

Current Relocation Practices Targeting Disaster Prone Communities in Developing Countries: Case Study San Francisco Libre, Nicaragua

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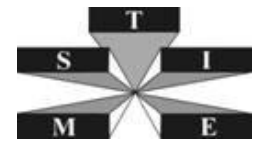
ABSTRACT :

Multiple studies suggest how disaster risk in developing countries is exacerbated by a combination of conditions such as lack of affordable housing, hazardous locations, people's vulnerability, government mismanagement and political agendas (Quarantelli, 2003; Jha et al., 2010, Viratkapan & Perera, 2006; Horwood & Phillips, 2007; Davidson et al., 2007; Cronin & Gunthrie, 2011; Satterthwaite, 2011). Although not a recent issue, governments and urban planners continue to struggle to find solutions for safe, adequate and affordable housing for the urban poor. New urban projects and legislation often have unintentionally aggravated these communities' situations (Sanderson, 2000). This pressure to solve the low income settler "problem" becomes even more poignant in the face of disaster and multiple fatalities.

A well-known approach to low income communities living in high risk areas is relocation either before or after a disaster event; according to Jha et al. (2010) relocation remains one of the most common project endeavors in post-disaster recovery. In San Francisco Libre, a community by Lake Managua in Nicaragua, the local government has undertaken a massive relocation project since the 2011 floods that left several coastal families without homes. In this study, we describe the current conditions and challenges for the relocated families and provide discussion about efforts by local government officials to provide much needed services on reduced budgets. This research benefits from field observations and interviews with government officials and families from the affected communities. Horwood and Phillips (2007) observes that in developing countries like Nicaragua, relocation projects do not succeed due to the rigid small design of relocation housing as well as lack of appropriate land and services. Knowledge about relocation practices and outcomes can help inform current practice and improve project development to provide effectively for low income families in developing countries.

KEYWORDS:

Low income housing, Relocation Projects, Case Study Nicaragua, High risk settlements, Disaster risk-reduction



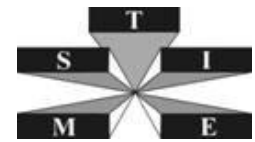
1. URBAN POOR COMMUNITIES AND DISASTER RISK

Countries may vary in shape, size, culture and economy but there is a constant among developing nations and that is the presence of urban poor settlements in big city centers. This phenomenon affecting the housing sector is neither recent nor showing signs of decreasing in the developing world. These settlements are often called a number of names; one of the most common is informal settlements. “Informal settlement” is a blanket term to describe the conditions of the settlements where the urban poor reside with a heavy emphasis on their position outside official housing markets (Imparato & Ruster, 2003). An informal Settlement shares the same characteristics with some other terms such as slum, shanty, squatter, informal housing and low income community. Since there is no clear definition or agreement for a unified term the authors usually decide on the term to use based on the literature and context. Often times urban poor and informal settlement terminology are used interchangeably, for the purposes of this paper’s discussion, the term urban poor and informal settlement will be used more extensively to clarify not just the position in the housing market but also their socioeconomic stance.

City growth is often associated with prosperity and progress but cities in the developing world experience growth differently as it usually presents itself in the form of population increase without parallel economic advancement. Population growth can potentially benefit business and service providers but this is not always the case. Unfortunately unprecedented urban growth combined with increasing poverty and inequality only has accelerated the growth of urban poor settlements (U.N, 2003). The constant flow of new inhabitants observed in the developing urban centers are often product of rural to urban migration; these individuals are mostly forced to migrate because of lack of employment opportunities. The UN Human Settlements Programme (2007) has predicted that the world will become even more urbanized as the total urban population expected to reach 5 billion by 2030, while the rural populations will experience a decrease from 2015 onwards.

This increment in urban population by way of migration or mere birth rates has brought about extra pressures for already imperfect housing markets in the developing world. The lack of formal affordable housing for new immigrants result in land invasion or occupation of undesirable land where there is minimum cost, vigilance or opposition by government entities (Abbott, 2002). This undesirable land may be affordable on migrant or reduced incomes but is also undeveloped, inaccessible to authorities and often located on disaster prone areas. Informal settlers in the developing world are then driven to hazardous areas because of convenience affordability and availability. For the urban poor, the choice to settle comes from a combination of availability of affordable housing and proximity to livelihood opportunities which appears to weight more than security of tenure and risk avoidance (Jha, 2010).

