machines available, as well as generally using its control over the dam to influence Iraq. In the course of the conflicts, Mr. von Lossow explained that all parties and groups involved have increasingly weaponized water in the last years.

It was noted that such post-conflict situations cannot simply be equated with an absence of conflict. Mr. von Lossow moreover noted that the differentiation between conflict and post-conflict settings does not matter for water infrastructures, and that dams should be better protected from invasion and attempts to gain control.

In terms of how the weaponizing of water can be better regulated as well as the potential role for the international community and the UN Security Council, Mr von Lossow offered three perspectives:

1. Firstly, Syria and Iraq clearly demonstrated the limits of international law in practice as well as highlighted classic challenges of international law relating to accountability and compliance. With the scale of explicit and systematic violation of principles and norms observed in the conflicts, the violation of international law became the rule rather than the exception. In Syria, weaponizing water was in the end a part of warfare which deliberately targeted civil populations.
2. Secondly, military interventions to regain the control of dams may have different mandates. It is necessary to ensure reparation of water infrastructure during armed conflicts (i.e. water ceasefire).
3. Finally, Mr. von Lossow noted that for post-conflict settings, a shift in perspective may be needed as post-conflict eras can equally be seen as interim periods or even pre-conflict situations.

Mark Zeitoun (University of East Anglia) presented his work in collaboration with the International Committee of the Red Cross (ICRC) on the topic of *The Impact of Armed Conflict on Urban Water Services*. As a first aspect of water services, he highlighted that water systems are not only infrastructure, but are also connected to humans and consumables (e.g. stores, treatment chemicals), and the engineers who design and maintain the systems. As a second basic issue, Mr. Zeitoun noted that these systems are interdependent – if there is no electricity, there is no light and no clean water. While generators can be put in place, damage to the electricity networks also means damage to the associated water systems.

Moreover, Mr. Zeitoun noted that there is a hierarchy of the different service components of the water system that are impacted by explosive weapons. For instance, if an impact takes place downstream, the damage is not as widespread as if the impact occurs upstream. The impact of the explosives and the knock-on consequences of the electricity systems and downstream causes all impact the water systems. When determining the spatial damage, this is thus not only the blast zone effected; in fact, the spatial effect could be hundreds of kilometres wide (e.g. if a water treatment plant is impacted). The duration of the impact is thus not only the milliseconds in which the explosion happens, but also the base-line resilience of the system.

In terms of the impact of protracted armed conflicts, the research of the ICRC and West Anglia University distinguished between 1) direct, 2) indirect and 3) cumulative impacts. The most prominent indirect impact is “brain drain” – i.e. that most of those who knew how to repair water systems have left the country or retired. When the indirect impact is accumulated over a longer period, the impact becomes even greater. Such a prolonged impact becomes a serious challenge for public health, and recovery may no longer be possible. In such a scenario, proactive planning also suffers. Mr. Zeitoun noted that more research was needed in connection to the discontent and social tensions in such situations.

Rather than speaking about the specific origins of post-conflict, Mr. Zeitoun noted that these contexts are characterized by constant insecurity and instability.

The implications of the research can be categorised in three categories:

1. Firstly, as regards international humanitarian law, the direct impacts of explosive weapons are ‘reasonably foreseeable’, both in space and in time. Engineers should play a role in the definition of proportionality assessments. In particular, their involvement would contribute to make more accurate assessments and prevent collateral damage to water and sanitation services. In addition, reverberating, indirect, and cumulative impact should be better documented and communicated – so that they become ‘reasonably foreseeable’.

2. Secondly, the technical capacity should be increased (in particular pertaining to programming for protracted conflicts).
3. Finally, conceptual work should be undertaken to re-work the relief-rehabilitation-development continuum.

Mamadou Diarafa Diallo (Mali's Country Representative, WaterAid), speaking about *Water and Armed conflict in Mali*, began by noting that the elections created a time of unrest. The breach of the social contract between the State and citizens was highly linked to the provision of basic services.

In the most affected areas in Mali, only 27% have access to clean water. Some of the responses to the conflict were inadequate, and unsustainable. Mr. Diallo also underlined that the conflict relates to controlling the water points since the armed groups are the ones who have control over the few valuable water points. He noted that people sometimes walk for ten kilometers to get drinking water, and even then have to wait in line between two to six hours. Internally displaced persons and repatriations placed additional stress on water systems in the urban and peri-urban areas.

If there is no stable government presence, the maintenance of the water points becomes challenging. The financing of useful operations is instead often undertaken by various non-governmental organizations. This implementation gap was made worse by a funding gap of 89 % of the Water, Sanitation and Hygiene (WASH) cluster in the country. In terms of the sector performance more broadly, Mr. Diallo noted that there are competing objectives between the humanitarian agenda and sustainable development agenda, e.g. relating to quick wins vs. longer term gains. He spoke to the importance of transforming this zero-sum competition.

