First steps in Hydroclimatological Services in Peru

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The climate variability and change will have increasing influence on the economic and social development of all countries and regions, such as the Andes in Latin America. Peru is a country with high hydroclimatological variability with many different hydrological and climatological regimes that has lately had extremes impacts around the country. In this context, understanding the hydroclimatological processes as well as informing early about these impacts is vital to decrease socioeconomic impacts.

In Peru, the hydrometeorological network is administrated by the National Meteorological and Hydrological Service (SENAMHI) and concerning the spatial distribution of the hydrological network in Peru, it is poorly done and the primary data is mostly river levels. In hydrological applications we need overall discharges and due to budget and logistics (remote regions) in Peru this information is scarce. However, in the last years several projects with other sectors: i) Modernization Management of Water Resources Project with the National Water Agency (Ministry of Agriculture) in the Pacific drainage, ii) Hydroelectric Generation Project for purposes of Energy with the Ministry of Energy and Mines (Amazonas high mountains drainage), iii) Prevention Disaster Risk Project (various sectors), iv) Hydrogeodinamic of the Amazon basin (Hybam) with the IRD (France) and some news activities in the Regional Directions of SENAMHI will allow in the next years obtain flow data at the national level thanks to the news hydrological stations and discharge measurements.

Nowadays, in SENAMHI we are working in the implementation of hydroclimatological services in the context of the Global Framework Climate Services (GFCS) conducted by the World Meteorological Organization (WMO). In this context, our first Climate Service pilot is the CLIMANDES project (Servicios Climáticos con énfasis en los Andes en apoyo a las Decisiones) supported by the Swiss Development Cooperation. Through this project it has been identified three problems to be solved (1) insufficient human resources specialized in meteorology and climatology available in the country, (2) insufficient and inadequate use of climate information available for decision-making in public agencies at all three levels of government, and (3) The limited capacity of observation and processing of existing climate information in the system of SENAMHI. These same problems are identified for the Hydrological works and we think solve attack these problem as SENAMHI. In fact, for the next years (up to 2016) the vision of SENAMHI's Strategic Plan is that: " The Peruvian society takes appropriate decisions based on the weather, water and climate information for sustainable development" and as mission: "to provide reliable and timely products and services meteorological, hydrological and climate ". All this based on 4 themes: i) Disaster Risk, ii) Economic Development, iii) Climate, Water and Climate Change and iv) Environmental Quality.