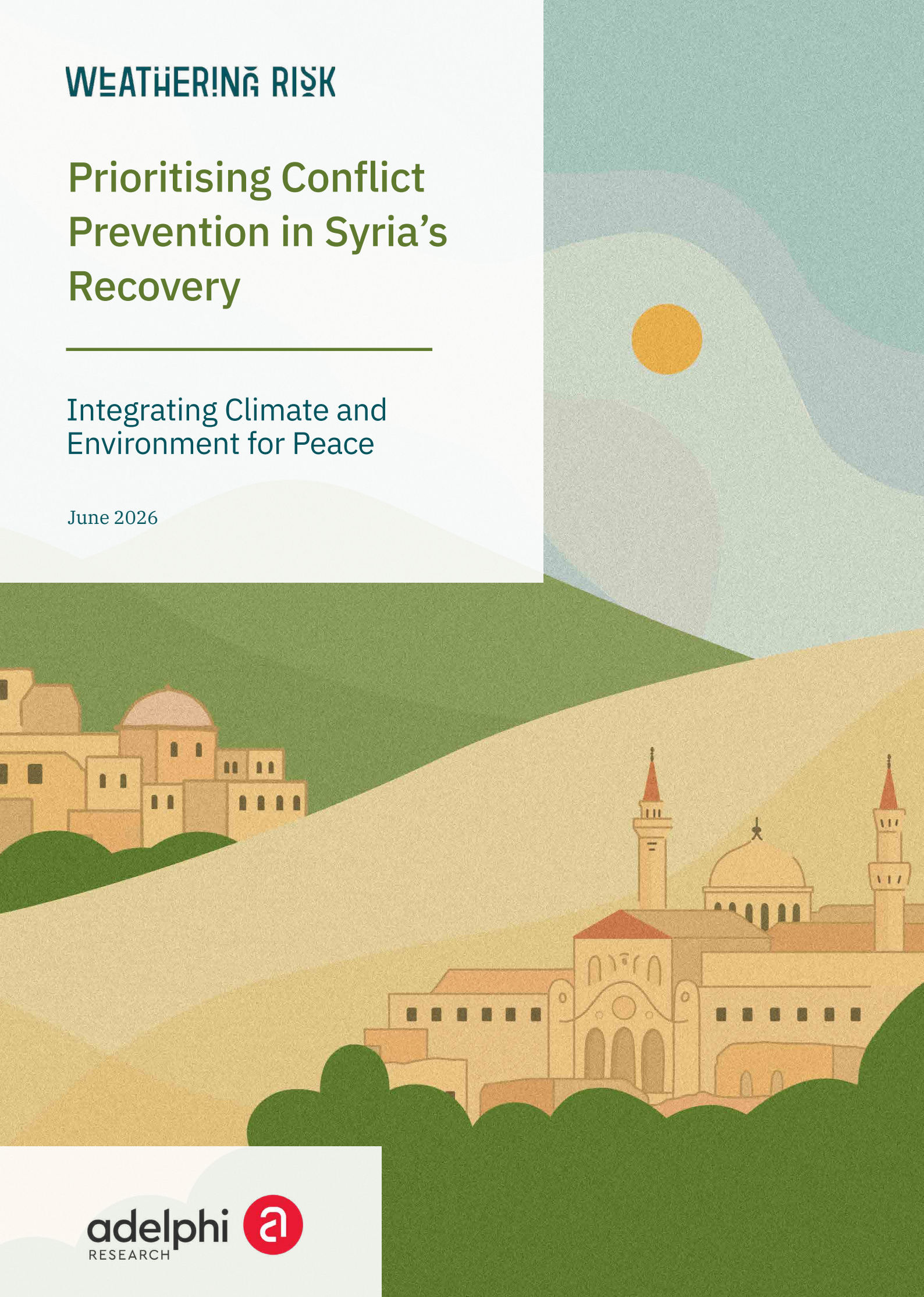
WEATHERING RISK

Prioritising Conflict Prevention in Syria's Recovery

Integrating Climate and Environment for Peace

June 2026



adelphi RESEARCH

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LIST OF ACRONYMS

BBC	British Broadcasting Corporation
C3S	Copernicus Climate Change Service
CCKP	Climate Change Knowledge Portal
CEPF	Critical Ecosystem Partnership Fund
CMIP6	Coupled Model Intercomparison Project Phase 6
CPS	Climate, Peace and Security
FAO	Food and Agriculture Organization (of the United Nations)
FCDO	Foreign, Commonwealth and Development Office (UK)
FGD	Focus Group Discussion
GDP	Gross Domestic Product
ICG	International Crisis Group
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Person
KII	Key Informant Interview
NGO	Non-Governmental Organisation
PAX	PAX for Peace
SDF	Syrian Democratic Forces
SME	Small and Medium-sized Enterprise
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
USD	United States Dollar
WASH	Water, Sanitation and Hygiene

1. Executive Summary

1.1. A Window of Opportunity and the Risks of Missing It

With the fall of the Assad regime in December 2024, a window of opportunity has opened for a recovery rooted in durable peace. However, this window will not remain open indefinitely. Seizing it demands more than technical reconstruction, it requires rebuilding Syria's deeply damaged social fabric, and renewing the social contract between state and society – one grounded in accountability, inclusion and a shared stake in recovery. Central to this process is addressing climate and environmental realities. Decisions about who controls water, how land rights are adjudicated and which communities benefit from infrastructure investments will signal whether governance is inclusive and fair, or whether it will reproduce the patterns of exclusion that fuelled conflict. Early attention to climate and environmental realities – including rising temperatures, increasingly erratic rainfall and more frequent droughts – is not a distraction from recovery, it is integral to making the recovery durable.

1.2. Our Approach

This assessment connects climate risk analysis with a conflict prevention angle, translating both into actionable entry points for investment and policymaking. The assessment draws on adelphi's Weathering Risk methodology, adapted to the Syrian context, which integrates climate and conflict lenses to identify where environmental pressures intersect with fragility and where opportunities for peace exist. The analysis combines technical and policy expertise with the lived realities of communities and input from experts across 10 governorates, drawing on more than 230 household and community-level interviews, 24 expert consultations, as well as stakeholder consultations in Amman and Damascus.

1.3. Climate and Environmental Stressors

Syria is experiencing rising temperatures, declining and increasingly erratic rainfall, and intensifying cycles of drought and flooding – trends that are reducing agricultural yields, deepening water scarcity and exposing already damaged infrastructure to compounding hazards. Under a high-emissions scenario, mean temperatures are projected to rise by up to 1.48°C in the near term and 2.55°C by mid-century, with the northeast of the country – Syria's breadbasket and a region of acute political sensitivity – facing the most extreme conditions. These stressors do not fall evenly across Syria's population or geography: women, young and elderly people, internally displaced persons (IDPs) and communities living in areas of contested governance face compounding pressures that climate change will intensify. How recovery is experienced across groups and regions will determine whether it strengthens social cohesion or deepens the fractures that fuelled conflict.

Beneath the headline climate figures lies an environmental crisis that is already shaping what recovery is possible. More than 85 per cent of agricultural land faces soil degradation, forest cover has contracted by roughly a quarter since 2011, and untreated sewage contaminates both surface and groundwater – contributing to cholera outbreaks that have overwhelmed Syria's already fractured health system. Drought-like conditions affected 25,000 km² of cropland in 2025 alone. What makes these pressures particularly destabilising is their interaction with fragile infrastructure, weak institutions and unresolved communal tensions.

1.4. Peace and Security Landscape

Syria's transitional government faces a complex set of overlapping challenges:

- **Governance and security:** The government faces a difficult balancing act – consolidating state authority while building legitimacy through inclusive governance, and addressing immediate humanitarian needs alongside longer-term climate resilience rather than treating them as sequential priorities.

- **Demographics:** More than 13.5 million people have been displaced by the war – 6.1 million as refugees outside the country and 7.4 million internally – reconfiguring Syria's social geography along increasingly sectarian lines.

- **Media and information environment:** Perceptions of safety diverge sharply across communities. A fragmented information environment, dominated by informal digital channels, amplifies divisions, with disinformation actively stoking sectarian tensions.

- **Regional influences:** Türkiye, Israel and several Gulf states retain significant leverage in Syria's transition. The lifting of sanctions has drawn significant regional investment into reconstruction, though its impact will depend on how well such investments factor in long-term climate resilience, deliver social dividends equitably, and avoid entrenching existing inequalities.

1.5. Vulnerability and Resilience

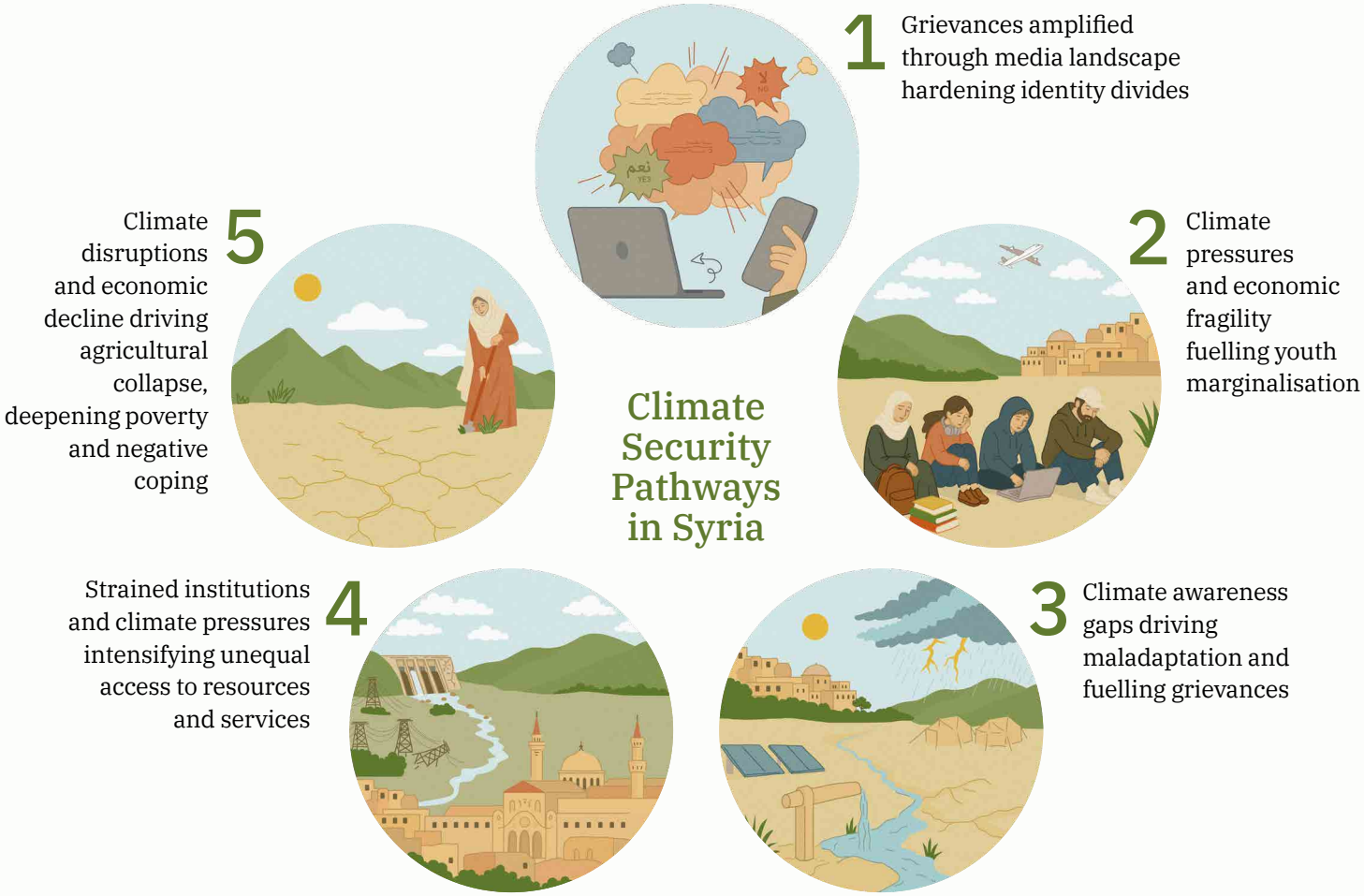
Vulnerabilities in Syria are acute across all dimensions, making prioritisation a persistent challenge. Yet communities have endured more than a decade of conflict through local networks, civil society and adaptive capacities – assets that any effective response must build upon rather than overlook.

- **Economy and livelihoods:** The economy has contracted by more than 50 per cent since 2011, agricultural value chains have collapsed, and women often lack access to credit and cooperatives. Remittances sustain many households, while returning diaspora and small businesses represent fragile but tangible recovery potential.

- **Infrastructure and environment:** A third of infrastructure has been destroyed, with reconstruction costs projected at USD 216 billion. Short-term coping mechanisms, particularly the proliferation of solar-powered wells, have helped communities survive. However, these mechanisms have also accelerated groundwater depletion, embedding long-term vulnerabilities that will be difficult to reverse.

- **Social fabric and human capital:** Trust between communities and in state institutions has eroded. Young people and women remain largely excluded from recovery discussions, while unresolved housing, land and property disputes continue to exacerbate social tensions. The emigration of skilled professionals has further depleted the human capital on which reconstruction depends. Despite these challenges, civil society has endured. Investing in the equitable restoration of health and education services could support stabilisation and contribute to rebuilding the social contract.

1.6. Key Climate Security Pathways



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This report identifies five key pathways through which climate and environmental risks are converging with underlying security dynamics and sociocultural conditions to either exacerbate or mitigate tensions, generate conflict flashpoints, or impede stable recovery across Syria.

- **Pathway 1 – grievances amplified through media landscape hardening identity divides**: In Syria's fragmented media environment – characterised by the dominance of informal digital channels and widespread disinformation – grievances are systematically reframed through sectarian narratives. This dynamic marginalises minority voices, particularly those already reluctant to engage online for fear of being targeted. Moreover, as sectarian identity becomes a dominant interpretive framework, disinformation not only reflects existing divisions but actively deepens them. The consequences extend to government legitimacy. Even evidence-based policies, such as those governing natural resource, risk being reframed on social media as deliberate attempts by the government to prevent communities from rebuilding – often before any official communication has reached the public.

