IGAD CLUSTER II
MARCH-MAY (MAM) 2026 SEASON FORECAST

Statement from the Intergovernmental Authority on Development (IGAD) Cluster II (Marsabit - Borena) Multi-Stakeholder Climate Outlook Forum for March-May 2026 Rainfall Season: 10—12 February 2026, Koket Hotel, Moyale, Ethiopia

March-MAY (MAM) 2026 SEASONAL FORECAST FOR IGAD CLUSTER II

1.   The Forum

The fifth IGAD sub-Regional Climate Outlook Forum (sub-COF5) for the March–April–May (MAM) 2026 rainfall season was held from 10 to 12 February 2026 at the Koket Hotel in Moyale, Ethiopia, under the theme "Advancing climate services, building community resilience, and contributing to sustainable development."

The forum focused primarily on the Marsabit–Borana cross-border region (IGAD Cluster II). However, the tailored MAM 2026 forecast, climate risk assessment, and co-production discussions also covered the Karamoja Cluster (IGAD Cluster I) and the Mandera Cluster (IGAD Cluster III). It brought together climate scientists, sector experts, planners, media, peace actors, development partners, and community representatives including women and youth from Ethiopia and Kenya. Participants also included representatives from IGAD specialized institutions (ICPAC, ICPALD) and the IGAD Cross-Border Development Facilitation Unit (CBDFU).

This forum is the fifth in a series of IGAD cluster-based climate outlook forums aimed at strengthening the use of downscaled, cluster-level tailored climate information for sector-specific planning and anticipatory action. The series began with the first forum in the Karamoja Cluster (IGAD Cluster I), held in Lodwar, Kenya, in February 2020, followed by the second and third forums in the Marsabit–Borana Cluster (IGAD Cluster II), convened in Moyale in March 2022 and March 2023, respectively. The fourth forum was held in the Karamoja Cluster (IGAD Cluster I) in Lodwar, Kenya, in February 2025.

2. Climate Risk Context

The impacts of climate change have become more apparent in the IGAD cross-border regions through increased frequency and intensity of extreme weather and climate events, mainly recurring and severe droughts, heat waves, and floods. For example, the communities experienced consecutive droughts from late 2020 to early 2023, resulting in widespread crop failure and the deaths of millions of livestock. This was a significant loss for the region, as livestock is a vital source of food, income, and transportation. Conversely, the El Niño event and the positive Indian Ocean Dipole (IOD) in October and November 2023 brought heavy rainfall to these regions, resulting in flooding.

Currently, communities in the cross-border areas of Marsabit, Borana, and Mandera are facing drought following the poor October–December 2025 rains. The failed agricultural and pastoral season has severely reduced crop yields and livestock productivity, heightening concerns over worsening food insecurity. The situation has been linked to a combination of La Niña conditions and an exceptionally strong negative Indian Ocean Dipole (IOD).

In addition, limited access to accurate and timely weather and climate information for early warning and disaster risk reduction, together with weak coordination mechanisms, continues to undermine livelihood sustainability and economic stability, particularly in IGAD's cross-border regions. Addressing the knowledge needs and capacity gaps of climate-sensitive sectors, response stakeholders, and the media is essential to ensure climate information and products are locally relevant and translated into effective and timely action.

In response, the sub-COF5 provided a much-needed platform to strengthen co-production processes and promote exchange and collaboration among pastoralist communities, climate information producers and users, and sectoral stakeholders across livestock, water, health, conflict, DRM, and agriculture. It has addressed the knowledge needs and capacity gaps of response actors, local journalists, and media practitioners to ensure climate information and products are locally relevant, trusted, and actionable. Additionally the forum bridged the critical "last-mile" gap between climate information and community action, enabling more timely and effective decisions on the ground.

3. Importance of the MAM Season

The MAM rainfall season, on average, brings up to 300 mm of rainfall over northern and eastern Marsabit (Godoma, Bultiye, Sololo, Uran, and parts of Bubissa, Maikona, and Dukana), while more than 300 mm is recorded in Dire and Moyale on the Ethiopia side of IGAD Cluster II. While MAM rainfall amounts in the IGAD cluster III range from 150 mm in the central area (e.g., Mandera East and Dolow) to 250 mm in the north (e.g., North Liben and Afder). This season contributes between 40% to 60% of the climatological annual total rainfall in most parts of the two clusters, reaching 80% in northeast part of the Mandera cluster.

