

# Evaluation of Spatial Planning in South Bandung Area Towards Flood Resilience

Mohammad Adietyarahman Sulistio Ardjo, Budi Siswanto, Astri Aulia Safrianty and Anisa Permana (Indonesia)

**Key words:** Implementation of plans; Informal settlements; Spatial planning; Cikapundung river

## SUMMARY

Abstract: Citarum River is the main river and one of the largest river in Java. Citarum River not only serves the needs of seven districts and two cities in West Java but also as a source water of Jakarta. The river is also a major source of water flow for hydropower Saguling and Cirata. At first, Citarum River as a part of people's live. Rapid development of the city raises issues such as the problem of waste, slums along the river, and the disruption of the flow of water on the surface (run-off) due to dense the development. This phenomenon make Citarum River as one of the rivers with highest pollution levels in the world (Cita Citarum, 2013). Large impact occurring is flooding that often occurs each rainy season. Flood mitigation is an important issue in land use planning especially in South Bandung Area. Flood mitigation measures to minimize the impact of floods in South Bandung Area as a results of the overflowing of the Citarum River Topography of South Bandung area under river make this area all year round to flooding, especially when the river overflow. Potential flooding in South Bandung described by using Geographic Information System. The data used for this study is the, topographic maps, land use maps, hydrologic maps of Bandung regency. This study use the SRTM data. The data shows the location of the lowest point at the Bandung basin and the pattern of water flow which it can use to analyze the potential of flood areas. This study is an initial attempt to map potential flood risk on the banks of the Citarum River so that losses due to the risk can be minimized through spatial planning's tools. How the compatibility between land use planning and flood area delineation. This study explain the relevance of spatial plans in South Bandung is associated with frequent floods that hit the area, by evaluating the compatibility of spatial plan with flood area delineation, and formulate recommendations for land-use regulation in the Citarum Riverbanks in South Bandung area towards flood resilience.

---

Evaluation of Spatial Planning in South Bandung Area Towards Flood Resilience (8331)  
Mohammad Adietyarahman Sulistio Ardjo, Budi Siswanto, Astri Aulia Safrianty and Anisa Permana (Indonesia)

FIG Working Week 2016  
Recovery from Disaster  
Christchurch, New Zealand, May 2–6, 2016