RECOMMENDATIONS FROM D'A 26:
Working together to build water security: an imperative

In many regions, droughts are becoming more intense. As they become more frequent, more intense and longer lasting, the limitations of approaches focused solely on increasing water supply or on ad hoc technical responses are becoming increasingly apparent. The increasing scarcity of this resource raises questions about how water is shared, how different uses are coordinated and the collective capacity to organise its management over the long term. These are all key elements of integrated water resource management (IWRM), a concept that reflects the idea that good management of water, a limited and vulnerable resource, requires consideration of the entire hydrological cycle, ecosystems and the diversity of uses.

Formalised at the International Conference on Water and the Environment held in Dublin in 1992, this approach appears across the board in the United Nations Convention to Combat Desertification (UNCCD). The texts emphasise the interactions between environmental factors, resource management practices and governance choices, while recognising the importance of territorialised and participatory approaches. However, the issue of water is often treated from an economic and utilitarian perspective. Power relations and decision-making mechanisms at the territorial level, as well as interconnections with ecosystems, are not fully addressed. More broadly, IWRM principles often remain symbolic or are applied only partially. They appear to be more of a normative framework than operational tools for structuring sectoral policies.

However, making the concrete implementation of integrated and shared water resource management at the territorial level an international issue could help to better understand the current challenges related to drought. While water security relies on technical solutions, institutional, social and political arrangements are essential to empower stakeholders in decision-making and ensure equitable access to resources.

1 | How would building shared water management at the territorial level be useful?

Water is not just a technical resource mobilised for economic projects. In other words, it is not solely a commodity with market value. It is also – and above all – a shared resource shaped by different uses, values, interests and power relations. And in many drought contexts, the difficulties stem less from a lack of solutions than from the coexistence of fragmented, sectoral decisions and the impossibility of having a space for discussion on collective priorities. Establishing a shared territorial approach to water management makes it possible to identify these inconsistencies and address them politically rather than technically, while moving away from implicit assumptions and conflict. A new logic is taking hold: all users – farmers, local authorities, technical services, economic actors, civil society – and no longer just a small group with vested interests, are involved in defining the rules, objectives and limits of use. This co-production does not aim for unanimity, but rather the construction of discussed, revisable compromises. It involves sharing responsibilities and engaging stakeholders in a form of accountability. Decisions, including those involving restrictions, thus become more transparent and legitimate.

This empowerment of the various stakeholders promotes the inclusion of often marginalised groups in decision-making bodies, because their needs and knowledge are essential for defining appropriate and equitable rules. Women and vulnerable populations benefit from this. This broadly inclusive approach makes it possible to coordinate between decision-making levels and sectors of intervention. Water is at the crossroads of many policies – agricultural, food, energy, environmental and territorial – and is therefore essential.

Organising shared water management leads to replacing compartmentalisation and fragmented decision-making with a systemic approach. The intervention strategy thus gains in coherence while taking better account of the physical, social and economic realities specific to each territory, without losing sight of national and international frameworks. Collective water governance plays a central role here in identifying and prioritising uses in order to ensure optimal and equitable allocation of resources. It is a tool for securing trajectories in the face of increasing climate uncertainty. Rather than responding to shortages with ad hoc and emergency decisions, collective management encourages anticipation and the collective capacity to adjust choices over time. In a context of more frequent and longer droughts, this ability to collectively debate, decide and revise becomes a central factor in territorial resilience.

A necessary but demanding approach

Shared water management does not eliminate physical constraints or social inequalities. It requires institutional capacities, financial resources and spaces for dialogue, transparency and effective control, which are often lacking. Without attention to power relations, participatory mechanisms may remain formal or mainly benefit already dominant actors. The link between local consultation, shared responsibility and regulatory decisions remains fragile, especially given the high economic stakes. These limitations serve as a reminder that shared water management is neither a turnkey model nor a guarantee of consensus, but a demanding framework whose effects depend heavily on the context and implementation methods.

2 | What are the current constraints in terms of water management in the context of drought?

Institutional and sectoral fragmentation

In many countries, water management is the responsibility of several ministries and administrations (agriculture, environment, water, energy, planning), whose mandates overlap without coordination. This fragmentation sometimes results in contradictory policies: support for irrigation on the one hand, and groundwater conservation objectives on the other. In West Africa, several national water management strategies have also struggled to produce concrete results due to a lack of implementing decrees and clarification of responsibilities between national and local levels. This structural deficit creates a governance vacuum in which decisions are neither taken nor discussed collectively.