4. MAM 2026 Climate Outlook

The downscaled IGAD Clusters MAM 2026 objective forecast (Figure 2) indicates slightly higher chances of wetter than usual conditions in IGAD cluster I (Karamoja cluster) and central to northern parts of Mandera cluster. Higher chances for normal to below normal conditions are predicted over most part of Marsabit-Borena and southern parts of Mandera cluster. Higher chances of wetter than usual conditions also indicated over the Northwestern part of Marsabit-Borena cluster, particularly in hamer and Teltele.

Analysis of the start of the rainfall season indicates the season is likely to start on time over most parts of the cluster except over areas in Marsabit and Mandera (Figure 3).

The seasonal temperature forecast for March–May (MAM) 2026 indicates an increased likelihood of warmer-than-average surface temperatures across IGAD Clusters I, II, and III (Figure 4). Enhanced probabilities (up to 60–65%) of above-normal temperatures are expected over most parts of the Marsabit–Borana cluster, and Eastern parts of the Mandera cluster. Elevated temperatures may increase evapotranspiration rates, exacerbate moisture stress, and heighten risks to water resources, livestock health, and human well-being, particularly in areas already affected by drought.

In view of normal to below-normal rainfall in some areas may prolong drought, reducing pasture and water availability and undermining livestock health and milk production. Above-normal temperatures could intensify heat stress and increase the risk of heat-related illness and vector-borne diseases. Conversely, above-normal rainfall in other areas may improve crop and pasture conditions and water availability, but could also heighten the risk of flooding. As the Marsabit–Borana region faces increasing climate variability and extremes, Sub-COFs remain vital platforms for regional collaboration, risk assessment and management, and resilience-building.

ICPAC urges Member States, cross-border actors, and humanitarian and development partners to use the regularly updated ICPAC sub-regional seasonal outlook, alongside national and sub-national forecasts issued by NMHSs, to inform timely, risk-based decisions and early action.

The objective rainfall and temperature and rangeland outlook for IGAD Cluster I, II and III are given below:
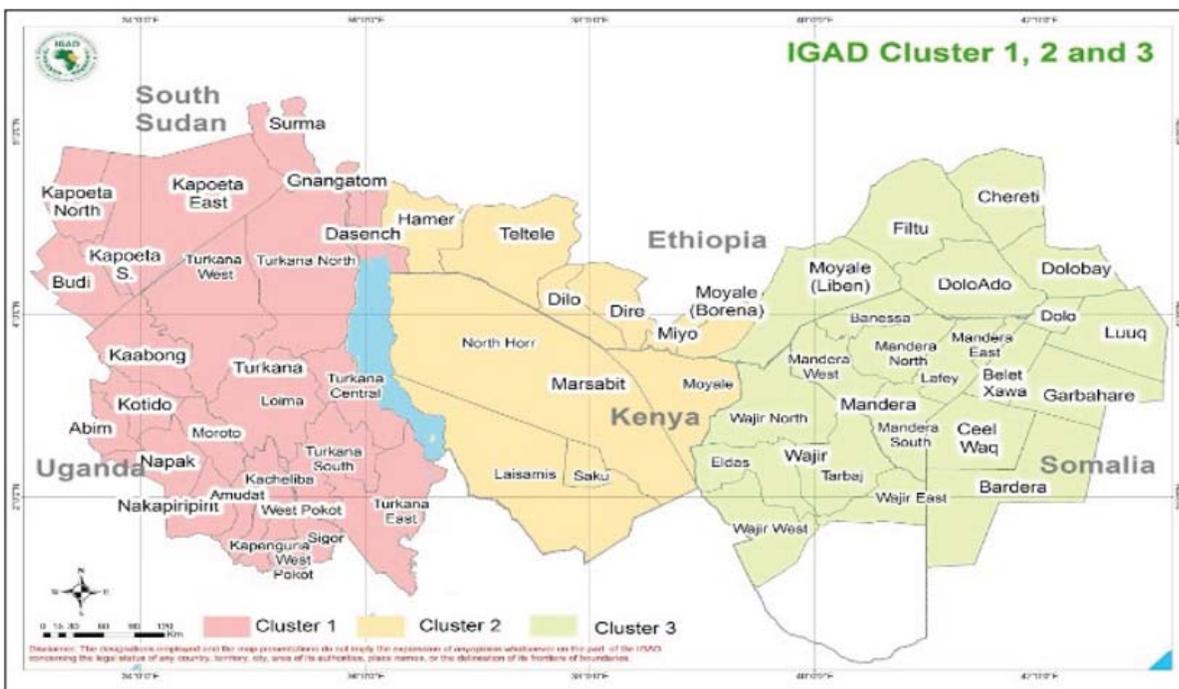

