

DIRECTORATE-GENERAL FOR EXTERNAL POLICIES  
POLICY DEPARTMENT



**Conflict  
and cooperation  
over water-  
The role of the EU in  
ensuring the realisation  
of human rights**

DROI



## STUDY

# Conflict and cooperation over water - The role of the EU in ensuring the realisation of human rights

### ABSTRACT

The human right to water has been firmly established and its implications for policy-making have been discussed in many fields. Thus far, this has hardly been the case for conflicts over water. This study discusses what it means to integrate human rights in the context of governing water and addressing conflicts over water. A human rights perspective on conflicts over water will help formulating equitable water governance strategies. To support such developments, the EU should integrate human rights in policies and other measures to address water conflicts at all levels. The EU's activities should be guided by the human rights principles of non-discrimination and equality; participation and access to information; accountability and access to justice; and a priority for water uses as far as they are necessary for the realisation of human rights. This relates to internal legislation and policies, development cooperation, engagement in transboundary basins, political dialogues with partner countries, international fora such as the UN Human Rights Council, and the negotiations on the post-2015 development agenda. The European Parliament, specifically, should support such initiatives with resolutions, engagement in UN and inter-parliamentary fora, and enhancement of public awareness.

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# Table of contents

Abbreviations	5
Executive summary	7
1 Introduction	11
1.1 Objective	11
1.2 Scope and focus	11
1.3 Approach, methodology and outline	12
2 Overview of human rights law applicable to water conflicts	13
2.1 The human right to water	13
2.2 Other relevant human rights	13
2.3 Human rights principles	14
2.4 The transboundary dimension of human rights	14
3 Understanding conflicts over water	16
3.1 Increasing competition over water	16
3.2 Typologies of conflicts over water	17
3.2.1 Level of conflict	17
3.2.2 Scale of conflict	18
3.2.3 Basis of conflict	19
3.2.4 Actors involved in the conflict	19
3.2.5 Impact of conflict	20
3.2.6 Focus of this study	20
3.3 Drivers of conflict	20
3.4 A question of governance	22
4 Impact on the realisation of human rights	23
4.1 Illustrative examples of conflicts and their impact of human rights	23
4.1.1 Conflicts between different sectors neglecting basic human needs	23
4.1.2 Inequalities in the context of household use	23
4.1.3 Conflicts affecting the livelihoods of small-scale farmers and communities	24
4.1.4 Conflicts over contamination and disproportionate affects on disadvantaged communities	25
4.1.5 Gender inequalities	25
4.1.6 Lack of participation in decision-making	25
4.2 Risk of human rights violations	26
4.3 Transboundary water conflicts and human rights	27
5 Overview of applicable international and regional law and its reflection of human rights	28
5.1 International and regional water law	28

5.2	Humanitarian law	30
5.3	EU law	30
6	Current policy initiatives at the international and EU level and their impact	31
6.1	Initiatives at the international level	31
6.1.1	Initiatives in the context of human rights	31
6.1.2	Other initiatives	31
6.2	Initiatives at the EU level	32
6.2.1	Human rights	33
6.2.2	Development	33
6.2.3	Foreign affairs and water diplomacy	34
6.2.4	Humanitarian aid	34
6.2.5	Environment	35
6.3	Impact of these initiatives and the integration of human rights	35
7	Implications of Human Rights for addressing conflicts over water	37
7.1	Prioritise basic human requirements	37
7.2	Ensure non-discrimination and equality	37
7.3	Devise adequate legal frameworks, policies and regulation in line with human rights	38
7.4	Responsibilities of companies	38
7.5	Enable participation	38
7.6	Human rights impact assessments	39
7.7	Accountability and access to justice	39
8	Policy recommendations for the EU and the European Parliament	40
8.1	Recommendations for EU-internal processes	40
8.2	Recommendations for engagement with partner countries	40
8.3	Recommendations for engagement in international fora	41
8.4	Specific recommendations for the European Parliament	41
	Bibliography	42

## Abbreviations

BAR	Basins at risk
CERD	Committee on the Elimination of Racial Discrimination
CESCR	Committee on Economic, Social and Cultural Rights
CFS	UN Committee on World Food Security
DG DEVCO	Directorate-General for International Cooperation and Development
DG	Directorate-General
DG ECHO	Directorate-General for Humanitarian Aid and Civil Protection
EEAS	European External Action Service
et seqq.	et sequentia
EUWI	EU Water Initiative
GAP	Guneydogu Anadolu Projesi (Southeast-Anatolia-Project)
GIZ	Gesellschaft für Internationale Zusammenarbeit
GWP	Global Water Partnership
HLPE	High Level Panel of Experts (of the Committee on World Food Security)
HRC	Human Rights Council
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
IE WatSan	United Nations Independent Expert on the issue of human rights obligations related to access to safe drinking water and sanitation
ILA	International Law Association
ILC	International Law Commission
IWRM	Integrated Water Resources Management
MRWO	Michigan Welfare Rights Organization
NBI	Nile Basin Initiative
OHCHR	Office of the High Commissioner for Human Rights
Para.	Paragraph
PCCP	Potential Conflict to Co-operation Potential
SR Indigenous	United Nations Special Rapporteur on the rights of indigenous peoples
SR WatSan	United Nations Special Rapporteur on the human right to safe drinking water and sanitation
UN	United Nations
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme

Unesco	United Nations Educational, Scientific and Cultural Organization
UNGA	United Nation General Assembly
USAID	U.S. Agency for International Development
WFD	Water Framework Directive
EDF	European Development Fund
WGF	Water Governance Facility
WWAP	World Water Assessment Programme

## Executive summary

The objective of this study is to discuss the role of human rights in the context of conflicts over water. It is intended to support the debate on the topic in the Subcommittee on Human Rights, and it lists policy options for the European Union, and in particular the European Parliament with a view to strengthening the integration of human rights in policy responses and other measures adopted to address conflicts over water.

The human right to water has been firmly established and its implications for policy-making have been discussed in many fields. Thus far, this has hardly been the case for conflicts over water, and the study seeks to address this gap by discussing the human rights implications in that context. A human rights perspective on conflicts over water will help in the formulation of equitable water governance strategies. It can help avoid basic human needs losing out to more powerfully voiced claims in the allocation of resources by prioritising the most basic requirements, focusing on the rights of the most disadvantaged and marginalised individuals and groups, calling for active, free, meaningful, and inclusive participation, and ensuring accountability and access to justice.

Following the introduction, the study starts with an overview of human rights law applicable to water conflicts (section 2). Against that background, the study seeks to convey an understanding of conflicts over water using various typologies and examining the drivers of conflict (section 3) before analysing the impact on the realisation of human rights and determining a number of factors that lead to a risk of human rights violations (section 4). Addressing such (potential) human rights violations will largely depend on integrating human rights in other fields of legislation and policy. The study therefore turns to an analysis of other bodies of law, namely international and regional water law, humanitarian law and EU law and its reflection of human rights (section 5) as well as a discussion of current policy initiatives at the international and EU level and the extent to which human rights are integrated in these initiatives (section 6). Based on the gaps identified, the study discusses the implications of human rights in the context of conflicts over water (section 7) before concluding with policy recommendations for the EU and the European Parliament in particular in internal processes, engagement with partner countries, and engagement in international fora (section 8).

### **Overview of human rights law applicable to water conflicts**

Recent developments in international human rights law leave no doubt that the human right to water is guaranteed under international law. At the political level, resolutions by the UN General Assembly and the UN Human Rights Council affirmed the interpretation of the human right to water as an implicit component of the human right to an adequate standard of living.

Apart from the human right to water, many other human rights depend on water in their realisation. The right to food cannot be realised without water. Likewise, water quality and quantity are intimately linked to the enjoyment of the right to health, with poor quality water among the main causes of disease. Moreover, the right to work of many individuals is dependent on economic development, which in turn requires water, whether for small-scale livelihood activities or large-scale economic development. Water is used for hydro-power generation which also shows linkages to the human right to an adequate standard of living which arguably includes access to energy services. Religious and cultural practices, including of indigenous peoples, that require access to water, are also protected by human rights. Finally, environmental processes require water, and the right to a healthy environment is recognised in a range of regional and national human rights instruments. Establishing these linkages, however, does not imply that all water used for these purposes is necessary for the realisation of human rights. For instance, not all water used in agriculture is directed to the realisation of the human right to food. Water-intensive production of some agricultural crops, for instance, does not contribute to the realisation of the right to food or goes beyond its requirements.



At least as important as human rights standards are the human rights principles of non-discrimination and equality; participation; transparency and access to information; and accountability and access to justice.

Human rights also have an extraterritorial dimension, which implies that states have human rights obligations toward residents in other countries. The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights adopted in 2011 provide important guidance. When applying these principles to the context of transboundary waters, they imply that states, at the very least, must not violate the human rights of residents in neighbouring countries, for instance through using water in such quantities that the rights of residents in downstream countries could no longer be met, or polluting waters in a way that puts the rights of people in downstream countries at risk.

### **Understanding conflicts over water**

Against this background, the study seeks to contribute to a better understanding of conflicts over water and their drivers. Water is perceived as an increasingly scarce resource. Some have warned that the next wars will be fought over water rather than oil. However, researchers have shown that transboundary cooperation over water is much more likely than violent conflict. Still, conflicts over water – understood as incompatible interests and competing claims between different parties – exist, but they are usually resolved by other means, for instance through negotiation, agreements, or conflict resolution. Competition over water, however, is increasing.

Researchers have used different typologies to contribute to an improved understanding of water conflicts. These typologies serve different purposes and distinguish between the level of conflicts, their basis, their scale, the actors involved and the impact of conflict. For the focus of this study, the typologies that discuss the various actors and water users involved in conflicts over water as well as the categories that look into various impacts of water conflicts are most useful to discuss the impact on human rights.

Research on the drivers of conflict points to a number of factors that determine the likelihood of conflicts, including competing claims on resources, whether or not agreements exist between different actors, whether mechanisms and institutions are in place, and whether there are unequal power relationships and tensions between groups at a broader level. Rather than focusing on the fact that physical water availability is limited, the question is how competition over water is managed and governed through economic, social, political, institutional and legal structures, and to what extent these structures are arranged to benefit the poorest and most marginalised people.

### **Impact on the realisation of human rights**

In the analysis of conflicts over water from the perspective of human rights, a pattern of marginalisation emerges with individuals and groups that often face discrimination in society at a more general level also being disadvantaged in the context of conflicts over water. Such marginalisation exists in all regions of the world. The risk of human rights violations is therefore not limited to a specific number of countries.

A number of factors emerge that make the risk of human rights violations in the context of conflicts over water most salient:

- While water scarcity does not inevitably or by itself lead to conflicts and/or human rights violations, it does result in increasing competition for water. Where there are no rules to manage this competition in a way that does not disadvantage marginalised individuals and groups, a violation of their human rights is likely. Agreeing on rules for allocation is even more important, where competition over water increases suddenly, whether due to droughts or due to additional water uses.
- Whether or not increased competition over water will lead to human rights violations largely depends on whether there are adequate rules and regulations that protect the rights of marginalised individuals and groups and whether these rules are adequately enforced.

- In turn, adequate regulation and its enforcement depend on strong institutions. Where institutions are weak or non-existing human rights violations are likely.
- Whether conflicts can be resolved without resulting in violations of human rights will also depend on the clarity, transparency and consistency of legislation and other rules.
- The risk of human rights violations increases when additional water uses emerge that put increasing pressure on water resources. In many instances decision-makers prioritise such uses with the respective marginalisation of existing users.
- Participation of concerned communities plays a key role. Where existing water users have not been involved in decision-making processes that relate to new projects or new uses of existing resources, conflicts and human rights violations are likely.
- Conflicts over water are often inextricably linked to entrenched inequalities and conflicts at a much broader level. Where these are not resolved, they are likely to be reflected in inequalities in access to water and resulting human rights violations.

### **Overview of applicable international and regional law and its reflection of human rights**

Preventing and addressing (potential) human rights violations will largely depend on integrating human rights in other fields of legislation and policies. Different bodies of law apply to water conflicts besides international human rights law: international and regional water law, international humanitarian law and EU law. The no-harm principle and the principle of equitable and reasonable utilisation are regarded as fundamental norms in the field of water resources law. In determining what is equitable and reasonable use, recent developments in the field of international water law such as the Berlin Rules from 2004 and the ILC draft Articles on the Law of Transboundary Aquifers from 2008 concede a priority to vital human needs and can be seen as reflecting human rights to some extent. International humanitarian law also includes important safeguards for access to water and prohibitions of the destruction of water infrastructure. Internally, the EU Water Framework Directive (WFD) is the main instrument dealing with water. The WFD has its roots in an increasing awareness of the need for environmental and water protection and focuses on river basin management. While Art. 14 WFD stresses the importance of public participation, the WFD does not reflect human rights standards or principles in a more explicit or comprehensive way.