People with fewer options often settle in high risk areas specifically because other people who have more options, and recognize the vulnerability, leave them vacant. This “risk” as defined by Ansel and Wharton (1992) in Coppola (2011) is the combination of *Likelihood*: probability or frequency of a hazard in a location, and *Consequence*: effects on humans, buildings and environment. The combination of urban poor settlements and high risk areas results in recurrent loss of lives, property and damage to the environment in the developing world. An analysis of the world’s most populous cities showed that 78 percent of them were exposed to cyclical natural phenomena such as: earthquakes, tsunamis, volcanoes or windstorms. In the developing world alone 85 percent of their biggest urban centers suffer more than one of these occurrences (Quarantelli, 2003). An example of this disparity of affected communities is evident in the Mozambique floods of February 2000. The floods caused several casualties and damages of which 70 percent occurred in urban areas, unsurprisingly the urban poor living in informal settlements in Maputo, Matola, Xai Xai and Chokwe suffered the most because of their vulnerable locations on flood plains and riversides (U.N, 2007).



2. GOVERNMENT “SOLUTIONS” AND STRUGGLES

Governments and urban planners have not yet found a definite solution to the issue of safe, adequate and affordable housing for the urban poor, if any, new urban legislation has unintentionally aggravated the situation of these populations (Sanderson, 2000). Planners, government agencies and international partners are constantly looking for a definite holistic approach for urban poor communities, which are more complex than the simple engineering solutions or slum clearances that happened in the past (U.N, 2003).

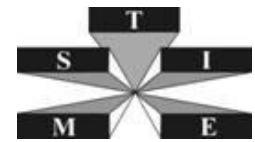
So far there have been efforts to address the problem by: clearance or eviction, relocation, reconstruction or “building back better” and upgrade or regularization. Some of these “solutions” have been gravely mistaken and it has taken years of post-project impact studies and advocacy movements to realize it. The most infamous of these is “clearance or eviction” which in the 60s and even today represents the most violent and repressive form of government regulation of the urban poor in high risk areas. Evictions or clearances is one of the eldest practices to deal with informal settlements, it is usually government lead and by force. From the 19th century in Europe to today in the developing world communities are still being “cleared” with the excuse of law, order and improvement of safety (U.N, 2003). During the 1960s and 1970s the biggest fear among the urban poor in Latin America and the Caribbean was the possibility of eviction either by government or private landowners backed by government (U.N, 2003). Up to the 1970’s the UN estimated that governments were destroying more low income housing than they were building in a desperate effort to “clear” urban poor communities in major cities to prevent disaster casualties (Werlin, 1999).

Recent UN- HABITAT studies from 60 countries show that between 2000 and 2002 there have been at least 6.7 million of people forcible evicted, the highest number of forced evictions occurs in the sub-Saharan Africa (Horwood & Phillips, 2007). Key to the bad reputation associated with these evictions is the fact that they were usually poorly executed in terms of options and opportunity creation for those affected. The UN report on slums in the world as of 2003 found that in some cases no housing solutions were given to those evicted. The case of the Ezbet El Haggana slum in Cairo illustrates this point, several families and entire communities’ houses were demolished with promises of new housing that have not been built to this day.

Legislation has a powerful impact in the lives of the urban poor that are sometimes seen as a problem to be solved or eradicated rather than a population in need. The UN in its report of the world slums makes a powerful affirmation: “slums are products of failed policies, bad governance, corruption, inappropriate regulation, dysfunctional land markets, unresponsive financial systems and fundamental lack of political will” (U.N, 2003, p.165). There is an emergent group researchers that agree with this statement and attribute higher disaster consequences to this mismanagement at the local level translated into the urban planning departments (Sanderson, 2000; Quarantelli, 2003; Bull-Kamanga et al., 2003; Fay, Ghesquiere & Solo, 2003; Horwood & Phillips, 2007; Satterthwaite, 2011).

