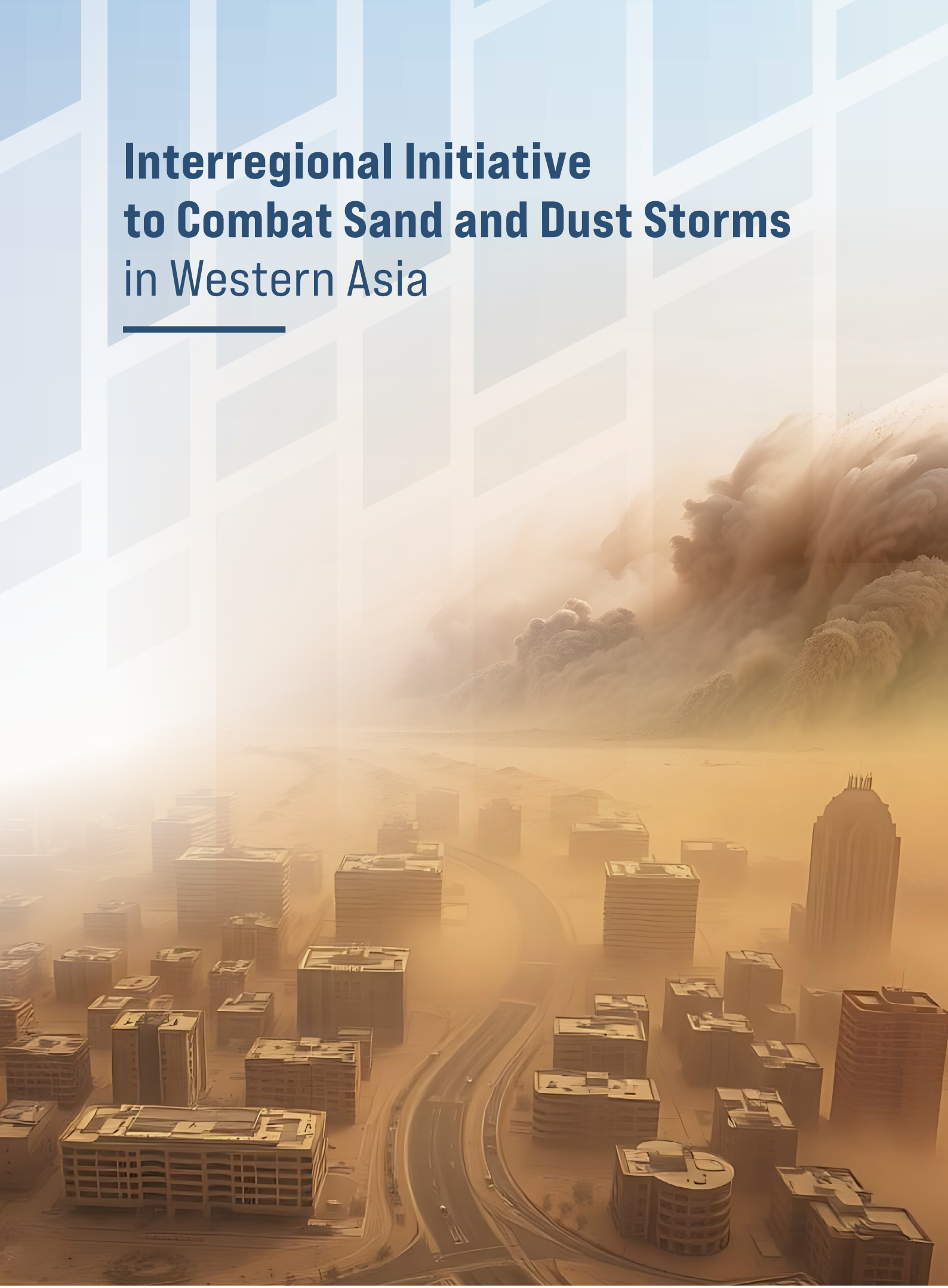
Interregional Initiative to Combat Sand and Dust Storms in Western Asia



Interregional Initiative to Combat Sand and Dust Storms in Western Asia

The elaboration of this initiative by the Partner Countries was supported by the United Nations Economic and Social Commission for Western Asia (ESCWA) through its Arab Centre for Climate Change Policies (ACCCP) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) through its Asian and Pacific Centre for the Development of Disaster Information Management (APDIM) with funding provide by the Government of Sweden.

