

KvK Hotspot Jakarta: Flood risk and Damage Assessment

BACKGROUND

Spatial planning and water management are currently not well tuned in the greater Jakarta area. Relevant climate change impacts are: increased intensities and amounts of rainfall, especially during the wet season; sea level rise; and an increased probability of storm surges. These factors are not yet taken into account in the calculation of flood risks. Spatial planning and water management are poorly integrated and these policy fields are not climate proof. Awareness of climate change issues and their influence on flood risks in stakeholders, such as inhabitants, private businesses and decentral governments, is low. Tools to support the decision making process and to communicate with stakeholders about flood risks in general (and more specifically the increased risk due to climate change factors) are insufficient.

OBJECTIVES

- Improve flood risk mapping by incorporating existing climate model results of future changes in rainfall, sea level rise and storm surge activity;
- Improve the integration of spatial planning and water management by using improved flood risk mapping and applying Strategic Environmental Assessment both as a basis for planning and for communication with stakeholders;
- Improve decision making processes by using better adaptation tools such as flood risk maps that incorporate climate change impacts.

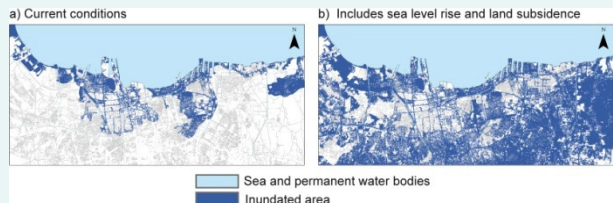


CONSORTIUM AND FUNDING

This project is funded by the Dutch National Research Programme Knowledge for Climate (<http://www.klimaatonderzoeknederland.nl/>)

Partners involved in the consortium are:

- Royal Haskoning, Nijmegen, Netherlands
- Institute for Environmental Studies (IVM), Amsterdam, Netherlands
- Universitas Gadjah Mada, Yogyakarta, Indonesia
- Wageningen University, Netherlands



Inundation maps of northern Jakarta for two coastal flood scenarios

SELECTED OUTPUT TO DATE

Ward, P.J., Marfai, M.A., Yulianto, F., Hizbaron, D.R., Aerts, J.C.J.H., 2010. Coastal inundation and damage exposure estimation: for Jakarta. Natural Hazards, doi:10.1007/s11069-010-9599-1.

Ward, P.J., Pauw, W.P., Van Buuren, A., Marfai, M.A., 2010. A tale of two cities: Governance lessons for flood risk management in a time of climate change - the cases of Jakarta and Rotterdam. Symposium of City University of Hong Kong, 8-9 July 2010, Hong Kong, China.

FURTHER INFORMATION

The definition phase of this project runs from 2009 to February 2010, and the second phase of the project will run from February 2010 to summer 2014.

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