Water for Food: a Human Rights Obligation

How States can Manage Conflicts Between the Human Right to Water and the Human Right to Adequate Food

Michael Windfuhr
The Institute

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German Institute for Human Rights
Zimmerstraße 26/27
10969 Berlin, Germany
Phone: +49 (30) 25 93 59 - 0
Fax: +49 (30) 25 93 59 - 59
info@institut-fuer-menschenrechte.de
www.institut-fuer-menschenrechte.de

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Study

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How States can Manage Conflicts Between the Human Right to Water and the Human Right to Adequate Food

Michael Windfuhr
Michael Windfuhr has been the Deputy Director of the German Institute for Human Rights in Berlin since 2011. The Institute is Germany’s national human rights institution and holds the mandate to promote and protect human rights in and through Germany. Among others, he is responsible for the Institute’s work in the international context as well as the work related to business and human rights. In the area of the right to adequate food he advised the German Government during the negotiations of the “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests”, adopted in 2012 by the Committee on World Food Security.

Prior to his work at the Institute, he served as Human Rights Director of Bread for the World, the development organisation of the Protestant Churches in Germany. Between 1988 and 2006 he worked with FIAN International (FoodFirst Information and Action Network), an international human rights organisation focusing on the realisation of the right to adequate food. He represented FIAN at the United Nations Human Rights system from 1992 onward and lateron, he became Secretary General of FIAN. For his long-standing work on food security issues and the right to adequate food, he was awarded the Prof. Niklas Medal in 2012, the highest distinction of the German Ministry for Agriculture.

He brought his experience in international relations to the Institute of Political Science at the University of Heidelberg, where he had been teaching almost 15 years before moving on to Berlin. His main fields of research and publications are human rights policies with a special focus on economic, social and cultural rights as well as trade and agricultural policies, international relations theory, and international economic and development policies.

Special thanks to Ingrid Müller, Virginia Roaf, Christopher Schuller for helpful comments and editing the text.
Is Water for food production a human rights obligation? If yes, how does it relate to the human right to water, which is defined as access to drinking water and water for personal and domestic use? Can states accommodate to implement both at the same time? How to make sure that investments in agriculture, worldwide the main water consumer, do not jeopardise access to drinking water or threaten the sustainability of ecosystems? Do states have to give priority to water for food production compared to other agricultural water uses? How can and should conflict of water uses be settled with the help of human rights norms and standards?

This study aims to create an understanding of how states can identify and understand their various human rights obligations in connection with the use of water. The key questions have just been raised. The study hopes to start a discussion about potential conflicts in the implementation of human rights obligations deriving from different human rights – the right to water, the right to adequate food and the right to health. Furthermore it means to set priorities for decisions on the use of water or the settlement of potential conflicts.

Water is a natural resource which is becoming increasingly scarce in more and more countries and states needs to take priority decisions on how to use and/or distribute water for different uses. The World Food Crises in 2007–2008 led to a longer term increase in agricultural prices and resulted in more investments in agriculture, the main consumer of water worldwide. Therefore, there is a need to understand the human rights implications of water for food and agricultural production much better.

The study means to be a start for applying human rights standards and criteria for decisions on the use of an increasingly scarce resource. It has been written to identify answers on how to define criteria for setting priorities in its usage.

It aims to be helpful in the context of the discussion on implementing the right to adequate food at the Committee on World Food Security. The CFS recently elaborated the “Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests” and is currently discussing principles of responsible agricultural investments. It will discuss issues of access to natural resources including water in the years to come as one of the key issues on their agenda. The study may also be of interest for the discussions on the implementation of the right to adequate food and the right to water in the Human Rights Council. In particular it might be useful for countries starting to guide their implementation strategies for these human rights. Ideally, the study will initiate further research based on individual countries, but also more substantive and in-depth studies on the issues around access to a productive resource and their link to human rights standards.

Michael Windfuhr
Deputy Director
German Institute for Human Rights
Abstract

While the right to water is a universal human right, water resources are limited. The single largest consumer of water globally is agriculture with its function to safeguard the right to adequate food. At the same time, water resources available for human consumption are decreasing, and more and more countries face water shortages.

Conflicts related to water will become a serious issue. Local authorities as well as state governments need to develop mechanisms and criteria that allow them to decide which claims for water have priority and to settle disputes over access to, and availability of, water before conflicts escalate.

This study argues and describes a human rights-based approach for defining priorities both at national and local levels.

States have to guarantee that enough water is available for personal and domestic use. This requires adequate planning for an integrated water resource management. Additionally, they also have to be prepared to react adequately in the case of natural or man-made disasters.

In times of economic globalisation it is important to note that the rights to water and the rights to adequate food do also encompass extraterritorial obligations including the obligation to international cooperation and assistance, as stipulated in the International Covenant on Economic, Social and Cultural Rights as well as in the UN-Guiding Principles on Business and Human Rights.

The priorities for nation states cover the following issues:

• dealing with potential conflicts between the right to adequate food and the right to water;
• safeguarding the supply of safe drinking water in situations of disaster relief to prevent starvation and disease;
• ensuring sustainable water supply for agricultural use to the extent possible based on adequate integrated water resource management systems and spatial planning;
• developing a national strategy for the realisation of the right to adequate food and the right to water with an adequate focus on the most vulnerable groups based on good governance and participatory and transparent procedures;
• controlling private actors registered under their jurisdiction and supporting other states in the implementation of essential services related to the right to water and/or the right to adequate food.
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Agriculture is the single largest consumer of water globally. Around 70 percent of fresh water is transformed in the agricultural system into food, feed, and fibres, the three main outputs of agriculture. At the same time, the water available for human consumption (household, industry, and agriculture) is decreasing in many countries around the globe, and more and more countries are going to become increasingly water-scarce. The water resources available in a country are subject to different – and often competing – user interests: for drinking, cooking and personal hygiene, for industrial processes, for agriculture and also for leisure. As water becomes increasingly scarce, governments need to reconcile potential conflicts in the use of water resources and to develop criteria on priorities in usage and management tools to administer the use properly.

