Applied Research Partnerships with Developing and Transition Countries Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Is resettlement a viable strategy to mitigate the risk of natural hazards? Issues and experiences from the city of Santa Fe, Argentina

Year

2009

Thematic focus

Resettlement, post-disaster, disaster mitigation

Project location

Santa Fe, Argentina

Swiss Institution

Jennifer Duyne (jennifer.duyne@supsi.ch) World Habitat Research Centre, DACD, SUPSI www.worldhabitat.supsi.ch

Description

One of the most visible consequences of rapid urbanization in low- and middle-income countries is the increasing number of informal settlements on fragile lands that are highly prone to natural disasters. There is a close link between poverty, land tenure security, housing and vulnerability to natural disasters. Due to lack of access to safe land, poor people often settle on highly vulnerable marginal lands. Disaster risks and lack of tenure security discourage people and local authorities from investing in safe housing and infrastructure, with the result that the poor regularly loose what little they have. These factors explain why governments and international agencies are increasingly considering resettlement of vulnerable urban

Partner Institution

Maria-Luisa d'Angelo (mdangelo@fhuc.unl.edu.ar) Geography Department, Universidad Nacional del Litoral http://www.unl.edu.ar/

communities as a strategy towards reducing the risk of natural hazards, in particular within the framework of postdisaster reconstruction. This is the case of the highly floodprone city of Santa Fe, Argentina, which following the severe floods of 2003 has started considering the resettlement of vulnerable neighbourhoods as part of a comprehensive disaster risk reduction (DRR) strategy. Resettlement, however, is a complex process. Though sometimes desirable and unavoidable, its challenges and social consequences are often underestimated.

Development relevance

Resettlement risks can be mitigated through a comprehensive understanding of the socio-economic, spatial and ecological determinants of successful relocation and through participatory planning processes. The project aimed to contribute to a better understanding of factors affecting the viability of resettlement as a strategy to mitigate the risk of natural hazards with reference to Santa Fe by assessing the



Rektorenkonferenz der Fachhochschulen der Schweiz Conférence des Recteurs des Hautes Ecoles Spécialisées Suisses Conferenza dei Rettori delle Scuole Universitarie Professionali Svizzere Rectors' Conference of the Swiss Universities of Apolied Sciences

The research team

attitudes and experiences of different categories of stakeholders. The research findings were shared with communities, the municipal authorities, civil society organizations and academia in Santa Fe and served to trigger a debate about the opportunities and challenges of resettlement as a risk mitigation strategy.



The Salado River which is exposing the city of Santa Fe to the risk of floods



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

Main features of the project

In 2003 Santa Fe was severely affected by a flood which left over one third of the city submerged in deep water for several days. The impacts of the flood were particularly severe in the city's informal neighbourhoods located in the floodplains along the river. Hundreds of families lost their shelter and belongings. Following the floods a number of NGOs provided housing assistance to disaster-affected communities in relocated sites. When the city was again affected by severe floods in 2007 the municipal government of Santa Fe started considering the relocation of highly flood-prone informal settlements to safer sites in the city's periphery as part of a comprehensive urban renewal and disaster risk reduction program. The research aimed at finding out the viability, effectiveness and social acceptance of resettlement as a risk reduction strategy from the perspective of different categories of stakeholders. To this aim semi-structured interviews, focus group discussions and surveys were conducted with people living in vulnerable neighbourhoods who may be relocated as part of the program, people who have already been resettled following the floods of 2003 and representatives of community based organizations, NGOs and governmental agencies.

The research revealed that several factors influence people's attitudes towards resettlement. Despite the fact that many agencies emphasize the importance of the quality of housing, our findings indicate that this is only one among the several factors influencing people's attitude towards resettlement. Although good housing is appreciated and was found to have a positive impact on relocated households' socio-economic status, other factors such as access to employment and livelihood resources, the size of homestead plots, tenure security, distance to the place of origin and to employment opportunities strongly influence attitudes towards resettlement. These may outweigh the importance of housing. The research showed that the relative importance given by people to different variables and their overall attitudes towards resettlement depends among others on age, gender, family type and livelihoods. For example we found that young families perceived resettlement prevalently as an opportunity to improve their overall living conditions and to offer safer and healthier environment to their children. On the other hand, elderly people categorically rejected the idea of being resettled due to their well-established site-dependent livelihoods, extensive social networks and to an emotional attachment to their neighbourhoods. Elderly people expected the municipality to provide protection from floods in situ through infrastructural improvements and in many cases took themselves the initiative to build a second floor on their houses where they could move in case of floods.

The research concluded that in order to be successful resettlement needs careful planning and a participatory approach. While there are good reasons to reduce the demographic density of flood prone areas by means of resettlement, municipal authorities need to accept that for some categories of people resettlement is unacceptable. Accordingly, people should be encouraged to relocate on a voluntary basis through selective incentives. Understanding demographic and socio-economic differences in attitudes towards relocation may contribute to designing more targeted resettlement policies and plans. This will ultimately contribute to more cost-effective and equitable resettlement-based disaster risk reduction strategies.



Field researcher conducting a household survey in a resettled neighbourhood in Santa Fe



A plastic house provided within the framework of a resettlement project after the floods of 2003