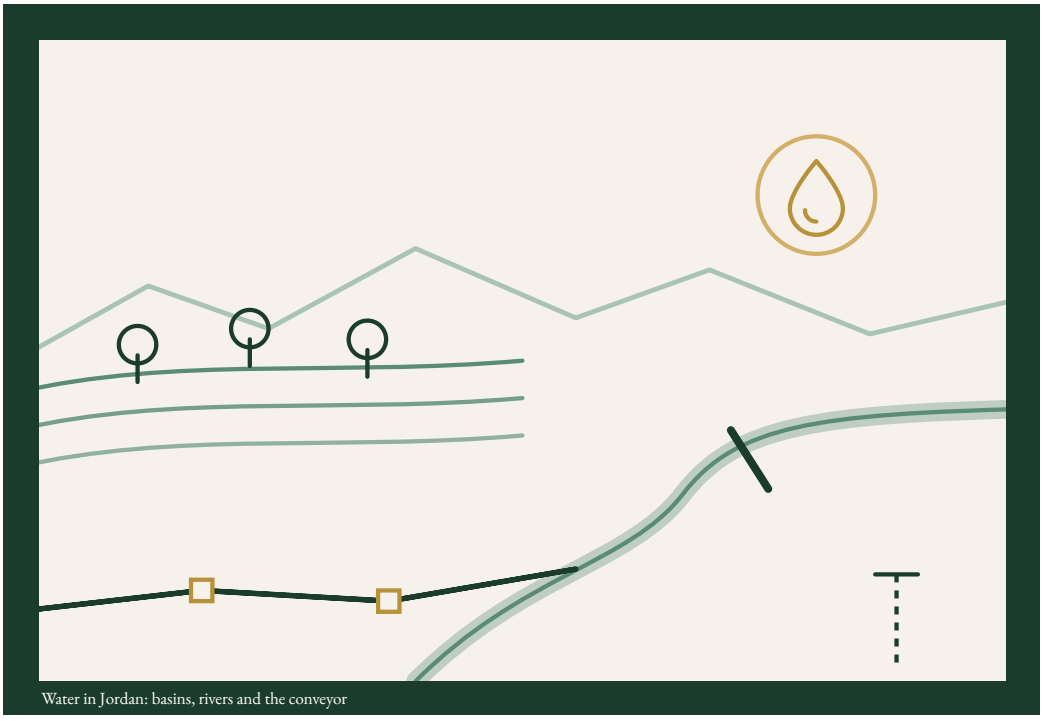
Analysis Paper
ISDI 2026/68
Water Security Series

ISDI
معهد التنمية المستدامة والإبتكار
INSTITUTE FOR SUSTAINABLE DEVELOPMENT & INNOVATION

From Priority to Plan:

Reading His Majesty's Call (Water, Water, Water!)

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Water in Jordan: basins, rivers and the conveyor

Pages [9] [11.2026]

Opening the third ordinary session of the 20th Parliament, His Majesty King Abdullah II returned to water three times in a row, stating that "our water security is a national priority, and we will not allow the thirst of Jordanians to be held hostage to any circumstance; there is no room for compromise or appeasement on it," and directing the government to continue its water security projects and to draw up proactive plans to protect the nation's resources, ensuring their sustainability and the rights of future generations. The directive did not come in isolation; weeks earlier, addressing the United Nations General Assembly, His Majesty had warned against new facts being imposed on the ground, including around vital water resources, and stated that any threat to Jordan's northern border or to its water security is a threat to its national security, so that water now occupies the same position at home as it does abroad. The Institute for Sustainable Development and Innovation believes this directive goes to the heart of the matter, because the difference between a plan prepared before a crisis and a response that arrives after it has struck is the difference between a crisis we manage and a crisis that sets its own terms on us.

