



The social impacts of relocating communities in risk areas

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ABSTRACT

Facing diverse and complex challenges arising from the process of relocating communities in risk areas includes the disruption of community support networks, impacts on mental health and difficulties in cultural adaptation. These three aspects were conceptualized followed by the purpose of relocation as being a crucial measure to ensure the safety and well-being of populations exposed to disasters. In this sense, cases such as the floods in Acre and Hurricane Katrina in the United States were analyzed from the perspective of acquiring learning to practice more effective future actions. This study also drew the parallel of the development of long-term public policies that consider the needs of affected populations and guarantee adequate infrastructure, psychological support and opportunities for community integration. It became clear that relocation requires a multidisciplinary, participatory and holistic approach to be successful in protecting lives and promoting the well-being and resilience of relocated communities.

Keywords: Relocation, Support networks, Mental health, Cultural adaptation.

INTRODUCTION

The relocation of communities in risk areas is a measure often adopted to ensure the safety and well-being of populations exposed to disasters such as floods, landslides and earthquakes. These situations of imminent risk endanger people's lives and property, justifying the need for swift and decisive action by government authorities and humanitarian aid organizations. However, the relocation of these communities, while necessary, involves several technical, logistical, social, and economic challenges. The complexity of the process requires a multidisciplinary approach that considers not only the physical safety of populations, but also the social, cultural and psychological impacts that change entails.

Disorderly urban growth, often in vulnerable areas, intensifies these challenges, especially for lowincome populations. Considering the social vulnerability of affected populations is essential for the implementation and implementation of effective relocation policies. Case studies around the world show that well-planned interventions can significantly reduce the vulnerability of these populations, providing them with safe housing and better access to basic services.

However, the measure can cause a few adverse social impacts if not conducted properly. In this study, three crucial aspects were highlighted that must be carefully considered and managed in a

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population relocation process: changes in social structure and community support networks, the effects on mental health and well-being of families, and the challenges of cultural adaptation and integration into new communities.

These aspects, as being critical in the face of the social impacts of a population transfer, provide a multidisciplinary analysis of the challenges and opportunities associated with relocation, proposing practical approaches to mitigate the adverse impacts and promote a successful transition for affected households.

By integrating theories of social capital, human development, and cultural adaptation, this study aims to contribute to a more complete understanding and development of more effective and humanized strategies in the management of communities in at-risk areas, ensuring that relocation policies protect lives and promote the well-being and social integration of displaced populations.

The cases of relocations in Brazil, in the state of Acre, after the floods of 2015, and in the United States after Hurricane Katrina, in 2005, were compared. Both situations involve disasters that have resulted in large population displacements and subsequent relocation challenges.

CHANGES IN THE SOCIAL STRUCTURE AND COMMUNITY SUPPORT NETWORKS

The social structure of a community includes family relationships, friendships, support networks, and everyday social interactions. Relocation can destabilize these structures, causing a significant disruption in community support networks.

Community support networks, which often involve neighbors, friends, and close relatives, are critical to the resilience of families in situations of adversity. Relocation often disperses these networks, leaving families without the social support they were used to. Studies show that the absence of support networks can lead to increased social isolation and reduce families' ability to cope with daily and emergency challenges.

Bourdieu (1986) discusses the importance of social capital, which is the network of relationships that provides resources and support to people. The dispersion of these networks can mean a significant loss of social capital, negatively impacting the ability of relocated families to recover and adapt.

RECONFIGURATION OF THE SOCIAL STRUCTURE

The reconfiguration of the social structure implies the need to build new relationships and support networks. This process can be challenging and time-consuming, especially in communities where social cohesion was strong prior to relocation. Creating new bonds depends on a variety of factors, including the receptivity of the destination community and the opportunities for social interaction offered. Putnam (2000) discusses the decline of social capital in contemporary society and the importance of social connections for individual and community well-being. Relocation can exacerbate this decline, making it difficult to form new support networks and integrate socially.

EFFECTS ON MENTAL HEALTH AND WELL-BEING OF FAMILIES

"Disasters are challenges; require a rethinking of the way in which the environment erupts in the human psyche and must be analysed in terms of the reactions of people who have suffered harm and its psychological impact." (THOMÉ, 2004). Disasters are occurrences that affect a certain population that begins to experience a sudden, disorganized or disruptive situation that, in a violent and traumatizing way, causes a disruption in people's daily lives. During this type of event, the need for mental health care increases, since these specifically complex situations require organized human responses.

