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Water Governance in Syria During the Transition

The Challenges of Conflict and Reconstruction and Options for Equity and Sustainability



A policy paper based on two participatory workshops with sector specialists

October 2026

Foreword

Water is central to reconstruction decisions during Syria's transition. Decisions about which networks to rehabilitate first, where to direct public spending, and how to allocate water between drinking water supply and irrigation affect the reliability and cost of services, as well as the ability of households and farming communities to rebuild their livelihoods. The fairness of these decisions depends on the criteria used to set priorities, the extent to which affected communities can help shape them, and their ability to hold the authorities responsible for implementation to account.

Some of the causes of Syria's water crisis predate 2011. The Syrian Center for Policy Research (SCPR) documented in its report Syria: Justice to Transcend Conflict the proliferation of unlicensed wells before the conflict and the resulting pressure on groundwater resources. During the conflict, drinking water networks and treatment plants were damaged, recurrent electricity outages disrupted the operation of water supply wells, and water sources were contaminated in areas where rudimentary methods were used to extract and refine oil. Restoring water services therefore requires rehabilitating infrastructure, ensuring that it can operate reliably, and protecting the water sources on which it depends.

The Syrian Center for Policy Research prepared this policy paper drawing on the outcomes of two participatory workshops on water governance held in collaboration with the Arab NGO Network for Development (ANND) within the framework of its Arab Watch Report on Economic and Social Rights series. This collaboration forms part of ANND's work on the right to water and the impact of climate change, the focus of the seventh edition, the Arab Watch Report 2025 on the Right to Water and Climate Change.

The paper applies the concepts of distributive and procedural justice developed in SCPR's report. From a distributive justice perspective, it examines who benefits from public spending, which areas are prioritised for service restoration, and how the costs of water supply and the risks of resource depletion and pollution are distributed. From a procedural justice perspective, it examines who takes part in decision-making, how accessible the information behind those decisions is, and what avenues affected communities have to challenge decisions and hold the responsible authorities to account.

The paper examines how Syria can restore and improve water services during the transition while directing investment to underserved areas and groups, expanding local communities' role in setting priorities, and protecting water resources from depletion and pollution. It proposes policy options that link immediate recovery needs with longer-term reform of the rules governing water management.

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Disclosure of Digital Tool Use and Disclaimer

The team used digital tools to assist with proofreading and editing. The Syrian Center for Policy Research team analysed the findings from the two participatory workshops, developed the policy options, and carried out the final review. The Center takes responsibility for the paper's content and final wording.

The paper draws on discussions and proposals from the two workshops and presents options for debate on water governance in Syria during the transition. It may not capture every view expressed by participants. Readers are responsible for any decisions they make on the basis of the paper.

Authorship Collaboration and Acknowledgements

Iyas Shahin prepared this paper with contributions from Wajdi Wahbi and Rabie Nasser of the Syrian Center for Policy Research. The paper draws on two workshops held jointly by the Center and the Arab NGO Network for Development as part of the Arab Watch on Economic and Social Rights project.

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Executive Summary

Water is central to Syria's recovery and reconstruction because it affects food security, health, energy, livelihoods, and social relations. This paper examines how the effects of conflict, economic policies, and arrangements of power are reshaping water governance during the transition that began after the fall of the Assad regime on 8 December 2024. It asks which policy options can support productive recovery, the right to water, and environmental sustainability. It argues that rules governing allocation, finance, and control over water turn physical scarcity into unequal deprivation. Rebuilding infrastructure is necessary, but it is not enough on its own to achieve equitable water security.

The paper uses a qualitative case study. It combines a focused critical review of literature and reports with an analysis of the Syrian Economic Sciences Association workshop held on 11 March 2025 and records of the second workshop, dated 21 August 2026. The findings cover three themes: governance and institutions, financing and service sustainability, and equity and integration. The paper distinguishes participants' observations from published evidence and from its own conclusions and recommendations, taking account of the limits of a sample drawn from sector specialists.

The analysis brings together sustainable development and critical political economy. It assesses each option by its effects on the distribution of power, benefits, and costs, the restoration of productive capacity and public services, the limits of basin replenishment, participation and accountability, and solidarity and social cohesion. The paper examines neoliberal policies through practices that can be investigated empirically, such as shifting service costs to households, reducing public investment, and extending commercial control over resources. It does not treat them as a blanket explanation for every failure.

The paper gives priority to rebuilding public capacity under community oversight, protecting essential water uses, funding operations and maintenance through a transparent budget, and making withdrawals and investment subject to basin water accounts. It proposes clear responsibilities for national, basin, and local institutions, tariffs that reflect users' ability to pay, phased regulation of wells coupled with livelihood protection, and safe reuse of treated wastewater. These measures contribute to social cohesion only if their benefits and burdens are shared fairly and affected people can challenge decisions and obtain redress. Better supply alone will not produce this result.

Keywords: Syria, water governance, transition, critical political economy, sustainable development, right to water, reconstruction, water justice, social cohesion.

1. Introduction and Research Problem

Syria's water sector entered the transition under overlapping pressures that built up before the conflict and worsened during it. Agricultural expansion and depletion in some basins compounded the effects of damage to infrastructure, declining electricity supply and maintenance, displacement, and fragmented governance. The change in political authority in December 2024 did not, by itself, remove these conditions or restore services. Risks of local violence and unequal access persist, which makes this a conflict-affected transition rather than a stable post-conflict period (SCPR, 2020; Haj Asaad, 2024; Selby, 2019; UNICEF, 2026).

Water serves many uses and links agriculture, energy, health, food security, and spatial planning. It is a condition for both production and the reproduction of everyday life. When supplies fail, farmers and businesses lose income, and households spend more money and unpaid time securing water. The allocation of investment across areas determines who benefits from recovery and who bears its costs. Water governance therefore goes beyond ministerial structures and administrative efficiency to include the formal and informal rules that distribute rights, power, and risks (SCPR, 2020; Bakker, 2007; Sultana, 2018).

The paper focuses on governance within Syria, as discussed in the two workshops. It also considers shared international waters, control over water sources, and occupation as external constraints on national decisions. Its scope excludes a new national water balance, a comprehensive engineering assessment of damage, and generalisations about Syrians' views from a sample of specialists. It traces developments before 2011, during the conflict through December 2024, and during the transition through 14 October 2026. Earlier literature helps trace these developments, and the paper gives the reference dates for indicators so that readers can distinguish historical data from current conditions.

The main question is how the effects of conflict, economic policy, and power relations interact to shape water governance in Syria during the transition. What institutional, financial, and distributional options would allow reconstruction to uphold the right to water, support productive recovery and social cohesion, and respect the environmental limits of river basins?

Three questions follow.

Institutions. How are decision-making authority, oversight, and control over data shared among national and local bodies and economic actors? How can institutions prevent renewed discrimination and capture of water resources?

Financing and sustainability. How do budgets, energy, tariffs, aid, and private participation affect service continuity and who pays for it? What mix of financing can last and distribute costs fairly?

Justice and integration. What rules for allocating water and managing demand can protect essential needs, livelihoods, and resource replenishment? How can fair procedures and outcomes build trust and cooperation between communities and institutions?

2. Research Methodology

The paper uses an interpretive qualitative case study based on a focused critical review of the literature and document analysis of two specialist workshops. It treats participants' sector expertise as supplementary qualitative evidence, not as a representative statistical survey.

