



## Enhancing the Uptake of Climate Early Warning Information and Early Response Capacity in the Karamoja Cluster



24-26 February 2020

Lodwar, Kenya

March 2020

ICPAC, Kenya



## **1. Introduction**

Climate variability and change is one of the controlling factors of socioeconomic activities and livelihoods in most parts of the Greater Horn of Africa (GHA). More than two-thirds of the IGAD region is considered arid and semi-arid lands (ASAL) and suffer periodical climate related shocks. However, in remote drought-prone cross-border regions the use of weather and climate information to combat the negative effects of climate variability and climate change is low due to structural, knowledge, accessibility and availability gaps, which disrupts the economic and social stability and sustainability of livelihoods. In addition, for effective early warning and disaster risk management applications, weather and climate information and products should be locally relevant, properly interpreted, packaged and disseminated, and knowledge and capacity gaps of response stakeholders appropriately addressed.

To address some of the challenges faced in the IGAD cross-border regions, the IGAD Climate Prediction and Applications Centre (ICPAC), in collaboration with other IGAD entities, conducted a Stakeholder Engagement Climate Forum from 24-26 February 2020 to enhance the access and use of value-added climate prediction services for the March-May 2020 rainfall season to pastoral communities in the IGAD Cluster I (Karamoja Cluster) sub-region. The forum brought together sub-regional participants from Ethiopia, Kenya, South Sudan, and Uganda including planners, media representatives, climate producers, and users in the agriculture, water, and livestock sectors, and regional experts from the IGAD offices and international and regional humanitarian institutions. Advisories were disseminated for climate-sensitive sectors through media and local, sub-regional and regional actors and intermediaries.

The Stakeholder Engagement Climate Forum was co-organized by ICPAC, through the WISER Support To ICPAC Project (W2SIP), and IGAD Cross Border Development Facilitation Unit (CBDFU). Financial support for the forum was provided by the German International Zusammenarbeit (GIZ). W2SIP and its implementation partner (CARE Kenya) and the WISER Support to South Sudan and Somalia Project provided facilitation and technical support including high-resolution sub-regional seasonal climate outlook for MAM 2020 rainfall season.

## 2. The Forum

The IGAD Cluster I (Karamoja Cluster) sub-region is one of IGAD's cross-border clusters conjoining arid and semi-arid border areas of Ethiopia, Kenya, South Sudan, and Uganda. The cluster experiences high rainfall variability and frequent droughts. The average annual total rainfall barely exceeds 1000 mm. The scarce availability of water and fodder for livestock usually leads to conflicts across boundaries. In such conditions, accessibility, availability, and use of timely and reliable weather and climate information and services are crucial for economic and social stability and development.

Addressing the needs of communities in the *IGAD Cluster I* (Karamoja Cluster) cross-border sub-region, a Stakeholder Engagement Climate Forum was held from 24-26 February 2020 at the Stegra Hotel, Lodwar, Kenya, to increase the early response capacity and enhance the uptake of downscaled climate early warning information and products for March-May 2020 rainfall season. The forum was the first of its kind to employ cluster-level downscaled climate information and products to assess the impact of upcoming seasonal climate on migration and conflict and co-develop advisories in livestock, agriculture, and water sectors at sub-regional level.

The forum was attended by media representatives, planners, and socio-economic actors and sectoral experts from Ethiopia, Kenya, South Sudan and Uganda. Regional stakeholders and experts from ICPAC, IGAD Cross Border Development Facilitation Unit (CBDFU), IGAD Centre for Pastoral Areas and Livestock Development (ICPALD), Conflict Early Warning and Response Mechanism (CEWARN), GIZ, and National Coordinators of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) led the development of advisories and early warning products. The IGAD Cluster I sub-region comprises of Karamoja (Uganda), Turkana and West Pokot (Kenya), Greater Kapoeta (South Sudan), and Nyangatom, Dasenech and Surma (Ethiopia) cross-border districts/counties/woredas. The forum statement and sector advisories were read by the Disaster and Risk Management Director of Turkana County (Kenya) at the official closing of the event. Action documents were further disseminated to reach all stakeholders through media and local and regional offices in the four countries.