The consequences of the disaster, such as the abrupt move to new environments, can cause even more stress, anxiety and other mental health problems, since there is a deterioration in the psychological and emotional well-being of families, caused by the interruption of routine.

According to Marmot (2005), chronic stress resulting from uncertainty and loss of control can have adverse effects on mental health. Relocation, by removing families from their home environments and social support, increases the risk of psychological problems.

Children are particularly vulnerable to the psychological effects of relocation. The change of environment can negatively affect children's school performance, social relationships, and emotional development. The disruption of routine and the need to adapt to new schools and communities can cause additional stress. Research by Evans (2006) on environmental and social impacts on child development indicates that residential instability and loss of support networks can impair children's psychological well-being and academic performance.

The availability of mental health services in relocation areas is critical to mitigating the negative effects on the mental health of families. Psychological support programs and community interventions can help promote the well-being and resilience of relocated families. Bronfenbrenner (1979), with his Theory of Ecological Systems, highlights the importance of a supportive environment for human development. The provision of mental health and social support services can create a more supportive environment for relocated families, helping them to adapt and thrive.

CULTURAL ADAPTATION AND INTEGRATION INTO NEW COMMUNITIES

Cultural adaptation and integration into new communities are significant challenges for relocated families. Relocating to areas with different cultures may require families to adjust to new ways of life, customs, and traditions. This cultural adaptation can be particularly difficult for families who maintained a

strong cultural identity in their home community. ITS Brazil (2004) stresses that housing policies should consider the cultural identity and specific needs of populations to facilitate adaptation and promote social cohesion. Integration into new communities requires not only the provision of adequate housing, but also the creation of opportunities for social participation and the building of new support networks.

Hofstede (1980) discusses cultural differences and how they can impact people's integration and adaptation to new environments. Understanding and acceptance of cultural differences are essential to facilitate the integration of relocated families.

Integration into new communities depends on factors such as the receptivity of local residents, social inclusion policies, and opportunities for community participation. The absence of initiatives that promote integration can lead to isolation and social exclusion of relocated families. Putnam (2007) argues that diversity can initially lead to social isolation, but in the long run, inclusive communities that promote interaction between different cultural groups can develop greater social cohesion and trust.

Building a new community identity is a process that can take years. Families need to develop a sense of belonging and establish new roots in relocation areas. Community activities, social events, and integration programs can facilitate this process, promoting social cohesion and a sense of community.

Giddens (1991) argues that modernity and rapid change can destabilize personal and collective identities. Relocation represents a disruption that challenges established identities, requiring a conscious effort to build new forms of belonging and social cohesion.

CASE STUDIES AND COMPARATIVE ANALYSIS

To illustrate the points discussed, it is useful to examine case studies and comparative analyses of different relocation experiences in Brazil and around the world. For this purpose, the cases of relocations in the state of Acre, Brazil, after the floods of 2015 and in the United States, after Hurricane Katrina, in 2005, will be compared. Both events involved catastrophes that caused significant population displacements, followed by relocation challenges.

The mention of New Orleans, in the context of discussions about forced relocations and their impacts, is usually related to Hurricane Katrina. This disaster caused large-scale destruction and resulted in one of the largest relocation and reconstruction operations in U.S. history. The effects of this event are studied in terms of socio-economic impact, community loss, and subsequent urban relocation and reconstruction policies. The New Orleans experience exemplifies how a disaster can displace entire communities and the complexities in urban recovery, offering valuable lessons for examining similar situations globally, including relocations to at-risk areas in Brazil, allowing for comparisons and learnings in international contexts.



With regard to the mention of the flood that hit Acre, it illustrates specific challenges of a region subject to seasonal flooding, with limited infrastructure and socioeconomic vulnerabilities. These floods can make entire communities vulnerable and periodically force residents to relocate to safer areas. Emergency and relocation operations in Acre are hampered by restricted access and the need for policies that minimize environmental impacts and conflicts over land use. Analysis of the 2015 flood that struck the region offers insights to adapt policies and practices to extreme conditions and similar socio-economic challenges, informing strategies for risk management, urban planning, resilient infrastructure development, and housing policies that consider the needs of vulnerable populations.