While water resources are limited or decreasing in many countries and regions, the demand is growing. The world food crises since 2007–2008 have shown the additional challenges we face to increase agricultural output. FAO estimates that agricultural production needs to be increased by 70 percent up to 2050 in order to feed the world population, which will exceed by then 9 billion people. Other factors are contributing to an increasing demand for agricultural produce. Rising incomes in middle-income countries and the BRIC countries (Brazil, Russia, India, China) lead to increased meat consumption. Around one third of the global cereal production is currently used for the production of animal feed. Another 20 percent of the total grain production is used as input for industry and as energy crops. In recent years, the percentage used for biofuel production soared, due to biofuel policies of the US and the European Union, granting subsidies and tax exemptions in order to achieve policy objectives such as fixed quotas of ethanol or biodiesel used in fuel production.

There are several reasons why water resources are decreasing in many countries around the globe. First, resources are overused in water stressed regions, such as semi-arid climates, e.g. due to industrialised agriculture or the expansion of water-intensive production patterns, as illustrated by the cotton production in the Aral Sea. The Aral Sea – once one of the biggest freshwater lakes on planet – has been reduced to a small portion of its original size due to the overuse of water in the tributaries for irrigation of the cotton fields. Second, changes to water-intensive lifestyle patterns, e.g. higher meat consumption, increased use of consumer goods etc., cause an increase in the per capita use of water. Third, water scarcity is also induced in many countries by changing natural circumstances and climate change. Processes such as temperature rise and the higher incidence of extreme weather events with intensive floods instead of a more regular distribution of rainfall are examples. Fourth, the rapid process of urbanisation is also contributing to existing water problems. Most of the new megacities of the world are situated in fertile coastal areas. They require huge catchment areas in order to ensure the population’s adequate water supply, which then reduces water availability for agriculture in such fertile coastal areas.

1 Figures presented by FAO at the conference “How to feed the World” in October 2009. The 2013 UN population development forecasts indicate that the world population in 2050 will be 9.6 billion people, i.e. be slightly higher by 250 million [Deutsche Stiftung Weltbevölkerung, press release, 12.06.2013.]
3 According to FAO figures in Asia alone more than 1.5 billion people will urbanised by 2030. The water demand of growing cities, which are often situated in fertile coastal areas, might conflict with water consumption of agriculture in the same regions.
All these reasons illustrate a variety of processes that increase water shortages caused by climate change. Local or regional overuse of available resources in a river basin or underground aquifer is often caused by man-made destruction of local environments. Large scale deforestation influences the water capture capacities of the soils and of entire basins. Constant overuse of water resources can contribute to desertification processes.

These trends will create or intensify user-conflicts related to water. Initially this will be most visible at the local level, where different water users or interest groups need to find solutions to conflicts, such as in northern Kenya, where pastoralists and local farmers battle over access to dwindling water resources. States often do not have relevant mechanisms for resolving these conflicts at the central or local levels, particularly in regions where water scarcity is new or accelerating. Such mechanisms need to be built up. Additionally, in conflict situations, states need to have criteria that allow them to decide which claims for water have priority. Unless fair and accessible dispute settlement procedures exist with transparent criteria for prioritising access to water, conflicts may escalate. Moreover not all groups have equal opportunities to engage in disputes over water in order to secure their access to water wells, due to different political or economic resources. 

An overall management of water as a resource is needed, with good planning of relevant short and long term needs of different users. Integrated Water Resource Management is one of the tools that need to be developed to try to avoid conflicts as far as possible ex ante. Water resources management needs to be aligned with spatial planning, e.g. decisions on land use. Future decisions on forms of land use need to consider and be based on the long term availability of water. Currently it can be observed that investment in land, particular at large scale is carried out preferably in water-rich areas; the potential of future use might lead to an overuse of available water resources. Therefore decisions approving of large scale land acquisitions should only be taken when they are integrated in a spatial planning process that is based on integrated water resource management. The decision-making process has to follow human rights principles such as non-discrimination, participation and transparency. Conflict solving strategies are one element that needs to be further developed. In many situations conflicts cannot only be solved ex post, when they are aggravating or have already occurred. In cases where a substantive aquifer or a river basin water system is overused systematically, water becomes a common good. Water use and access rights to water need to be determined ex ante, and criteria for setting priorities for doing so in the usage of water need to be available.

The importance and the potential level of priority of different uses of water vary again from country to country and they should be discussed with the public. Defining priorities for use is a key task for the governments concerned. Water is on the one hand essential as drinking water and for other domestic purposes, but it is at the same time the backbone of agriculture and industrial processes. How to prioritise the different uses? How to define them? This study argues and describes that an orientation based on human rights norms and standards is the best framework for defining priorities both at national and local levels because human rights serve as a legitimate reference framework. The need for a balancing approach to satisfy the different uses of water made its way into the "Voluntary Guidelines on the progressive realisation of the right to adequate food" which were adopted unanimously in the FAO Council in 2004 (FAO 2005). The text of Guideline 8c asks for the sustainable and efficient use of water as a resource and the satisfaction of basic human needs in an adequate manner: "Beating in mind that access to water in sufficient quality and quantity for all is fundamental for life and health, States should strive to improve access to, and promote sustainable use of, water resources and their allocation among users giving due regard to efficiency and the satisfaction of basic human needs in an equitable manner and that balances the requirement of preserving or restoring the functioning of ecosystems with domestic, industrial and agricultural needs, including safeguarding drinking-water quality."


