Participation in the Implementation of the Human Right to Water in Tunisia

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This article analyses the implementation of the human right to water in Tunisia, focusing on the procedural indicator on 'participation'. The article looks at the functioning of local Water User Associations as the lowest institutional level of water management and reviews the performance criteria for participation within these associations as applied by the Tunisian government against the background of the legal norms for the human right to water and the indicator on participation within Sustainable Development Goal 6 on water and sanitation, i.e. SDG 6.b.

Keywords: human right to water; sustainable development goal 6b; water

1. Introduction

In Tunisia, local communities play a central role in water management. As a result, Tunisia provides an interesting case study in participatory water governance. The management by citizens of water resources in the public interest is the central focus of this article, implying a scrutiny of the operational content of the concept of 'participation'. Participation is at the core of citizenship and state guaranteed rights, including the right to water. Beyond very general notions, however, it is not clear what 'participation' means at the lowest institutional levels, i.e. the local interface between the state and local communities. What are the norms that are applied in practice to 'participation' as it applies to the realisation of the right to water? How do rights holders engage with the local state with reference to the enjoyment of the right to water? The example of Tunisia helps to shed light on such matters related to the interaction between rights holders and duty bearers in order to effectuate the realisation of this right. Participation in water governance is defined and regulated in several different, sometimes contradicting, forms. The Human Right to Water, the Sustainable Development Goals (SDGs) and Tunisian water law all interact and influence participatory water management in different but related ways. In this article we explore the degree to which these frameworks have permeated the lowest institutional level of water governance, i.e. the Groups for Agricultural Development (Groupements de Développement Agricole, GDAs), which are Tunisia's vehicle for local participation in irrigation and drinking water management.

In the following sections we explore first the Tunisian revolution and its recognition of the right to water. Secondly, we look at the framework of the SDGs in the context of Tunisia, identifying the rural areas as a key area for participatory water governance. Thirdly, we focus on the methodology of SDG 6 as it applies to participation in the water sector. Lastly, we examine how participation has been applied in practice in rural Tunisia.

2. Frameworks for participatory water governance in Tunisia

The recognition of the human right to water in Tunisia is inextricably linked to the popular uprising and the demand for participatory decision making, democracy and human rights. This uprising was part of a string of protests now known as the ‘Arab spring.’ Following the Revolution of 2011, and integral to a broader anchoring of human rights and participatory democracy in the country, Tunisia recognised the human right to water in its 2014 constitution. Article 44 states: ‘the right to water shall be guaranteed. The conservation

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and rational use of water is a duty of the state and society. Significantly, the second part of Article 44 balances the state obligation to protect water resources with citizens’ duty to do the same. A range of legal and policy measures have evolved to formalise this interaction between the Tunisian state and its citizens. For example, prominence is given to Article 2, which declares Tunisia to be a ‘civil state based on citizenship, the will of the people and the supremacy of law.’ Procedurally, Article 32 guarantees the right to information and the right of access to information. More broadly and related to issues such as sanitation and wastewater management, Article 38 declares health to be a human right. Also, more broadly and related to water quality, river basin management and the protection and restoration of water related ecosystems, Article 45 declares state protection of a healthy and balanced environment and the right to participate in the protection of the climate. Note here the reference to participation as a pillar of climate resilience. Article 8 guarantees the right of youth to participate in social, economic, cultural and political development, while Article 139 entrusts local government with the responsibility to ensure the broadest possible participation of citizens in the preparation of development programmes.

In addition, Tunisia has ratified the key conventions relevant to the human right to water, i.e. the International Covenant on Economic Social and Cultural Rights (1969), the International Covenant on Civil and Political Rights (1969), the Convention on the Elimination of all forms of Discrimination Against Women (1985), the Convention on the Rights of the Child (1992) and the Convention on the rights of Persons with Disabilities (2008). In terms of Article 65 of the Tunisian Constitution, the ratification of treaties takes the form of ordinary law, i.e. a law is passed to recognise the treaty as part of the body of Tunisian law through a majority decision in parliament. Article 67 further provides that commercial treaties (which could cover private investments in the water sector) are also subject to ratification before their entry into force. With these mechanisms in place, Tunisia has a broad series of instruments at its disposal which guide the implementation of the human right to water.

Currently, a draft water law has been submitted to Parliament (in early 2020). There have been delays in replacing the 1975 Water Code (Code des Eaux), which is still the operational water law, through amongst other factors, changes of government. It is understood at the time of writing that the new draft water law will provide more substantive and procedural clarity on the implementation of the right to water. For the moment therefore, the substantive norms regarding the human right to water, i.e. accessibility measures (economic and physical), availability (sufficiency and continuity of supply), acceptability (odour, colour, taste and cultural acceptability) and quality (free from micro-organisms, chemical substances and radiological hazards) still need to be defined. This is not to say that no such norms exist, only that the standards that exist (such as the drinking water standard) still need to be aligned to the recognition of the right to water.