Two records form the main source material. The first is the record of the Syrian Economic Sciences Association workshop held in Damascus on 11 March 2025, which documents discussions of indicators, policies, actors, and options. The second comprises the record and outputs of the workshop Domestic Water Resources Governance in Syria During the Transition, dated 21 August 2026. A joint NGO submission to the Universal Periodic Review, background papers, and reports by the Syrian Center for Policy Research provide context and analysis (Arab NGO Network for Development and Syrian Center for Policy Research, 2026; SCPR, 2020; Syrian Center for Policy Research, 2026a, 2026b). The review covered peer-reviewed work on climate and conflict, the political economy of water, justice and peacebuilding, reports by UN bodies and research institutions, and primary sources on financing and institutional regulation.

Document analysis examines what the records say, how they were produced, and what their limits are. It also checks them against independent sources rather than reporting them as established facts (Bowen, 2009). The analysis identified claims and proposals by topic, actor, and level of decision-making, compared the two workshops, and examined what in the literature and data supported or challenged the claims. The three themes of the second workshop provided the initial structure. The analysis added questions of power, care work, and environmental limits. Throughout the paper, claims are identified as workshop contributions, published evidence, or analytical conclusions.

The paper evaluates policy options against explicit criteria of need, rights, and environmental limits. These are normative choices and are identified as such alongside the descriptive findings. The paper does not attribute to participants the proposals it developed itself, such as financing arrangements and monitoring indicators, unless these appear in the workshop records.

The workshops provide access to valuable sector expertise. Their participants represent neither the population nor everyone who works in the sector. Repetition in the records does not establish how widespread a view is, and the paper does not treat views expressed in the workshops as a consensus. Some reports and workshop contributions come from the same institutional setting, so agreement between them may not constitute independent corroboration. The paper uses unverified estimates only to identify research gaps and draws no quantitative conclusions from them. Further work should interview users who are often marginalised and collect data on services and households, with clear consent to use and attribute testimony.

2.1. Theoretical Framework and Literature Review

This review brings together research on institutions and water security, critical political economy and political ecology, justice and the right to water, peacebuilding, and environmental efficiency. It does not assume that any single perspective can explain the Syrian case on its own. Instead, it asks what each perspective reveals, what it overlooks, and how comparing them helps explain the tensions that surfaced in the two workshops.

Haj Asaad (2024) shows that breaches of the law, political interference, and patronage in the development and use of water resources undermine Syria's water security. Institutional reform therefore depends on political will. This is not only a matter of weak coordination: existing rules may serve actors who benefit from exemptions or weak enforcement. The paper draws on the institutional approach to understand water security and institutional capacity, then asks a question about power: who can change a rule or block its enforcement? Technical staff need enough independence to resist coercion and manage conflicts of interest. That independence must remain subject to public accountability so that it does not become immunity for experts beyond oversight.

Debates about climate, scarcity, and the agricultural crisis help explain why water governance matters and how its effects vary. Kelley et al. (2015) linked the drought before 2011 to greater agricultural vulnerability and migration under conditions of unsustainable resource management, and suggested that it may have contributed to unrest. Selby et al. (2017) questioned the strength of the evidence linking drought to large-scale migration and, in turn, to the outbreak of conflict. Selby (2019) highlighted the role of deteriorating water resources, rural poverty, and changes in the agricultural development model. The debate is less about whether climate change has effects than about how a climate hazard turns into a social crisis. A single-cause explanation of the conflict cannot replace analysis of repression, discrimination, and economic policy.

This debate has practical implications for reconstruction. Restoring a network or bringing a growing season back on track leaves farmers exposed if they lack credit, secure rights to land, or the means to pay for energy. The Intergovernmental Panel on Climate Change identifies rising risks of water scarcity and drought as long-term constraints (IPCC, 2022). Attributing any particular crisis in Syria to climate change requires evidence specific to that crisis. Effective adaptation combines risk management with changes to the social conditions that make people more vulnerable.

Koki (2019) proposes a framework for modernising water management in Syria that combines institutional, legislative, and economic measures with stakeholder participation. Integrated water resources management and the water–energy–food nexus help trace how decisions in one sector affect others. Coordination alone does not ensure fair priorities: energy and irrigation can be well integrated technically while financing rules still exclude small producers. The paper uses both approaches to examine links across sectors and adds an analysis of representation, asset ownership, and rights of use. It distinguishes consultation from the ability to influence a decision.

In her discussion of commodification, neoliberal policy, and public capacity, Bakker (2007) shows that asserting an individual right to water leaves questions of ownership and commercial control unresolved. Treating water as a commons brings the management of the resource and authority over it into view. The paper distinguishes privatisation, which transfers ownership or control, from commodification, which makes access depend mainly on the ability to pay, and from contracting out specific tasks. Market relations can expand while a utility remains publicly owned. A public institution can also procure services from private firms while retaining control over water allocation and tariffs.

In Syria, the paper examines neoliberal policies through observable changes: declining public funding in real terms, greater reliance on cost recovery from users without adequate protections, the transfer of risk to households, and investment concessions with weak oversight. SCPR's reports on public finance and output caution against taking an accounting surplus or growth in nominal values as evidence that productive and social capacities have recovered (SCPR, 2026a, 2026b). Establishing the effects on water requires sector data on spending, tariffs, wages, and contracts. The paper distinguishes the broader economic trends documented in those reports from the implications for water that it draws from them and that still need to be measured.

Sowers, Weinthal, and Zawahri (2017) show how attacks on environmental infrastructure in the region's wars caused lasting harm to civilians by damaging water, sanitation, and energy systems. Daoudy (2020) examines the weaponisation of water through control over resources, military use, and forms of cooperation that perpetuate domination, as well as through supply cuts. At the start of Syria's transition, Benzoni (2025) linked stability in water management to cooperation on governance and a reassessment of overreliance on irrigation. The paper draws on these studies but cautions against reducing recovery to political stability or security. It also asks whose rights reconstruction restores and who bears its costs.

General Comment No. 15 sets out standards for the right to water that cover sufficiency, quality, accessibility, affordability, and non-discrimination (Committee on Economic, Social and Cultural Rights, 2003, paras. 2 and 12). Sultana (2018) treats water justice as a question of power, recognition of marginalised groups, and participation, as well as distribution. In Syria, this means examining differences between households connected to the network and those that buy water from tankers, between large landholders and smallholders, and across income levels, displacement status, and gender. A higher national average can mask unsafe service and shifts in the burden of securing water onto unpaid care work.

Krampe, Hegazi, and VanDeveer (2021) identify three ways resource governance may contribute to peacebuilding: repeated cooperation between groups, the spread of norms that give people more influence, and better public services. These effects depend on context and do not follow automatically from implementing water projects. Even a project that works as designed can deepen grievances if authorities choose sites on the basis of loyalty or exclude a group from managing the resource it relies on. This is consistent with SCPR's framework, which links overcoming conflict to justice, people's capacity to act, and the rebuilding of relationships and institutions (SCPR, 2020).

The paper defines social cohesion as the ability to cooperate while recognising differences and allowing people to challenge decisions. It includes horizontal trust among water users and vertical trust between users and institutions. Cohesion does not mean the absence of protest or simple acceptance of decisions. Safe, affordable services may ease disputes over distribution and reduce the burden of care. Basin committees that represent users may help resolve disputes. Testing these possibilities requires tracking trust, complaints, and disputes before and after an intervention, examining local circumstances, and considering what else may have caused any change.