### **3. Objectives**

The objectives of the Stakeholder Engagement and Climate Forum are to enhance the use and uptake of tailored climate early warning information and improve the response capacity of stakeholders and development actors in the IGAD Cluster I sub-region. In particular, the forum aims to increase awareness, provide contextual and thematic interpretation relevant for sectoral applications, improve access of relevant weather and climate information to pastoral communities, and engage sectoral professionals and response officials to facilitate dialogue and enhance understanding on use of climate information and services in the cluster.

### **4. Seasonal Outlook Summary**

ICPAC's objective forecast downscaled for IGAD Cluster I indicates higher chances of wetter conditions in most parts of the cluster during March-May (MAM) 2020. Accordingly, high chances for wetter than normal rainfall are anticipated in Kaabong (Uganda), Northwestern Turkana (Kenya), Nyangatom Surma, and Dasenech (Ethiopia). In addition, the western parts of the cluster from West Pokot (Kenya) through Kaabong to Greater Kapoeta (South Sudan) are likely to experience earlier than normal start of the MAM 2020 season. The sub-region will experience warmer than normal temperatures through the season. Noting that there was abundant rainfall during October – December 2019 and considering that the coming MAM 2020 rainfall season is anticipated to be wet, all stakeholders are called upon to use the information appropriately to maximise productivity but also be keen to mitigate any potential risks such as floods and landslides that are usually associated with wetter seasons.

### **5. Sector Implication and advisories for the March to May 2020 rainfall season in the IGAD cluster I sub-region**

#### **a) Agriculture**

- With the expected early onset of rains, land preparation should begin towards end of February and early March.

- Farmers should consider using improved certified seeds to increase production and productivity.
- Farmers should be prepared for above normal rainfall which requires implementing pest and diseases management practices.
- It is expected that low land areas will experience flash floods. This necessitates implementations of farming practices such as sustainable land management.

## **b) Livestock**

- Encourage pasture development, harvesting and conservation for future use
- Water harvesting is recommended
- Encourage trade in pastures between areas with plenty and areas with deficit
- Surveillance, prevention and control measures should be undertaken for diseases such as Foot and mouth disease (FMD), Peste des Petit Ruminante (PPR), Vector borne (tick and tsetse fly). etc.
- Identify areas with adequate natural resources to avoid haphazard movements.
- Organize cross border dialogue meetings on access and sharing of natural resources as mobility from Turkana and West Pokot to Karamoja is expected
- Concerned governments to beef up security in grazing areas, joint kraals and watering points.

## **c) Conflict**

The anticipated above normal rains in the sub-region are expected to provide adequate pasture and water in the pastoral areas, hence;

- Encourage minimal movements of pastoralists in search for water and pasture.
- Conflicts associated with movements and crowding around the limited resource areas will dissipate.
- Livestock theft should be discouraged at the time of return from common grazing areas through dialogues to enhance coexistence

- Revitalise and strengthen peace committees amongst other interventions in preparation for future anticipated conflict incidences related to wetter conditions.
- Observe and respect grazing plans
- Monitor and stop revenge and counter attacks
- Livestock herders to observe and respect cultivated lands

#### **d) Water**

- Those in flood and landslide prone areas to prepare for relocation before onset of rains.
- Desilting of water pans to be done before the onsets.
- Put in place mechanisms for water harvesting.
- Open up drainage systems in cities and towns.
- Install lightening arresters on buildings in prone areas.