Water is a right, and therefore the international community should see access to water as a right and not a privilege. He underlined that the supply and demand approaches of the cities and the governments is highly relevant in this context. Governments should provide water services (affordable, reliable and safe), protect from water-related disasters (conflict sensitive approaches) and preserve surface, ground and transboundary water resources (planning, monitoring and enforcement) to ensure sustainability. In the end, Mr. Diallo underlined that it is critical to not just provide water but to ensure that water systems remain strong.

Hassan Partow (UN Environment Programme) provided comments on the presentations and noted that the main impact of protracted conflicts on the water sector is a sharp erosion in governance; failure of the software rather than the hardware. Consequently, a key challenge in many post-conflict situations is that there is no custodian or referee for the sector. Citing experiences in DR Congo, he noted that while local self-help groups or associations assist in filling the gap in service provision, there is often limited oversight of water constructions nor quality control resulting in high breakdown rates (often more than half). Net result is rapidly growing sector informalisation.

“Government by NGO” is a recurring challenge in these contexts, as much of the work is carried outside regulatory purview, while government service provision and authority continue to decline. A growing data vacuum and difficulties in accessing information further complicates matters. There is an imbalance with many development partners focusing on infrastructure (treatment plants, wells). However, as the ‘day zero’ crisis in Cape Town illustrates infrastructure is of limited value there is no water. A growing number of countries are facing similar predicaments such as Iraq and Iran; although the authorities there are careful not to alarm their citizens. There is growing need to adopt broader ecosystem-based approaches promoting sustainable use of land and natural resources at landscape level (catchments) to help ensure water supplies. Co-management and participatory arrangements involving local stakeholders could help mitigate some of these challenges, as practically demonstrated by UNEP experiences in Afghanistan and Sudan.

In terms of how to bring these matters to the attention of the UN Security Council, Mr. Partow noted that countries where there are UN peacekeeping or political missions provide a good entry point as their

situation is subject to regular review. There are also opportunities to interact with UN political leadership at country level (i.e. office of the Special Representative of the Secretary General) who are increasingly more open to addressing environmental triggers and consequences of conflict – including in relation to water - as part of Mission mandate. Strengthening information analysis and early warning capacity of UN Missions to address water issues is another good way for highlighting their security impacts. Finally, he noted that a long-standing issue and hindrance in fully supporting sustainable water management is that financing streams in post-conflict countries are typically rigidly segregated into stabilization, humanitarian and development programming. Thereby, obstructing the adoption of longer-term approaches for water resources and infrastructure management.

In the discussion that followed, the rights-based approach as opposed to the need-based approach was highlighted, including in connection to the right to intervention by the international community. The right-based approach could support compliance and implementation of law, for example in ensuring access to justice for victims. Moreover, it was noted that specialized work is very useful in this context, and that setting standards and coordinating the protocols amongst themselves is helpful. It was also noted that the human rights framework provides guidance on what to do and how to do it, also in terms of sequencing.

In terms of the indirect effect of water conflicts, the limits to the approach of reasonable foreseeability, it was noted that the impact would determine if it is reasonably foreseeable. It was noted that the limits would change with every system, so for instance some parts of the critical infrastructure (water treatment plants etc.) are identifiable with current technology. With proportionality considerations, if the targeting does comply with the principles of international humanitarian law, those targeting can predict exactly how far the effects will be travelled, how many people will be affected by it and for how long.

Regarding the role of the UN, it was noted that the UN needs better documentation of cases, to improve learning from the best outcomes. A “water forum” could also be very useful to this end. The potential need of reform of the UN or if the Security Council needs to take a stronger stance was also highlighted, as well as analysing what other organisations could assist on water issues in post-conflict situations.

The example of Syria was also highlighted, as well as that of Ukraine, where political decisions had contributed to the political instrumentalisation and weaponization of water in a military sense.





Session 2: Searching for a Legal Framework for Protecting Water in Post-Conflict

Rosemary Rayfuse (Lund University/University of New South Wales) served as the moderator for the session, and highlighted the limits of international law. She also noted that issues of coordination had been a long-standing issue in this field, and that this session would focus in particular on the gaps of international law.

Karen Hulme (Essex University) spoke on the topic of *A Human Rights-based Approach to Address Water Issues in Post-Conflict*. Ms. Hulme noted that she would be addressing the questions in relating to access to water during the transitional phase and looking at how human rights (normatively and practically) function in this area.

Firstly, she noted that there is rarely a smooth transition from conflict to peace. It is clear in international law that human rights apply at all times, but it remains a question whether international environmental law applies throughout the different phases of the conflict lifecycle. The right to water is one of the most developed of all human rights in relation to armed conflicts, in particular due to the references provided by former Special Rapporteur on the human rights to safe drinking water and sanitation Ms. Catarina de Albuquerque. This right has been described as the obligation of a state to provide access to an essential level of safe, acceptable, physically accessible, and affordable water without discrimination.

