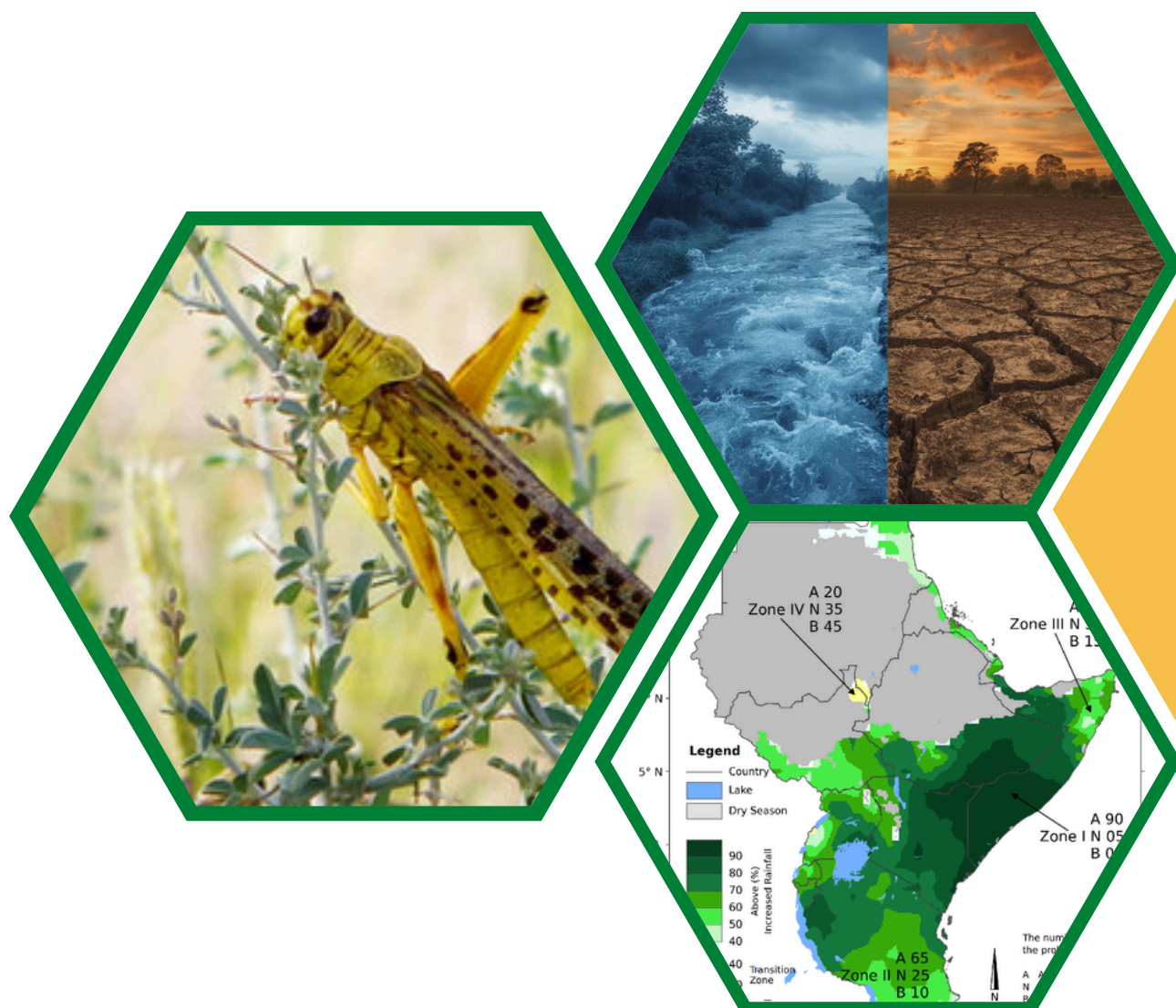




DESERT LOCUST RISK UNDER A STRENGTHENING EL NIÑO: IMPLICATIONS FOR THE GREATER HORN OF AFRICA





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Key message: The Greater Horn of Africa moved from an exceptional regional Desert Locust upsurge during 2019-2021 to a generally recessionary but episodic pattern of localized outbreaks from 2022 onward. The decline reflects effective surveillance and control, intervening dry periods, and stronger regional preparedness. Through IFRAH and the Inter-Regional Platform, IGAD has reinforced cross-border coordination, information sharing, knowledge exchange and early warning, helping Member States and partners detect and address localized risks before they escalate to regional crisis scale.