01. Background

The escalating frequency and severity of sand and dust storms pose significant challenges to sustainable development and human well-being across arid and semi-arid regions, particularly in Western Asia, Central Asia, South Asia, East Asia and the Sahel. Sand and dust storm events result from a combination of factors including high wind velocities, aridity and soil erosion, compounded by unsustainable land use practices, land degradation, desertification, overgrazing, deforestation and climate change.

In addition to their immediate impacts on air quality and visibility, sand and dust storms have far-reaching consequences on well-being. They affect 11 of the 17 Sustainable Development Goals (SDGs), impacting livelihoods, threatening food security, disrupting transportation networks, damaging to infrastructure and economic activity, accelerating glacial melting and intensifying public health crises by transporting fine particulate matter and pathogens. As transboundary phenomena, mitigating sand and dust storms at the source and their impacts demands collaborative action that integrates science, policy, technology, indigenous and local knowledge and investments to reduce risks and enhance resilience.

Combating sand and dust storms can be pursued through source mitigation by reducing risks and through impact mitigation by enhancing the resilience of countries through adaptation and response measures. An enabling environment at the regional and country levels is needed to inform these actions, including impact-based forecasting, early warning systems, collaborative assessments and projects that support the targeting of interventions and actions.

02. Global and regional context

United Nations Member States proclaimed the United Nations Decade on Combating Sand and Dust Storms (2025-2034) in July 2024. Moreover, the Pact for the Future adopted by Member States in September 2024 iteratively references sand and dust storms as a priority for advancing sustainable development and financing for development. The General Assembly also pronounced multiple resolutions stressing the need for cooperation at the global and regional levels with a view to managing and mitigating the effects of sand and dust storms.

The outcomes of the 16th Conference of the Parties to the United Nations Convention to Combat Desertification (COP16) hosted by the Kingdom of Saudi Arabia reaffirm the urgency of addressing sand and dust storms as a global, regional and national challenge. Specifically, its decisions call for the strengthening of multi-stakeholder platforms and regional initiatives to contribute to addressing sand and dust storms linked to desertification, land degradation and drought, as well as the advancement of efforts to reduce their negative impacts. COP16 also invited the United Nations Coalition on Combating Sand and Dust Storms to continue fostering collaboration and the implementation of national and regional sand and dust storm policies and action plans, including early warning, risk and vulnerability assessments, and source mitigation.

Regional momentum for addressing sand and dust storms was also provided by the International Conference on Combating Sand and Dust Storms, held in Tehran from 9-10 September 2023, which highlighted the need for stronger science-policy linkages and cooperation to mitigate sand and dust storms, its sources and impacts at transboundary level, and by the First International Conference on Sand and Dust Storms, convened in Riyadh from 4-6 March 2024, which showcased examples of transboundary collaboration, financing, and multi-stakeholder engagement. The importance of regional collaboration for advancing action has also been taken up by the United Nations Coalition on Combating Sand and Dust Storms and its Working Group on Regional Collaboration and Mediation, which are both co-coordinated by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and United Nations Economic and Social Commission for Western Asia (ESCWA).

In response to these calls for action, a series of interregional dialogues was organized by ESCWA and ESCAP to engage senior officials in Western Asia Member States in discussions aimed at fostering collaboration to combat sand and dust storms.

The first dialogue (Doha, February 2025) fostered mutual understanding by providing space for each delegation to share its assessment of the challenges posed by sand and dust storms, the institutional and scientific resources available to deal with these challenges, and proposed priorities for national and regional follow-up.

The second dialogue (Abu Dhabi, May 2025) focused on collaborative solutions and priority measures, including sharing sand and dust storms related information and experiences through expert networks. It also featured a consolidated draft analysis of the regional challenges based on the presentations made during the first dialogue which informed the conceptualization of this collaborative Initiative. The analysis resulted in a technical paper that provides the evidence-base for this Initiative, including sand and dust storm pathways in the region and how projected changes in the climate may also affect the frequency, severity, duration, seasonality and transport pathways of sand and dust storms given expected changes in temperature, evapotranspiration, and land cover in Western Asia.

A third broader, multi-stakeholder forum (Beirut, October 2025) drew lessons learned from initiatives in other regions and was organized in collaboration with the United Nations Coalition on Combating Sand and Dust Storms. A draft of this Initiative was discussed on the sidelines of the Beirut dialogue among the countries participating in the development of this Initiative. The dialogues were complemented by online consultations and technical workshops delivered to meteorological services on forecasting sand and dust storm. These dialogues and workshops were implemented with the financial support of the Government of Sweden. The initiative was then approved by the Partner Countries in December 2025.