There are numerous links between human rights and environmental dimensions, due to contamination of chemicals, for instance. Forests also need to be protected in order to preserve water, due to the complexities of the ecosystem. Climate change further exacerbates stresses on these ecosystems.

She underlined that the focus should be on human rights standards and that the key to using human rights is the mechanisms – domestic, regional and international for compliance and monitoring. The Universal Periodic Review of the Human Rights Council serves as a useful standard in this context.

Ms. Hulme highlighted a few problematic dimensions connected to the realization of the human right to water. Firstly, economic, social and cultural rights are progressive in their realization, in that states have a period of time in which they should meet their obligations. A second caveat for such rights is that they are to be implemented to the “maximum availability of their resources”, and in post-conflict times resources are highly scarce. As regards economic, social and cultural rights and minimum core obligations, it was noted that states have immediate obligations in spite of the above, and should provide physically accessible and drinkable water. Special attention should be given to women, children, refugees and other vulnerable groups.

Ms. Hulme noted that states are required to explain what they are doing to implement their human rights obligations, including in post-conflict situations. Such obligations also pertain to planning and introducing re-construction activities.

There are three dimensions to human rights: respect, protect and fulfil. The state should avoid further pollution, it must protect against third parties (i.e. third party destroying resources, e.g. polluting companies), and it must take immediate measures to protect against diseases by cleaning contaminated water sources and contaminated areas and repair and rebuild facilities.

Clean-up operations was underlined as an important aspect; the minimum core obligations could be used to help states to prioritize among remediation and recovery programmes, as well as to leverage international assistance to help the state to meet its human rights obligations.

Local solutions should not be forgotten, and the UN Security Council could be helpful here in prioritizing agendas to that end. Common causes of conflict, in addition to poverty, gross disparities in wealth and resources of populations within a state, and unbalanced development policies, are factors of competition for land and water resources, desertification, and environmental degradation. This is a key area where the UN Security Council can assist to set the agenda for peacebuilding mechanisms and transitional justice.

Finally, Ms. Hulme noted that there are numerous linkages with the right to environment – food, life and livelihoods are only a few examples.

Doug Weir (Toxic Remnants of War Project (TRWN)/The Conflict and Environment Observatory) presented on the topic of Initiatives within the UN system to Increase Environmental Security in relation to Armed Conflict. His presentation centered around considerations for pursuing legal and political initiatives at the UN.

The Observatory and previously the TRWN has worked at a number of UN fora on depleted uranium weapons, toxic remnants of war, and on the protection of the environment in relation to armed conflicts. He noted that their advocacy work is informed by the field of humanitarian disarmament, which in turn is based on promoting human security needs.

Mr. Weir highlighted the following key points as relevant when promoting an initiative on water security within the UN system.

- Who are your partners from academia, NGOs, think-tanks, international organisations and states? Are your objectives the same or do they just overlap?
- As there is no designated UN forum for debating and addressing environmental security topics, what are the limitations of the forum you have chosen?
- You need to fully understand the internal process of each forum and the roles of the different actors within it to identify opportunities to steer initiatives.
- Do you have the capacity to influence states on both the national level and at international fora?
- What exactly will your initiative achieve in terms of positive change on the ground; who will implement it; and who will monitor its implementation?
- How does your initiative relate to or complement other ongoing environmental security initiatives?
- How quickly can your advocacy work respond to unexpected developments?

Mr. Weir noted that the lack of expert knowledge on water and security topics among diplomats has a range of implications, some positive, some negative. For instance, while the organization may try to promote discrete environmental security topics, national interests and positions often make it hard to deal with particular themes in isolation. He also noted that many states hold, or are increasingly developing, divergent views on what constitutes environmental security, and its relevance as a topic within particular UN fora.

In terms of the P5's interventions in the 2016 UN Security Council debate on water, peace and security, Mr Weir noted that the debate on climate security could be a useful analogue for informing future strategies

on water at the UN Security Council. That said, he warned of the danger of advocating for duplication in UN level mechanisms intended to address the environmental dimensions of armed conflicts.

In closing, Mr. Weir noted that advocacy is most effective when it is data driven and undertaken in partnership with a diverse group of stakeholders, including states, international organizations and civil society. He also noted that the barriers to promoting environmental security topics at the UN Security Council are both institutional and geopolitical, and that the breadth of the environmental security landscape and the diversity of current legal, political and policy initiatives risks duplication without more effective coordination.

The commentator **Marie Jacobsson** (Swedish Ministry of Foreign Affairs) noted that there is a very strong gender aspect in the protection of water in post-conflict situations. At the same time, there is a lack of female participation and this is a big challenge to the international community.