5 See the World Bank study on large scale acquisitions of land, "Rising Global Interest in Farmland" Washington, D.C. September 2010. The most actural data base on large scale land acquisitions can be found on the web-site of the Landmatrix. The Land Matrix is a global and independent land monitoring initiative that promotes transparency and accountability in decisions over land and investment and is supported and financed by more than 40 development actors: www.landmatrix.org.
To ensure adequate procedures, a balancing approach based on a human rights framework is required. It needs to be built on the agreed understanding of the content of the relevant human rights standards and an understanding of the relevant State obligations related to the human rights concerned. Looking at water consumption and its competing user interests, several human rights are relevant and all of them need to be accounted for if States want to comply with all the relevant state obligations related to the use of water. These are first and foremost the right to water, but also the right to adequate food and the right to the enjoyment of the highest attainable standards of health. I want to describe the different obligations States parties have in international human rights law related to water. I will particularly discuss the relationship between the right to water and the right to adequate food, since the latter requires adequate access to water for agricultural use. The study also discusses if it is necessary to define priorities when it comes to the implementation of different state obligations, and how to solve potential conflicts between different priorities. The study will take into consideration the recent progress made in understanding of these rights.

It is important to improve our understanding of the relationship between the right to water and the right to adequate food — this has not yet been subject of many publications or research work. Therefore the goal of this study is to explore the subject and to start a debate about the interdependence of these human rights and to discuss the potential conflicts arising from conflicting implementation requirements.

I want to start with a description of the current understanding of human rights obligations related to water under the right to water and the right to adequate food. It will then analyse in particular whether and how access to water for agriculture can be described in human rights language. Is access to water for agriculture a human rights obligation, and if so, where are the limits of such an obligation in the enjoyment of other human rights? It will try to identify potential conflict areas, discuss how priorities for implementation of these rights might be formulated, and decision making processes might be set up in order to allow the fair balancing of different concerns in the process and to allow effective remedies.

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6 The most authoritative interpretation guides have been given by the UN Committee on Economic, Social and Cultural Rights, the treaty body to the International Covenant on Economic, Social and Cultural Rights in form of general comments. The relevant general comments on the right to adequate food and on the right to water have been adopted in 1999 and 2002 are quite recent. Further clarification has been achieved through the work of the Special Rapporteur on the right to adequate food (since 2000) and the independent expert on the right to water, who also became a Special Rapporteur in 2010.
2 State Obligations Related to the Right to Water

The year 2010 was an important milestone in the recognition of the right to water and the right to sanitation. The right to water and the right to sanitation were first recognised in a resolution of the General Assembly in July 2010 and later in a resolution of the Human Rights Council. The GA Resolution is based on the understanding that the right to water already exists as a component of the right to an adequate standard of living. The right to an adequate standard of living is recognised in Art. 25 of the Universal Declaration of Human Rights from 1948 and further contained in Art. 11 (1) of the legally binding International Covenant on Economic, Social and Cultural Rights (ICESCR): “The States Parties to the present Covenant recognise the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions.” The text does not explicitly mention water or sanitation, and the right to water has sometimes been challenged by experts. But the term “including” requires that other rights relevant for an adequate living besides housing, food and clothing exist. The UN-Committee on ESC Rights made a similar assumption as did the GA Resolution in 2002, when drafting a general comment on the right to water. It recognised the right to water as an already existing component of the right to an adequate standard of living. “The right to water clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival.”

What has changed since 1948 or 1966 is the relative importance of water. The increase of water-related problems today has made it clear that an “adequate standard of living” must cover access to water for domestic use and access to sanitation.

The Committee on Economic, Social, and Cultural Rights described the right to water in its General Comment No. 15 (GC 15) in more detail and the interpretation given by the Committee was reaffirmed by both the General Assembly resolution and resolution of the UN Human Rights Council in 2010. GC 15 highlights the link of the right to water also to the right to the highest attainable standard of health, which is contained in Art. 12 of the ICESRC. The right to water is further recognised in more recent international law instruments such as the Convention on the elimination of all forms of discrimination against Women (CEDAW). The Committee only described the right to water in GC 15. The General Assembly re-affirms the right to water and sanitation. The Special Rapporteur on the right to water, Catarina de Albuquerque, has clarified since that the right to water and the right to sanitation should be addressed as two distinct rights derived from the right to an “adequate standard of living”. They are often closely related to each other, since sanitation residues pollute drinking water resources. However, she is arguing that one can be much more precise in describing the content and the state obligations for each right separately, because sanitation does not necessarily require water and also because state action to implement both rights are partially very different.


The content of the legal norm of the right to water was described by the Committee on ESC-Rights in the General Comment No. 15 as the right to water for the personal and domestic use. The Committee recognised that, besides personal and domestic use, water is necessary for the realisation of other rights and functions, i.e., to produce food (right to adequate food) and ensure environmental hygiene (right to health) etc. But it concludes that “priority in the allocation of water must be given to the right to water for personal and domestic uses.” GC 15 therefore focuses on water for personal and domestic use, which covers drinking water, personal sanitation, washing of clothes, food preparation, and personal and household hygiene. There is no internationally standardised calculation of what amount of water is needed to satisfy these functions. The World Health Organisation estimates that in many circumstances, around 100 litres per day would be needed to adequately cover personal and domestic needs, though less could still cover the minimum needs. The minimum quantity can only be defined in specific local contexts. According to the definition of the CESC, the right to water comprises both freedoms and entitlements. The freedoms include the right to maintain access to existing water supplies and the right to be free from interference (i.e., no arbitrary disconnections or contamination of water supplies). The entitlements include “the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water” (GC 15, paragraph 10).

The General Comment covers five elements that clarify the content of the norms related to the right to water. The same elements are used to describe the normative content of other economic, social, and cultural rights in other general comments of the Committee. When all are fulfilled the right to water would be adequate for human dignity.

1. **Availability**: Water supply must be sufficient and continuous. Concerning the quantity needed for each person, the Committee referred to WHO guidelines, while mentioning that some particular groups might need higher quantities, due health, climate or work conditions.

2. **Quality**: Water must be safe and should not constitute a threat to a person’s health.

3. **Acceptability**: Water supply should be culturally acceptable and it should also be acceptable with respect to colour, odour and taste.

