# 1  The EROSFIRE project - presentation

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The idea for the EROSFIRE proposal (POCTI/AGR/60354/2004) arose as a response to the "Soil losses after the forest fires of the summer of 2003"-map that was produced for Portugal following the particularly extensive wildfires of that year. This map is based on some modified version of the Universal Soil Loss Equation (USLE). However understandable this choice of model may have been for pragmatic reasons, it does raise serious questions about the real-world applicability of the major advances that quantitative soil erosion prediction has seen over the last decades. The EROSFIRE proposal takes up the challenge, so to say, of developing a model-based tool for erosion hazard assessment in Portugal following forest wildfires with a more up-to-date scientific basis than USLE.

In the EROSFIRE proposal, rainfall simulation experiments (rse's) are envisaged as a comparatively time-and cost-effective approach to gather substantial amounts of soil erosion data under rapidly changing circumstances and, thereby, as a possible way-around the data constraints commonly encountered in model parameterisation, calibration and assessment. Additional monitoring of small-scale and slope-scale plots is intended to ensure that the rse's are sufficiently representative of real-world situations. The rse data are thought to provide a sufficient basis for erosion modelling at the small-plot scale and, through upscaling, for predicting erosion rates at the slope scale. Various existing erosion models will be compared, and the best model(s) - eventually

adapted to the Portuguese situation - are intended to allow erosion hazard assessment at the scale of individual hill slopes for different post-fire management scenarios.

The EROSFIRE proposal was only very recently proposed for financing by the Portuguese Foundation for Science and Technology (FCT), so that the intended presentation will merely provide a general outline of the project.