

## Water-Energy-Food- Ecosystems (WEFE) in Syria



### Introduction and Problem Statement

Syria's Water-Energy-Food- Ecosystems (WEFE) landscape is dominated by the legacy of conflict. Years of infrastructural damage, displacement, and weakened institutions have eroded water and energy systems and severely reduced agricultural capacity. Data gaps are pervasive and governance is fragmented. The central challenge for policymakers is to align reconstruction with a WEFE approach: rebuilding basic services while redesigning systems to be water-efficient, resilient to climate variability, and sensitive to ecosystem recovery.

### Contextual and Analytical Background

Syria's agricultural core — historically an important cereal producer — has contracted sharply, and urban water and sanitation services are uneven. Hydropower and river flows on the Euphrates have been affected by upstream abstraction in neighboring countries, and pipeline and power infrastructure have been intermittently disrupted. The institutional architecture for integrated planning is weak and requires capacity support. Nonetheless, reconstruction provides a unique opportunity to mainstream WEFE principles from the outset, rather than retrofitting them into legacy systems.

### Main Analysis and Insights

First, reconstruction must prioritize basic water and sanitation while incentivizing efficient water use. Investments in wastewater treatment and reuse for agriculture will reduce pressure on freshwater sources and create job opportunities and local irrigation. Given limited capital, a tiered approach that prioritizes resilient sanitation in dense urban and camp settings, together with decentralized wastewater reuse projects for peri-urban agriculture, offers strong returns.

Second, restoring energy infrastructure should be coupled with the deployment of renewable energy targeted at critical local services. Solar generation can underpin water pumping, household electricity, and health clinics; hybrid solutions reduce dependence on fragile fuel supply lines. Prioritizing off-grid solutions in remote and conflict-affected areas improves service continuity and reduces the need for lengthy transmission repairs.

Third, agricultural recovery should emphasize resilience: re-establish seed systems, provide extension services for drought-tolerant varieties, and rehabilitate irrigation infrastructure where it yields clear water-productivity gains. Linking agricultural revitalization to local markets and storage will reduce the need for emergency food imports.

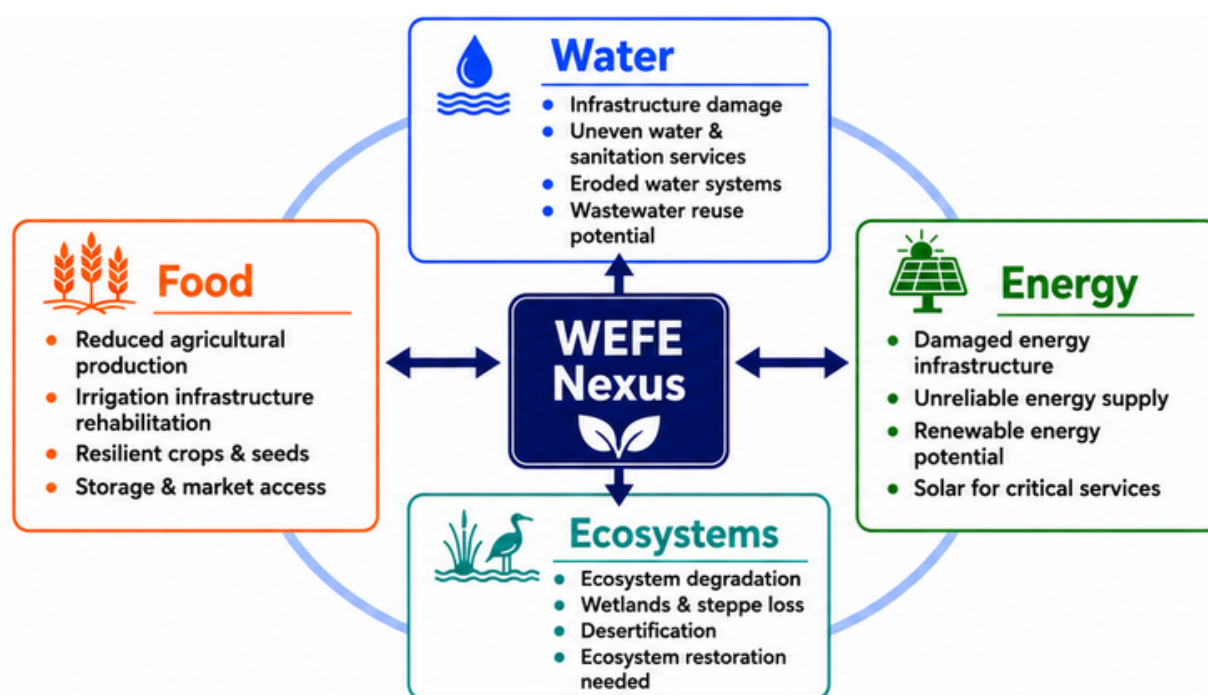
Fourth, transboundary cooperation on the Euphrates and Tigris is essential for long-term water security. Syria should pursue technical cooperation on flow monitoring and seek incremental agreements that enable predictable releases for irrigation and environmental flows, backed by international mediation where necessary.

Finally, ecosystem restoration — including wetlands and steppe systems — should be integrated into reconstruction funding envelopes. Rehabilitated ecosystems reduce desertification and provide livelihoods through fisheries and grazing that are less water-intensive than conventional cropping.

## Summary and Policy Insights

Syria's policy pathway must couple immediate reconstruction with systematic integration of WEFE. The practical priorities are to invest in decentralized wastewater treatment and reuse; deploy renewables to secure critical services; direct agricultural recovery toward resilient crops and value-chain investments; and pursue pragmatic transboundary arrangements to stabilize river flows. International donors can multiply domestic budgets by conditioning reconstruction support on WEFE reforms that lock in long-term resilience and productivity gains.

# Policy Brief: Syria Syria's Water-Energy-Food-Ecosystems (WEFE) Nexus



## Priority Policy Actions



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