ACCORD EUROPÉEN ET MÉDITERRANÉEN SUR LES RISQUES MAJEURS

(EUR-OPA)

PROJECT – INsPIREd (CERU + CEPRIS + CUEBC)

INFORM AND INVOLVE THE POPULATION IN THE PREVENTION OF SEISMIC AND TSUNAMI RISKS: MINIMIZE DAMAGE AND INCREASE THE RESILIENCE OF THE CITIES OF CASCAIS AND LAGOS, IN PORTUGAL, AND M’DIEQ AND TANGIER, IN MOROCCO

Centro Europeu de Riscos Urbanos
Lisboa - Portugal

Centre Euro-Méditerranéen pour l’Évaluation et la Prévention du Risque Sismique
Rabat - Maroc

Centro Universitario Europeu per i Beni Culturali
Ravello - Italia

WP3 : Study of the Social vulnerability of Lagos and evaluation of criticality and supportability for integrated risk analysis - Executive summary

COORDINATOR: Paula TEVES-COSTA (Portugal)

CERU – 2015
Introduction

The study on the social vulnerability assessment for Lagos was performed by the Centre on Social Studies (CES) of the University of Coimbra (Portugal) and was supported by CERU and Lagos Municipality.

The following pages present the Executive Summary conducted by the authors.

The full report was delivered in Portuguese.

The municipality of Lagos is analysing the results in order to consider its applicability from various perspectives and to subsequently decide the measures to be implemented.

After the Executive Summary we include in this report the final map of Lagos social vulnerability that should be interpreted in the context of the work in which it has been conducted.
In the national context, the evaluation Lagos County social vulnerability is classified as very low. This contextualization is fundamental in order to understand the results at the municipality scale, which must be interpreted in a perspective of differentiation within the municipal territory, and not in absolute terms.

In effect, except as regarding their components, the social vulnerability results were obtained for the statistics sections of the Municipality of Lagos, using input belonging only to this municipality. Thus, the scores of each geographical unit of analysis cannot be compared with the results obtained in other geographical areas, although the methodology used has been the same.

Combining the two components - criticality and support capacity – in a final value of social vulnerability, it is observed that a type of profile is distinguished where the vulnerability is higher. This profile is characterized by the presence of a high proportion of aged population coincident with rural areas where the support capacity is, in general, lower. The corresponding areas are almost all the Odiáxere parish, the northernmost statistical sections in the parish of Bensafrim and Barão de São João and some statistical sections of the Luz parish.
A second profile of larger vulnerability is characterized by a small proportion of families without unemployed, and not so much associated with a lower support capacity, and which is well defined in a statistical section that partially comprises the place of Chinicato.
WP3: Study of the Social Vulnerability of Lagos
SOCIAL VULNERABILITY ASSESSMENT IN THE MUNICIPALITY OF LAGOS

- Executive Summary -

José Manuel Mendes
Alexandre Oliveira Tavares
Pedro Pinto dos Santos

September 2015
Executive Summary

The best efficiency and effectiveness in risk governance processes is achieved through the optimal combination of three fundamental pillars: organization, communication and knowledge. The evaluation of social vulnerability is a necessary step in the knowledge-generating process on the risk that characterizes individuals and communities.

The methodology applied in this study for the social vulnerability assessment, abbreviated as VS-CES-OSIRIS, was initially developed in a scientific research project coordinated by the Centre for Social Studies of the University of Coimbra called "Risk, Social Vulnerability and Planning Strategies: A Integrated Approach".

The innovation brought by the VS-CES-OSIRIS methodology is the assumption that social vulnerability is a function of two components, criticality and support capacity. The criticality is defined by the set of characteristics and behaviors of individuals that determine the degree of resistance and resilience to respond or deal with disasters and catastrophic scenarios. Support capacity is defined by the coverage and diversity of infrastructure and equipment that leverage the response of communities to disasters and catastrophes.

The results of the above mentioned project attribute to the Municipality of Lagos – with reference to the data for all municipalities of mainland Portugal – a very low criticality - 5th level on a scale ranging from very high to very low - and a very high support capacity - 1st level according to the same scale – resulting in a very low social vulnerability. However, this is the situation before the reality of the country, and assessed at the municipal level. At an inframunicipal level, knowledge of the specificities and nuances of the dimensions, amplitude and cartographic representation of social vulnerability and its two components was not available.

This study aims to address this lack of information, identifying at the inframunicipal level – taking the statistical block as the geographical unit of analysis – the most vulnerable areas and local asymmetries. To get an accurate idea of the degree of detail of the analysis, consider that the Municipality of Lagos, with a population of 31,049 inhabitants and an area of 212.99 km², is divided into 70 statistical blocks, thus presenting each of them an average of 444 resident population.

From a universe of 49 variables, Principal Component Analysis (PCA) identified four principal components (FAC's) for criticality. Regarding support capacity, 11
initial variables were considered that were grouped into two principal components, explicative of the mitigating factor of social vulnerability. The main components for the criticality describe and differentiate the Lagos Municipality in terms of vulnerable age groups and housing conditions (FAC1), education and economic situation (FAC2), rural population (FAC3) and least unfavorable social context (FAC4). The components of support capacity describe the coverage by social equipment and services (FAC1) and the contrast between urban and rural areas (FAC2). Both reflect the availability and proximity to social facilities, infrastructure and public or private services that are relevant to the population and the socio-economic activity for its potentiating role of resilience.

The representation of criticality in the 70 analyzed statistical blocks identified specific and confined areas of very high criticality, in sectors of the built-up areas of Chinicato and Meia Praia, as well as a statistical section in the Trindade area where is a residential structure for the elderly exists. Age, education and employment are the underlying factors that characterize these situations. Regarding support capacity, the assessment identified a clear concentration of some equipment and services in the City of Lagos, while this differentiation is less notable with respect to some public social infrastructure, in the areas of education and support to the elderly.

Risk governance is an ongoing process that takes place at different levels and sectors of administration, at different scales, involving public and private entities in conjunction with individuals and communities. The reduction and mitigation of the impact of disastrous events – whether they are more or less severe and likely, with varying degrees of ubiquity – therefore depends on the integrated action of various spheres of society. The results of this assessment highlight the relevance of such type of approach. At the level of the Lagos Municipality in particular, it is considered to exist applicability of the social vulnerability information in the fields of Civil Protection, Public Security, Social Welfare, Housing, Urban and Regional Planning.