61 m^3
renewable water per person a year

450 MCM
estimated annual water deficit

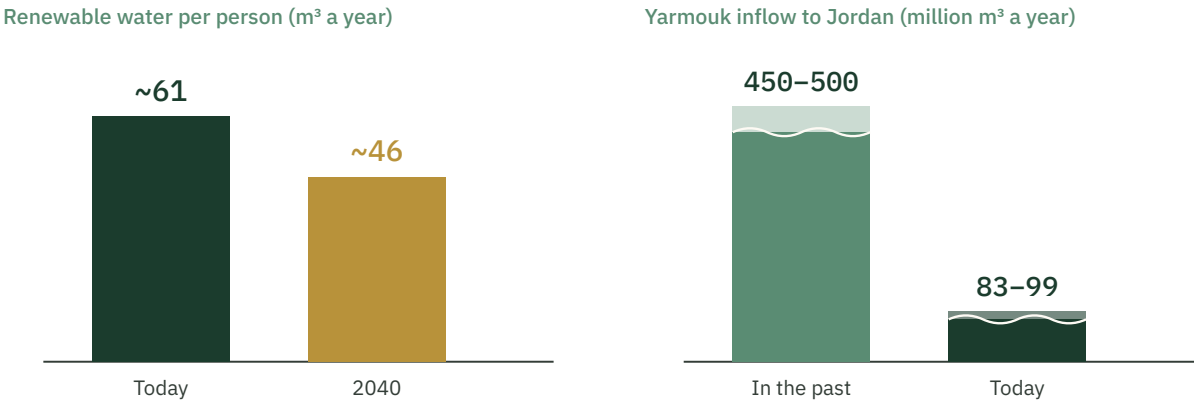
~75%
of the twelve groundwater basins drawn beyond recharge

41%
of pumped water never reaches a customer's bill

The Numbers as They Are

Any proactive plan has to start from the numbers as they are. According to the National Water Strategy 2023–2040, the renewable water available per person does not exceed about 61 cubic metres a year, among the lowest levels in the world, and is expected to fall to around 46 cubic metres by 2040. According to the Ministry of Water and Irrigation's water budget, about 75% of the country's twelve groundwater basins are drawn on more heavily than rainfall returns to them, while the Disi aquifer, an ancient closed basin that rainfall does not recharge, is today abstracted at its full rate. Inflow from the Yarmouk has fallen from 450 to 500 million cubic metres in the past to between 83 and 99 million today, a decline caused by upstream dams and use, and by well numbers exceeding what the 1987 agreement provided for, more than it is a consequence of climate alone. The Ministry of Water and Irrigation puts the annual water deficit at about 450 million cubic metres.

Figure 1 **The numbers as they are**



Source: National Water Strategy 2023–2040; Ministry of Water and Irrigation, as cited in the text.

What Is Happening Underground

ISDI's diagnostic study, From Managing Scarcity to Building Resilience, concludes that what is happening underground is not waiting on a decision in order to happen, because unlicensed wells draw on the basins every day regardless of any plan, and the result appears in three successive signs: first, water tables in the basin fall; second, pumping costs rise because water is lifted from greater depth; and third, salinity rises to the point where the water requires desalination before it can be used for irrigation, an added cost the farmer pays in the end. Faced with this, there are two options and no more: either we address the matter now, while we still have time, by bringing unlicensed wells under control, enforcing the law on them, and working with farmers to raise the efficiency of water use; or the correction comes in the end from the aquifer itself, on the day farming on its water ceases to be viable, when the cost is higher and the options fewer. That is exactly what the proactive planning His Majesty called for means, because being proactive here is to choose the moment of decision before nature chooses it.

