

STATE OF CLIMATE SERVICES

WATER



HEALTH



ENERGY



DISASTER RISK REDUCTION



AGRICULTURE



THE STATE OF CLIMATE SERVICES REPORT PROVIDES AN ASSESSMENT OF THE AVAILABILITY AND ACCESSIBILITY OF HIGH-QUALITY CLIMATE INFORMATION TO ADDRESS NEEDS FOR CLIMATE CHANGE ADAPTATION. THE FIRST REPORT WILL FOCUS ON AGRICULTURE AND FOOD SECURITY.

the role

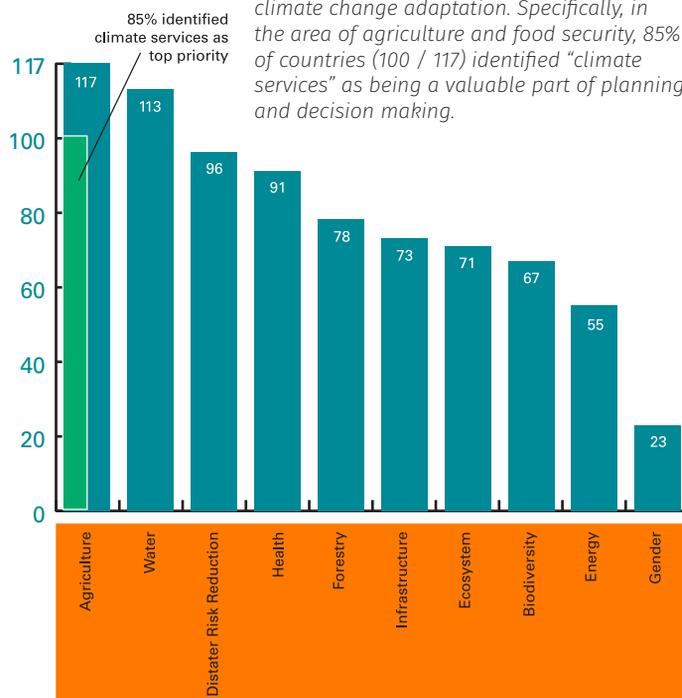
Climate Services are to provide tailored, science-based information that helps people from policy makers to farmers make better decisions about how to adapt to the challenges of climate variability and change. In the area of agriculture and food security, the need is especially strong. The Food and Agriculture Organization of the United Nations (FAO) estimates that over 500 million smallholder farms producing more than 80% of the world's food in terms of value, and 750 million extremely poor people working in agriculture - usually as smallholder family farmers - are vulnerable to the effects of climate change. The Nationally Determined Contributions, of Parties to the Paris Agreement, highlight the demand for more timely, reliable and specific information relevant to agriculture and food security. This need is especially strong among developing countries.

the value

Climate Services deliver significant value. It is estimated that improved weather, climate, water observations and forecasting could lead to up to USD 30 billion per year in increased global productivity and up to USD 2 billion per year in reduced asset losses (WMO, World Bank, USAID, 2015). The State of Climate Services Report will examine case studies offering a range of angles on the positive value that climate services can provide for food security and nutrition.

NATIONALLY DETERMINED CONTRIBUTIONS

In separate analysis by both the World Meteorological Organization (WMO) and FAO of Nationally Determined Contributions, the majority of countries highlighted agriculture and water as the two top priority sectors for climate change adaptation. Specifically, in the area of agriculture and food security, 85% of countries (100 / 117) identified "climate services" as being a valuable part of planning and decision making.



WORLD METEOROLOGICAL ORGANIZATION



RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security



Food and Agriculture Organization of the United Nations



GLOBAL ENVIRONMENT FACILITY INVESTING IN OUR PLANET



GFCS GLOBAL FRAMEWORK FOR CLIMATE SERVICES



GFDRR Global Facility for Disaster Reduction and Recovery



GREEN CLIMATE FUND



WORLD BANK GROUP



WFP World Food Programme

GLOBAL CLIMATE SERVICES CAPACITY



GOVERNANCE

Institutional mechanism ensuring the development and application of climate services in national adaptation planning.



OBSERVATIONS & MONITORING

The essential infrastructure for generating the necessary climate data.



USER INTERFACE

Platform that allows users, researchers and climate service providers to interact.



CAPACITY DEVELOPMENT

Empowerment of the institutions, infrastructure and human resources needed for effective climate services.



CLIMATE SERVICES INFORMATION SYSTEM

The production and distribution system for climate data and information products that address user needs.



MONITORING & EVALUATION

Tracking of benefits and outcomes from climate services including socio-economic assessments and strategies based on information.

the analysis

WMO has completed a climate services baseline analysis to help countries assess the capacity of National Meteorological and Hydrological Services with respect to their role in climate services operationalization. The data consist of 137 yes/no responses to a checklist that addresses functional capacities across the climate services value chain. Functional capacities assessed by the checklist are organized into six groups. The percentages of “yes” answers to checklist questions in each of the six areas is shown in the graphs based on data from 109 countries who responded to the checklist in 2018.

the need

The capacity of countries or regions to benefit from climate services depends on several factors ranging from the observations and monitoring of weather and climate events to the aggregation and combination of climate data with socio-economic data and effective delivery of services to end users. As highlighted by FAO and the World Food Programme, the accessibility of these services, such as covering last mile delivery to farmers, is especially critical. Equally important, according to the CGIAR Research Program on Climate Change, Agriculture and Food Security, is the continual refining and improvement of raw data for climate information to ensure the information is both accurate and actionable. WMO through the Global Framework for Climate Services continues to work with countries to identify needs and gaps in the six climate service priority areas at the national, regional and global levels. The report will explore how climate financing is addressing those needs. At present more than USD 3 billion is invested in nearly 200 climate service and early warning projects with funding from the Green Climate Fund, the Adaptation Fund, the Global Environment Facility and the World Bank Group.

the report

Launching at the 25th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 25), the 2019 State of Climate Services Report will offer insight into climate services for agriculture. It will frame the critical role that climate data and climate data delivery play to empower decision making from the level of the policy maker to the farmer. It will assess the gaps that need to be filled to ensure the availability of quality climate information across all regions.

As a climate-sensitive sector among the highest priorities for countries seeking to implement the Paris Agreement, the agri-food sector presents a clear lens to view the positive impact that climate services can have in terms of reducing food insecurity and strengthening the capacity of vulnerable communities to adapt to climate change impacts.

Bringing together both implementing and funding organizations, the report also highlights examples of how climate services are used on the ground by agencies and non-profit organizations. It also frames the role of funding institutions within the broader climate finance context to highlight how investments in climate services at all levels, from the local to the global, can contribute to the achievement of the Sustainable Development Goals and provide strong social and economic returns.