

STRENGTHENING URBAN RESILIENCE IN CENTRAL AMERICAN MUNICIPALITIES

Making Cities Resilient to Reduce Central America's Vulnerability to Natural Hazards

AT A GLANCE

Region Central America

Risks Floods, earthquakes, hurricanes, landslides

Area of Engagement Promoting access to risk information, Scaling up city resilience, Deepening engagements in resilience to climate-related risks, Promoting resilient infrastructure, Building resilience at the community level

Supporting national and local governments in Central America to better understand disaster resilience and climate risks thus enhancing urban resilience

GROWING EXPOSURE & VULNERABILITY DUE TO INCREASED URBANIZATION NECESSITATES TERRITORIAL PLANNING

Central America is the second-fastest urbanizing region in the world, second only to Africa. Urbanization is progressing at unprecedented rates and cities are becoming the place where challenges and opportunities are increasingly concentrated. At current rates of urbanization, the region's urban population will double in size by 2050, adding over 25 million new urban dwellers. Underestimating this transition could increase the creation of informal settlements and the concentration of population and economic activity in risk-prone areas, undermining productivity and reducing the capacity of countries and cities to withstand shocks. Understanding the social and economic losses inflicted by natural disasters will be essential as local governments work on preventing future risk, reducing vulnerability, and building resilient cities.

Central America's geographic location makes it especially prone to disasters from adverse natural events, including hurricanes, floods, and earthquakes. Between 2000 and 2016, the damages and losses associated with natural hazards in Central America have been estimated to total almost US \$40 billion. The frequency and severity of hydro-meteorological catastrophic events which produce extreme rainfall, hurricanes, and storms have increased in recent decades causing the greatest accumulated regional damages and



With improved risk reduction and climate smart planning for specific sectors, client countries are able to not only mitigate damage from natural hazards, but also incorporate this knowledge into policy decisions. (Source: World Bank)

losses. In addition, the largely unplanned and poorly managed urban growth over the past decades has resulted in a high share of the urban population living in precarious settlements, often in hazard-prone areas vulnerable to landslides and floods. Promoting resilient investments in cities requires coordinated efforts between national investment systems and municipal planning units. Financial resilience is key to protecting people and assets from existing and future disaster risks and is an inherent component of urban resilience.

BOOSTING CAPACITY, KNOWLEDGE, & POLICY ACTIONS FOR URBAN RESILIENCE

With support from the Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries, client countries enhanced their understanding of risks and resilience in their urban systems, thus enabling them to incorporate risk analysis into development planning processes and capital investment decisions, not only assisting municipalities in improving disaster risk management (DRM), but also benefiting over 16 million people by increasing resilience of cities. To that end, the US \$1.7 million grant increased the capacity of

government officials to effectively strengthen disaster resilient development at the local level, by designing slum upgrading policies, providing methodological guidelines for assessing disaster risk, and building statistical capacity for improved urban resilience.

To strengthen resilience at the local level three case studies were compiled in the capital cities of: Tegucigalpa, Honduras; Managua, Nicaragua; and Panama City, Panama, where more than the half of the population of each country lives. Through gaps identified during case study analysis, governments increased understanding of their DRM profile and began projects to address these issues. At the municipal level, the World Bank team performed a landslide hazard and risk assessment in six cities in Mancomunidad del Sur, Guatemala as well as designed and implemented methodologies for risk mapping, including flood modeling in 20 municipalities in Sula Valley, Honduras, informing both national and local DRM plans. In addition, there were two international workshops for the discussion and dissemination of the Central American Urbanization Review (June and Oct. 2016). The TA also financed other national workshops with participation of international experts: (i) International training on DRM in Costa Rica – CATIE (Nov. 2016), (ii) Resettlement and DRM (Honduras, May 2018), and (iii) Landslides workshop in Guatemala (May 2019). Other national workshops were financed in the context of the proposed new DRM Law and the new policy for slums upgrading in Guatemala (Several workshops in 2017 and 2018), as well as the formulation of the DRM municipal plan in Managua (August 2018), and Tegucigalpa (Sept. 2018).

Japanese expertise, including close collaboration with JICA, was instrumental during the grant. The countries benefited from two Technical Deep Dives (TDD) in Tokyo, hosted by the Tokyo DRM Hub and Tokyo Development Learning Center. Guatemala's delegation, during the TDD on Compact Cities in 2016, learned how Japan built a shared development vision for urban areas by building long-term consensus among key stakeholders. Guatemalan authorities later applied these lessons to the multi-stakeholder socialization of their new DRM law process. In 2017, during the TDD on Integrated Urban Water Management, the Honduran delegation learned how officials in Yokohama integrated flooding into their city model. By recognizing flooding is a cyclical, recurrent phenomenon, and consequently planning for such flooding, the Japanese were able to mitigate damages and losses strengthening their urban flood resilience. This harmonious perspective strengthened the Hondurans' inclinations to introduce flood risk reduction into national policy discussions, making this peer-to-peer exchange highly beneficial for the client country. Furthermore, the grant helped to leverage additional investments from the World Bank through the Guatemala and Honduras Catastrophe Deferred Drawdown Option (US \$200,000 and US \$119,000 respectively), as well as, US \$200 million through the El Salvador Local Economic Resilience Project.



Over 16 million people
living with more resilient urban systems

Over US \$500 million
mobilized to further urban resilience

KNOWLEDGE DEEPENED

12 country or city specific diagnostic reports and/or policy action plans produced and disseminated

focusing on international best practices on housing financing policy instruments, slum upgrading, national urban policy and resilient cities.

TECHNOLOGY & RISK INFORMATION ENHANCED

Countries improved understanding of risks and resilience in their urban systems at national and the municipal levels. In total, three hazard, exposure and risk datasets

and geospatial layers were developed; 18 datasets made available, and one data sharing platform; 16 knowledge exchanges were facilitated, and 1,107 people trained, including 498 women. National governments are now using risk information in development planning and capital investment decisions to assist municipalities in improving DRM.

BUILDING CAPACITY AT THE LOCAL LEVEL

The grant contributed to the successful reform of the national, legal and institutional structure for

DRM in Guatemala, strengthening 340 municipalities; local authorities approved a Strategic Plan for DRM and Urban Resilience in Managua, Nicaragua; strengthened DRM capacities in 20 municipalities in the Sula Valley region of Honduras.