

Text to accompany US Presentation on Access to Climate Data for NWP Workshop on
Downscaling and Access to Climate Data

Slide 2

The Climate Mapper was developed for SERVIR-Viz to give project designers access to historical weather data as well as projections of climate change. The Climate Mapper grew out of USAID's effort to develop and apply its [Climate Change Adaptation Guidance Manual](#). The Adaptation Guidance Manual is meant to help development practitioners think about how climate change can affect the performance of development projects and identify alternative, more resilient options.

The AGM lays out a six step process for project designers:

1. Conduct a quick sensitivity screen for the sector and project approach
2. Work with stakeholders to identify alternative project options
3. Conduct a detailed analysis of the performance various options under current and projected conditions
4. Work with stakeholders to select the appropriate option

SLIDE 3:

We've found that STEP 3, the analysis step, can overwhelm the others. Particularly challenging can be finding and using data on past and projected climate. So, we wanted to provide easier access to the climate data – both historical and projected. We wanted decision makers to have a sense of the range of plausible climatic changes that could affect a project.

Slide 4:

Currently, the Climate Mapper serves Africa; in the near future we plan to cover the entire globe. The data are available for an area of ½ degree ½ degree, or roughly 50km x 50km in the tropics. When you click on the map, the tool will pull data for the grid cell surrounding the point where you clicked and display it as a line graph. The data can be exported to a spreadsheet application.

The Climate Mapper presents outputs of three of the models used in the IPCC's 4th Assessment Report: the National Center for Atmospheric Research Community Climate System Model (NCAR CCSM); the European Centre/Hamburg Model (ECHAM); and the Geophysical Fluid Dynamics Laboratory Coupled Model (GFDL-CM21). We chose these models because they represent the highest, middle, and lowest projections for changes in Africa in the Climate Moisture Index (CMI), a measure of the relative balance of precipitation and temperature. We ran the models using the A1B SRES scenario, a scenario of economic activity and carbon emissions that most closely represents the current or business-as-usual emissions trajectory. Currently, we are on an economic growth and emissions trajectory that resembles that described by A1B. If the world's emissions begin to change, we will re-run the models with a more representative scenario.

Information on past weather and projected climate should inform development practitioners as they design projects to be more resilient to climate variability and change. Designers should know that climate projections are not predictions; they are scenarios of possible futures based on complex models. Models provide insights, but all

of the development practitioner's knowledge and experience should be brought into the design of a project.

We are establishing a SERVIR Hub to serve Africa. The hub will be based in Nairobi at the Regional Center for Mapping Resources for Sustainable Development. The original SERVIR Hub is based in Panama at the Centro del Agua del Trópico Húmedo para América Latina y el Caribe (CATHALAC), and staff from Panama are training the Nairobi staff. Training in the use of the USAID Adaptation Guidance Manual and the Climate Mapper will begin soon. The Climate Mapper and more information on SERVIR Viz can be found at: www.servir.net.