03. Goal

The overarching goal of the interregional Initiative is to enhance resilience and reduce the risks posed by sand and dust storms. By combining coherent policy approaches, collaborative research, as well as regional and multi-country actions, the Initiative aims to significantly reduce the vulnerability and impact that sand and dust storms pose to people, ecosystems and economies across Western Asia.

04. Objective

To achieve this goal, the objective of the Initiative is to mitigate the effects of sand and dust storms through transboundary cooperation by fostering a shared knowledge base and strengthening collaboration on mitigation and adaptation of sand and dust storms, including through joint projects.

The Initiative is aligned with the objectives of the United Nations Decade on Combating Sand and Dust Storms (2025-2034), which call for accelerating and sustaining action towards the mobilization of means of implementation; scaling up international cooperation and collaboration in science, research and innovation at the local, national and regional levels; and fostering public-private and multi-stakeholder partnership.

05. Partner Countries

The following ten countries in Western Asia participated in the dialogue series and consultations and are implementing this Initiative:

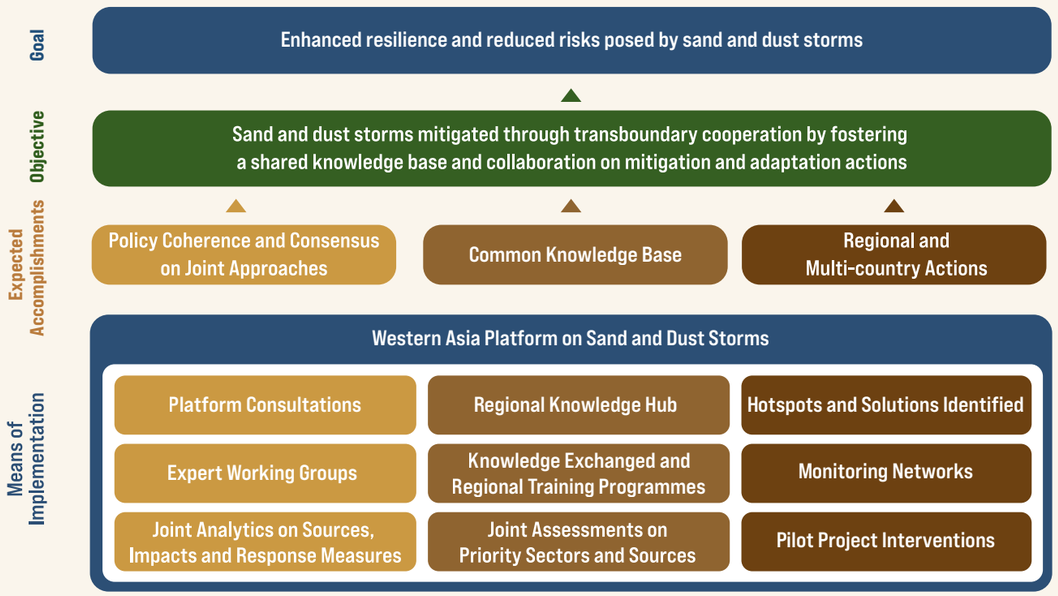
Islamic Republic of Iran	**Iraq**	**Jordan**	**Kuwait**	**Lebanon**
Qatar	**Kingdom of Saudi Arabia**	**Syrian Arab Republic**	**Türkiye**	**United Arab Emirates**

06. Theory of Change

The Theory of Change illustrated in Figure 1 starts with the shared assumption that sand and dust storms are a complex, multi-sectoral, transboundary challenge that no single country can effectively address alone.

The underlying assumption is that informed, coordinated and harmonized measures will be far more effective in addressing drivers and impacts of sand and dust storms than isolated national initiatives.

Figure 1. Theory of Change



As shown in the figure, the overarching goal of the Initiative is to reduce risks and enhance resilience to sand and dust storms with the objective of mitigating sand and dust storms through transboundary cooperation fostered by developing a shared knowledge base and collaborative actions.

To achieve this, the Initiative identifies three expected accomplishments focused on fostering policy coherence and consensus on joint approaches, establishing a common knowledge base, and implementing regional and multi-country actions. The Western Asia Platform on Sand and Dust Storms will coordinate, monitor and guide the implementation of the Initiative.

