SOCIAL SURVEYS INDICATING THE RESILIENCE OF URBAN COASTAL LOCALITIES IN MACARONESIA TO COASTAL FLOODING*

Conceição Fortes[1] jfortes@lnec.pt
Larize Lima[1] llima@lnec.pt
Ana Catarina Zózimo[1] aczozimo@lnec.pt
Liliana V. Pinheiro[1] lpinheiro@lnec.pt
Raquel Modino[2] rmodino@ull.edu.es
Josué Gutiérrez-Barroso[2] jgutierb@ull.edu.es
Carla González Cruz[2] cgonzalc@ull.edu.es
Laura Comes[3] lcomes@tragsa.es

[1]LNEC - Laboratório Nacional de Engenharia Civil (Portugal)
Núcleo de Portos e Estruturas Marítimas, Departamento de Hidráulica e Ambiente

[2]Universidad de La Laguna (Espanha)
Instituto Universitario de Investigación Social y Turismo, Departamento de Sociología y Antropología

[3]Grupo Tragsa, Departamento de Proyectos (Espanha)

ABSTRACT

The project LIFE-GARACHICO* (LIFE20 CCA/ES/001641) proposes the creation of an effective flexible adaptation framework for the coastal municipalities of Macaronesia, making specific local interventions to increase their resilience against extreme coastal events resulting from climate change. The pilot location for the study is Garachico (Tenerife – Spain). The actions of the project are then replicated in 2 other, including Praia da Vitória (Terceira, Azores – Portugal).

This project emphasizes the integrative participation of the community by the application of surveys to the local population. Such surveys addressed 4 thematic dimensions: 1) Sociodemographic information; 2) Previous experiences with coastal floods; 3) Information about coastal floods in their daily lives; and 4) Resilience to face future floods. The objective of this communication is to make a qualitative evaluation of the results extracted from these surveys in Garachico and Praia da Vitória.

68% of the population is above 41 years old in PV and about 64% is above 46 years old in Garachico. 70% have completed, at most, secondary education in Garachico, against 62,5% in PV. 18.3% of the population of PV claims to have been affected by coastal floodings, compared to only 12.3% of the population of Garachico. In Praia da Vitória, 83.3% of those who claimed to be affected, have had no type of assistance, while in Garachico, about 57% of the affected claim to have had government assistance. In daily life, the population of Garachico feels more previously informed about the risk of coastal floods (58.7%) than the population of Praia da Vitória (23%). Also, the population of Garachico considers themselves much more prepared (73%) than the population of Praia da Vitória (only 30%), in case of being affected by a coastal flooding event. Overall, the population of Garachico seems more resilient than the population of Praia da Vitória, since they are more informed and better supported by the government.

The integrative methodological approach used in this project proves to be highly effective and capable of substantiating the proposal for creating a flexible adaptation model that deeply respects the realities of the urban coastal communities of Macaronesia.

Keywords: Coastal flooding, flexible adaptation, integrative participation, resilience.

*Aknowledgments: this work has been supported by the project LIFE-GARACHICO, which is part of the UE funded LIFE Programme (LIFE20 CCA/ES/001641).