3. The Right to Water and the SDGs in Tunisia

There is a great deal of overlap and interaction between human rights approaches and the SDGs: the UN Secretary General has mentioned that ‘human rights, including the right to development, lie at the core of the 2030 agenda.’ The targets and indicators of SDG 6 on water and sanitation have been adjusted in various ways to embrace human rights indicators. A prominent issue in this regard is the issue of non-discrimination (or in SDG language: ‘leaving no-one behind’): Tunisia has one of the highest rates of access to water on the African continent, with 100% in urban areas and 83% in rural areas. However, these statistics reflect the Millennium Development Goal indicators which do not cover functionality of the supply systems (i.e. continuity of supply), nor do they adequately cover accessibility and especially affordability, as water supply in rural areas can be linked to high tariffs. These are important human rights criteria and therefore the Tunisian statistics on availability and accessibility would need to be corrected downwards. Furthermore,

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1 Constitution of Tunisia 2014, s 2, art 44.
2 ibid.
3 ibid., art 32.
4 Ibid., s 2, art 8; and s 2, art 139.
5 In this case a majority of 51% suffices, it is not necessary to obtain a two thirds majority.
6 République Tunisienne, Code des Eaux (Publications de l’Imprimerie Officielle de la République Tunisienne 1975).
7 Moez Allouhi, private correspondence.
8 Committee on Economic, Social and Cultural Rights (CESCR), General Comment no. 15: The right to water (CESCR 2003).
9 Office of the High Commissioner for Human Rights, Transforming our world: Human Rights in the 2030 Agenda for Sustainable Development (UN Human Rights Office of the High Commissioner 2015).
10 WHO and UNICEF, Progress on drinking water, sanitation and hygiene: Update and SDG baselines (United Nations Children’s Fund (UNICEF), World Health Organization (WHO) 2017).
while access to drinking water is 100% in urban areas, it is service provision in the rural areas which requires attention if non-discrimination is to be paid sufficient attention. Because rural water provision lies within the responsibility of Water User Associations (WUAs), as will be described in more detail below, we need to further analyse the current status of WUAs in Tunisia. These organisations are the institutions charged with water resources management and provision of water services in rural Tunisia. All service provision to the as yet unserved population in Tunisia (i.e. action on non-discrimination) revolves around the functioning of these participatory user managed entities. It should be emphasized that while this applies to water for personal and domestic uses, as Article 6 of General Comment no. 15 (GC 15) states, water is required for a range of different purposes, [...] to realize many of the covenant rights. For instance, water is necessary to produce food (right to food) and ensure environmental hygiene (right to health)."11 GC 15 makes several references to Integrated Water Resources Management (IWRM) and alludes to a much broader application of the right than merely to domestic and household use. While it is true that the focus of GC 15 is to accord special status to water for domestic and household needs, as the author has argued elsewhere, there are many references to the anchoring of GC 15 in a broader water resources management framework.12 In this sense there is a broad congruence with SDG 6, which anchors access to drinking water and sanitation within a broader set of health and environmental goals such as water quality (target 6.3) and ecosystem protection (SDG 6.6). In Tunisia, as is the case elsewhere, the human right to water has been grafted on to an already existing water sector with its own legal framework and governance system. Furthermore, reference to the human right to water in the Tunisian constitution of 2014 took place at a time when the water sector was aligning itself to the 2030 SDGs, specifically SDG 6 on water. There is in practice a complex mutual alignment of the national water sector framework, the SDG 6 framework and the human right to water. Each of these has its own indicators and monitoring mechanisms as well as a specific associated narrative. GC 15 in Article 48 states that ‘the right of individuals and groups to participate in decision making processes that may affect their exercise of the right to water must be an integral part of any policy, programme or strategy concerning water’.13 Whereas GC 15 does not list specific monitoring criteria for participation, SDG 6 does have a separate target for participation with an associated monitoring protocol. The government of Tunisia, as will be seen below, has applied yet another format to assess participation, which is more detailed than either the right to water or SDG 6. It is at the local level that the de facto interface between laws and policies on the one hand and rights holders on the other hand, takes place. It is here also that the merger or lack of merger between different legal and institutional traditions comes into clear relief.