### **Current policy initiatives at the international and EU level and their impact**

Apart from these applicable legal standards, a range of policy initiatives is relevant in the context of conflicts over water. As water cuts across many different sectors and policy fields, these initiatives take place in a number of different organisations, fields, and directorates at the international and the EU level in the context of human rights, development, foreign affairs, humanitarian aid and environment.

The human right to water has achieved remarkable prominence in recent years and has been on the agenda for the European Union in various fora. However, this awareness and willingness to discuss the integration of human rights seems largely limited to the context of water supply. As far as water management, water allocation and conflicts over water are concerned, the implications of the human right to water and other human rights have hardly been discussed in a policy context. For UN human rights mechanisms and the mandate of the Special Rapporteur on the human right to safe drinking water and sanitation, such an engagement has arguably been hindered by the exclusion of transboundary issues from the mandate of the Special Rapporteur during the first years of the mandate. Addressing conflicts over water from the perspective of human rights without the transboundary dimension would have been a limited exercise. Lifting this restriction should enable the new mandate-holder to address human rights issues in the context of water conflicts, including their transboundary dimension.

EU-internally, in the context of the implementation of the WFD, human rights also seem to play a limited role. Relevant legislative and policy instruments do not explicitly refer to human rights. However, they do reflect human rights principles to some extent, as evident in the WFD's emphasis on participation. As far as competing uses and conflicts over water are concerned, instruments could more clearly establish a priority for personal and domestic uses and other water uses linked to the realisation of human rights. The review of the WFD provides an opportunity in this regard. In relation to external relations, a host of activities in the context of (transboundary) water management and water diplomacy is taking place, yet human rights do not seem to influence these efforts. These linkages could be strengthened.

### **Implications of human rights for addressing conflicts over water**

The human rights framework has significant implications for how priorities in water use and allocation are determined. First and foremost, prioritising water uses from a human rights perspective requires ensuring that everyone's basic human requirements are met, above all, water for personal and domestic use. But priorities also relate to the realisation of other human rights such as the right to food or cultural rights, or water that people require for their livelihoods, among others. In conflicts over water and decisions on allocation, water for food production, water for livelihoods, water for cultural and religious uses has to be prioritised as far as people do not have alternatives but rely on access to water to realise their human rights. Such uses must have priority over large-scale agricultural or industrial uses, tourism resorts, golf courses, or other uses that may have economic benefits but tend to benefit only a few.

States must address patterns of inequalities and historically entrenched processes of marginalisation and take positive measures to achieve substantive equality. States must not only make sure that they do not discriminate against certain groups and individuals when adopting new measures, but they also have to redress existing and past disadvantage and redistribute resources. To ensure this, states must assess existing legal frameworks and analyse their implications for the realisation of human rights and adjust and reform them so as to ensure that human rights are protected, including the rights of the most marginalised and disadvantaged.

The human rights framework focuses primarily on the relationship between individuals who have rights and states that bear human rights obligations. However, non-state actors, companies in particular, play an important role in conflicts over water resources, for instance when they seek to establish water uses for industrial or agricultural water uses. It is well accepted that companies have responsibilities to respect human rights to prevent and address negative impacts of their activities on people and communities.

People have a right to participate in decision-making on water use and governance. States must take deliberate steps to ensure that participation is active, free, meaningful and inclusive and must address the barriers to participation that people face, whether these are physical, economic, institutional, attitudinal, or social. Participatory processes and fora need to be in place to balance competing interests while according due protection to the interests, rights, and concerns of minorities.

Finally, accountability and access to justice are key features of the human rights framework. Where people experience or feel that their human rights are violated or threatened they must be enabled to hold the responsible authorities and actors accountable. Such accountability can be ensured through various mechanisms including administrative and regulatory mechanisms, National Human Rights Institutions, and ultimately access to the courts. States have an obligation to put adequate mechanisms into place and to make these accessible.

# 1 Introduction

## 1.1 Objective

- The objective of this study is to discuss the role of human rights in the context of conflicts over water. It is intended to support the debate on the topic in the Subcommittee on Human Rights, and it lists policy options for the European Union, and in particular the European Parliament with a view to strengthening the integration of human rights in policy responses and other measures taken to address conflicts over water.
- Water has been a source of tension for centuries. It has repeatedly been called the ‘the new oil’. Some argue that water shortage fuels conflicts, but at the same time, extensive cooperation over water can be witnessed. With increasing water stress and scarcity and the ever-increasing demand for water, questions around competition over water gain renewed urgency. Over the last decade, the human right to water has been firmly established and its implications for policy-making have been discussed in many fields. Thus far, this has hardly been the case for conflicts over water (but see WGF, 2012), and the present study seeks to fill this gap and discuss the human rights implications in that context.

It is often said that water is life. And indeed, water is necessary for human survival and many other basic needs. For this particular reason, it is essential to address conflicts over water from the perspective of human rights. Conflicts over water have a much more immediate effect on human lives than conflicts over many other natural resources. A human rights perspective on conflicts over water can help in formulating equitable water governance strategies. It can help avoid basic human needs losing out to more powerfully voiced claims in the allocation of resources by prioritising the most basic requirements, by focusing on the rights of the most disadvantaged and marginalised individuals and groups, by calling for active, free, meaningful, and inclusive participation, and by ensuring accountability and access to justice.

## 1.2 Scope and focus

The focus of this study is on actual conflicts over water as a resource. The study will not focus primarily on question of access to water during (armed) conflicts or address questions related to water as a tactical tool or water infrastructure as a target of military action or terrorism. The relevant instruments will only briefly be referred to. At a broader level, the intersection of armed conflict, human rights and humanitarian law has been addressed extensively by others (e.g. Lubell, 2005; Siatitsa and Titberidze, 2011; OHCHR, 2011). Yet others have addressed the links between conflict management, resolution, and transformation, peace building, and human rights (Parlevliet, 2002; Mertus and Helsing, ed., 2006; GIZ, 2011).

The study will discuss the role of dams only as far as they are concerned with water resources, their allocation, and conflicts in that regard. It will not deal with the broader implications of dams including resettlements as this has been dealt with in-depth by others (WCD, 2000).

Finally, some conflicts related to water may be about the modalities of service provision rather than the use and allocation of the resource as such. The privatisation of water services, in particular, has often been controversial and has been met with resistance, for instance resulting in the Guerra del Agua in Bolivia in the early 2000s (see e.g. Bustamante, n.d.). Some cases relating to the privatisation of public services in Argentina have been dealt with by the International Centre for Settlement of Investment Disputes (see Bray, 2014). More recently, the privatisation of water services in Greece has been met with resistance (SR WatSan, 2014a: para. 28) and large-scale water disconnections in Detroit have given rise to conflict, protests, challenges in the courts (MWRO, 2015). However, these types of conflicts will not be in the focus of this study as the issue of privatisation raises an entirely different set of questions with different actors and institutions involved in addressing these and a different set of policies and

interventions required to ensure the realisation of human rights. Moreover, these questions have already been addressed elsewhere from the perspective of human rights (Langford, 2012: 12 et seqq.; IE WatSan, 2010; de Albuquerque and Winkler, 2010; Murthy, 2013).

### 1.3 Approach, methodology and outline

- This study mainly draws on a desk study undertaken in January to March 2015 to review the academic and grey literature as well as official documents. The study seeks to bring together different bodies of literature and make linkages between fields that have previously not been considered and to develop policy recommendations on that basis. In addition, the author has reached out to strategic EU institutions (in several directorates in the European Commission and the European External Action Service), international organisations, civil society, and other academics working in the field to gather various views and inputs. The author would like to thank the responsible administrator in the Directorate-General for External Policies as well as Annabelle Houdret, Ha Le Phan, and Virginia Roaf for their insightful comments on an earlier draft.
- Following this introduction, the study starts with an overview of human rights law applicable to water conflicts (section 2). Against that background, the study seeks to convey an understanding of conflicts over water using various typologies and examining the drivers of conflict (section 3) before analysing the impact on the realisation of human rights through illustrative case studies and determining factors that lead to a risk of human rights violations (section 4). Addressing such (potential) human rights violations will largely depend on integrating human rights in other fields of legislation and policy. The study therefore turns to an analysis of other bodies of law, namely international and regional water law, humanitarian law, and EU law and its reflection of human rights (section 5) as well as a discussion of current policy initiatives and the extent to which human rights are integrated in these initiatives (section 6). Based on the gaps identified, the study discusses the implications of human rights in the context of conflicts over water (section 7) before concluding with policy recommendations for the EU in internal processes, engagement with partner countries, and engagement in international fora (section 8).

## 2 Overview of human rights law applicable to water conflicts

To provide the necessary background, this section reviews the applicable international human rights law. This will provide the basis to identify the impact of water conflicts on the realisation of human rights and assess the risk of human rights violations in section 4.

### 2.1 The human right to water

Recent developments in international human rights law leave no doubt that the human right to water is guaranteed under international law. While the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights (ICESCR) do not explicitly refer to the right to water, it is implicitly guaranteed in these instruments. Already in 2002, the Committee on Economic, Social and Cultural Rights (CESCR) stated in its General Comment No. 15 that the human right to water is implicitly guaranteed by the human right to an adequate standard and the human right to the highest attainable standard of health as guaranteed in Art. 11 and 12 ICESCR. It stated that 'The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses' (CESCR, 2003: para. 2). At the political level, recent resolutions by the UN General Assembly and the Human Rights Council affirmed the interpretation of the right to water as an unnamed component of the right to an adequate standard of living leaving no doubt as to the explicit recognition of the right to water (UNGA, 2010; UNGA, 2013; HRC, 2010).

Apart from this implicit guarantee, water is also mentioned in other human rights treaties, in particular the Convention on the Elimination of All Forms of Discrimination Against Women (Art. 14(2)(h)), the Convention on the Rights of the Child (Art. 24(2)(c)), and the Convention on the Rights of Persons with Disabilities (Art. 28(2)(a)). Moreover, the right to water is guaranteed in a number of national Constitutions including Belgium, Bolivia, Colombia, the Democratic Republic of Congo, the Dominican Republic, Ecuador, Ethiopia, the Gambia, Kenya, Malawi, the Maldives, Mexico, Nicaragua, Niger, Panama, the Philippines, South Africa, Tunisia, Uruguay, Uganda, Venezuela, and Zambia (Right to Water, 2015).

The human right to water can be specified by the criteria of availability, quality, accessibility and affordability. In the context of water conflicts, availability and quality are most relevant. Quality refers to water that is safe for human consumption (Winkler, 2012: 134). Water availability refers to water for personal and domestic uses, i.e. a limited amount of water. The human right to water does not guarantee immoderate water use, or luxury uses such as washing cars or filling swimming pools (Winkler, 2012: 133).

### 2.2 Other relevant human rights

The scope of the right to water (as limited to water for personal and domestic use) points to the importance of including other human rights in the analysis. Competition between different sectors cannot be addressed without taking all uses into account. Many other human rights depend on water in their realisation. General Comment No. 15 by the CESCR recognises that water 'is a prerequisite for the realization of other human rights' (CESCR, 2003: para. 1). Given the quantities needed to realise human rights such as the right to food, they cannot be ignored in conflicts over water resources (for an analysis see Winkler, 2012: 150 et seqq.). Indeed, it is estimated that 2,000 to 3,500 litres of water per person per day are necessary to produce sufficient food depending on factors such as diet and climatic conditions (UNDP, 2006: 137), i.e. a much larger amount than the amount needed to realise the human right to water.

Likewise, water quality and quantity are intimately linked to the enjoyment of the right to health, with poor quality water among the main causes of disease. Moreover, the right to work of many individuals is dependent on economic development, which in turn requires water, whether for small-scale livelihood activities or large-scale economic development. Water is used for hydro-power generation which also shows linkages to the human right to an adequate standard of living, which arguably includes access to



energy services. Religious and cultural practices, including of indigenous peoples, which require access to water, are also protected by human rights. Finally, environmental processes require water, and the right to a healthy environment is recognised in a range of regional and national human rights instruments.

Establishing these linkages, however, does not imply that all water used for these purposes is necessary for the realisation of human rights. For instance, not all water used in agriculture is directed to the realisation of the human right to food. Water-intensive production of some agricultural crops, such as high-value fruit as well as the production of bio-fuels, does not contribute to the realisation of the right to food or goes beyond its requirements. Similarly not all water used for industrial purposes is necessary for the realisation of people's rights to work or an adequate standard of living. The same applies to other water uses and their links to human rights – usually only a fraction of water use actually links to the realisation of human rights. As far as they do relate to human rights they need to be taken into account in addressing competition and conflicts over water from the perspective of human rights.