- **Pathway 2 – climate pressures and economic fragility fuelling youth marginalisation**: Young people in Syria – who constitute a third of the population – are disproportionately affected by economic fragility, repeated climate shocks, and a labour market hollowed out by conflict and agricultural collapse. This is not merely an economic crisis. Limited access to stable livelihoods can undermine young people's social standing, sense of belonging and agency. This precarity pushes many towards informal work, migration and, in some areas, armed groups. This dynamic of exclusion deepens their disengagement from civic and community life.

- **Pathway 3 – climate awareness gaps driving maladaptation and fuelling grievances**: In Syria, climate change is primarily experienced through its immediate manifestations – such as a failed harvest, a dry well or an unpredictable season – rather than as a longer-term structural trend. In a context of acute and compounding crises, this gap in awareness and prioritisation is human. Yet its consequences are significant. Decisions being made now about where people return, how water is extracted and how regional trade is structured will lock in trajectories that are difficult and costly to reverse. Where climate considerations are not integrated, maladaptive practices can become structural. Meanwhile, where climate considerations are integrated but disconnected from lived realities, even sound policies risk being perceived as abandonment.

- **Pathway 4 – strained institutions and climate pressures intensifying unequal access to resources and services**: Climate pressures are landing in an environment where natural resources and services are severely strained and access is deeply unequal – both in practice and perception. With ministerial mandates and cross-sectoral coordination still being established, the institutional choices being made now are not simply technical, they will determine whether access becomes more equitable or whether existing patterns of exclusion are carried forward.

- **Pathway 5 – climate disruptions and economic decline driving agricultural collapse, deepening poverty and negative coping**: Syria's agricultural sector is facing pressures from multiple directions. The legacy of conflict, climate stress and exposure to international markets are interacting in ways that risk tipping farming communities beyond what they can absorb alone. Until now, farmers have been navigating these pressures alone, adopting coping strategies that are rational at the household level but accelerate environmental and economic deterioration at scale. Female-headed households, herders and rainfed farming communities in the north of the country face the steepest barriers. In contexts where vulnerability is most acute, the risk of grievance, social fragmentation and instability runs deepest.

1.7. Strategic Recommendations for Conflict Prevention

This report presents six key recommendations for Syria's transitional authorities, civil society, international donors and climate finance institutions seeking to support a recovery that is both climate resilient and conflict preventive.

1. **Transparent, inclusive and climate risk-informed review of agricultural stability zones**: The agricultural stability zones, introduced in 1975, are now widely seen as inequitable and a significant source of public grievance. A transparent and participatory review could contribute to evidence-based water management, while also offering the new administration an early opportunity to rebuild public trust and demonstrate its commitment to fair governance. The review should incorporate up-to-date climate projections and hydrological data, and be grounded in the contextual realities into which it will feed. In settings where information spreads through informal digital channels and communities are preoccupied with immediate needs, the legitimacy of the reform process – and how it is communicated – matters as much as its technical substance.

2. **Climate-proof jobs and SMEs that contribute to social cohesion:** Job creation and SME development should be designed to be both equitable and climate resilient, avoiding investment in livelihoods and value chains that are likely to be undermined by climate change. Employment programmes that bring divided communities together around shared economic interests through, for example, cross-community cooperatives in climate-adapted agriculture, renewable energy installation and maintenance, and water-efficient technologies should be prioritised.

3. **Equitable and climate risk-informed agricultural extension and veterinary services**: Support should be given to restoring agricultural extension and veterinary services, while ensuring they are equitable in reach and informed by current climate risk data. The rehabilitation of these services is not only a technical necessity, but also a signal of the state's renewed commitment to rural communities – many of which felt systematically neglected or punished under the previous regime.

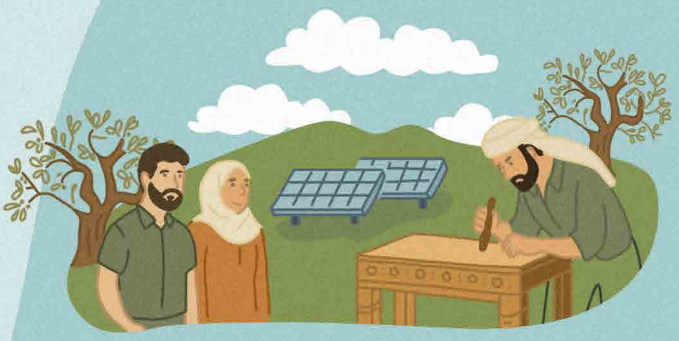
4. **Water and energy infrastructure rehabilitation with social dividends**: Infrastructure rehabilitation should be designed to deliver social cohesion alongside service restoration, ensuring equitable access across formerly divided communities, inclusive community-level governance and the recruitment of local workers from diverse backgrounds. When delivered fairly and transparently, these projects provide some of the most visible peace dividends available to the new administration and are critical to building trust in communities where access to infrastructure was previously weaponised as a tool of control or punishment.

5. **Dialogue and reconciliation around mutual local concerns**: Use common environmental and service provision challenges – such as water scarcity, access to electricity, waste management and land degradation – as non-politicised entry points for local dialogue and reconciliation, including via social media, between communities that may otherwise have little basis for constructive engagement. Ensure that these dialogue and reconciliation processes are genuinely inclusive of marginalised groups, including women, young people, displaced communities and vulnerable returnees.

6. **Harmonising data and creating a national climate security monitoring platform:** Establish a unified, interoperable, open-access data platform that harmonises climate, environmental, agricultural, displacement and conflict data currently held across multiple government ministries, UN agencies and NGOs, enabling integrated analysis and early warning for climate security risks.

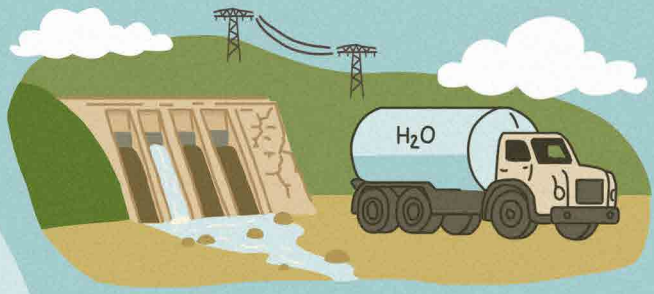
Recommendations

1 **Transparent, Inclusive and Climate Risk-Informed Review of Agricultural Stability Zones:** Ground the review in up-to-date climate projections and hydrological data, layered with contextual social and economic data. Where information travels through informal digital channels and communities are preoccupied with immediate needs, the legitimacy and communication of reform matter as much as its technical content.



2 **Climate-Proof Jobs and SMEs That Contribute to Social Cohesion:** Invest in climate-resilient, equitable job creation and SME development, prioritising employment programmes that bring together divided communities around shared economic interests — for example, cross-community cooperatives in climate-adapted agriculture, renewable energy installation and maintenance, or water-efficient technologies.

3 **Equitable and Climate Risk-Informed Agricultural Extension and Veterinary Services:** Restore these services equitably and grounded in current climate risk data, signalling the state's renewed commitment to rural communities — many of which felt systematically neglected or punished under the previous regime.



4 **Water and Energy Infrastructure Rehabilitation with Social Dividends:** Rehabilitate water and energy infrastructure to deliver social cohesion alongside service restoration — ensuring equitable access across formerly divided communities, inclusive governance, and recruitment of local workers from diverse backgrounds.

5 **Dialogue and Reconciliation Around Mutual Local Concerns:** Anchor dialogue and reconciliation in shared environmental and service-provision challenges as non-politicised entry points between divided communities — including on social media channels — ensuring meaningful participation of women, youth, displaced communities and vulnerable returnees.

6 **Harmonising Data and Creating a National Climate-Security Monitoring Platform:** Establish a unified, interoperable, open-access data platform that harmonises climate, environmental, agricultural, displacement and conflict data currently held across multiple ministries, UN agencies and NGOs, enabling integrated analysis and early warning for climate-security risks.

Damaged buildings © Ghaith Hsaino/adelphi research

2 FRAMING THE ASSESSMENT

1.1. Introduction: A Window of Opportunity

While the fall of the Assad regime in December 2024 ushered in a period of transition in Syria, the costs of 14 years of conflict will take some time to recede. For many, this shift marked liberation after decades of oppression; for others, it signalled crisis and dispossession. This gulf in experience reflects deep structural divisions within the country – communal, ethnic and political – continue to shape the road ahead.

Bridging these divides will demand more than technical reconstruction. It will also require rebuilding a deeply damaged social fabric, and renewing the social contract between state and society – one grounded in accountability, inclusion and a shared stake in recovery. Institutions hollowed out by conflict persist alongside unresolved grievances, ongoing insecurity and sustained economic pressures for ordinary Syrians. Humanitarian needs remain immense and the country's political direction is still uncertain. Without a renewed social contract that addresses these conditions, even well-resourced recovery efforts risk reinforcing fragmentation rather than fostering cohesion.

Less visible, but quietly affecting Syria's prospects for recovery, is the degradation of its environmental foundations. Fourteen years of war has depleted aquifers, desiccated rivers, exhausted agricultural lands and destroyed infrastructure. These impacts are not easily reversed and are likely to be compounded by climate change. Rising temperatures, increasingly erratic rainfall and more frequent droughts threaten to exacerbate scarcity and undermine recovery before it takes hold.

For those piecing together lives and livelihoods after the conflict, environmental concerns may feel distant, crowded out by more immediate demands: security, shelter and survival. However, these environmental and climate pressures will be felt all the same. Water shortages, forest fires, failing harvests and uninhabitable land will not wait for political settlements or reconstruction plans. They shape what recovery is possible, where and for whom. Left unaddressed, these pressures are likely to compound, undermining gains made in other areas.

Building Resilience, Preventing Conflict

How Syria's emerging governance structures manage water, land and energy will shape not only environmental outcomes but also the prospects for durable peace. Early attention to environmental realities is not a distraction from recovery, it is integral to making that recovery sustainable. These are inherently political questions, closely tied to demands for security, livelihoods and justice, and they will determine how transparently and accountably the country can be governed. They are also tests of the social contract between state and society: decisions about who controls access to water, how land rights are adjudicated and which communities benefit from infrastructure investments will signal whether governance is perceived as inclusive and fair, or as reproducing the patterns of exclusion that fuelled conflict.

The window for embedding climate resilience within peacebuilding and reconstruction has opened, but it will not remain so indefinitely.

Purpose and Approach of this Assessment

This assessment is designed to inform decision-making during this critical period, offering analysis and options for those positioned to act, including Syria's transitional authorities, civil society, international donors and climate finance institutions seeking to support a recovery that prevents, rather than reignites, conflict. The assessment draws on the experience of technical and policy experts alongside the lived realities of communities across the country – people whose experiences of the last 14 years have been vastly different.

What emerges is a picture of the road ahead. One that requires an accountable, coordinated national authority working in concert with local expertise – responsive to context, grounded in justice and capable of earning public trust. It also requires deliberate investment in social cohesion: creating spaces for dialogue, ensuring that recovery processes are perceived as fair, and building trust

between communities and the state. Furthermore, it requires those outside Syria to align their support with community-identified priorities in ways that foster self-determination and avoid the harms of maladaptation.

Since December 2024, there has been a surge of activity – including assessments, research, dialogue and broader conversations about what comes next – seeking to map Syria's recovery needs and chart a path forwards. **This report builds on that foundation but also serves a distinct purpose: to connect climate risk analysis with conflict prevention, and to translate both into actionable entry points for investment and policy.** It is intended not only to inform, but also to guide – offering those positioned to act a clearer understanding of where climate-sensitive interventions can support stability and reduce the risk of renewed conflict.

Though grounded in Syria's specific context, this assessment speaks to challenges that are increasingly common across post-conflict settings. These include how to rebuild accountability and governance, while restoring degraded land, water and ecosystems; how to manage scarce natural resources in ways that reduce rather than fuel tensions; and how to ensure that recovery is resilient to the climate pressures that will shape the decades ahead. The approaches outlined in this report offer relevant lessons for other fragile and conflict-affected contexts – whether currently facing these challenges or emerging from conflict – from Sudan to Gaza to Ukraine.

Guiding Questions

To navigate these challenges, this assessment is organised around six core research questions:

1. **Climate and environmental stressors:** Which climate and environmental stressors are most likely to heighten tensions, generate dispute risks or impede stable recovery, and where are the most likely flashpoints?

2. **Peace and security context:** What existing security risks and governance deficits could interact with climate stressors to increase the likelihood of violence, and where do capacities for peace exist?

3. **Contextual factors:** Which contextual factors magnify or mitigate climate and security-related vulnerabilities, and what are the implications for conflict-sensitive interventions?

4. **Climate-related security risks and pathways:** Through which pathways do climate stressors interact with existing risks to drive escalation, and what are the tipping points to monitor?

5. **Conflict prevention opportunities:** How can nature, climate and environmental action serve as building blocks for peace, and how can these dimensions be integrated into post-conflict reconstruction and national recovery strategies?

6. **Transferable insights:** What lessons can be applied to other fragile and post-conflict contexts in the region and globally?

Community members engaged in a focus group discussion © Ghaith Hsaino/adelphi research

1.2. Conceptual Framework: Climate, Fragility and Pathways for Sustainable Peace

The Weathering Risk Approach

Climate change and environmental stressors can undermine progress towards sustainable development and peace through their negative impact on the political, economic and social dimensions of human security. Addressing interacting climate and security risks in Syria first requires a granular understanding of the relationship between environmental change and insecurity in the country. To this end, the report uses the Weathering Risk methodology, adapted to the Syrian context, integrating both a climate and conflict lens for sustainability.

Conflict Prevention Orientation

Syria's current political transition offers an opportunity to address the social and structural vulnerabilities that make the country susceptible to renewed conflict. With this in mind, the research framework was adapted to have a conflict prevention angle at its centre, allowing for the examination of structural drivers of fragility, grievance formation and pathways to sustainable peace.

Strengthening social cohesion across divides, and promoting inclusive access to resources and decision-making are key aspects of conflict prevention. However, Syria remains in a delicate and fleeting phase, which requires balancing stabilisation with pluralisation, or stability with legitimacy. The country's diverse ethnic and religious communities face unequal barriers to participation in recovery processes, which can perpetuate cycles of marginalisation and increase the risk of renewed conflict. This context presents both risks and opportunities for integrating climate and environmental considerations into recovery planning in ways that strengthen peace, build government legitimacy and prevent conflict resurgence.