Figure 2 **Underground, the clock is already running**

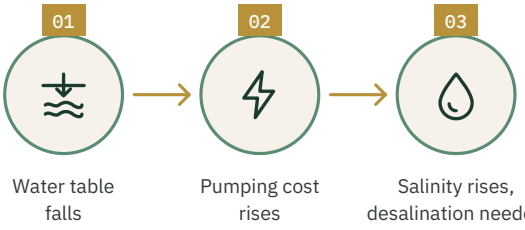
Twelve groundwater basins



Drawn beyond recharge (~75%)

Other basins

Three successive signs



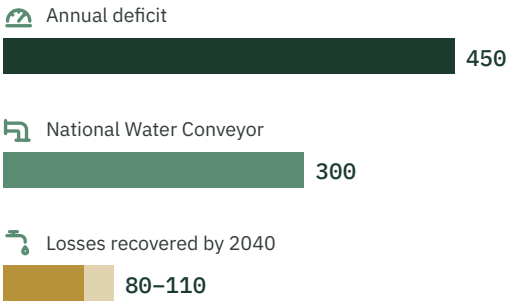
Source: Ministry of Water and Irrigation water budget; ISDI diagnostic study, From Managing Scarcity to Building Resilience. Icons show the proportion, not individual basins.

The Conveyor and the Energy Question

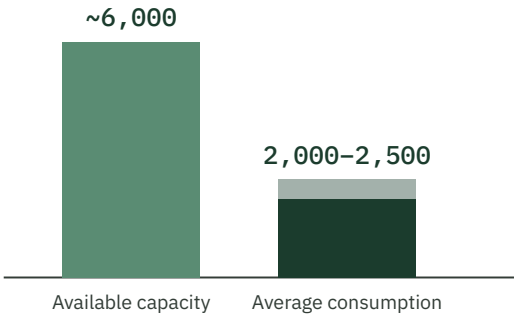
ISDI sees the National Water Conveyor from Aqaba to Amman as an indispensable pillar, yet its capacity of 300 million cubic metres a year covers about two thirds of the estimated annual deficit, which makes it an essential part of the solution rather than the whole of it. It also shifts part of our dependence from water to energy, because desalinating water and pumping it from Aqaba to Amman consumes a great deal of electricity in a country that imports most of its power, as the recent shocks showed plainly when the halt in gas supply feeding around 60% of electricity generation pushed generation costs up by some 100 million dinars a month at the peak of the crisis. Linking the conveyor's pumping hours to surplus renewable electricity is therefore not an operational detail but a design decision that will set the cost per cubic metre for decades to come, and the surplus is real, with available electrical capacity of about 6,000 megawatts against average consumption ranging between 2,000 and 2,500. It is also a decision that bears directly on a water sector debt of some four billion dinars, close to 12% of public debt.

Figure 3 **The conveyor is a pillar, not the whole solution**

Scale comparison (million m³ a year)



Electricity: capacity against average use (MW)

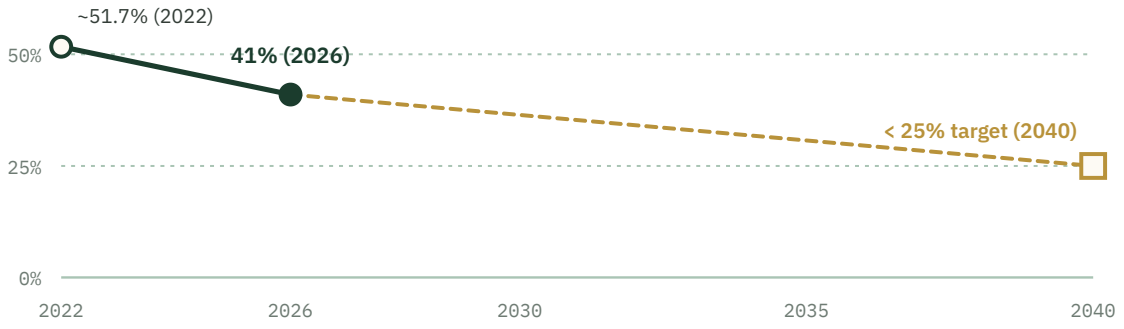


Source: Ministry of Water and Irrigation; ISDI, as cited in the text. Losses recovered = reaching the 2040 target of under 25%.