4. **Accessibility**: Water supply must be accessible physically. Water facilities must be within a safe physical reach within, or in the immediate vicinity, of each household, educational institutions or workplace. The water must follow the above mentioned quality standards and during the access of water facilities and services the physical security should not be threatened, particularly for women and girls. Moreover, accessibility covers also the economic accessibility of water, water facilities and services.

5. **Availability** requires state parties refrain from interfering directly or indirectly with the enjoyment of the right to water, that means for example that the state does not deny or limit access to water, interferes with traditional arrangements for water allocation. The obligation to protect requires state parties to prevent third parties from interfering in any way with the enjoyment of the right to water. States are required to adopt the necessary legislative or other measures to make sure that neither individuals nor groups or corporations interfere with the enjoyment of the right to water. The obligation to protect is of particular relevance for the operation of water facilities and services.

What are the relevant state obligations related to the right to water? The state obligations concerning economic, social, and cultural rights are generally understood as imposing three types of obligations on state parties: the obligations to respect, to protect and to fulfill.

The **obligation to respect** requires state parties refrain from interfering directly or indirectly with the enjoyment of the right to water, that means for example that the state does not deny or limit access to water, interferes with traditional arrangements for water allocation. The **obligation to protect** requires state parties to prevent third parties from interfering in any way with the enjoyment of the right to water. States are required to adopt the necessary legislative or other measures to make sure that neither individuals nor groups or corporations interfere with the enjoyment of the right to water. The obligation to protect is of particular relevance for the operation of water services (water networks etc.) through private entities. The **obligation to fulfill** is an obligation for a progressive

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11 Many further specifications and clarifications were added to the content of the General Comment through the work of the “independent expert” on the human rights obligations relating to access to safe drinking water and sanitation, Catarina de Albuquerque (in 2011 the mandate was extended, and the name changed from Independent Expert to “Special Rapporteur on the human right to safe drinking water and sanitation”).
realisation towards the full realisation of the right to water. States parties are required to take positive measures to assist individuals and communities to enjoy the right. States parties shall adopt measures to ensure that water is affordable. That should include the use of a range of low cost-techniques, appropriate pricing policies and/or income supplements.

The right to water shall be implemented in a way that does not lead to discrimination in access or use. All water policies should be developed in a transparent and participatory way. While the right to water applies to everybody living on the territory of a state, the state shall nevertheless give particular attention to those individuals and groups that have traditionally faced difficulties in exercising that right, and individual and groups in particular vulnerable living conditions, from women and children, to internally displaced people, migrants, prisoners and detainees.

The General Comment already links the availability of water for personal as well as domestic consumption and a framework of government policies to "ensure that there is sufficient and safe water for present and future generations" (CG 15, paragraph 28). Relevant national strategies shall ensure that water reserves are carefully monitored and secured by making sure that water is not used in an unsustainable way and not contaminated. In that context the General Comment also refers to sanitation as one of the mechanism for protecting the quality of drinking water supplies and resources. The General Comment calls for a responsible ecosystem watershed policy and requires the monitoring of developments such as climate change and deforestation. National development policies and projects should not interfere with access to adequate water. The link to the broader water policy framework is of particular importance for the long-term availability of water for personal and domestic use.

The importance of such a framework is high, even if water for domestic use is only a small portion of the overall consumption of water. Its physical availability as well as its economic accessibility is depending from the overall management of the water resource in a catchment area. This is particularly important when it comes to water for agriculture, which in a global per average figure already consumes around 70 percent of all sweet water available. Agricultural and industry investments can also lead to situation of overuse of water for agriculture or the respective investment in a way that hardly any resource is left to meet drinking water or health needs of neighbouring communities or people.

12 The Committee concentrated the GC 15 on the right to water for personal and domestic use, and it does not cover the right to sanitation. Defining both was a too comprehensive task at that moment. Because both rights are closely related they are both in the current mandate of the Special Rapporteur and both are covered in the General Assembly resolution.
In the General Comment No 15 the committee noted that ensuring sustainable access to water is important also for the enjoyment of several other Covenant rights, in particular the right to adequate food and the right to health. The water required to produce food is therefore seen and described as a component of the right to adequate food.

The right to adequate food is – as the right to water – part of the right to an adequate standard of living as formulated in the Universal Declaration of Human Rights in Article 25. It has then been enshrined in Art. 11. of the ICESCR, in Art. 11. (1) as a component of the right to an adequate standard of living and in Art. 11 (2) as fundamental right to be free from hunger. The Covenant requires that states shall take measures to improve methods of production, conservation and distribution of food by using natural resources most efficiently. Already this article is mentioning the natural resource conditions as being fundamental for food production and that access to water is – as access to food – one of the central possibilities to implement state obligations under the right to food. In addition, the right to adequate food can be found in other international instruments, including the Convention of the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination Against Women, or the four Geneva Conventions and their two Additional Protocols.

The right to adequate food was further reaffirmed by the World Food Summit in 1996 and all subsequent World Food Summits in 2002 and 2008. The Committee on Economic, Social and Cultural Rights (CESCR) was asked by the World Food Summit Plan of Action in 1996 to describe the legal norm as the state obligations to the right to adequate food. Following that call it developed the General Comment No. 12 in 1999 to describe the content and relevant state obligations. It was the first General Comment of the CESCR focusing on one single right of the Covenant. In 2000, the right to food was also among the first ESC-rights whose interpretation and application is supported by a thematic special rapporteur on the right to adequate food.

In 2004 the member states of the Food and Agriculture Organisation adopted unanimously the “Voluntary Guidelines to support the progressive realisation of the right to adequate food in the context of national food security” (VGRtaF) a detailed guideline for national implementation of the right to adequate food. The Right to Food guidelines are an intergovernmentally negotiated text that confirms the content of the legal norm and the description of state obligations contained in General Comment No. 12. The Voluntary Guidelines particularly demand the policy coordination as quoted above (from guideline 8c).

