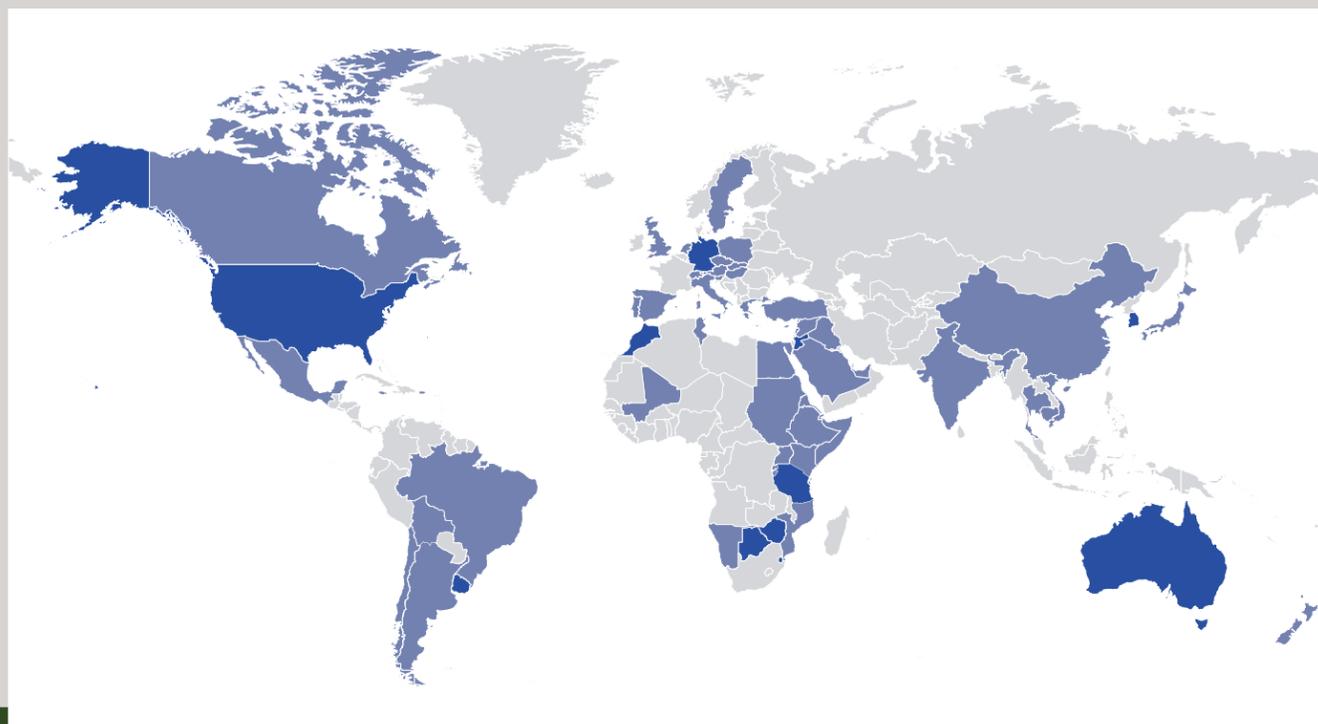


# Where we work

In normal years, members of the National Drought Mitigation Center team travel across the country and the globe to share and further develop best practices in better preparing populations for future droughts. The coronavirus changed how the NDMC staff worked with our collaborators and partner agencies, but it did not change what we do. The past year put a stop to most in-person meetings and led to far more teleconferences than normal, but the NDMC continued to work in partnership on improving drought monitoring and readiness around the world. Here are some of the most recent projects that are moving forward or were recently completed in 2020.

■ 2020 countries ■ Previous countries



## 1 Global Combined Drought Index (CDI) development, Tanzania, Zimbabwe, Botswana and Eswatini

Before the spread of the coronavirus shut down travel, members of the NDMC team traveled to Eswatini in early 2020 to continue work with the World Bank and our in-country partners on enhancing drought preparedness strategies and creating drought monitoring resources that, like the U.S. Drought Monitor, can provide regular snapshots of drought and help direct aid and assistance to places and people where it is most needed.