## **6. Discussion, Lesson Learned and Way Forward**

The forum was characterized by two-way communication and constructive dialogue. Sessions were centered around the users to ensure enrichment of materials through participatory discussion and activities. Terminologies were discussed from the user perspectives and, where possible, through participatory activities. General aspects of climate variability and climate change and associated impacts were discussed in simple understandable ways, linking salient features with what is experienced locally and to what NMHS representatives from Ethiopia, Kenya, and South Sudan presented and discussed. The seasonal climate outlook was delivered interactively. Group discussions in breakout sessions provided critical inputs for plenary meetings at which the implications of the anticipated seasonal climate were assessed, mitigation strategies designed, and sectoral advisories developed.

One of the most significant practices initiated in this forum was the use of digital forecast data for the assessment of the impacts of the forecast in livestock and conflict. In this regard, ICPALD (livestock) and CEWARN (conflict) were provided with digital forecasts in advance of the forum for use in their in-house models.

Although currently at early stages, ICPALD and CEWARN were able to overlay past historical and forecast data to assess the impact of the forecast in livestock and conflict. It was recommended that the use of digital forecast data be continued and more efforts exerted to develop objective methods and tools to advance early warning applications.

Overall, the forum was evaluated positively by participants. Except for three participants who marked the forum to have low impact in their field of work and considered the forecast and advisories not useful or not needed, 40 out of 43 respondents (93%) graded the climate outlook, group break outs sessions, baseline information, interactive exercises, and final advisories useful or very useful. The same proportion of respondents also believed the forum had medium to high impact in their field of work. Participants further recommended that such events be held for a longer duration and much in advance of the start of a season to give decision makers enough time to incorporate the advisories and recommendations in their implementation plans. We believe that such downscaled climate early warning information and advisories would be more useful and actionable at sub-regional levels and should be continued immediately after GHACOFs.

## **Contributors**

Financial support for the conference was provided by the German International Zusammenarbeit (GIZ). The WISER Support to ICPAC Project (W2SIP) with its implementation partner (CARE Kenya) and the WISER Support to South Sudan and Somalia Project provided facilitation and technical support including high-resolution sub-regional climate outlook for MAM 2020 rainfall season. Sector-specific advisories and early warning products were co-developed with contributions from ICPAC, CBDFU, ICPALD, CEWARN, and representatives of NMHSs, media, agriculture, livestock, water, and conflict from the cross-border areas of Ethiopia, Kenya, South Sudan and Uganda.

Photo: Group discussion on seasonal forecast implications at the Stakeholder Engagement Climate Forum in Lodwar, Kenya.





## **ANNEX I**

### **STATEMENT FROM THE FIRST INTERGOVERNMENTAL AUTHORITY ON DEVELOPMENT (IGAD) CLUSTER I MULTI-STAKEHOLDER CLIMATE FORUM FOR MARCH-MAY 2020 SEASON: 24-26 FEBRUARY, 2020; STEGRA HOTEL, LODWAR, KENYA**

#### **Summary: Climate Outlook for March to May 2020**

Consistent with GHACOF54 Objective Forecast, the cluster-level downscaled regional objective forecast indicates higher chance of wetter conditions in most parts of the IGAD Cluster I (Karamoja, Turkana, West Pokot, Greater Kapoeta, Nyangatom, Dasenech and Surma) during March to May 2020. Higher probability for wetter than normal rainfall is anticipated in Kaabong (Uganda) and Northwestern Turkana, Surma, Nyangatom and Dasenech. In addition, the western parts of the cluster from West Pokot (Kenya) through Kaabong (Uganda) to Greater Kapoeta in South Sudan is likely to experience earlier than normal start of the MAM 2020 season. The cluster is also expected to experience warmer than normal temperatures through the season.

#### **The IGAD Cluster I Multi-Stakeholder Climate Forum**

The IGAD Cluster I Multi-Stakeholder Climate Forum was held at Stegra Hotel, Lodwar, Kenya, from 24-26 February 2020. The forum was attended by sector representatives from member states (Kenya, Ethiopia, South Sudan and Uganda) and IGAD specialized institutions (ICPAC, ICPALD, CEWARN), Planning Coordination and Partnership Division of IGAD and development partners. This forum is the first of its kind to use cluster-level downscaled climate information and products and engage users from sectors including livestock, agriculture, and water sectors as well as planners, media and peace actors. The forum also assessed the anticipated impacts of the expected seasonal climate on various sectors and the corresponding mitigation measures.