The right to adequate food is realised when every man, women and child, alone or in community with others have physical and economic access at all times to adequate food or means for its procurement. The right to adequate food is therefore more than a narrow or restrictive package of calories, proteins and other specific nutrients. The CESCR describes the normative content of the right to food with the same attributes or elements that are used to describe the content of the right to water.

13 The Plan of Action of the World Food Summit contained objective 7.4 related to the right to adequate food: “(e) Invite the UN High Commissioner for Human Rights, in consultation with relevant treaty bodies, and in collaboration with relevant specialised agencies and programmes of the UN system and appropriate intergovernmental mechanisms, to better define the rights related to food in Article 11 of the Covenant and to propose ways to implement and realise these rights...”
14 From 2000–2008, the Swiss Jean Ziegler served as Special Rapporteur; since 2008 the Belgian Olivier de Schutter has held this post.
15 The text of the Voluntary Guidelines can be found on the FAO-Right to Food homepage. The following text will use the short title: “Right to Food guidelines”, when referring to this document which was adopted by the FAO Council in November 2004.
(1) Food needs to be adequate in cultural terms and shall satisfy the dietary needs. The adequacy requirement is particularly important for the food. It should be safe and free from adverse substances “and acceptable within a given culture”. Dietary needs refer to human physiological needs and age and vary according to gender and occupation.

(2) Availability refers to the possibility that people can either feed themselves from productive land or other natural resources, or when this is not possible, that a functioning distribution, processing and marketing systems guarantee that food is available everywhere in a country where there is demand in “quantity and quality sufficient to satisfy the dietary needs of individuals...”. Availability is also affected by external actions from states or other actors. During the world food crises in 2007-2008 some major exporters of staple food stopped exporting their surplus in order to serve the needs of their own population first, and countries that are dependent on food imports faced severe difficulties in securing the availability of food during that period.

(3) Accessibility encompasses both physical and economic accessibility. Physical accessibility implies that adequate food must be available to everyone, through a variety of mechanisms such as storage also for people in disaster prone areas or for especially disadvantaged groups including ill or persons with persistent health problems. Economic accessibility means that everyone does have the income and financial means to realise their access to the food available. The income can come from own use of productive resources, from wage labour or trade or through transfer programmes.

(4) The access to food cannot be regarded sufficiently affordable when its enjoyment interferes with the enjoyment of other human rights. This refers to situations, where for example a family has to take a decision to either buy food or to send one member of the family to a medical doctor or to pay fees for primary education for their children.

Special recognition is given in GC 12 to the term sustainability when it comes to sustainable access and food security, implying food being accessible for both present and future generations” (GC 12, paragraph 7). This would also be applicable to the water use in agriculture. When water resources are overused so that they are no longer available for future generations or when water is overused so that soil becomes salty, the sustainability of food security is threatened. The voluntary guidelines point in the same direction, highlighting that states should guarantee a sustainable, non-discriminatory and secure access and utilisation of resources, emphasising that such access needs to be long term and secure (VG-RtF, guidelines 8.1).

The right to adequate food also imposes three types or levels of obligations on States parties, to respect, to protect and to fulfil. The obligation to respect requires States parties “not to take any measure that results in preventing such access”. The obligation to protect requires that no third parties – individuals or enterprises do deprive individuals of their access to adequate food. The obligation to fulfil has two subcategories, the obligation to facilitate and the obligation to provide. “The obligations to fulfil (facilitate) means that States must pro-actively engage in activities intended to strengthen people’s access to and utilisation of resources”. The obligation to provide (provision) comes into play, whenever individuals or groups are unable, for reasons beyond their control, to enjoy the right to adequate food, that the state needs to provide access to food directly, through direct procurement of safety nets. This applies also to persons who became victims of natural or other disasters. The Voluntary Guidelines contain extra guidelines on the support for vulnerable groups (Guidelines 13) and safety nets (Guidelines 14). While a minimum of essential level needs to be guaranteed immediately, other measures taken by states will be more of long-term character and will contribute to the progressive implementation of that right.

The best implementation guide for the right to adequate food is the Voluntary Guidelines for its progressive realisation. They start at the beginning with the call to states to develop human rights based national strategies for the implementation of the right to adequate food. In the Guidelines, three elements of such strategies are described which contain the following:

16 Quote taken from the Right to Food guidelines paragraph 16 in the Preface and Introduction section.

17 See for the definition of “minimum essential levels” in General Comment No. 12. The Voluntary Guidelines on the right to food are qualifying the obligation as follows: “States should consider, to the extent that resources permit, establishing and maintaining social safety nets to protect those who are unable to provide for themselves” (VG 14.1). (UN-Doc E/C.12/1999/5.)
(1) States need to base their strategies on a careful assessment of the most vulnerable groups. If these groups are not identified properly states cannot chose or develop adequate policies and strategies. They should (2) assess existing national legislation and identify forms of discrimination of loopholes. They should (3) develop policies and administrative measures to implement the right to adequate food for each of the vulnerable group. (4) Such laws and policies should regularly be assessed and evaluated in their relevance and effectiveness to improve the realisation of the right to adequate food, particularly for the existing vulnerable individuals and groups. Finally states shall make sure that all people have access to an effective remedy. Such a strategy should guide all activities of a state which has to prove that it is using the maximum of available resources. In case that the available resources are not sufficient, be it in normal situations or in a humanitarian catastrophe states have the immediate obligation to seek international assistance and cooperation.