Figure 1: Map illustrating the spatial extent of the three IGAD climate clusters (Cluster I, Cluster II, and Cluster III).
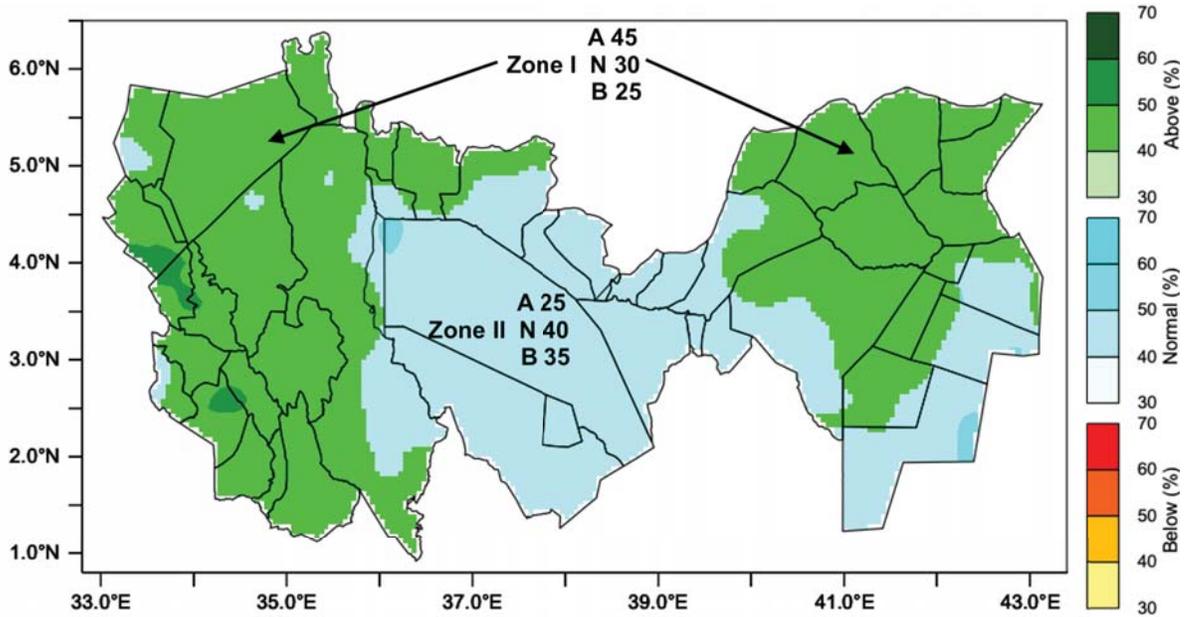
Figure 2: Objective Rainfall Outlook for the March to May 2026 Rainfall Season.

Zone I (light green): In this Area, highest probability is for above normal category (45%). The probabilities for normal and below normal categories are 30% and 25%, respectively.