Research on the irrigation efficiency paradox shows that supplying less water to a field may leave net water consumption across the basin unchanged. Return flows may fall, or farmers may expand the area they irrigate (Grafton et al., 2018).

FAO also warns that lower pumping costs from solar power can increase withdrawals where no management plan is in place (FAO, 2018). The paper therefore pairs technical improvements with accounting for withdrawals, evapotranspiration, return flows, and water quality. Success should be measured by real water savings that protect the resource without shifting deprivation to other users, not only by the number of pumps or drip irrigation systems installed.

2.2. Analytical Framework for the Two Workshops

The paper analyses the workshop findings under three themes: governance and institutions, financing and service sustainability, and equity and integration. For each theme, it traces how the problem developed, identifies who controls the resource, decisions, or financing, and examines who receives the benefits and bears the costs and risks. It then considers the policy options, what it would take to implement them, and how those responsible would be held to account. The paper defines sustainable development in terms of rebuilding productive and social capacities and extending rights while protecting basin replenishment and water quality. This goes beyond simply increasing investment or revenue.

The paper assesses each option against six criteria:

1. Protection of the right to water and equitable access.
2. Effects on employment, production, and food security.
3. Sustainability at basin level.
4. Institutional and financial capacity.
5. Participation and accountability.
6. Potential effects on conflict and trust.

The paper rules out options that breach minimum requirements for the right to water or worsen depletion that the basin cannot sustain. It then considers the trade-offs among the remaining options and how to compensate those adversely affected.

The paper connects the practical knowledge shared in the workshops to an analysis of how reconstruction developed and who gains or loses from it. It asks how decisions on regulation, tariffs, and irrigation redistribute power, wealth, and environmental risks. The links between

these decisions and social cohesion remain testable hypotheses, not causal findings measured in the workshops.

3. Syria's Trajectory: From Accumulated Fragility to Transition

Before the conflict, expanding irrigation networks supported agriculture and widened access to water. It also went hand in hand with heavy withdrawals, breaches of groundwater rules, and unequal benefits and protections. Research situates the crisis in the Jazira region within broader changes in agricultural policy, rural poverty, and the state's relationship with outlying regions, rather than treating it as the result of a passing drought alone (Haj Asaad, 2024; Selby, 2019). Simply returning to pre-2011 indicators is therefore not an adequate goal. Recovery must restore capacities and services while changing the incentives and rules of access that contributed to depletion and exclusion.

From 2011 onwards, direct damage compounded power cuts, equipment losses, falling wages, declining skills, and restrictions on access to facilities. Research on attacks on environmental infrastructure shows how the failure of one component can disrupt pumping, treatment, and sewerage, with consequences for health and food supplies (Sowers et al., 2017). SCPR's 2020 report documents declining production, the weakening of social relations and institutions, and the expansion of the conflict economy. These conditions help explain why water system maintenance depends on protecting workers, public revenues, and supply chains (SCPR, 2020).

Public institutions, workers, local initiatives, and relief organisations kept parts of the system running. Tankers, wells, and generators helped meet basic needs when other services failed. Participants in the first workshop drew attention to differences in prices and the risks associated with water sources. They also warned that banning tankers before providing an alternative could leave people without drinking water (First Workshop, 2025, discussion of tanker monopolies). The paper argues for regulation that preserves an essential emergency service while addressing monopoly and contamination. Both allowing the alternative market to operate without oversight and shutting it down abruptly can leave households bearing the cost.

Participants also discussed wartime restrictions on imports of equipment, chlorine, and energy supplies, and how aid helped overcome some of these restrictions (First Workshop, 2025). The paper considers these accounts alongside violence, funding constraints, corruption, and fragmented administration, without attributing the decline in services to any single factor. Measuring the effects of sanctions or banking restrictions requires information on the period, the goods affected, the payment channels, and the applicable exemptions. The workshops did not provide quantitative evidence at that level. The policy options therefore focus on securing operating supplies, establishing transparent procurement, and protecting humanitarian access, with arrangements updated to reflect the applicable law.

After December 2024, the change in political authority created opportunities to reconnect institutions and renew international cooperation. At the same time, the effects of conflict, return and displacement, and local unrest continued to put services under pressure. In its revised 2026 appeal, UNICEF reported improved humanitarian access alongside severe water needs

(UNICEF, 2026). Regaining access to an area, repairing a facility, and providing continuous and equitable service are distinct achievements. Unifying the administration does not by itself guarantee broader representation. That requires rules that give local areas, workers, and users real influence over allocation decisions.

On 23 April 2026, the World Bank approved US$225 million in grants for water and health. The Water Security and Resilient Services Project accounted for US$150 million, and health for US$75 million (World Bank, 2026). Acted, the implementing organisation for WATER-RES, reported an investment of more than US$27.7 million, including US$25 million from the Green Climate Fund. The project focuses on Rural Damascus and Eastern Ghouta (Acted, 2026). These figures describe announced funding commitments. Actual spending and results require separate evidence.

The 2025 drought should not be taken as a picture of the whole transition. On 28 August 2026, FAO projected wheat production of about 2.7 million tonnes after rainfall improved. It also reported localised flood damage and continuing food security challenges (FAO, 2026). This variation underlines the need to manage both scarcity and flooding. It also matters when interpreting the figures: production can rise or fall with rainfall before the effects of institutional or economic reforms can be measured.

Water supports production in agriculture, industry, and services. It also sustains health, education, care, and the ability to return in dignity. The paper proposes assessing how water management affects recovery in four areas: fewer interruptions to production and lower costs from risk, less time households spend securing water, protection of natural capital from pollution and depletion, and greater scope for cooperation and accountability over a shared resource. The paper draws these areas from the two workshops and research on justice and peacebuilding (First Workshop, 2025; Second Workshop, 2026; Sultana, 2018; Krampe et al., 2021; UNESCO/UN-Water, 2024). It does not quantify the gains for Syria.

The distributional question becomes clear when comparing people who own a tank, a pump, or a well with those who live on daily earnings and depend on a distant collection point. An increase in total supply may benefit people who can store water first. Before choosing a reconstruction project, decision-makers should examine gaps in service, the costs people incur to cope, patterns of ownership, and the work involved. They should track results by population group and area, support women’s participation without adding to their unpaid workload, and provide decent paid employment for work the project requires.

4. Quantitative Indicators and Limits of Inference

Table 1 presents recently published figures alongside historical estimates discussed at the first workshop. The figures use different definitions, so the paper reports each one with its source, reference period, and limits rather than combining them into a single baseline. The expert estimates form part of the workshop evidence and remain unverified at the national level. The absence of consistent measurements is itself an institutional finding and points to the need for publicly available water accounts.

The volume of renewable water resources, water withdrawals, and net consumption measure different things. People may need assistance even where some service is available. Non-revenue water is broader than physical leakage, and a water footprint that includes rainfall covers more than withdrawals from surface water and groundwater. Groundwater levels should be reported in metres, with the measurement site and reference date specified. A percentage decline is meaningful only if its basis is clear. These distinctions matter when figures are used to set tariffs, approve investments, or restrict rights.

