

User-tailored seasonal forecasts for agriculture – creating socio-economic benefit through climate services in the Andes

Sara De Ventura (1), Grinia Avalos (2), Andrea Rossa (1), Marlene Dapozzo (2), Moritz Flubacher (1), Teresa Garcia (2), Stefanie Gubler (1), Mark A. Liniger (1), Karim Quevedo (2), Gabriela Rosas (2), Cornelia Schwierz (1), Katrin Sedlmeier (1), and Christoph Spirig (1)

(1) Federal Office of Meteorology and Climatology MeteoSwiss, Zürich, Switzerland (Sara.DeVentura@meteoswiss.ch), (2) Servicio Nacional de Meteorología e Hidrología del Perú, Peru,

The project Climandes is a twinning project between the Peruvian National Meteorological and Hydrological Service (SENAMHI) and the Federal Office of Meteorology and Climatology of Switzerland (MeteoSwiss) aiming at improving climate services for the Andean Region. It was launched in 2012 as a pilot project of the Global Framework for Climate Services (GFCS) of WMO. In 2016, the second phase of the project has started.

Until now, Peru as all the Andean countries has had only a limited access to climate services, and the few instruments already in place have mostly not been developed in concordance with user needs. Due to this shortcoming, the opportunity to achieve veritable socio-economic benefits (SEB) has been overlooked so far. An additional difficulty is the lack of trained and experienced climatology and meteorology professionals, capable to develop and provide high-quality climate services. Furthermore, the importance of climate information and its far-reaching benefits has not yet been fully acknowledged and embraced by the political decision-makers.

The overall goals of the Climandes project are the following:

• Provision of user-tailored climate services for the Andean Region to improve socio- economic benefits for the agricultural sector and for society at large.

• Improvement of the capacities of the meteorological service of Peru to generate user-tailored climate services in the agricultural sector.

These goals are elaborated within three mutually dependent modules: The first one comprises user-tailored climate products for the agricultural sector in the Peruvian Andes. This includes drought and precipitation monitoring as well as the development of a prototype seasonal prediction system for the region, including indices tailored to the agricultural sector. The second module focuses on capacity building, enabling climatology-related professionals and students to develop high-quality climate services for Peru and the Andean Region. Training courses as well as E-learning tools covering the knowledge needed for the elaboration and use of climate services (e.g. monitoring, seasonal prediction) are developed and implemented. The third module aims at raising the awareness of political stakeholders of the SEB of SENAMHI's sector-specific climate services and establish a user-dialog in order to meet the specific needs of Andean smallholder farmers.

This contribution will give an overview of the project and highlights some of the results of the first two years of Climandes 2.