The starting point is that in a post-war situation, we have the law of peace and not international humanitarian law. The gaps in the normative framework are largely gender-based and procedural.

The Swedish International Development Agency (SIDA) has [noted that when it comes to women and water supplies, women take a central role in provision and especially girls spend more time acquiring water than anyone else in the family](#). It becomes particularly important when it comes to sanitation facilities since if women and girls are not safe, this insecurity could influence society and become a broader safety issue. The gender dimension is nonetheless very much missing when addressing water in post-conflict situations.

A 2001 report regarding the [Responsibility to Protect](#) serves as an illustrative example, where the idea of going into an area with the main aim of helping women is seen as absurd or even inadequate as a reason.

Ms. Jacobsson also underlined the [2017 UN Security Council resolution on the Lake Chad Basin](#) as an important reference point.

The combination of the unwillingness of the UN Security Council as well as the unwillingness of addressing the lack of consideration of gendered aspects highlight the problem at hand. Ms. Jacobsson proposed going back to human rights and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), under which states have an obligation to recognize women's status without any type of discrimination. This in turn imposes an obligation on states to ensure women's participation.

The discussion that followed focused on issues such as the effectiveness of the UN Security Council as well as activities on the ground, where it was noted that coordination would be important. The idea to have a standing body to address the impact of water in conflict was highlighted, as well as. It was also noted that in order for an issue to be brought in on the agenda of the UN Security Council, a threat to peace and security is required, which sets the bar very high. Thus, expectations should be managed accordingly.

Human rights law as a tool to bring different actors together, promote better alignments and coordination between actors inside the country was highlighted, while noting that in certain situations, the state is non-existent. The importance of addressing gender through water issues in post-conflict situations was also underlined.



Session 3: Water Protection and Management in Peace Processes and Peacekeeping Operations

Karin Aggestam (Lund University) served as moderator of the session.

Daniëlla Dam-de Jong, (Leiden University) spoke on the topic of *Governance of Natural Resources in Peace Agreements*. She started by noting that by peace agreements she referenced contracts which end conflicts. Peace agreements are needed to govern post-conflict situations in relation to resource management. Her remarks also specifically focused on internal peace agreements (i.e. those occurring after internal armed conflicts).

The presentation was structured in three parts: 1) particularities of peace agreement, 2) natural resource agreements, and 3) the normative environment in which natural resource agreements interact with international law.

It was noted that intra-state peace agreements are not always subject to international law, in particular treaty law and that international courts and tribunals have stated that these peace agreements may sometimes overwrite international law.

Ms. Dam-de Jong underlined that peace agreements are rarely contained in one document, and that they are fragile when it comes to internal armed conflict. About half of these agreements break down in under five years. Since the final agreement depends on the parties negotiating the text, it is important to see whether all those involved in the conflict are also included in the negotiations of the peace agreement.

Ms. Dam-de Jong distinguished between three categories of resource agreements – renewable resources (water), non-renewable resources (e.g. extractives), and land.

The way in which these natural resources are addressed depends on a number of factors, such as:

- The **nature of the armed conflict**: 1) unified state: national reconciliation; 2) secession/autonomy for minorities; 3) indigenous peoples
- The **role that natural resources played in the conflict**: 1) grievances over access or benefit-sharing as root cause of the armed conflict; 2) role of natural resources in perpetuating the armed conflict (parallel economy); 3) damage to natural resources as a result of the hostilities
- And finally, **the type of natural resource involved**: water has, for example, a very different role in the conflict dynamics than diamonds, while these natural resources also have different functions in peacebuilding.

As a result of these factors, natural resources in peace agreements are addressed from several perspectives: sometimes as a development or humanitarian issue (related to the task of the government to provide basic services to the population as well as its human rights obligations); as an environmental issue (restoration of degraded natural resources or conservation of natural resources); sometimes also as a confidence-building issue aimed at bringing together former belligerents through cooperation; or more generally as a power-sharing issue, which may lead to wealth-sharing arrangements and/or autonomy arrangements. Lastly, natural resources may also be addressed as a security issue, most notably when they have contributed to the financing of the armed conflict, or as part of disarmament, demobilization and reintegration programmes, where the reintegration of former combatants includes projects aimed at restoring vital infrastructure, such as water systems.

Based on these categorizations, Ms. Dam-de Jong noted that it is clear that natural resource arrangements in peace agreements interact with several branches of international law, including international human rights law, international environmental law and international law relating to the maintenance of international peace and security. Peace agreements do not operate in a vacuum, but are part of a broader regulatory environment which delineates the governance of natural resources at the domestic level. This interaction can in turn result in stronger frameworks for governments in post-conflict situations.