Table 1. Selected quantitative indicators, sources, and limits of interpretation

Indicator	Value and reference period	Source and interpretation
Water availability per capita	Less than 700 m³ per year. Published in April 2026.	World Bank (2026). A national measure of water scarcity. It does not measure how much drinking water an individual receives.
Damage to water supply infrastructure	More than half of the infrastructure was severely damaged. 2026 estimate.	World Bank (2026). Sector-wide damage estimate.
Damage to wastewater treatment plants	About 70% of plants were severely damaged. 2026 estimate.	World Bank (2026).
Decline in water supply	About 40% below pre-conflict levels. Published in 2026.	World Bank (2026). Decline in total supply through public networks compared with pre-2011 levels.
Gap in access to safe water	More than 10 million people. Revised 2026 appeal issued in August.	UNICEF (2026).
Projected wheat production	2.7 million tonnes in 2026. Estimate dated 28 August 2026.	FAO (2026). The estimate reflects improved conditions after the 2025 drought. Irrigation sustainability and equity require separate evidence.
Historical renewable water resources	16.2 billion m³ per year. Historical average presented by experts in March 2025.	First Workshop (2025).
Historical water use and deficit	Water use of 17.7 billion m³, exceeding available resources by about 1.5 billion m³, according to the figures presented for the period up to 2011.	First Workshop (2025). Expert estimate.
Historical share of agriculture in water use	88% of water use in the water balance cited at the first workshop.	First Workshop (2025).

Indicator	Value and reference period	Source and interpretation
Water rehabilitation grant	US$150 million approved on 23 April 2026.	World Bank (2026).
Funding for water-related climate adaptation	US$25 million from the Green Climate Fund, out of total funding of more than US$27.7 million.	Acted (2026), WATER-RES project.

The figures show the severity of the crisis and the uneven quality of the evidence. Annual water availability per capita cannot establish a household's allocation. Updating a pre-conflict estimate requires more than substituting a new population figure. Higher production in a wet season cannot establish lasting institutional recovery. Alongside water volumes and production, progress should be assessed through service reliability, equity, water quality, and basin replenishment.

5. Findings

5.1. Governance, Institutions, and the Distribution of Decision-Making Authority

Water governance starts with two questions: who has the authority to decide, and who lives with the consequences? The first workshop record discusses technical failures alongside the influence of powerful actors and the use of exemptions. The second workshop focuses on institutional authority, data, and coordination. Taken together, the workshops suggest that clear responsibilities are necessary but not sufficient without oversight of the power actually exercised, beyond what the legal texts say (First Workshop, 2025; Second Workshop, 2026).

5.1.1. Issues Raised in the Two Workshops

The workshops show a tension between bringing responsibility under a single authority and preserving independent technical judgement and local participation. As the literature suggests, transferring responsibilities can reduce fragmentation or concentrate power further, depending on who controls appointments and budgets and how officials are held to account. Any restructuring should therefore be judged by how well institutions perform their functions, not by the number of ministries or bodies merged (Haj Asaad, 2024; Koki, 2019).

Institutional structure and allocation of responsibilities. Bringing water resources, electricity, and oil under the Ministry of Energy raises questions about the place of the right to water and of agricultural and environmental functions in government decisions. Decree No. 150 of 2025 provides for the merger of responsibilities and budgets. Its effects on coordination and on the independence of water sector decisions depend on how the merger is implemented. The paper identifies a risk that warrants monitoring. Without published allocation rules and a water balance, revenue and energy priorities may take precedence over essential services (Syrian Arab Republic, 2025).

The structure of government matters because it shapes who decides and how the authorities responsible for water, agriculture, energy, the environment, health, and urban development work together. During reconstruction, decisions about investment and urban expansion also affect water resources and the environment (Koki, 2019). The paper proposes assigning distinct responsibilities for setting policy and allocating water, operating services, and overseeing performance and resolving complaints. This keeps operators and investors from judging their own performance. Several institutional arrangements can achieve this if mandates, resources, and routes of appeal are clear.

Centralisation and decentralisation. Transferring tasks to governorates is only one aspect of decentralisation. Local bodies also need authority, funding, knowledge, and accountability. The first workshop examined the roles of water users and local institutions. The second discussed initiatives that fill gaps in service (First Workshop, 2025; Second Workshop, 2026). These arrangements can support cooperation, though well owners, local power brokers, or water traders may come to dominate them. The paper proposes assigning functions at the basin or

service level as appropriate, using fiscal transfers to reduce disparities between areas, and ensuring representation for landless users, returnees, and women. People must also be able to challenge decisions through channels outside local networks of influence.

Data, oversight, and the legal framework. Decisions depend on sound data and effective oversight, but the problem goes beyond a lack of measurement. The first workshop noted gaps in metering and the difficulty of comparing withdrawals with the volumes that reach users. The second stressed the need to account for the resource and measure losses (First Workshop, 2025, Theme 1; Second Workshop, 2026, Theme 2). Operating records, financial data, and estimates based on judgement require different methods of verification. The paper proposes a common register of assets, wells, withdrawals, supply, and water quality. It also proposes publishing definitions, estimation methods, and levels of uncertainty, and making aggregated data available in ways that protect household privacy and facility security.

Gaps in information can allow licences or investments to go ahead before anyone assesses their effects on the basin. Both workshops raised concerns about commercial bottling, urban expansion, and encroachment on water sources (First Workshop, 2025; Second Workshop, 2026). Auditing licence and beneficial ownership records would help establish the extent of resource capture. To prevent conflicts of interest, authorities should publish contracts, withdrawal conditions, costs, subsidies, and the identity of beneficiaries. Projects should undergo assessments of their effects on water, the environment, and affected communities before authorities grant licences.

Both workshops called for a review of water legislation, beginning with Law No. 31 of 2005. The review should link resource protection to safeguards for water use and accountability, clarify who is responsible for pollution and withdrawals, and examine the implementing regulations and their amendments (First Workshop, 2025; Second Workshop, 2026; Haj Asaad, 2024; Syrian Arab Republic, 2005). Tougher penalties will have limited effect if enforcement falls on small users while powerful actors secure exemptions. Authorities should publish enforcement rules, provide access to grievance procedures, and ensure that people whose livelihoods are affected by restrictions have access to alternatives during the transition.

Water and power during the transition. Some participants in the second workshop described continued sieges and control over supply as systematic policies that cause deprivation and waste (Second Workshop, 2026, discussion of violations and public policy). The literature supports examining who controls supplies in practice, who makes and carries out decisions, and how those decisions affect civilians (Daoudy, 2020; Sowers et al., 2017). This calls for documenting harm, investigating it independently, ensuring access without discrimination, protecting workers, and holding individuals to account through fair procedures.

5.1.2. Responsibilities and Safeguards for Public Oversight

The practical question is how to allocate functions, resources, and oversight. Which responsibilities must national authorities retain? Which decisions are best taken at basin level or by local institutions? How can the same standards apply to contracts and community initiatives?

The transitional authorities are responsible for guaranteeing the right to water, protecting the resource, financing a basic level of service, and coordinating across basins. Water utilities and irrigation institutions should operate services under published mandates. The second workshop proposed a separate water ministry or an independent water authority (Second Workshop, 2026). The paper treats this as one institutional option whose feasibility and transition costs need assessment, and urgent reforms should not wait for it. The immediate priority is to protect water sector functions, budgets, staff, and oversight. The institutional form can then be settled through public discussion.

At basin level, bodies should draw up water supply and demand accounts and drought plans within national limits and standards. Local institutions should manage operations, maintenance, and complaints, and publish their results. An oversight body independent of the operator should review water quality, contracts, and equity. Partnerships between public institutions can help them share expertise and equipment. Community organisations should participate in oversight and decision-making without the state shifting its financial obligations onto volunteer work.