1. Overview

The Desert Locust situation in the Greater Horn of Africa (GHA) since 2018 shows a clear transition from the exceptional 2019-2021 regional upsurge to a generally recessionary but episodic pattern of localized outbreaks between 2022 and 2026. The 2019-2021 crisis originated after exceptional cyclone-driven rainfall in the Arabian Peninsula, followed by successive favourable rainfall seasons, abundant vegetation and repeated breeding that enabled populations to expand into Somalia, Ethiopia, Kenya and neighbouring countries. The eventual decline reflected a combination of large-scale surveillance and control, less favourable breeding conditions, and stronger regional preparedness and coordination mechanisms established during and after the crisis.

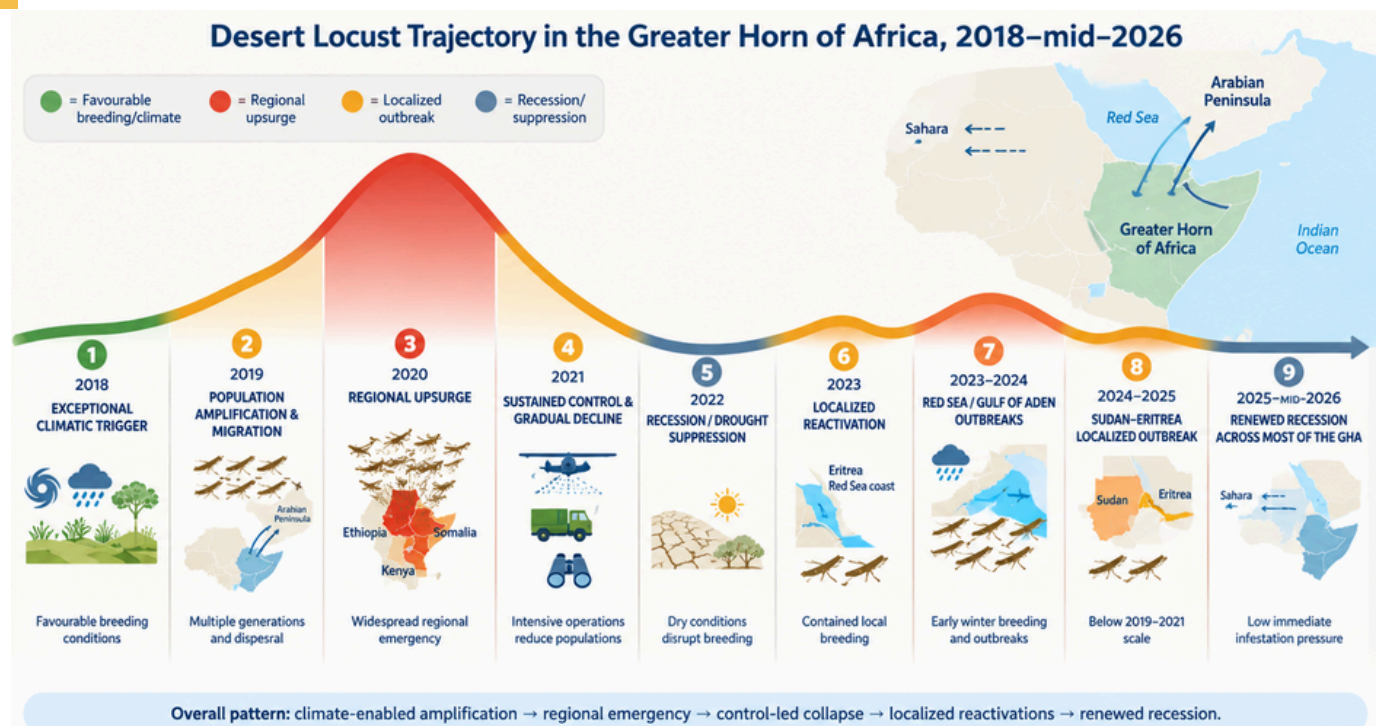
Since the major upsurge ended, the underlying risk has not disappeared. Localized breeding and migration occurred again in Eritrea, Somalia and Ethiopia in 2023; El Niño and positive Indian Ocean Dipole conditions contributed to renewed outbreaks along the Red Sea and Gulf of Aden during late 2023 and early 2024; and another localized outbreak developed in Sudan during late 2024 and persisted into early 2025. However, these episodes did not develop into another GHA-wide high-intensity upsurge. Improved cross-border information exchange, regional convening, early warning, national preparedness and targeted response increasingly complemented national and partner control operations, helping localized events to be detected and addressed earlier.

