

NATURAL DISASTERS

Back home or not

Post-disaster reconstruction in situ is potentially good as it allows affected populations to start a new life within their community. But what if people would have preferred to move elsewhere?

Etienne Piguet

Going back home seems the most obvious dream of forced displaced victims of hurricanes, tsunamis, landslides or earthquakes. Policies therefore most often prioritize reconstruction of destroyed settlements in their original location and assume this is the best solution to ensure a sustainable future for affected populations, and to allow them to recreate their communities. Research by Jamie McCaughey and colleagues, reported in this issue of *Nature Sustainability*¹, shows that this might not always be the best and only solution. Following the 2004 tsunami in Banda Aceh, Indonesia, many of the most affluent displaced households actually chose not to live in the new houses built for them by the government in the affected areas, but to move away. Poorer households had no choice but to return to their original location.

Research on the mobility–environment nexus found that post-disaster displacements are most often temporary and that people wish to move back home². According to the Intergovernmental Panel on Climate Change, “Most displaced people attempt to return to their original residence and rebuild as soon as practical”³. This finding, supported by studies on natural disasters from various parts of the world^{4–6}, played an important and very necessary role in deflating popular fears⁶ that in the future growing flows of environmental refugees (displaced by climate change) could end up swamping receiving regions. At the same time, a significant body of research identified displaced populations that found it unduly difficult to return. In New Orleans, USA, after Hurricane Katrina, disadvantaged populations and especially African-American tenants faced important difficulties when trying to return to the city centre⁷ because of property owners trying to increase the rent by upgrading or repurposing their properties. As a result, some experts denounced subtle forms of post-disaster gentrification, suggesting that speculators deliberately rebuilt for more affluent inhabitants at the expense of the poorest who could not afford to come



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back⁸. The humanitarian lessons are clear: reconstruction on site should be a priority of post-disaster policies and displaced populations should be offered affordable housing in their original neighbourhood.

In their contribution, McCaughey and colleagues¹ do not contradict those conclusions and related policy implications, but show that under certain circumstances things might be more complicated. Their work investigates the reconstruction in Banda Aceh, Indonesia, after the December 2004 tsunami, which destroyed half of the city. There, aid providers encouraged reconstruction on-site by offering housing aid to surviving landowners to rebuild on their original plots. The article offers an analysis of the long-term impacts of that policy and of the extent to which return fulfilled the expectations of displaced populations. The researchers used complementary mixed methods: 756 households’ surveys, geospatial and property price analysis, interviews with officials, and secondary statistics on populations and poverty rates. The main findings challenge what the authors call “the humanitarian

ideal to build back better”¹; they found that a substantial proportion of the displaced population indeed preferred to live farther from the coasts than before the tsunami. The most striking conclusion is that this choice is constrained by socioeconomic status. Whereas more affluent households were able to settle elsewhere in the city, where increased housing demand pushed up the prices, many poorer households were trapped in their original location, where government-led reconstruction occurred. The large supply of unwanted rebuilt houses decreased the prices and attracted lower-income newcomers in the hazard-exposed part of the city. As a result of the reconstruction policy and households’ behaviour, within the tsunami-affected zones poverty rates increased and property prices decreased, whereas prices increased elsewhere. In other words, exposure to the tsunami led to a new kind of spatial and socioeconomic segregation in the area.

In the case of Banda Aceh, the main reason why, after the disaster, many households wished to move away from the coast was their modified perception of risk.

Before the tsunami, most people were not aware of living in a threatened zone, but after it struck they feared it could happen again, a feeling known as “chronic syndrome of insecurity”. Such feelings can interfere with one’s attachment to a place — “the [emotional, cultural and historic] bonds between people and places” — that represents one of the main reasons why, in many cases, people do wish to go back. In Banda Aceh too, attachment to place could have still influenced the decisions of some households, and as a result not all households that returned to hazard-exposed areas considered themselves ‘trapped’ and wished to go away. Indeed, 40% of aid houses are occupied by beneficiaries who are satisfied to be back to their pre-tsunami place of residence. However, as emphasized by McCaughey et al., the main finding remains that those people who wanted to move away from the areas at risk struggled to do so if they had a low socio-economic status, due to the changes in housing prices. Indeed, the researchers found evidence of a process of spatial segregation. Some poor households were pushed out of the safer neighbourhoods as housing became less affordable, as a consequence of the rising

demand from the more affluent households that were moving out of the tsunami area. This also led to a situation where some of the poor people were trapped in the tsunami risk area as they could only afford housing there.

Banda Aceh remains a specific case and it is likely to be difficult to generalize findings more widely: in other locations, reconstruction on site may still be the best option and the housing market might not be so responsive to demand changes. A number of general policy implications can nevertheless be considered on the basis of this case study. The first one, presented by McCaughey and colleagues, is that displaced people should be allowed to choose where to be resettled. A second one is that people should definitely not be forced to go back, unless the affected zones can be secured in the event of future disasters with reliable early-warning systems, escape routes, and so on. A third and last one is that the potential long-term social sustainability implications of interventions have to be integrated in all post-disaster recovery efforts and policies from the outset. Prioritizing reconstruction of destroyed settlements

in their original location might lead to phenomena of segregation that undermine the sustainability of communities and could exacerbate the impacts of natural disasters. □

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