A composite drought indicator (CDI) is a drought monitoring and early warning tool that uses combinations of remotely sensed data to describe the location and intensity of drought. The National Drought Mitigation Center, with World Bank support, has been developing CDIs in different countries since 2012. These maps, modeled on the U.S. Drought Monitor, blend various sources of physical data, along with local expert feedback. They make use of whatever indicators are available, accessible and relevant for each country.

CDIs rely on a convergence of evidence approach. Every input tells its own unique story, but we use them in unison to tell a common story. The resulting maps can then inform decision making and trigger drought management actions.
Since 2018, the National Drought Mitigation Center and the World Bank have been developing a composite drought indicator for the Southern African Development Community, an intergovernmental organization fostering cooperation among 16 southern African countries.

An automated-CDI approach using satellite data provides a uniform system for monitoring and identifying drought in data-scarce areas. A region-wide tool such as this can allow for comparisons and consistent communications across borders. Zimbabwe, Eswatini and Botswana are at the forefront of piloting country-specific process. They are working towards a process that calls upon experts for validation, uses the best available data for their country and incorporates the CDI tool into drought management and planning.

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In Zimbabwe, the Department of Civil Protection is working with Bindura University of Science Education to develop and institutionalize the CDI.

In Eswatini, the National Disaster Management Agency provides the CDI in a bulletin for agricultural producers in the Lubombo region.

In Botswana, the Department of Water Affairs is attempting to develop a CDI focused on hydrological inputs.

**Vision for the future**

On-the-ground expertise is increasing through workshops and capacity-building exercises, facilitating an internal, bottom-up process for developing and updating the CDI, with the Southern African Development Community secretariat providing regional leadership, technical support and capacity building. Over time, individual governments will have the capacity to incorporate locally sourced data and country-specific inputs, regularly update the product and integrate it into their drought planning processes to increase the tool’s validity and usefulness.