However, it should be noted that beyond hazardous locations, people’s vulnerability and mismanagement from government; disaster risk is also increased where planning departments struggle with budget restrictions, political agendas and land and data availability. It has been observed that when city planners and governments officials decide to invest on such informal settlements they face criticism from political groups and other institutions for “encouraging” illegal and irresponsible housing (Horwood & Phillips, 2007). This “irresponsible” housing refers to the poor construction of the houses of the urban poor commonly executed on salvaged or inexpensive materials. Jha et al (2010) on a project for the World Bank collected case studies and interviews from multiple experts looking at informality and the urban poor housing solutions in the developing world. They found among many things that living on minimal incomes; the urban poor realize that building materials, rent, utilities and even formal transportation are out of budget which results in the decision to settle in informal areas of the city (Jha et al., 2010).

Also, a common difficulty for governments and urban administrators presents itself on increased numbers of migrants from rural areas who demand infrastructure and services on their informal communities. Infrastructure



and service provision for illegal settlements and immigrants may be interpreted as a green light for such activities (Horwood & Phillips, 2007). Several authors have found that a failure to provide basic infrastructure and services equally for high, middle and low income citizens is key to the increased vulnerability of these communities (Sanderson, 2000; Quarantelli, 2003; Bull-Kamanga et al., 2003; Fay, Ghesquiere & Solo, 2003; Horwood & Phillips, 2007; Satterthwaite, 2011). Satterthwaite (2011) found that on several cases in Latin America and Africa disaster risk in informal settlements was aggravated due to lack of basic services and infrastructure which are otherwise provided to wealthier legal citizens. Horwood and Phillips (2007) present examples of such disparities in 10 cases studies from Delhi, Lagos, Dhaka, Addis, Rio, Jakarta, Cairo, El Alto, Luanda and Ulaanbaatar. They found that informal settlers in Cairo and other cities are excluded from infrastructure and service projects because of their non-participation in tax collection and formal markets; this happens even in those settlements that are decades old and a substantial part of the city population and economy (Horwood & Phillips, 2007).

Simple provision of infrastructure and sanitation services could potentially reduce informal settlement vulnerability. In his 2011 study on low income population vulnerability to disaster risk, Satterthwaite concluded that the reasons why developed countries experience far fewer disasters are because of: good quality housing located in areas with good quality infrastructure and services. In other words sound planning and attention from government could potentially reduce the losses experienced in informal settlements due to natural phenomena.

It is thus, not an easy task for government and urban planning departments to deal with the complex issue of urban poor communities without having to navigate in a sea of political and economic restraints. Efforts are being made but success is unfortunately very infrequent. The case study of San Francisco Libre in Nicaragua is one of those well intended but highly complicated project endeavors; the following pages will illustrate not only the urban poor but local government's struggle as well.

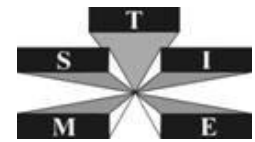
3. URBAN POOR LOGIC: A REASON TO STAY

As discussed earlier there is evidence that the urban poor decide to settle in such high risk areas not out of will but necessity. This might be difficult to understand for those in government positions but these communities are well aware of the risks they will face though ill prepared for them. Quarantelli (2003) explains that the Schumuck-Widmann (1998) study on differences between professional and lay people's perception evidenced that professionals see the decision to settle in disaster prone area as a sign of the urban poor's lack of perception of risk (Quarantelli, 2003). Perceptions of risk and the need to do something about it have different connotations for different social groups; for the urban poor the priority is daily survival and the constant seek for better opportunities (Jha et al., 2010). The following discussion touches on several though not all the elements that might come into play on the urban poor decision to settle on high risk areas.

3.1 A Search for Prosperity

There is no proof that anyone could get rich by mere osmosis but there are true benefits to be had from being closer to those who prosper. Being part of a community not only benefits an individual's inner well-being but also has powerful effects on the economic aspects of her/his life. Groups with limited resources tend to cluster in groups of self-support and survive by surrounding themselves with helping neighbors and family members. Urban poor communities seek better living conditions for their families, but more importantly, they are in search of places that can guarantee prosperity. Cities are centers of activity, human interaction and increased possibilities where ambitions, aspirations and other immaterial aspects of life are realized (UN Habitat, 2013). Unfortunately, in the modern world prosperity and opportunities are not distributed equally even for those brave enough to leave rural areas for urban spaces.

Even so, great urban centers in the developing world continue to attract new and hopeful residents. The City Prosperity Index was designed by UN-Habitat as a way to track and quantify how subjectively prosperous a given city appears to new comers and why they would be driven to stay.