07. Expected accomplishments and deliverables

The three expected accomplishments of the Initiative will contribute to reaching its long-term goal and objective. These will be pursued through a Western Asia Platform on Sand and Dust Storms and means of implementation elaborated through a set of deliverables, which are illustrated in the Theory of Change and detailed below.

EXPECTED ACCOMPLISHMENT 1.

Policy coherence and consensus on joint approaches achieved

Policy coherence will be supported by transboundary cooperation aimed at fostering joint regional approaches for monitoring, measuring and reporting on sand and dust storm phenomena and its risks.

Deliverable 1.1. Western Asia Platform on Sand and Dust Storms consultations launched

The Western Asia Platform on Sand and Dust Storms will be launched by the Partner Countries with the support of a secretariat staffed by ESCAP and ESCWA. Up to four representatives designated by each Partner Country will serve on the Platform, representing different sectors responsible for enhancing resilience and reducing risks posed by sand and dust storms. The Platform will meet on a regular basis to ensure policy coherence and consensus on joint approaches, including those related to analytics, the shared regional knowledge hub and multi-country actions.

Deliverable 1.2. Expert Working Groups established and operational

Expert Working Groups will be set up and operationalized in accordance with the Terms of Reference annexed to this document. The Expert Working Groups will comprise government officials, experts and representatives of institutions designated by the Partner Countries. They will be tasked to produce knowledge products and advice for the Platform's consideration. Their work

will inform decisions that will enhance policy coherence and facilitate coordination among countries in the region based on a shared vision and approach. The preliminary list of Expert Working Groups identified by the Partner Countries includes agriculture, energy, health, transport, and source analysis and mitigation.

Deliverable 1.3. Joint analytics on sources, impacts and response measures developed

Common methodologies and guidelines to monitor sand and dust storm pathways and measure their socio-economic and environmental impacts will be developed through the Expert Working Groups, drawing on the exchange of studies, best practices, and a collection of scientific-based information and data relevant to the regional context. This will facilitate consensus on baseline information and common approaches for generating comparable national analytics that will contribute to joint regional assessments on the sources and impacts of sand and dust storms. The Partner Countries have expressed interest in developing joint analytics on indicators, methodologies, and impact-based forecasting.

EXPECTED ACCOMPLISHMENT 2.

Common knowledge base established

Countries in Western Asia will contribute to the development of a common relevant knowledge base by sharing studies, data, experiences, analysis and technical information. The knowledge base will be enhanced by the common methodologies, guidelines and approaches developed through the Expert Working Groups and the preparation of joint assessments, which will be shared digitally on the Platform's Regional Knowledge Hub.

Deliverable 2.1. Regional Knowledge Hub on Sand and Dust Storms operationalized

The Western Asia Platform on Sand and Dust Storms will be supported by a shared digital knowledge hub. This regional knowledge hub will be designed, maintained and populated on a regular basis to report on the work of the Platform and its Expert Working Groups; provide a repository of data, research and policies; and facilitate the coordination of activities related to the preparation of joint assessments. The hub will also catalogue and facilitate access to knowledge products on indicators, methodologies and guidelines; feature experiences and good practices; and visualize the outcomes of joint assessments on priority sectors, sources and hotspots identified by the Platform. The information on the hub will be open access for selected datasets to encourage research, innovation and wider stakeholder use by pulling together knowledge, research and education institutions dedicated to the studying, monitoring and analysis of sand and dust phenomena.

Deliverable 2.2. Knowledge exchanged and regional training programmes developed

Countries in Western Asia will benefit from opportunities to engage in South-South cooperation, technical exchanges, peer learning and study tours within the region and with other countries working to mitigate sand and dust storms at the source and their impacts. This will strengthen national capabilities and knowledge sharing while also fostering collaborative approaches and technical networks amongst countries vulnerable to sand and dust storms.

Regional training and capacity-building programmes on impact-based sand and dust storms forecasting for national meteorological services as well as regional workshops on agriculture and sustainable land management practices as well as disaster risk reduction planning will be developed and delivered.

South-South exchanges and collaboration with other regions affected by sand and dust storms (such as the Sahel, Central Asia and East Asia) will also be explored and pursued subject to the availability of resources.

Deliverable 2.3. Joint assessments on priority sectors and sources conducted

At least three joint technical assessments or analyses on sand and dust storms will be produced by two or more countries situated in Western Asia to inform decision-making and facilitate the identification of joint collaborative actions. The subject and scope of each assessment will be defined during Platform consultations. The assessments will be used to support sand and dust storm risk analysis and the identification of hotspots and proposed interventions that can inform agreement on multi-country actions.

