

Dear Mrs/Mr,

Regarding the Horizon 2020 Programme launched by the European Commission, INCDPM team intends to write a proposal, as follows:

The program theme Water innovation: boosting its value for Europe

Topic Topic: WATER –2B-2015 Integrated approaches to food security, low-carbon energy, sustainable water management and climate change mitigation

Project title: Evaluation the intensity and dynamics of the phenomenon of desertification in vulnerable areas caused by anthropogenic activities and climate changes

Summary proposal There will be developed research networks at European level with the purpose to identify vulnerable areas, to assess the expansion of desertification in the last 20 years in the Southern and South-eastern parts of the European area, to carry out seasonal monitoring of environmental factors characteristic in vulnerable areas and to develop strategies in order to prevent irrational anthropogenic actions that led to rising in the phenomenon, as well as measures to adapt to new environmental conditions.

The main objectives of the project are:

- identification of the areas affected by the desertification phenomenon and those with potential occurrences;
- desertification assessment of affected areas;
- development of research networks in order to perform an in-depth research regarding the aspects related to desertification phenomenon and its propagation methods.

INCDM Bucharest mission is to advance knowledge of science and to fulfil the society needs related to environmental protection, sustainable development and climatic changes, both at national and international level. The mission of the institute is asserted by specialists with a lot of professional experience, which may offer, any time, efficient solutions to different challenges regarding this field of knowledge, but also by promoting young researchers, which are helped by experts in order to increase the technical and scientific quality of their work.

Research activities of INCDPM are developed in its 11 departments, as follows: Biodiversity and Ecosystem Dynamics; Construction Impact on Environment and Ecological Rehabilitation; Environmental Quality Assessment; Laboratories; Natural Resources Management; Numerical Modelling and GIS; Technological Development and Engineering for Environmental Protection; Waste management; **Climate Changes and Sustainable Development**, its main directions being: prediction of climate variability and change; identifying the link between climate variability at large scale and at regional scale through specialized statistical methods; development of regional climate scenarios using statistical downscaling methods; quantification of greenhouse gases emissions; assessing environmental impact of wind

and photovoltaic farms. In order to emphasize INCDPM capabilities to write and implement this research project, please find below some of the most representative projects conducted so far:

1. **CarpathCC Project (Carpathian in-depth assessment of vulnerability to climate change and ecosystem-based adaption measures)**, was conducted in the period 2011-2013 and was financed by the European Union, represented by the European Commission - DG Environment. The project consortium consisted of 7 partners and it was led by Regional Environmental Centre for Central and Eastern Europe (REC). The area of interest referred to the region of the Carpathian Mountains, including as adjacent areas the Transylvanian Basin and the Pannonial plain (<http://www.carpathcc.eu/>).
2. **CARPATCLIM project (Climate of the Carpathian Region)**, was financed by Joint Research Centre (JRC), and was conducted in the period 2010-2013. The project consortium consisted of 10 partners from 9 different countries and it was led by Hungarian Meteorological Service. The area of interest refers to the region of the Carpathian Mountains, including the adjacent zone, between latitudes 44°N and 50°N, and longitudes 17°E and 27°E (<http://www.carpatclim-eu.org>).

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We are looking forward to your reply!

Yours faithfully,

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