The City Prosperity Index (CPI) as defined by UN-Habitat combines five dimensions of prosperity that all city dwellers are looking for:

- 1- Productivity: economic growth, development, income and job availability
- 2- Infrastructure: adequate city services to improve urban living
- 3- Quality of life: community cohesion, civic identity, safety and security of lives and property
- 4- Equity and social inclusion: equitable distribution of benefits of a prosperous city
- 5- Social inclusion and environmental sustainability

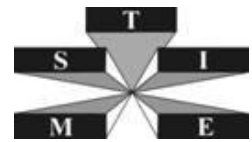
These elements give a good idea of the main drivers of migration in developing and developed cities. The urban poor; as demonstrated in the UN CPI's core elements, is attracted not only to the visible benefits of the city but also to the vibrancy of informal settlements. It is evident that the urban poor places great importance in social capital elements such as networks, social cohesion and human intimacy that develop naturally in informal communities despite the squalor, extreme lack of privacy and non-existent services (Horwood & Phillips, 2007). Once in the city, similarly disadvantaged groups such as women and the elderly find support in community unity; La Ferrara (2002) argues that "People who do not have access to the formal labor market and whose options in the informal market are unattractive can often benefit from pooling resources and working in groups" (p. 61-89). Several examples in Latin America illustrate that uneducated women and single mothers benefit greatly from associating in small cooperatives which can get funding to start micro businesses in either the manufacturing or service areas.

This perspective implies that there is a higher chance of alleviating poverty through community living and urban opportunities. Jockin Arputham; leader of Slum Dwellers International organization and a Mumbai slum dweller himself, explains that "a poor person who lives in a village needs a lot of guts to come to the city to improve their life, even if they might meet hard indifference and great competition for resources" (Horwood & Phillips, 2007, p.10). This desperate courage to come to the city and try for prosperity likely makes the immigrant hesitant to give up land that most of the time is safe to live in; if only occasionally or seasonally very risky.

3.2 Sense of Community

Beyond the economic benefits of living in close proximity to others there are important social and emotional gains of having a prolonged experience of community among those who experience similar hardships daily. The humble home of the urban poor is just a physical representation of a greater concept; the concept of home and belonging. In time communities develop shared values and shared identity inevitably tied with place (Hewitt, 1997). Post-disaster survival stories evidence the deep roots that individuals develop with place and how a sudden change in appearance results in sentiments of confusion, unrecognizable surroundings and loneliness. To lose connection with the place where we live means to feel abandoned by the people that form part of our daily lives.

Urban communities that have spent enough time together manage to develop a way of culture that in turn is transmitted through generations and becomes their identity and comfort. A common complaint of relocated groups is the difficulty they experience in trying to maintain a traditional way of life and traditions that can be successfully transmitted to new generations in a relocation place that was not conceived with that purpose in mind. The Moken people from Thailand argue that after the tsunami that destroyed their houses, their children lost interest in their own language and culture. The elders blame this on the location of the rebuilt community near a road that links them to city areas (Nidhiprabha, 2007). The experience of the urban poor might be different than that of the Moken people but the sentiment of loss identity is parallel and blamable on poor relocation choices. The UN (2007) on its report of urban safety discusses the importance of social bonds created in poor areas which translates into tools for resilience. Such groups benefit from pooling of resources in cases of emergency, this is however not enough to deal with bigger disaster events. There is nonetheless a good reason for these communities to believe that their place in the informal settlement is one that gives them identity, solidarity from others and strength for daily survival, this is a precious thing for the urban poor.



4. RELOCATION: THE SILVER BULLET?

This paper has so far discussed the perspectives of local governments and urban planners along with the difficulties they face to support but also regulate the urban poor while considering the possible mindset governing these informal communities. There is an incessant search for “the solution”, “the silver bullet” to solve the problem of the urban poor; benefiting not only governments but also providing for communities’ wellbeing. This is a difficult task that has yet to be completed; there has been progress in dealing with high risk settlements moving from mindless evictions to planned relocation projects. Unfortunately relocation projects in the majority of cases are not completely successful. Even definite removal of communities seems to be a struggle; let alone convincing them to stay in the relocation place.