For the purpose of post-conflict natural resource governance, Ms. Dam-de Jong outlined two ways in which peace agreements and international law interact:

1. international law provides a framework for the design and implementation of natural resource arrangements within the peace agreement.
2. the peace agreement can also shape and develop international law, most notably by giving substance to open-ended norms and principles in international law.

In closing, Ms. Dam-de Jong noted that peace agreements can shape international law by giving substance to norms of international law. One example is that many peace agreements contain open-ended agreements (cf. e.g. the 2011 Doha Document for Peace in Darfur, including provisions on “equitable” access to resources).

Florian Krampe (Stockholm International Peace Research Institute) spoke about the topic of *Water for Peace – Dealing with Competing Interests*. For socially and politically resilient peace; Mr. Krampe noted that infrastructure is an arena where a lot of different interests and actors come together. However, when looking at international peace-building resolutions, this subject rarely arises during the negotiations.

Kosovo, East Timor and Afghanistan were used as the focus of Mr. Krampe’s study. In **Kosovo**, Mr. Krampe noted that there were different interests within the UN mandate. Moreover, the water resource management was expert driven, with the assumption that no or limited expertise was available in the local communities.

While United Nations Mission in Kosovo (UNMIK) had to deal with utilities, the World Bank focused on structural adjustment. The restructuring was done into seven different water facilities, which were separated along ethnic lines. Mr. Krampe noted that water is both a technical and complex problem, which requires support from both political scientists as well as water engineers.

When conflict arose in relation to water management, the UN went in and solved the issue in a pragmatic way – by paying the bill. There was no attempt in solving the conflict by forcing cooperation. There was no violence around the governance of water issue, and Mr. Krampe noted that the UN prevented violence through this act.

In **East Timor**, the UN took over a newly formed state, which was a giant issue since the organization was in charge of running utilities as well as keeping the peace. The UN mission brought water and distributed it to remote areas of the country by helicopter bringing because there was no other way of producing water.

Again, the issue of intersectionality in relation to water issues was underlined; for instance, water had to be pumped which was relied on electricity.

The focus on the peace-keeping force to supply water was highlighted as one of the key challenges. Here, different actors came in to work on water delivering. Diesel-powered pumps were selected as a quick fix, whereas coordination would have been a better main focus point. While the installation of water pumps throughout the country was undertaken by NGOs, later the population demanded fuel for the pumps from the UN mission. Thus, while the UN mission did not install or support the installation of the pumps, they nonetheless had to deal with the long-term repercussions.

In **Afghanistan**, Mr. Krampe noted that water management within the UN was given a low priority; it was only by 2007/2008 that Afghanistan moved towards establishing a new water law. This process was externally driven, which was also seen as a problematic way of identifying and addressing the problems relating to water security.

Mr. Krampe underscored that the international community must find sound ways of dealing with specific issues and cultural “aspects” in conflicts and post-conflict situations. For instance, it should be analyzed how attitudes of communities are affected by new management of water systems.

In conclusion, water management in post-conflict situations is very complex and demands more coordination. Mr. Krampe called for stronger central UN leadership, particularly as regards to the peace-keeping response.

Vally Kobi (Swiss Federal Institute of Technology (ETH, Zurich)/ University of Bern) started her presentation on *The Nexus between Climate Change, Migration and Security and its Implications for Access to Clean Water* by noting that politicians and media are increasingly interested in the relationship between migration and environmental issues. In most cases, we generalize from one case (Syria or Egypt were suggested as examples). Through their research, Ms. Kobi and her colleagues want to disentangle this issue and mitigate misunderstandings. For instance, she noted that environmental damage will not affect everyone equally, and that not all types of environmental changes are able to oppose deprivation or grievances in individuals.

Ms. Kobi argued that individual-level conflict perceptions depend on the type of climatic event experienced by migrants. Sudden, short-term climate incidents, such as severe storms or floods, usually affect most individuals equally and people are exposed to these events only for a short period. Hence, the likelihood to develop relative deprivation and grievances that will lead to an increased conflict perception is low. In contrast, gradual, long-term climate events, such as droughts, by fostering relative deprivations due to differences in adaptive capacities and a longer period of exposure, induce heightened grievances and migrants are likely to perceive conflict at their new locations. This hypothesis had been tested through empirical analysis relying on individual-level survey data from five developing countries strongly, which supports Ms. Kobi’s argument.

In addition, perceptions of the local population could reinforce this pattern at least due to two reasons. First, people in receiving areas may perceive migrants of sudden events as being more legitimate than migrants of gradual events, since the former are seen as having no other option than to flee and are expected to return to their homes once the effect of the particular event abates. Second, migrants of long-term events are more likely to being perceived as competitors for jobs and public goods (e.g., water, public infrastructure, education, health) since they are not expected to return to their original location and hence are more likely to try to find a job and consume public goods. Such socio-economic environments, where locals compete with migrants for those public goods and migrants feel marginalized, could shape both natives’ and migrants’ conflict perceptions and, hence, provide a fertile ground for political violence.