Water Losses: The Cheapest Source

On the other side of the equation, water losses remain the largest resource we lose and the cheapest one we can win back. In August 2026 the Ministry of Water and Irrigation announced that it had met its annual loss-reduction target for the fourth consecutive year, bringing the share of water that is pumped but never reaches a customer's bill down to about 41%, a cumulative fall of 10.7 percentage points from 2022 levels, against a national target of under 25% by 2040. Every percentage point recovered from these losses equals about 5.2 million cubic metres a year, measured against current municipal supply, and reaching the 2040 target would mean recovering between 80 and 110 million cubic metres a year, equivalent to between a quarter and a third of what the conveyor will produce, and at a far lower cost; fixing the network is, in truth, a cheap new source of water that competes with large water projects. Most of what remains of these losses, however, is no longer a matter of old pipes, as the Ministry itself notes that water theft and attacks on sources and networks account for a large share of them, which moves the remedy from the engineer's hands into the law's.

Figure 4 **Water losses: the cheapest source we can win back**



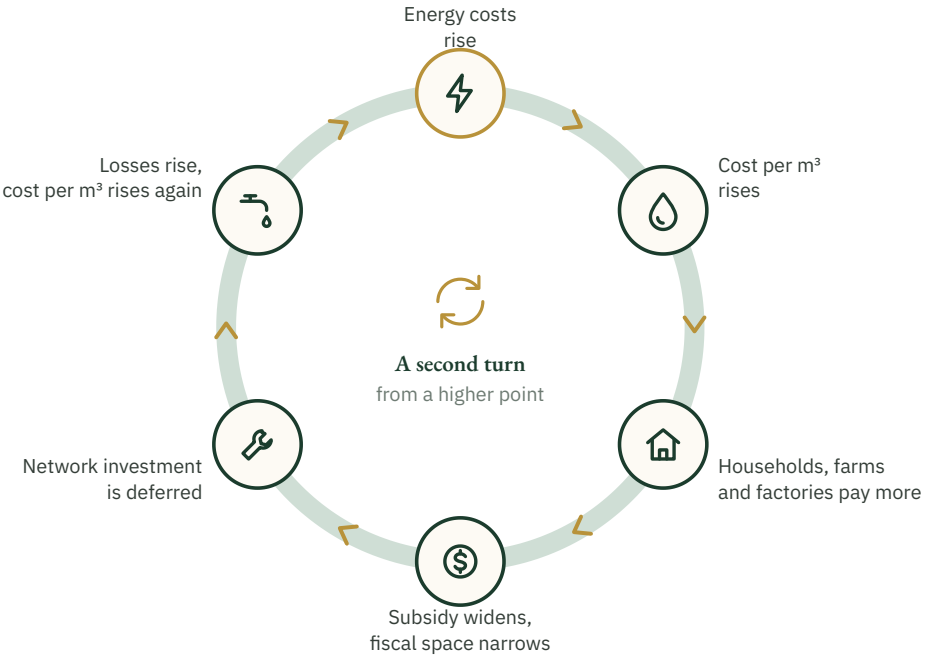
Source: Ministry of Water and Irrigation (August 2026). The 2022 level is implied by the stated 10.7-point fall; 2040 is the national target.

How Pressure Travels

What the study adds most to our understanding of water security is that it does not read these files one by one, but traces how pressure travels between them in a loop that returns to where it began: higher energy costs raise the cost of pumping and desalinating water, so the cost per cubic metre rises, and its effects appear in the household's bill, in the farm's irrigation costs and in the factory's production costs; and because passing that cost on in full to the consumer is not socially possible, the state absorbs part of it as subsidy, so the subsidy line widens and what remains of fiscal resources narrows, and the first thing to be deferred is investment in network rehabilitation, since it is a capital expense that is easy to postpone year after year, and postponing it raises losses, and rising losses raise the cost of each cubic metre that actually reaches

the consumer, so the loop begins a second turn from a higher point than the one it started from. This means that repairing a single link is not enough, because the remaining links return matters to where they began, and that any remedy must touch more than one point at the same time.