Conflicts of use linked to the implicit prioritisation of needs

When resources become scarce, tensions between different uses become apparent, not because of new needs but because they compete directly with each other. Conflicts over mega-basins in France illustrate these unresolved trade-offs between agricultural irrigation, environmental preservation and domestic uses. In other contexts, such as the peri-urban areas of North Africa, urban expansion often penalises agricultural uses, without a clear framework for compensation or prioritisation. These conflicts reveal the absence of shared rules on what is considered a priority use or an essential need in situations of scarcity. In the context of a humanitarian crisis, difficulties in accessing resources are exacerbated by tensions that may arise between displaced populations and host communities, for example.

Inequalities in access within the same territory or sector

Beyond intersectoral conflicts, drought highlights stark inequalities between actors with very different levels of access, particularly women – whose access to land remains limited – and vulnerable populations. In agriculture, the best-equipped farms (deep boreholes, motorised pumps) capture a disproportionate share of the resource, to the detriment of small producers who depend on surface water or irregular rainfall. Studies conducted in the Sahel show, for example, that during dry periods, some areas continue to produce crops while others are completely excluded from access to water, exacerbating economic and social inequalities. Similarly, when several communities share the same aquifer or watercourse without a consultation mechanism, decisions taken locally can have negative effects downstream. The hydrological scale therefore often remains disconnected from the administrative decision-making scales.

The lack of reliable and shared data

Drought management is hampered by a lack of operational information on the actual state of the resource. In several countries, informal boreholes are not recorded, withdrawals are not measured and hydrological data is scattered across different institutions. This situation complicates crisis anticipation and fuels mistrust: restrictions that are not based on comprehensible and accessible diagnoses are perceived as arbitrary. In some Tunisian oases, the lack of accurate groundwater monitoring has contributed to chronic overexploitation and soil salinisation.

Political and geopolitical constraints.

In territories marked by conflict, occupation or high political instability, water becomes a lever of power rather than an object of collective management. In Palestine and Yemen, access to water is closely linked to political power relations, limiting the capacity of local institutions to take action. Even outside these extreme contexts, large-scale water projects can crystallise tensions when they are perceived as serving specific territorial or economic interests.

Eroding confidence in decision-making mechanisms

The accumulation of opaque decisions, formal consultations with no real impact, and contested projects weakens the legitimacy of water management institutions. In some areas, stakeholders are becoming weary of participatory processes that are perceived as symbolic. This lack of trust makes it difficult to adhere to collective rules, even though drought management requires shared efforts and difficult trade-offs.

3 | Ways to develop more integrated and shared water resource management

Establishing more collegial modes of governance, facilitating dialogue between stakeholders with very different interests, and managing to balance different water needs fairly while preserving the sustainability of the resource... These necessary changes are being built gradually. They require action on many fronts, particularly in terms of dialogue between stakeholders, which is essential for laying the foundations for collective management and making trade-offs visible and open to discussion. In this regard, several experiences demonstrate the value of regional consultation frameworks in defusing some of the tensions associated with drought: while they do not eliminate conflicts of use, they make them negotiable. Local water platforms, oasis committees or, in France, schemes such as Territorial Water Management Projects, thus provide spaces where withdrawal rules, priorities and restrictions can be discussed collectively.

In Senegal and Tunisia, these bodies have helped to re-establish dialogue between farmers, local authorities and technical services, particularly during periods of scarcity: they have made it possible to move away from exclusively administrative management or implicit arbitration.

Dialogue can continue on a larger scale, such as through cooperation between basins, which provides a relevant framework for moving beyond communal or sectoral approaches. In Burkina Faso, the establishment of water agencies and multi-level structures has made it possible to link local decisions to national policies, while integrating the ecological and social dimensions of water management. The experiences of pilot basins, such as Comoé and Nakambé, show that this coordination is possible, provided that existing endogenous rules are recognised and stakeholders are supported over the long term.

Within the consultation bodies, the terms and conditions for sharing the resource are discussed in very concrete terms, which can take different forms depending on the context: agreed water rotations, local pumping rules or seasonal quotas, for example. These terms and conditions are all the more readily accepted when they are combined with simple tools for monitoring withdrawals and transparent communication on the state of the resource. By combining formalised shared rules with collective monitoring of groundwater levels, some Tunisian oases have managed to limit abusive use and strengthen the legitimacy of decisions, even when they involve restrictions. More broadly, access to reliable and shared information on the state of the resource appears to be a key factor in governance. Thanks to the development of piezometer networks, the inventory of hydraulic structures and the establishment of territorial information systems, it is now possible to objectify diagnoses and limit perceptions of arbitrariness. In several pilot basins in Burkina Faso, these tools have helped to support the decisions of local water committees (CLEs) and strengthen the credibility of management rules, even though their sustainability remains dependent on the financial and human resources available. They can also be used to build early warning systems. In the Niayes region of Senegal, citizen monitoring of groundwater and boreholes by local water platforms serves as a lever for alerting, mobilising and engaging in political dialogue, strengthening territorial governance in the face of climate change and pressure on resources.

