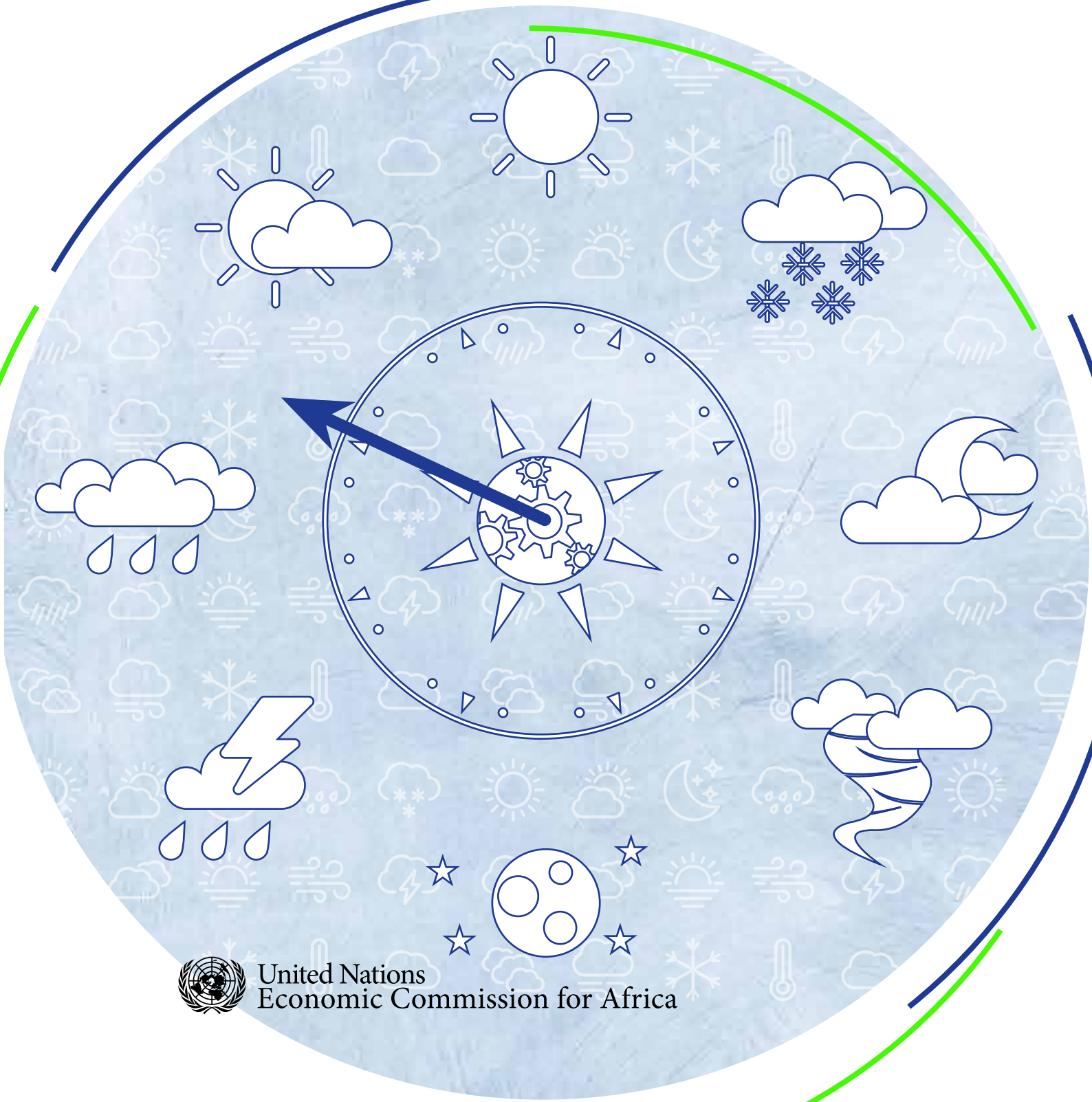
PRIVATE SECTOR ENGAGEMENT IN CLIMATE INFORMATION SERVICES IN AFRICA



United Nations
Economic Commission for Africa

The production of this document was coordinated by:

Under the auspices of:

To order copies of ***Private Sector Engagement in Climate Information Services in Africa***, please contact:

Publications Section
Economic Commission for Africa
P.O. Box 3001
Addis Ababa, Ethiopia
Tel: +251 11 544-9900
Fax: +251 11 551-4416
E-mail: eca-info@un.org
Web: www.uneca.org

First printing February 2021

Designed and printed in Addis Ababa, Ethiopia by the ECA Printing and Publishing Unit. ISO 14001:2015 certified.
Printed on chlorine free paper

