

Mechanism, Modeling and Forecasting of Landslide Displacements

Fact Sheet

Project Information

FOLADIS

Grant agreement ID: 249186

Status
Closed project


Start date
4 January 2010

End date
3 January 2013

Funded under
FP7-PEOPLE

Overall budget
€ 75 000

EU contribution
€ 75 000

Coordinated by
**MIDDLE EAST TECHNICAL
UNIVERSITY**
 Turkey

Objective

Landslides cause significant damage and loss of life throughout the world. There is an increase in landslide activity as a result of continued deforestation, increased construction in landslide-prone areas, and increased regional precipitation by changing climate patterns, which is a primary trigger for landslides. One of the four priorities areas in FP7 have been identified as triggering factors and forecasting, and mitigation strategies for natural hazards. The overall goal of this research is to reduce damage caused by landslides, by increasing our understanding of the mechanism of slow-moving landslides. The specific objectives are: (1) to identify the triggering factors and failure mechanisms in landslides composed mainly of (or dominated by) cohesive soils, (2) to investigate application of numerical models in slope displacement analyses and calibration of model parameters by observed deformations in well-documented case histories. (3) to establish threshold slope displacement rates that can be used in setting up alarm levels and early warning, and to improve forecasting methods that would help predict the failure time, (4) to transfer

the knowledge to end-users by preparing handbooks/guidelines and training courses. The proposed research will generate (a) a large database of well-documented landslide case histories and correlations to predict certain type of movements from slopes with certain properties (material type, slope angle, etc.), (b) a numerical methodology for the evaluation of slope stability and slope deformations including validation and calibration of model parameters with the measured deformations, (c) enhanced forecasting tools for failure time prediction in landslides, (d) the range of values of threshold displacement rates for different degrees of alert levels that can be used by decision makers, (e) guidelines and manuals covering all aspects.

Field of science

/natural sciences/earth and related environmental sciences/physical geography/natural disaster
/humanities/history and archaeology/history

Programme(s)

Topic(s)

Call for proposal

FP7-PEOPLE-2009-RG

Funding Scheme

MC-IRG - International Re-integration Grants (IRG)

Coordinator



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Activity type

**Higher or Secondary
Education Establishments**

[Contact the organisation](#) 

EU contribution

€ 75 000

Last update: 16 July 2019

Record number: 93354

Permalink: <https://cordis.europa.eu/project/id/249186/>

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