Methodology

The assessment is based on both quantitative and qualitative data. The quantitative climate data draws upon newly commissioned climate impact data, which provides an overview of the observed and projected climate in Syria, as well as projected impacts for the country's different sectors. It also incorporates findings from a comprehensive literature review. The qualitative data draws on in-person expert stakeholder consultations in Amman and Damascus, interviews with 24 regional and national experts, plus field research that entailed household and community-level consultations with more than 230 people in 81 locations across 10 (of the 14) governorates in the country, as well as an inclusive validation workshop. The consultations were designed to capture a broad spectrum of voices, with respondents varying by gender, age and occupation. Particular attention was given to ensuring meaningful representation of minority and vulnerable groups. Furthermore, conflict sensitivity was prioritised throughout the research, with careful consideration of trauma, ethical safeguards and inclusive representation.

Figure 1: Weathering Risk methodology

The data was analysed using a grounded theory approach, whereby theoretical frameworks emerged directly from systematic data review and analysis rather than from pre-existing hypotheses. This approach has proven particularly useful in exploring new themes and patterns, notably in contexts where climate and environment concepts can be difficult to disentangle.

DESK REVIEW

The data collection started with an extensive literature review of both scholarly work and grey literature, with a particular consideration for knowledge produced by Syrian and Middle Eastern individuals and institutions. The desk review allowed for a deeper understanding of trends, patterns and gaps in the existing literature on the interlinkages between climate, peace and security in Syria. These findings were further nuanced through subsequent interviews with regional and national experts, as well as field research.

A climate impact profile for Syria was developed in partnership with Climatepedia, providing forward-looking data on Syria's climate, including projected parameters under various emission scenarios across key sectors, with the goal of supporting resilience-oriented short and long-term planning. The state-of-the-art climate modelling and projections are based on data from the Climate Change Knowledge Portal (CCKP), the World Climate Research Programme's CMIP6 and the Coupled Model Intercomparison Project Phase 6.

STAKEHOLDER CONSULTATIONS

The assessment was developed in consultation with the transitional Government of Syria[1] to ensure it aligns with the reconstruction priorities set out by the Syrian authorities, while also recognising that the government is best positioned to integrate climate security considerations into national planning and ensure long-term, conflict-sensitive resilience. This approach also reflects recognition that a vast amount of expertise

1 Throughout this report, "Government of Syria" refers to the Syrian transitional government constituted on 29 March 2025, initiating a five-year transitional period (2025–30).

Geography	Primary climate-security risks	Rationale for focus
Rural Damascus	Drought; water scarcity; rural-urban tensions	Land degradation; rural-urban competition over land for water resources
Suwayda	Drought; rainfed agriculture; heat impacts; water scarcity; energy–water link	Armed groups and youth recruitment; illicit economic activities
Deir ez-Zor	Water scarcity; Euphrates flow variability; energy–water link	Hydropower/irrigation dependence; grievance potential; groundwater/borehole risks
Raqqa	Drought, irrigation stress; displacement pressures	Euphrates-fed irrigation; livelihood erosion; upstream–downstream dynamics
Aleppo	Urban flooding/drainage failure; water supply stress; heat risk	Critical urban services; health and energy implications
Hama	Drought/heat; olive/cereal stress; rural tensions	Mixed rural communities; value chains; irrigation rehabilitation opportunities
Homs	Drought/heat; olive/cereal stress; rural tensions	Mixed rural communities; value chains; irrigation rehabilitation opportunities
Latakia	Wildfires; storm surge/sea-level rise; saline intrusion	Ports/logistics, fisheries, coastal agriculture; national strategic importance
Tartous	Wildfires; storm surge/sea-level rise; saline intrusion	Ports/logistics, fisheries, coastal agriculture; national strategic importance
Idlib	Flooding; winter storms; heat/cold waves in camps	High density of IDPs; camp governance; WASH/shelter stress

Table 1. Overview of primary climate security risks and rationale for their selection across each selected governorate

on Syria and the region exists within the country, and that engagement with national authorities is key for the inclusiveness of the research.

Regional expertise was garnered through stakeholder consultations in Amman in November 2025, bringing together experts from Syrian civil society, international NGOs operating in Syria, academia and government. The Amman consultation was complemented by virtual interviews with Syrian experts from civil society, academia and government working across diverse geographic and governance contexts, allowing for a deeper and more nuanced understanding of climate, peace and security dynamics at the national and subnational level.

The technical exchange process in Damascus was particularly valuable, providing an opportunity to bring together multidisciplinary expertise. Moreover, it enabled participants to explore ways to strengthen dialogue on the climate, peace and security nexus in the region. Collaboration and coordination with international entities engaged in Syria's recovery, facilitated through the stakeholder consultation process, further demonstrates the value of this exercise by fostering greater synergies and complementarity. In this context, the assessment complements FAO's climate risk assessment on agrifood systems and farming communities, funded by the United Kingdom's FCDO Resilience and Adaptation Fund.

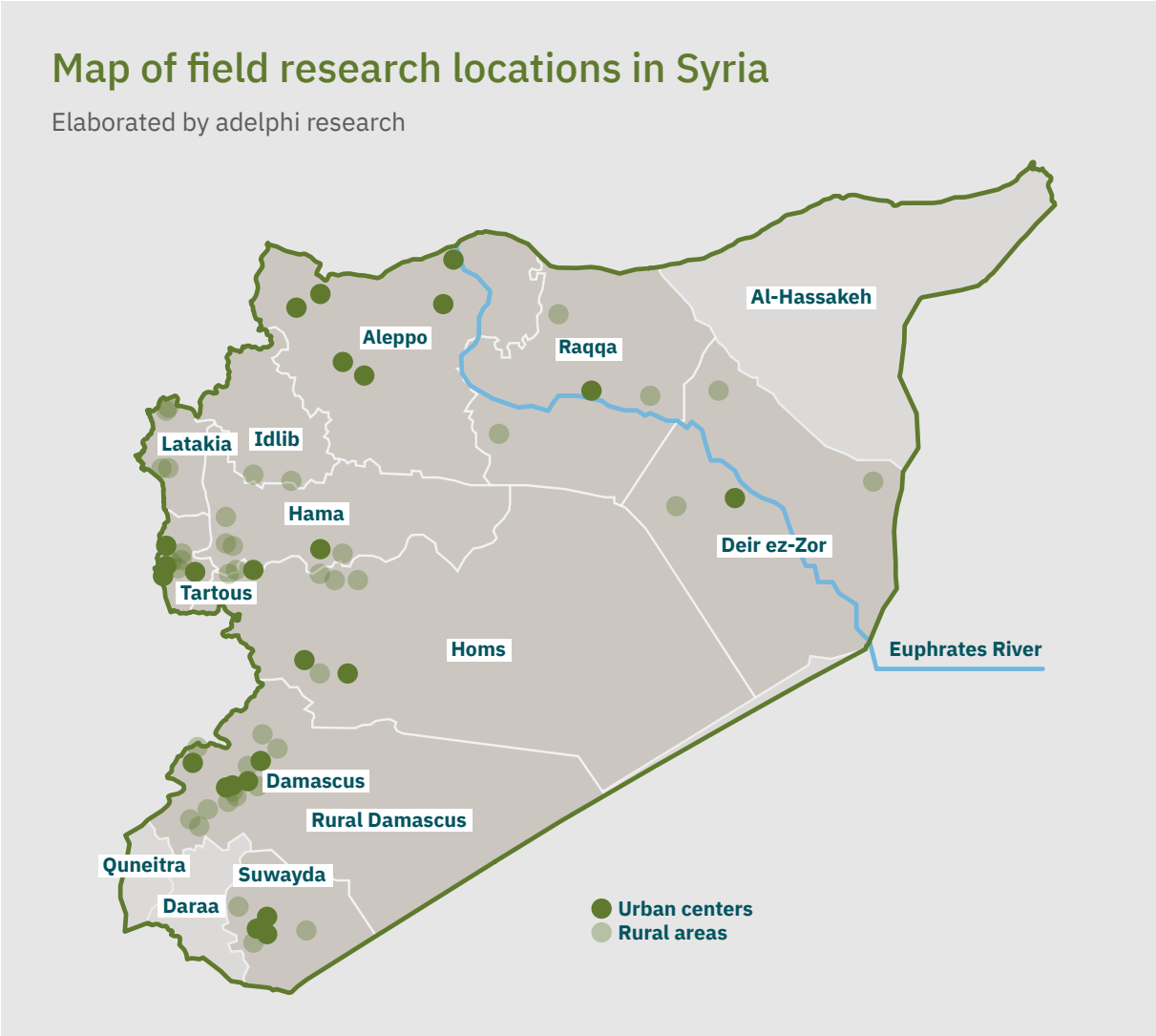


Figure 2. Field Research Locations

FIELD RESEARCH AND SUBNATIONAL CASE STUDIES

The national-level analysis was complemented by field research conducted in 81 locations across the following governorates: Aleppo, Deir ez-Zor, Hama, Homs, Idlib, Latakia, Tartous, Raqqa, Rural Damascus[2] and Suwayda. These governorates were selected based on climate vulnerability, the legacy and persistence of conflict, ethnic and religious diversity, equity considerations, data gaps, and operational feasibility.

COMMUNITY CONSULTATIONS

To ensure the research was culturally sensitive and leveraged the expertise of local actors, the field research was led by multiple Syrian research teams. The composition of the teams was designed to reflect the ethno-religious diversity of the communities across the areas covered in order to strengthen trust and access, and to enhance data collection. adelphi led an orientation workshop for the local researchers before the community consultations began, with the teams trained in conflict, gender and disability-sensitive and intersectional research approaches, as well as ethical and safety considerations. The local research teams comprised both male and

2 Also referred to as Rif Dimashq.

female team members. Moreover, the workshop highlighted conflict-sensitive approaches and the importance of ensuring informed consent.

The household and community-level data collection largely focused on key informant interviews (KIIs), which were complemented by a focus group discussion (FGD) in each of the 10 selected governorates. In total, 10 FDGs and more than 230 KIIs were conducted – all in Arabic and using a storytelling approach rather than a survey. Importantly, the data collection tool was contextualised with the field partners ahead of data collection and translated into Arabic. Separate female-led conversations were held with female respondents, including young and elderly women, and all data was disaggregated by gender, age, religion and socioeconomic markers.

VALIDATION

A validation workshop was conducted to ground truth the initial pathway analysis and priority areas for further research. The workshop ensured that the assessment's emerging findings were grounded in context-specific realities, and informed by the lived experiences of affected communities and key stakeholders.

Aftermath of forest fire in north Latakia © Ghaith Hsaino/adelphi research

3 THE CLIMATE, ENVIRONMENT AND PEACE CONTEXT

2.1. Climate and Environmental Stressors in Syria

This section explores current and future impacts of climate change in Syria, focusing on the near term (2020–39) and medium term (2040–59). The observed climate data is informed by the Climate Research Unit at the University of East Anglia and the Copernicus Climate Change Service (C3S) Climate Data Store of the European Centre for Medium-Range Weather Forecasts, both accessed via the World Bank's Climate Change Knowledge Portal. The projected climate data is drawn from the World Climate Research Programme's CMIP6 (Coupled Model Intercomparison Project Phase 6). For a complete methodology and detailed review of Syria's climate trends and sectoral impacts, adelphi commissioned the complementary Climate Impact Profile for Syria.

Air Temperature

In Syria's semi-arid to arid climate, rising temperatures are not merely an environmental trend – they pose a direct challenge to livelihoods already under strain and risk deepening the fault lines of the conflict.

> **"I have 30 dunums (approximately three hectares) that used to produce one tonne per season. This year, they produced nothing because of the extreme heat."**
>
> – Mukhtar,[3] Al-Mukharram Al-Janoubi, Homs

Under a high-emissions scenario, mean temperatures are projected to rise by up to 1.48°C in the near term (2020–39) and by 2.55°C by mid-century (2040–59), with most regions shifting towards hotter and drier conditions (Geldin, 2026). The most extreme conditions are concentrated in the northeast – Syria's breadbasket and a region of acute political sensitivity – radiating outwards from the Badiya desert. More mountainous regions, while spared the most extreme heat, face a different threat: critical decreases in frost days during winter months, making late spring frosts increasingly unpredictable (Geldin, 2026). For a country in which food security, water availability and livelihoods depend on predictable seasons, these shifts demand strategic foresight.

Precipitation

Shifting rainfall patterns are reshaping the conditions for Syria's agricultural recovery. Overall, mean precipitation is declining, both annually and seasonally, pointing towards more frequent and prolonged dry spells. Under a high-emissions scenario, the sharpest decreases are projected in winter and spring, particularly in the west (Geldin, 2026). Yet this broad drying trend masks another reality: seasonal increases in precipitation intensity, including heavier five-day rainfall events, signal a growing risk of extreme wet events, even as overall conditions become drier (Geldin, 2026). Syria's infrastructure, much of it damaged or degraded by conflict, is ill-equipped to withstand these extremes, and communities whose coping capacities have been eroded by 14 years of war face heightened risks from both drought and flooding.

Droughts

Drought is Syria's most pervasive climate risk – and perhaps the most politically charged. Higher mean and extreme temperatures, decreases in seasonal precipitation, declining stream flows, and rising water demand are converging to deepen water scarcity across all major watersheds (Geldin, 2026). Upstream water diversions by neighbouring states and conflict actors further tighten the margin, turning hydrological stress into a source of grievance with both domestic and transboundary dimensions (UNOCHA, 2021; Daoudy, 2020). The historical record underscores how deeply drought is embedded in Syria's landscape. Over the past 50 years, drought conditions prevailed in nearly half of all years (Breisinger et al., 2011), with the northeast experiencing the highest overall frequency, and the south and northwest facing disproportionately higher rates of extreme droughts (Geldin, 2026; Mathbou et al., 2018).

3 Neighbourhood or village-level representative in Syria.

This is not a neutral geographic distribution. These regions correspond to areas of heightened ethnic diversity, contested governance and displacement. The most affected zones overlap with Syria's core rainfed agricultural belt, where multi-year droughts layered with governance issues have repeatedly pushed some rural communities past the point of viable farming. Furthermore, anecdotal evidence points to deepening groundwater depletion, though systematic assessments date no further back than 2010–12. Pre-conflict data already indicated that Syria's groundwater withdrawals were at least twice the rate of renewable supply, with roughly a third of the population exposed to high or extreme groundwater stress (FAO, 2008; World Bank, 2018).