Zone II (cyan): The probability of normal category is 40%, while the probabilities for above and below normal categories are 25% and 35%, respectively.
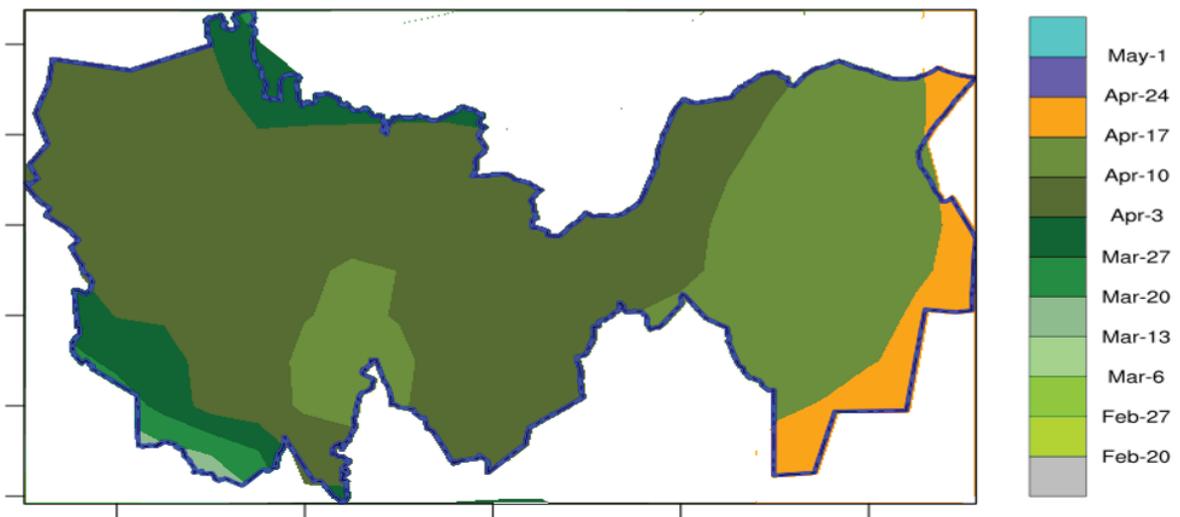

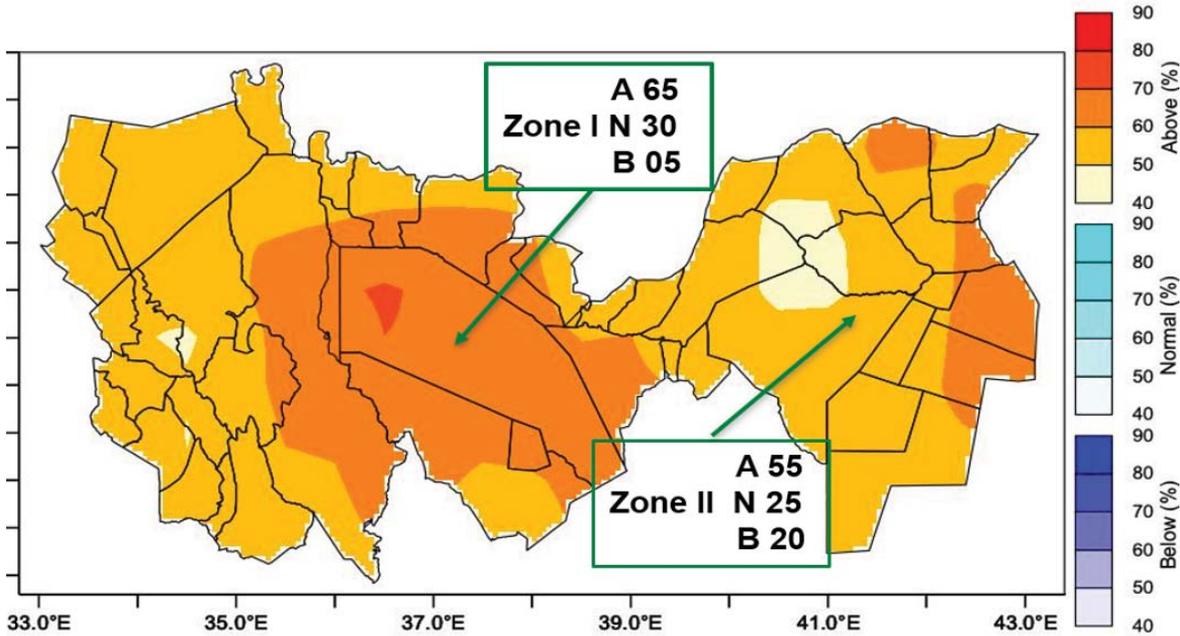Figure 3: Forecasts of the Start of MAM 2026 Season in IGAD Clusters.

Figure 4: Probability forecast of mean surface temperatures for March to May 2026.

Zone I: In this area the highst probability is for above (65%). The probabilities for normal and below normal are 30% and 05%, are valid for the corresponding shading interval (dark orange).

Zone II: In this Area the highest probability is for above normal (55%). The probabilities of normal and below normal are 25% and 20%, respectively.

