



## **A climate service prototype: enhancing Ethiopia's drought early warning tools with input from seasonal forecasting systems.**

Sandro Calmant (1) and Anna Law (2)

(1) ENEA, UTMEA-CLIM, Rome, Italy, (2) United Nations WFP, Rome, Italy

The EU-FP7 project EUPORIAS is developing a selected number of experimental operational prototypes of climate impact prediction systems in different sectors.

One of the proposed prototypes aims at enhancing an existing drought early warning system owned by the Government of Ethiopia's Directorate for Risk Management and Food Security.

This early warning system is based on a software platform called LEAP, which uses precipitation and monitoring data to estimate the number of people to be in need of food assistance due to drought. By providing early and objective estimates of the expected magnitude of needs, LEAP helps increase both the speed and transparency with which a humanitarian response can be triggered. Currently, the LEAP uses monitoring data to calculate future needs. The aim of the prototype is to integrate seasonal precipitation forecasts into the calculations, which will enable the model to provide earlier projections of beneficiary numbers, thereby enhancing the entire decision making process.

As the implementation of the prototype is still in progress we will discuss the workflow of the prototype and the current understanding and modelling approach for the connection between the climate driver (drought) and the corresponding impact (food insecurity). We will also present the expected value of the prototype given the expected level of skill of the underlying seasonal forecasting system and a preliminary cost/benefit scenario for an operational impact prediction system that is able to anticipate the occurrence of the most severe drought events.