## 2.3 Human rights principles

At least as important as human rights standards are the human rights principles of non-discrimination and equality; participation; transparency and access to information; and accountability and access to justice.

- **Non-discrimination and equality:** Human rights must be guaranteed without discrimination. People must be enabled to enjoy their human rights on an equal basis with others. No one must be excluded from exercising his or her human rights on the basis of race, colour, gender, ethnicity, language, religion, national or social origin, disability, property, birth or other status, which includes, for instance, health status and socio-economic status (CESCR, 2009). In order to redress past discrimination and to achieve substantive equality, states must adopt positive measures to prioritise disadvantaged individuals and groups, to ensure equal participation of all, and to achieve a redistribution of power and resources (SR WatSan, 2014c: Booklet 7: 10-13). In the context of conflicts over water, this means that human rights law requires solving these conflicts and ensuring an allocation of water that does not marginalise certain groups as well as taking measures to ensure that the human rights of already disadvantaged groups are realised with priority.
- **Participation:** Participation is a human right in itself, and it brings many advantages in terms of ownership and sustainability. Participation must be active, free and meaningful. People must be enabled to determine priorities in water use which requires meaningful opportunities to take part in decision-making on policies, programmes and activities on water management that have an impact on their lives (SR WatSan, 2014c: Booklet 7: 54).
- **Transparency and access to information:** Access to information is critical for people's ability to hold the state to account for decisions on water governance and for the ability to participate meaningfully in decision-making processes (SR WatSan, 2014c: Booklet 7: 35).
- **Accountability and access to justice:** States are accountable for meeting their obligations to realise human rights. Various mechanisms need to be put in place to ensure that people have the opportunity to hold the state to account to live up to its human rights obligations. Accountability is also essential in relation to third parties that use water resources or discharge wastewater.

## 2.4 The transboundary dimension of human rights

One hotly debated question in human rights law in the last years is the extraterritorial application of human rights law. It implies that states have human rights obligations toward people outside of their boundaries. The questions discussed in this context are broad and relate to numerous different

constellations that have extraterritorial implications. Here, the questions of interest relate to transboundary conflicts over water.

While many specific issues remain contentious, the starting point is that the ICESCR – which is most relevant in the context of the right to water and related human rights – does not include any territorial restriction. The extraterritorial application of the ICESCR was confirmed by the International Court of Justice among many other sources (ICJ, 2004: para. 109-112). The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights adopted in 2011 provide important guidance on states' obligations (Maastricht Principles, 2012).

When applying these principles to the context of transboundary waters, they imply that states must not violate the human rights of residents in neighbouring countries (Bulto, 2013: 168), for instance through using water in such quantities that the rights of residents in downstream countries could no longer be met, or polluting waters in a way that puts the rights of people in downstream countries at risk (Winkler and Phan, 2014: 13). Likewise, states must prevent other actors under their jurisdiction, such as companies, from infringing on the rights of downstream residents, for instance through pollution (Russell and McCaffrey, 2015; Bulto, 2013: 169).

A more complex question is whether states have an obligation to share their water resources with neighbouring countries whose residents would rely on these for the realisation of human rights. Firstly, it should be pointed out that the quantities of water required for the realisation of the human right to water are very limited. While other human rights require larger amounts of water for their realisation, these can often also be realised through alternative means (such as food imports). Where transboundary water conflicts take place, these are usually related to broader questions of security and economic development. Nevertheless, the question is also a pertinent one from the perspective of human rights. At a general level, the Maastricht Principles point out that each state must 'contribute to the fulfilment of economic, social and cultural rights extraterritorially, commensurate with, *inter alia*, its economic, technical and technological capacities [and] available resources' (Maastricht Principles, 2012: Principle 31). In the context of transboundary waters this would mean that states with sufficient water resources should contribute to the realisation of human rights in neighbouring countries through sharing these water resources (for a detailed discussion see Bulto, 2013: 170 et seqq.).



### 3 Understanding conflicts over water

This section seeks to convey an understanding of competition and conflicts over water, using various typologies of water conflicts and analysing the drivers of conflicts, in order to provide the basis for assessing the impact on the realisation of human rights in section 4.

#### 3.1 Increasing competition over water

Water is perceived as an increasingly scarce resource. Some have warned that the next wars will be fought over water rather than oil (Serageldin, 1995; Boutros-Ghali, cited in Gleick, 1993: 86; Bulloch and Darwish, 1993; Starr, 1991). However, researchers have shown that transboundary cooperation over water is much more likely than violent conflict. Research by Wolf et al. demonstrates that the large majority of interactions between states over transboundary waters have been cooperative. Cooperative interactions have been twice as common as conflictive interaction between co-riparian states, and conflicts that involved violence have been very uncommon (UNEP, 2002: 3). Between 1948 and 2002, only 37 conflicts that involved violence were recorded, and these largely geographically focused on Israel and its neighbouring countries (UNEP, 2002: 3). In modern times, no war has been fought over water resources (Wolf, 2003: 7), but instead collaboration and cooperation over water has increased (Houdret, 2008: 5). However, while inter-state wars seem unlikely, at a small scale, incidences of acute, violent conflict can be witnessed in countries all over the world. Yet, again, while violent clashes often make headlines, they represent a small minority of instances of conflict or cooperation over water. A long-term, systematic study of water conflicts at the local level found that physical violence only took place in less than 1 % of water-related events examined for the study (Ravnborg et al., 2012: 348). The study selected five districts in Asia, Africa and Latin America: Con Cuong district in Vietnam, Douentza district in Mali, Namwala district in Zambia, Tiraque district in Bolivia and Condega district in Nicaragua. These were not selected because of the particular likelihood of conflict in these districts, but based on a maximum variation sampling strategy (Ravnborg et al., 2012: 338).

The fact that violent conflict over water is rare and that war over water seems unlikely does not imply that there are no conflicts over water. It means that conflicts – understood as incompatible interests and competing claims between different parties – are usually resolved by other means, for instance through negotiations, agreements, or conflict resolution. Competition over water, however, is increasing. The sectors that compete over the use of water can broadly be categorised as agricultural users, industrial users and household users. Globally, an estimated 70 % of water is used in agriculture, roughly 20 % are for industrial purposes, and households account for about 10 % of water use (WWAP, 2009: 99).

Contrary to public perception the global amount of water (and of available freshwater) overall stays the same. Increasing water scarcity is not caused by a diminishing resource base. However, other factors have an impact on increasing competition over water. Population growth is often mentioned as a factor that leads to increasing demand for water. While this is true, it is not the most relevant factor. The demand for water has been increasing to a significantly larger extent than the world's population has been growing. Economic growth, changing lifestyles and diets increase the demand for water. While the population has doubled in the course of the last 50 years, the demand for water has increased by four (Winkler, 2012: 22). At the same time, water becomes increasingly contaminated, making available quantities unfit for human consumption and many other purposes.

Moreover, it is futile to assess water availability at a global or even national scale. What counts is the regional and local availability of water, which varies and changes. Increasing urbanisation puts increasing stress on water availability in urban centres, which already house more than half of the global population. This share is expected to rise due to population growth predominantly in urban areas (WWAP, 2012: 64). As the demand for water often cannot be met from the immediate area cities occupy, water needs to be transported to urban centres from adjacent areas. Bangalore in South India, for example, pumps its

drinking water over a distance of 100 km from the river Cauvery (WWAP, 2009: 128). Similarly, migration and displacements result in an increased demand for water where migrants and displaced persons settle.

Another factor influencing water availability is climate change. Melting glaciers and snow cover are predicted to affect flow patterns of rivers and thus diminish the availability of water especially in dry seasons. In coastal areas, rising sea levels will mean increased salinity intrusions reducing available fresh ground water sources for human consumption (Bates et al., 2008: 3). Rising temperatures will also lead to increased evapotranspiration and thus reduced soil moisture. Moreover, climate change is likely to result in more frequent floods and droughts due to an intensification of the hydrological cycle (Bates et al., 2008: 3). Against this background, the competition over water resources is bound to increase.

The water stress index originally developed by Falkenmark assesses per capita availability of water in a country. Where that figure drops below 1,700 m<sup>3</sup>/person, she assumes water stress, and where it drops further to below 1,000 m<sup>3</sup>/person she speaks of water scarcity with extreme scarcity at below 500 m<sup>3</sup>/person (Falkenmark and Widstrand, 1992: 19). In situations of water scarcity, the entire demand for water cannot be met, imposing restrictions on food production and economic development. While the index has its shortcomings, in particular because it does not take into account seasonal and regional variability in water availability (Wolf, 2003: 9), it provides an indication of overall water availability. On that basis, researchers have identified regions experiencing water scarcity and water stress covering large parts of the Middle East and Northern Africa (WWAP, 2012: 390). Water stress and scarcity are bound to increase by 2050 (WWAP, 2012: 391), while such assessments do not necessarily address how states may adjust to the changing physical situation.

## 3.2 Typologies of conflicts over water

Researchers have used different typologies to contribute to an improved understanding of water conflicts. These typologies serve different purposes and use different categories. In the following, typologies that distinguish conflicts according to their level, their basis, their scale, the actors involved and the impact of conflicts will be presented.

### 3.2.1 Level of conflict

Conflicts can be distinguished according to the level at which they occur: whether at the local, national or transboundary level. The field of 'water and conflict' relates to a broad array of settings – it could be the (unlikely) scenario of a war over water between countries, competition over water resources at a regional level, or conflict over access to irrigation within a community.

At the transboundary level, examples from the Middle East are frequently discussed. The Jordan basin is among those most frequently referred to (e.g. Haddadin and Shamir, 2003). The arid climate and frequent droughts compounded with inefficiencies in water use, increasing demand through industrialisation and population growth put stress on water resources (Fröhlich, 2012: 147). This is intertwined with the political situation as reflected in disparities in water allocation. Water consumption by Israelis and Palestinians reflect stark inequalities. While estimates vary, they suggest that Israelis consume about three times as much water per person per day (250 litres) as Palestinians (84 litres) (Fröhlich, 2012: 150).

The Euphrates-Tigris basin shared between Turkey, Iraq and Syria is another basin very often referred to in studies on water conflicts. Turkey as the upper riparian claims the right to use water for electricity generation and irrigation. The conflict revolves primarily around the Southeast-Anatolia-Project (GAP - Güneydogu Anadolu Projesi) consisting of 22 dams and 19 power plants and the associated water use (Fröhlich, 2012: 155). The role of ISIL adds to the complexity of the conflict, as the insurgents have seized dams in Iraq putting them in control of cutting water supplies and causing flooding (Pacific Institute, 2015).

Yet another 'hot' basin is the Nile. The Nile Basin Initiative (NBI) is a regional platform for water management, multi stakeholder dialogue, and joint planning in the Nile Basin. It is led by 10 riparian countries, namely Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda. Eritrea participates as an observer. The NBI is supported by the World Bank, the EU and many other organisations. It has gone through phases of confidence building and institutional strengthening, but challenges remain (NBI, 2015). Most recently, the development of the Grand Renaissance Dam on the Blue Nile in Ethiopia has given rise to new tensions, in particular with Egypt (Veilleux, 2013).

These examples reflect a trend in the literature on water conflicts: There is a tendency to focus on the most volatile basins, which makes it difficult to draw general conclusions (Wolf, 2003: 3). It is true that competition and conflict over water have an important transboundary dimension. There are 276 transboundary basins in the world, and more than 2000 transboundary aquifers have been identified (UN-Water, 2013). More than 45 % of the earth's surface lies in transboundary drainage basins, and 40 % of the world's population live in transboundary basins (Manno, 2010). In many instances, transboundary water resources are necessary to secure access to water. Egypt, for example, relies almost entirely on exogenous water resources (Libiszewski, 1999: 120). From a legal perspective, it is important to distinguish the transboundary dimension of conflicts over water. As discussed above, additional questions arise in terms of the application of human rights law in a transboundary context.

However, to some extent, the focus on the question whether there might be actual wars between states over water distracts from other conflicts over water – that are often on a smaller scale, often at the local level, and often non-violent. Even transboundary conflicts often have an internal or local dimension with conflicting interests in the use of the share of water resources available within the state. Such local conflicts between different user groups, ethnic groups, different parts of a country, or other competing interests require greater emphasis. Seeking to address this gap, the 'Competing for Water Research Programme' developed inventories of water conflicts and cooperation in selected districts in Asia, Africa and Latin America (Ravnborg et al., 2012). At the local level, rather than having a discrete number of transboundary basins, the settings where conflicts can take place are virtually unlimited, hence the necessity of selecting a number of districts for the purposes of the programme.

### 3.2.2 Scale of conflict

Wolf et al. focus on conflicts and cooperation in transboundary basins in their typology for identifying basins at risk of dispute (BAR scale). They apply a scale from conflict to cooperation from the most conflictive at -7 (war) to the most cooperative at +7 (the voluntary merging of countries) using political, diplomatic and economic hostile actions, verbal hostilities, verbal support, different types of agreements and the signing of treaties to define the various scales in between (Wolf et al., 2003: 5).