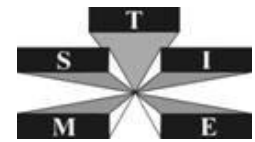
The inherent difficulty of moving great numbers of individuals makes relocation one of the most difficult decisions and planning activities when dealing with the urban poor. Yet it is to this day one of the most common government interventions for high risk poor communities. Relocation projects have a bad reputation among informal settlers that feel that their social and economic needs are secondary compared to governments need to “solve” a recurrent problem.

One of the biggest difficulties found during relocation projects is the lack of available land especially in great metropolis with high density populations. Location of the new community is tightly linked to success of the relocation project since one of the main reasons why the settlers live in high risk areas is because of its strategic access to services and opportunities. There is a problem of lack of available land but there is also a problem of budgeting since there may be available land in the vicinity of the original settlement but at higher prices that cannot be subsidized by government, NGOs or settlers. These communities do not possess financial support for such a move which in turn would need to be subsidized by governments and NGOs (Fay, Ghesquiere & Solo, 2003). The priority is to find available land that is affordable resulting commonly in the selection of a site in the periphery of the city. Jha & Duyne (2010) and Turner & Fichter (1972) both agree that location is a determinant factor in the success of a relocation site.

For these groups the community or neighborhood is more than a geographical point: it represents a place with higher opportunities for survival. Often a lack of affordable land near impacted settlements occasion relocation to areas distant from the original settlement where land may be available and less expensive. Relocation on the grounds of potential or eminent danger often fails because the new land doesn’t provide similar economic opportunities. An example of a failed relocation project is that in the Valley of Amaratca in Honduras; after Hurricane Mitch families living in shelters were given houses in a relocation project in this valley. Amaratca is located 35Km away from the city center. Failure to coordinate with planning departments and institutions made it impossible to provide basic infrastructure and services in time for move in periods making daily activities and economic survival almost impossible for relocated communities (Jha & Duyne, 2010).

On a similar case, during the relocation project of a slum community from Kamgar Putala to Hadapsar in Pune, India; planners and NGOs worked with a limited set of options to relocate them resulting in the selection of the Hadapsar site which is 8Km away from Kamgar Putala. Initially settlers agreed with the site selection as it was the best among many undesirable locations, but after moving in they expressed great transportation difficulties as infrastructure did not supply for their needs (Cronin & Guthrie, 2011).

Another phenomenon to consider is that of competition with host or adjacent communities, whose resources are often stressed because of the flow of newcomers. In these instances there is no place for the new settlers and their businesses or services. Resettlement of people in risk-prone areas should carefully consider the relocation of the livelihoods and the availability of services to support the already existent economic dynamics since these communities’ economy is already extremely delicate. Jha et al. (2010) in their examination of multiple cases of relocation projects found that these may solve the vulnerability issue in the short term but ignoring the rich economic and social dynamics of informal settlements would significantly damage socioeconomic development in the long term.



Similarly relocation projects need to be more inclusive in the sense that the beneficiaries are seen as partners and not just victims. It is however complex to design relocation projects that ensure that the “public” in participation represents all opinions (Ganapati & Ganapati, 2008). Relocation projects without adequate public participation are no different from informed evictions and would similarly incur in more damage than benefit. Relocation projects in the future need to be concerned with both physical and socioeconomic improvement of the lives of the urban poor.

5. CASE STUDY: SAN FRANCISCO LIBRE NICARAGUA

5.1 About the Study

Our findings, based on our field study of a vulnerable community in San Francisco Libre, Nicaragua, illuminates the settlement characteristics and everyday experiences of its inhabitants. We emphasize the life narratives of these informal settlers and the ways they are embedded in informal economic patterns, familial and friendship networks, localized customs, housing and community impermanence, and an acceptance of risk and fate.

On 2011 massive rains affected the Pacific of Nicaragua producing several damages to infrastructure and private property. As a result of these rains Lake Managua reached its historic highest capacity overflowing to coastal areas in the city of Managua and the municipality of San Francisco Libre. Product of these floods the municipality of San Francisco Libre identified that they had 3 critical or risky areas most of them on the vicinity of the lake. The local government in coordination with the Central Government decided to start a huge evacuation project of approximately 251 families or 3500 individuals which were temporarily placed in shelters. After 6 months in the shelters these families were presented with the opportunity to move to a relocation neighborhood since their land and houses were left inhabitable. One of the neighborhoods for relocation is located on a hill side which is prone to drought and intense winds. The community has complained about the poor conditions of the land in the new settlement as well as the lack of infrastructure and services even to this day. In May 2013 the first and the fourth author conducted field observation and interviews at San Francisco Libre at the local government office and community members in the new relocation on the hillside. Interviews with various men and women from the settlements were tape recorded, and still photos and video images were also collected during field observations. All individual and group interviews were transcribed verbatim. The team also collected and analyzed numerous news accounts and other archival documents.