2. Sequence of Events and Drivers

1	May–Oct 2018: Genesis of the upsurge 	Desert Locust situation Unusually favourable breeding developed in the Empty Quarter of the Arabian Peninsula.	Conditions that perpetuated the situation - Cyclones Mekunu and Luban generated exceptional rainfall in remote desert areas. - Moist soils and vegetation allowed approximately three successive generations of largely undetected breeding.	Progression Large populations accumulated and subsequently dispersed from the Arabian Peninsula.
2	2019: Movement into the Horn of Africa 	Desert Locust situation Swarms moved from Arabia/Yemen into northern Somalia and eastern Ethiopia and subsequently expanded regionally.	Conditions that perpetuated the situation - Continued rainfall and breeding in Yemen, together with exceptionally wet conditions associated with a strong positive IOD, sustained vegetation and breeding. - East Africa experienced one of its wettest October–December seasons, while unusually high Indian Ocean cyclone activity further enhanced suitable conditions.	Progression Populations became established within the Horn rather than simply passing through it.
3	Late 2019–2020: Regional upsurge and peak 	Desert Locust situation - Massive swarms spread through Ethiopia, Somalia and Kenya and reached Djibouti, Eritrea, Uganda, South Sudan and northern Tanzania. - Kenya experienced its worst infestation in about 70 years, while Ethiopia and Somalia faced their worst outbreak in approximately 25 years.	Conditions that perpetuated the situation - Heavy OND 2019 rainfall, the strong positive IOD and Cyclone Pawan provided moist sandy soils and persistent green vegetation. - Repeated breeding cycles in Ethiopia and Somalia, coupled with continued sources of locusts from inaccessible areas of Yemen, prolonged the emergency.	Progression The problem evolved from localized outbreaks into a regional upsurge, requiring extensive aerial and ground control.
4	2020–2021: Continued breeding but progressive suppression 	Desert Locust situation Successive generations continued, particularly in Ethiopia and Somalia, with recurrent swarm movements within the region.	Conditions that perpetuated the situation - Seasonal rainfall periodically restored breeding conditions, while insecurity and difficult access constrained surveillance and control in parts of Ethiopia, Somalia and Yemen. - At the same time, regional control capacity increased substantially.	Progression - Intensive surveillance and control reduced populations progressively. - FAO reported nearly 2.3 million ha were treated during 2020–2021 in targeted countries.
5	Late 2021–2022: Collapse of the regional upsurge 	Desert Locust situation Swarm numbers declined substantially and the GHA returned to recession conditions.	Conditions that perpetuated the situation - A combination of effective aerial/ground control and increasingly dry conditions disrupted breeding. - The severe Horn of Africa drought reduced green vegetation and suitable soil moisture.	Progression FAO subsequently declared the regional upsurge over; Kenya, Ethiopia and Somalia no longer faced an active regional-scale threat.
6	Mid-2023: Localized reactivation 	Desert Locust situation - Breeding occurred along the Eritrean Red Sea coast. - Adult groups moved into the highlands and subsequently into Afar and Tigray in Ethiopia; small immature swarms were reported in northern Ethiopia.	Conditions that perpetuated the situation - Localized rainfall and vegetation supported breeding in Eritrea. - As coastal vegetation dried, adults migrated towards more favourable areas in Ethiopia.	Progression The event remained comparatively small and localized, with targeted control preventing escalation into a regional upsurge.
7	Oct 2023–early 2024: Red Sea/ Gulf of Aden outbreaks 	Desert Locust situation Four outbreaks emerged in November 2023, followed by five active outbreaks in the Central Region by January–February 2024, including Eritrea, Somalia and Sudan, with some small swarms reaching Ethiopia.	Conditions that perpetuated the situation - El Niño and a positive IOD contributed to an earlier-than-normal winter breeding season and above-normal rainfall along the Red Sea and Gulf of Aden. - Two generations of winter breeding developed in some areas.	Progression - Despite second-generation breeding, expanded control operations and subsequent decline in rainfall and vegetation stopped escalation. - By April 2024 outbreaks had ended in Eritrea, Somalia and Sudan, and by June all outbreaks from the preceding winter/spring had ended.
8	Late 2024–early 2025: Sudan–Eritrea reactivation 	Desert Locust situation - A small outbreak developed in Sudan during October 2024. - By December, groups, bands and small swarms were present, with some populations migrating toward the Red Sea coast. - A small outbreak subsequently developed in Eritrea.	Conditions that perpetuated the situation - Seasonal summer breeding in Sudan generated populations that subsequently moved into winter breeding areas. - Suitable conditions along parts of the Red Sea coast allowed additional reproduction.	Progression By January–February 2025, groups and bands remained in Eritrea and groups, bands and small swarms persisted in Sudan, but the event remained much smaller than 2019–2021.
9	Mar–Aug 2023: Decline in the Horn 	Desert Locust situation - Populations persisted mainly in northern Sudan and the Nile Valley during early 2025, while activity in Eritrea declined. - By August only scattered adults were reported in Sudan within the Central Region.	Conditions that perpetuated the situation Below-normal rainfall and dry conditions across the Horn, southern Red Sea and Arabian Peninsula limited continued breeding.	Progression The centre of Desert Locust activity increasingly shifted westwards toward the Sahara and subsequently Mauritania and Western Sahara.
10	Late 2025–mid-2026: Shift away from the GHA 	Desert Locust situation - A substantial outbreak developed across Mauritania, Western Sahara and subsequently Morocco. - Only isolated or scattered locusts occurred periodically in Sudan and neighbouring Central Region countries.	Conditions that perpetuated the situation - Favourable rainfall and breeding conditions shifted geographically toward western and northwestern Africa. - Relatively dry conditions across East Africa and the Red Sea during much of mid-2026 constrained breeding in the Horn.	Progression The immediate infestation pressure on the GHA remained low, although climatic conditions were forecast to become more favourable later in 2026.