The impact of drought is particularly evident in olive production, with a resident from Al-Bayadiyah, Hama, reporting that olive oil output dropped sharply from 27 barrels in the previous productive season to only four barrels in the most recent year.

Flooding

As rainfall becomes more erratic, flooding is emerging as a recurring disruption to recovery across Syria. Damaged infrastructure, the loss of permeable surfaces in war-damaged (rubble-covered) urban areas and dense displacement settlements leave little buffer against extreme rainfall. Much of northern Syria is now projected to experience damaging urban floods at least once a decade (Geldin, 2026; World Resources Institute, 2023). The consequences are already visible. In 2021, flooding in Aleppo and Idlib displaced more than 80,000 people, many already uprooted by conflict (IDMC, 2025).

> **"Floods and heavy rains accompanied by strong winds damage crops and greenhouses."**
> – Farmer, male, 61, Ma'itar Al-Dweir, Tartous

The geographic differentiation in climate risk adds a further layer of concern, especially where it coincides and interacts with both historical and ongoing conflict dynamics. The sharpest increases in precipitation intensity and related landslides are projected around Latakia – the site of widespread violence in March 2025, including the deliberate targeting of Alawite communities. Meanwhile, heavy multi-day rainfall is set to intensify most in the northeast – a region also facing significant instability (Geldin, 2026; Paes et al., 2025). These cases illustrate how flood risk not only manifests in isolation, but also compounds existing social tensions and governance fragmentation, creating overlapping pressures in regions already under acute strain.

Sectoral Implications of Climate Change through a Conflict Prevention Lens

The climate stresses outlined above do not affect Syria's population or geography evenly. Their impacts are shaped by years of conflict, socioeconomic decline and regional disparities, which have produced vastly different vulnerabilities and capacities for resilience. Women, young and elderly people, people living with disabilities, IDPs, and communities living in areas where governance remains fragmented or contested face compounding pressures that climate change will intensify. These differentiated impacts are critical: how recovery is experienced across groups and regions will determine whether it strengthens social cohesion or deepens the fractures that fuelled conflict.

HUMAN HEALTH

Syria's health system enters the transition gravely weakened and increasingly exposed to climate pressures. Daytime temperatures above 35°C and nighttime minimums that no longer allow the body to recover are becoming more frequent across Syria's populous western plains and plateaus. The related risks of dehydration, heat stroke and heat-related mortality fall hardest on outdoor labourers, elderly people, pregnant women, children, people living with disabilities and IDPs living in inadequate housing (Geldin, 2026).

Vector and water-borne diseases further illustrate how climate and conflict interact and compound risk. Leishmaniasis is a case in point. Conflict-driven displacement, damaged buildings and unmanaged waste expanded sandfly habitats after 2014, leading to tens of thousands of cases in areas where the disease had not pre-

viously been observed (Carew et al., 2025; Paz et al., 2021). Rising nighttime temperatures are projected to accelerate this trend further, particularly in the northeast (Geldin, 2026). Water-borne diseases follow a similar compounding dynamic. Drought conditions can concentrate pathogens in diminished water sources, while flooding overwhelms sanitation systems already degraded by conflict. Between 2015 and mid-2021, an estimated 2.7 million cases of water-borne disease were recorded in northeast Syria alone, the majority affecting children under five (Tabor et al., 2023). Between 2022 and 2023, bacteria-contaminated water from the Euphrates – where low flows had concentrated pathogens – resulted in more than 600,000 cholera cases across northern Syria (Tarnas et al., 2025; Alhaffar et al., 2023).

> **"The health sector in our area is almost non-existent today, forcing us to travel to Damascus at high costs that are not affordable for everyone."**
>
> – Farmer, male, 53, Al-Hasiniyah, Deir ez-Zor

These health risks are not evenly distributed. While regional disparities in health infrastructure are significant, they represent only one dimension of a broader crisis. Even in comparatively better-served areas, the exodus of trained medical professionals and years of systemic neglect have left services well below the level required to meet communities' needs.

FOOD AND AGRICULTURE

Few sectors carry as much weight in Syria's recovery as agriculture. Before the civil war, farming produced roughly a quarter of the country's exports and provided the primary source of income for an estimated 80 per cent of the rural population (FAO, 2021). That foundation has been shattered by over a decade of conflict, compounded by increasing aridity, water stress and soil degradation (Cherlet et al., 2018).

> **"Agriculturally, there have been major losses and failures of rainfed crops, such as wheat and barley, which constitute the backbone of food security."**
>
> – Farmer, male, 39, Al-Shamitiyah, Deir ez-Zor

The data confirms what farmers are experiencing. Wheat yields face losses of up to 27 per cent for every 2°C increase in growing season temperatures (Lobell et al., 2011). The burden, however, falls unevenly. In northern Syria, a largely rainfed and agriculturally significant region, successive droughts and governance shortcomings have driven wholesale livelihood collapse, pushing farming families into displacement and maladaptation (Taha et al., 2025). Across the country, frustration over the agricultural stability zone system,[4] and the constraints it imposes is adding to tensions both between communities and towards state authorities.

> **"Agricultural activities are severely constrained by restrictive policies related to the town's classification as a Zone 5 area."**
>
> – Resident, Al-Qaryatayn, Homs

For female-headed households – which comprise a significant share of Syria's rural households as many men were conscripted, were detained or died in conflict – the barriers are steeper still. Limited access to credit, inputs and markets constrains their capacity to sustain production (Taha et al., 2025). Among livestock-dependent Bedouin communities, extreme heat and water shortages pose a particular threat (Geldin, 2026), with knock-on effects on grazing lands.

4 Syria's five agricultural stability zones (Zones 1–5) classify land according to average annual rainfall and suitability for rainfed crop production. Zone classifications directly determine which crops farmers are permitted or required to grow, access to inputs and eligibility for support programmes.

> **"Livestock breeding declined sharply due to the absence of grazing lands and total dependence on purchased fodder."**
> – Mukhtar, Al-Sankari, Homs

CRITICAL INFRASTRUCTURE AND THE ECONOMY

Syria's post-conflict economy absorbs climate pressures on a strained baseline. More than a third of the country's infrastructure lies in ruins, with reconstruction costs projected at USD 216 billion (World Bank, 2025b). Against this backdrop, drought alone drives average GDP losses of nearly USD 320 million[5] and pushes tens of thousands of additional people below the poverty line (Geldin, 2026; Al-Riffai et al., 2012). Hydropower facilities along the Euphrates, which generate roughly 70 per cent of Syria's electricity, are vulnerable to the hotter, drier summers ahead (Geldin, 2026; Sottimano and Samman, 2022). Some investment in solar photovoltaic occurred during the Assad era. However, the absence of battery storage has limited reliability. As battery storage becomes increasingly viable, it presents a concrete opportunity to address energy insecurity – provided maintenance and responsible end-of-life disposal are incorporated from the outset.

Geological hazards add a further layer of risk. Syria ranks high regionally in terms of average annual losses from both earthquakes (USD 101.2 million) and flooding (USD 68.4 million), with Aleppo and Rural Damascus bearing the greatest burden (Dabbeek et al., 2020; Geldin, 2026). Infrastructure rebuilt without accounting for these overlapping risks will remain fragile, while infrastructure designed with them in mind can provide a foundation for a more durable recovery.

HUMAN DISPLACEMENT

During the conflict, roughly 7.4 million people were internally displaced – around half of whom resided in Aleppo and Idlib – and a further 6.1 million people fled seeking refuge in neighbouring countries (UNHCR, 2025; IDMC, 2025). Recent evidence suggests that migrants considered climate stress – particularly drought – a factor in their decision to relocate, though the timing of land abandonment aligns more closely with perceived pressures than with scientifically measured drought conditions (Dinc and Eklund, 2023; Eklund et al., 2022). What is clear is that climate-related hazards now fall hardest on those already displaced. In particular, IDPs concentrated in inadequate housing, with limited access to basic services and few income-generating opportunities, are disproportionately affected by flooding and geological hazards (IDMC, 2025; World Bank, 2023).

Displacement also directly contributes to environmental degradation. Many of the roughly 1,500 camps in northwest Syria have expanded rapidly and without adequate planning, resulting in unmanaged waste, and driving IDPs to clear surrounding vegetation for shelter and fuelwood. In turn, these dynamics exacerbate the very flooding, drought and fire risks that affect these communities (Taha et al., 2025).

For many IDPs, return remains out of reach – blocked by instability, contamination and a lack of employment. Those that can return face greater difficulties accessing services and shelter. The toxic remnants of war also block the path back. More than 75 per cent of airstrikes on farmland during the civil war occurred in the northwest – Aleppo, Idlib and Hama – and hundreds of thousands of unexploded ordnance are believed to remain, rendering large areas inaccessible, and degrading soil, water and biodiversity (Insecurity Insight, 2023).

ECOSYSTEMS

Syria's natural landscapes are not only environmental assets, but also buffers against the very hazards that threaten recovery. However, these systems remain exposed. Although Syria is home to 42 key biodiversity sites and 173 threatened species, only a fraction of these areas benefit from internationally recognised protected status (Geldin, 2026). The largest concentrations of critical ecosystems lie in northern governorates that already bear some of the heaviest legacies of conflict (The Nature Conservancy, 2023).

Forests span just three per cent of national territory, approximately half of which are naturally occurring, and serve as essential buffers against flooding and landslides (UNDP, 2008). Urban development,

5 Drought-related GDP losses depend on spatial extent, severity and duration of the event, among other factors. The figure for average GDP loss estimated in USD is based on 2007 GDP.

intense agriculture and wartime encroachment have steadily degraded these landscapes (CEPF, 2024). Between 2010 and 2018, farmers, loggers, charcoal collectors and IDPs cleared a quarter of this cover, particularly in northwest Idlib (Zubkova et al., 2021). As forest cover retreats, desertification and wildfire risks advance (Houmsi et al., 2019). The July 2025 fires in Latakia demonstrate the consequences of these converging pressures. Unprecedented drought conditions combined with weak governance contributed to the largest wildfire event in Syria's modern history, burning at least 15,000 hectares and causing severe damage to biodiversity – a flashpoint where climate, conflict legacy and communal tensions collided (Shahin, 2025; Al Nofal, 2025).

> **"High temperatures have acted as a trigger for forest fires, with winds contributing to their spread."**
>
> – Renewable energy engineer, female, 29, Dweir Al-Sheikh Saad, Tartous

Syria's aquatic ecosystems face parallel pressures. Mean sea surface temperatures along the Mediterranean coast have risen sharply and the frequency of marine heatwaves is projected to increase, driving biodiversity loss, algal blooms and cascading effects across food chains (Khatib and Chaaban, 2025; Darmaraki et al., 2019; Richardson et al., 2021). Inland, the picture is equally stark. Droughts and excessive irrigation withdrawals are stressing freshwater systems, while invasive species outcompete endemic fish (UNDP, 2008; CEPF, 2024). FAO (2017) estimates USD 80 million in conflict-related damage to the fisheries sector, concentrated in the northwest and northeast. These losses are not merely ecological, they erode the natural capital on which rural and coastal communities depend for food, fuel and flood protection, narrowing the resource base for a durable recovery.

Aftermath of forest fire in north Latakia © Ghaith Hsaino/adelphi research

2.2. The Peace and Security Landscape

Prevailing Conditions

After more than 14 years of conflict, December 2024 saw the fall of the Assad regime and the establishment of a new administration in Damascus. The new authorities face the immense task of repairing and rebuilding damaged infrastructure and housing, a deeply fractured social fabric, severely weakened institutions and a hollowed-out economy – all within a context shaped by competing international interests. This requires a complex balancing act: consolidating state authority while building legitimacy through inclusive governance; engaging international support while safeguarding domestic priorities; and enabling meaningful participation across Syria's diverse communities without entrenching new divisions. Underpinning these challenges are difficult trade-offs between addressing immediate humanitarian needs and investing in longer-term resilience, particularly in responding to mounting climate pressures (ICG, 2025; Wieland, 2025).

Perhaps the most alarming development in the post-transition period has been the surge in communal violence. At its core lies a dual crisis of legitimacy and capacity in state security provision. The transitional government has yet to establish full control over the country, having inherited a patchwork of governance. Years of conflict have produced overlapping power structures at national, subnational and local levels, with competing sources of authority that frequently map onto communal lines. Establishing coherent state authority across this fragmented landscape presents a formidable challenge, with a clear risk of renewed tensions.

Demographics

The civil war fundamentally reshaped Syria's demographic landscape. Over 13.5 million people were displaced, reconfiguring the country's social geography along increasingly sectarian lines (UNHCR, 2025). Many Alawites relocated to the coastal region, while Kurdish and Druze communities consolidated in the northeast and south, respectively (Fefer, 2025). Rural-to-urban migration accelerated as people abandoned farms, many rendered unviable by drought and degradation, in search of economic alternatives. These shifts carry lasting consequences. They raise new tensions should large-scale returns occur, place additional strain on urban resources already under climate stress and have eroded the capacities of communities as a first line of resilience.

Media and Digital Communication Landscape

Perceptions of safety following the transition vary sharply across communities. Many Sunni households report greater optimism under the new government – a meaningful shift after years of insecurity (Etana, 2025). For minority groups,[6] the picture is more uncertain, with concerns about marginalisation and targeted violence (Fefer, 2025; UK Home Office, 2026). Social media plays a key role here. With many former news outlets disbanded and media coverage fragmented, social media platforms have filled the resulting void. However, they also service as spaces where extreme positions are easily amplified, hardening identity divisions and enabling hatred to circulate without clear accountability (Randrup, 2025; BBC, 2025). These divergent dynamics present both a challenge and an opportunity: addressing security concerns across all communities in a visible and transparent manner could provide an early foundation for building broader legitimacy.