The assessments done be the United Nations concerning people facing hunger and under-nutrition show that on a global scale, the majority (around 80 percent) live in rural areas. Half of these are smallholder farmers with very limited access to productive resources, for example with half or one hectare of land, and often insecure tenure rights or regulation. Such producers are often excluded from access to support structures, e.g. they do not have access to credits, agricultural extension or veterinary services. Another 22 percent are landless labourers who often live on seasonal employment only. Around 8 percent live in collecting economies, such as fisher folks, pastoralism etc. Insecurity of tenure, non-investment in rural infrastructure, neglect of policies priorities are often key for the situation of such vulnerable groups. They are often marginalised inside their own society. The weak tenure security and the missing support structures also hardly allow or effectively hinder them to invest in a sustainable use of their land and water resources. These groups are often inadequately supported by their own government. The members of the African Union already decided already in 2003 to invest ten percent of their households in agriculture and rural development. Ten years later less than 10 of the 54 countries have achieved that objective; a good example to show in how far public support to vulnerable groups and regions is often inadequate.

In response to that challenge the Voluntary Guidelines (VG) on the Right to Food have given much attention to the issue of “access to resources and assets” in Guideline 8. The VG demand that States should secure non-discriminatory access to and utilisation of resources in order to protect assets that are important for people's livelihood. The VG first ask states to respect and protect existing access of individuals with respect to land, water, fisheries and livestock. Moreover states should pro-actively – where necessary and appropriate – carry out land reforms and other policy reforms to improve a more equitable access to land. The VG also demand that land reforms are done without violating other human rights obligations. The particular importance of the access to land has been reconfirmed with the development of a second set of Voluntary Guidelines. The United Nations Committee on World Food Security – whose mandate was renewed after the world food crises in 2009 – developed the “Voluntary Guidelines on responsible governance of tenure of land, forests and fisheries in the context of national food security” between 2010 and 2012. These guidelines describe in detail what states and private actors can do to protect the access to productive resources for particularly vulnerable land users, in situation of land transfers, investments and land administration. The VG-Land demand a careful registration of all land users, because often marginalised and vulnerable groups have an insecure access to land and other productive resources, which include water.

Therefore, the guideline 8 of the Right to Food guidelines has also a section on access to water resources as one of its central obligations to improve secure access to productive resources. It also refers to water use for agriculture and highlights the need to use resources in a sustainable way. Guidelines 8 asks states to improve access to, and promote sustainable use of, water resources and their allocation among users. By doing so they have to balance the requirements of the satisfaction of basic human needs and of preserving or restoring functioning ecosystems with domestic, industrial and agricultural needs.

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18 The groups belonging to the category of vulnerable groups will vary from country to country and region to region. FAO identified 54 potential vulnerable groups related to food security through its FIVIMS (Food Insecurity and Vulnerability Mapping System) system. The national strategy demands a state to identify those who are particularly relevant in their national contexts, because only when identified adequate policies to support, to protect and to fulfil can be developed. For further details see www.fao.org.

In essence the right to adequate food requires the state to focus on very vulnerable groups. Due to the fact that their majority live in rural areas the secure and sustainable access to productive resources is an important policy requirement in order to guarantee that individuals, families and groups can obtain a sufficient income, which is needed to guarantee the economic accessibility of food. Part of the access to resources is the access to water for agriculture, which should be distributed in an equitable manner with the requirement of preserving or restoring functioning ecosystems. The interpretation of the right to food as it has been developed already comprises provisions to deal with potential conflicts between land and water use. Many recent large scale investments in land have been made in areas which also have sufficient water agriculture. Land without sufficient access to agricultural water has a lower value; however, investors are usually looking for both.
It is generally recognised that human rights obligations are primary obligations that states must fulfil. While in general states are free to decide on the allocation of resources, they bind themselves when ratifying human rights treaties to give their implementation priority. The UN Committee on ESC rights as formulated: States have to move “as expeditiously and effectively as possible towards” the full realisation of the rights of the covenant on ESC-Rights. The Limburg Principles state that “in the use of the available resources priority shall be given to the realisation of rights recognised in the Covenant”. In essence that means that “if a State does not accord some degree of priority to the implementation of the Covenant’s rights, it will hardly comply with the obligation under article 2(1) of the Covenant on ESC Rights [...]”. While the priority for the implementation of human rights is clear, two problems of prioritising resources come up: (1) the issue of how to distribute resources for the implementation of different human rights, how to set priorities what to do first (2) How to decide when looking into the realisation of one specific right, what are components of that right that need particular attention and priority setting, how to make choices on policy options. These problems are often not easy to solve, in particular when one wants to compare the costs of different policy options that might help solving a problem. Such calculations are often difficult and methodologically demanding. (3) A third layer of problems come up because policy choices in one policy area can affect other policy areas. Such trade-offs needs to be identified and analysed as well. To answer such questions a detailed analysis of human rights obligations and implementation issues needs to be made. In the case of water the additional question come up, for what use of the resource the state shall give priorities. The issue of prioritisation in the implementation of human rights has been answered here and there in General Comments, but it is an issue area that needs much more attention in the years to come, particularly when governments have limited financial or other resources available. A first orientation to deal with these problems can also be to start or concentrate implementation at the first on particular vulnerable groups struggling for subsistence levels of support.

When looking more into the details of the problem of user conflicts around scarce resources and into the definition of criteria for priorities in government action and policy making, the following section therefore starts with a look into already existing provisions in the current understanding of the right to water and the right to adequate food and how they can be applied. The section will end in describing open issues that need further elaboration and discussion. The following section (5) will then summarise human rights based criteria for a nexus of the right to water and the right to adequate food.

Water is required for a range of functions and different purposes and is therefore relevant for the enjoyment of several human rights. Inga Winkler has classified the use of water into nine different categories. Besides guaranteeing the access to water for personal and domestic uses, water is necessary to produce food and ensure hygiene in housing. Water is also essential

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for industrial production, job security and for cultural practices. Improved access to safe water closer to home will have a positive impact on the enrolment rates of girls. As with the implementation of all Economic, Social and Cultural rights, states will ask about the primary obligations to follow, particularly when resources are limited, and what needs to be implemented first. This can relate to financial resources, but also to political will. In the following, I want to elaborate on considerations in the definition process of priorities, and when the physical available amount of water is already very limited.