## March – May 2020 Climate Outlook

The objective Rainfall and Temperature Outlook for IGAD Cluster 1 are given below:

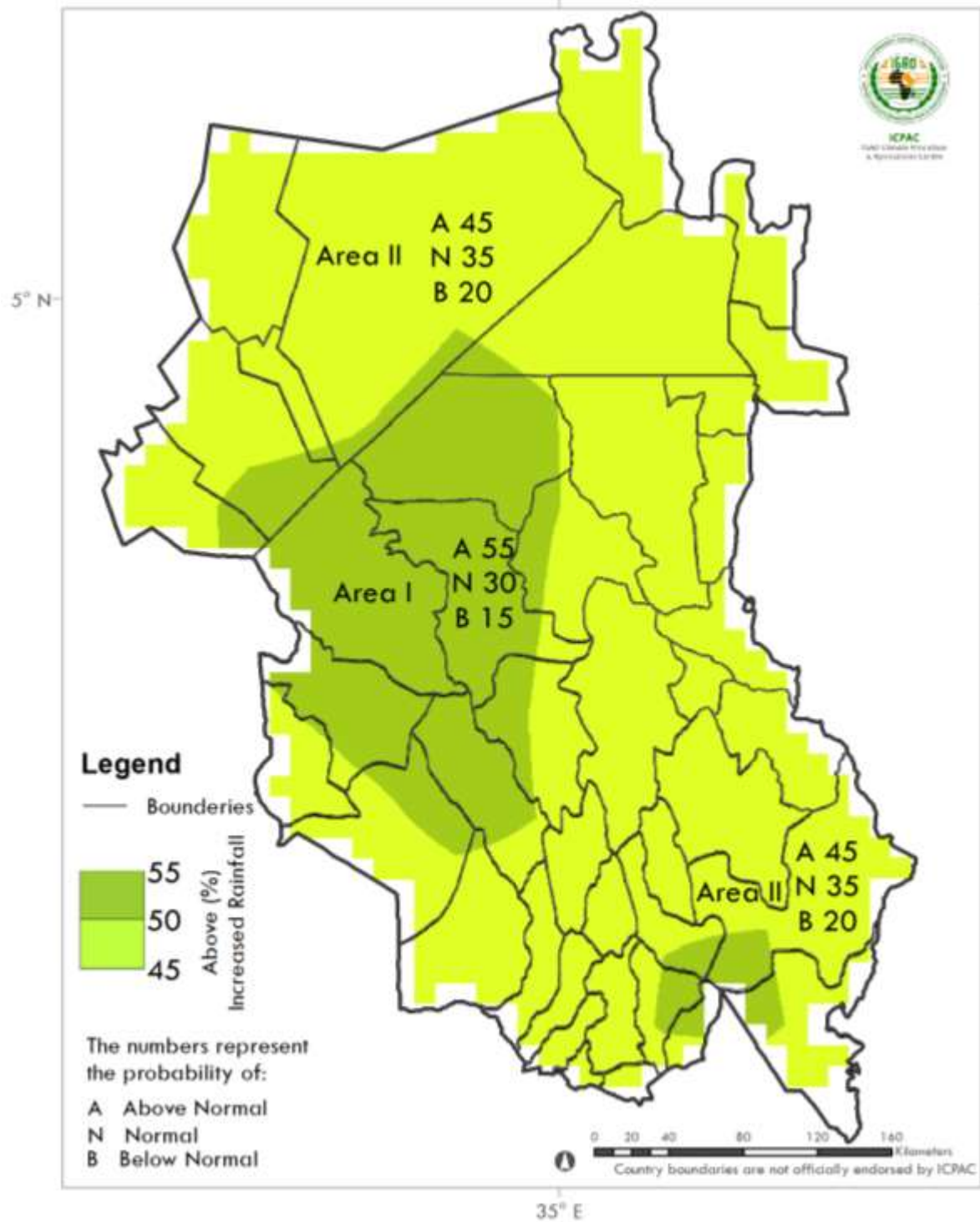
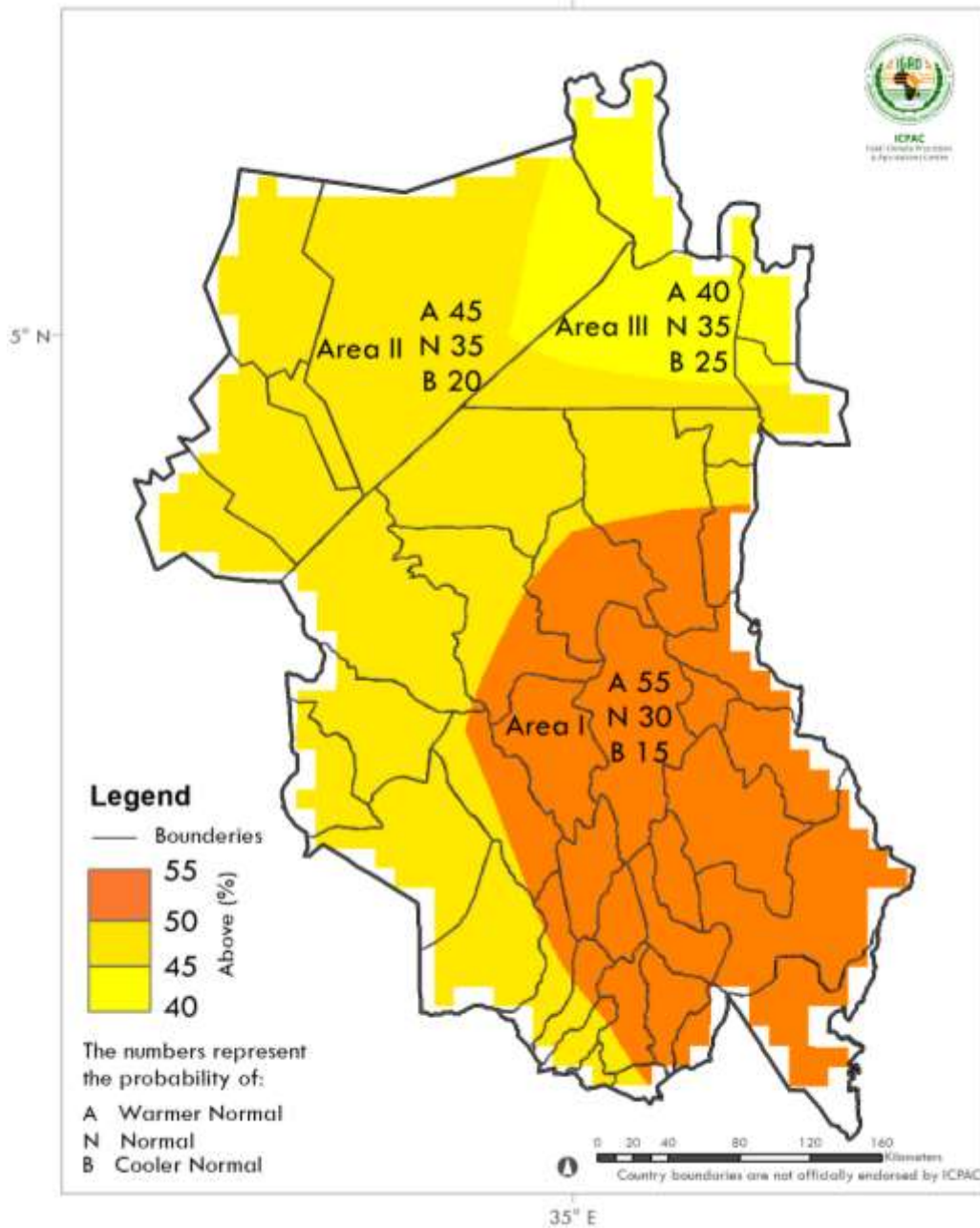


Figure 1: IGAD Cluster I Objective Rainfall Outlook for the March to May 2020 rainfall season

**Area I** in Figure 1 indicates that the highest probability is for above normal rainfall (55%). The probabilities for normal and below normal are 30% and 15% respectively.