EXPECTED ACCOMPLISHMENT 3.

Regional and multi-country actions implemented

Mitigating the transboundary impacts of sand and dust storms will be based on the identification of specific hotspots and can be informed by the findings generated by the Expert Working Groups, as well as monitoring and observation networks. Identification of specific criteria and analytics in terms of risks and impacts based on common methodologies and joint assessments will then inform the implementation of pilot projects and associated multi-country interventions.

Deliverable 3.1. Hotspots and solutions identified

At least three hotspots will be identified through the agreed set of indicators, analytics or assessments. The identification of hotspots will be complemented by proposed solutions for consideration by the Platform. Proposed solutions would seek to mitigate sand and dust storms at the source to reduce risks and enhance resilience through appropriate adaptation interventions through transboundary collaborative efforts focused on priority hotspot areas or sectors. Partner Countries have identified regional and multi-country actions for consideration, including desertification control, windbreak forestation, stabilization of sand dunes, investments in drought and saline-tolerant species and non-water control measures such as use of non-living windbreaks, mulching and bio-saline crops investment in sand stabilization technologies and other new emerging technologies.

Deliverable 3.2. Monitoring networks coordinated

Collaborative monitoring networks will support the observation and forecasting of sand and dust storm events as well as the study of the potential health impacts related to sand and dust storms. This will be coordinated through common analytics and data exchange, which can contribute to further identification of priority hot spots and risk reduction among the most vulnerable groups.

Deliverable 3.3. Pilot project interventions initiated

Based on the collaborative assessments and analytics, joint identification of hotspots and response measures, project interventions will be piloted and implemented at the country and regional levels and coordinated under the umbrella of the Platform. This will include drawing on the regional knowledge base generated under the Initiative to generate funding for transboundary projects and interventions to combat sand and dust storms in Western Asia.

08. Implementation strategy

The Western Asia Platform on Sand and Dust Storms will convene senior officials from the Partner Countries that are ESCAP or ESCWA Member States situated in Western Asia, and, when relevant, extended to neighbouring and other countries in Central and South Asia as well as North and East Africa. Designated representatives will be those responsible for combating sand and dust storms at the national and regional levels across pertinent sectors.

The Platform will meet twice a year, once in person and once online. It will be responsible for mandating the tasks of the Expert Working Groups and reviewing their outputs and recommendations; forging consensus on common approaches, joint assessments and multi-country actions; and monitoring progress and recommending any adjustments to the Initiative, as appropriate.

The Platform's work will be informed by the Expert Working Groups mandated to conduct specific tasks and provide recommendations to the senior officials serving on the Platform. This will achieve the dual objective of informing and technically supporting the work of the Platform while also fostering expert networks among the Partner Countries. It is expected that this approach will strengthen the science-policy interface and foster multi-country collaboration on specific topics.

The Expert Working Groups will be comprised of nominated technical officials from the Partner Countries as well as subject matter experts and institutions agreed to by the Platform members. They will meet at least twice a year based on the tasks assigned by the Platform. Support will be provided by ESCAP and ESCWA as Secretariat of the Platform.

The terms of reference for the Platform and its Expert Working Groups are provided in Annex 1 and the logical framework for the Initiative is provided in Annex 2.

09. Partnerships

The Initiative will be undertaken through partnerships between United Nations Member States situated in Western Asia. This will be pursued through a multi-sectoral approach involving the various relevant actors combating sand and dust storms at the country level.

The Initiative will be coordinated through the Western Asia Sand and Dust Storms Platform jointly supported by ESCWA and ESCAP as the United Nations Regional Commissions serving Member States in this area. It will be implemented in collaboration and consultation with stakeholders and organizations that can contribute knowledge, technology and resources to support Member States in this region. This includes representatives of countries situated in other parts of Asia and Africa affected by sand and dust storms, expert organizations, private sector actors and technology providers, development partners, regional and international financial institutions, as well as members of the United Nations Coalition on Combating Sand and Dust Storms.

In this connection, this Initiative will benefit at its inception from a mapping of existing initiatives being implemented at the regional level on sand and dust storms and will offer a unique opportunity through its Western Asia Platform and the Expert Working Groups for countries in the region to coordinate programmes and projects related to sand and dust storms at the regional and country-levels. In this connection, clear linkages with existing efforts at regional and international levels will be sought by the Initiative with a view to strengthen complementarity and avoid duplication.

