

# Groundwater Ecosystem Services of Mt. Mitsikeli of Ioannina

## Abstract:

The term ecosystem means all animals, micro-organisms, plants and the natural environment that co-exist interdependently and interact. The ecosystems located on the planet Earth offer humans a number of benefits, which are referred to as "ecosystem services". This dissertation deals with ecosystem services related to mountain areas, as well as the parameters that affect them. For example, we talk about biodiversity, physical capital, institutional and economic context.

The emergence of ecosystem services is more than ever necessary at a time when climate change and the alteration of the natural environment lead to negative results, visible in every aspect of human - and not only - activity. Therefore, it is necessary to evaluate the ecosystem services in the modern context, as well as how they relate to biodiversity and natural environment. Further, the subject of study is the way that financial incentives and sources of funding affect ecosystem services, and the role of ecosystem services in the management of mountain areas. Still, one of the questions that this thesis is required to answer relates to whether and to what extent the institutional framework, domestic and international, contributes or impedes the functioning of ecosystem services.

Finally, ecosystem services of groundwater and Karst systems are being analyzed separately with Mt. Mitsikeli serving as a case study.

**Key words:** ecosystem, ecosystem services, biodiversity, natural environment, mountain areas, groundwater, Karst, Mitsikeli, GIS