In particular, when the reality of available resources is clarified, the existence of a formalised dialogue between stakeholders helps to enable reflection on water savings. In the field, this can involve the dissemination of water-saving practices across a given territory, so as to avoid the adverse effects of unregulated individual modernisation. When adapted to the economic and social realities of the territories and in line with collective rules, solutions such as drip irrigation, regulated solar pumping, controlled drainage or improved soil retention lead to reduced demand while securing agricultural production. And when rational use is no longer enough to ease tensions, promoting so-called "unconventional" water sources, through the reuse of treated wastewater, rainwater harvesting or artificial groundwater recharge, can be a useful tool. In Cape Verde, the combination of desalination for drinking water and wastewater reuse in agriculture has helped to stabilise usage and reduce local tensions, while strengthening the social acceptability of the choices made. However, although these practices can reduce pressure on resources at a given moment, they are not without impact on ecosystems, particularly aquatic ecosystems.

4 | Where further action is needed

Establishing more democratic water governance at all levels

There are local water management bodies that, on paper, have the resources, a mandate and institutional recognition. However, some major decisions are taken outside these consultation frameworks: crucial negotiations on the allocation of water use take place between the State and certain sectoral actors, bypassing the bodies that are theoretically competent. To limit the influence of powerful interest groups and ensure fairness among users, decision-making must be based on transparent and legitimate processes. The foundations for such governance, which is necessary at the international, national and local levels, are set out in the texts associated with international conferences such as the UNCCD, but they need to be strengthened and, above all, their implementation must be accelerated.

Developing public policies that respect planetary boundaries

Given the increasing scarcity of available water, it is becoming imperative to develop public policies that incorporate a forward-looking vision, so that decisions are made that are compatible with the resource's capacity for renewal, while respecting planetary boundaries. Economic profitability can no longer be used as the sole guiding principle. Such an approach necessarily involves a transformation of the agricultural model, resulting in a shift to a more rational and less productive model, based in particular on the principles of agroecology. Such a transition requires, first and foremost, better coordination between water and agricultural policies. It also raises questions about needs themselves and may require a collective decision to give up certain uses deemed non-essential. Such a choice implies setting common production targets, designed in line with planetary boundaries, within the framework of democratic decision-making mechanisms.

Making transparency and knowledge the foundation of collective decision-making

The production, sharing and accessibility of hydrological data are essential for peaceful water management. Monitoring withdrawals, groundwater levels, water quality and usage helps to objectively assess situations of tension, foster dialogue and strengthen the legitimacy of decisions. These functions require long-term public and collective investment, just like physical infrastructure.

Investing in human, social and organisational capacities

Shared water management relies on skills that are often invisible but crucial: mediation, consultation, regional coordination and intersectoral coordination. Without strengthening these capacities – within local authorities, local organisations and technical services – the sustainability of governance mechanisms and their ability to evolve in the face of climate uncertainty cannot be envisaged.

Promoting inclusive and appropriate financing mechanisms

Financing arrangements have a strong influence on water management trajectories. To ensure effectiveness, flexible, multi-year and accessible mechanisms are needed. Experimenting with risk-sharing, insurance or territorial water financing mechanisms can help to secure transitions in the most fragile contexts. The polluter pays principle, which is not effectively applied today, is also a potential resource, even as the costs of making water drinkable are rising worldwide.

Désertif'actions 2026

Excerpts from the bibliography used:

Amsallem I. (2025) Bibliographic note D'A26: Territorial management of water resources. CARI.

Baron, C., Siri, Y., & Belbéoc'h, A. (2022). IWRM: A travelling model confronted with the revenge of territories. International Review of Development Studies, 248, Article 248. https://doi.org/10.4000/ried.420

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This document is part of the Désertif'actions initiative, which seeks to better understand how to improve the resilience of territories to drought. It is based on a specific bibliographic analysis as well as on country workshops and webinars held in the run-up to this event, which will take place from 25 to 28 March 2026 in Djerba.

Intended for Désertif'actions participants and contributors, this note aims to explain the importance of effective collective water management in increasing the resilience of agricultural production in arid and semi-arid areas. It should help to strengthen the arguments that civil society representatives will be able to put forward at COP17 of the UNCCD.

List of countries that contributed to this note through their preparatory workshops: France, India, Palestine, Democratic Republic of Congo, Senegal, Tunisia, Yemen.

Find the reports from the preparatory workshops and webinars on the website desertif-actions.org

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