The Initiative will aim at engaging, including through its Expert Working Groups, communities directly affected by sand and dust storms, such as farmers and pastoralists whose land management practices are intrinsically linked to both the causes of and solutions for land degradation. Participatory mechanisms that involve these key stakeholders in the design and implementation of programmes will be adopted especially in the design and implementation of the mitigation projects with a view to also address the issue of alternative livelihood programmes that are essential for reducing economic dependence and pressure exerted on fragile lands.

Engagement with the private sector will be critical for the success of the Initiative and will include the articulation of clear incentives for businesses—particularly in agriculture, construction, and renewable energy—to adopt dust-suppressive practices and sustainable land management. Green business opportunities that align economic incentives with environmental goals, as well as fostering

corporate social responsibility (CSR) initiatives specifically targeted at sand and dust storm hotspot areas will be explored in the first phase of implementation of this Initiative.

Engagement with relevant universities and research institutes and centres in the region and beyond will also be actively pursued with a view to inform the design of methodologies and the implementation of various elements of this Initiative so that their scientific evidence and monitoring capacity directly inform policy uptake and operational decisions.

10. Duration and work plan

The Initiative was developed to coincide with the start of the United Nations Decade on Combating Sand and Dust Storms. Its first phase will have a duration of three years, running through the end of 2028 so that its outcomes may be reported to Initiative beneficiaries and to United Nations Member States as part of the mid-term review of the Decade. Based on the outcomes achieved, a second phase may be developed for a subsequent three years.

Table 1 presents the work plan of the Initiative for the years 2026 through 2028 in accordance with the expected accomplishments (EAs) and deliverables detailed above. The schedule of work is indicated on a half year basis, with H1 representing the period from January to June, and H2 representing the period from July to December.

Table 1. Work plan

Expected Accomplishments and Deliverables	H1 2026	H2 2026	H1 2027	H2 2027	H1 2028	H2 2028
EA 1: Policy coherence and consensus on joint approaches achieved						
Deliverable 1.1. Western Asia Platform on Sand and Dust Storms consultations launched	▬		▬		▬	▬
Deliverable 1.2. Expert Working Groups established and operational	▬	▬	▬	▬	▬	▬
Deliverable 1.3. Joint analytics on sources, impacts and response measures developed		▬	▬	▬		
EA 2: Common knowledge base established						
Deliverable 2.1. Regional Knowledge Hub on Sand and Dust Storms operationalized	▬	▬	▬			
Deliverable 2.2. Knowledge exchanged and regional training programmes developed		▬	▬	▬	▬	▬
Deliverable 2.3. Joint assessments on priority sectors and sources conducted			▬	▬	▬	▬
EA 3: Regional and multi-country actions implemented						
Deliverable 3.1. Hotspots and solutions identified			▬	▬		
Deliverable 3.2. Monitoring networks coordinated			▬	▬	▬	▬
Deliverable 3.3. Pilot project interventions initiated			▬	▬	▬	▬
Monitoring, reporting and evaluation	▬	▬	▬	▬	▬	▬

11. Funding mechanisms

The implementation of this Initiative will be supported through different funding sources that will be mobilized in accordance with a resource mobilization approach to be developed by the Secretariat in consultation with the Partner Countries.

The multiple funding streams expected to contribute to the implementation of the Initiative include: (1) extra-budgetary sources of funding to ESCAP and ESCWA to support the Secretariat of the Initiative and the convening of the Western Asia Platform on Sand and Dust Storms and its Expert Working Groups; (2) bilateral and multilateral voluntary funding to the Partner Countries and/or to the Secretariat for the implementation of specific elements of this Initiative; and (3) climate-related development finance, including for the joint projects envisaged in this Initiative.

Furthermore, it is expected that mapping and coordinating existing sand and dust storms efforts implemented by the United Nations, its specialized agencies and other international and national actors in the region will lead to significant financial and programmatic efficiencies as well as open further opportunities for synergies and coordination among the Partner Countries.

12. Monitoring, reporting and evaluation

Regular monitoring and reporting on the Initiative's activities and impacts will be provided by the Secretariat to the Platform for its consideration and featured on the regional knowledge hub. Partner Countries will also be invited to report on progress achieved at national level, as appropriate. The Secretariat of the Initiative will facilitate regional reporting and consolidate outputs, including reporting to Partner Countries, regional organizations, donors and mechanism established under the United Nations Decade on Combating Sand and Dust Storms. An annual report of the Initiative's implementation will be issued by the Secretariat and will highlight success stories and lessons learned that encourage the scaling up of effective practices.