4. Exploring SDG 6.b methodology on participation

In the SDG framework, participation is classified as a process indicator under ‘means of implementation’. SDG 6.b is particularly pertinent as a process through which the substantive targets of goal 6 (targets 6.1–6.6): water for personal and domestic use, sanitation, water quality, etc. can be achieved. Of course, participation is also a goal in itself and it is a right which is guaranteed in many national, regional and international legal frameworks.14 Participation in the right to water and SDG 6.b are derived from the second of four ‘Dublin principles’ on water management which were incorporated into the outcomes of the United Nations Conference on Environment and Development in 1992 and which have become cornerstones of water management since then.15 The second Dublin principle states that ‘water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels’.16 In comparison, target 6.b on stakeholder participation is formulated slightly differently, i.e. to ‘support and strengthen the participation of local communities in improving water and sanitation management’.17 In this latter formulation,
local communities are the central focus of the target and planners and policy makers at different institutional levels are not explicitly mentioned as they are in the second Dublin principle. By contrast, however, it is not local communities but local planners and policy makers who are the focal point of the indicator of the target: the key indicator of SDG 6.b is the ‘proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management’. As explained below, ‘administrative units’ are seen by UN Water as government institutions and WUAs are therefore not included within this classification.

This raises the question how the indicator is related to the target: the assumption seems to be that if local administrative units have established operational procedures for participation, the participation of local communities will be supported and strengthened. It leaves out the option where water supply is directly under the control of local communities. Many national water laws have provisions establishing locally managed water institutions with a government permit to provide different classes of water services (domestic/irrigation/both). These typically emerged in national laws and the licensing practices during the 1970’s and 1980’s, either initiated by government, or by donor organisations, or by both. The World Bank at the time was supportive of reducing state debt by transferring financial burdens of capital-intensive water projects to users. This was flagged as a reduction in state control and increase in ‘participation’ but where not carefully managed, resulted in the transfer of risk to poor rural communities. The same is true in the present era: at the interface between the state and citizens, the question of participation casts light on the risks borne by both parties in ensuring the realization of the right to water in practice. Considering the fact that in rural areas, many village water schemes are managed by individuals from the community itself, and that across the world, irrigation management has in past decades been handed over to farmers themselves, this raises the question how the direct management of water by local WUAs is seen in the context of ‘participation’ under SDG 6. The same question can be applied to the right to water: if user managed services are operating under license to government, what criteria could be applied to ‘participation’ in a human rights perspective?

Globally, participation in water management preceded both the human right to water and the SDGs. Similarly, participation became an important issue in Tunisia from the 1980’s onwards. Irrigation Management Transfer (which can be seen as user participation) started in the 1970’s and peaked towards the end of the 20th Century. Its key philosophies in fact included a drive for increased ownership, decision-making authority and active participation in operation and maintenance of irrigation systems by water users. This has little to do with what UN Water currently refers to as local administrative procedures for participation: in many national water laws, the decision to issue a water use permit, or license, to a WUA is a national prerogative, or it may be delegated to the river basin/catchment level. WUAs may be federated upwards within a Catchment Management Forum. Similarly, Village Water Committees often receive bulk supplies from a national water utility. Therefore, participation and decision making may be layered in ways that are structured according to the logic of a catchment management area or a provincial/national structure rather than to that of a local administration. By focusing only on the procedures of local administrative units for the participation of local communities in water and sanitation management, there is a risk that the target indicator for SDG 6.b misses widespread and well-established participation practices.

In the SDG 6 framework, the second part of Dublin principle 2 is not explicitly mentioned, i.e. that water management decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects. Perhaps it is implied in the SDG target that water should be managed at the lowest appropriate level, but the definition does not explicitly mention it. SDG 6.b defines local administrative units as ‘subdistricts, municipalities, communes or other local community level units covering both urban and rural areas to be defined by the government’. In this formulation the emphasis appears to lie on subnational units of government such as districts and
municipalities, rather than on legally registered WUAs. It is not clear here how a user defined and organised institution with its own procedures for participation would enter the equation. On the Dublin principles, it is important to note also the word ‘appropriate’. This suggests that to be effective, participation should take place at the (lowest) appropriate level: clearly national policy dialogues are best held at national level (although one could hold regional consultations), basin planning discussions should take place in catchment forums, municipal infrastructure planning discussions should take place at municipal level and (rural) water delivery issues should be discussed within a WUA. Of particular importance here is the fact that SDG 6 reporting involves a national focal point who is expected to collect the relevant data from various ministries and other government sources to respond to UN-Water questions on progress. It is not standard practice for umbrella bodies in civil society to provide counterfactual evidence or to be included in deliberations on SDG 6 reporting. This is problematic in the sense that ‘unconventional’ sources of data that may challenge the official narrative on particular aspects of water management are excluded. The domain of ‘citizen science’ is an evolving discipline: increases in mobile phone connectivity, photographic evidence of non-functional water supplies, community water quality analyses, etc. are all growing.

Secondly, to be effective in the context of the right to water and/or SDG 6, participation should relate to the substantive indicators of the right and SDG 6.1–6.6, i.e. they should yield outcomes in terms of accessibility, affordability, cultural acceptability, water quality, water demand management, IWRM and protection and restoration of water related ecosystems. They are not required here as a procedural right. This is because 6.b refers to the Means of Implementation of SDG 6: it is a means to an end. Therefore, participation should be judged in terms of whether technology choices and management have led to the desired outcomes from the point of view of users. Similarly, participation is inserted in GC 15 with regard to interventions that may interfere with the enjoyment of the right to water.