Note: The numbers for each zone indicate the probabilities of rainfall and mean temperature in each of the three categories, above-, near-, and below-normal. For example, in Zone I, Figure 2, there is a 45% probability of rainfall occurring in the above- normal category; a 30% probability of rainfall occurring in the near-normal category; and a 25% probability of rainfall occurring in the below-normal category. In Zone I, (Figure 4), the dark orange shading indicates a 65% probability of mean temperature occurring in the above-normal (i.e., warmer) category; 30% probability of mean temperature occurring in the near-normal category; and a 5% probability of mean temperature occurring in the below-normal (i.e., cooler) category.
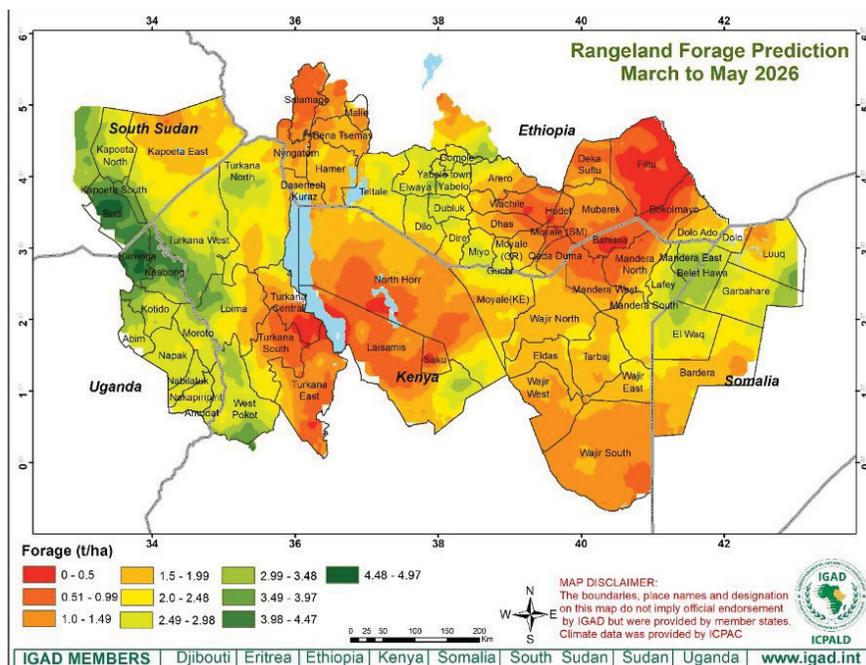

Figure 5: Seasonal Rangeland Forage Prediction (March-May 2026)

SECTOR IMPLICATION AND ADVISORIES FOR THE EXPECTED MARCH TO MAY 2026 RAINFALL SEASON IN IGAD CLUSTER II

Agriculture

Impacts

The MAM 2026 agriculture and food security outlook for the Moyale cluster indicates that near-normal rains and favourable wet conditions are expected to support crop production, particularly wheat, maize, and teff in the highland areas, while also creating increased labour opportunities for youth and women through kitchen gardening and micro-irrigation. Improved seasonal conditions may reduce migration, lower school dropout rates, and enhance household incomes and food security, with added opportunities for crop diversification and expansion of vegetables, beans, and other short-cycle crops.

However, the season also presents major risks, including increased prevalence of crop pests and diseases (FAW, African armyworm, aphids, MLND, teff shoot fly), possible moisture stress and crop failure in some areas, rising food prices due to supply constraints, rural–urban migration, heat stress impacts on crops and human health, and escalating human–wildlife conflict leading to crop damage.

Advisories

- Strengthen early warning dissemination and timely agronomic action, including early land preparation and planting immediately at rainfall onset (expected early April) using multimedia communication channels.
- Promote climate-smart cropping strategies, such as short-maturing crops (beans, cowpeas, vegetables) and adoption of drought-tolerant, certified varieties (e.g., Katumani, Melkassa-4 maize; Boset teff).
- Scale up water harvesting and sustainable soil management, including zai pits, farm ponds, earth dams, roof catchments, mulching, crop rotation, and cover cropping to reduce erosion and evapotranspiration losses.
- Ensure timely input supply and pest/disease preparedness, through pre-positioning seeds, fertilizers, pesticides, and strengthening surveillance and early control of major crop pests and diseases.
- Expand livelihood, financial, and social protection support, including farmer credit access, crop insurance, off-farm income activities, strategic food reserves, humanitarian assistance, cash transfers, subsidies, and school feeding programs.