The 'Competing for Water Research Programme' developed a scale for local water conflicts inspired by the BAR scale. It ranges from -7 (organised collective violence) to +7 (merging access rights) with various events of conflict and cooperation on this scale such as different forms of violence, demonstrations, violations of access rights, verbal disputes, joint activities, verbal agreements, joint organisation fora and joint decision-making authority (Ravnborg et al., 2012: 341). Overall, the study found that events are equally distributed between conflict and cooperation over water, but that violent conflict is rare (Ravnborg et al., 2012: 356).

### 3.2.3 Basis of conflict

A Water Conflict Chronology developed by the Pacific Institute categorises conflicts according to the basis of conflict and the role water plays in the conflict using the following categories:

- ‘Control of Water Resources (state and non-state actors): where water supplies or access to water is at the root of tensions.
- Military Tool (state actors): where water resources, or water systems themselves, are used by a nation or state as a weapon during a military action.
- Political Tool (state and non-state actors): where water resources, or water systems themselves, are used by a nation, state, or non-state actor for a political goal.
- Terrorism (non-state actors): where water resources, or water systems, are either targets or tools of violence or coercion by non-state actors.
- Military Target (state actors): where water resource systems are targets of military actions by nations or states.
- Development Disputes (state and non-state actors): where water resources or water systems are a major source of contention and dispute in the context of economic and social development.’ (Pacific Institute, 2015).

The database currently includes close to 350 entries of water-related conflicts. Some of these categories relate to conflicts over water, whereas others show that water can also be used in a tactical way in a conflict, for instance depriving the opponents of access to water or contaminating their water supply (Pacific Institute, 2015; see also USAID 2014: 5).

Recent examples of conflicts from the Middle East include Israeli sanctions on Gaza that caused water shortages, a conflict in Iran over the diversion of water used by farmers, and tensions in Jordan over water supply exacerbated by Syrian refugees (Pacific Institute, 2015).

### 3.2.4 Actors involved in the conflict

Houdret suggests an actor-centred typology of water conflicts that focuses on the interests certain groups have in water use (Houdret, 2008: 11 et seqq). Such a typology points to

- conflicts between different geographical areas, such as conflicts between urban and rural areas as growing urban centres rely increasingly on water resources from farther away (Molle and Berkoff, 2006).
- conflicts between different sectors of water use, for instance between tourism relying on golf courses and resorts on the one hand and agricultural users on the other hand; or between industrial users who may extract large amounts of water or contaminate water that other users rely on for domestic or agricultural use.
- conflicts between different users within the same sector such as agricultural users that rely on the same source or irrigation system. This may involve large-scale agricultural use (often aimed at export and sometimes linked to large-scale land acquisitions and water grabbing) and small-scale farmers whose livelihoods rely on access to water (Mehta, Veldwisch and Franco, 2012); or allocation within urban areas where rationing in times of drought may affect different areas in a city to a varying extent;
- conflicts between different population groups for instance between indigenous peoples and others; or between long-time residents in a country and refugees.

### 3.2.5 Impact of conflict

One tool that assesses the impact of conflicts is the Environmental Justice Atlas. It includes more than 1300 cases of community mobilization in the context of social conflict around environmental issues, which can be filtered according to various criteria. There are 190 reported cases in the broad category of 'water management'. If filtered differently, 183 conflicts relate to dams and water distribution conflicts, 30 relate to 'interbasin water transfers/transboundary water conflicts', 235 relate to 'water access rights and entitlements'. The conflicts included in the database can also be filtered by intensity from high (described as violence and mass mobilisation) to latent (described as no visible organising at the moment), by the groups involved in mobilisation, and the forms of mobilisation. Probably most interesting from the perspective of human rights is the possibility to search for environmental conflicts by their environmental, health and socio-economic impacts. Categories relevant in the context of water conflicts include desertification/drought, floods, food insecurity, groundwater pollution or depletion, mine tailing spills, oil spills, surface water pollution / decreasing water, waste overflow, malnutrition, loss of livelihood, among others (Environmental Justice Atlas, 2015).

### 3.2.6 Focus of this study

For the focus of this study, the typologies that discuss the various actors and users involved in conflicts over water as well as the categories that look into impacts of water conflicts are most useful to discuss the impact on human rights and will be used further in section 4.

## 3.3 Drivers of conflict

Understanding conflicts over water also requires an understanding of the drivers of conflict. Some researchers have linked water scarcity to conflict. There have also been efforts to identify regions that are at risk of water conflicts on the basis of water scarcity. Gleick, (1993: 84-85) points to a number of factors that he considers relevant in making water a source of 'strategic rivalry'. He refers to '(1) the degree of scarcity, (2) the extent to which the water supply is shared by more than one region or state, (3) the relative power of the basin states, and (4) the ease of access to alternative fresh water sources.' He uses quantitative indices to suggest 'regions at risk' of conflict measuring the annual water withdrawals compared to annual renewable water availability assuming a risk where withdrawals exceed one-third of the renewable resources (Gleick, 1993: 99). A second measure looks at annual per capita water availability below 1,000 m<sup>3</sup> (Gleick, 1993: 100). A third measure assesses the extent to which water resources are shared (Gleick, 1993: 102). Finally, Gleick also looks at the dependency on hydroelectricity (as a fraction of the total electricity supply) assuming a risk where the fraction is higher than 50 % (Gleick, 1993: 102).

However, others have pointed out that scarcity does not inevitably lead to conflict, painting a more complex picture of factors that lead to conflict or in other instances cooperation over scarce resources. Studies found that socio-economic factors have a larger impact than environmental factors (Tamas, 2003: 4). In most instances, conflicts over water are not only conflicts over the development or use of water resources, but are related to other societal and political conflicts (Tamas, 2003: 2). The conflict over the allocation, distribution or use of water may be highly visible, but the underlying conflicts often go much deeper. Economic stability, social cohesion, disparities and inequalities, participation in decision-making processes, and good governance are all important determinants of conflict.

In their study on 'Basins at Risk', Wolf et al. use a more complex methodology with the aim of identifying basins of risk at dispute relying on a combination of biophysical, socio-economic and geopolitical data (Wolf et al., 2003: 5). They complement geographical and physical factors with an analysis of the capacity to absorb stress evident in factors such as joint water management bodies, transboundary treaties, and stability and types of government (Wolf et al., 2003: 10). They find that the type of climate (arid or not) as such does not influence the likelihood of conflicts, but that institutional capacity serves as a moderating



factor and is at least as important in determining the risk of dispute (Wolf et al., 2003: 11). They conclude that rapid change in a basin is what is most likely to cause conflicts. Such change can either stem from the fact that a basin is 'internationalised', i.e. in situations where a previously unified territory disintegrates into several states, or from unilateral projects in basins such as large dams that cause rapid physical change where no cooperative regimes exist to deal with these changes (Wolf et al., 2003: 16). On that basis, the research team identified almost 20 basins at risk of dispute. In the Middle East they included the Kura-Araks basin in Azerbaijan, Georgia, Armenia, Iran, and Turkey as a basin at risk, as well as the Euphrates-Tigris, Jordan and Nile basins as basins that were in conflict (Wolf et al., 2003: 14). Interestingly, after they concluded their study,, water agreements were concluded in some basins and cooperative projects were initiated in several of these basins such as the Kura-Araks (Houdret et al, 2010: 12).

At a broader level, water distribution often reflects economic, social and political disparities and inequalities (Houdret, 2008: 2). Conflicts are not necessarily linked to water being scarce, but exclusion from access to water may reflect exclusion from participation in social and political life more broadly. For instance, where Dalits are excluded from using water (SR WatSan, 2012: para. 36), this conflict has little to do with the availability or non-availability of water, but entrenched caste discrimination.

On the other hand, conflicts may also arise in situations of abundant water availability. Tamas refers to the 'honey pot' of abundance (2003: 1) that may lead to greed and fuel conflicts. A case study on a local water conflict in Qolque Khoya, Bolivia, actually shows that conflict over water increased after the upgrading of a reservoir that resulted in an increased amount of water available for irrigation. The greater quantity of water made it necessary to develop new rules for allocation, which caused disagreements between villages, litigation, and minor instances of physical violence (Funder et al., 2012: 27).

These strands of research and the changing contexts point to the difficulties of drawing up a definitive number of countries or basins where conflict is likely to emerge. These difficulties are exacerbated at the local level where circumstances change even more quickly and make such an assessment impossible. Rather than determining a complete list of potential localities, it is more useful to determine the factors that are likely drivers of conflicts. A recent toolkit by USAID on water and conflict provides useful guiding questions that seek to assess whether water-related conflict is likely to emerge:

- 'Do two or more parties hold competing claims on a water resource? Does an unequal power relationship exist between the parties?
- Do water-sharing parties belong to different groups of society? Do tensions unrelated to water exist between these groups?
- Are water management mechanisms effective, enforced, and perceived as fair?
- Is lack of water, flooding, or water resources development impacting health, depriving people of their livelihood, or forcing them to migrate?
- Do water management institutions and relevant populations have the capacity to adapt to situations of water variability (scarcity and abundance)?' (USAID, 2014: 39)<sup>1</sup>.

In summary, studies on the typologies and drivers of conflict demonstrate that competition and conflicts over water may arise at all levels in countries all over the world. Whether competition turns into conflicts depends on a range of factors including whether adequate processes, institutions, and regulations are in place, which is essentially a question of governance.

<sup>1</sup> The toolkit also includes a more elaborate checklist of questions that point to the likelihood of conflict over water. See USAID 2014: 40 et seq.

### 3.4 A question of governance

Conflicts are not the inevitable result of physical scarcity. The 2006 Human Development Report powerfully argued that ‘the scarcity at the heart of the global water crisis is rooted in power, poverty and inequality, not in physical availability.’ (UNDP, 2006: 2). It refers to the twin deficits of institutional and political choices (UNDP, 2006: 2) and explains that ‘scarcity is manufactured through political processes and institutions that disadvantage the poor’ (UNDP, 2006: 3).

Indeed, whether people have access to water for personal and domestic use has very little to do with physical water availability. Even in water scarce regions, there is sufficient water to realise the human right to water. If one assumes that the right to water can be realised with around 100 litres per person per day, this translates to 36,5 m<sup>3</sup> per person per year, a fraction of the water available even in the most water scarce regions (Winkler, 2012: 20). As far as access to drinking water is concerned, the question is far more often a question of (physical and economic) accessibility rather than of availability. While other water uses, such as agriculture for food production, require larger amounts of water, there is sufficient water to satisfy the basic needs – and rights – of all people.

Rather than focusing on the fact that physical water availability is limited, the question is how competition over water is managed and governed through economic, social, political, institutional and legal structures, and to what extent these structures are arranged to benefit the poorest and most marginalised (UNDP, 2006: 17). To ensure that the most disadvantaged do not lose out in conflicts over water a shift in power relations to address deep-seated poverty and inequalities is required.

## 4 Impact on the realisation of human rights

This section will draw on the different types of water conflicts and the drivers of conflict to evaluate the impact on human rights and the risk of human rights violations in the context of conflicts over water based on the applicable human rights law presented in section 2. As mentioned above, the actor-centred typology and the focus on the impact of conflicts are particularly useful for an assessment from the perspective of human rights. In terms of substantive human rights standards, the analysis will look beyond the human right to water itself to also include other human rights such as the right to food, cultural rights, the rights of indigenous peoples, gender equality, and non-discrimination and equality more broadly.

The section draws attention to common conflicts over water and possible scenarios that put human rights at risk. In this regard, the Water Governance Facility observed: 'Water resources allocation for a range of productive purposes, from agriculture to industry to ecosystem services, is typically inequitable; generally speaking, comparatively powerless groups tend to be shut out not just of access to water resources but also of the processes whereby allocation decisions are made.' (WGF, 2012: 5). By way of using illustrative examples of conflicts between sectors and within sectors, the section will draw attention to patterns of marginalisation and exclusion pointing to groups that are often discriminated against in society more broadly and are often disadvantaged in conflicts over water. Following these illustrative examples, the section seeks to identify a number of factors that point to the risk of human rights violations.

### 4.1 Illustrative examples of conflicts and their impact of human rights

#### 4.1.1 Conflicts between different sectors neglecting basic human needs

In the analysis of conflicts over water from the perspective of human rights, a pattern of marginalisation emerges. Where conflicts occur between different sectors, basic human needs in terms of drinking water but also water use for livelihoods are often neglected. While it is very common for national legislation to prioritise personal and domestic uses (Winkler, 2012: 144-146), these priorities do not always translate into practice. Art. 2 of the Algerian Law on Water is just one example of a law that prioritises the requirements of the population (Algeria 2005, Art. 2). However, when examining actual conflicts over water, people who use water for personal and domestic uses often lose out to livestock keepers or irrigators (Ravnborg et al., 2012, 355).