The integrated monitoring guide for SDG 6 produced by UN-Water indicates that goal 6.b supports the implementation of the substantive SDG 6 targets by promoting the meaningful involvement of local communities. In many countries Village Water Committees or WUAs are, often by definition in law, the ‘lowest appropriate level’ of decision-making in water management. In any subnational area, there may be quite many such local water management institutions providing services to users. How is participation regulated at the local level?

5. Participation in the water sector in rural Tunisia

The case of Tunisian WUAs sheds light on how the state has regulated user self-management of services and how participation has been defined. After a period of centralised water control, Tunisia began in 1987 both to disengage the state from local community management and to increase the role of local users in water management in rural areas. In 1990, local state institutions were created to decentralise support services to what were at that time called Associations of Collective Interest (Associations d’Intêret Collectif, AIC). From 1995, irrigation management transfer began in earnest, transferring irrigated areas and irrigation infrastructure into the hands of users. From 1999 onwards, the regulatory framework obliged AIC’s to be transformed into GDAs. Law no. 99-43 of 1999 provided for the creation of water management organisations in civil society. It was also intended to diversify their financial resources to guarantee their long-term sustainability. These organisations were to have tasks serving the needs of users as well as the needs of the sector. Certain objectives were mandatory, such as the protection and rational use of natural resources, the maintenance of equipment and the building of local agricultural production capacity. The state also imposed a format for the statutes of the institution. Presently, the legal format of the GDA has remained the institutional vehicle.

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24 According to the WHO, the intention in this definition was to provide flexibility on the definition of ‘local administrative units’, and the intention was not necessarily to exclude WUAs or equivalent. Be that as it may, clarity is needed on whether these organisations are ‘government’ administrations or civil society organisations. The definition currently seems to emphasise government entities.

25 This is not new: before this time, there were other types of farmers associations involved in water management at the local level in the cases and other areas and this since the 19th century.

27 République Tunisienne, Loi no. 99-43 du 10 mai 1999, relative aux groupements de développement dans le secteur de l’agriculture et de la pêche (Publications de l’Imprimerie Officielle de la République Tunisienne, 1999).
for user managed water in rural areas, even if this institution in many cases did not manage water for irrigation but was increasingly established to manage water for domestic purposes.\(^{28}\)

There is currently a total of 2736 WUAs in Tunisia. According to law, rural water users in Tunisia may establish a GDA to provide domestic/household water services, or to provide irrigation services, or both.\(^{29}\) Since the revolution, there has been a rapid increase in establishment of GDAs to provide water for household and domestic purposes despite the legal vehicle bearing the title ‘agricultural.’ The provision of household/domestic water in rural areas has become a key priority of the democratically elected government. Currently 1369 GDA have been established to provide water for household purposes, 1232 GDA have been established to provide irrigation services and 135 GDA provide both kinds of services. The GDA which provide potable water provide services to some 1.6 million people and the GDA focusing on irrigation service farmers on a total of some 200,000 ha of irrigation land. Taken together, these GDA account for some 48% of water utilisation in the country, and any effective implementation of SDG 6 targets in the country therefore depends on their effective management.\(^{30}\) The GDA is an example of water management at the lowest appropriate level and offers insight both into the effective implementation of participation in for the right to water and to implement SDG 6.b.

Tunisia is one of the most arid countries in the Mediterranean, suffering from acute water scarcity. The annual water supply fluctuates around some 4,864 million m\(^3\) per year and is less than 500 m\(^3\) per inhabitant per year (representing ‘absolute’ water scarcity).\(^{31}\) With the national population expected to grow to approximately 13 million in 2030, the availability is expected to drop to 360m\(^3\) by that year despite the fact that water utilisation has currently grown to 95% of available supply.\(^{32}\)