Ms. Kobi noted that water scarcity does not automatically lead to conflict, but that the quantity, quality and access to water is key in this context. She noted that one challenge is that most of the countries discussed during the workshop lack adequate policies to deal with water and security issues. Instead,

politicians tend to use water as a political tool in order to gain votes. Unequal water access which leaves marginalized groups in the sidelines is the main issue at stake.

Annica Waleij (Swedish Defence Research Agency) served as a commentator and noted that there are only five UN peace-keeping missions which have the mandate to look into natural resources in relation to post-conflict situations. She noted that these missions should consider and manage the environmental impacts of their work. She underlined that the legal language of “what to do” must be translated into “how to do” it.

Ms. Waleij noted that the UN peace-keeping missions constitute over 50% of the whole of the carbon footprint of the UN. A lot of solid waste being produced, as seen in for example in Haiti. Moreover, the persons in the UN missions are not always adequately trained and those who are, are often not able to convert their training into practice. Ms. Waleij noted that the reformation of the UN system is central and called for a more pragmatic agenda by the UN. Private-public partnerships were highlighted as useful tools in this respect.

In the discussion that followed, the fragmentation of the water sector inside the UN was underlined; e.g. the fragmentation of the division between the peace agenda and the development agenda.

It was also noted that water is too important to delegate only to the technical expertise of engineers. The challenge with a lack of local level analysis and problems of water relating to culture and social structures was also underlined. When many different actors are working on the same issues, overlaps and duplication of efforts may occur. Coordination is needed to move beyond the starting point of the rights-based approach and to actualize concrete solutions.

In addition, it was noted that water management is also about conflict management, as even in times of peace, unsustainable water management can contribute to conflict. It was also underlined that water management does not take place in governance vacuums, and that solutions should take into account existing structures. In terms of structures already in place during post-conflict situations, it was also noted that the way governments deal with natural resources may not be through environmental perspectives or structures.

In relation to coordination, it was noted that the real barrier is caused by the funding streamlines because this is what dictates what happens on the ground. Funding is coming through stabilization, which is a firewall from a system that is managed by the UN.



Panel discussion: Water in Peacebuilding Activities: Transforming Water from A Strategy of War to an Asset for Peace

Cecilia Chatterjee-Martinsen (WaterAid) moderated the panel, which consisted of **Catarina de Albuquerque** (Sanitation and Water for All); **Daniëlla Dam-de Jong** (Leiden University); **David Michel** (Stockholm International Water Institute); **François Münger** (Geneva Water Hub); **Lisa Svensson** (UN Environment) and **Mark Zeitoun** (University of East Anglia).

Mark Zeitoun began by noting that water can be used as a weapon and that it has a great impact on war and conflict situations. He also highlighted the significance of reverberating impacts after the direct impact, for instance the impact on civilian's health due to lack of water and/or unhealthy water. Finally, and even more problematic than explosive weapons are the repeated damages and downgrading that happens when water is affected during times of conflict.

Regarding the responsibility of the provision on protection and preservation on water and the legal frameworks to ensure that water is actually provided, protected and preserved, **Daniëlla Dam-de Jong** noted that many agreements are between states, but most problems are between local communities within the states.

Catarina de Albuquerque noted that human rights law provides rules on how to make sure that we get our "how:s" in order. Proper implementation of human rights can serve to mitigate the rise and impact of armed conflicts. For instance, everyone is entitled to access to water, of good quality and affordable. She also noted that this is an obligation of means, requiring participation, accountability mechanisms, and ensuring that we do not have inequalities and discrimination. Moreover, she noted that the human rights framework provides an early-warning mechanisms, e.g. if human rights are threatened or violated in a given country.

In terms of main obstacles when dealing with water issues in peace-building and promoting peace, **Lisa Svensson** highlighted that clean water should not be taken for granted and that broader natural resource management, with an ecosystems-based approach, was important. She also noted that when allocating economic value to water, the interest in these issues increased.

Catarina de Albuquerque underscored that a key obstacle was governments who do not comply with their human rights obligations. If people feel excluded or do not have access to meaningful participation, this is likely to trigger grievances and tensions. **François Münger** similarly highlighted the importance of rebuilding of local construction in conflict-affected areas.

A number of questions were received from the floor, e.g. relating to the Grand Renaissance Dam in Ethiopia and water infrastructure in Colombia, where cleaning up the river banks has been a part of the reconciliation process more than enhancing water access. The potential role of the 2008 International Law Commission's Draft Articles on the Law of Transboundary Aquifers was also discussed, as well as the right to water.

