

Where will the next food production problem occur?

June 8 2017



The Anomaly hot Spots of Agricultural Production (ASAP) system, developed by the JRC, will help detect agricultural production anomaly hotspots for early planning of aid interventions or adaptation of rural development programmes. Credit: Fotolia, Elena Belozorova

A new early warning system detecting agricultural production anomaly



hotspots was launched at the European Development Days on the 8 June 2017 in Brussels.

The Anomaly hot Spots of Agricultural Production (ASAP) system, developed by the European Commission's science and knowledge service, the Joint Research Centre (JRC), will produce monthly reports that identify hotspot countries to support further investigation as well as early planning of aid interventions or adaptation of rural development programmes.

The system covers 80 countries, and is based mainly on Earth observation and meteorological model outputs. In addition to the monthly <u>warning</u> reports, every ten days, it will issue automatic warnings at province level and make available crop monitoring indicators for technical experts.

The early warnings of impending problems for <u>food</u> production in food insecure countries can then feed into the main existing international coordination mechanisms including for example the Integrated Food Security Phase Classification, complementing the information provided in the Global Network against Food Crises, and will also contribute to multi-agency <u>early warning products</u> such as the Crop Monitor for Early Warning.

Over 20 years of using Earth observation data for monitoring <u>agricultural production</u>

The JRC has long-standing experience of monitoring agricultural production in food insecure areas around the world. JRC scientists have been using Earth observation data since they became in the late 1980's. The first remote-sensing-based crop monitoring bulletin was published in 2001 for Somalia and was followed by similar products for other countries in East, West and Southern Africa in the following years.



However, while this work addressed country-specific information needs, the full potential of global datasets of remote sensing and weather information for monitoring agricultural production in all countries affected by risk of food insecurity remained largely underexploited. At the same time, the availability and coverage of satellite data is rapidly increasing, thanks also to programmes funded by the EU such as the Copernicus programme.

With climate change and the increase in extreme events, the recurrence of droughts and the related crop failures are not going to decrease. The 2015-2016 El Niño phenomenon in Southern and Eastern Africa, as well as the current situation in Somalia, show that the climatic dimension remains a fundamental driver that should continue to be monitored and analysed.

For the utmost accuracy, full advantage has to be taken of the latest technological and science developments, including the Copernicus Earth observation programme.

Provided by CORDIS

Citation: Where will the next food production problem occur? (2017, June 8) retrieved 11 July 2024 from <u>https://phys.org/news/2017-06-food-production-problem.html</u>

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