The paper does not assume that the state is neutral simply because it is a public body. Public institutions can use their authority to uphold rights, and powerful networks can capture that same authority (SCPR, 2020; Haj Asaad, 2024). The paper therefore calls for rules on conflicts of interest, transparent appointments and spending, routes of appeal, and safeguards for professional and civic organising. Eligibility for essential services should be independent of political loyalty, identity, or unresolved property disputes. Providing water does not settle property ownership, and it should not be withheld while ownership remains unresolved.

The workshops point to overlapping mandates as well as deeper problems concerning the distribution of power and the ability to hold decision-makers to account. The transition calls for national coordination to limit fragmentation and enough local authority to prevent a monopoly over decisions. Progress should be judged by whether people know who is responsible, receive a better service, and can challenge decisions, not by the announcement of a new administrative structure.

5.1.3. Institutional Reform Priorities

The findings point to four lines of work that can proceed alongside repairs and service improvements while restructuring is under way.

1. **Protect water sector authority and functions.** Set out in writing who plans, allocates water, operates services, and oversees performance. Create clear budget lines for water supply, sanitation, and irrigation, and require coordination with agriculture, energy, environmental, health, and urban planning authorities. Assess the institutional and distributional effects of a separate ministry, a national authority, or safeguards for water functions within the existing structure. Repairs and worker protection can proceed while these options are assessed. Effective leadership depends on whether national institutions and staff can assess projects and direct external funding towards national priorities. Building that capacity is part of governance reform, not an add-on to it.
2. **Develop the legislative and regulatory framework.** Review laws and rules on licensing, tariffs, and water use to uphold the right to water and non-discrimination and to link withdrawals and investment to basin capacity and water quality. Publish exemptions, their duration, the reasons for granting them, and the body that approved them. Assess their cumulative effect: what matters is the total pressure on the resource that the state allows, not only individual licences. The joint civil society submission to the Universal Periodic Review provides a rights and policy reference for rebuilding institutions, setting investment rules, and enabling civic oversight (Arab NGO Network for Development and Syrian Center for Policy Research, 2026).
3. **Build a public system for data and oversight.** Start by surveying critical assets, major wells, and pollution sites. Restore monitoring stations and operating records, and publish aggregated maps of needs and damage with the methods used to produce them. Combine remote sensing with local knowledge and field verification, without letting satellite estimates replace direct measurements of withdrawals and water quality. Establish a grievance process that links complaints to verification, a decision, and compensation when harm is established. Protect those who file complaints.
4. **Integrate water into sector and spatial planning.** Assess the cumulative effects of agricultural, energy, and urban planning decisions on basins and population groups. Require a water balance for major projects, specify requirements for sanitation, energy, and maintenance before approval, and publish the options before signing contracts. Do not use water constraints to justify restricting voluntary return or stripping residents of their rights. Use them to guide investment and improve services within existing rights.

These reforms rebuild technical capacity and give more people a say in decisions and a role in oversight. Resistance from vested interests, funding shortages, and gaps in data may slow implementation. The paper proposes starting with clearly assigned functions in publicly identified pilot areas and reviewing the results before extending the approach.

5.2. Financing, Service Sustainability, and Cost Sharing

Keeping water services running takes more than capital investment. Who pays for operations and maintenance? Who bears the cost when services fail, and who takes on investment risks? The first workshop focused on bill collection, energy costs, and metering. The second raised tariffs, private sector participation, and rehabilitation priorities. The paper examines these issues together from a financial, social, and environmental perspective. A utility can balance its books while leaving households without water or deferring work needed to protect the resource.

5.2.1. Issues Raised in the Two Workshops

Public financing and the limits of privatisation. The second workshop raised concerns about growing commercial interest in water bottling at a time of scarcity (Second Workshop, 2026). Without an independent register, reported numbers of licence applications cannot establish how many plants are operating or how much water they withdraw. The questions concern the terms of access. Do investors bear the costs they impose on the basin? Are withdrawal rights, ownership, and contracts public? Do allocation rules protect essential services when more profitable uses compete for the same water? Research on commodification helps show that the main risk lies in shifting the authority to allocate water and the distribution of risks, not simply in who provides the service (Bakker, 2007).

Private firms can carry out specific works or supply equipment and services. Using long-term exclusive rights or undisclosed profit guarantees to cover a funding shortfall can leave the state and users with future liabilities. The paper proposes assessing each contract for its life-cycle costs, financial and environmental risks, transparency, and provisions for amendment or termination. Public bodies should remain accountable for upholding the right to water and for setting allocation rules and tariffs.

Rehabilitation and continuity of service. World Bank estimates published in April 2026 show extensive damage to water supply and wastewater treatment infrastructure and a decline in supply compared with pre-conflict levels (World Bank, 2026, see Table 1). Physical damage is not the same as loss of function: a plant may be structurally sound and still sit idle for lack of power, chlorine, or staff. Asset assessments should therefore record structural condition, operational capacity, and the quality of the water or effluent produced. They should cover the whole system, from the source to the user and through wastewater collection and treatment.

Rehabilitation priorities should reflect gaps in access, contamination risks, the number of people served, the extent of marginalisation, and the cost of restoring and maintaining service. Ranking projects by the number of people served alone can exclude small villages where service costs are high. The paper proposes solidarity funding for areas where local bill collection cannot cover a basic level of service. Authorities should publish why they chose each project and report results against the stated objectives.

Tariffs and bill collection. Both workshops discussed gaps in metering and bill collection and the difference between what people pay for piped water and what they pay outside the network. This gap does not mean that public tariffs should rise to alternative-market prices, which would spread scarcity rents to a wider population. Nor is a low tariff automatically fair if only

households connected to the network benefit while unserved households pay more for lower-quality water. The analysis should count what households spend on piped water, tanker deliveries, transport, storage, and home treatment. It should distinguish households that cannot pay from users who can pay and evade payment.

The paper proposes a gradual reform that sets an affordable basic tariff block according to household size and need and extends support to households without a network connection. Higher tariff blocks and commercial rates should be reviewed after metering is restored, service improves, and costs are published. Bill collection should not be an end in itself. Collection rules should protect access to a basic supply for people who cannot pay and provide routes for complaints and payment in instalments. They should also protect tenants and households with shared meters from being charged punitive tariff rates because of how accounts are registered (Committee on Economic, Social and Cultural Rights, 2003, paras. 27 and 56).

Investment priorities and external financing. Workshop participants discussed transferring water from the coast and desalinating seawater (First Workshop, 2025, Theme 3; Second Workshop, 2026, Theme 2). The preliminary estimates discussed in the workshops leave feasibility and relative priority unresolved. The paper proposes an independent comparison of leakage reduction, rehabilitation of existing sources, treatment and reuse, water harvesting, desalination, and transfers. The comparison should cover energy costs, emissions, salinity, marine discharge, conflict risks, and households' ability to pay. It should also assess the effects of transfers on source areas. Any estimate of surplus water must first account for the needs of residents and ecosystems and for climate variability.

External financing can bring vital facilities back into operation. Without publicly stated priorities that can be reviewed, projects may be selected for ease of contracting, media visibility, or the prospect of a guaranteed return. The paper proposes a published national framework for grants and projects that shows how funding is distributed across areas and what will pay for operations after external funding ends. It should allow local institutions and communities to oversee implementation. Donor approval, disbursement, and completion are separate milestones. Nor should it be assumed that all external funding requires privatisation. Conditions, contracts, and state obligations should be assessed case by case.