In other instances, amenity uses have shown to be favoured, even in situations where basic needs are not met. Water amusement parks in Mumbai, for example, receive water even in times of drought when domestic use is already restricted (Graham, Desai and McFarlane, 2013: 131). Rules of allocation might be adequate, but *de facto* water allocation does not reflect policy priorities. Golf courses in gated communities in Spain, for example, have been found to illegally extract groundwater designated for agricultural use. Their number is rising at great speed putting increasing pressure on water resources and disadvantaging existing users (Zimmer, 2010: 38-39). Many small-scale farmers and rural communities have been shown to be particularly disadvantaged - their human rights may be unfulfilled while other users have access to large amounts of water (see generally Hiskes, 2010).

#### 4.1.2 Inequalities in the context of household use

In the context of personal and domestic water use, individuals and groups that often face discrimination are often also being disadvantaged in the context of conflicts over water. Such discrimination relates, for instance, to socio-economic status, ethnicity or caste. A number of short case studies illustrate this:

**Water rationing in informal settlements:** Water rationing tends to affect informal settlements and poorer areas more than affluent or business areas, as in the case of Cusco, Peru (Crawford and Bell, 2012: 1060). Similarly, the supply to users relying on public standpipes in Ghana has been reduced while more



well-off households continued to be supplied with large amounts of water (Stephens 1996: 25). The situation in Delhi during the summer season is similar where the better-off benefit from continued supply, while water services are discontinued in poorer areas (see generally Janakarajan, Llorente and Zérah, 2006).

**Inequalities in water allocation for domestic purposes between different population groups:** UN human rights bodies have repeatedly raised concerns about water shortages affecting Palestinians. In 2010, the Human Rights Committee stated that it was 'concerned at water shortages affecting disproportionately the Palestinian population of the West Bank, due to prevention of construction and maintenance of water and sanitation infrastructure, as well as the prohibition of construction of wells' (Human Rights Committee 2010: para. 18). It linked its concerns to Art. 6 and Art. 26 of the International Covenant on Civil and Political Rights on the right to life and non-discrimination, respectively. In 2014, the Human Rights Committee raised concerns regarding Palestinians in the Gaza strip as well as Bedouins in the Negev and their access to water (Human Rights Committee, 2014: para. 9, 12). The Committee on Economic, Social and Cultural Rights and the Committee on the Elimination of Racial Discrimination voiced similar concerns (CESCR, 2011: para. 29; CERD, 2012: para. 24-25).

**Exclusion from access to drinking water:** In many other parts of the world, disadvantaged, marginalised and discriminated against groups are also excluded from access to water on an equal basis. The Special Rapporteur on the human right to safe drinking water and sanitation explained how Dalits are often unable to collect water from shared wells, have been forced into separate lines to wait for collection, and have faced physical attacks and other forms of violence when seeking to access facilities (SR WatSan, 2012: para. 36).

**Tensions between long-term residents and refugees:** For instance in Jordan, tensions exist between the existing population and Syrian refugees (USAID, 2014: 25). The Special Rapporteur on the human right to safe drinking water and sanitation reported that water supply per person per day has dropped from 80 litres to below 30 litres in some areas of Jordan upon the arrival of Syrian refugees, who mostly reside outside of refugee camps (SR WatSan, 2014b: para. 48). At the same time, many refugees struggle to secure access to water supplied by tankers or cannot afford services (SR WatSan, 2014b: para. 55, 57).

#### 4.1.3 Conflicts affecting the livelihoods of small-scale farmers and communities

Similar to the context of household use, communities and small-scale farmers also face disadvantages in the context of conflict over water that may threaten their livelihoods. A few short case studies illustrate their marginalisation:

**Impacts of export-oriented agriculture:** Agriculture is not a homogenous sector and many conflicts exist between large-scale agriculture (often of cash crops targeted for export) and the livelihoods of local small-scale or subsistence farmers. One example is Kenya, which produces millions of tons of flowers for the European, American and Japanese market, which has an impact on water availability for local farmers and their livelihoods (Wuppertal Institut, 2005: 111).

**Impacts of water grabbing:** Such conflicts related to export-oriented water use have become more pronounced in recent years in the context of water grabbing. Water grabbing can be understood as the appropriation of water 'and the control of [its] associated uses and benefits, with or without the transfer of ownership, usually from poor and marginalised to powerful actors' (Mehta, Veldwisch and Franco, 2012). It has significant implications for control over water resources, with communities often losing access to water for irrigation (Mehta, Veldwisch and Franco, 2012: 202). An example from Morocco illustrates how water grabbing in the context of a public-private partnership for a pipeline from a mountain region to plantations in the Souss Valley has marginalised small-scale farmers and their livelihoods. The growth of lucrative fruit is export-oriented and most benefits the economic elite and reinforces their control over water and political control more generally (Houdret, 2012).

**Over-exploitation by industrial water users:** Some bottling plants, for instance in India, have faced resistance by communities over the use of groundwater that resulted in water shortages for communities due to depleting water tables. In some instances, licences were not renewed or companies chose to discontinue their operations (Chopra, 2010: 20-21; Winkler, 2012: 32).

#### 4.1.4 Conflicts over contamination and disproportionate affects on disadvantaged communities

Conflicts not only exist over the availability and quantity of water, but also stem from pollution of available water resources as demonstrated by these short case studies:

**Disadvantaged communities affected by contamination through sewage:** Exposure to wastewater is typically greater for marginalised populations (Corcoran et al., 2010: 23). Informal settlements are located on riverbanks in many cities, and residents often rely on rivers for water supply and are exposed to wastewater discharge from upstream parts of the city. For example, a community in Argentina called Chacras de Merced was affected by an upstream sewage treatment plant with insufficient capacity that resulted in raw sewage being dumped into the river, polluting the river and the groundwater in the locality (SR WatSan 2013: para. 77).

**Disadvantaged communities affected by agricultural contamination:** Nitrate contamination due to agricultural production is widespread in the San Joaquin Valley in California. A recent study revealed that disadvantaged communities with relatively high proportions of minority Latino residents are more likely to rely on water that is high in nitrates than other communities (Balasz et al., 2011).

**Extractive industries affecting the rights of indigenous peoples:** Extractive industries are often set up in remote areas or regions where predominantly indigenous communities live. While providing valuable natural resources to economies, such industries are often accompanied by tremendous water pollution challenges, endangering the human rights of local communities and local livelihoods. Indigenous peoples often bear the brunt of such pollution. Negative impacts include health problems, but also the disruption of traditional livelihood activities and cultures (SR Indigenous, 2011: 9-10).

#### 4.1.5 Gender inequalities

In many instances, processes of marginalisation have a gendered dimension. Women and girls often bear the burden of water collection for domestic use (JMP 2011: 28), and where conflicts over water result in less water being available for domestic use, their burden increases, for instance by having to walk farther distances to collect water. Moreover, intra-household inequalities often negatively affect women (Winkler et al., 2014). In the context of agriculture, women often lack access to water rights, irrigation, and decision-making processes. However, the gendered dimensions of water conflicts are very difficult to assess due to a lack of data. Even the in-depth study on local water conflicts mentioned above did not consider private water conflicts such as conflicts between wife and husband over the use of water (Ravnborg et al., 2012: 341).

#### 4.1.6 Lack of participation in decision-making

The marginalisation in conflicts over water at the level of access often goes hand in hand with a lack of participation in decision-making on water governance. Subsistence farmers, including female farmers, might not be recognised as legitimate stakeholders in decisions on water management (WGF, 2012: 8). Similarly, indigenous peoples often experience that their right to free, prior and informed consent is not adequately ensured in practice (see e.g. SR Indigenous, 2011: 12). Such a lack of participation makes it difficult to challenge existing marginalisation, as such reinforcing and entrenching patterns of inequalities and exclusion even further.

## 4.2 Risk of human rights violations

The above examples point to conflicts over water that are most salient from the perspective of human rights and demonstrate patterns that disadvantage certain groups. Such conflicts continue to be likely in the future and risk violating human rights. Yet, as will be discussed below, human rights also have the potential to address such human rights violations.

The examples illustrate that patterns of marginalisation and inequalities exist in all regions of the world. Similarly, the work undertaken by the UN Special Rapporteur on the human right to safe drinking water and sanitation points to human rights violations and challenges in the realisation of the human rights to water and sanitation in countries all over the world. During the six years of her tenure, the first mandate-holder, Catarina de Albuquerque undertook country visits to countries as diverse as Bangladesh, Brazil, Costa Rica, Egypt, Japan, Jordan, Kenya, Kiribati, Namibia, Senegal, Slovenia, Thailand, Tuvalu, the United States of America, and Uruguay, and her reports illustrate the challenges to the realisation of the human rights to water and sanitation in all these countries. The risk of human rights violations is not limited to a specific number of countries. However, a number of factors emerge that make the risk of human rights violations in the context of conflicts over water most salient:

- While water scarcity does not inevitably or by itself lead to conflicts and/or human rights violations, it does result in increasing competition for water. Where there are no rules to manage this competition in a way that does not disadvantage marginalised individuals and groups, a violation of their human rights is likely. Agreeing on rules for allocation is even more important, where competition over water increases suddenly, whether due to droughts or due to additional water uses.
- Whether or not increased competition over water will lead to human rights violations largely depends on whether there are adequate rules and regulations that protect the rights of marginalised individuals and groups and whether these rules are adequately enforced.
- In turn, adequate regulation and its enforcement depend on strong institutions. Where institutions are weak or non-existing (to enforce rules on water allocation, to deal with complaints etc.) human rights violations are likely.
- Whether conflicts can be resolved without resulting in violations of human rights will also depend on the clarity, transparency and consistency of legislation and other rules. Water rights or permits, abstraction limits or other instruments must be clearly established. Where regulations are contradictory, the economically and socially stronger actors are likely to succeed in using water, often resulting in violations of human rights for the more disadvantaged actors. Where customary rights exist, these must be taken into account with the objective of achieving clarity and balancing all water uses on the basis of non-discrimination and equality.
- The risk of human rights violations increases when new water uses emerge that put increasing pressure on water resources. In many instances decision-makers prioritise such uses (for instance a new industrial plant, the production of biofuels, or large-scale agricultural production) with the respective marginalisation of existing users.
- Participation of concerned individuals and communities plays a key role. Where existing water users have not been involved in decision-making processes that relate to new projects or new uses of existing resources, conflicts are likely to emerge. Apart from the violation of the right to participate, other human rights violations are likely to occur.
- Conflicts over water are often inextricably linked to entrenched inequalities and conflicts at a broader level. Where these are not resolved, they are likely to be reflected in inequalities in access to water and resulting human rights violations.

### 4.3 Transboundary water conflicts and human rights

In principle, the issues in transboundary water conflicts are similar to local and national conflicts. The groups and individuals who are likely to be disadvantaged in conflicts over water are generally the same. However, the impacts are mediated through the inter-state dispute and usually do not come to the fore directly. In most instances, broader questions around economic development and other issues are the more visible subject of a transboundary dispute. Some researchers have criticized the fact that transboundary processes are usually driven by 'national interests' through political and technical elites with no direct representation of local communities and water users (Earle and Bazilli, 2013).

Inter-state conflicts over water would have to reach an extreme extent for the activities in one state to have a direct impact on water availability in the neighbouring state to the extent that people's human rights are violated. Such violations may more readily occur in instances of transboundary pollution. Still, they have rarely been documented or been in the focus of studies on transboundary water conflicts (for a discussion see Bulto, 2013: 225 et seqq.). Yet, this does not mean that human rights are not impacted in instances of transboundary water conflicts. In many instances they are, but in a more indirect way. For instance, where water availability is reduced as a result of activities in an upstream country, this impacts overall availability in the downstream country, and in internal processes regarding the governance of these resources, marginalised individuals and groups may – once again – be the ones who lose out.

## 5 Overview of applicable international and regional law and its reflection of human rights

Different bodies of law apply to water conflicts besides international human rights law: international and regional water law, international humanitarian law and EU law. These bodies of law will be analysed as to their reflection and integration of human rights. Following this analysis, section 6 will assess to what extent existing policy initiatives complement this legal framework with a view to ensuring the realisation of human rights.

### 5.1 International and regional water law

There is a significant body of international water law: a large number of agreements governing particular watercourses or basins, conventions that are global or regional in scope as well as rules of customary international law. The International Law Association (ILA) issued the Helsinki Rules on the Uses of the Waters of International Rivers (ILA, 1966) in 1966 that are still widely referred to today as a comprehensive codification of the customary law of international watercourses (Salman 2007: 639). In 1997, the General Assembly adopted the Convention on the Law of the Non-navigational Uses of International Watercourses, which was greatly influenced by the Helsinki Rules. It entered into force in 2014 after receiving the necessary 35 ratifications (United Nations Treaty Collection, 2015a).

