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Weather and Climate Information and
Services into use for Health: The role of
County Meteorological Directors in Kenya





INTRODUCTIONS: OBJECTIVES

Briefing Paper

- Part of the WISER programme
- Rose Ochieng from NIRAS Africa Limited and Virginie Le Masson from Overseas Development Institute (ODI)

Objectives

- To better understand the role of the County Directors of Meteorology (CDMs) in the delivery of WCIS
- Examine how having them working at County level has improved (or not) the delivery of WCIS
- Particularly delivery of WCIS in relation to the environmental determinants of health



INTRODUCTIONS: METHODOLOGY

Mixed method: KIIs, case studies and literature review

Data collection:

- KIIs with CDMs, NDMA officers, staff from KMD HQ and researcher
- Case studies from project implemented in Kenya as part of the WISER programme: 'Coastal resilience and improved services for potato production' (CRISPP). The project is split into two sub-projects, 'Increasing the Resilience of Kenya's Potato Sector' and 'Enhancing access to weather and climate information for Kenya's coastal region'.



INTRODUCTIONS: METHODOLOGY

Scientific literature on the environmental determinants of health risks in Kenya and grey literature on development strategies to support health

Study conducted by the **Maintains programme** on the levels of preparedness and response of health systems to climate shocks in Marsabit, Turkana, and Wajir Counties (Fortnam et al., 2020).

- Target area: Kenya specifically Kitui and Kilifi Counties
- Limitation of study:
 - **COVID-19** hampered our efforts to conduct extensive field study – restricted to phone interviews



FINDINGS

Role of CDMs

- To develop and disseminate decentralised forecasts, downscaled to ward level *Types of forecasts: seven day, monthly and seasonal forecasts; **Main parameters:** temperature and rainfall, relative humidity, wind patterns (magnitude and strength), solar radiation and air pollution and quality; **Channels of Dissemination:** radio, internet, intermediaries (Non-Government Organisations and Community Based Organisations), County steering group (CSG) , County development coordination committee (CDCC) , Participatory Scenario Planning (PSP) and chiefs' "barazas."*
- Implement national policies at County level
- Deliver CIS to inform decision making at County level *working with the CSG and CDCC*



FINDINGS CONT'

WCIS and the health sector

1. Weather forecasts

Assess prevailing diseases including **airborne and waterborne diseases**

Surveillance, control and treatment of weather and **climate sensitive diseases such as malaria**

Temperature is further used to determine conditions conducive for **bacteria to survive**

Radiation (to inform about risks related to sun exposure including skin cancers)

2. Co-production processes

- Participatory Scenario Planning (PSPs)
- Greater Horn of Africa Climate Outlook Forum (GHACOF)



FINDINGS CONT'

WCIS and the health sector

3. National Drought Management Authority (NDMA)

Drought Early Warning Bulletins

Food and Nutrition Security Assessment
Reports



CONCLUSION



Weather and climate data provided by met services is largely geared towards addressing drought risks and tackling malnutrition

Uptake of WCIS is mainly determined by ease of understanding, timeliness and accuracy of the information

Remarkable improvement in the delivery of WCIS esp. the short-term forecasts

Need for more collaboration with the health sector in order to provide more tailored information that they can use

More funding for meteorological services – improve coverage and service delivery

Additional **skilled human resources**