Regional Influences

Regional actors retain significant leverage in Syria's transition, and the country's borders are where external pressures and internal fragmentation converge most acutely. Türkiye is the most consequential player. Its military presence in northern Aleppo sustains parallel governance structures, while its control over Euphrates water flows – already diminished by drought and upstream damming – affords Ankara significant influence over

6 Syria's largest minority groups include Alawites, Christians, Druze, Yezidis, Kurds, Armenians, Circassians and Turkmens.

water-stressed Syria (King, 2015; Daoudy, 2020). Longstanding tensions between Türkiye and the Syrian Democratic Forces add a further layer of volatility. To the south, Israeli military operations have continued since December 2024, including airstrikes and reported ground incursions. To the east, the unofficial Semelka–Faysh Khabour crossing with Iraqi Kurdistan remains a critical economic lifeline for the northeast, although its strategic value makes it a focal point of ongoing contestation (ICG, 2025).

The lifting of international sanctions has reopened Syria to substantial state-linked private investment, with regional states – including Türkiye, Qatar, Saudi Arabia and the United Arab Emirates – moving quickly on energy and reconstruction priorities (Sharawi, 2026). This convergence presents both opportunities and risks. If investment in reconstruction is not aligned with climate resilience and local livelihood priorities from the outset, it risks locking in development pathways that deepen rather than reduce long-term vulnerability.

2.3. Contextual Factors Driving Vulnerability and Resilience

Vulnerabilities in Syria are acute across all dimensions – financial, physical, social, human and natural – making prioritisation a persistent challenge. Yet resilience is also pervasive. Communities have endured more than a decade of conflict, relying on their own capacities: local networks, civil society organisations, traditional knowledge and the resilience of individuals – often stretched to their limits, yet continuing to adapt. These assets are fragile, sporadic and under severe strain, but they exist and any effective response must build on them.

Economy

Economic hardship is near-universal in Syria, yet falls hardest on the displaced, on women and young people, and on those cut off from what few functional markets remain. The economy has contracted by over 50 per cent since 2011; a quarter of the population now survives on less than USD 2.15 per day. For many urban households, remittances from relatives abroad have become the primary lifeline (World Bank, 2025a). In rural areas, the picture is bleaker still. Agricultural value chains have collapsed – from field to processor to market. What remains is adaptation under duress: hardier crops with lower returns, abandoned fields and coping strategies that keep households afloat while depleting the assets they will need to rebuild. Women – who have assumed greater economic responsibilities on farms as many men have died, fled or been detained – often lack access to the credit and cooperatives needed to sustain these roles (Taha et al., 2025). Nevertheless, pockets of resilience exist. The diaspora continues to sustain livelihoods through remittances, and skilled Syrians are beginning to reopen workshops and small businesses, drawing on craftsmanship and expertise that survived the war. These are fragile shoots, but they point towards a recovery that could be locally rooted rather than externally imposed.

Physical Legacy of Conflict

Reviving Syria's physical environment is essential, but the scale of destruction means this is likely to be a generational undertaking. More than a third of the country's infrastructure and buildings have been destroyed, with reconstruction costs projected at USD 216 billion; Aleppo, Rural Damascus and Homs have suffered the heaviest losses (World Bank, 2025b). However, physical damage alone does not capture the full picture. Throughout the war, dams, oil production and water treatment plants were exploited as instruments of coercion – creating vulnerabilities that extend far beyond their physical destruction for the communities that depended on these services. Today, nearly two-thirds of water treatment plants, half of pumping stations and a third of water towers remain damaged (Carnegie Endowment for International Peace, 2024). Moreover, more than half of the electrical grid is incapacitated, with severe fuel short-

ages crippling what remains operational (Crisis Analysis Syria, 2025).

In response, many communities have turned to decentralised solar power – a pragmatic adaptation that has also resulted in unintended consequences. Cheap power enabled a proliferation of unregulated wells, accelerating groundwater depletion. Moreover, uneven access to solar power risks creating new grievances, while the long-term challenge of disposing of solar panels and batteries remains unaddressed (Crisis Analysis Syria, 2025). This reflects a broader pattern across Syria's physical landscape. In the absence of coordinated alternatives, short-term coping mechanisms take hold, entrenching vulnerabilities that are difficult to reverse, and that manifest differently along lines of ethnicity, gender and ability. Minority communities perceive reconstruction support as uneven, grievances that layer onto deeper mistrust of the transition. Inadequate street lighting restricts women's mobility after dark. In Aleppo, where an estimated one million residents live with disabilities (UNHCR, 2023), the slow pace of rebuilding, particularly in poorer eastern areas, amplifies vulnerabilities in a city still recovering from more than a decade of conflict, devastating flooding and the February 2023 earthquake.

Frayed Social Fabric

Another layer of vulnerability lies in the frayed bonds that hold communities together and connect them to the state. Years of repression, violence and demographic upheaval have eroded both. Informal support networks, once the first line of resilience in times of crisis, are stretched thin by the sheer scale of need. Trust between communities has been undermined by targeted violence and perceived inequities, while trust in the state remains low, particularly among minorities who fear marginalisation under the new order. Young people under 25, who now constitute a third of the population, and women remain largely excluded from discussions shaping Syria's future (Ahmad et al., 2025). Competition between host communities and IDPs – alongside unresolved housing, land and property disputes – adds further strain to an already fragmented social landscape (Haid, 2025). Despite these pressures, signs of resilience persist. Notwithstanding decades of suppression – with civil society organisations disbanded or co-opted, and civil society leaders forced into exile – a vibrant civic fabric has endured, often sustaining communities where the state could not (PAX, 2025). In addition, mixed communities continue to resist polarisation, maintaining social ties even as the broader environment pushes towards division.

Looking at the broader social picture, however, also requires a more granular, individual-level perspective. A generation of children has grown up with disrupted schooling, resulting in critical gaps in vocational skills. Yet our data reveals that the primary barrier facing young people is not a lack of skills, but a lack of opportunity. Those with digital capabilities, which enable access to education and markets beyond their immediate context, remain the exception. Moreover, Syria's educated professionals – such as doctors, engineers and teachers – have emigrated in large numbers, draining the human capital needed for reconstruction. The health system illustrates this depletion starkly. Access to care is patchy at best – a risk greatly aggravated by drought and water insecurity, as recent cholera outbreaks have shown. Some regions, including Deir ez-Zor and Idlib, have fewer than one physician per 10,000 residents, with equally stark disparities between urban and rural areas. Yet this is also where opportunity lies. Effective health and education service delivery in post-conflict settings is often one of the most immediate and tangible signals that governance is functioning. Restoring access – equitably, across communities – can serve as a cornerstone of stabilisation and a foundation for renewing the social contract (Farhat, 2025).

State of the Environment

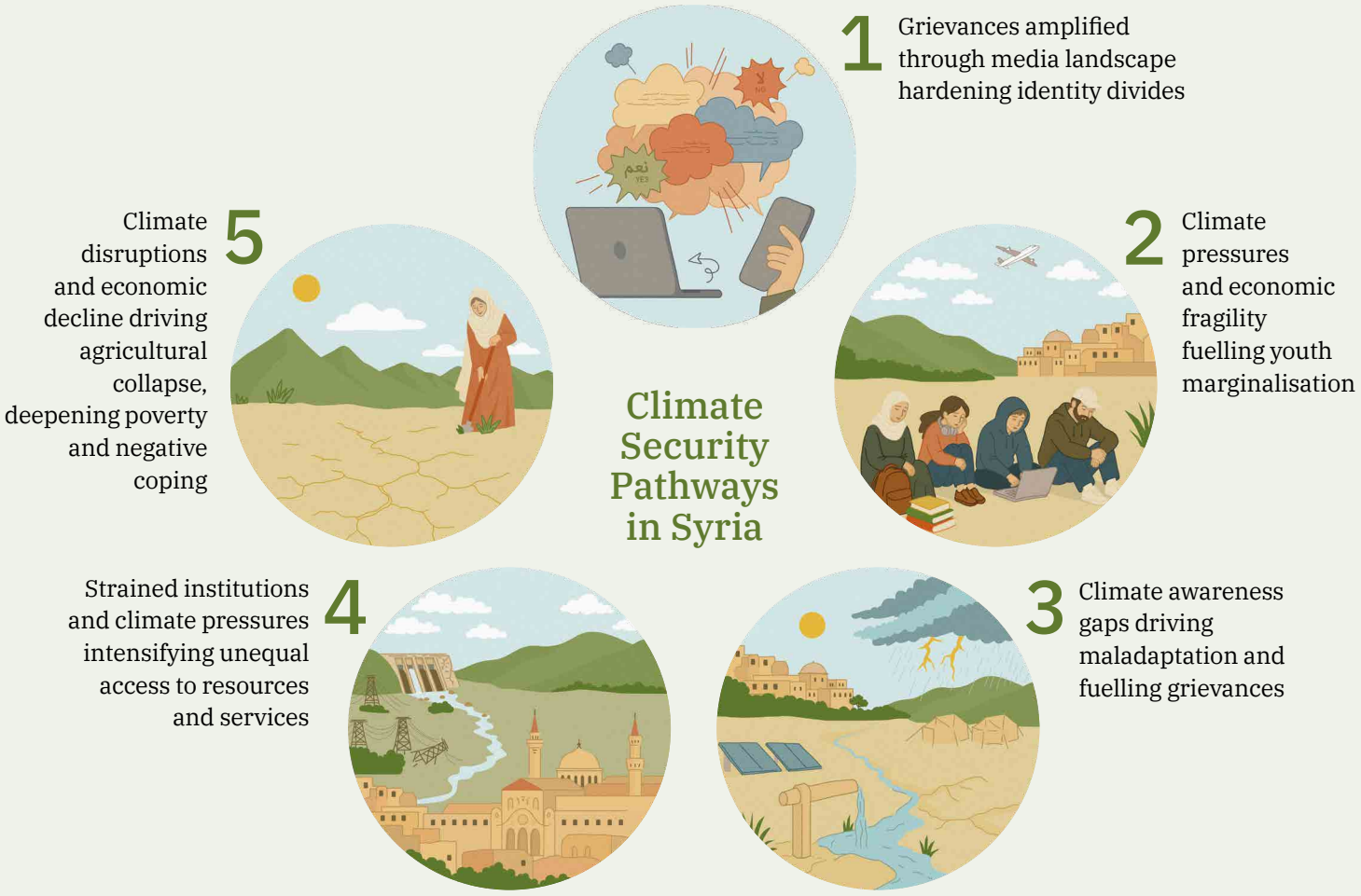
For communities focused on security, shelter and survival, environmental degradation can feel like a problem for later. However, water insecurity, degraded soils and intensifying climate impacts do not wait for reconstruction efforts to catch up, they shape what recovery is possible and how it unfolds over time. Moreover, these impacts are no longer abstract projections.

In 2025, drought-like conditions affected 25,000 km² of cropland across Syria's agricultural heartland (UNOCHA, 2025). More than 85 per cent of agricultural land now faces soil degradation, while forest cover has contracted by roughly a quarter since 2011, and untreated sewage contaminates

surface and groundwater – contributing to cholera outbreaks that have overwhelmed the country's already fractured health system (PAX, 2023; Eklund et al., 2022). What makes these pressures particularly destabilising is their interaction with fragile infrastructure, weak institutions and unresolved communal tensions. In July 2025, wildfires swept through forests in Latakia, a region heavily affected by violence since the transition. Firefighting efforts were hampered by strong winds, inaccessible terrain and the presence of landmines – a deadly convergence of climate shock, conflict legacy and weakened governance (UNICEF, 2025). Similarly, the February 2023 earthquake, which devastated already weakened infrastructure across the northwest, underscored how natural hazards compound conflict-related damage. Yet here, too, pockets of resilience remain. In Aleppo, communities traditionally divided by class and communal lines came together in response to the earthquake's devastation. Elsewhere, farmers have begun constructing water retention systems to capture increasingly erratic rainfall. However, the natural dimension may prove the least forgiving. Losses already incurred – such as depleted aquifers, exhausted soils and burnt forests – may not recover within a generation.

Damaged buildings © Ghaith Hsaino/adelphi research

4 CLIMATE SECURITY PATHWAYS



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The following pathways illustrate how climate and environmental risks are converging with underlying security dynamics and sociocultural conditions to either exacerbate or mitigate tensions, generate conflict flashpoints, or impede stable recovery across Syria. The assessed governorates share several structural challenges: economic collapse; climate-related disruptions, such as prolonged drought and frost events; and mounting environmental pressures, including acute water scarcity and increasingly frequent forest fires.

Many also contend with compounding factors – such as mass displacement, demographic shifts, weak governance, livelihood erosion and competition over resources and services – that further strain coping capacities. However, the scale and severity of these impacts, and the extent to which households and communities can absorb shocks and resist escalation into conflict, vary considerably across and within governorates.

These dynamics play out against a backdrop of deep social fragmentation, years of conflict, and a transition that remains contested and uneven. In this context, the question of who is included in recovery – and how decisions are made – matters as much as the decisions themselves. The conflict prevention opportunities highlighted throughout this report are grounded in the recognition that inclusive, transparent and locally legitimate processes are not a procedural nicety but a structural necessity.

3.1. Grievances Amplified through Media Landscape Hardening Identity Divides

In Syria's fragmented media environment – shaped by decades of repression under the Assad regime, and dominated today by informal digital channels and widespread disinformation – grievances are being systematically reframed through a sectarian lens. Once sectarian identity becomes the dominant interpretive framework, reconstruction is read as favouritism, climate impacts are filtered through communal fault lines, and technically sound policy responses risk being recast as acts of state imposition or abandonment before any official communication has had the opportunity to reach the public. Consequently, Syria's information environment has become a climate security risk in its own right: a structural condition that determines whether environmental governance will build legitimacy and social cohesion or deepen grievance.

Who Controls the Story

Information is essential to addressing climate change, building social cohesion and sustaining trust in governance. Yet in Syria, reliable information is difficult to come by. Decades of media repression under the Assad regime, compounded by 14 years of conflict, have withered the country's media landscape and institutional capability. In their place, informal digital channels have become the primary means through which populations access and share news – platforms characterised by limited accountability, rapid and unfiltered information flows, and minimal state presence (Atlantic Council, 2025).