Cover photos: Shutterstock.com

Contents

List of acronyms

ACPC	African Climate Policy Centre
AMCOMET	Africa Ministerial Conference on Meteorology
CR4D	Climate Research for Development
ECA	Economic Commission for Africa
GFCS	Global Framework for Climate Services
ICT	Information and Communications Technology
IFI	International finance institution
IPCC	Intergovernmental Panel on Climate Change
NFCS	National Framework for Climate Services
NMHS	National Meteorological and Hydrological Service
PPP	Public-private partnership
PICSA	Participatory Integrated Climate Services for Agriculture
RCC	Regional climate centres
WMO	World Meteorological Organization

Executive summary

Private sector engagement in the provision of climate information services (CIS) in Africa will contribute to the efficiency of those services if the enabling environment is provided for their operations. Climate information services involve the acquisition, processing and packaging of weather and climate variables and their delivery to a range of users at different levels to support climate-resilient development and inform climate-related policymaking and decision-making. In Africa, the provision of such services has been the responsibility of governments through national meteorological and hydrological services. African governments have not, however, demonstrated the political will necessary to empower those services to operate effectively, although there is widespread recognition of the importance of weather and climate information. Moreover, climate information services have a long value chain and governments alone cannot effectively provide such services along its entire length. In addition, users are many and diverse, making it a challenge for governments to tailor climate information to every user specification. For effective delivery of user-specific climate information, it is imperative that appropriate institutional mechanisms be in place to generate, exchange, customize and disseminate information at all necessary levels. The importance of climate information services for the Global Framework for Climate Services priority areas and the rationale for the involvement of the private sector in climate information service production, processing and dissemination for the success of the priority areas in Africa has been discussed. To create an enabling environment in which the private sector can operate and contribute to the provision of climate information services, the physical infrastructure of national meteorological and hydrological services needs to be upgraded, professional human resources and succession plans in place and the policy and legal framework developed to guide the various responsibilities of the services and the private partners. It is essential to ensure collaboration between the management structures of the national services and the private sector. While national policies may not permit complete ownership of network observations by the private sector, there are opportunities to work with climate service providers at different levels, including observation networks and other network infrastructure. The national meteorological and hydrological services alone cannot meet the demand for climate-related information, so it is important to identify other actors and open up to the involvement of the private sector in order to ensure seamless climate information services operations.

There are some opportunities for the private sector in the delivery of climate services. For example, the mobile phone is an important tool and its use is increasing rapidly in Africa. More than 90 per cent of people live within range of a mobile Internet signal, making access to clients easy for private companies engaged in climate information services. The demand for climate information is high and creates a clear market for such services in Africa. More than 2.36 million end users receive climate information from private-sector providers in sub-Saharan Africa. There are still barriers limiting the optimal involvement of the private sector, notably the absence of a policy and legal framework to guide private sector operations. Another key challenge for the private sector is the absence of historical data and authenticated meteorological records. Most of the data collected have been recorded on paper and not catalogued electronically and there are data gaps at multiple levels. Despite the challenges facing the private sector, a few private actors have been successful in providing climate information services in Africa.

This report outlines a business model based on the success stories of these actors to encourage the engagement of the private sector. The recommendations include: putting in place a comprehensive policy and legal framework on the involvement of private actors in the provision of climate information services; and upgrading the current infrastructure, equipment and software of national meteorological and hydrological services to state-of-the-art systems to meet private sector demand for high quality,

high resolution data. Strategic and operational recommendations are made for the national and regional levels to improve the engagement of the private sector in the provision of climate information services in Africa.

1. Introduction

1.1. CLIMATE INFORMATION SERVICES AND WHAT THEY ENCOMPASS

Climate information services are the activities that deal with the generation and provision of climate information to a range of users to support climate-resilient development and inform climate-related decision-making and climate-smart policy and planning. They involve the acquisition, processing, packaging and delivery of weather and climate variables such as temperature, rainfall, wind, soil moisture, ocean conditions and extreme weather indicators. The Economic Commission for Africa (ECA), defines these services as the packaging and dissemination of climate information to specific users (Kadi and others, 2011). For the European Commission, they are the transformation of climate-related data and other relevant information into customized products such as projections, trends, economic analysis, counselling on best practices and the development and evaluation of solutions and any other service about climate that may be used for the benefit of the society at large (European Commission, 2015). Climate services involve the generation, provision and contextualization of information and knowledge derived from climate research for decision-making at all levels of society (Vaughan and Dessai, 2014). They can describe historical, current and future weather and climate conditions and may entail future predictions on daily, monthly, seasonal or decadal timescales and projections at multidecadal and centennial scales (WMO, 2014).

Quality information tailored to the needs of an end user can enhance planning for positive outcomes, including safeguarding economic gains and advancing social development. Climate information equipped with accurate data helps policymakers by providing them with relevant information so that they can make informed decisions. Governments and the private sector are much more likely to integrate climate policies incorporating demand-led, evidence-based information into economic and development planning. Access to robust climate information services is therefore critical across the majority of local, governmental and private institutions to fostering growth along Africa's development pathway.