To optimise water utilisation, Tunisia embarked on a strategy of IWRM since 1990, and within this strategy, Water Demand Management has been its main strategic objective.\(^{33}\) This strategy consists of a range of instruments such as public education, rehabilitation of distribution infrastructure, leak detection and replacing household and agricultural water use systems by more efficient technology. The government hopes to reduce agricultural water demand to 73.5% of the total by 2030, enabling the percentage of water utilised for drinking water to increase from 13.4% currently to 17.7% in 2030. In turn, participatory management of hydraulic infrastructure and the involvement of citizens in national efforts to conserve water is a key element of Water Demand Management. In a context in which the network losses in the transport and distribution of irrigation water are of the order of 35%, the rehabilitation and modernisation of irrigation systems has become a national priority.\(^{34}\) Between May 2013 and July 2017, the government implemented a programme to revitalise the GDAs as part of the National Strategy for sustainable management and utilisation of water systems (Mise en œuvre de la stratégie nationale de pérennisation au niveau des projets d’AEP et d’irrigation de petit et moyen hydraulique, NSP). The goal of this programme, known as Mission 2 of the National Sustainability Strategy, was to ‘professionalise’ 193 of the 2736 GDAs in Tunisia selected for their poor performance. Through targeted capacity building in key areas of water management, the government hopes to substantially improve the performance of the rural water sector. The reason for this is that many GDA suffer from internal problems of various kinds inherited from the period before the Tunisian revolution of 2011: indebtedness to bulk water and electricity providers, outdated and malfunctioning supply infrastructure, insufficient technical, financial and administrative capacity and unclear or disturbed institutional relations between water providers and water users. A survey from 2006 revealed that only 17.25% of GDA providing potable water and 36.60% of GDA providing irrigation water could be judged to be performing satisfactorily.\(^{35}\) All of these themes are central to participation and to the enablement of user-managed water services. For instance, for a GDA to receive investments in infrastructure upgrades, capacity

\(^{28}\) H Moun, and S Marlet, De l’association d’intérêt collectif au groupement de développement agricole : Le changement institutionnel et son impact sur le fonctionnement des périmètres publics irrigués Tunisiens. (Paper for Wademed Conference) (Agritrop 2006).
\(^{29}\) Thus, a GDA does not need to be agricultural, despite its title.
\(^{30}\) GDAs occupy some 200,000 ha of the 416,000 irrigated hectares in the country. The agricultural sector accounts for 80% of total water use. See BPEH, Rapport Nationale du Secteur de L’Eau (BPEH 2015).
\(^{31}\) This is the highest level of water scarcity on a five-point scale developed by the Swedish scientist Malin Falkenmark.
\(^{32}\) M Louati and J Bucknall, Tunisia’s experience in water resource mobilization and management, 157 (Water in the Arab World 2010).
\(^{33}\) The mobilisation of this level of water resources was achieved through two ten-year programmes, 1990–2000 and 2001–2010.
\(^{34}\) République Tunisienne, Bureau de Planification et des Equilibres Hydrauliques (BPEH), Rapport National du Secteur de l’Eau. Année 2015 (Publications de l’Imprimerie Officielle de la République Tunisienne 2016). Water quality is also a key concern, as more than 53% of water resources have a salinity higher than 1.5 g/l.
\(^{35}\) Ibid.

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building or other forms of support, a management contract is entered into with the Regional Commission for Agricultural Development (Comités Régionaux de Développement Agricole, CRDA), a devolved extension service of the Ministry of Agriculture, Water Resources and Fisheries. Government performance norms on participation are linked to a range of technical interventions: obtaining government support in water management is conditional on satisfaction of norms including technical, financial, administrative and participation issues that are put in place through such a contract at the interface between a GDA on the one hand and government on the other. This is a top-down initiative which serves to anchor participation norms in GDA governance and therefore can potentially boost local participation levels. The current situation is one featuring many irregularities in relations between GDA and their beneficiaries. For instance, many GDA exist without having a GDA Board that has been elected by users, and GDA do not always have a clear contract with users which defines the supply area and mutual obligations of service provider and beneficiary. These are issues of participation on the interface between service provider and user. The management contract includes targets for improved governance such as whether or not the GDA board has been elected and is functional. As time goes on, the government will extend the programme to new sets of GDAs.

6. The Integrated Monitoring Initiative and the SDG 6.b framework for monitoring stakeholder participation

For each target under SDG 6, UN-Water has produced guidance notes and summary documents on indicators and measurement for national governments. Whereas the Millennium Development Goals only embraced drinking water and sanitation, the SDG 6 framework is more ambitious, including aspects such as water quality, water demand, IWRM and the protection and restoration of water related ecosystems. This involved an expansion of the group of UN bodies with water related mandates from just UNICEF and the WHO to include UNECE, UNEP, FAO, UNESCO, UN Habitat and the WMO. This initiative is known as the Integrated Monitoring Initiative (IMI). Amongst other things, the IMI has developed an integrated monitoring guide for SDG 6. Through the UN-Water GLAAS initiative, WHO has led the development of a (draft) guide specifically for measuring and monitoring ‘Means of Implementation’ targets 6.a and 6. b, in collaboration with co-custodians OECD and UNEP. The level of participation in water and sanitation management in Tunisia can therefore be assessed by applying this framework. Annex 1 of the UN Water guidance note on SDG 6.b contains the following central question from the UN-GLAAS survey used in the monitoring of target 6.b: ‘Are there clearly defined procedures in laws or policies for participation by service users (e.g. households) and communities in planning programmes and what is the level of participation?’

Two questions form this definition, a binary one on participation procedures and an analytical one on the level of participation. Participation is defined in this instance as a mechanism by which individuals and communities can meaningfully contribute to decisions and directions about WASH and water resources. Note that in this question, the reference to local procedures is absent and it is ambiguous whether the methodology is referring to national or local laws or policies. However, the formulation of the indicator reveals that it refers to local administrative units.