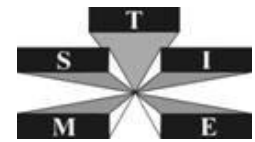
The research employed a case study design (Stake, 1995; Yin, 2013) to collect and organize data. We applied grounded analytic techniques (Strauss & Corbin, 1998), iterating between inductive and deductive steps, to uncover and illuminate the micro-analytics of worldviews and everyday activities among the informal settlers and governmental officials.

5.2 Generalities of San Francisco Libre

Location: San Francisco Libre, Nicaragua. Semi-Urban Settlement.

Population: A total of 10,503 habitants with an urban population of 3,080. On average 4.8 people inhabit each house with a predominance of males over female numbers. In the 2005 Census, the index of insufficient basic services was 31.9% and the index of extreme poverty individuals was 34.4% in the whole municipality. These numbers change when applied to the specific urban area of the municipality; here we can see 36.1% of those who are classified as extremely poor. Even so, these levels of poverty are lower than those observed in the neighboring rural areas which can reach up to 47.9%, this would explain the incentive even if little of rural communities to move to the city. (Source: INIDE Census 2005, Cifras Municipales)

Description: San Francisco Libre is a SemiUrban settlement comprising 4 small villages and an urban center. It lies next to Lake Managua (Lake Xolotlan) which accounts for the flooding damages experienced each year in



the community. Although only 50 miles from the capital city Managua, there is still much difficulty in communication between sites and the roads are often damaged by rain. Because of its vicinity to the lake part of the urban area is sitting in a flat area, just 2% slope above that of the lake, a small rain can cause flooding and storm surges all around the coast line. Poor drainage and inexistent lake containment system also contributes to the vulnerability of this community. (Source: INIDE Census 2005, Cifras Municipales)

5.3 Findings

During our field work our team interviewed both governmental and urban poor communities living in the new relocation site. In San Francisco Libre the team interviewed seven individuals, males and females, but prevalently females, since field work was conducted on a common working day. Occupations among those interviewed varied from: housewife, former farmer, project supervisor, community activist and construction workers.

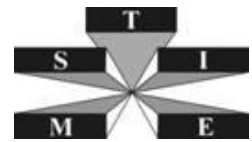
The families interviewed expressed that their families had always lived in the municipality of San Francisco Libre but not in the urban area but on the adjacent extensive rural areas. This confirms our belief in strong rural to urban migration aggregated to an unforeseeable contribution of young couples struggling to find their first home who decide to settle on a relatively cheap but risky location. There was a considerate proportion of settlers who used to live in rural areas but found that agriculture did not provide enough for their needs and that the closest semi-urban center provided more options.

Length of residence varied among individual settlers ranging from 2 months to 1 1/2 years which is the initial date of the relocation project. There were different lengths of residence among those interviewed because of the perceived incompleteness of the relocation site, several families who were initially signed to receive a house did not immediately move because of the lack of basic services such as water and electricity. Even sanitation services were scarce, most of them opting for latrines in their backyards. Such conditions made it difficult for several families to willingly move or even decide to stay for a longer time.

Interviewed government officials explained that the central government had provided for the land on the hillside and for the construction materials but service extension budgets were not considered. For this purpose the current mayor and his assistants were trying; at the time of the interviews, to gain interest from some international NGOs and cooperation agencies to help them subsidize water and electricity services. To this day, the water project has been successfully subsidized by a German NGO but electricity is still unsure. Most of those interviewed were not ashamed to say that they had; out of necessity, made illegal electric connections from a nearby farm using rudimentary wires and wood posts. These connections although sufficient to service their homes at night, represent a fire and electrocution hazard for the families.