3. Overall Trend

The trajectory can therefore be summarized as:



A particularly important change since 2021 is that subsequent favourable breeding episodes have not translated into another GHA-wide upsurge. The 2023-2024 episode illustrates this clearly: favourable El Niño/IOD-driven rainfall supported two generations of breeding along the Red Sea and Gulf of Aden, but surveillance and control operations, followed by drying vegetation, interrupted further population growth. This contrasts with 2018-2020, when several consecutive breeding opportunities occurred across poorly accessible areas before populations were brought under effective control.

main gregarious activity was concentrated in the Western Region, particularly Morocco and parts of northwest Africa. This means the immediate infestation pressure within the GHA remained low entering the latter part of 2026, but the regional risk environment is changing as rainfall conditions become more favourable for vegetation regeneration and breeding in parts of the Horn.

4. Current Risk and Outlook – August 2026

Member states have reported a comparatively calm situation in the Greater Horn of Africa. FAO reported no locusts in the Central Region in July 2026, while the

ICPAC's regional climate outlook point to wetter conditions developing across the Horn from September and becoming more widespread during October-December 2026. The risk should therefore be interpreted dynamically: current locust populations in the Central Region are low, but ecological suitability is expected to increase. Heightened surveillance is warranted in traditional summer and winter breeding zones, particularly along the Red Sea and Gulf of Aden coastal plains and adjacent inland areas, so that any incoming or residual populations are detected before repeated breeding can lead to gregarization and swarm formation.



5. Contribution of IGAD Regional Coordination, Collaboration, Knowledge Sharing and Early Warning

IGAD's contribution to the reduction in high-intensity Desert Locust upsurges has primarily been preventive and enabling rather than a substitute for national surveillance and control operations. During the 2019-2021 emergency, IGAD convened Member States and regional partners to improve regional coordination, information exchange and joint preparedness. The 2021 Ministerial agenda subsequently institutionalized this approach through the Inter-Regional Platform for the Sustainable Management of Desert Locust and other Transboundary Pests, with explicit priorities on regional and inter-regional collaboration, timely and actionable early warning, shared risk assessment, contingency planning, capacity development and information sharing.