36 Although the title suggests that this is a commission, it is in fact an office with delegated tasks.
37 In many cases a donor may also be involved in this relation, investing in upgrades and capacity building under certain conditions.
38 In the case of GDAs focusing on services in the Water, Sanitation and Health (WASH) sector, this type of GDAs are strongly supported by the Ministry: the water systems are designed, financed and realised by it. The Ministry provides administrative support and capacity building programs as well and realise the heavy maintenance works. There is therefore a strong dependency relationship and GDAs cannot (yet) be seen as independent entities in civil society.
39 UN Water, Integrated Monitoring Guide for Sustainable Development Goal targets and indicators. (2017).
40 United Nations Children’s Fund, World Health Organization, United Nations Economic Commission for Europe, Food and Agricultural Organization, United Nations Scientific and Cultural Organization, UN Habitat and the World Meteorological Organization.
41 The ‘Integrated Monitoring Guide for SDG 6’ lays out the measurements and methodology for the targets and indicators included in the framework proposed by an IAEG-SDGs report (report of the Inter-Agency and Expert Group on Sustainable Development Goals Indicators).
42 <http://www.who.int/water_sanitation_health/monitoring/investments/glaas/en/> accessed 23 November2019; and UN-Water, Methodological note: Indicators and proposed monitoring framework for Means of Implementation (MoI) targets for Sustainable Development Goal 6. (2016).
43 ibid., page 17.
44 ibid.
45 Since the UN-GLAAS survey response is put together at the national level, for many countries this question would be applied at the national level, i.e. national policies and plans.
The Water Governance Unit of the Stockholm International Water Institute defines three levels of participation in water governance:

- Low: information is provided without the possibility of influencing.
- Moderate: consultation (information is provided and open to comments and suggestions that may be taken into consideration).
- High: joint decision-making.  

This framework can be used to measure two instances of participation in GDAs: namely (i). the existence of (local) laws or policies describing the amount of control that an individual water user can exert over the procedures immediately influencing his or her water use, such as water prices and the election of the GDA board; and (ii). the amount of influence that the GDA community can exert over decision-making in higher levels of the decision-making hierarchy. The former could be described as ‘horizontal participation’ and the latter as ‘vertical participation.’ These instances fit 6.b as well as the second Dublin principle: the establishment of participation procedures for communities and participatory approach at all levels.

To analyse the extent to which SDG 6.b is included in Tunisian policies for participation of local communities in water and sanitation management in Tunisia and how they are integrated into the performance criteria of the GDAs, the UN-Water framework definition of participation operationalising the SDG is compared to the ideas in the annual national water sector reports of 2015 and the Mission 2-report which stipulates performance criteria for the GDAs.

7. SDG 6.b in the National water sector and the Mission 2 of the National Sustainability Strategy

The Tunisian annual national water sector reports highlight the central position of participation in water management: not only is it an end in itself to empower water users, but the government actively seeks participation as a means to establish good governance and sustainable water management. The main institutional vehicle for this transfer is, as mentioned, the GDA, which is intended to represent natural water users democratically. Whereas the previously existing irrigation bodies, the AICs, still featured strong government influence in water management issues, the GDAs were in theory intended to be managed by their users, independent from centralised authority. Certainly, the current government intends this to take place.

To what extent do current GDA policies (of all GDAs in Tunisia) and practice correspond with the SDG 6.b targets as explained by the UN-Water methodological note?

In 2015, the annual national water sector report claims that ‘the water system is managed in a participatory manner [by the GDA]’, implying that the GDA system itself is participatory in nature. However, in practice, current GDA management is characterised by insufficient inclusivity and representation, which can include undemocratic board member appointment, communication shortcomings between levels of the management hierarchy, irregular reporting to users on operation and maintenance practices and even lack of clarity on the supply area and the delineation of the users served by the GDA. In addition, many GDA’s have low levels of technical, financial and administrative capacity, a backlog on maintenance, high levels of system losses and low rates of cost recovery leading to financial problems. As these issues severely limit efficiency, and lack of participation has been recognised by government officials and scholars alike to be a major source of popular discontent and even mistrust of the GDA system, the government has initiated a range of projects which aim to rectify these and other shortcomings. In the first phase, from 2013 to 2016, technical assistance was provided to uplift the management and ensure the institutional sustainability of GDAs – 165 GDAs providing drinking water services and 58 GDA providing irrigation services. From 2016 onwards, GDA have been prepared for access to a good governance fund which is intended to reward improvements in