Fiscal policy and who bears the cost of recovery. SCPR's study of public finances during the transition links the shrinking role of the state in development to higher burdens on households and producers through fees and price liberalisation, alongside weak budget transparency (SCPR, 2026a, pp. 2–4, 11–12). Applied to water, this means examining what institutions actually spend on maintenance, staff, and energy, rather than their nominal budget allocations alone. It also means measuring service costs as a share of household income. During periods of inflation, higher spending in Syrian pounds can coincide with lower investment in real terms. This distinction matters when interpreting the budget figures presented at the first workshop (First Workshop, 2025).

The paper proposes protecting core operating budgets, raising public revenue more progressively from economic rents and large profits as part of broader fiscal reform, and using grants to rehabilitate assets. Tariff revenue can cover only part of a large reconstruction

shortfall. Public subsidies can also distribute benefits unevenly if they go unaudited. For both tariffs and subsidies, authorities should disclose who benefits, show how costs and benefits are distributed, and tie funding to service improvements that can be verified.

Sanitation, pollution, and reuse. Sanitation is part of both resource sustainability and justice, because the costs of water use in a city or facility can be passed on to residents and farmers downstream. Treatment performance should be measured by how much water meets the requirements for its intended use, whether treatment runs consistently, and whether operators dispose of sludge safely. Design capacity is only one measure. Reuse can ease pressure on freshwater if it replaces existing withdrawals without creating new demand. It requires public health oversight, protection for workers and consumers, and clear responsibilities for polluters.

5.2.2. Financing and Management Responsibilities

The paper proposes four sources of finance: multi-year public investment, coordinated external grants, service revenue that reflects users' ability to pay, and graduated charges on large users for water withdrawals and pollution. Legislation and oversight should govern these arrangements.

The treasury should fund basic service obligations and ensure a fair distribution of resources across areas. Service providers should publish operating costs, revenue, and subsidies. An independent oversight body should audit contracts, and user organisations should monitor service quality. Staff need adequate resources and wages. Communities also need funding if they are asked to take on oversight or maintenance responsibilities.

5.2.3. Options for Financing and Keeping Services Running

The following priorities build on the financing issues raised in the two workshops. They seek to distribute costs and risks more fairly, recognising that restoring revenue, oversight, and purchasing power takes time (First Workshop, 2025; Second Workshop, 2026; SCPR, 2026a).

1. **Compare private participation with public and community options.** Assess private contracts against what a strengthened public utility could deliver, what public institutions could achieve by working together, and what adequately funded community management could provide where appropriate. A partnership should not be adopted simply because of a cash shortage: it may meet immediate financing needs in exchange for costly obligations later. Safeguards include open competition, disclosure of beneficial ownership, publication of performance requirements and subsidies, independent audit, limits on public guarantees, and rights to review or terminate contracts. Where representation and oversight are weak, the paper proposes deferring long-term strategic commitments that would be hard to reverse.
2. **Reform tariffs with social protection.** Start by assessing ability to pay, household needs, service quality, and metering. Test tariff blocks and safeguards in publicly identified areas and review the effects on households. The figure of 120 litres per person per day discussed at the workshops requires assessment before it can serve as an entitlement. A national standard should reflect health needs, climate, household size, and service levels, with a phased plan to reach it. Assess the fairness of any tariff

change against what households pay for water from all sources, including those outside the network.

3. **Fund the full water service cycle.** Pair investment in networks with funding for energy, disinfection, laboratories, sanitation, maintenance, and waste disposal. Each new project should identify who will operate it after the grant ends, how operations will be funded, and what effects it will have on the resource and on the most underserved groups. Assess desalination, treatment, and reuse against local conditions, water quality, and total costs, without assuming in advance that any one technology is superior.
4. **Base investment and urban expansion on available water.** Assess water sources, sanitation requirements, and infrastructure costs before approving new investment or urban expansion. Distinguish between imposing strict conditions on new projects with high water demand and providing services to people in existing settlements, including informal areas and displaced populations. Addressing planning violations does not justify cutting off drinking water or using services to put pressure on housing and property rights. This is part of a shift from financing infrastructure after shortages occur to planning for water needs in advance, so that water availability becomes a key factor in urban planning and investment decisions.
5. **Strengthen maintenance, improve operations, and support community participation.** Provide regular funding for wages, training, spare parts, and preventive maintenance. Where local repair firms take part, set safety and wage standards and publish contract terms. Communities can support service providers by reporting faults and following up on complaints. If they take on operational work, compensate them for their time and expenses so that women and poorer households do not absorb additional unpaid work.

These options link stable financing to the right to water and the replenishment of water resources. Limited revenue, weak administrative capacity, and dependence on donors constrain what can be done. Basic services, maintenance, and transparency come first. Investment can expand as operating capacity and reliable funding grow. Success should be measured by a lower cost of deprivation for communities, not by higher utility revenue alone.

5.3. Justice, Integration, and the Limits of Water Use

Water justice concerns who gets water, when they get it, what quality they receive, and what they pay. It also concerns who takes part in decisions and who bears the effects of pollution or reduced withdrawals. The first workshop identified disparities among areas and users. The second raised questions about allocation across governorates and sectors. A critical reading adds that administrative boundaries do not coincide with basin boundaries, and that equal rights do not require identical allocations or tariffs where needs, costs, and ability to pay differ.

5.3.1. Issues Raised in the Two Workshops

Distributive and social justice. Access varies with income, influence, housing conditions, connection to the network, and distance from water sources. Return and displacement increase pressure on areas where services have suffered damage. National displacement figures cannot establish how many people left rural areas because of drought (Selby et al., 2017; UNICEF, 2026). The paper proposes monitoring services at settlement and household level, with results broken down by income, gender, disability, rural or urban location, and displacement or return status. Eligibility for service should extend to households without complete property documents.

Justice does not mean arithmetic equality in allocations or prices. Poorer households may spend a larger share of their income for less water, while women and girls may spend more time collecting water and providing care. Policy should set out clear criteria for need and equity, give users a meaningful voice on user councils, provide safe ways to access water, and ensure equal access to technical and administrative jobs. Gender analysis should track time spent on paid and unpaid work, control over resources, and decision-making authority, not just the number of women who attend (Sultana, 2018).

Trade-offs among uses and protection of basic needs. Agriculture accounted for the largest share of water use in the historical estimates. Its efficiency varies by basin, crop, and rate of return flow. An assessment should distinguish withdrawals from net consumption and consider crop choice, return flows, salinity, location, employment, and food security. Water used for hydropower may remain available for downstream uses, though storage, the timing of releases, and evaporation affect who can use it and when. Comparing sector totals alone provides too little basis for deciding whose rights take priority.

A presentation at the second workshop proposed giving priority to energy, followed by drinking water and household uses, and then industry, with agriculture absorbing the largest cuts (Second Workshop, 2026, Theme 3). The paper critically examines this proposal in light of General Comment No. 15, which gives priority to personal and domestic uses and to water needed to prevent hunger and disease (Committee on Economic, Social and Cultural Rights, 2003, paras. 6–7). Powering pumps can be essential to meeting these priorities. This does not, however, justify giving energy production in general priority over these uses. Once those uses and the environmental flows needed to sustain the resource are protected, authorities should assess other uses against several criteria and provide transitional compensation to small producers adversely affected by cuts.

Agricultural geography and spatial planning. Both workshops discussed changes in land use, pressures from urban expansion, and differences in how well crops suit local water resources. The paper links these issues to credit, crop procurement, energy prices, and land tenure, because changing what and how they produce is not simply a technical choice that farmers are free to make. Before reallocating irrigation water, authorities should assess the effects on employment, food, rents, and debt. Small producers and agricultural workers should not bear the costs of the environmental transition alone.