Water

Impacts

The March–May (MAM) 2026 water outlook for Marsabit and Borana indicates mixed impacts, with a possibility of limited recharge of surface and groundwater sources (water pans, dams, rock catchments, boreholes, and shallow wells), which could slightly improve water availability and reduce trekking distances, water costs, water-related diseases, and even visible social stresses such as conflict, GBV risks, and school absenteeism.

However, the season also carries significant downside risks, including insufficient recharge leading to declining water access as the season progresses, rising borehole operation and maintenance costs, increased vulnerability to waterborne disease outbreaks due to poor sanitation, heightened internal and cross-border migration with potential conflict and GBV, possible school dropouts, and increased human–wildlife conflict in the search for water.

Advisories

- Strengthen community awareness and preparedness on the expected MAM 2026 seasonal outlook to support early action and reduce risks.
- Scale up rainwater harvesting readiness at household and institutional levels through distribution of storage tanks, gutters, and improved catchment systems.
- Rehabilitate and protect key water infrastructure by de-silting water pans/dams and ensuring drainage channels in towns are unclogged to prevent flooding and maximize water capture.
- Preposition borehole repair capacity and emergency supplies, including fast-moving spare parts, servicing of water trucking equipment.
- Improve water safety and coordination mechanisms through stockpiling water treatment chemicals, activating sector technical working groups, and sustaining IWRM measures for long-term recharge protection.

Livestock

Impacts

The forecast of wetter-than-normal to normal-wetter conditions across much of western Kenya, Uganda, South Sudan, Ethiopia, and parts of Somalia is expected to significantly improve pasture regeneration and water availability, enhancing livestock body condition, milk production, reproduction, and overall productivity—particularly in cross-border areas projected to record relatively high forage biomass (>2.49 t/ha). Improved forage and water access will likely reduce livestock mobility, strengthen food and feed security, improve herd productivity and ease resource-based conflicts. However, excessive rainfall in some areas may trigger flooding, waterborne and vector-borne diseases, infrastructure damage, and grazing inaccessibility, leading to localized livestock losses and market disruptions.

Conversely, areas expected to receive below-normal rainfall—including parts of coastal Kenya, southern Ethiopia (including areas around Quadaduma, Hudet, Mubarak, Moyale), northern/eastern Kenya (including Marsabit, Mandera, and Wajir, and parts of Turkana), southern Somalia, and Kapoeta East in South Sudan and localized cross-border zones with low forage biomass (<2.0 t/ha)—may experience deteriorating pasture and water conditions, increased livestock movement and mortality, declining productivity and prices, heightened disease risk, and increased competition over scarce resources, particularly affecting vulnerable pastoral communities.

Advisories

- Strengthen livestock disease surveillance, vaccination campaigns, and parasite control in wetter areas to mitigate waterborne, vector-borne, and transboundary animal diseases.

- Promote water harvesting, pasture conservation (hay/silage making), and strategic forage storage in high biomass areas to prepare for potential dry spells.
- Implement flood preparedness measures, including early warning dissemination and protection of critical infrastructure (roads, water points, markets).
- Support supplementary feeding, strategic destocking, and timely market off-take in below-normal rainfall areas to reduce livestock losses and stabilize household incomes.
- Enhance cross-border resource management coordination to minimize grazing pressure and conflict over pasture and water, particularly in drought-prone zones.
- Provide targeted support to vulnerable households (especially women and children) through water access interventions, animal health outreach, and livelihood diversification programs for below-normal rainfall areas.

Disaster Risk Management

Impacts

The MAM 2026 Disaster Risk Management (DRM) outlook for the Moyale cross-border zone highlights the importance of monitoring rainfall and vegetation performance following the Long Rains 2025 and Short Rains 2025 seasons. The forecasted season presents a range of likely risk factors, scenarios, and impacts that may affect vulnerable communities, particularly through climate-driven shocks linked to rainfall variability, vegetation conditions, and associated hazards.

While the presentation emphasizes seasonal performance tracking, it underscores the need for preparedness against potential climate-related risks that could influence livelihoods, natural resource stability, and cross-border disaster response coordination.