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46 From Dr Jenny Grönwall, SIWI, private correspondence
47 République Tunisienne, BPEH, Rapport national du secteur de l’eau: Année 2014 (2015), 18. The Tunisian constitution also mentions in Article 44 that water resources conservation is the duty of both the state and civil society.
48 I.e. through elected GDA boards.
49 République Tunisienne, Rapport national du secteur de l’eau: Année 2014 (2015), 3.
50 In addition, GDA have limited female representation and limited youth representation.
51 See for example P Minoia and F Guglielmi, ‘Social conflict in water resource management and its environmental impacts in south-eastern Tunisia’ in Natural Environment and Culture in the Mediterranean Region, vol 257, no 270 (2008), pp 257–270, 258 (Cambridge scholars 2009); or W Ghazouani et al, ‘Farmers’ practices and community management of irrigation: Why do they not match in Fatnassa oasis?’ in Irrigation and drainage, vol 61, no 1 (2012), pp 39–51, 39 (American Society of Civil Engineers 2012).
management. Key indicators being monitored at national level include the number of GDA having an operational board elected by users, the number of GDA having clear management contracts defining the area of operation and the clients and GDA which have a form of financial reporting.\textsuperscript{52} These indicators are key to the national framework used to evaluate participation \textit{within} the GDAs.

The 2015 National water report discusses vertical participation at length. More than 6 water-related meetings were held in which national strategies were discussed to which water users were invited to provide their insights, be informed and engage in shared decision-making. According to this report, the annual meeting for technical and financial partners in the water sector included GDA members and UTAP representatives to discuss strategy.\textsuperscript{53} Two meetings were held for the National Commission for Monitoring the Implementation of the GDA Promotion Strategy in 2015. In discussing the water strategy for 2050, water users were consulted extensively because: ‘The process of elaboration of the chosen “Long-term strategy” is a participative process in order to guarantee the adherence to and the appropriation of the strategy by all key actors involved.’\textsuperscript{54} Finally, the government established the Water Forum, a platform for dialogue and consultation between the various stakeholders who use or manage the water resource in a given region in order to discuss and implement a common action plan for the efficient and sustainable management of available water resources.\textsuperscript{55}

Following the UN-Water definition, these efforts put the participation level of Tunisia’s national decision-making somewhere between the highest and second of the three echelons: between consultation and joint decision-making. The final report of Mission 2 further clarifies this position. It describes the efforts made to revitalise the GDAs, not just by enforcing participation standards, but through other improvements such as technical and financial aid used for internal training and consulting. Part of this process was the creation of a list of indicators of good governance. These indicators can be compared to the UN-Water criterion for participation under SDG 6.b target appreciation. The Tunisian list of performance criteria for GDAs was put together as part of the GDA amelioration process: the indicators followed from the input of the water users who were asked to name the problems they were experiencing with the functioning of their Group. Both the outcome (i.e. the list) and the process in which it was constructed is an indicator for community participation as defined in the second Dublin principle.

Mission 2’s final report describes at length that the process which preceded the implementation of the plan included a great deal of participation by the key figures of GDA management. On numerous occasions these people were asked to input their views of the project and the way it was being implemented. This led to an accurate view of the most prevailing issues based on a participatory method. An example of this process is Activity a.3 of the pilot phase. Mission 2 was implemented in several phases, which were in turn further subdivided. A.3 refers in this case to a step in the section of the pilot phase referred to as A, in which 60 local GDA members were asked to identify prevailing problems and possible solutions in their GDA, and in which their engagement in the amelioration process was assured.\textsuperscript{56} Another is Activity b.4 of phase B in which CRDA members and GDA representatives exchanged ideas and planned the practical aspects of the project implementation.\textsuperscript{57}

A limiting factor to the ideal of joint decision-making (level 3) in the proposed methodology rather than just consultation (level 2) is that the grand strategy in formulating the goals of this project was done before the activities listed above. Before a.3 and b.4, there were other meetings in which policy was formed without consultation of end users, so the first GDA-representing key persons were introduced only after those plans were formed. The Dublin principle of participation at all levels was therefore not fully attained. Some might argue that the CRDA or ministry representatives are elected to represent the water users, but the aim of SDG 6.b is to provide scope for local community input into water policies. The question in the UN-GLAAS survey explicitly refers to the role of service users in \textit{planning programmes}.\textsuperscript{58}

One of the main problems following from the planning phase was the undemocratic process of ‘electing’ board members. The final report shows that only 54.2\% of GDA boards were elected rather than appointed
in 2014 (now above 73%). In terms of vertical participation, this is a crucial component in implementing 6.b, as Mission 2 works with key persons, who are usually selected from board positions. To include the lowest echelons in the management hierarchy, solving this issue should be of primary concern. The list of indicators corresponds largely with the UN-Water framework. GDA performance criteria that are directly relevant to participation include the percentage of GDAs which: have elected board members rather than appointed ones; have not held general assemblies for more than 3 years; or hold board meetings. Following from the data in the list, these numbers have improved significantly, indicating the priority that these points must have had in the process (see Table 1). This view is supported by the accompanying text, which describes the efforts the organisers went through in Mission 2 to effectively improve GDAs trailing in these categories.