Drawing a comparison between these cases allows for a detailed analysis of the difficulties faced and the strategies adopted to mitigate the social and economic impacts of large-scale relocations, highlighting lessons learned and best practices for further more effective interventions.

RELOCATION AFTER THE FLOOD IN ACRE

In 2015, the state of Acre faced one of the worst floods in its history, with the Acre River overflowing due to heavy rains. This disaster significantly affected the capital Rio Branco, as well as other major cities, including Brasileia and Xapuri. (BUFFON et al., 2015).

The calamity resulted in a large number of homeless people, who had to be temporarily housed in makeshift shelters, highlighting the vulnerability of populations living in flood-prone areas without adequate infrastructure.

In response to this catastrophe, the state government of Acre, with the support of the federal government and several humanitarian organizations, expanded the "City of the People" program with the aim of continuing to move families from at-risk areas to safer locations. This project aimed to build a new neighborhood planned to accommodate families located in at-risk areas, seeking not only to provide safe housing, but also to create an environment with adequate infrastructure and essential services to improve the quality of life of the relocated families. (ACRE, 2012).

Also according to the project, in the first stage of the program, the areas of greatest risk and vulnerability were identified in order to determine which communities should be relocated as a priority. Then, safe land was selected for the construction of the new housing units. These plots were chosen based on geological and risk assessments, to ensure that the new dwellings were in locations protected from future flooding. The construction of the housing was accompanied by the provision of basic infrastructure, including sanitation, electricity, clean water, public transport, schools and health facilities.

However, the infrastructure and services in the new housing areas were not fully developed when families began to be relocated, resulting in significant difficulties for the relocated. Many families faced problems due to a lack of adequate access to transportation, schools, security, health facilities, and employment opportunities, exacerbating the sense of isolation and making it difficult to adapt to the new environment.

Rodrigues and Melo (2015) reported to the G1 Acre Rede Amazônica website that in addition to the structural challenges, the social and cultural adaptation of the relocated families was also problematic. Many of these families were accustomed to the lifestyle in the flooded areas and faced difficulties in adjusting to the new urban context. The disconnection from community support networks, such as relatives, friends, and neighbors, increased feelings of vulnerability and social isolation. The lack of psychological support services has further exacerbated these problems, making the transition more difficult for many families.

To mitigate these challenges, the government of Acre claimed gradual measures in health, transportation, and public safety, complementing the basic infrastructure in the new housing areas, ensuring that families had access to essential services. Job creation programs have been developed to promote the economic integration of families, including professional training initiatives and support for local entrepreneurship.

The results of the "People's City" program showed that while the physical safety of relocated families was ensured, the lack of more robust urban and social planning compromised the effectiveness of relocation initiatives, emphasizing the complexity and challenges inherent in the process of moving entire populations to safer areas. Key lessons learned include, in addition to the need to protect lives, the importance of a holistic and participatory approach, which involves affected communities in the decision-making process, ensuring that their needs and concerns are met. The integration of urban, social and economic planning is crucial to the success of relocation initiatives, as is the ongoing provision of social, psychological and economic support.

RELOCATION AFTER HURRICANE KATRINA IN THE UNITED STATES

The relocation of residents from at-risk areas presents complex and multifaceted challenges that go beyond the simple physical movement of people to new locations. Hurricane Katrina, which devastated New Orleans in 2005, offers a case study that points out the hardships faced by displaced communities. Displaced: Life in the Katrina Diaspora, organized by authors Lynn Weber and Lori Peek in 2012, provides a rich compilation of stories and studies that illustrate the relocation experiences of residents affected by the disaster.

One of the main challenges of relocation is the loss of social and community networks. As highlighted by Weber and Peek (2012), many families displaced by Hurricane Katrina reported feeling isolated in their new communities, due to the absence of friends, family, and neighbors who made up their previous support network. This social isolation can aggravate mental health problems and make it difficult

to adapt to new circumstances, highlighting the importance of considering social and emotional factors when planning relocations.

Another significant challenge is the economic barrier faced by displaced people. Many of the communities affected by Hurricane Katrina were already living in conditions of economic vulnerability before the disaster. Relocation has intensified this vulnerability, as many families have found it difficult to secure affordable housing and stable employment in new locations (Weber and Peek, 2012). Relocation policies therefore need to include ongoing economic support and community development programs to facilitate the transition.