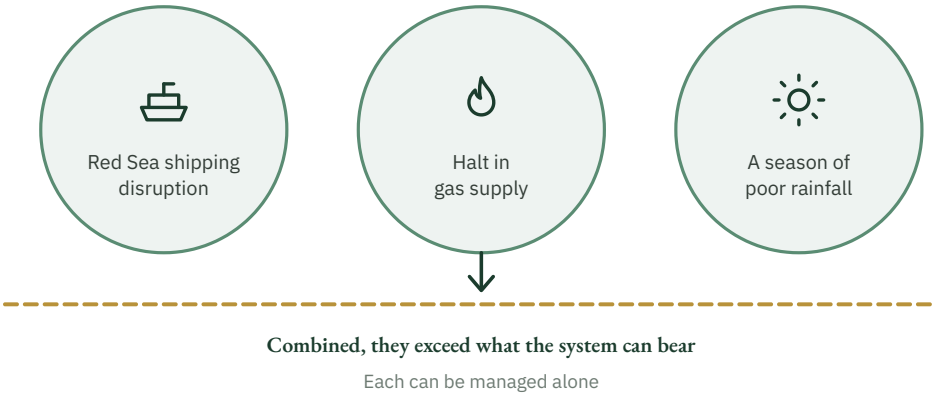
Figure 5 **How pressure travels around the loop**



Source: ISDI diagnostic study, From Managing Scarcity to Building Resilience.

The study adds that the greatest danger comes not from one large shock but from two moderate shocks occurring at the same time, such as a disruption to shipping in the Red Sea that raises import costs alongside a halt in gas supply that raises the cost of electricity and with it the cost of pumping water, and all of this in a season of poor rainfall. Each of these pressures can be managed on its own, but their coincidence exceeds the system's capacity to bear them, and water security is therefore measured not only by the sources we add, but by our ability to hold together on the day the pressures arrive together.

Figure 6 **The real risk: moderate shocks arriving together**

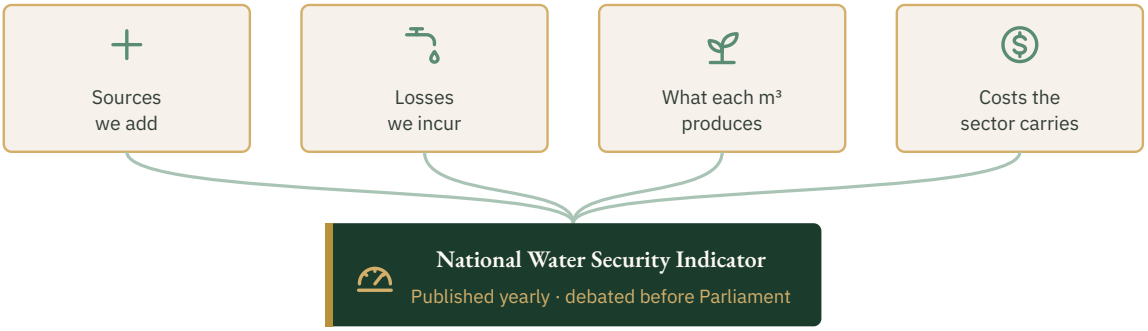


Source: ISDI diagnostic study, From Managing Scarcity to Building Resilience.

Who Leads Delivery?

That leaves a question the numbers alone do not answer, which is who leads the delivery. The royal directive settled the priority and instructed that work begin on drawing up implementation plans, and ISDI's reading is that water, energy and agriculture are not three parallel decisions but a single one, and that the largest possible improvement in this file comes not from the most expensive projects but from the cheapest, namely clarity of responsibility and joint implementation across institutions. The absence of a single national water security indicator, one bringing together the sources we add, the losses we incur, what each cubic metre produces and the costs the sector carries, published every year and debated openly, is therefore today the clearest gap that can be closed by an administrative decision rather than a large investment, because what we do not measure no one is answerable for, and what no one is answerable for is not delivered at the pace it deserves.

