

Disaster Vulnerability Profile - Kota Bengkulu

This profile summarises the vulnerability of the Social and Cultural, Built, and Economic environments of Kota Bengkulu to natural hazards.

Natural Environment

Bengkulu City is the capital of Bengkulu Province, located on the west coast of Sumatera, Indonesia. With a land area of 152 km², the city occupies low coastal plains, small river basins, raised coastal terraces and relatively low-lying rolling hill terrain.

Hazards and Risks

Proximity to the Sunda tectonic subduction margin, along with wet and dry seasonal variation, combined with low lying topography, make Kota Bengkulu prone to natural hazards, particularly earthquake, tsunami, and flooding. Kota Bengkulu has a BNPB Disaster Risk Index score of 170 (high) and it is ranked 168th out of 496 districts assessed (BNPB 2013). Tsunami is considered to pose the highest threat.



Table 1 Assessment of risk from hazards for Kota Bengkulu (Disaster Risk Index– 2013).

Threat	Earthquake	Tsunami	Flood	Landslide	Coastal Erosion	Forest fires	Extreme weather	Drought
Risk	High	High	High	Moderate	High	High	Moderate	High

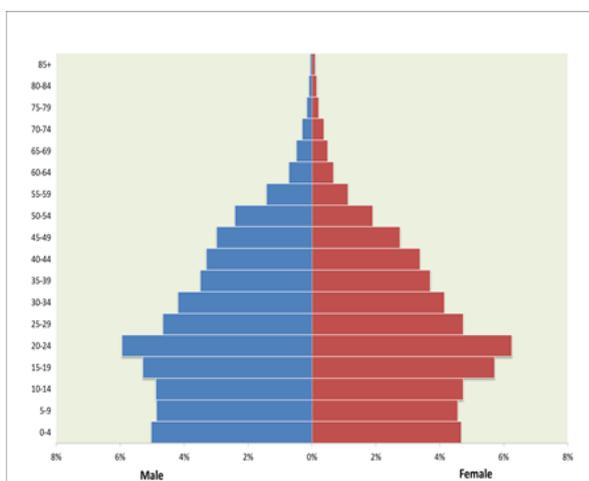
Built environment vulnerability

Poor construction and development control

Many buildings and developments in Kota Bengkulu do not have permits and commonly do not adhere to spatial planning and building regulations. Geological, geotechnical and geomorphological conditions, including hazards, are often not considered despite risk maps being available.

At-risk major transport gateways

Both the port and airport are at risk from hazards, and the ports capacity is diminished by sedimentation and the need for constant dredging of the shipping channel. Disruption to the port would have significant impacts on the economy and contingency arrangements should be formulated.



Social and Culture Vulnerability

The population of Kota Bengkulu in mid-2013 was 334,529. The population density of Kota Bengkulu is about 2,280 people per km². The population is made up of a number of ethnicities and is predominantly Muslim.

Youthful Population

Kota Bengkulu has a youthful population. Younger people can be more vulnerable to disasters, but there is an opportunity to educate the population on hazards and potential impacts through schools. Educating young adults and youth should consider utilize social networking and the internet.

Immigration

Despite successful transmigration, there are still ethnic, racial, religious and social issues. Migrant population from outside the district may be more vulnerable to hazards as they are often unaware of the hazards and the risk reduction measures in place. Social conflict has also developed and disputes over land occur.



Economic Vulnerability

Vulnerable Port

Kota Bengkulu is predominantly a port city with much of the local commodities from the surrounding districts (Palm oil, coal) being shipped from here.

Vulnerable tourist industry

Tourism is primarily based along the beaches of Bengkulu, which are vulnerable to earthquake, tsunami and in the long term, sea level rise and coastal erosion.

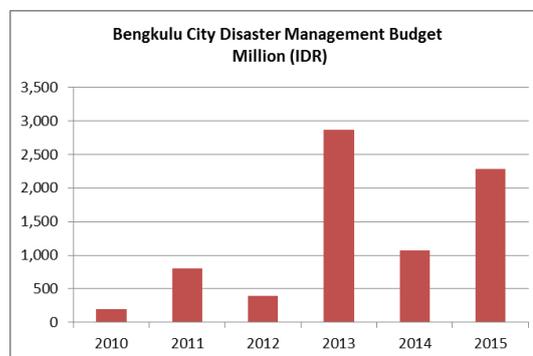
External impacts

Deforestation, illegal logging and conversion of forests to palm plantations modifies catchments, increases and concentrates run-off, increases erosion and flood potential. Mining activities upstream of Bengkulu also causes sedimentation in the rivers exacerbates flooding.

Disaster Risk Reduction environment

The budget for Disaster Management is mostly allocated from the national budget. The amount of BPBD budget has increased from 2010. The disaster management mission of Kota Bengkulu is “A Prosperous and Dignified Kota Bengkulu for the People” as laid out in the Disaster Management Plan 2014-2018 and prevention initiatives include:

- *vegetation fortress along parts of the coast for tsunami mitigation;*
- *determination of “safe zones” and equipping them;*
- *dissemination of disaster risk through posters,*
- *disaster hazard map, evacuation signs and sirens*
- *disaster simulation involving all community; and*
- *reconfiguring the disaster organization structure.*



Coordination

While the regulations, policies and plans for DRR are in place, along with a BPBD structure, stakeholder interaction and integration across all agencies in Kota Bengkulu is poor, and often excludes the private sector and Universities. There is a lack of awareness from private sector for DRR and a lack of use of media to disseminate disaster-related information.

Resources

Suitable education materials need to be developed for a variety of community groups. Staff rotation at BPBD is very high, thus difficult to maintain capability and continuity of effort. The human resources at the BPBD need to be developed through training.