These mechanisms have progressively strengthened the region's ability to identify and manage risk before infestations reach crisis scale. IGAD facilitated the development of a transboundary pest management framework and joint coordination arrangements involving Djibouti, Ethiopia and Somalia; a cross-border coordination meeting between Ethiopia and Somalia/Somaliland to address breeding in Hargeisa and reduce the risk of onward invasion; Member State capacity development; Steering Committee oversight; and implementation of a knowledge-management and crisis-communication strategy. The IGAD Food and Nutrition Security Strategy 2025-2034 further notes that strengthened early warning, coordination and inter-regional cooperation helped avoid a major Desert Locust outbreak in 2023.

The practical value of this regional architecture is the reduction of information and coordination gaps that historically allowed locust populations to multiply across national borders. Faster sharing of field observations and forecasts, common interpretation of climate and pest risk, and sustained technical dialogue can shorten the interval between detection and response. This is particularly important for the Horn of Africa, where breeding areas and swarm trajectories frequently span Somalia, Ethiopia, Djibouti, Eritrea, Sudan and countries outside the IGAD region. The 2023 - 2024 pattern of localized outbreaks that did not escalate into another region-wide crisis is therefore consistent with the combined effect of improved preparedness and coordination, effective national and partner control, and periods of unfavourable breeding conditions.

The decline in regional Desert Locust intensity cannot be attributed to IGAD coordination alone. It reflects the interaction of national and international control operations, changing rainfall and vegetation conditions, and stronger regional early-warning, information-sharing and preparedness systems. IGAD's role is most appropriately understood as reducing transboundary coordination failures and supporting earlier collective action.

6. El Niño 2026 Forecast and Implications for Desert Locust Risk

The climate context for the remainder of 2026 requires heightened attention. ICPAC's OND 2026 regional outlook[1], released on 18 August 2026, indicates an increased likelihood of wetter-than-normal conditions across much of the Greater Horn of Africa as El Niño strengthens. The highest probabilities are indicated over eastern parts of the region, particularly eastern Kenya, Ethiopia, Eritrea, Djibouti and much of Somalia. The August 2026 Food Security and [1] IGAD Climate Prediction and Applications Centre. (2026, August 18). Technical statement from the 74th Greater Horn of Africa Climate Outlook Forum (GHACOF74). [ICPAC](#).

Nutrition Working Group (FSNWG) Special Report[1] on El Niño indicates that the ongoing event is expected to strengthen and persist into early 2027, with a 95 per cent chance of reaching strong or very strong intensity by late 2026. A likely positive Indian Ocean Dipole may further enhance rainfall over the eastern sector of the region.