It is clear that there are policies in place to ascertain the participation of water users through the general assemblies (with the aim to increase the number of annual meetings) and through the democratisation of board membership and subsequent representation of members to the higher echelons. However, in a list of over 40 indicators, only three have direct impact on participation. Obviously, increasing participation levels is not the only goal of Mission 2 but with the frequency of it being mentioned in the national water report, participation seems to be underrepresented in the indicator list, especially in terms of the solidity of the GDA’s legal position. Many of the government’s aims are directly or indirectly impacted by the level of participation, so following the SDG and Dublin framework more closely to solidify participation at the appropriate management level will benefit the government’s goals.

It should be noted that the criteria used to judge the performance of GDAs in Tunisia do not correspond to the substantive targets of SDG 6. The focus is primarily on governance indicators, looking at operational procedures, legal and administrative processes, financial accounting and reporting, etc. It will prove beneficial to recalibrate the targets used with those of the international community. Some indicators will require very little alteration as they correspond to SDG targets already: notably financial issues (which feature as an accessibility criterion) and system losses (which can be used as an indicator for SDG 6.4, water use efficiency).

### 8. Conclusions

In this article we explore the degree to which international and national frameworks for participatory water governance have permeated the lowest institutional level of water governance, i.e. the GDAs, which are Tunisia’s vehicle for local participation in irrigation and drinking water management. Participation is at the core of citizenship and state guaranteed rights, including the right to water. Participation is listed as a process indicator within the framework of the human right to water, but there is little guidance on the normative content of participation as applied to water management for the realisation of this right. It is therefore instructive to examine the concrete case of participation in rural Tunisia, where both the human right to water and participation have recently been anchored in the Constitution. We asked what the norms are that are applied in practice to ‘participation’ in the context of the realisation of the right to water? Secondly, we asked how rights holders engage with the local state with reference to the enjoyment of the right to water.

We noted that there are a number of parallel normative frameworks which influence participation: The Human Right to Water, the SDGs and Tunisian law all interact and influence participatory water management in different but related ways. The SDGs have gone some way towards laying out an indicator framework for participation under target 6.b. However, current definitions of the indicator seem to overlook WUAs as a central institution for participatory water governance in Tunisia, where they are referred to as GDA. The Tunisia case shows that this approach carries the risk that it will not capture widely prevalent participation practices in the water sector. Currently the SDG 6.b indicator focuses on the proportion of local administrative units with established and operational policies and procedures for participation of local communities in

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59 République Tunisienne, BPEH, *Rapport Nationale du Secteur de L’Eau* (2015).
60 ibid, p 8.
61 République Tunisienne, BPEH, *Stratégie Nationale Pour la Pérennisation de la Gestion et de l’Exploitation des systèmes d’Eau* (2017).
water and sanitation management. It appears to leave out both the national interface and the local interface between water users and the associations supplying their water.

For the Tunisian government, efforts are being made to improve participation at the interface between GDA and users are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects. This in turn is seen as essential to the national water demand management strategy. To be effective, participation should take place at the (lowest) appropriate institutional level, in line with the Dublin principles. Secondly, to be effective in the context of SDG6, participation should relate to the substantive indicators of SDG 6.1–6.6. Participation should be judged in terms of whether decisions have led to the desired outcomes from the point of view of users.

Having applied the UN-Water framework, it can be affirmed that Tunisia has measures in place to make real progress towards implementing SDG 6.b. These measures, however, do not exist at local government level but at national level on the one hand and within the GDAs on the other hand. In reality, much more must be done to make the general assembly, the most important institution for instigating horizontal participation in the GDA, more potent. One way which does not resonate in the final report for Mission 2 is to strengthen the legal basis for the Assembly with regards to the regional CRDAs and the national Ministry of Agriculture, Water Resources and Fisheries. The UN-Water framework clearly puts emphasis on laws and policies, and as of yet there still are remnants of historical inequalities and power discrepancies between the government and the GDA members which need to be addressed if the Irrigation Management Transfer in Tunisia is to be successful. This will also support and hasten progress towards SDG 6.b.

Finally, we argued that for SDG 6 to be implemented in an integrated fashion, the performance indicators of local WUAs need to incorporate the full range of SDG 6 indicators. Indeed, the GDA format has increasingly been used in Tunisia for the delivery of domestic water services in rural areas (SDG 6.1). Performance criteria include financial indicators and indicators related to on system losses. However, the criteria used to judge the performance of GDAs in Tunisia do on the whole not correspond to the substantive targets of SDG 6. This leaves open the question how SDG 6 will be implemented and monitored if it is not integrated into the day to day functioning of local WUAs.

**Competing Interests**
The authors have no competing interests to declare.