Both domestic and foreign actors have exploited this void to spread disinformation that reinforces sectarian narratives, gradually entrenching identity divisions that were already under pressure during the transition (BBC, 2025).[7]

> **"Relationships are very tense because sectarianism has resurfaced, and people constantly hear classifications such as Sunni and Alawite [...] All of this increases hatred among people and weakens social bonds [...] Most problems do not occur only on the ground, but more so online and on social media such as Facebook."**
> – Male, 34, Dreikish, Tartous

The risk is twofold. First, as sectarian identity becomes the dominant explanatory framework, it crowds out more layered, intersectional understandings of vulnerability, as well as more diverse, nuanced voices that are essential for effective reconstruction and environmental governance. Our research indicates that young people from minority communities have grown increasingly reluctant to engage online for fear of being targeted. Second, in an increasingly polarised information environment, rebuilding the conditions for trusted public communication represents a governance challenge in its own right. The increasing pressure on Syria's

7 Foreign influence, however, extends beyond content. As Syria rebuilds its communications networks, competing foreign powers are shaping not just what information flows, but also the architecture through which it flows (Arslan, 2025), raising concerns over data sovereignty and the risk of digital sabotage.

groundwater illustrates this dynamic acutely. While policies restricting extraction may be scientifically justified, in a context of low institutional trust, they can be rapidly reframed on social media as deliberate attempts by to prevent communities from recovering – often gaining traction before official communication has the opportunity to reach the public. The result is a vicious cycle in which disinformation and misinformation not only reflect divisions but actively deepen them.

Coastal Violence, Mistrust and Wildfires

The coastal governorates of Latakia and Tartous illustrate how a fractured information environment can accelerate the translation of latent grievances into open violence. In the weeks prior to the March 2025 events, foreign-backed disinformation campaigns – relying on coordinated fake accounts and automated reposting – flooded social media with inflammatory content, systematically recasting local grievances as sectarian conflicts. By the time violence escalated, communities were already navigating an information environment in which the same events were narrated in irreconcilable ways across identity lines. These competing social media narratives left no shared interpretive ground from which accountability, dialogue or recovery could begin – hardening identities, entrenching mistrust and undermining the very conditions that reconstruction requires (Atlantic Council, 2025).

The recent wildfires in the coastal governorates reveal a related but distinct dynamic. Firefighting efforts were hampered by strong winds, inaccessible terrain and landmines (UNICEF, 2025), as well as years of unregulated logging and minimal but centralised forest management. In a low-trust information environment, the state's response to a climate event is immediately subject to scrutiny and politically charged interpretation on social media. Non-response, or delayed response, may be framed as state abandonment of a given community. Centralised responses, without locally embedded structures and genuine community participation, risk being framed as the imposition of outside authority. When either is amplified through social media, climate events risk becoming not shared crises but new fronts in existing conflicts over governance and belonging.

Opportunities for Conflict Prevention

The dynamics above demonstrate how technically sound solutions cannot simply be parachuted into fractured information environments. The trust and awareness that give a policy legitimacy must be built alongside it. These dynamics also reveal how quickly and with how little coordination information, misinformation and disinformation can travel through Syria. This has direct implications for how policy is designed and communicated. Every policy, whether reconstruction, climate change or governance, should be treated as a communication act in its own right – one that accounts for how information will flow, how legitimacy is built over time and how social media actors can be incorporated into the process rather than left to shape the narrative from the outside.

Social media channels can equally carry content that fosters cross-community dialogue, bringing communities together around shared challenges. Environmental concerns can serve as a relatively "neutral" platform on which to rebuild habits of collective problem-solving and negotiation, laying the groundwork for broader social cohesion – provided these processes are carefully facilitated and genuinely inclusive of marginalised groups. By offering less contentious topics for online engagement, environmental issues may also create the conditions in which voices that have otherwise remained silent feel safer to participate.

3.2. Climate Pressures and Economic Fragility Fuelling Youth Marginalisation

Syria's young people – who comprise a third of the population – are navigating a labour market hollowed out by conflict, agricultural collapse and an SME sector under mounting pressure. With few viable options, many are turning to migration, temporary work or early marriage; in contexts of entrenched insecurity and widely available weapons, some are drawn towards armed recruitment. This is not simply an economic crisis. The erosion of economic agency translates into a loss of social standing and belonging, and where grievances go unaddressed, disengagement from civic life follows. In a country whose recovery depends on rebuilding a legitimate social contract, the systematic exclusion of a generation from economic and social participation represents a structural fragility risk – one that climate change will deepen as it continues to erode the agricultural and natural resource base on which livelihoods depend.

Shrinking Opportunities

Young people make up around a third of Syria's population (UNICEF, 2022), and are disproportionately affected by economic fragility, repeated climate shocks, prolonged conflict and repression, as well as uncertainty over how recovery will unfold. Across governorates, the shortage of jobs for young people was one of the most consistently raised concerns – voiced not only by young people themselves, but also by respondents of all ages. While conflict and climate-related disruptions to education have limited skills development for some young people, respondents were clear that the primary constraint is structural: there are simply not enough jobs. In particular, agricultural employment has declined sharply due to climate and conflict-induced value chain collapse, undermining what has served as the primary entry point into the labour market for young people in rural areas, without viable alternatives emerging to replace it.

These gaps extend beyond those without formal qualifications. Many with higher education qualifications also struggle to secure employment commensurate with their training.

> **"Most of my university peers work in jobs unrelated to their field of study: delivery drivers, shop assistants or private tutors. Education no longer guarantees employment."**
>
> – University student, female, 21, Suwayda (city), Suwayda

Access to reliable internet, devices and digital literacy is increasingly determining which young people can access alternative pathways, such as through remote work and online education, and which cannot, adding a further dimension to the already uneven distribution of opportunity. Moreover, the local SME sector, where it has survived, faces mounting pressure from increased competition following the lifting of sanctions, years of brain drain and limited access to finance, further narrowing the employment pathways available to young people.

When There Are no Good Choices

With few viable options, many turn to informal, temporary and low-paying work, emigrate and send remittances back to support their families, or marry early.

> **"The biggest change is the loss of hope in the future. My friends are either getting married early or migrating, and I feel trapped between two difficult choices."**
> – University student, female, 21, Suwayda (city), Suwayda

Limited economic opportunities and an uncertain recovery trajectory leave many young people feeling frustrated, disillusioned and without a clear stake in society. This speaks to a broader dynamic: without a stable economic footing, young people risk losing their social standing, and in turn their sense of belonging and agency. Where that sense of agency is absent, disengagement from civic and community life becomes a possible response.

In Suwayda, Deir ez-Zor and Raqqa, economic marginalisation is pushing some young people towards armed recruitment. The widespread availability of weapons and entrenched insecurity lower barriers to entry, making affiliation with armed factions an accessible – if deeply constrained – livelihood option.

> **"Some young people have been forced to work within local armed factions in the absence of the state, as these groups are relatively organised and provide a stable – albeit limited – income."**
> – Male, 58, Suwayda (city), Suwayda

Where armed factions are less present, other survival strategies emerge.

> **"Young people have not found work and have resorted to theft and drugs."**
> – Female, 51, Zakiyah, Rural Damascus

Rising crime was reported across multiple governorates and was not confined to young people alone. However, this points to a broader tension in how communities perceive young people during the transition: both as those most affected by exclusion and capable of contributing to recovery, and as a potential source of insecurity.

Opportunities for Conflict Prevention

Conflict prevention requires addressing the mutually reinforcing dynamics of economic exclusion and civic disengagement – conditions that push many young people towards migration, informal and temporary work, harmful coping strategies, and in some contexts armed recruitment. Therefore, for Syria's young people, creating equitable, climate-resilient jobs, and supporting SMEs is not merely an economic imperative, it is also a means of preventing the social marginalisation that fuels fragility. Critically, job creation and SME development must avoid investment in livelihoods and value chains likely to be undermined by climate change in the future.

Beyond individual economic opportunity, employment programmes should be intentionally designed to generate cohesion dividends alongside economic ones. This means prioritising initiatives that bring divided communities together around shared economic interests, such as cross-community cooperatives in climate-adapted agriculture, renewable energy installation and maintenance, and water-efficient technologies. Such models build not only livelihoods but also the social fabric through which grievances can be managed collectively.

3.3. Climate Awareness Gaps Driving Maladaptation and Fuelling Grievances

In Syria, climate change is largely experienced through its immediate manifestations – such as a failed harvest, a dry well or seasonal patterns that can no longer be relied upon – rather than as the structural, long-term force it represents. In a context of acute and compounding crises, where immediate survival needs are profound, this gap in climate awareness and prioritisation is human. However, its consequences are significant. Decisions being made now about where people return, how water is extracted and how regional trade is structured will lock in trajectories that are difficult and costly to reverse. Where climate rationale is absent from decision-making, maladaptation can become structural. Similarly, where they are present but poorly grounded in the lived realities of communities under survival pressure, even sound policies risk generating resistance or being perceived as abandonment. The result is a compounding dynamic in which short-term survival imperatives, a fragmented and outdated evidence base, and low institutional trust interact, leaving Syria increasingly exposed to climate risks that are already unfolding beneath the surface.

The Invisible Pressure

In Syria, climate change is experienced not as an abstract threat but through its immediate impacts, such as a failed harvest, a dry well or seasonal patterns that can no longer be relied upon. Interviews with Syrian experts revealed considerable technical knowledge of current and projected climate impacts. However, local research data presents a more nuanced story. While communities are often acutely attuned to changes in their immediate environment and demonstrate resourcefulness in coping under extraordinarily difficult circumstances, awareness rarely extends to the structural, longer-term shifts that climate change will bring. In a context where immediate survival needs compete for attention with longer-term structural risks, this gap in awareness and prioritisation is human.

> **"Climate change is real, but it is our smallest problem. Our focus is on how to escape the overall reality."**
> – Male, 23, Suwayda (city), Suwayda

However, the consequence is that decisions made today, without structural recognition of the future impacts of climate change, risk undermining options that will be critically needed tomorrow. The following sections trace what this looks like in practice.

Wells, Solar Power and Structural Dependency

The proliferation of unlicensed wells illustrates how survival imperatives and policy gaps interact over time. During the conflict, well drilling expanded rapidly, accelerated by the widespread adoption of solar power as a substitute for costly fuel-operated water pumps. In many communities, households have become heavily dependent on solar-powered wells and, as the water table drops, the response has been to drill deeper. The result is a structural dependency that will be difficult to reverse, alongside a groundwater crisis that is gradually intensifying, compounded by a critical lack of up-to-date data.

Damaged infrastructure © Ghaith Hsaino/adelphi research

"Wells we use for emergency irrigation have become very scarce and saline."

– Agricultural labourer, male, 30, Al-Hasiniyah, Deir ez-Zor

Nevertheless, when consulted on their most pressing needs, communities consistently identified the need for additional wells – a response that reflects the immediate logic of survival but sits in tension with the longer-term imperative of sustainable groundwater management. This gap between community demand and evidence-based policy represents a governance challenge that cannot be resolved through regulation alone. It requires sustained attention to the livelihood realities of affected communities, investment in viable alternatives and the conflict-sensitive communication of regulatory changes.

Displacement, Return and Unmet Conditions

Similar dynamics are evident in the context of displacement and return. Displacement camps, particularly in northeastern Syria, are already under pressure due to overlapping climate and security shocks, including heatwaves, flooding and insufficient shelter. Yet rapid return processes that fail to account for longer-term environmental change risk replacing one form of vulnerability with another.

"I regret returning. We need education for our children and we need public transportation. Without these, life here is impossible."

– Male, Tamima, Latakia

This points to a systemic gap. Return decisions are often driven by immediate pressures rather than long-term viability and climate considerations have yet to be integrated into these processes.

The Euphrates and the Limits of Local Adaptation

Some climate security risks operate at a scale that exceeds national boundaries and cannot be addressed through domestic policy alone. The Euphrates illustrates this clearly. Upstream dam infrastructure has long strained regional relations, while downstream water shortages pose direct health and survival risks. Between 2022 and 2023, reduced river flows concentrated pathogens to the extent that more than 600,000 people in northern Syria contracted cholera (Tarnas et al., 2025; Alhaffar et al, 2023). Similarly, hydropower facilities along the Euphrates generate around 70 per cent of Syria's electricity, a dependence that becomes increasingly vulnerable given climate projections of hotter, drier summers (Sottimano and Samman, 2022; Geldin, 2026).

The lifting of sanctions has added a further dimension. Agricultural imports – particularly of tomatoes and oranges from Türkiye and Egypt – are undercutting local producers already operating under severe strain, embedding Syria's water scarcity into its trade relationships through flows of virtual water – a dynamic that rarely feature in policy discussions. These are structural vulnerabilities that no community can navigate alone. Addressing them will require explicit recognition of climate change as a structural force shaping Syria's recovery and the political bandwidth to engage with regional partners beyond the demands of the immediate crisis.

Opportunities for Conflict Prevention

Integrating climate change explicitly into reconstruction planning, including return processes and water regulation, represents one of the most critical conflict prevention opportunities within this pathway. Where communities do not understand why a return area has been deemed unviable or why water allocations have been changed, even well-founded policies risk being perceived as abandonment or political manipulation. Embedding climate rationale into the design and communication of reconstruction decisions, coupled with meaningful community engagement, is not a secondary concern; it is what determines whether those decisions build or erode trust.

Sound, long-term decision-making requires an adequate evidence base. Currently, critical data on climate, environment, agriculture, displacement and conflict remains scattered across government ministries, UN agencies and NGOs or is out of date. A unified, interoperable national climate security monitoring platform that harmonises these sources is an essential foundation for integrated analysis and early warning of climate security risks.

3.4. Strained Institutions and Climate Pressures Intensifying Unequal Access to Resources and Services

In Syria, climate pressures are intensifying in a context where natural resources and essential services are already severely strained, and access is deeply unequal – both in practice and perception. Governance institutions are in transition, with cross-ministerial coordination yet to take shape and mandates on climate change still being defined, leaving a significant gap in response capacity. Critically, the institutional choices being made now are not simply technical. In a context highly attuned to patterns of exclusion, they signal inclusiveness and will determine whether governance structures can deliver coordinated responses to future flooding, droughts, wildfires and seismic events. Herein also lies opportunity: rehabilitating critical infrastructure and services in ways that deliver tangible social dividends can both alleviate immediate vulnerabilities, and begin to rebuild the social contract between state and society.