The principle of equitable and reasonable utilisation is regarded as one of the fundamental norms in the field of water resources law and is part of customary international law. Art. 5 of the 1997 Convention sets forth that '[w]atercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner.' Art. 6 spells out the factors that are relevant for determining an equitable and reasonable utilisation. Among other factors these include the social and economic needs of the states and the population dependent on the watercourse in question.

The other major principle of international water law is the obligation to prevent causing significant harm to riparian states as spelled out in Art. 7 of the 1997 Convention. Art. 7(2) of the 1997 Convention relates to instances where harm nevertheless occurs and stipulates that states must take measures to eliminate and mitigate such harm and discuss compensation where appropriate.

Art. 10 of the Convention is of particular interest from the perspective of human rights. Art. 10(1) establishes that '[i]n the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses'. Art. 10(2) sets forth that a conflict between uses of an international watercourse shall be resolved 'with special regard being given to the requirements of vital human needs'. According to the Statement of Understanding these vital human needs are to be understood as 'providing sufficient water to sustain human life, including both drinking water and water required for production of food in order to prevent starvation' (UNGA Sixth Committee, 1997, para. 8). Thus, the Statement of Understanding interprets this term restrictively by only including mere survival requirements but not water for other basic human needs such as personal hygiene that are inextricably linked to human health and thus could be regarded as vital as well.

Moreover, Art. 10(2) has to be read together with Art. 10(1) which provides that Art. 10 only refers to constellations with no agreement or custom to the contrary (Hey, 1995: 132). According to the ILC, 'a conflict' between uses could only arise where no system of priorities governing those uses, or other means of accommodating them, had been established by agreement or custom as between the watercourse States concerned' (ILC, 1991: 180). States are thus free to give priority to whatever use they wish by agreement and the requirements of basic human needs only prevail in the absence of such an agreement (Hey, 1995: 132). Thus, on the one hand, the Convention recognises a need for the special protection of vital human needs, but on the other hand it does not go as far as to prescribe this priority.

More recent developments in international water law are reflected in the Berlin Rules, issued by the ILA in 2004. They are meant to provide a comprehensive revision of the Helsinki Rules (ILA, 2004: 336) taking note of the development and profound changes in international law as well as in the factual situation since 1966 (ILA, 2004: 337 et seq.). Regarding the consideration of basic human needs, the Berlin Rules differ significantly from the Helsinki Rules and the 1997 Convention. They establish in Art. 14(1) that '[i]n determining an equitable and reasonable use, States shall first allocate waters to satisfy vital human needs'. In contrast to the 1997 Convention and its interpretation by the ILC, the Berlin Rules are not limited to constellations with no agreement to the contrary and indicate a clear priority for vital human needs. Moreover, the concept of 'vital human needs' is defined in a broader sense than the interpretation of the term in the 1997 Convention. Art. 3(20) of the Berlin Rules defines vital human needs as 'waters used for immediate human survival, including drinking, cooking, and sanitary needs, as well as water needed for the immediate sustenance of a household'.

The Berlin Rules also include a specific reference to the human right to water. Art. 17(1) stipulates that '[e]very individual has a right of access to sufficient, safe, acceptable, physically accessible, and affordable water to meet that individual's vital human needs.' Moreover, Art. 18 deals with participation and access to information. Art. 18(1) stipulates: 'In the management of waters, States shall assure that persons subject to the State's jurisdiction and likely to be affected by water management decisions are able to participate, directly or indirectly, in processes by which those decisions are made and have a reasonable opportunity to express their views on programs, plans, projects, or activities relating to waters.'

Another recent development in international water law deals with groundwater. The 1997 Convention does not exclude groundwater, but it only covers groundwater bodies to the extent that they are connected to surface waters. Dealing with groundwater specifically, the International Law Commission has adopted the draft Articles on the Law of Transboundary Aquifers in 2008 (ILC, 2008). To a large extent, these draft Articles transfer the principles contained in the 1997 Convention to groundwater (Gavouneli, 2011). However, in the context of conflicts over water and from the perspective of human rights, Art. 5(2) of the draft Articles is particularly noteworthy. It stipulates that 'in weighing different kinds of utilization of a transboundary aquifer or aquifer system, special regard shall be given to vital human needs.' In so far, it differs from Art. 10(2) of the 1997 Convention.

At the regional level, the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes is of particular relevance, especially because the European Union is a party to the Convention (United Nations Treaty Collection, 2015b). Initially a regional instrument, the Convention was opened for accession from countries outside the UNECE region in 2013 (UNECE, 2004). The Convention strengthens the transboundary management and protection of water bodies – both surface and groundwater (Art. 1(1)). It fosters cooperation at the levels of basins. Some of the underlying principles are similar to the one in the UN 1997 Convention: the UNECE Convention requires states to prevent, control and reduce transboundary impact (Art. 2(1) and (2)(a) and 3), and it requires them to use transboundary waters in a reasonable and equitable way (Art. 2(2)(c)), while the UNECE Convention puts a stronger focus on controlling transboundary impacts as well as on cooperation at various levels, joint monitoring and assessment, common research, exchange of information and similar aspects.

These multilateral agreements are complemented by an extensive web of bilateral and multilateral river basin treaties. A number of these are noteworthy in the context of this study for the explicit recognition of the human right to water: the Charter of Waters of the Senegal River (Art. 4), the Water Charter of the River Niger Basin (Art. 4, 14-15), and the Water Charter of the Lake Chad Basin (Art. 72). Taken together, recent developments in the field of international water law reflect human rights to some extent, in particular through the priority accorded to vital human needs in the Berlin Rules and the ILC draft Articles on the Law of Transboundary Aquifers. These developments demonstrate that international water law can be understood and interpreted in way that integrates human rights.



## 5.2 Humanitarian law

International humanitarian law also includes important safeguards for access to water and prohibitions of the destruction of water infrastructure. The Third Geneva Convention applies to the treatment of prisoners of war. It refers to water supplies and sanitary measures in Art. 20, 26, 29 and 46, guaranteeing sufficient water for drinking purposes and other human needs. Similarly the Fourth Geneva Convention, which aims at the protection of civilian persons in times of war, mentions water and sanitary conveniences in Art. 85, 89 and 127. According to Art. 5(1)(b) of Protocol II, persons who have been deprived of their liberty shall *inter alia* be provided with drinking water.

With regard to the protection of infrastructure, the First Additional Protocol stipulates in Art. 54 that it is prohibited to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, such as [...] drinking water installations and supplies and irrigation works, for the specific purpose of denying them for their sustenance value to the civilian population or to the adverse Party [...]

Art. 14 of the Second Additional Protocol contains a similar provision. While some provisions deal with access to water under particular circumstances, these latter provisions deal with situations where water infrastructure is used as a tactical tool in armed conflict. These provisions are briefly referenced here, but as explained above, these questions will not be in the focus of this study (see generally Lorenz, 2003).

## 5.3 EU law

Internally, the EU Water Framework Directive (WFD) is the main instrument dealing with water. The WFD has its roots in an increasing awareness of the need for environmental and water protection.

The WFD uses river basins as the basis for water management rather than administrative boundaries. According to Art. 13 WFD, river basin management plans should have been developed by 2009, and many have been adopted, but there are delays in some basins. The objective of river basin management plans is to devise a plan for the management and protection of water and its various uses. For instance, according to Annex VII (A)(2) of the WFD, plans should include an analysis of pressures and impacts of human activity on the status of water bodies. Art. 7 WFD deals specifically with the abstraction of drinking water requiring specific protection and monitoring, which is complemented by the Drinking Water Directive. Where river basins are international, Art. 3 WFD calls for the creation of international districts to ensure coordination. The aim is to produce a single international river basin management plan, Art. 13 (2) WFD. In many basins, such as the Danube, such cooperation has been strong (EU DG Environment, 2008).

The WFD puts a particular emphasis on public participation. Art. 14 deals with public information and consultation and calls on states to 'encourage the active involvement of all interested parties in the implementation of this Directive, in particular in the production, review and updating of the river basin management plans.' As such, the WFD recognises that participation is the best way to identify and balance the interests and priorities of the various stakeholders, groups, communities and ultimately individuals involved. While Art. 14 WFD stresses the importance of public participation, the WFD does not reflect human rights standards or principles in a more explicit or comprehensive way.

## 6 Current policy initiatives at the international and EU level and their impact

As water cuts across many different sectors and policy fields, relevant policy initiatives take place in a number of different organisations and fields at the international and the EU level in the context of human rights, development, foreign affairs, humanitarian aid and environment.

### 6.1 Initiatives at the international level

#### 6.1.1 Initiatives in the context of human rights

Following the issuance of General Comment No. 15 by the CESCR, initiatives at the international level in the area of human rights focused on the consolidation and explicit political recognition of the human right to water. Spain and Germany initiated a process in the UN Human Rights Council to that extent. In a first step, the Human Rights Council asked the UN High Commissioner for Human Rights to conduct a study on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under international human rights instruments. The study was finalised in 2007 and concluded that it is 'time to consider access to safe drinking water and sanitation as a human right' (HRC, 2007: para. 66). It also identified areas that would benefit from further clarification including 'the prioritization between various kinds of water use, particularly in situations of water scarcity' (HRC, 2007: para. 62), which is closely linked to conflicts over water.

In a next step, the UN Human Rights Council established a Special Procedure on water and sanitation. Catarina de Albuquerque was appointed as Independent Expert on the issue of human rights obligations related to access to safe drinking water and sanitation. In 2011, her mandate was extended and – following the explicit recognition of the human right to water and sanitation as outlined above – renamed in Special Rapporteur on the human right to safe drinking water and sanitation. From the beginning, the transboundary dimension of the mandate was contentious. The resolutions on the mandate affirmed 'the need to focus on local and national perspectives in considering the issue, leaving aside questions of international watercourse law and all transboundary water issues' (HRC, 2008; HRC, 2011). This language limited the scope of issues to be addressed by the mandate, but it does not imply that the human right to water does not apply in a transboundary context in substantive terms. Moreover, the Human Rights Council finally adopted new language lifting the restriction on the scope of the mandate in 2013. The resolution from 2013 no longer includes the paragraph from previous resolutions and affirms 'the importance of regional and international technical cooperation, where appropriate, as a means to promote the progressive realization of the human right to safe drinking water and sanitation, without any prejudice to questions of international water law, including international watercourse law' (HRC, 2013). Transboundary issues are therefore no longer excluded from the scope of the mandate.

During her tenure (which ended in 2014, with Léo Heller appointed as successor), Catarina de Albuquerque addressed a significant number of issues pertaining to the realisation of the rights to water and sanitation with a strong focus on practical guidance for implementing human rights. She has not specifically addressed water conflicts, which might have been difficult without addressing the transboundary dimension. Yet, she has consistently addressed inequalities in access to water, pointing for instance to Dalits in South Asia being excluded from the use of water points (SR WatSan, 2012: 36) or Roma in Europe being denied access to water (SR WatSan, 2012: 31).

#### 6.1.2 Other initiatives

Apart from these developments specifically focusing on human rights, a few other initiatives are worth noting, in particular because the realisation of human rights as they relate to conflicts over water will be achieved mainly through the integration of human rights in other policy fields.



The United Nations Educational, Scientific and Cultural Organization (Unesco) runs the programme 'Potential Conflict to Co-operation Potential' (PCCP). The programme seeks to facilitate multi-level dialogues on conflict resolution and cooperation related to transboundary water resources. It is built on the assumption that water resource management does not necessarily have to be a source of conflict, but that cooperative management can even be an entry point for further cooperation. The programme works with decision-makers, diplomats, water professionals, and civil society through training, dissemination of best practices, and direct support to ongoing processes (PCCP, 2015).

Rather than a specific initiative but an overall approach is 'Integrated Water Resources Management' (IWRM), which has gained wide acceptance. The Global Water Partnership (GWP) defines IWRM as 'a process which promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems' (GWP, 2015). The reference to 'equity' could serve as an entry point for human rights, but in practice the dimension of equity has not always received sufficient priority (WGF, 2012: 5). The approach can be seen as an overall framework to allocate and manage water resources and develop the necessary legislative framework, policies, plans, institutions, financing mechanisms, regulations etc. for that purpose. (GWP, 2015).

Another relevant initiative is taking place at the UN Committee on World Food Security (CFS). The CFS requested its High Level Panel of Experts to prepare a study on Water and Food Security for its 2015 session. This topic brings the competition between water uses and the need to set priorities in allocation to the fore. A first draft has been prepared in October 2014 (CFS HLPE, 2014), and the study is expected to be finalised in May 2015.

