



Relating climate change policy to poverty policy: assessing the global exposure of the poor to floods and droughts

Hessel Winsemius (1), Brenden Jongman (2,3), Ted Veldkamp (3), Stéphane Hallegatte (4), Mook Bangalore (4), and Philip Ward (3)

(1) Deltares, Inland Water Systems, Delft, Netherlands (hessel.winsemius@deltares.nl), (2) Global Facility for Disaster Reduction and Recovery, World Bank Group, Washington D.C., United States, (3) Vrije Universiteit Amsterdam, Institute for Environmental Studies, Amsterdam, Netherlands, (4) Climate Change Group, World Bank Group, Washington D.C., United States

Prior to the COP21 conference in Paris this year, the World Bank published a report called “Shockwaves – Managing the Impacts of Climate Change on Poverty”. The report flagged that ending poverty and stabilizing climate change should be jointly tackled and that without a good joint policy, a further 100 million people could become trapped in poverty by 2050.

As part of the “Shockwaves” report, we investigated whether low-income households are disproportionately overrepresented in hazard-prone areas compared to households with higher income. Furthermore, the hazardous conditions under which poor households are exposed to now may become worse due to climate change with resulting increases in intensity and frequency of floods and droughts. We also show how the amount of affected people to these natural hazards change in the future if nothing is done. We use recent advances in the global spatial modeling of flood and drought hazard and a large sample of household surveys containing asset and income data to explore the relationships.