Between Risk and Renewal

Syria's recovery is taking place under conditions of severe resource stress and institutional flux. Climate change and reconstruction pressures are converging in an environment where natural resources – water, land and the ecosystems that sustain livelihoods – are severely strained, and where access to essential services remains uneven, both in practice and perception. The central governance structures that would ordinarily manage these pressures are themselves in transition. Ministerial responsibilities remain contested, cross-sectoral coordination is underdeveloped and response capacities are stretched thin. This convergence of resource stress, service gaps and institutional uncertainty creates conditions through which climate pressures can translate into grievance, instability and the gradual erosion of government legitimacy. Yet the same conditions also present an opportunity. For a new government seeking to establish its legitimacy, effective and equitable environmental governance offers a powerful means of demonstrating that the patterns of neglect and exclusion that marked the Assad era belong to the past.

Resources and Services under Strain

The range of natural resources and services under strain in Syria is extensive, and their impacts are deeply interconnected (see Chapter 3 for more detail). Drought, for example, not only reduces agricultural yields, it also diminishes hydropower capacity at major dams, including along the Euphrates (Orto, 2025), curtailing electricity generation. These electricity shortfalls then ripple outwards, disrupting the systems on which food security and water distribution depend (Weinthal and Sowers, 2020). Communities on the receiving end are left to cope, with the capacity to do so varying sharply.

Critically, these pressures are already generating tensions. Respondents reported tensions in water queues, disputes between farmers over irrigation access and conflicts over shared wells. Sustained resource pressures are also straining the family and community networks that have served as the primary source of resilience for many.

“People’s preoccupation with securing services and striving to obtain parts of them has led to disruptions in relationships, especially family ties, and in some cases has escalated into disputes that resulted in killings.”

– Male, 53, Al-Hasiniyah, Deir ez-Zor

Compounding these pressures is the uneven distribution of access, both in practice and perception. Disparities cut across socioeconomic, sectarian, gender, geographic and displacement lines, generating resentment between those who can secure resources and access services, and those who cannot. Wealthier households can absorb rising costs – purchasing trucked water, drilling deeper wells or running private generators – while poorer families have no equivalent means of coping.

"Water exists, but it is only accessible to those who can afford illegal drilling. Poor farmers are completely excluded."

– Respondent, Mahin, Homs

Rural communities describe themselves as systematically underserved relative to urban centres, displaced populations report unspoken hierarchies in service provision, and disparities in health infrastructure, access to water and agricultural support across governorates are stark. Where these disparities are perceived to reflect sectarian logic, they carry a sharper political charge.

Whatever institutional arrangements emerge to govern natural resources and restore services, they will need to address these layered perceptions as a core design challenge.

"The crisis is not only about service interruptions but also about their transformation into tools of patronage and corruption. Education is a clear example, having become sectarian and detached from merit-based principles."

– University professor, male, 45, Suwayda (city), Suwayda

AGRICULTURAL STABILITY ZONES – AN EXAMPLE OF PERCEIVED UNFAIRNESS

The agricultural stability zone system remains a contentious subject. Many respondents in our household and community-level consultations questioned the credibility of Syria's zone classification. Introduced in 1975, the classification categorises land from Zone 1 to Zone 5 according to average annual rainfall. For instance, a geology specialist from Saddad, Homs, noted that neighbouring Hissiya, adjacent to Saddad, had been designated Zone 4, while Saddad had been classified as Zone 5, despite comparable environmental and geological conditions. This suggests that zone demarcations can be sharp and at times arbitrary, particularly given uncertainties in hydrological data, and the far-reaching consequences of zone classification for cultivation rights, investment and long-term planning. Where classifications are perceived as unjust, they risk eroding trust in state institutions and discouraging productive land use. Therefore, a transparent, participatory review of zone boundaries, informed by up-to-date climate and hydrological data, would represent an important step towards restoring confidence in the system and ensuring that policy frameworks reflect current conditions on the ground.

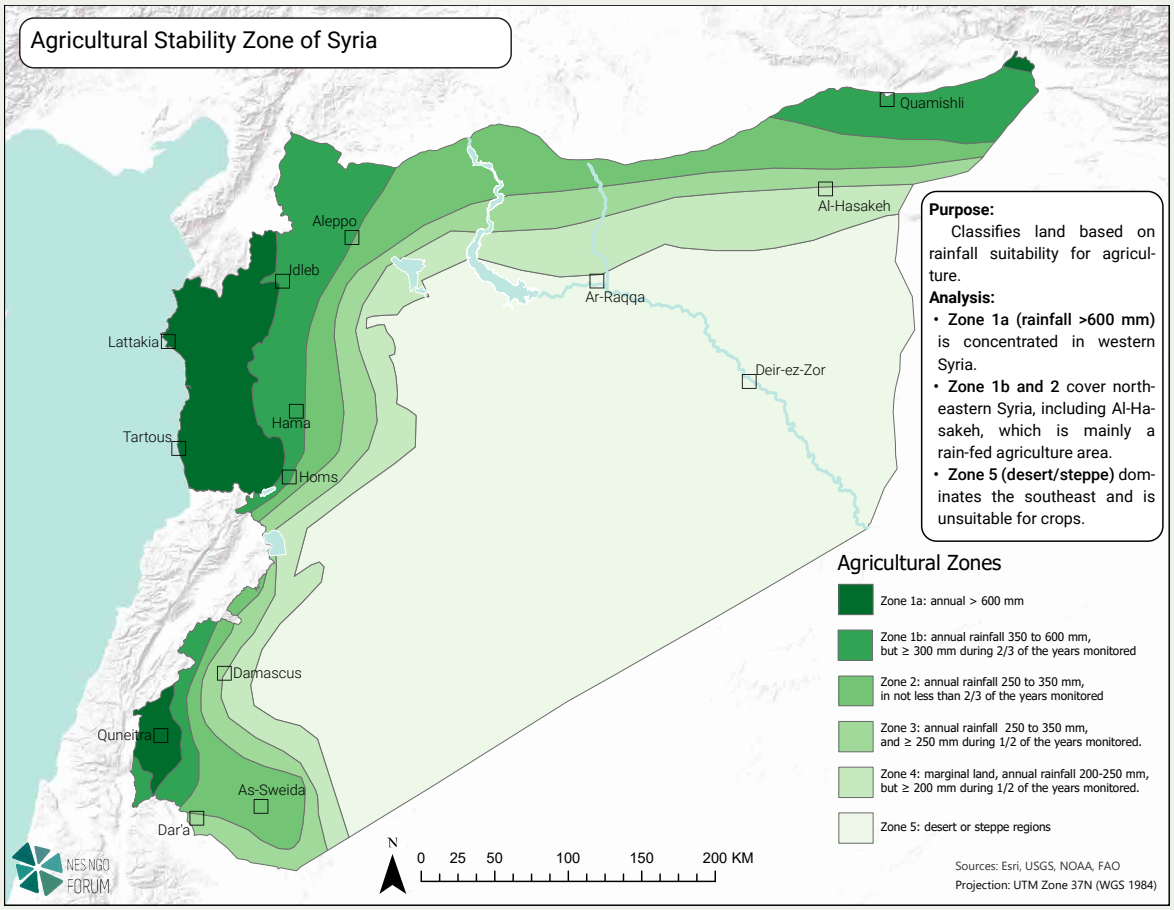


Figure 3. Agricultural Stability Zone of Syria. Source: NES NGO Forum (2025).

Governance in Flux and under Construction

Syria's approach to natural resource management and environmental governance is being constructed anew. How responsibilities are assigned across ministries, how reconstruction finance is channelled and how far governance is centralised or devolved will shape not only environmental outcomes but also broader questions of accountability, legitimacy and the distribution of power.

At the institutional level, ministries are defining their mandates, clarifying responsibilities across portfolios, and establishing the cross-sectoral coordination mechanisms required for effective climate and resource management. Meanwhile, the distribution of responsibilities for environmental and climate affairs is in the process of being determined. These are consequential choices. In a context of resource competition, limited services, and both perceived and real inequalities in access, decisions about ministerial mandates and governance architecture extend beyond questions of institutional design. They signal inclusiveness to communities already attuned to patterns of exclusion, and determine whether governance structures can deliver coordinated, cross-sectoral responses to flooding, droughts, wildfires and seismic events.

Opportunities for Conflict Prevention

Infrastructure rehabilitation – particularly of water and energy systems – offers a clear entry point for conflict prevention, provided it is designed to deliver social dividends alongside service restoration. At the community level, projects that ensure equitable access across formerly divided communities, draw on local labour from diverse backgrounds, and establish inclusive governance structures for ongoing management and maintenance can directly relieve the tensions generated by competition over scarce resources and unequal access. Delivered fairly and transparently, such projects carry particular weight in areas where infrastructure access was previously weaponised as a tool of control or punishment. At this level, the stakes extend beyond the community. Infrastructure rehabilitation that is visibly and consistently equitable can become one of the most tangible signals that the new administration is serious about renewing the social contract.

The agricultural zone system, which sits at the intersection of resource strain and the distribution of access, is widely perceived as inequitable and represents a further opportunity the new administration would do well to seize. A transparent, inclusive and climate risk-informed reassessment of agricultural stability zones, drawing on up-to-date climate projections and hydrological data, could serve a dual purpose: strengthening the evidence base for sustainable water use and management, while providing a tangible early opportunity to demonstrate that decisions about resource access will be made openly and fairly. A participatory process involving local authorities, community representatives and independent technical experts would reinforce this signal: that the burdens and benefits of managing increasingly scarce resources are to be shared across communities rather than concentrated among a few, and that past patterns of governance are not being quietly reproduced under new leadership.

3.5. Climate Disruptions and Economic Decline Driving Agricultural Collapse, Deepening Poverty and Negative Coping

Syria's agricultural sector, long the backbone of rural livelihoods and a foundation of national food security, is under pressure from multiple directions. Climate-induced droughts, soil degradation, disrupted value chains, and the collapse of input and capital markets have compounded the damage caused by years of conflict, leaving farmers with few tools and limited capacity to respond. Simultaneously, the lifting of sanctions, while opening broader economic possibilities, has exposed producers to international market competition before local agriculture has had any meaningful opportunity to recover. Against this backdrop, those dependent on the agricultural sector are resorting to coping strategies that, while entirely understandable in the absence of viable alternatives, risk entrenching vulnerabilities and deepening poverty. As productive foundations erode and institutional support remains absent, the conditions for grievance, social fragmentation and instability quietly accumulate.

A Sector under Converging Stress

Syria's agricultural sector – a foundation of rural livelihoods and national food security – is facing a convergence of pressures that risks becoming systemic. Years of conflict have severely damaged infrastructure, disrupted value chains and fragmented communities, fundamentally unsettling the agricultural workforce that reconstruction now depends on. Successive severe droughts have compounded these losses, while the lifting of sanctions – though opening broader economic possibilities – has simultaneously exposed Syrian producers to international competition before local agriculture has had any meaningful opportunity to recover. The result is a sector facing pressures from multiple directions, with the legacy of conflict, climate stress and market exposure interacting in ways that risk tipping agricultural communities past the point of viable recovery.

A List that Could Continue

The constraints facing farmers are compounding. Soils have been degraded by years of neglect, contamination and the presence of landmines; seeds and fertilisers are either unavailable or priced beyond reach; energy is unreliable and unaffordable; water is increasingly scarce across wells, rivers and rainfall; diseases and pests are spreading, while pesticides and veterinary medicines are scarce; roads, markets and distribution networks are fractured; and access to capital markets remains highly constrained. These are not isolated constraints, they interact and reinforce one another, such that addressing one in isolation yields limited gains.

Within this context, particular vulnerabilities warrant attention. Many women have become the primary decision-makers on farms – not by choice, but because many men were conscripted, were detained or died in conflict – while facing tighter restrictions on access to capital and compounding safety risks. The mutually sustaining relationship between farmers and livestock herders is also under acute strain. As pastures dry up, herders are forced to sell or lose animals, removing the manure that farmers depend on at precisely the moment when chemical inputs have become prohibitively expensive. Declining yields, in turn, leave farmers with less fodder to offer, pushing herders to purchase it at costs few can absorb – a feedback loop that accelerates the collapse of both systems simultaneously.

Livestock herding © Ghaith Hsaino/adelphi research

"Our main crops – wheat and barley – sometimes fail. My neighbour lost two consecutive seasons due to rainfall scarcity, as we rely entirely on rainfed agriculture. Natural pastures have weakened, forcing us to purchase fodder, which has led to a decline in livestock."

– Livestock breeder, female, Al-Nasiriyah, Rural Damascus

Coping without Guidance

Faced with these compounding pressures, farmers are adopting a wide range of coping strategies. However, in the absence of institutional support or guidance, these responses are fragmented and often contradictory. Water tankers have become a primary source of water for some, though at a cost that few can sustain over time. Others have abandoned farms altogether, shifted to less water-intensive crops or continued producing at a loss in the absence of alternative income.

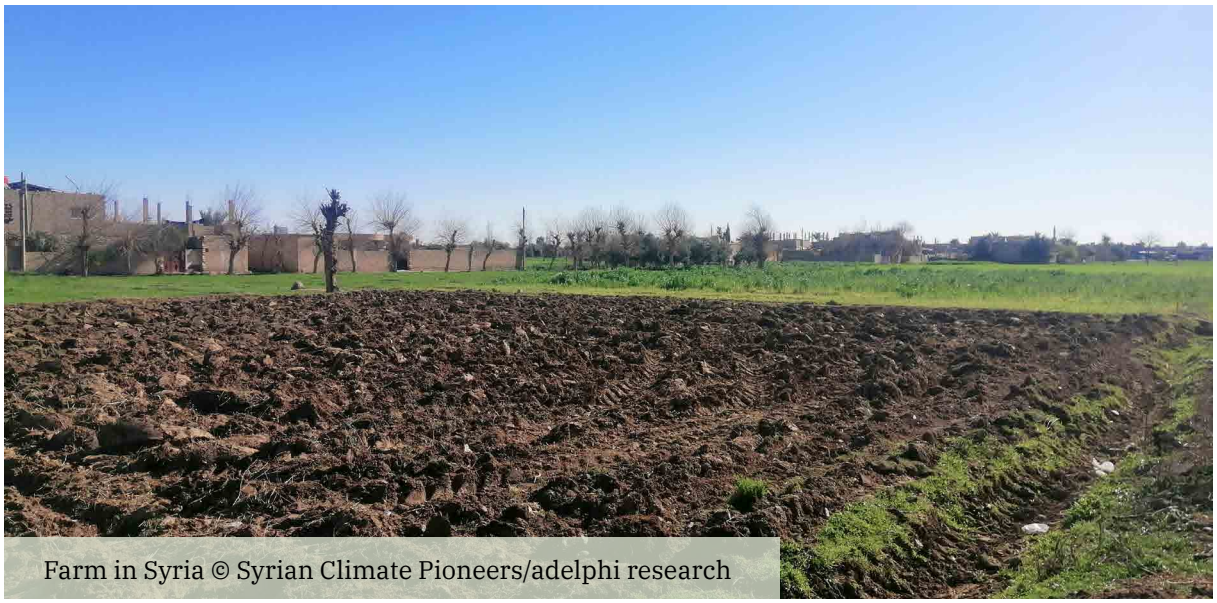
"Feed prices are extremely high, while the selling price of milk does not match production costs."