It was noted that the UN Security Council should address the ways in which water is vital for peace and security, and that reconstruction of water systems is not just about infrastructure. In terms of solutions, it was proposed that the UN Security Council should analyze the possibility of a global UN-based early warning mechanism that would also use human rights indicators.

On the other hand, it was also noted that small-scale solutions can be better suited to eliminate inequalities. In terms of thing to do differently or more of to accomplish change, using an eco-system based approach and small-scale solutions were highlighted, focusing more on the gender dynamics of water security through research and practice, as well as allocating more funds and considering reconstruction needs. New mechanisms to induce cooperation were also proposed.



Next steps

Britta Sjöstedt (Lund University) and **Mara Tignino** (University of Geneva/ Geneva Water Hub) concluded the Panel discussion presenting the next steps.

Ms. Tignino noted that the Geneva Water Hub acting as the Secretariat of the Global High-Level Panel on Water and Peace is in charge of the follow-up of its recommendations. One of the recommendations of the Panel suggests the establishment of a List of essential water infrastructure to be protected during armed conflicts. The University of Geneva/Geneva Water Hub together with Lund University, Duke University and New Hampshire University started a cooperation to study the opportunity of such a List. It is expected that this consortium will federate and mobilize the capacities of other universities and research institutes. The research conducted will also count on the inputs provided by governmental and non-governmental organizations such as UN Environment and the International Committee of the Red Cross. A cooperation with the International Law Commission is also envisaged in regard to the topic of the « Protection of the Environment in relation to Armed Conflicts ». The project also aims at creating a Coalition for the Implementation of International Humanitarian Law on the Protection of Water During and After Armed Conflicts. This Coalition aims at the enhancement of the respect of international humanitarian law and other relevant principles and rules of human rights law, international environmental law and international water law.

Ms. Tignino also pointed out that an High-Level Session “Blue Peace. From Recommendations to Action” will be held on the 19th of March 2018 at the World Water Forum in Brasilia. The Session will focus on the linkages between water, peace and security and the ways to strengthen transboundary water cooperation. The topic of data sharing and the role of youth in water management will also be addressed. Ms. Tignino noted that the results of the Expert’s Workshop in Lund will contribute to the reflection on the protection of water infrastructure during and after armed conflicts which will be carried out in Brasilia.

Ms. Sjöstedt indicated that a follow-up initiative to the Workshop will be the publication of a special issue of the Review of Environmental and Community International Environmental Law (RECIEL). This special issue will be based on the presentations made and discussions during the Expert’s Workshop.

The follow-up to the workshop is also developed in the context of the related work of actors such as the UN Security Council. The Council is continuously addressing climate change and security issues, e.g.

through its resolutions on Lake Chad and Somalia, and through a dedicated briefing event on World Water Day (22 March) 2018.



Annexe 1 – Programme

Day I

15.00 - **Registration and coffee**

15.15 - **Welcome note** – Ulf Maunsbach, Head of department, Faculty of Law, Lund University

15.30 - **Scope of the Workshop** - Britta Sjöstedt, Lund University; and Mara Tignino, University of Geneva/Geneva Water Hub

15.45 - **The Recommendations of the Global High-Level Panel on Water and Peace** - François Münger, Geneva Water Hub

16.00 – Session 1: Armed conflict and its Impacts on Water

Moderator: Natasha Carmi, Palestinian Negotiations Support Project

Speakers:

The Control of Dams in Recent Armed Conflicts - Tobias von Lossow, Clingendael - Netherlands Institute of International Relations

The Impact of Armed Conflict on Urban Water Services - Mark Zeitoun, University of East Anglia

Water and Armed conflict in Mali - Mamadou Diarafa Diallo, Mali's Country Representative, WaterAid

Commentators: Evaristo de Pinho Oliveira, International Committee of the Red Cross; and Hassan Partow, UN Environment

Session objectives:

1. Address the attacks and control of water installations as a war strategy;
2. Assessing damage to urban water services as a consequence of protracted armed conflicts and the impact on availability of water;
3. How military operations against electrical facilities and wastewater treatment plants affect access to water? How to increase their protection
4. and rehabilitation during and after an armed conflict? How to strengthen their resilience?
5. Discuss water pollution and ways to rehabilitate natural ecosystems.

17.15 - **Discussion**

17.30 – **Break**

17.45 – Session 2: Searching for a Legal Framework for Protecting Water in Post-Conflict

Moderator: Rosemary Rayfuse, Lund University/University of New South Wales

Speakers:

A Human Rights-based Approach to Address Water Issues in Post-Conflict - Karen Hulme, Essex University

Environmental Justice in Post-Conflict - Phoebe Okowa, Queen Mary University of London

Initiatives within the UN system to Increase Environmental Security in relation to Armed Conflict – Doug Weir, Toxic Remnants of War Project

Commentator: Marie Jacobsson, Swedish Ministry of Foreign Affairs

Session objectives:

1. How is access to water protected under international law during the transition from armed conflict to peace?
2. Clarify the interplay between different areas of international law, i.e. international humanitarian law, human rights law, international environmental law and the UN Charter;
3. Identify gaps in the normative framework on post-conflict legal regime;
4. Assess the means for the Security Council to address lack of access to water as matter for international peace and security.