Cultural adaptation is also a crucial aspect that is often overlooked in relocation processes. Resettlement in areas with different cultures can cause cultural maladjustments, making it difficult for displaced people to integrate. Weber and Peek (2012) report that some relocated communities felt culturally displaced in their new residences, facing challenges in assimilating new social practices and cultural norms. Cultural assistance, such as reception and integration programs, is essential to mitigate these impacts.

Also according to the authors, another factor to be analyzed refers to issues of identity and belonging, which are also profoundly affected by relocation. Residents displaced by Hurricane Katrina often struggled to rebuild their identities and sense of belonging in new communities. The loss of a home is not only physical but also symbolic, affecting the personal and collective identity of individuals. Relocation programs should therefore incorporate strategies that help displaced people rebuild their sense of identity and belonging.

Finally, relocation also faces administrative and logistical challenges. Coordination between different levels of government and non-governmental organizations is crucial to the success of relocation efforts. Weber and Peek (2012) point out that lack of coordination and excessive bureaucracy often delayed the provision of essential resources to families displaced by Hurricane Katrina. Implementing effective management and simplifying bureaucratic processes are key to facilitating relocation.

COMPARATIVE ANALYSIS

The floods in Acre, as well as Hurricane Katrina, have resulted in the evacuation of a significant number of people and the urgent need for temporary shelters and long-term solutions for displaced communities. In both cases, the initial disorganization and lack of adequate infrastructure to accommodate the displaced have accentuated the challenges faced by the authorities and the affected populations. The response in Acre, while on a smaller scale than required in the U.S., also highlighted the importance of a coordinated and integrated approach, involving the construction of new safe housing and the provision of social and economic support to facilitate the adaptation of relocated families.



The relocation in the aftermath of Hurricane Katrina exposed both weaknesses and opportunities for improvement in disaster management and emergency housing policies in the United States. The lessons learned from this experience underscore the importance of an integrated and coordinated approach that includes sustainable urban planning, community participation, ongoing social and psychological support, and economic inclusion policies. The tragedy of Katrina serves as a reminder of the need to be better prepared for future disasters, ensuring that the most vulnerable populations receive the support they need to rebuild their lives in dignity and safety.

Comparing the two situations, it is evident that there is a need for more robust and prepared public policies to deal with disasters, ensuring that displaced people receive the support they need to rebuild their lives in a dignified and sustainable manner.

LONG-TERM PUBLIC POLICIES AND MONITORING

The relocation of residents from at-risk areas is a complex process that requires a multifaceted approach. As discussed by Weber and Peek (2012), addressing social, economic, cultural, and administrative challenges is essential to ensure that displaced people can adapt and thrive in their new communities. Effective relocation policies and programs must consider all of these aspects to provide a smoother and more sustainable transition for affected individuals and communities.

To minimize the negative social impacts of relocation, it is essential to develop long-term policies and ongoing monitoring mechanisms. Policies that address risk prevention, sustainable urban development, and the provision of adequate housing are critical to avoid the need for relocation and improve outcomes for relocated households.

Ongoing monitoring and assessment of the conditions of relocated families allows you to identify issues and adjust policies as needed. Participatory assessment tools, which involve the relocated families themselves, are particularly effective in ensuring that needs and concerns are met.

FINAL THOUGHTS

The relocation of communities in at-risk areas is a necessary measure to protect lives, but it involves significant societal challenges. The disruption of community support networks, the impacts on mental health, and the process of cultural adaptation are issues that need to be addressed with sensitivity and a broad perspective. Disconnection from social media can result in isolation and loss of emotional support, affecting the resilience of families. This aspect is particularly important as community support networks provide a sense of belonging and security that is crucial for people's psychological well-being.

The mental health impacts of relocated families cannot be underestimated. Abrupt and forced relocation to new environments, often without the necessary infrastructure, can lead to stress, anxiety, and

depression. The trauma of losing one's home and facing uncertainty about one's future has lasting effects on mental health. Therefore, it is essential that relocation programs include ongoing and accessible psychological support, helping families cope with trauma and build new lives in an unfamiliar environment.