4.1 Priorities for the implementation at the national level

General Comment No. 15 starts with the following phrase for orientation: "[...] priority in the allocation of water must be given to the right to water for personal and domestic uses. Priority should also be given to the water resources required to prevent starvation and disease, as well as water required to meet the core obligation of each of the Covenant rights". Following this phrase, the first priority is that states are required to guarantee that enough water is available for personal and domestic use. In order to guarantee that access states must make sure that other forms of uses do not consume too much water, so that physical access is not limited. While states may need to develop a whole infrastructure for the delivery of water for personal and domestic use only progressively, they have to make sure that the water needed for that purpose is available. This requires adequate planning, considering the number of people living in an area and their effective demand. Governments need this essential information in order to develop and implement an integrated water resource management. When the local water is used for other functions of the right to water, governments still have the obligation to bring water in the affected areas through longer distance services. Governments might need technical support to install adequate planning tools.

General Comment No. 15. also highlights the second priority: prevention of starvation and disease (paragraph 6). Disease refers to the link between water quality and diarrhoea. Many undernourished people die of additional infections such as diarrhoea which become life threatening to an already weakened body. The quality of drinking water is essential for reducing diarrhoea related deaths.

The prevention of starvation is also considered as priority in the use of water resources and food production. A similar formulation is used in the statement of understanding accompanying the United Nations Conventions on the Law of Non-Navigational Uses of Watercourses which declared that in the event of conflicts over the use of watercourses "special attention is to be paid to providing sufficient water to sustain human life, including both drinking water and water required for production of food in order to prevent starvation."

It is a complex issue to assess these priorities. Their implementation demands a variety of policies to prevent starvation and/or to improve the quality of drinking water substantially in the long term. Nevertheless, a second priority needs to be defined when it comes to adequate treatment of people in the case of natural or man-made disasters when the situation demands urgent measures to prevent diarrhoea and starvation.

In General Comment No 12, the Committee highlights the ultimate importance for states to make sure that vulnerable population groups do not starve: "Even where a State face severe resource constraints, whether caused by a process of economic adjustment, economic recession, climate conditions or other factors, measure should be undertaken to ensure that the right to adequate food is especially fulfilled for vulnerable population groups".

The third priority mentioned is the implementation of the core obligations of each of the Covenant rights. In general the reference to core obligations is helpful because core obligations are defined in most of the General Comments written by the CESCR. Unfortunately the definitions vary. In some General Comments, like the one on the right to health, the core obligations are too broadly defined and are not appropriate for the definition of priorities. In the Right to Food guidelines another term was used in Guidelines 8.11 "...allocation among users giving due regard to efficiency and the satisfaction of basic human needs." The committee uses also sometimes the term "minimum essential levels". What becomes clear is that the third priority level is to focus the use of water on those, who have a special need who need access to the resources base urgently in order not to die or to face severe restrictions or violations.

For systematic water allocation, Inga Winkler offers a framework to balance the water requirements necessary for the realisation of the human right to water with other water requirements at different levels. "It
builds upon the minimum core approach”. Winkler differentiates four different levels of human rights guarantees: (1) the survival level, (2) the core content, (3) the level of full realisation of human rights and (4) the level beyond human rights guarantees. The survival level refers to what the Committee often calls the minimum essential level of supply to guarantee survival. “The core content reaches beyond mere survival requirements. It relates to the respective minimum essential level of all human rights, without which they would lose their significance as human rights”. Needless to say, this definition is not easy to fill and to use it as guide to concrete policy decision. Nevertheless the differentiation between survival level and core content is a very helpful one to guide the understanding of state obligations.

The fourth priority in General Comment No 15 the Committee refers also particularly to the use of water for agriculture. In paragraph 7 the Committee notes the importance of ensuring sustainable access to water resources for agriculture to realise the right to adequate food. While doing so states shall give attention “to ensuring that disadvantaged and marginalised farmers, including women farmers, have equitable access to water and water management systems.” The Committee mentions different techniques such as water harvesting and irrigation technologies in order to achieve water for agriculture for such groups. At the same time the Committee highlights that Article 1 paragraph 2 of the Covenant requires that people should not “be deprived of its means of subsistence”. Therefore adequate access to water for subsistence farming and for securing livelihoods of indigenous peoples and farmers must be seen as the fourth layer of priority. This is also not an easy obligation, particularly in times of climate change some states might get into situations where the overall availability of water supply is becoming increasingly scarce. But the Committee’s recommendation is clear. Focus water for agriculture first on those groups who need this for their subsistence.

When referring to water for agriculture, the Committee has repeatedly urged to use water in a sustainable manner. The importance of sustainability has grown since the drafting of the ICESCR, which is not specific when it refers in Article 11 (2) “to improving the methods of production, conservation and distribution of food.” The sustainability is of such importance because the availability of water becomes to the most limiting factor in modern agriculture. In average, agriculture uses 70 percent of the water available and many current forms of intensified agriculture consume a huge amount of water, particularly animal production. In Guideline 8.13, states are urged to consider “specific national policies, legal instruments and supporting mechanisms to protect ecological sustainability and the carrying capacity of ecosystems. Therefore, the issue of sustainability was specifically addressed in the Voluntary Guidelines on the Right to food. It shapes the conditions for the long term possibility to protect and guarantee access to productive resources. This should help to ensure long term sustainable food production for present and future generation. Sustainability refers to the use of water resources, water pollution, protection of soil fertility and the sustainable management of fisheries and forests. While this provision is not very detailed, it stipulates a clear state obligation that all relevant laws and policies need to be planned accordingly and emphasises the sustainability of resource management as an obligation in all planning processes.

