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Making Cities Resilient: My City is Getting Ready!

World Disaster Reduction Campaign 2010-2011

Lisboa is getting ready!

Lisboa, Portugal

Municipality Population: 564,657 (2001 census)

Municipality Area: 84,6 km²

Type of Hazard: Windstorms and short intense rainfall, Flooding, Urban Fires, Waves of heat, Earthquake with tsunami

Lisboa is mainland Europe's western most capital. Located on the Atlantic coast at the mouth of the Tagus River, Lisbon is the capital and largest city in Portugal. The urban structure of the city, mainly the historical areas, has very old buildings where building density is high. The oldest part of the city is localized along the river shore and is vulnerable to floods especially in the period of short intense rainfalls.

The whole city is exposed to seismic risk. Although it's unpredictability, since the 12th century Lisboa has suffered the effect of nine earthquakes that caused great losses. The earthquake on 1st November 1755 had tremendous devastation: the river shore of the city was destroyed, also due to the tsunami that followed the earthquake.

In August 1988 there was a big urban fire in the 'heart' of the city, Chiado. Several quarters were completely burned, with residential and commercial areas devastated. The population was evacuated to emergency lodging places.

In the summertime all the country and also the city of Lisboa is exposed to heat waves. The temperature reaches high values during the summer months, affecting mainly the old population living in the old quarters.

Description of the hazard and vulnerability profile of the city

- Seismic risk

In the last 200 years Lisboa had two major earthquakes. In 1755, with tsunami, magnitude 8,5/9 (Richter). Historical reports describe this major earthquake as a catastrophe, with 20.000 deads in the city, most of the buildings collapsed or were consumed by the fire. All the riverside area of Lisboa city was devastated. The 1909 and 1969 earthquakes affected mainly the neighborhood of Lisboa (magnitudes 7,0 and 6,5/7,5 Richter), with residual losses reported.

- Strong wind and Intense rain, with flood risk

Lisboa has a corridor along the river side of flood areas, bounded by several small hills (the 7 hills of Lisboa) with high density of old buildings. These areas are vulnerable to storm surge and flooding, due to short intense rain periods, mainly from November to March. During those rainfall events combined with a high tide, the storm water surcharge in the drainage system can cause major flooding in the rivershore areas as well as central areas.

- Waves of heat

In Summer months there is a great probability of the temperature reaching high values with serious consequences on older population.

- Urban fires

One of the numerous occurrences in Lisboa is the Urban Fire, in old buildings mostly. On August 1988 there was a huge fire in Chiado, the 'heart' of the city, where a few quarters from the city downtown were completely burned.

- Forest fires

Situated on the occidental part of the city, the Monsanto hill is a forest park with an area about 10 km². Although this area is covered by an Operational Plan and constantly monitored by the Florestal Police, the forest fire is an eminent risk, mainly in summer time.

Disaster Risk Reduction activities

- Prevention: Identify and define different levels of vulnerability and risk situations with probability of occurrence inside of the geographical limits of Lisboa. Improve the local system of alert; Hazard mapping; Disaster Risk Management Reports and Studies.

- Planning: Build much realistic and detailed risk scenarios to include on future upgrading of the existing contingency plans; build new criteria to apply in the warning and alert systems used between all the relevant entities and organisms on risk situation ; Contribution to sustainable urban planning practices;
- Awareness & Public Information: Support the definition of which quarters should be prioritized in public information campaigns (frequently the budget allocated to this kind of projects is very limited and it's necessary to choose specific areas to perform the public information); evolve the population on preparedness by organizing voluntary groups of citizens allocated to their residential quarters;
- Crisis Management: In case of occurrence of a disaster focalize operations and efforts in the areas identified as much vulnerable.

Quote Mayor and Picture of Mayor António Costa

“ The Municipality of Lisboa will participate in this Campaign through the Department of Civil Protection, engaging local partnerships on hazard monitoring and risk assessment, creating public and private alliances and promoting good practices among citizens and community groups enabling Lisboa as a city resilient to disasters

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António Costa, Mayor of Lisboa