The process of cultural adaptation and integration into new communities also presents significant challenges. Relocated families often face difficulties adjusting to new ways of life, customs, and social norms, which can increase feelings of alienation and exclusion. Successful social integration requires policies that promote the inclusion and active involvement of families in their new communities. Welcoming and integration programs can facilitate cultural adaptation, helping people to establish new connections and feel an integral part of their new communities.

Effective public policies are key to ensuring that relocation is carried out in a way that minimizes negative impacts. This includes developing relocation plans that involve affected communities in the decision-making process, ensuring that their needs and concerns are considered. Community participation is crucial to the success of these policies, as it fosters trust and engagement of relocated families.

In addition, adequate support services such as quality housing, access to health services, education, security, and employment opportunities are essential for rebuilding the lives of relocated families. The provision of adequate infrastructure in new housing areas is a critical component of avoiding marginalization and social isolation. Investments in infrastructure not only ensure physical security, but also improve the quality of life and facilitate the social and economic integration of families.

Community initiatives play a vital role in creating a welcoming and supportive environment. Projects that encourage the active participation of relocated people in community activities, as well as the development of programs that promote social cohesion, are essential for building resilient and integrated communities. Strengthening new support networks can help mitigate the effects of disrupting previous networks by providing a renewed sense of belonging and security.

In short, the relocation of communities to at-risk areas should be conducted with a holistic approach that addresses the social, psychological, and cultural aspects of change. The deployment and implementation of effective public policies, the provision of adequate support services, and the promotion of community-based initiatives are essential to ensure that relocated families can rebuild their lives with dignity and safety. By integrating these elements, we can create relocation strategies that not only protect lives but also promote the well-being and social inclusion of affected populations.



REFERENCES

Acre (State). Governo do Acre. CIDADE DO POVO. TerraUrbanismo. Master Plan, 2012. Available at: http://fne.emsuacasa.com.br/pages/fne/files/Cidade_do_Povo_Acre.pdf.

Bourdieu, P. (1986). The Forms of Capital. In J. Richardson (Ed.), Handbook of Theory and Research for the Sociology of Education. New York: Greenwood.

Bronfenbrenner, U. (1979). The Ecology of Human Development: Experiments by Nature and Design. Cambridge, MA: Harvard University Press.

Buffon, F. T., et al. (2015). Enchente de 2015 no Rio Acre: Aquisição de dados e Monitoramento. XXI Simpósio Brasileiro de Recursos Hídricos (ABRH), Brasília - DF, November 2015.

Evans, G. W. (2006). Child Development and the Physical Environment. Annual Review of Psychology, 57, 423-451. Available at: https://doi.org/10.1146/annurev.psych.57.102904.190057

Giddens, A. (1991). Modernity and Self-Identity: Self and Society in the Late Modern Age. Stanford: Stanford University Press.

Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage.

ITS Brasil. (2004). Direito à Moradia, Direito à Terra e Direito à Cidade. Secretaria Especial dos Direitos Humanos da Presidência da República.

Marmot, M. (2005). The Status Syndrome: How Social Standing Affects Our Health and Longevity. New York: Henry Holt.

Putnam, R. D. (2000). Bowling Alone: The Collapse and Revival of American Community. New York: Simon & Schuster.

Putnam, R. D. (2007). Pluribus Unum: Diversity and Community in the Twenty-first Century. Scandinavian Political Studies, 30(2), 137-174. Available at: https://doi.org/10.1111/j.1467-9477.2007.00176.x

Rodrigues, I.; Melo, Q. (2015, May 22). Moradores falam de desafios o primeiro ano da Cidade do Povo. G1 AC Rede Amazônica. Available at: https://g1.globo.com/ac/acre/noticia/2015/05/um-ano-depois-seguranca-e-saude-ainda-sao-desafios-na-cidade-do-povo.html.

Thomé, J. T. (2004). Projeto Psiquiatria para uma vida melhor. Cartilha para intervenção em catástrofes. Associação Brasileira de Psiquiatria. Available at: https://www.saude.sc.gov.br/index.php/documentos/atencao-basica/saude-mental/desastre-de-origem-natural/2961-cartilha-catastrofes-2009/file.

Weber, L., & Peek, L. (Eds.). (2012). Displaced: Life in the Katrina Diaspora. University of Texas Press.