**Area II** in Figure 1 indicates that the highest probability is for above normal (45%). The probabilities of normal and below normal are 35% and 20% respectively.



**Figure 2: IGAD Cluster I Objective Temperature Outlook for the March to May 2020 season**

In Figure 2, **Area I** represents increased likelihood of above normal (i.e., warmer) mean temperatures. The probabilities shown in **Area I** (above = 55%; normal = 30%; below = 15%) are valid for the corresponding shading interval (dark orange). Similarly, above normal mean temperatures (i.e., warmer) are expected in **Area II** (above = 45%; normal = 35%; below = 20%) in the orange shading, and **Area III** with slightly lower above normal probability (above = 40%; normal = 35%; below = 25%) in the yellow shading.

*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 Area I, Figure 1, there is a 55% probability of rainfall occurring in the above-normal category; a 30% probability of rainfall occurring in the near-normal category; and a 15% probability of rainfall occurring in the below-normal category. In Area I, Figure 2, the dark orange shading indicates a 55% probability of mean temperature occurring in the above-normal (i.e., warmer) category; up to 30% probability of mean temperature occurring in the near-normal category; and a 15% probability of mean temperature occurring in the below-normal (i.e., cooler) category. The boundaries between Areas should be considered as transition areas.*

## **Sector Implication and advisories for the expected March to May 2020 rainfall season in IGAD cluster I:**

### **Agriculture**

- With the expected early onset of rains, land preparation should begin towards end of February and early March.
- Farmers should consider using improved certified seeds to increase production and productivity.
- Farmers should be prepared for above normal rainfall which requires implementing pest and diseases management practices.
- It is expected that low land areas will experience flash floods calling for farming practices such as sustainable land management practices.

## **Livestock**

- Encourage pasture development, harvesting and conservation for future use
- Water harvesting is recommended
- Encourage trade in pastures between areas with plenty and areas with deficit
- Surveillance, prevention and control measures should be undertaken for diseases such as Foot and mouth disease (FMD), Peste des Petit Ruminante (PPR), Vector borne (tick and tsetse fly) etc.
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- Organize cross border dialogue meetings on access and sharing of natural resources as mobility from Turkana and West Pokot to Karamoja is expected
- Concerned governments to beef up security in grazing areas, joint kraals and watering points.

## **Conflict**

The anticipated above normal rains in the IGAD Cluster I are expected to provide adequate pasture and water in the pastoral areas, hence;

- Encourage minimal movements of pastoralists in search for water and pasture.
- Conflicts associated with movements and crowding around the limited resource areas will dissipate.
- Livestock theft should be discouraged at the time of return from common grazing areas through dialogues to enhance coexistence
- Revitalise and strengthen peace committees amongst other interventions in preparation for future anticipated conflict incidences related to wetter conditions.
- Observe and respect grazing plans
- Monitor and stop revenge and counter attacks
- Livestock herders to observe and respect cultivated lands

## **Water**

- Those in flood and landslide prone areas to prepare for relocation before onset of rains.
- Desilting of water pans to be done before the onsets.
- Put in place mechanisms for water harvesting.
- Open up drainage systems in cities and towns.
- Install lightening arresters on buildings in prone areas.

**In conclusion, given that there was abundant rainfall during October – December 2019 and that the coming March – May 2020 is anticipated to be wet, all stakeholders are called upon to use the information appropriately to maximise productivity but also be keen to mitigate any potential risks such as floods and landslides that are usually associated with wetter season.**

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