ANNEX 1: TERMS OF REFERENCES

Terms of Reference for the Western Asia Platform on Sand and Dust Storms

1. Objective

The Western Asia Platform on Sand and Dust Storms will be responsible for discussing and prioritizing cross-sectoral, overarching policy issues, including common methodologies, approaches and guidelines with a view to guide and oversee the implementation of this Initiative.

2. Responsibilities

The Platform key focus will be to monitor and discuss the evolution of sand and dust storms and their impact in the region and beyond; to identify and agree on specific areas for joint projects and action; to task the Expert Working Groups and review their work on a regular basis with the scope of ensuring progress in the implementation of this Initiative and of recommending any adjustments to it as appropriate.

3. Composition

The Platform will be comprised of up to four representatives from each of the governments participating in the Initiative, drawing from various ministries and public institutions concerned with sand and dust storms. The representatives will be nominated by their respective government for a consecutive period of three years.

4. Decision-Making

Decisions will be taken by the Western Asia Platform on Sand and Dust Storms on a consensus basis.

5. Frequency of Meetings

The Western Asia Platform on Sand and Dust Storm will meet once a year at high level and once a year at the senior working level. High-level meetings will be held in person, on rotation as feasible**,** in the Partner Countries implementing this Initiative.

6. Secretariat

ESCAP and ESCWA will provide substantive and secretariat support to the Western Asia Platform on Sand and Dust Storms, including dissemination of activities and outputs on the regional knowledge hub and associated reporting under the United Nations Decade on Combating Sand and Dust Storms.



ANNEX 1: TERMS OF REFERENCES

Terms of Reference for the Western Asia Platform on Sand and Dust Storms - Expert Working Groups

1. Objective

The Expert Working Groups will be tasked by the Platform with the development of specific programmes, analytical products or policy recommendations for consideration by the Platform. This approach aims at fostering expert networks amongst the countries involved in the Initiative.

2. Responsibilities

The Expert Working Groups focus will be responsible for providing a means for joint monitoring, socio-economic analysis and modelling of sand and dust storm events and impacts with a view to strengthen the science-policy interface and multi-country collaboration on specific topics.

3. Composition

The Expert Working Groups will be comprised of up to two technical experts nominated by the Partner Countries as well as subject matter experts and institutions. Technical experts will be nominated by their respective government with a task-oriented approach for the duration of the task assigned by the Platform. This allows specialized experts designated by Partner Countries to contribute to one or more expert working group.

During the first phase, the Platform will mandate the establishment of the Expert Working Groups and their respective scopes of work. The preliminary list of Expert Working Groups identified by the Partner Countries includes agriculture, energy, health, transport and source analysis and mitigation.

4. Frequency of Meetings

The Expert Working Groups will meet as needed, through in person, online or hybrid meetings. Once a year, each active Expert Working Group will provide the Secretariat with an update on progress achieved against the tasks assigned by the Platform. Two or more Expert Working Groups could also be convened in joint fashion to facilitate, when needed, the identification of cross-sectoral response measures and solutions.

