



Integrated approach for the development across Europe of user oriented climate indicators for GFCS high-priority sectors: Agriculture, disaster risk reduction, energy, health, water and tourism

Work Package 6

Deliverable 6.4

Report on the assessment of sectorial climate change impact based on INDECIS-ISD in the context of climate change scenarios



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Overview

In order to investigate the added values of the INDECIS-ISD, a series of pilot sectorial applications have been developed.

The first type of applications focused on the applicability of INDECIS-ISD in terms of seasonal forecasting; the skills of seasonal forecast systems and the applicability of seasonal forecast outputs for 3 sectors (agriculture, energy and tourism) have been evaluated through a series of selected indices from INDECIS-ISD and the results have been reported within deliverable D6.3.

The second type of application of the INDECIS-ISD, presented in this report, focuses on the assessment of sectorial climate change impact based on INDECIS derived indices in the context of the latest climate change scenarios (EUROCORDEX), in the near-future (2021-2050) and on long term (2070-2100).

The work targeted the analysis of physical impacts associated with climate changes through a series of indices relevant in particular for human health and agriculture. The studies were performed either at European scale or at national scale and the results are reported as follows:

Annex A:

Climate change projections for INDECIS-ISD indices representative of extremes for precipitation and temperature

Authors: Joaquin Bedia, Ana Casanueva, Juan Antonio Fernández Granja, Sixto Herrera, Manuel del Jesús, Javier Díez Sierra (UC-IH)

Annex B:

Temperature-based climate indicators relevant for agriculture sector in the context of climate changes in Romania

Authors: Liliana Velea, Roxana Diana Burcea (MeteoRo)

Annex C:

Present and future potential groundwater recharge at European scale

Authors: S. Lanini, G. Hevin, P. Le Cointe, S. Pinson, R. Thieblemont, Y. Caballero (BRGM)

Annex D:

A French spatially distributed hydrological model as a demonstrator for a national groundwater management tool

Authors: J.-P. Vergnes, S. Lanini, Y. Caballero (BRGM)