



The CALCHAS project is co-financed by the European Programme LIFE+ (Environment Policy and Governance)



**CALCHAS Development of an Integrated Analysis System for the effective** fire conservancy of forests **LIFE08 ENV/GR/000558** 

## **Partners**



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CALCHAS aims at the development of an integrated analysis system (Integrated Forest Fire Analysis System - IFFAS), which will provide to the responsible authorities the data and information required towards the effective management and confrontation of fire incidents in forest ecosystems.

CALCHAS' pilot implementation is performed in two forest areas of significant ecological importance concerning the existing biodiversity:

- Grammos in Greece
- Troodos in Cyprus.

## CALCHAS' implementation actions are:

- Identification and spatial distribution of flora species in Grammos and Troodos and development of a GIS Database
- Development of flora maps
- Flora sampling, lab analysis and identification of the species` flammability
- Geomorphological and spatial analysis of the two areas
- Identification and mapping of possible ignition areas
- Multi-criteria analysis and determination of Fire Risk Indexes (FRI)
- Development of a simulation platform (model), for estimating the evolution of a forest fire
- Installation of a network of prototype meteorological stations in Grammos and Troodos
- Pilot operation of IFFAS
- Training of the key stakeholders on the use of IFFAS` model operation
- Dissemination of the project results to the scientific community and the relevant stakeholders.

With the completion of CALCHAS, the competent authorities will be granted with an Integrated Forest Fire Analysis System for the effective fire conservancy of Grammos and Troodos forest, which will consist of the following components:

- Two sets of GIS Databases consisting of flora and risk analysis data
- A network of meteorological stations appropriately installed in order to feed on-line the developed system with real-time data
- A computational platform for simulating the evolution of forest fire incidents.

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Analysis System is expected to become a useful tool for the responsible authorities:

- at scenario level, for personnel training purposes and planning of the necessary fire conservancy infrastructures
- at operational level, for decision making and coordination during forest fire incidents.