5. Secretariat

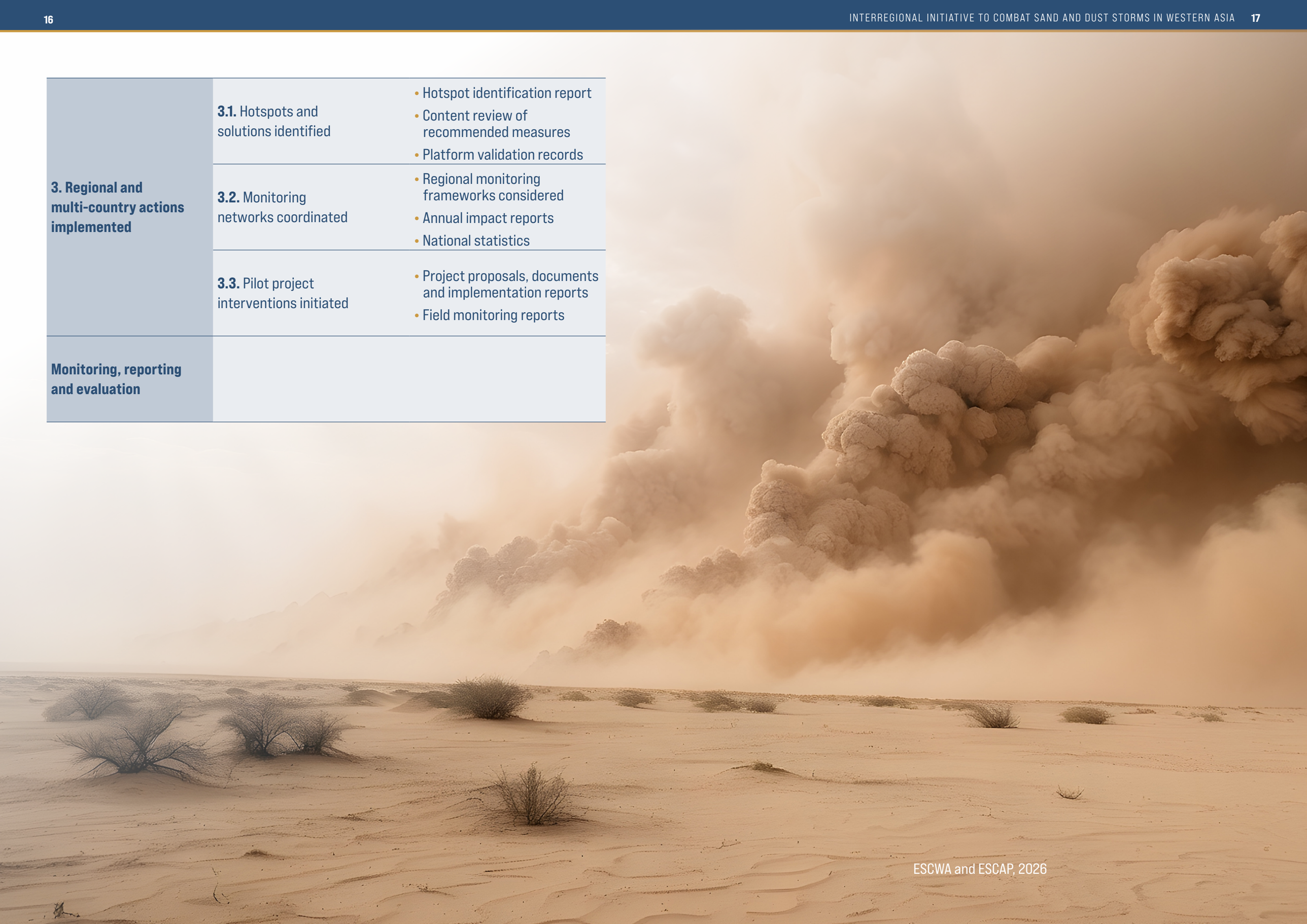
ESCAP and ESCWA will provide substantive and secretariat support to the Expert Working Groups, including dissemination of activities and outputs on the regional knowledge hub.

ANNEX 2: LOGICAL FRAMEWORK

Logical framework for the Interregional Initiative to Combat Sand and Dust Storms in Western Asia

Expected Accomplishment	Deliverables	Means of Verification
1. Policy coherence and consensus on joint approaches achieved	**1.1.** Western Asia Platform on Sand and Dust Storms consultations launched	• Terms of Reference • Meeting records • Platform decisions
	1.2. Expert Working Groups established and operational	• Terms of Reference • Meeting records • Technical papers
	1.3. Joint analytics on sources, impacts and response measures developed	• Agreed analytics, methodologies and guidelines • Comparable baseline datasets
2. Common knowledge base established	**2.1.** Regional Knowledge Hub on Sand and Dust Storms operationalized	• Portal established with data and document repository • Usage statistics • Content review
	2.2. Knowledge exchanged and regional training programmes developed	• Event reports • Participant lists • Feedback surveys from South-South exchanges, peer learning and study tours
	2.3. Joint assessments on priority sectors and sources conducted	• Published assessments • Evidence of participation from at least two countries in joint assessments

3. Regional and multi-country actions implemented	**3.1.** Hotspots and solutions identified	• Hotspot identification report • Content review of recommended measures • Platform validation records
	3.2. Monitoring networks coordinated	• Regional monitoring frameworks considered • Annual impact reports • National statistics
	3.3. Pilot project interventions initiated	• Project proposals, documents and implementation reports • Field monitoring reports
Monitoring, reporting and evaluation		



ESCWA and ESCAP, 2026



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