As part of the interview the team asked respondents their opinions about government's relocation efforts and the imminent danger most of them faced every rainy season. Interviewees expressed their gratitude toward their local government and central government for giving them a new safe home but were not hesitant in adding that they needed better conditions. Nicaragua is now under a "new socialist" government that preaches extreme interest in local governments and poor citizens. Despite good intentions, the government can scarcely subsidize all the projects needed to make crucial changes in the quality of life of those under the poverty line. This is a reality that informal settlers understand and were willing to accept when they moved to the relocation site but lack of water and electricity proved to be one condition they could not ignore.

When asked about the night of the flooding events near the lake, those interviewed expressed their surprise when the lake reached their homes and the desperation to salvage as much of the valuables as they could. Though they were fully aware of the flooding risk, they were not prepared for the intensity of the rains and the velocity with which the situation got out of control. Now in the relocation site they have found that they have no concern about the rainy season anymore, ironically now they wish for it since the relocation site is located on a rocky steep hill with scarce vegetation. Because of few options and poor planning, the relocation site presents new risks that habitants are slowly becoming aware of as time passes.



Some of the main weaknesses of the relocation project as expressed by the interviewed urban poor were:

1) Inadequate Relocation Site: Most respondents had faith in government relocation alternatives but found that their needs were not completely met and the project was only half completed even 1 ½ years after the floods. Our informants were clearly aware of the difficulties in their former location and the quick response of the local government but regarded the resettlement areas to be worse. Some of the major concerns were: relocation in almost mountainous dry, rocky, steep land (not good for elders and children), rumors of projects completely abandoned after building the homes, lack of transportation to job and school centers (some informal one passenger bike services are available), no water or electricity networks in the foreseeable future, separation of families that used to live on the same block (parents, uncles, grandparents, newlyweds) and now were given lots in different locations.

2) Reduced Opportunities and benefits from Communal Life: Our respondents expressed clearly the need for job and services in potential relocation sites. Hidden in our conversations, however, were several social and community issues that concerned them. Such is the case of neighborhood feuds over water access, perceived sadness and increased disease among elders (grandparents) who were relocated far from their families and friends and the necessity of young people to leave education goals to help support their families rendered unemployed after relocating (the case of shop owners and mini restaurants). The move was indeed traumatic for some of our respondents who perceived the new location as a site of bad luck and sadness, contrastingly the former site was frequently discussed as a better place where happy moments and prosperity was foreseeable.

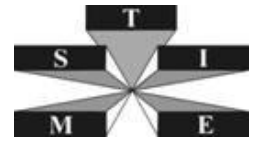
Often relocated families experience a period of new home euphoria which lasts until the family is forced to change their dynamics, such as the father staying behind or living only sporadically at home to work in the city or children having limited educational opportunities. Having studied informal settlements in situ we observe that government plans although well intentioned seriously underestimate the social factors – family, neighbors, informal economic networks, daily routines of family members – that guide the everyday lives of informal settler families.

5.4 Conclusions

Our field study clearly illustrates that a complex array of individual, community, and socio-economic factors underlie the sometimes fatal decisions of informal settlers to remain in risk-prone locations. We suggest, however, that these factors are not merely disjointed elements of irrational thinking; rather, they are components of unique but seemingly holistic worldviews that reflect the challenging circumstances of these settlers' everyday lives. Importantly, our field data revealed clearly that their everyday realities substantially diverge from the thinking of government planners who are responsible for carrying-out public policies intended to protect and relocate them.

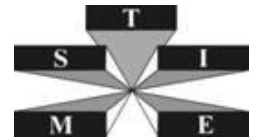
We suggest two arenas for practical application from our findings. First, efforts to identify and order the array of factors can realistically inform and enrich government policy making and overall disaster risk reduction efforts. In our own ongoing research, including in other national settings, we hope to identify and elaborate these factors in the form of a replicable instrument that can be applied in other developing countries. We believe that the findings of our study will be eminently useful to inform governmental post-or pre-disaster relocation or alternative strategies for mitigating the risks to informal settlements.

Second, gaining the trust and cooperation of informal settlers whom governments wish to relocate requires more than a checklist of factors. It entails dialogue in order to bridge understanding between groups with two very different agendas and assessments. Evidence entreats a role for third party actors, notably civil society organizations. Leaders and staff in these organizations can make a contribution as mediators and translators between the two opposing worldviews. Understanding starts with communication; everybody with whom we met shares an aspiration to bring the desired understanding to fruition. In conclusion, improved policy making and enriched dialogue can save lives and foster cooperative relations between members of the community and those charged with overseeing their wellbeing.



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