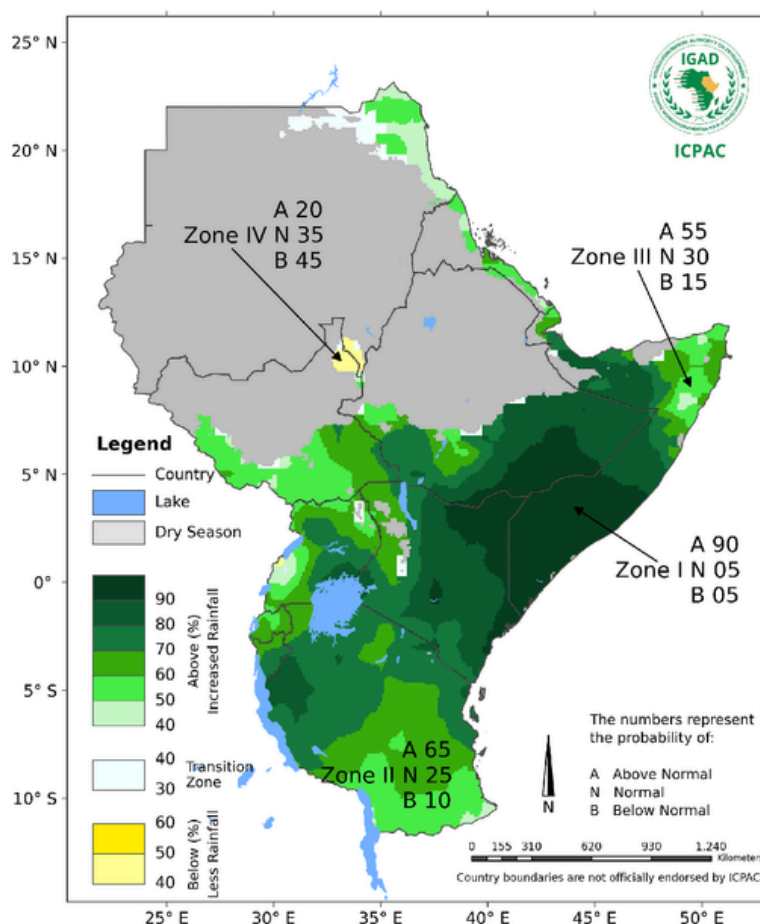


Figure 1: October-December (OND) 2026 Rainfall Outlook

[1] IGAD Climate Prediction and Applications Centre. (2026, August 18). Technical statement from the 74th Greater Horn of Africa Climate Outlook Forum (GHACOF74). [ICPAC](#).



For desert locusts, the primary implication is not El Niño itself but the ecological conditions it can generate. Sustained rainfall over sandy breeding areas can increase soil moisture, trigger green vegetation and prolong habitat suitability for egg laying and hopper development. The areas requiring particular attention include the Red Sea coastal plains, the Gulf of Aden corridor, northern and north-eastern Somalia/Somaliland, Djibouti, eastern and north-eastern Ethiopia, Eritrea and adjacent Sudan. If suitable rainfall occurs repeatedly and coincides with incoming or residual locust populations, successive generations can increase rapidly and create conditions for gregarization, hopper-band formation and eventual swarm development.

The current risk should nevertheless be described as elevated preparedness risk rather than evidence of an ongoing regional upsurge. FAO reported no locusts in the Central Region in July 2026, indicating a low starting population in much of the GHA. Escalation during OND 2026 would therefore depend on the arrival or survival of breeding populations, the spatial overlap of rainfall with suitable habitat, persistence of green vegetation, and whether field surveillance and control are able to interrupt breeding cycles early. Excessive rainfall and flooding may also create operational challenges by restricting access to remote breeding areas, which could delay detection and treatment.

Risk factor	OND 2026 implication	Operational response
 Above-normal rainfall	Improved soil moisture and vegetation may expand temporary breeding habitat.	 Increase ecological monitoring and field verification in known breeding zones.
 Strong El Niño / likely positive IOD	Raises probability of sustained wet conditions in eastern GHA; impacts remain spatially variable.	 Use weekly, sub-seasonal and national forecasts to update locust risk assessments.
 Low current Central Region populations	Reduces immediate probability of a large outbreak, but does not eliminate migration or localized breeding risk.	 Maintain routine surveys and rapid reporting; avoid reducing readiness because current numbers are low.
 Cross-border migration	Any emerging groups can move rapidly between countries with prevailing winds.	 Activate rapid cross-border alerts, trajectory analysis and coordinated surveillance.
 Flooding/access constraints	Remote breeding areas may become difficult to reach, allowing undetected multiplication.	 Pre-position surveillance arrangements, remote-sensing support and contingency access options.

[1] IGAD Climate Prediction and Applications Centre (ICPAC), Food Security and Nutrition Working Group (FSNWG). (2026, August 19). FSNWG special report: Strengthening El Niño conditions– Implications for rainfall, flood risk and food security in Eastern Africa. ReliefWeb. [ReliefWeb report](#)

7. IGAD-IFRAH Support to Member States

Consistent with IFRAH's mandate as a regional food security, nutrition and resilience analysis hub, and with the mandate of the Inter-Regional Platform for Sustainable Management of Desert Locust and other Transboundary Pests, IGAD's support is focusing on converting the El Niño forecast into coordinated preparedness and early action. The following support priorities are proposed to be implemented in coordination with Member States and other technical partners and subject to available resources.

