SESSION: (B4) S2D forecasts for decision making

(B4-03)

Using Subseasonal to Seasonal Forecast Guidance to Support Famine Early Warning Systems Network International Food Security Assessments

Hoell, Andrew (1), Verdin, James (2)

NOAA/Earth System Research Laboratory (1), Famine Early Warning Systems Network (2)

Early warning of acute food insecurity requires robust agro-climatological assessments at many time horizons, from the monitoring of current conditions to forecasts ranging from weekly to interannual time scales. This poses a unique challenge to Famine Early Warning Systems Network (FEWS NET) physical science partners comprised of individuals from NOAA, USGS, NASA and USDA. One aspect of this unique challenge lies in the integration of all relevant forecasts in the context of emerging predictability information gathered through research and the clear communication of key forecast information to the social scientists, who also consider markets, trade nutrition and health when they produce food security outlooks. The food security outlooks are ultimately used to inform the programming of limited aid resources for the times and places where they will be most needed.

We summarize how FEWS NET physical scientists provide agro-climatological guidance over the subsequent 9 months for countries in sub-Saharan Africa, Central Asia, Central America and Caribbean. FEWS NET's physical science partners: (1) monitor current agro-climatological conditions, such as soil moisture, precipitation, temperature and crop health, (2) gather and interpret weather and climate projections to better understand the likely future conditions on weekly to interannual time scales, and (3) research the drivers of regional agro-climatic variability on sub-seasonal to interannual to decadal time scales in the context of a changing climate.

Key positive features of FEWS NET climate services include:

(1) Direct communication of agro-climatological questions by food security analysts to the physical scientists, resulting in reduced need to speculate about what agro-climatological information might be relevant and (2) frequent direct communication between FEWS NET physical scientists and food security analysts generates highly relevant research questions, and the resulting research findings consequently have a fast track to application and generation of societal benefits.