## 2 Completed development of drought monitoring tools in the Middle East and North Africa (MENA)

In partnership with the International Water Management Institute, NASA's Goddard Space Flight Center, Johns

Hopkins University and others, NDMC team members completed work to adapt a drought monitoring system to the local environmental conditions of partners in the MENA region — Jordan, Morocco and Lebanon — so that the system can be operated locally. The multifaceted MENA drought project, funded by USAID, brought experts in drought monitoring, forecasting and management together to strengthen resilience in one of the most water-stressed regions of the world.

## 3 U.N. Convention to Combat Desertification (UNCCD) Intergovernmental Working Group, Germany

NDMC director Mark Svoboda is one of 15 independent experts invited by the United Nations to take part in the UNCCD Drought Initiative. It was created in part to provide drought planning expertise for officials who are cre-

ating plans in their home countries. The UNCCD mandate states that the Intergovernmental Working Group that Svoboda will serve on “supports over 70 countries in designing comprehensive national plans of action ready to be activated well before the drought strikes.”

## 4 Drought risk management for southern South America workshop in Montevideo, Uruguay

In May, the NDMC teamed with the Drought Information System for southern South America (or SISSA, for its Spanish acronym), to help create plans to increase drought resilience. Initially scheduled to be an in-person workshop, the online event included representatives from six SISSA member countries (Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay) as well as other countries of South and Central America. Workshop participants and leaders assessed current capabilities of each country represented at the meeting in regards to the three pillars of drought policy — monitoring and early warning, vulnerability and impact assessment, and mitigation and response — with the goal of developing proactive national policies and preparedness plans aimed at reducing societal vulnerability and increasing resilience to drought.

## 5 Creating an Australian Combined Drought Indicator, Southern Queensland, Australia

Australia is the world's driest inhabited continent, and farmers and others there have endured some of the warmest years on record since 2005, including a historic drought in 2019. Programmers with the University of Southern Queensland's Centre for Applied Climate Sciences have worked with NDMC programmers to develop an Australian combined drought indicator CDI. A CDI incorporates multiple data sets, including rainfall, soil moisture, evapotranspiration, and vegetation stress, to examine current drought conditions.

## 6 K-Water partnership, Korea

In 2019, NDMC director Mark Svoboda and Jae-Young Park of Korea Water Resources Corporation (K-Water) signed a memorandum of understanding between the National Drought Mitigation Center and K-water following Svoboda's keynote talk at the International Asian Drought Forum, held during the grand opening of the Korean National Drought Information and Analysis Center. In 2020, the two sides continued to work toward goals outlined in the memorandum, including the development of improved drought early warning and risk management systems.

## 7 Midwest specialty crop decision calendars, Iowa, Wisconsin and Missouri

Growers of Midwestern specialty crops face high risks due to climate extremes such as drought, but are sometimes ignored in drought management outreach. Now, producers have new resources to turn to help them make decisions during drought years, available on the National Drought Mitigation Center website. The NDMC has released a set of fact sheets and decision calendars that provide month-by-month and seasonal advice on how growers manage production of Midwestern apple, grape, cranberry and irrigated potato crops during drought years. To create the resources, the project team met with specialty crop growers in three Midwestern states and conducted focus groups to learn what they considered to be the most important decisions they made, when they made them and how those decisions led to better vegetable and fruit production outcomes during drought.

## 8 Envisioning a Regional Drought Learning Network, Las Cruces, New Mexico

Staff from the NDMC worked in conjunction with the USDA's Southwest Climate Hub to bring together drought management leaders from the Southwest and Southern Plains to establish a Drought Learning Network (DLN) where communities learn from communities. The meeting's goals included documenting stakeholder experiences during drought, leveraging service provider resources and options to better meet needs via a DLN and establishing a collective approach and timeline for the development of a regional DLN. Six teams were developed as part of the DLN, each one focusing on specific issues related to drought in the region.

## 9 USDA Northwest Climate Hub Drought Workshop

Held in July, the virtual workshop highlighted drought issues prevalent in the region. The workshop included a discussion about the making of the U.S. Drought Monitor, and how local climate experts contribute to the weekly process, as well how some USDA programs are affected by U.S. Drought Monitor designations. Sessions focused on peer-to-peer learning for the East side of the region, as well as the West. During both sessions participants were engaged in discussion and information exchange about drought adaptation strategies and information needs. □