18.45 - **Discussion**

19.00 - **End of Day I**

19.30 - **Dinner (Pelarsalen, Main University Building)**

DAY II

9.00 – **Coffee**

9.15 – **Session 3: Water Protection and Management in Peace Processes and Peacekeeping Operations**

Moderator: Karin Aggestam, Lund University

Speakers:

Governance of Natural Resources in Peace Agreements - Daniëlla Dam-de Jong, Leiden University

Water for Peace – Dealing with Competing Interests - Florian Krampe, Stockholm International Peace Research Institute

The Nexus between Climate Change, Migration and Security and its Implications for Access to Clean Water - Vally Kobi, Swiss Federal Institute of Technology (ETH, Zurich) and University of Berne

Commentators: Annica Waleij, Swedish Defence Research Agency; and Kitty van der Heijden, World Resources Institute

Session objectives:

1. Discuss the management and protection of water in peacekeeping operations and identify the main challenges;
2. Analyse the status of water in peace agreements;
3. Examine the linkages between water and migration and the challenges it may involve;
4. Discuss the role of water diplomacy to overcome disputes.

10.30 - **Discussion**

11.00 – **Panel discussion: Water in Peacebuilding Activities: Transforming Water from A Strategy of War to an Asset for Peace**

Moderator: **Cecilia Chatterjee-Martinsen**, WaterAid

Panellists:

Catarina de Albuquerque, Sanitation and Water for All

Daniëlla Dam-de Jong, Leiden University

David Michel, Stockholm International Water Institute

François Münger, Geneva Water Hub

Lisa Svensson, UN Environment

Mark Zeitoun, University of East Anglia

12.30 Wrap-up: **Britta Sjöstedt**, Lund University; and **Mara Tignino**, University of Geneva/Geneva Water Hub

13.00 **Reception and light lunch**

Annexe 2 – Extracts from the Report “A Matter of Survival” of the Global High-Level Panel on Water and Peace, 2017

Chapter 2: Into the Abyss: Water in Armed Conflicts, Recommendations, p. 31.

Within its efforts to strengthen the protection of civilians in armed conflicts, the UN Security Council should adopt a resolution that will reflect the experiences of protecting water resources and infrastructure in armed conflicts and guide the Council’s decision making relating to specific situations on its agenda. The Panel believes that the resolution could include a number of elements stemming from existing experience. The Security Council should:

- Recognize water as “a vital asset of humankind” and emphasize that the protection of water resources and installations constitutes a vital element of protection of civilians in armed conflicts – therefore water must not be affected by armed attack or used as a weapon of war;
- Strengthen the respect for and implementation of International Humanitarian Law (IHL) and clarify that IHL principles, such as the principles of distinction and proportionality must be applied both in international and in non-international armed conflicts;
- Encourage “water supply cease res” during armed conflicts and the inclusion of water issues and water cooperation in peace agreements;
- Insist on restraint with respect to the environment during armed conflicts and encourage provisions on environmental protection in cease res and peace agreements;
- Provide a platform for support to humanitarian organizations in their work before, during and after armed conflicts;
- Encourage the quick deployment of military water specialists in peace operations to rehabilitate and rebuild water supply systems;
- Guide the formulation and implementation of mandates of the UN peace operations as well as post-conflict peace building activities that will include the protection of water resources and installations;
- Serve as an inspiration to other UN bodies, as well as to UN Member States and other international actors.

States and the relevant international organizations and UN bodies, including the Security Council’s Counterterrorism Committee, should study the trends in the development of technologies for protecting water infrastructure and stimulate international cooperation for their effective use in situations of armed conflicts. States should be encouraged to develop appropriate legislative frameworks for the protection of transboundary water infrastructures against terrorist acts.

States and the international community as a whole should support non-governmental organizations engaging with non-state actors seeking their full respect of IHL, such as Geneva Call, an NGO which reaches out to non-state actors through the “Deeds of Commitment” in the effort to strengthen their respect for IHL in general and protection of water resources in particular.

Further consideration should be given to proposals to establish:

- An independent international body mandated to gather information about the destruction and cuts to water supplies as well as to foster technical assistance during protracted armed conflicts;
- A mechanism to monitor compliance with IHL and reparations to victims of violations;
- Improved cooperation among the relevant international organizations and agencies to manage post- conflict environmental assessments and remedial measures;

- A rapid reaction water engineering military capacity to restore basic water and sanitation services for civilian populations and, in particular, for sensitive sites such as hospitals and refugee camps.