

Dr. Peter Bauer, ECMWF, consortium leader ExtremeEarth

With this letter I'd like to provide official endorsement for the ExtremeEarth Flagship project (FETFLAG-01-2018). The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) addresses the increasing challenge of global warming and declining food security on agricultural practices, policies and measures through a strategic collaboration between CGIAR and Future Earth. With a budget of US\$60m per year, it is a major global program involving dozens of institutions, from university partners in the north and south, through to CGIAR centers and national government stakeholders in developing countries.

In our work, accurate climate information from seasonal through to decadal and multi-decadal scales is essential to support adaptation and mitigation processes to secure future food security. Ourselves and our partners are large consumers of climate information, yet are often faced with serious barriers to use as the uncertainties are high, spatial scale often unfit for use, and limitations in timeliness of information for dynamic decision making. The better physical representation of key processes, at a resolution of 1 km, and more accurate global Earth System and Climate modeling proposed by the ExtremeEarth Flagship will be a leap forward for our work. The improved prediction and detailed accounting of uncertainties will be instrumental in allowing better-informed decision from local to national and regional scales.

We hope to both collaborate with the ExtremeEarth Flagship project by linking to the demands from our stakeholders for improved climate information, and also be a user of the results that come out of the project. This endorsement of the Flagship candidate project ExtremeEarth implies that we support the scientific, technological and planned objectives of ExtremeEarth. This endorsement does not imply any legal or financial commitments towards the ExtremeEarth project. Support will imply that statements and logos of CCAFS may be shown on the ExtremeEarth website.

Andy Jarvis

Flagship Leader for Climate Smart Agriculture, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

Research Area Director, Decision and Policy Analysis, International Center for Tropical Agriculture (CIAT)