

New towns going up in developing nations pose major risk to the poor

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Satellite city projects across the developing world are putting an increasing number of poor people at risk to natural hazards and climate change, according to a new study from the University of Colorado Denver.

Throughout Asia, Africa and Latin America 'new towns' are rapidly being built on the outskirts of major cities with the goal of relieving population pressures, according to study author Andrew Rumbach, PhD, assistant professor of planning and design at CU Denver's College of Architecture and Planning.

The towns often sit in high flood risk zones but designers have minimized the dangers through land elevation, new building codes and quality construction. The problem, Rumbach says, are the informal settlements that invariably crop up beside these new cities and supply their labor force. When cyclones or monsoons occur, they suffer flooding along with diseases like cholera, hepatitis and dysentery.

"Clearly, we need to expand the scope of planning for these new cities to include the communities where the poor will live," said Rumbach, who specializes in dealing with natural hazards.

The study will be published in the July 2014 issue of the journal *Habitat International* and is already online at

<http://www.sciencedirect.com/science/article/pii/S0197397514000320>.

Many nations are aggressively creating new towns. In India, the government has set an ambitious plan to build 100 of them with a million people each by 2020. Rumbach focused his research on Salt Lake, a fully mature new town on the outskirts of Kolkata (formerly Calcutta).

"Kolkata's current perspective plan calls for more than a dozen new town projects to be planned and developed on the city's periphery, settlements that may eventually house more than four million residents," the study said.

With a population of 300,000, Salt Lake is an affluent city, home to many of Kolkata's elite. It sits in an area of frequent flooding but drainage systems, underground sewers and elevated pumping stations mean it rarely suffers from natural disasters, said Rumbach who lived in Salt Lake during his study.

But two major slums – Dattabad and Kestopur - border the city and are home to many of construction workers, domestic help, food vendors and others who work in Salt Lake.

Rumbach interviewed 598 workers. The majority lived in slums and was employed in Salt Lake.

He found that most lived in cramped or crowded conditions which help spread diseases like influenza, cholera and tuberculosis, especially worrisome following heavy rain and floods. Houses were mostly made of concrete and brick with occasional cheap tile roofs. Electricity was sporadic and scarce. More than 80 percent of households in Dattabad and 100 percent of households in other settlements relied on toilets outside their homes, shared by dozens and sometimes hundreds of households.

"During flood events, open drains quickly overflow, contaminating

nearby homes and open spaces with gray water and human waste," Rumbach said.

While the designers of Salt Lake anticipated the flood risks, they and planners of other new towns did not anticipate the thousands of low-income workers who would move to the area to work in the city.

"These workers are excluded from working in the township itself...so the increased hazard exposure associated with the low-lying terrain dramatically increases their risk to [natural hazards](#)," the study said. "Salt Lake's informal [labor force](#) is adversely affected by even routine hazards like monsoon rains. When a major cyclone strikes, as they do every century or so, the impact on these communities will likely be catastrophic."

Ultimately, Rumbach said, urban planners worldwide must anticipate the needs of low-income workers.

"The workforce is essential to everyday functioning of townships like Salt Lake," he said. "To reduce risks associated with new town development, planners must take these vulnerable groups into account."

Provided by University of Colorado Denver

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