A water strategy needs maps showing basins, salinity, soils, hazards, infrastructure, and population. Authorities should use these maps to guide agricultural and urban planning, investment, and services while protecting voluntary return and housing and land rights. Technical suitability alone gives authorities no grounds to move people into or out of an area against their will. Water planning should adapt development to these rights, not override them.

Links between water resources, energy, and climate. Energy determines the cost of pumping, moving, and treating water. Agriculture accounts for a large share of demand, urban development shifts where water is needed, and climate affects how much water is replenished and how availability varies. These links explain why unrestricted subsidies for pumping can worsen groundwater depletion even as they improve access to energy, and why a water project can fail without funding for sanitation or disinfection. Water and energy should be accounted for together, with the right to water, water quality, and environmental limits as binding requirements (Koki, 2019; Grafton et al., 2018; FAO, 2018).

The paper proposes basin-level drought and flood plans with published thresholds for action, measures to protect water sources, soils, and recharge areas, pollution monitoring, and early warnings linked to social protection. A wetter season can ease immediate shortages while long-term pressures persist. Drought, depletion from withdrawals, and pollution each require a different response (IPCC, 2022; FAO, 2026).

5.3.2. Responsibilities for Allocation and Oversight

Water justice requires a national authority to set allocation criteria that can be audited, and basin bodies and local institutions to help assess needs and implement allocations. Authorities should publish the reasons for cuts and exemptions, specify when decisions will be reviewed, and give users access to an independent appeals process. Authorities responsible for agriculture, energy, the environment, health, planning, and finance should contribute according to their mandates, without any one of them monopolising decisions on behalf of all those affected.

Oversight should establish who is responsible for pollution and depletion, starting with large users and sources of greatest risk. Bringing small wells into compliance should involve a grace period, a needs assessment, withdrawal conditions, and support during the transition. Blanket closures can cut off livelihoods, while open-ended legalisation can entrench depletion. Serious violations or direct sources of pollution require prompt action and a safe alternative for those affected.

5.3.3. Options for Allocation and Demand Management

Putting water justice into practice requires assigning clear responsibilities for water quantity, quality, cost, and representation, and making public who bears the costs of adaptation. The following options build on the two workshops and can be phased in and reviewed as evidence becomes available.

1. **Set equitable allocation rules.** Protect basic household, health, and food needs and the water required to sustain ecosystems. Allocate the remaining water using published criteria that take account of employment, social effects, and the cost of alternatives. Review cuts in light of their actual effects on different groups. Tie support and compensation to verifiable commitments, with clear criteria that prevent influence or land ownership alone from determining eligibility.
2. **Align water, agriculture, energy, and food policies.** Use basin water accounts to link water policy with agriculture, energy, food, the environment, and urban development. Align credit, crop procurement, and equipment subsidies with withdrawal limits. Fund agricultural extension, cooperatives, and forms of production that reduce depletion where local conditions allow. Support rainfed production, soil moisture conservation, and local food supply chains. Do not assume that expanding livestock production or switching crops will save water in every location. Evaluate agricultural options against net water consumption, value added, nutrition, decent work, market risks, and salinity. Pilot changes before expanding them and fund the transition for producers and workers. Make subsidies for solar pumping conditional on withdrawal limits, metering, maintenance, and basin monitoring. Lower emissions and energy costs alone do not prove water sustainability (Grafton et al., 2018; FAO, 2018).
3. **Manage demand and expand safe reuse.** Reduce leakage, manage network pressure, and restore metering. Measure physical losses separately from billing problems. Pair irrigation upgrades with withdrawal limits and monitoring of return flows so that expanding the irrigated area does not absorb the savings. Treat and reuse wastewater where it can replace freshwater withdrawals and meet health and environmental requirements. Test the measures in the basin concerned before estimating a percentage saving (Grafton et al., 2018).
4. **Integrate water into spatial planning and protect rights.** Factor water availability and climate adaptation into new investment licences and service plans. Direct spending towards closing service gaps in areas receiving displaced people, areas of return, and marginalised areas. Instead of speaking of “resettling” populations, link voluntary choices about where to live and produce to clear rights and sustainable services. Protect people from dispossession or displacement in the name of water efficiency.

These options bring together equitable allocation, demand management, resource protection, and support for livelihoods. They depend on up-to-date evidence and on the ability to hold large users and funders to the standards applied to households and farmers. Scarcity should not be blamed only on the behaviour of small consumers while decisions on investment, energy, and

large withdrawals escape review. Water justice thus becomes part of social, economic, and environmental planning and a criterion for judging reconstruction. Published rules and access to redress can support solidarity among areas and users. Unclear allocations and selective funding can deepen mistrust and division.

5.4. Shared International Waters and the Limits of Domestic Decision-Making

The paper focuses on domestic governance while recognising that shared basins extend beyond Syria and are shaped by regional disputes, particularly in southern Syria, where the occupation has expanded. Research on hydro-hegemony shows how unequal power and control of infrastructure shape negotiations and cooperation. The existence of an agreement does not prove that its effects are equitable (Zeitoun & Warner, 2006). The inventory compiled by the United Nations Economic and Social Commission for Western Asia and Germany's Federal Institute for Geosciences and Natural Resources provides a historical reference for the region's shared basins. It is not used here to measure 2026 indicators (UN-ESCWA & BGR, 2013).

The paper proposes strengthening technical and legal capacity for negotiations and establishing clear arrangements for public representation. It calls for data sharing, advance notification of operational changes and of flood and drought risks, and documentation of how water releases affect residents, agriculture, and ecosystems. It also calls for protecting rights to water sources under Israeli occupation in southern Syria or otherwise under external control, without relying on circulating figures that have not been verified. Managing domestic demand cannot substitute for addressing unequal power in regional water relations, and that imbalance does not justify neglecting pollution and depletion within Syria. Any cooperation arrangement should be assessed by who benefits, who bears the harm, and how the parties can be held to account.

5.5. Policy Priorities and Implementation Matrix

Table 2 translates the findings from the two workshops and the literature into lines of action, ordered by priority and timing: what should start first and what can wait. The time frames are indicative and run from the date the programme is adopted. Costs and quantitative targets should be set after feasibility studies and baseline assessments are complete.

Three criteria guide the sequence: the severity of deprivation, the risk of irreversible harm, and which actions depend on others. Protecting services, carrying out maintenance, and publishing information should begin immediately. Reforms to tariffs, withdrawals, and institutions should be tested before they are scaled up.

In the first year, authorities should protect services and staff while publishing information on funding and making data available. Physical repairs should not wait for comprehensive legislation. Deeper reforms should advance as institutions become ready, data improve, and social safeguards are put in place. Where a proposed cut would threaten a basic level of service or the livelihoods of vulnerable groups, support and viable alternatives should be in place before the cut takes effect.

Independent periodic reports, transparent contracting, and pilots that can be reversed can help manage implementation risks. A limited budget will constrain expansion. Groups that benefit from current arrangements may resist tighter controls on withdrawals or publication of contracts. The paper therefore proposes bringing professional bodies, workers, users, and researchers together to support reform without assuming that their interests are aligned. Publicly accessible procedures for complaints and compensation should ensure that accountability does not end with approval by funders or administrators.

