Influence of planning and land use on flood risk reduction - Case of Coimbra city

Susana Paixao^{*2,1} and João Almeida^{*\dagger}

 2 CEGOT – Portugal

¹Instituto Politécnico de Coimbra / ESTeSC-Coimbra Health School (IPC/ESTeSC) – Escola Superior de Tecnologia da Saúde de Coimbra Rua 5 de Outubro - S. Martinho do Bispo Apartado 7006 3040-162 Coimbra, Portugal

Abstract

The planning and land use of the territory aims the quality of life of the population, from an economic, social, cultural and environmental view, more favorable through better management of the territory. These factors are important in order to facilitate the balance between the impacts of progress and the sustainability of quality of life in all parameters of social life. Planning and land use have a significant influence on the reduction of floods and its consequences. Note that, in Europe, more than 10 million people live in flood risk areas. Due this fact (and in view of the increase in the number of floods) people affected and estimated losses, as well as the risks to the public health, environment, infrastructures and socio-economic used on floodable areas, becomes to intervene in a timely manner. The present study aimed to describe the main effects of the Mondego River floods in the city of Coimbra, as well as to analyze the causes and presenting measures to mitigate these effects. It has been concluded that some work has been done over the past 30 years in terms of flood and flood risk management and that this management follows five intervention vectors such as: prevention, protection, preparedness, response and recovery.

Keywords: Planning, floods, Coimbra

^{*}Speaker

[†]Corresponding author: joaoalmeida@estescoimbra.pt