– Farmer, male, Snobar, Latakia

The diversity of responses resists simple categorisation. Some farmers have turned to the cultivation of olive trees as a more drought-resistant option, while others have been forced to abandon olive groves that they had tended for decades. In some households, children have stopped attending school in order to work, as families have become reliant on their labour. These are not irrational responses, they reflect the constrained rationality of households navigating acute pressure without adequate support, information or viable alternatives. Without guidance, coping strategies that make sense at the household level can collectively accelerate the very deterioration they seek to avoid.

The Limits of Resilience

Climate projections offer little reassurance, as warmer, drier summers across most of Syria are an accelerating reality. Agricultural recovery is possible, but it will require structural transformation – across inputs, markets, water governance and land use – that extends well beyond what households and communities can deliver alone. The coping strategies documented above, while a testament to the resourcefulness of those who remain, are showing signs of exhaustion and early friction is already visible. Disputes over water tankers and tensions around well digging signal that the social buffers that have absorbed pressure until now are under increasing strain. Whether these remain isolated incidents will depend in large part on the speed and quality of institutional responses. The agricultural sector will not recover through household resilience alone and the longer structural support is absent the narrower the window becomes.



Farm in Syria © Syrian Climate Pioneers/adelphi research

Beyond the Farm

Syria's broader livelihood picture is also under strain. While some economic activity shows tentative signs of recovery – such as the trade in used vehicles and the opening of small shops – household and community-level consultations highlight the central role of remittances as a source of household income, alongside multiple temporary jobs, particularly among young people and female-headed households.

> **"Professional and specialised fields have largely disappeared, replaced by any activity that can generate immediate cash income. This has resulted in significant labour market distortion, with people working outside their areas of expertise, creating disguised unemployment and widespread frustration."**
>
> – Agricultural engineer, male, 45, Suwayda (city), Suwayda

This distortion extends beyond the current generation. In Rural Damascus, the market for high-quality handmade furniture – once a source of skilled employment and local pride – illustrates how years of conflict and displacement interrupted the informal transmission of craft knowledge between generations, threatening livelihoods that carry cultural as well as economic significance.

Opportunities for Conflict Prevention

Given the scale of pressure points along agricultural value chains as well as the broader economic picture, entry points for conflict prevention are manifold. One concrete opportunity lies in the restoration of agricultural extension and veterinary services – equitable in reach and informed by current climate risk data, including shifting growing seasons, changing pest and disease patterns, and declining water availability. Both services were deliberately targeted and destroyed during the war. Consequently, restoring these services would send a tangible signal of the state's renewed commitment to rural communities that have felt systematically neglected or marginalised by the previous regime, making it as much a conflict prevention measure as an agricultural one.

Reconstruction must also avoid creating new grievances in the process. This includes identifying and building on what is already working – the local initiatives, coping strategies and community networks that have sustained people through years of crisis – rather than bypassing them with externally designed solutions that fail to account for the knowledge and capacity already present.

Interviews with Syrian farmers © Syrian Climate Pioneers/adelphi research

5 FROM RISK TO RESPONSE

4.1. CPS as a Building Block for Peace

Climate, peace and security (CPS) analysis is a foundational building block for sustainable recovery. Fourteen years of conflict has simultaneously degraded institutions, infrastructure and social trust, making the task of addressing climate risks inseparable from tackling the drivers of instability. The country faces simultaneous agricultural collapse, water scarcity and infrastructure destruction, all compounded by a climate trajectory that includes rising temperatures, increasingly erratic rainfall and more frequent extreme events.

When immediate concerns around shelter, food and security dominate household priorities, climate risks recede from view – not because they are absent, but because they are crowded out. Yet the data, expert interviews and input from government ministries all point to the significant ways in which climate change is already impacting Syria's prospects for peace and economic stabilisation. Consequently, the Government of Syria faces a profound challenge: balancing the urgency to maintain stability, and rebuild social cohesion and trust across the country, while also tackling climate change – which, for large segments of the population, does not yet register as a priority vis-à-vis day-to-day survival. This assessment, and its recommendations, seeks to address this seeming trade-off between the urgent and the important by demonstrating that, in practice, the two are deeply interlinked.

This assessment was developed in close consultation with the Government of Syria, recognising that the government is best positioned to integrate climate security considerations into national reconstruction planning. CPS analysis provides a framework that supports, rather than substitutes for, national ownership of recovery processes.

Entry Points for Climate-Sensitive Reconstruction

Post-conflict reconstruction creates a rare window to embed climate resilience into infrastructure, governance and livelihoods before path dependencies set in. With reconstruction costs projected at USD 216 billion, and governorates such as Aleppo, Rural Damascus and Homs bearing the heaviest physical damage, early decisions about how to rebuild will shape Syria's climate vulnerability for decades.

Key entry points include water and energy infrastructure rehabilitation; agricultural livelihood recovery; local governance reform, particularly around natural resource management; and the restoration of social services that can simultaneously strengthen social cohesion.

Principles for Conflict-Security Risk-Informed Recovery in Fragile Contexts

- **Do no harm:** Interventions must account for existing conflict dynamics, power asymmetries and grievances, particularly around resource allocation and service delivery. In Syria, deeply inclusive and transparent processes are essential given the legacy of sectarianism, division, and the lived experience of conflict and transition.

- **Inclusivity and transparency**: In a context where trust in governance is fragile, processes must be perceived as fair and participatory. The Damascus consultation highlighted that perceptions of safety and trust diverge sharply across communities, reinforcing the importance of inclusive process design.

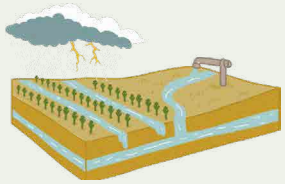
- **Sequencing the urgent and the important**: Climate action must be embedded within immediate stabilisation priorities, framed in terms that resonate with the day-to-day concerns of communities – such as access to water, and livelihood and food security – rather than abstract climate discourses.

Transferable Insights for Post-Conflict Climate Security Programming

- Syria's experience offers a critical lesson for other post-conflict, climate-affected contexts: **Prolonged crisis – whether lived through displacement, conflict or bare survival – creates a significant "climate awareness gap."** Those most disconnected from gradual environmental change, including communities in camps and those returning after years away, may find conditions fundamentally different from what they remember.

- Programming must bridge this gap proactively, recognising that – while national-level data and expertise clearly demonstrate escalating climate threats – household-level awareness may be limited, particularly among those whose immediate priorities centre on security, shelter and livelihoods.

4.2. Recommendations



1. Transparent Review of Agricultural Stability Zones

- Conduct a **transparent, inclusive and climate risk-informed review** of agricultural stability zones across all governorates, updating the classification system introduced in 1975. This review should incorporate up-to-date climate projections and hydrological data. This is particularly critical in governorates such as Hassakeh, where groundwater depletion, crop failure and food insecurity are acute, as well as in the Ghab plain and Janoubi basin, where irrigation-dependent communities are highly exposed.

- The current classification system is a significant source of grievance, as it is widely perceived as inequitable. A **fair, participatory review process** – involving local authorities, community representatives and independent technical experts – could serve a dual purpose: improving water use and management based on robust evidence, while also providing the new administration with an early, tangible opportunity to demonstrate its commitment to equitable governance and to renewing the social contract in a context where trust remains fragile.

2. Climate-Proof Jobs and SMEs that Contribute to Social Cohesion

- As Syria seeks to normalise its economy, lift sanctions and reintegrate into world markets, job creation and SME development should be designed to be both **equitable and climate-resilient** – avoiding investment in livelihoods and value chains that are likely to be undermined by climate change.

- Prioritise employment programmes that bring divided communities together around shared economic interests – such as **cross-community cooperatives** in climate-adapted agriculture, renewable energy installation and maintenance, and water-efficient technologies – generating cohesion dividends alongside economic ones.

3. Equitable and Climate Risk-Informed Agricultural Extension and Veterinary Services

- In communities that will continue to rely on arable farming and pastoralism for their livelihoods, support the restoration of **agricultural extension and veterinary services** that are equitable in reach and informed by current climate risk data, including shifting growing seasons, changing pest and disease patterns, and declining water availability.

- Both services were frequently and **deliberately targeted and destroyed** during the war, making their rehabilitation not only a technical necessity but also a signal of the state's renewed commitment to rural communities – many of which felt systematically neglected or punished under the previous regime.

4. Water and Energy Infrastructure Rehabilitation with Social Dividends

- Rehabilitation of water and energy infrastructure should be designed to deliver **social cohesion co-benefits** alongside service restoration, for example, by ensuring equitable access across formerly divided communities, using local labour from diverse backgrounds, and establishing inclusive community-level governance structures for ongoing management and maintenance.

- Infrastructure projects offer some of the most visible and tangible "peace dividends" available to the new administration. Ensuring these are delivered **fairly and transparently** is critical to building trust, particularly in areas where access to infrastructure was previously used as a tool of control or punishment.

5. Dialogue and Reconciliation around Mutual Local Concerns

- Use shared environmental and service provision challenges – such as water scarcity, access to electricity, waste management and land degradation – as **non-politicised entry points for local dialogue and reconciliation,** including in the online sphere, between communities that may otherwise have little basis for constructive engagement.

- Environmental concerns can serve as a relatively "neutral" platform on which to rebuild habits of collective problem-solving and negotiation, laying the groundwork for broader social cohesion – provided these processes are carefully facilitated and **genuinely inclusive of marginalised groups**, including women, young people, displaced communities and vulnerable returnees.

6. Harmonising Data and Creating a National Climate Security Monitoring Platform

- Establish a **unified, interoperable data platform** that harmonises climate, environmental, agricultural, displacement and conflict data currently held across multiple government ministries, UN agencies and NGOs, enabling integrated analysis and early warning for climate security risks.

- This platform should be designed in line with **open-access principles** where appropriate to support transparency and public trust, while also building national institutional capacity for evidence-based policymaking. Harmonised data will be essential for targeting interventions, tracking progress and making the case – both domestically and to international donors – for sustained investment in climate-resilient recovery.

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6. ANNEXES

6.1. Annex I:

Field Research Locations

Governorate	Location	
Rural Damascus	Adra	Housh Al-Fara
	Al-Mleiha	Jayrud
	Al-Nashabiyah	Khan Al-Sheih
	Al-Qutayfah	Qalamoun – Al-Tawani
	Al-Zabadani	Sahnaya
	Douma	Saqba
	Hafir Al-Fouqa	Sergaya
	Harasta	Zakiya
Suwayda	Al-Masaken	Rural Suwayda (Eastern/Western)
	Qanawat	Suwayda City
Deir ez-Zor	Al-Baghiliyah	Al-Shumaytiyah
	Al-Bukamal	Al-Tabni
	Al-Husseiniyah	Hatlah
	Al-Jneinah	Huwaijat Dhiab Shamiyah
	Al-Mari'iyah	Huwaijat Saqr
	Al-Mayadin	Sa'lu
Raqqa	Al-Ghassaniyah	Al-Salhabiyah
	Al-Jadidat	Hazimah
	Al-Karamah	Jadidat Kheit
	Al-Kasrat	Kabsh
	Al-Mashlab	Khas Ajil

Aleppo	Afrin Al-Nairab Jarablus	Manbij Nubl Safira
Hama	Al-Bayadiyah Al-Bayda Al-Mantar – Al-Sayyadah Al-Sheikh Ali Barri	Deir Mama Ghazilah Qabb Al-Haat Salamiyah Umm Al-Amad
Homs	Al-Mukharram Al-Janoubi Al-Qabu Al-Qaryatayn Al-Sankari Jubb Al-Jarrah	Mahin Rabah Saddad Taldo
Latakia	Istamo Qastal Maaf	Snobar Tamima
Tartous	Al-Ghamqa Al-Sharqiya Al-Sheikh Saad Bsamqa Dreikish	Dweir Al-Sheikh Saad Hseen Al-Bahr Maitar Al-Dweir Miyar Shaker
Idlib	Al-Habit	Atshan

6.2. Annex II:

Interviewee List[8]

1. Dr Mwaffak Chikhali, expert on natural resource management, Earth Link and Advanced Resources Development (ELARD Syria)
1. Samah Rislan, senior administrative field manager, SREO Consulting
2. Dr Muhammed Alassiry, president, Syrian Astronomical Association (SAA)
3. Dr Rosa Karmoka, scientific researcher, General Organisation of Remote Sensing
4. Angham Daiyoub, doctoral researcher in terrestrial ecology, Centre de Recerca Ecològica i Aplicacions Forestals (CREAF)
5. Sherwan Yousef, executive director, DeFacto Platform for Dialogue and Development
6. Dr Abdulkarim Ekzayez, health professional
7. Ruby Naif, researcher and climate consultant, Doria Feminist Fund
8. Dr Ali Thabeet, professor, Department of Forest and Ecology, Aleppo University
9. Modar Esmaeel, agricultural specialist
10. Alp Cenk Arslan, researcher on digital sovereignty
11. Dr Mohammad S. Abido, private environmental consultant
12. Firas Schuman, consultant on natural resource management
13. Dr Natalia Atfeh, professor and head of the Urban Planning and Environment Department, Damascus University
14. Dr Zuheir Shater, professor, Department of Forestry and Ecology, Faculty of Agriculture Engineering, University of Latakia
15. Dr Fadi AlMahmoud, Food and Agriculture Organization of the UN (FAO)
16. Riad Mohammad Al-Tarkhou, independent consultant, expert on environmental work and protected area management

8 The list is not comprehensive, as experts who preferred to remain anonymous have not been included.

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