As mentioned above, governments are requested to develop a national strategy for the implementation of the right to adequate food and the right to water. The realisation of both rights require policy changes in many different policy forums that only a strategy will be able to integrate all the changes needed. The strategy shall also help to focus all endeavours first and foremost on vulnerable and/or marginalised. It should be built on the systematic identification of policy measures and relevant activities for these contexts identified as particular obstacles of the full realisation of the right to food for people in vulnerable living conditions. The quality of all national strategies depend on the assessment of vulnerable groups and the definition of the key problems. Therefore, in its General Comment No 12 the Committee demands such a strategy in “full compliance with the principles of accountability, transparency, people’s participation, decentralisation, legislative capacity and the independence of the judiciary.” (paragraph 23). The text indicates that such strategies and the implementation of the right to adequate food and all other human rights basically depends on good governance. It highlights the problems which are there to adequately develop tools and mechanisms for the implementation of such strategies. What is required is a combination of integrated water
States should have an inventory of all water users in a certain geographical area and the resources available. It should know about the water needs for personal and domestic use and the above mentioned vulnerable groups in the region and the need to support subsistence agriculture. In the case that large scale investors in land or biomass are interested to invest in a region, the consequences for land and water availability needs to be assessed ex ante and should be discussed publicly in a transparent manner. Reality is in many countries far away from such a user sensitive process.

4.2 Priorities relating to extraterritorial obligations

In times of economic globalisation it is important to note that the right to water and the right to adequate food do also enshrine extraterritorial obligations including the obligation to international cooperation and assistance. States parties have to respect the enjoyment of the right in other countries ideally when elaborating their own policies. Moreover they have to take corrective actions, when such problems are reported. International cooperation requires States parties to "refrain from actions that interfere, directly or indirectly, with the enjoyment of the right to water or the right to adequate food in other countries."\(^{25}\) States should make sure that any activities undertaken within its jurisdiction a State party should not deprive another country of the ability to realise those rights for persons within its jurisdiction. This link has been made very explicit in the UN-Guiding Principles on Business and Human Rights that John Ruggie developed.

Beside such an obligation to respect, states need also to protect citizens of other countries and prevent their own citizens and companies from any violation of the right to adequate food or the right to water by individuals or communities in other countries. States should make sure through legislative and other measures that also private actors, when acting abroad, respect human rights standards in their activities. This obligation to protect is stipulated in more detail in the UN-guiding Principles on Business and Human Rights. States are also obliged to allow victims of the action of companies registered on its territory access to remedies.\(^{26}\) These are important concerns, because particularly in the sectors of food and water, transnational corporations do play an influential role.

As resources permit, State parties are also obliged to support other countries in the implementation of their obligation to fulfil, for example by providing resources as well as financial and technical assistance. "In disaster relief and emergency assistance, including assistance to refugees and displaced persons, priority should be given to Covenant rights."

\(^{25}\) The Quote is from General Comment No 15, para 31. In September 2011 an international legal expert opinion was written at a conference at the University of Maastricht: "The Maastricht Principles on extraterritorial obligations on Economic, Social and Cultural Rights." In these principles jurisdiction is defined in the following way: Principle 9: "A State has obligations to respect, protect and fulfil economic, social and cultural rights in any of the following: a) situations over which it exercises authority or effective control, whether or not such control is exercised in accordance with international law; b) situations over which State acts or omissions bring about foreseeable effects on the enjoyment of economic, social and cultural rights, whether within or outside its territory; c) situations in which the State, acting separately or jointly, whether through its executive, legislative or judicial branches, is in a position to exercise decisive influence or to take measures to realise economic, social and cultural rights extraterritorially, in accordance with international law." The text can be found on www.icj.org.


\(^{27}\) See the General Comment No 8 of the Committee on Economic, Social and Cultural Rights on sanctions.

\(^{28}\) This short paragraph takes up aspects from General Comment No 15, in paragraph 33, from General Comment No. 12, and from the UN Guiding Principles on Business and Human Rights that John Ruggie developed.
Conclusions and Recommendations: Human Rights Criteria for the Definition of Priorities

To define priorities, it is of utmost importance to identify particularly vulnerable groups and their minimum essential levels or basic human needs. Open issues here are having qualified and reliable monitoring tools. In the process it must be made sure that certain vulnerable groups are not overlooked unintentionally or even deliberately and that the essential needs are not underestimated. This often happens in situations of disaster relief and emergency assistance. While international aid is needed in such a situation, the obligation of the affected states to implement the rights affected for the most vulnerable groups remain. International assistance can help but shall not replace own action by the nation state. States must make sure that they are prepared for adequate emergency response in the case of natural disasters. States have to make sure that necessary action to mitigate or alleviate hunger is taken even in times of natural or other disasters (GC 12, paragraph 6).

Summing up the priorities identified in this text deriving from both rights: (1) when dealing with the nexus and potential conflicts between the right to adequate food and the right to water, states have to give priority to the availability and accessibility of drinking water and water for personal use. (2) The second priority is to ensure that in situations of disaster relief, in order to prevent starvation and disease, adequate measures are taken to provide both access water for personal use and agricultural water, when this is needed to prevent starvation. Particular attention should be granted to ensure (3) that the minimum essential level of all covenant rights is implemented. With (4) respect to water for agriculture, one can summarise that this is also an obligation under human rights law to make that water available to the extent possible through adequate integrated water resource management systems and spatial planning. With regard to water for agriculture, disadvantaged and marginalised farmers need to be granted priority. Any support to water for agriculture (5) must be made in a sustainable way. States shall develop (6) a national strategy for the realisation of the right to adequate food and the right to water that must focus on the most vulnerable groups. (7) Such a strategy must be based on good governance and a participatory and transparent process of elaboration. States have to use such human rights based criteria for defining priorities at the national level but also with regard to the extraterritorial level. States (8) shall make sure that their own activities do not do cause harm abroad. States (9) have to control private actors registered under their jurisdiction and (10) they have to support other states in the implementation of essential services related to the right to water or the right to adequate food. In all circumstances the obligations can be defined precisely only in the national context. States need to identify those individuals and groups in particular need and have to make sure that the most vulnerable groups are supported first. Support for water for agriculture has to be sustainable and must be seen as a human rights obligation when addressing the most disadvantaged and marginalised farmers.
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