At a broader level, UN-Water is the UN interagency mechanism established in 2003 that provides a platform for ensuring coordination and coherence among UN organisations active in the area of water. UN-Water has currently 31 members and works closely with partner organisations. In the context of water conflicts its work on water resources management, transboundary waters and water security is of particular relevance (UN-Water, 2015).

For development cooperation, the Millennium Development Goals provide an influential, overarching framework. Target 7.A calls for '[i]ntegrat[ing] the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources' with one of the accompanying indicators referring to water resources, and Target 7.C calls for '[h]alv[ing], by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation'. The component of the target referring to drinking water has been officially met in 2010 based on the indicator used (JMP, 2014: 5). However, due to the way the indicator was constructed, this does not mean that people actually gained access to safe drinking water, and the MDG target has been criticized from the perspective of human rights for the limited framing of the indicator as well as on other grounds such as the lack of setting incentives for reducing inequalities (Langford and Winkler, 2014).

## 6.2 Initiatives at the EU level

Relevant initiatives at the EU level related to conflict over water and human rights can be found in the policy fields of human rights, development, foreign affairs and water diplomacy, humanitarian aid, and environment. Examining initiatives and policy fields that relate to both the internal dimension of EU processes and its external relations is essential for safeguarding the EU's credibility with regard to promoting human rights. Several EU institutions, including the Parliament, the Commission (with several directorates), and the Council of the European Union play an active role in the context of water.

## 6.2.1 Human rights

The earliest initiative on the human right to water in the EU context was by the European Parliament in 2003. In the process leading to the unanimous explicit recognition of the human right to water, the European Parliament adopted a resolution stating 'that access to drinking water in a sufficient quantity and of adequate quality is a basic human right' (European Parliament, 2003: 432). The issue stayed on the Parliament's agenda. In January 2011, it held a hearing on the right to water and sanitation, and in November 2013 another hearing on access to safe drinking water and sanitation, in which the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque, took part both times (European Parliament 2014: 78, 116). In 2012, the Sub-Committee on Human Rights commissioned a study on the right to water and sanitation in development cooperation (Langford, 2012) that will be further discussed below.

The human right to water and sanitation is also at the core of the first successful European Citizens' initiative. The initiative links three inter-related concerns calling for the realisation of the right to water and sanitation in all EU member states, requesting water supply and water resource management to be excluded from 'internal market rules' and liberalisation, and thirdly calling on the EU to increase its efforts to achieve access to water and sanitation for all in other countries (Right2Water, 2015). In response to the initiative, the European Parliament held a hearing in February 2014, and the European Commission issued a communication outlining its response (European Commission, 2014a). It committed to ensuring that the human rights dimensions will guide its future action, including in relation to water quality, accessibility and affordability as well as transparency and access to information. It also announced a review of the Water Framework Directive in line with Art. 19(2) WFD and a public consultation on the Drinking Water Directive. Most recently, as part of its follow-up to the initiative, the Committee on the Environment, Public Health and Food Safety of the European Parliament issued its draft report with a motion for a resolution by the European Parliament (EP-ENVI, 2015). The draft considers it regrettable that the Commission's communication lacks ambition by limiting itself to reiterating existing commitments (EP-ENVI, 2015: Para. 3) and calls on the Commission to come forward with legislative proposals including a possible revision of the WFD that would recognise the right to water (EP-ENVI, 2015: Para. 4). It also recalls the UN affirmation of the human right to water and sanitation (EP-ENVI, 2015: Para. 5).

## 6.2.2 Development

The main strategy document guiding the EU's development cooperation in the water sector is from 2002, a communication from the European Commission entitled 'Water Management in developing countries – Policy and Priorities for EU development cooperation' (European Commission, 2002). It outlines challenges, ongoing activities, and policies adopted by member states before spelling out the way forward for EU development cooperation. It stresses integrated water resources management and recognises that different water uses need to be covered including water supply and sanitation, water for food, protecting ecosystems and sustainable water use for energy and industry. In a transboundary context, it also highlights the need for conflict prevention (European Commission, 2002).

In 2002, the EU Water Initiative (EUWI) was launched as a strategic partnership with a focus on improving access to water, better water governance and cooperation in river basins (EUWI, 2015). The EUWI has several regional components with Africa, Latin America, Mediterranean countries, and Eastern Europe, Caucasus and Central Asia with a focus on contributing to achieving the water-related MDGs. At the river basin level, the EUWI seeks to support IWRM based on the EU experience of river basin management (EUWI, 2012: 5). In 2004, the ACP-EU Water Facility was established for African, Caribbean and Pacific countries to improve water and sanitation infrastructure and water management (EUWI, 2012: 8). As far as transboundary water cooperation is concerned, most initiatives are funded by other programmes, but

the EUWI provides a framework for discussions, exchanging information and involving relevant stakeholders through its National Policy Dialogues (EUWI et al., 2014: 22).

The more recent 'Agenda for Change' from 2011 determines priority areas that result in a de-prioritisation of water (Langford, 2012: 15). The agenda refers to water a few times, including in the context of sustainable agriculture and energy (European Commission, 2011: 9), but it does not address it as a policy field of its own. While this is likely to lead to a lesser priority for water, sanitation and hygiene (WASH) and the water sector as such, it may also result in strengthening the linkages with other sectors, in particular energy and food, considering water as a resource in a cross-cutting way and providing support for water resource management and governance<sup>2</sup>.

### 6.2.3 Foreign affairs and water diplomacy

The EU is engaged in efforts to achieve water security and encourages cooperation between countries. In this regard, it provides support to the Nile Basin Initiative (more than 20 million Euro), it is actively engaged in Central Asia working towards integrated water resource management, and it provides support to seven transboundary basins in Africa (40 million Euro under the 9<sup>th</sup> EDF from 2000 to 2007) (European Union, 2012). Some of this work takes place in the context of development cooperation and the EU Water Initiative in close coordination with other actors supporting transboundary water cooperation through institutional strengthening and similar activities. Other activities are in the realm of the European External Action Service aimed at mainstreaming water diplomacy through demarches, inclusion of water diplomacy issues in bilateral or multilateral political dialogues, informal diplomatic contacts with third countries and actors, issuing statements, and similar activities<sup>3</sup>.

The High Representative of the Union for Foreign Affairs and Security Policy, Catherine Ashton, issued a statement on behalf of the European Union on World Water Day 2013 in which she affirmed the human right to safe drinking water and sanitation as derived from the right to an adequate standard of living. In line with the theme of water cooperation, she stressed that water security is a strategic concern in a world of water shortages, climate change, and economic and demographic changes. Therefore, '[t]he EU strongly encourages sustainable and collaborative transboundary approaches to water management across the world to promote economic and social development, political stability and peace and security' (European Union, 2013). In its statement on World Water Day 2015, the EU reiterated its encouragement for transboundary cooperation on water management (European Union, 2015).

In July 2013, the Council of the European Union issued conclusions on EU water diplomacy. These conclusions reiterate that the EU seeks to 'proactively engage in trans-boundary water security challenges with the aim of promoting collaborative and sustainable water management arrangements and to encourage and support regional and international cooperation in the context of agreed policies and programmes' (Council of the EU, 2013: para. 4). The conclusions invite the High Representative and the Commission to focus on conflict prevention and water cooperation. They welcome the results of the EU Water Security mapping (a confidential document), its policy conclusions and five policy recommendations (Council of the EU, 2013: para. 5). In terms of concrete situations, the conclusions refer to the Nile Basin, basins in Central Asia, as well as in the Middle East (Council of the EU, 2013: para. 7).

### 6.2.4 Humanitarian aid

The EU is also active in providing water, sanitation and hygiene assistance in the context of humanitarian aid. In fact, the EU is the biggest humanitarian donor providing up to EUR 200 million each year

<sup>2</sup> Interview with André Liebaert, DEVCO, 23 January 2015

<sup>3</sup> Communication with Alexandros Yannis, EEAS, Global Issues Division, 22 January 2015.

(European Commission, 2014b: 2). In doing so, the EU responds to natural disasters, conflicts, and other emergency situations. However, humanitarian provision relates not so much to conflicts over water, but rather to ensuring service provision in times of emergencies, crises, and conflict.

### 6.2.5 Environment

Internally, the DG Environment is the DG mainly focusing on water issues and the implementation of the WFD. One area that has emerged rather recently is dealing with scarcity and drought acknowledging the increasing competition over water. A communication from the Commission from 2007 deals with addressing the challenge of water scarcity and droughts in the European Union (European Commission, 2007).

The communication notes that water pricing is not consistently adopted, in particular beyond household water use. It suggests putting 'in place water tariffs based on a consistent economic assessment of water uses and water value, with adequate incentives to use water resources efficiently and an adequate contribution of the different water uses to the recovery of the costs of water services' (European Commission, 2007: para. 2.1) Yet, it also acknowledges that 'private households should, irrespective of their available financial resources, have access to adequate water provision.' (European Commission, 2007: para.2.1). In a 2012 review, the Commission laments that 'in agriculture, the biggest consumptive sector for water in the EU, operational costs for the provision of water are only partly recovered for 10 Member States and capital costs are often subsidised. An important share of water abstractions for agriculture in the EU is not priced, even in water stressed areas' (European Commission, 2012: para. 3.1.1).

The communication from 1997 also notes the need to improve land-use planning and criticises the 'widespread development of tourist resorts in sensitive river basins' as well as over-abstraction for agricultural purposes. It also points to the need to analyse the impact of biofuels on water availability (European Commission, 2007: para. 2.2.1). As such, it takes up a number of important factors in the context of conflicts over water suggesting pricing structures as a way to address such competition and to ensure more efficient water use.

## 6.3 Impact of these initiatives and the integration of human rights

The human right to water has achieved remarkable prominence in recent years and has been on the agenda for the UN and the EU in various fora. However, this awareness and willingness to integrate human rights seems largely limited to the context of water supply<sup>4</sup>.

In the context of development cooperation, the integration of human rights and its practical implications are (at least) discussed, even if a study found that the attention given to the rights to water and sanitation by EuropeAid is limited and that there is no policy on mainstreaming human rights in the water sector (Langford, 2012: 10). At a broader level, the EU's Strategic Framework and Action Plan on Human Rights and Democracy (Council of the EU, 2012) supported by a recently developed Tool-Box on a Rights-Based Approach, encompassing all Human Rights for EU Development Cooperation (European Commission, 2014c) provide a basis for such integration in development cooperation, including in the water and sanitation sector.

As far as water management, water allocation and conflicts over water are concerned, the implications of the human right to water and other human rights have hardly been discussed in a policy context. For UN human rights mechanisms and the mandate of the Special Rapporteur on the human right to safe drinking water and sanitation such an engagement has arguably been hindered by the exclusion of

<sup>4</sup> An officer in the DG DEVCO expressed the view that the right to water and sanitation relates specifically to access to drinking water and sanitation, which corresponds to the provision of water and sanitation services. Interview with André Liebaert, DEVCO, 23 January 2015.

transboundary issues from the mandate of the Special Rapporteur during the first years of the mandate. Addressing conflicts over water from the perspective of human rights without the transboundary dimension would have been a limited exercise. Lifting this restriction should enable the new mandate-holder to address human rights issues in the context of water conflicts, including their transboundary dimension.

In the EU, a host of activities in the context of (transboundary) water management and water diplomacy is taking place, yet human rights do not seem to influence these efforts. These linkages could be strengthened.

EU-internally, in the context of the implementation of the WFD, human rights also seem to play a limited role. The Commission has announced the review of the WFD based on Art. 19(2) WFD in light of the Citizens' initiative on the right to water, though. This presents an opportunity for strengthening the integration of human rights. So far, relevant legislative and policy instruments do not explicitly refer to human rights. However, they do reflect human rights standards and principles to some extent, as evident in the WFD's emphasis on participation. As far as competing uses and conflicts over water are concerned, instruments could more clearly establish a priority for personal and domestic uses and other water uses linked to the realisation of human rights. The ambivalence with regard to reflecting human rights is also evident in the emphasis on pricing water. While the human rights framework does certainly not prohibit pricing but in fact requires it in order to ensure sustainability (SR WatSan 2013b: 59), the human rights framework also requires affordability for all users. It does not conform to a purely economic valuation of water and establishing priorities in water use purely from the perspective of economic efficiency, but requires that water use necessary for the realisation of human rights is accorded priority regardless of economic considerations and the ability to pay.

## 7 Implications of Human Rights for addressing conflicts over water

Based on the human rights analysis and the overview of the applicable legal framework and the stock-taking of current initiatives, this section seeks to bring together these dimensions and discusses the implications of human rights for resolving conflicts over water resources in more detail. It presents some guidance on what it means to integrate human rights in the context of water governance and addressing conflicts over water.

