

altogether. Slums are particularly dangerous for children, given the lethal mixture of kids, guns and gangs in those environments.

Rio de Janeiro's long-running conflict between police and drug gangs has seen levels of violence comparable to those experienced by countries undergoing civil war. More people, particularly children, were killed by armed violence in the city's slums between 1978 and 2000 than in Colombia's civil strife over the same period.

Finding solutions

Many of the world's fastest-growing cities are least able to afford the basic services that new urban citizens require. In Africa, city dwellers multiplied 10-fold between 1950 and 2000, with another doubling expected by 2020. Two thirds of Africa's urban citizens live in slums.

Solutions that focus on governance often get to the heart of the matter. The Philippine port city of Iloilo—one of the fastest-growing places in the country—was struggling in the early 1990s with problems such as inadequate drinking water, poor air quality and poverty. With the help of the Canadian Urban Institute (CUI), a unique partnership was devised between the city and surrounding communities to begin solving these problems and launch a promising economic development plan.

The CUI, with Canadian support, helped local officials in Iloilo create a consensus-based regional development council, modelled in part on the Greater Vancouver Regional District. The key, says Iloilo Mayor Jerry Treñas, was for officials across the region to come up with a collective solution. "The issues we faced spilled from one jurisdiction to the next," he says. "To move forward we knew we needed to come together." Now the region

Big cities

In 1950, only one city, New York, had a population of more than 10 million. By 2015, 23 cities, most of them in developing countries, will have populations of more than 10 million.

source: UN-Habitat

works cooperatively, for example in tourism programs that promote travel to heritage buildings and festivals in the city core as well as surrounding farms, villages and distant white sand beaches.

The International Development Research Centre is looking at ways to improve the lives of slum dwellers while also protecting the environment as part of its Focus Cities Research Initiative, with projects aimed at everything from creating "edible neighbourhoods" to developing a dishwashing liquid that has a less harmful impact on soil (see story on page 8).

Environmental sustainability and local governance are the focus of urban initiatives by CIDA, which invests more than \$100 million a year on projects with an urban reach. For example, a municipal development group is working with local officials in 18 West African countries on issues such as ensuring local democratic governance and citizen input into anti-poverty efforts and training municipal employees and elected officials. In Haiti, a CIDA program has helped bring sustainable electricity service to the city of Jacmel. With reliable power in their homes and businesses 24 hours a day, residents have begun to regularly pay their energy bills, which has given Jacmel a level of social and economic development not seen elsewhere in Haiti.

The Canadian Mortgage and Housing Corporation (CMHC) has worked with UN-Habitat to show developing countries how to use satellite images and specialized computer systems to improve urban planning. For example, pictures from space can help identify areas vulnerable to mudslides or estimate the number of people in slums, providing key information in deciding where to install public water taps or build roads.

Pierre Lanciault, a CMHC manager, worked with the Kenyan city of Nakuru to show officials there how such images could be used to locate services in densely populated areas. "When we looked at the data, we showed them that a planned well was in the same watershed as a garbage dump," Lanciault says.

Many Canadian companies are showcasing their expertise in sustainable development technologies and services in rapidly growing cities. Baird and Associates, a coastal engineering firm based in Ottawa, is working with support from the federal government to turn a polluted and dusty canal bed running through the city of Viña del Mar, Chile, into a park-lined waterway.

In Matamoros, Mexico, Golder Associates, an international engineering and environmental services firm based in Toronto, is preparing a plan to close an existing dump



An informal settlement on Iloilo River: The Philippine port city of Iloilo has begun to solve its problems through a unique partnership with surrounding communities.