Advisories

- Strengthen seasonal monitoring of rainfall and vegetation performance to detect emerging drought or flood risks early and trigger timely action.
- Enhance cross-border coordination and contingency planning between Moyale Kenya and Ethiopia to manage shared disaster risks and resource pressures.
- Implement anticipatory preparedness measures for climate-related shocks, including pre-positioning of emergency supplies and rapid response mechanisms.
- Support community-based DRM and early warning communication, ensuring that local stakeholders receive and act on seasonal forecast information.
- Integrate risk scenario planning into sectoral response strategies, linking DRM actions with agriculture, water, livestock, and conflict-sensitive interventions.

Peace and security

Impacts

The MAM 2026 season outlook for the Climate-Induced Conflicts and Displacement sector highlights a mix of stabilizing and destabilizing dynamics across IGAD Cluster II. On the positive side, improved seasonal conditions may support livelihood diversification, increased school enrolment through access to meals, reduced raids particularly in the first 30 days, stronger interdependence among communities shaped by recurrent drought, and enhanced cross-border peacebuilding and social integration initiatives.

However, significant negative impacts remain likely, especially during the onset of the rains, including water- and livestock-related cross-border conflicts, agriculture-related disputes, food insecurity-driven stock theft, increased engagement in harmful alternative livelihoods such as illegal mining and charcoal burning, pastoralist–agropastoralist tensions, human–wildlife conflicts, heightened raids, livestock losses, and displacement pressures such as movement from mining zones to urban centres and overcrowding in IDP camps.

Advisories

- Safeguard Water Access and Reduce Resource-Based Tensions: Prioritize rapid rehabilitation and maintenance of critical water infrastructure, including water trucking where necessary, repair of borehole pumps, and desilting of water pans and dams. Protect and regulate access to traditional wells and strategic water points through locally agreed management systems to minimize competition and water-related conflict.
- Strengthen Early Warning and Cross-Border Peace Coordination: Enhance dissemination of seasonal forecasts, early warnings, and impact-based advisories to local authorities, security actors, and communities in accessible formats. Activate and support cross-border peace committees and customary institutions to anticipate and de-escalate resource-based tensions, particularly in hotspot grazing and migration corridors.
- Address Food and Livelihood Pressures to Prevent Conflict Escalation: Reduce food insecurity–driven risks through timely and transparent food assistance, targeted cash transfers, and coordinated livestock offtake programs. Scale up animal feed and veterinary support to protect core breeding stock and stabilize pastoral livelihoods, using a multi-sectoral and conflict-sensitive approach.
- Promote Community Dialogue and Prevent Harmful Coping Mechanisms: Intensify community sensitization through local radio, barazas, and inclusive dialogue platforms to discourage cattle raiding, stock theft, and environmentally destructive coping strategies such as illegal mining and charcoal production. Strengthen locally led conflict resolution and mediation structures.
- Mitigate Pastoralist–Farmer and Human–Wildlife Conflict Risks: Support negotiated grazing arrangements and clearly defined water access systems for humans, livestock, and wildlife. Improve coordination between community institutions, wildlife authorities, and security actors. Where feasible, advance long-term investments in climate-resilient water infrastructure (e.g., strategic water reservoirs and mega dams) to reduce chronic competition over scarce resources.

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The Fifth Sub-Regional Climate Outlook Forum (Sub-COF5) for IGAD Cluster II (Marsabit–Borana Cluster) was jointly organized by IGAD's Climate Prediction and Applications Centre (ICPAC), the IGAD Centre for Pastoral Areas and Livestock Development (ICPALD), the Kenya Meteorological Department (KMD), the Ethiopian Meteorological Institute (EMI), and Norwegian Capacity (NORCAP). The forum was supported through the Weather and Climate Information Services Pan-African Seasonal Strengthening (WISER-PASS) programme, funded by the UK Government's Foreign, Commonwealth and Development Office (FCDO); Strengthening Pastoral Livelihoods in the African Greater Horn through Effective Anticipatory Action (PASSAGE), funded by IDRC and FCDO; and Human Mobility in the Context of Disasters and Climate Change (MoDiaC), funded by the German Federal Ministry for Economic Cooperation and Development (BMZ). Contributors included climate scientists and sector experts from national, regional, and international institutions, including ICPAC, ICPALD, NORCAP, Alliance Bioversity International - CIAT, and WMO Global Producing Centres (GPCs).