# Stories of Impact

A series highlighting achievements in disaster risk management

Building Resilient Communities across Indonesia



REGION: EAST ASIA AND PACIFIC FOCUS: RISK IDENTIFICATION,
RISK REDUCTION
COUNTRY: INDONESIA



- GFDRR has provided \$2.8 million in grants and technical assistance support for raising community-level risk awareness and streamlining disaster preventive measures. This support has also served as building blocks for World Bank-financed community driven development projects of \$1.2 billion which cover
  - more than 100 million urban dwellers spread across 33 provinces.
- GFDRR assistance contributed to leveraging \$217 million in investments for strengthening local community infrastructures from the World Bank and the government of Indonesia.
- The GFDRR-supported InaSAFE tool is facilitating community-based risk mapping, helping local decision-makers better understand hazard impacts, and integrating disaster risk mitigation in local infrastructure projects. The InaSAFE tool has been downloaded more than 20,000 times across Indonesia.

Indonesia is among the top 35 countries with high mortality risks due to several natural hazards. 40% of the population is at risk, representing more than 90 million lives. The government of Indonesia, with support from the Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank, has made considerable progress in empowering vulnerable communities and strengthening urban resilience against a wide range of risks triggered by natural disasters and climate change.

Given the scale and geographic complexity of the country, enhancing community resilience in urban settings is an important priority for Indonesia. The government has been collaborating with community leaders to increase awareness of disaster risk mitigation and scale up preventive measures including eco-resilient settlements, safer evacuation routes, and landslide mitigation techniques.





A flood-prone waterway in Jakarta

#### **CONTEXT:**

With an average annual urbanization rate estimated at 4.1% between 2000 and 2010, Indonesia has become one of the most urbanized countries in Asia. Its urban population share, 54% in 2010, is projected to quickly reach 68% by 2025. Rapid urbanization results in dense settlements and a concentration of critical infrastructure, which means that 110 million people in 60 Indonesian cities are regularly exposed to natural hazards, including tsunamis, earthquakes, floods, and other climate change impacts.

Yet, when a disaster hits, urban environments can support vulnerable households when damages and losses are minimized, as well as make communities feel safer and recover faster. GFDRR, the World Bank, and the government of Indonesia are working together to empower vulnerable communities in disaster risk mitigation and mainstream preventive measures to reduce multi-hazard impacts.

#### **APPROACH:**

The National Program for Community Empowerment in Urban Areas has been implemented across 10,922 urban wards reaching more than 100 million urban dwellers, including 20% of urban poor. This nationwide program already employs more than 6,000 facilitators and 1,850 city coordinators and technical assistants who contribute to mainstreaming disaster risk management (DRM) measures by providing advisory assistance to communities in urban management and local infrastructure development.

GFDRR's support is helping the program's delivery of training activities for facilitators and provides block grants for communities to undertake urgent disaster resilient measures to reduce the impacts of natural hazards. This technical assistance has already leveraged \$217 million in investments from the World Bank and the government of Indonesia to fund additional Community Driven Development (CDD) projects, nearly 80% of which is to be invested in resilient community infrastructure. The training of facilitators has contributed to the dissemination of disaster risk reduction best practices. It has also encouraged communities to integrate resilience-enhancing measures into neighborhood infrastructure upgrades in urban areas, including evacuation routes, water retention drainage, landslide mitigation methods, and eco-resilient settlements.

#### **NEXT STEPS:**

The government of Indonesia is embarking on an ambitious plan to replicate this CDD approach to scale up strengthening local infrastructure and invest in the upgrading of urban neighborhoods in a sustainable manner. Based on the best practices provided by the World Bank and GFDRR, Indonesia is seeking to replicate these resilience-enhancing measures, empowering at-risk communities, and strengthening disaster resilience across urban areas prone to natural disasters. The government will also make further efforts to facilitate partnerships with the private sector, universities, and research institutions. This will allow better dissemination of knowledge related to community-based DRM, including local flood zoning, high impact infrastructure upgrades, and community risk reduction planning.

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"In landslide prone areas like Manado, trainings and workshops are provided to strengthen community awareness and improve local capacity in disaster risk management. We are very pleased with the results of this pilot program, and hope to replicate this unique approach in other disaster-prone locations."

- Yulin and Meyke, PNPM program community facilitators

### **LESSONS LEARNED:**

Bottom up risk awareness needs to be built through participative planning processes. The Program Nasional Pemberdayaan Mandiri (PNPM, or National Program for Community Empowerment) and Community Driven Development (CDD) programs in more than 200 urban neighborhoods have equipped and built the capacity of local decision-makers to conduct their own community risk mapping. As a result of this participatory approach, community leaders were able to identify recurring natural hazards, enabling them to measure exposure to disaster risks before planning quick-impact mitigation activities, such as evacuation routes or water retention drainage facilities.

## Resilience-enhancing measures need to be incorporated directly into regular urban infrastructure investment flows.

Successful integration of infrastructure and community measures are crucial before triggering systematic urban upgrading. Pilot grants for undertaking resilience-enhancing measures have provided communities with a realistic showcase to persuasively demonstrate how infrastructure investments can be resilient to the most common hazards facing Indonesia. These pilots demonstrate that densely populated settlements prone to landslides stand to benefit from being provided with preventive structural measures that are built with effective drainage systems, a robust design, and a connectivity function to provide safe evacuation options for the community during flood or earthquake-triggered events.