Figure 7 **One national water security indicator**



ISDI proposal, as set out in the text.

The Institute's Position and Recommendations

On this basis, ISDI recommends four complementary steps. First, that we treat loss reduction as a national water project with a published budget, indicators and clear responsibilities, rather than a secondary operational item, and that its enforcement dimension be paired with a legislative review making penalties proportionate to the scale of the damage. Second, building a national framework to protect the groundwater basins from depletion, beginning with bringing unlicensed wells under control and enforcing the law on them, paired with tools that help farmers adapt, such as satellite-based irrigation scheduling and support for shifting towards higher-return, less water-hungry crops, because the Jordanian farmer who will carry the first burden should be a partner in the solution rather than a recipient of it. Third, that we handle the Yarmouk and transboundary water as a diplomatic file as much as a technical one, and make use of the negotiating window opened by the resumption of the joint Jordanian-Syrian technical committee and the agreement to reassess the 1987 accord. Fourth, building a single governance structure that leads water, energy and agriculture decisions with clear authority to decide, and that issues each year a national water security indicator capable of serving as a tool of accountability before Parliament rather than one more annual report.

ISDI recommends four complementary steps

01 **Treat loss reduction as a national water project**
A published budget, indicators and clear responsibilities, with penalties proportionate to the damage.

02 **Protect the groundwater basins from depletion**
Bring unlicensed wells under control, with satellite irrigation scheduling and support for higher-return crops.

03 **Handle the Yarmouk as a diplomatic file**
Use the window opened by the joint Jordanian-Syrian technical committee and the review of the 1987 accord.

04 **One governance structure for water, energy and agriculture**
With clear authority to decide, and an annual national water security indicator before Parliament.

His Majesty has set the priority with a clarity that leaves no room for interpretation, and the task now is to turn that priority into a plan, while Parliament, at the start of its new session, has an opportunity to make water security a focus of its oversight and legislative work. For its part, the Institute for Sustainable Development and Innovation is beginning a series of focus sessions bringing together serving and former officials, members of Parliament, experts, academics and representatives of the private sector, civil society and international partners, the first of which convenes this month around gover-

nance, the economics of water, losses and transboundary exposure, with its outcomes to be drafted into a set of policy and procedural recommendations shared with the relevant institutions and decision makers. ISDI places its study and its data at the disposal of parliamentary committees, the government and everyone working on this file.

Sources

- Royal Hashemite Court: Speech from the Throne at the opening of the third ordinary session of the 20th Parliament
- Royal Hashemite Court: His Majesty's address to the United Nations General Assembly
- Ministry of Water and Irrigation: National Water Strategy 2023–2040
- Ministry of Water and Irrigation: Water budget for the groundwater basins
- Ministry of Water and Irrigation: Estimate of the annual water deficit
- Ministry of Water and Irrigation: Announcement on meeting the loss-reduction target, August 2026
- Jordanian-Syrian agreement on the utilisation of the Yarmouk waters (1987)
- Institute for Sustainable Development and Innovation: From Managing Scarcity to Building Resilience, A Diagnostic Study of Jordan's Agriculture and Food System

About the Author

Yousef Khalil is a public policy researcher focused on governance, institutional reform and policy development, and leads the Research and Policy Development Unit at the Institute for Sustainable Development and Innovation. He holds a background in political science from the University of Jordan and has worked with organisations including the Politics and Society Institute (PSI), the Center for Defending Freedom of Journalists (CDFJ), the Netherlands Institute for Multiparty Democracy (NIMD) and the Konrad-Adenauer-Stiftung (KAS).