### 7.1 Prioritise basic human requirements

The human rights framework has significant implications for how priorities in water use and allocation are set. First and foremost, prioritising water uses from a human rights perspective requires ensuring that everyone's basic human requirements are met, above all, water for personal and domestic use. In comparison with other water uses, personal and domestic use stands out, because there are no alternatives for realising the right to water: Water cannot be substituted, and people require direct access to water (Winkler 2012: 208). Yet, such an approach does not mean prioritising the domestic sector as such: not all household water uses are part of the human right to water and amenity uses should not be prioritised.

But priorities also relate to the realisation of other human rights such as the right to food or cultural rights, or water that people require for their livelihoods, among others. These must be considered in a comprehensive manner and states must employ the maximum of their available resources to realise all human rights to the greatest extent possible. This requires using natural, financial, and all other resources. When applying this to water allocation, it means that alternatives must be considered, where human rights link to water, but do not necessarily depend on water in their realisation. For instance, hydropower is a way to generate energy, which to some extent is needed to realise human rights, but energy can also be generated by other means. In other instances, water is indispensable, for instance for agricultural production, but the production of food does not necessarily require direct access. Food can be produced at other locations (with greater water availability) and be transported to the point of consumption (on the concept of virtual water see Allan, 1997). All these options and policy choices have advantages and disadvantages that are heavily influenced by political and other priorities. The human rights framework does not determine the outcome of these policy choices, but it does require that all these options are considered and that all available resources are employed in a way that guarantees the realisation of all human rights for all people to the greatest extent possible.

In the context of agricultural water use, water allocation needs to prioritise basic human requirements to sustain livelihoods of subsistence farmers and realise their right to food. Prioritising poor households' and farmers' water needs can contribute in substantial ways to better health and livelihoods of people living in poverty in rural areas. In conflicts over water and decisions on allocation, water for food production, water for livelihoods, water for cultural and religious uses has to be prioritised as far as people do not have alternatives but rely on access to water to realise their human rights. Such uses must have priority over large-scale agricultural or industrial uses, tourism resorts, golf courses, or other uses that may have economic benefits but tend to benefit only a few.

### 7.2 Ensure non-discrimination and equality

The prioritisation of the most basic requirements is strongly intertwined with the human rights principles of non-discrimination and equality. States must address patterns of marginalisation as identified above in section 4.1.

To start with, states need to identify individuals and groups that are marginalised in water allocation and decision-making. They should use the prohibited grounds of discrimination under human rights law to guide them in identifying these groups and individuals along the lines of gender, race, ethnicity, age,



language, religion, national or social origin, disability, property, health status, socio-economic status, and similar factors.

The aim of understanding such patterns of inequalities and historically entrenched processes of marginalisation is to take positive measures on that basis to achieve substantive equality. States must not only make sure that they do not discriminate against certain groups and individuals when adopting new measures related to the competition over water, but they also have to redress existing and past disadvantage and redistribute resources. For instance they should ensure that 'disadvantaged and marginalised farmers, including women farmers, have equitable access to water and water management systems.' (CESCR 2003: para. 7).

### 7.3 Devise adequate legal frameworks, policies and regulation in line with human rights

As states revise constitutions, legislation, and water policies, many are explicitly recognising the human right to water. Such recognition needs to be translated into concrete reforms of legal frameworks in all sectors directly or indirectly linked to competition and conflicts over water.

Existing legal frameworks have led to different outcomes in different contexts. In some instances, they may entrench existing power structures and inequalities. In some jurisdictions, landowners have the right to use groundwater underneath their property to an unlimited extent (WGF 2012:14). However, the groundwater resources are not directly linked to land of one owner, but often extend to a large area. Where users exploit groundwater in an unregulated way, this may lower water tables in the entire area and ultimately exhaust the aquifer. Large-scale, better-off users will be able to drill deeper and deeper, whereas small-scale farmers and less wealthy users will no longer be able to access water (WGF 2012: 15).

In other instances, laws may protect traditional water rights (such as those enjoyed by indigenous peoples, who have a right to the protection of their way of life linked to their use of water) and may prevent those rights from being infringed. Yet, customary rights do not inevitably protect the rights of the most marginalized individuals and groups: they may also reflect deeply entrenched power imbalances, inequalities, and social hierarchies that may, for instance, disadvantage women (WGF 2012: 9, 14).

Whatever the legal framework, whether based on formal water rights, water permits, customary rights, or other mechanisms of allocation, states must assess these legal frameworks and analyse their implications for the realisation of human rights and adjust and reform them so as to ensure that human rights are protected, including the rights of the most marginalised and disadvantaged.

### 7.4 Responsibilities of companies

The human rights framework focuses primarily on the relationship between individuals who have rights and states that bear human rights obligations. However, non-state actors, companies in particular, play an important role in conflicts over water resources, for instance when they seek to establish new water uses for industrial or agricultural water uses. It is well accepted that companies have responsibilities to respect human rights to prevent and address negative impacts of their activities on people and communities. The CEO Water Mandate has developed guidance for companies on what respecting human rights means in practice, including developing a policy commitment, assessing impacts, preventing potential negative impacts, tracking performance, establishing remediation and grievance mechanisms, and stakeholder engagement throughout the process (CEO Water Mandate, 2015).

### 7.5 Enable participation

The WFD stresses the need for public information and consultation and encourages the active involvement of all interested parties. Similarly, the IWRM approach points to participation as a key

feature. However, from the perspective of human rights participation is not just to be encouraged – people have a right to participate in decision-making (SR WatSan 2014d: para. 4, 9 et seq.). Such participation must be active, free and meaningful.

The greatest challenge in realising meaningful participation might be ensuring its inclusiveness, i.e. that everyone can participate on the basis of equality (SR WatSan 2014d: para. 3). The Special Rapporteur points out: ‘Communities cannot be considered a coherent and integrated whole; rather, inherent hierarchies and entrenched patterns of inequalities must be acknowledged.’ (SR WatSan 2014d: para. 41). On the basis of this acknowledgement, states must take deliberate steps to ensure inclusiveness and address the barriers to participation that people face, whether these are physical, economic, institutional, attitudinal, or social. (SR WatSan 2014d: para. 45).

In that context, transparency and access to information are human rights principles in their own right, and they are also important enablers for meaningful participation. Only when people are aware of current policies and drafts policies and are in position to understand them and their implications, can they participate meaningfully in decision-making processes.

Such participatory processes on the basis of equality will inevitably bring competing interests and conflicts over water to the fore. Processes, fora and regulations need to be in place to balance these competing interests while according due protection to the rights, interests, and concerns of minorities (SR WatSan 2014d: para. 39-40).

## 7.6 Human rights impact assessments

Human rights standards and principles provide overall guidance, but their implementation requires a contextualised analysis. In particular, where large-scale projects are envisaged, the impact of such projects should be assessed ex ante as well as ex post. Human Rights Impact Assessments can play an important role in this analysis, whether as stand-alone assessments or integrated in broader Social Impact Assessments. Importantly, such assessments must not only look at the impact on the intended beneficiaries of the project, but also at the impacts outside of the project area and the entire population that experiences impacts of the envisaged project (see Houdret, 2012: 299).

## 7.7 Accountability and access to justice

Accountability and access to justice are key features of the human rights framework. Where people experience or feel that their human rights are violated or threatened they must be enabled to hold the responsible authorities and actors accountable. Such accountability can be ensured through various mechanisms including administrative and regulatory mechanisms, National Human Rights Institutions, and ultimately access to the courts. States have an obligation to put adequate mechanisms into place and to make these accessible (SR WatSan, 2014c: Booklet 6). In a transboundary context, Art. 32 of the Watercourse Convention stipulates that residents in neighbouring countries must be granted access to judicial or other procedures in the case of transboundary harm.

In many countries, courts and other mechanisms have played an important role in resolving conflicts over water and securing the rights to the most marginalised populations. For instance, in the above mentioned case of the overflowing sewage treatment plant affecting downstream communities in Chacras de la Merced, Argentina, a court ordered the municipality to both provide short-term relief to the community through the provision of safe drinking water and to take measures to reduce the contamination of the river (SR WatSan 2014a: para. 21). In the Sardinal case from Costa Rica, the Supreme Court addressed water withdrawals from an aquifer to build a pipeline for water transfers to the coast and ordered the authorities to ensure that such withdrawals would not violate residents’ rights (SR WatSan 2014a: para. 30).



## 8 Policy recommendations for the EU and the European Parliament

Based on these implications of the human rights framework, this last section puts forward a number of policy recommendations for the EU, and the European Parliament in particular, with a view to better integrate human rights in policies and other measures to address water conflicts. They relate to three areas: internal processes, engagement with partner countries, and engagement in international fora.

### 8.1 Recommendations for EU-internal processes

- The EU should integrate human rights in water governance and water management internally. The upcoming review of the Water Framework Directive provides an opportune occasion to strengthen this integration.
- EU legislation and policies should clearly establish a priority for water uses as far as they are necessary for the realisation of human rights. First and foremost, this relates to water for personal and domestic uses, but also extends to other water uses such as cultural and religious uses and agricultural water use as far as necessary for the realisation of the right to food.
- EU legislation and policies should use and advocate for pricing in a way that balances arguments of economic efficiency and conservation with ensuring that everyone's basic needs are met regardless of ability to pay.
- EU legislation and policies should reflect the human rights principles of non-discrimination and equality and ensure that the rights to the most marginalized groups and individuals are guaranteed.
- EU legislation and policies should call for active, free and meaningful participation at all levels. This includes both the process of developing and reforming legislation and policies in the context of water as well as national, regional and local processes, for instance in the development of river basin management plans.

### 8.2 Recommendations for engagement with partner countries

- The EU should integrate and mainstream human rights in EU development cooperation in water supply and sanitation and water governance.
- The EU's engagement externally should be guided by the same human rights principles as internally, namely a priority for water uses as far as they are necessary for the realisation of human rights; non-discrimination and equality; participation; and accountability.
- The EU should support institutions and strengthen their capacity to implement human rights in the context of conflicts over water, both at the national level and the regional level such as river basin organisations in transboundary basins, and support active, free, meaningful, and inclusive participation of all individuals, groups, communities and stakeholders concerned in decision-making.
- The EU should support assessments of the impact on human rights (whether through specific Human Rights Impact Assessments or integrated into broader Social Impact Assessments) for any projects and measures that impact on water use and allocation, in particular when new actors and water users become active in a given locality.
- The EU should support the specific reference to and integration of human rights into transboundary and regional water agreements.
- The EU should support processes to ensure that water allocation and management in transboundary basins is guided by the principles on non-discrimination and equality and the prioritisation of basic human requirements as guaranteed by human rights.

- The EU should introduce human rights in its political dialogues in the context of water diplomacy.

### 8.3 Recommendations for engagement in international fora

- The EU should explicitly recognise the transboundary dimension of the human right to water and other relevant human rights, as reflected in the Maastricht Principles on Extraterritorial Obligations of States in the area of Economic, Social and Cultural Rights. It should support an interpretation of transboundary water law that reflects human rights and stress the linkages between transboundary water law and human rights law.
- The EU should support developments in the realm of the UN Human Rights Council to focus on water conflicts and human rights, for instance through supporting resolutions to be adopted in the Human Rights Council on the issue and through engaging with the UN Special Rapporteur on the human right to safe drinking water and sanitation and encouraging him to focus on conflicts over water, including their transboundary dimension.
- In the negotiations on the post-2015 development agenda, the EU should strengthen the perspective of human rights in inter-governmental processes and the discussion on a suggested Goal on water.

### 8.4 Specific recommendations for the European Parliament

- The European Parliament should consider adopting a resolution on the human right to water as a follow-up to its resolution from 2003 that goes beyond the mere recognition of the human right to water, and spells out its implications in the context of development cooperation as well as in the context of water conflicts, including their transboundary dimension.
- The European Parliament should further engage with the Human Rights Council to provide support to initiatives related to the human right to water, in particular related to water and conflicts, for instance through engaging in discussions in the Human Rights Council when sending delegations to the UN (noting that water and sanitation issues are usually discussed at the September session of the Human Rights Council).
- The European Parliament should engage in inter-parliamentary fora such as the Inter-Parliamentary Union (in which the European Parliament is an Associate Member) to strengthen attention to human rights in the context of conflicts over water, in particular in countries and regions where the EU is actively involved in supporting water management.
- The European Parliament should hold an event on the issue on water, conflicts and human rights to promote awareness on the linkages and the importance of integrating human rights in water governance.
- More broadly, the European Parliament should promote awareness that conflicts over water and human rights violations are not the inevitable result of physical scarcity and discuss relevant factors that may lead to human rights violations including a lack of legal protection for the rights of marginalised groups and individuals, a lack of institutional capacity, and entrenched inequalities at a broader level.

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