Publish operational monitoring results monthly or quarterly, depending on the indicator, and review policies annually. Compare service adequacy, continuity, quality, and cost across groups and areas. Track withdrawals, replenishment, energy intensity, and effluent quality. Include indicators for fairness in handling complaints, trust, representation, and decision-making authority. A fall in complaints is meaningful only if people can report problems safely and easily. Women’s attendance alone is not evidence that power is shared.

Table 2. Policy priorities and implementation matrix

Priority	Action and indicative time frame	Responsible bodies and partners	Financing and monitoring indicators
Staff and expertise	Immediate and ongoing. Fund wages, occupational safety, training, and cooperation among public institutions.	Water and finance authorities, service providers, universities, and professional bodies.	**Financing:** Operating budgets and training grants. **Indicators:** Retention of skilled staff, time to respond to and repair faults, and occupational safety conditions.
Protecting services	First 0–6 months, then ongoing. Carry out critical repairs, maintain disinfection, provide power for operations, and arrange safe alternative supplies.	Water resources authority within the Ministry of Energy and service providers, with health and local authorities.	**Financing:** Emergency public funding and external grants. **Indicators:** Regularity of supply hours, share of water samples meeting quality standards, and narrowing coverage gaps across areas.
Budgets and contracts	First 0–12 months, then quarterly. Publish costs, contracts, subsidies, and beneficial ownership information.	Finance and water authorities and oversight bodies, with civil society.	**Financing:** Public budget. **Indicators:** Share of spending and contracts publicly disclosed and adequacy of maintenance allocations.
Data and assets	First 0–12 months. Establish a baseline for assets, major wells, water resources, and needs.	Water institutions, basin bodies, and universities, with independent audit.	**Financing:** Data collection budgets and technical assistance grants. **Indicators:** Share of assets assessed, publication of methodological definitions, and frequency of updates to water records.
Participation and redress	First 0–12 months, then ongoing. Establish arrangements for representation, grievances, and documenting harm.	Local authorities, basin bodies, communities, and bodies responsible for redress.	**Financing:** Earmarked public funding for participation and oversight. **Indicators:** Safety and effectiveness of complaint handling, authority exercised by local representatives, and effects of services on different groups and areas.
Regional cooperation	First 0–12 months to prepare. Phase in cooperation, data sharing, and early warning.	Foreign affairs and water authorities and relevant technical bodies.	**Financing:** Technical budgets and international cooperation programmes. **Indicators:** Regularity of hydrological data exchange, use of advance notice of operational changes, and documentation of transboundary harm.
Mandates and oversight	First 0–12 months to define functions, then 1–3 years to embed reforms.	Government, relevant legislative and oversight bodies, and representatives of users and workers.	**Financing:** Institutional development budget. **Indicators:** Clear separation of planning, operations, and oversight, and publication of allocation decisions and appeal outcomes.

Priority	Action and indicative time frame	Responsible bodies and partners	Financing and monitoring indicators
Controlling withdrawals	First 0–12 months to pilot, then 1–3 years to expand. Register and meter withdrawals and set limits.	Water resources, basin, and agriculture authorities, with water users and oversight bodies.	**Financing:** Funding for metering systems and support during the transition. **Indicators:** Annual withdrawal volume, stability of groundwater levels, and rate of detection of violations by large users.
Tariffs and social protection	6–18 months. Restore metering, test affordable tariff blocks, and support households without service.	Water, finance, and social protection authorities, with local institutions and household representatives.	**Financing:** Targeted public subsidies and revenue from tiered tariffs. **Indicators:** Household water spending as a share of income and frequency of interruptions to basic service due to inability to pay.
Rehabilitation and sanitation	1–3 years. Rehabilitate networks and treatment facilities and maintain assets according to published criteria for risk and deprivation.	Water and sanitation providers and municipalities, with health and environmental authorities and funders.	**Financing:** Long-term public investment and reconstruction grants. **Indicators:** Volume of treated wastewater meeting environmental and health standards and continued operation of rehabilitated assets.
Changes in agricultural production	1–3 years to pilot, then 2–5 years to expand. Adapt crops, irrigation, and energy use to local water conditions.	Agricultural authorities, basin bodies, cooperatives, extension services, and credit institutions.	**Financing:** Concessional agricultural credit and conditional support. **Indicators:** Lower net water consumption, higher farm incomes, and stability of employment and food security.

6. Conclusion and Recommendations

The effects of conflict, economic policy, and power relations interact through control over water sources, the distribution of funding and costs, the priorities set for different uses, and people's ability to challenge decisions. The water crisis therefore cannot be reduced to resource shortages or weak coordination, and restoring the former infrastructure is not enough for reconstruction to succeed. The alternative is accountable public capacity, multi-level decision-making, protection of the right to water, basin water accounts, and financing that protects production, communities, and the environment together.

The recommendations fall under nine interrelated priorities.

1. **Institutional reform.** Protect water sector functions, budgets, and oversight. Compare institutional options before settling on a permanent structure. Assign allocation, service operations, and audit to distinct functions.
2. **Legislation and enforcement.** Update rules on water use, withdrawals, and pollution. Set clear terms for contracts and publish exemptions. Focus enforcement on the sources of greatest harm, provide access to grievance procedures, and protect the livelihoods of vulnerable groups.
3. **Solidarity-based decentralisation.** Give basin bodies and local institutions the authority, funding, and knowledge they need. Use fiscal transfers to reduce disparities across areas and oversight to prevent capture by local interests.
4. **Water justice.** Protect basic household, health, and food needs and sustain ecosystems. Provide access to services regardless of political affiliation, displacement status, or incomplete documents.
5. **Financing.** Fund operations, maintenance, and wages through public investment, coordinated grants, and equitable service revenue. Measure service levels and ability to pay before reforming tariffs. Audit long-term contractual obligations.
6. **Integration of environmental and production policies.** Use basin water accounts to guide decisions on irrigation, energy, crops, and urban expansion. Support changes in farming practices and solar pumping within verifiable limits.
7. **Transparency and participation.** Publish data, budgets, contracts, and beneficial ownership information. Give users, workers, women, displaced people, and returnees a role in decisions and monitoring.
8. **Capacity and cooperation.** Protect and train staff. Support cooperation among public institutions, researchers, and communities. Base regional coordination on data sharing, early warning, and prevention of harm.
9. **Planning and rights.** Direct investment according to water availability and gaps in service. Protect voluntary return and housing and land rights, and provide access to redress for water-related and environmental harm.

Work can begin by protecting safe water supplies, funding maintenance, supporting staff, and publishing the rules for project selection, expenditure, and measurement. Reforms to allocation, financing, and institutions can then build on results that can be verified. Responsibility for a basic level of service remains public even where several providers operate. Oversight and participation should be built into decision-making from the outset, not added later.

Water supports recovery and solidarity when people spend less time and money coping with shortages, can resume work and rebuild their livelihoods, and have a say in decisions. These gains must also preserve the resource for future generations. The success of reconstruction should be judged by tangible, equitable improvements in access to services and by the condition of the resource. Contract volumes and bill collection show only part of that progress.

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About the Center

The Syrian Center for Policy Research is an independent, non-governmental and non-profit research institution established in 2012. The Center works to bridge the gap between research and policymaking, foster evidence-based participatory dialogue, and develop policy alternatives that support inclusive, human-centred sustainable development.

A simple water-control and utilisation device in Deir al-Asafir, Eastern Ghouta, photographed in November 2022. The device has since been destroyed. Photograph by Iyas Shahin, enhanced using AI tools.

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