SUPPORT AREA	IGAD-IFRAH SUPPORT	EXPECTED CONTRIBUTION TO MEMBER STATES
REGIONAL COORDINATION AND GOVERNANCE	Use the Inter-Regional Platform, Technical Working Group and Steering Committee mechanisms for frequent situation reviews, joint interpretation of risk and agreement on cross-border actions during the El Niño season.	Common regional situational awareness, clearer roles and faster coordination across borders.
INTEGRATED EARLY WARNING	Combine ICPAC climate forecasts, vegetation and soil-moisture monitoring, wind/trajectory information and national field reports into regular regional pest-risk updates.	Earlier identification of emerging breeding hotspots and decision-ready information for surveillance and control.
CROSS-BORDER INFORMATION SHARING	Facilitate rapid alerts and structured exchange of pest occurrence, swarm movement, control and ecological-condition data among neighbouring Member States, with priority to the Red Sea and Gulf of Aden corridors.	Reduced delays between detection in one country and preparedness in countries at risk of onward movement.



SUPPORT AREA	IGAD-IFRAH SUPPORT	EXPECTED CONTRIBUTION TO MEMBER STATES
PREPAREDNESS AND CONTINGENCY PLANNING	Support Member States to review risk maps, surveillance plans, response protocols, equipment and pesticide/biopesticide readiness, logistics and institutional escalation arrangements before the peak wet period.	Improved readiness to respond while populations remain small and manageable.
CAPACITY DEVELOPMENT AND TECHNICAL SUPPORT	Strengthen skills in remote sensing, ecological monitoring, field surveillance, trajectory interpretation, reporting, safe control approaches and use of digital early-warning tools.	More consistent national surveillance and stronger linkage between climate information and operational pest management.
KNOWLEDGE SHARING AND COMMUNICATION	Produce regional situation briefs and advisories; facilitate peer learning and south-south exchange; strengthen crisis communication and dissemination to government decision-makers, extension systems, communities and partners.	Improved uptake of early-warning information and more coherent public and institutional messaging.
PARTNER COORDINATION AND RESOURCE MOBILIZATION	Map preparedness gaps and coordinate technical and financing discussions with regional organisations, development partners and relevant research organizations to avoid duplication and mobilize support where national capacity is constrained.	Better alignment of regional support and more efficient deployment of limited preparedness resources.



SUPPORT AREA	IGAD-IFRAH SUPPORT	EXPECTED CONTRIBUTION TO MEMBER STATES
POST-SEASON LEARNING	Document outbreak evolution, response performance, cross-border lessons and effectiveness of early-warning triggers after the OND season.	Continuous improvement of regional protocols, preparedness plans and early-warning thresholds.

An immediate operational priority is to maintain a higher frequency of regional technical exchange as the OND rains become established. This would allow IFRAH and the Platform to track whether forecast rainfall is translating into actual breeding suitability, compare ecological signals with national ground observations, identify potential cross-border movement pathways, and issue coordinated recommendations before significant gregarization occurs. The IGAD High-Level Ministerial Forum on El Niño Preparedness (15-17 September 2026) also provides an opportunity to position transboundary pest preparedness within the broader regional anticipatory-action agenda.

This improvement should not be attributed to a single factor. National and partner control operations, adverse breeding conditions during key periods, and strengthened regional coordination and early warning all contributed. IGAD's added value has been particularly important in addressing the transboundary dimension of the threat by facilitating joint analysis, information exchange, cross-border coordination, preparedness and institutional learning so that localized outbreaks are less likely to develop unnoticed into regional crises. With a strong El Niño expected to influence the OND 2026 season, the priority is to protect the gains achieved since 2021 through intensified surveillance, rapid information exchange and anticipatory preparedness rather than waiting for large swarms to form.

8. Conclusion and Implications for Regional Preparedness

The trend since the 2019-2021 crisis indicates that Desert Locust risk in the GHA has shifted from a prolonged regional emergency to shorter, spatially localized and climate-sensitive outbreaks.

IGAD, through IFRAH and the Inter-Regional Platform for Sustainable Management of Desert Locust and other Transboundary Pests, can support Member States by linking ICPAC climate information with pest surveillance, facilitating joint risk assessments and cross-border alerts, strengthening contingency planning and capacity, and coordinating partners around identified preparedness gaps.



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