

**The Relationship between Coastal Restoration and Community Relocation:
An Annotated Bibliography and Analysis of Alternative Relocation Scenarios**

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The Relationship between Coastal Restoration and Community Relocation: An Annotated Bibliography and Analysis of Alternative Relocation Scenarios

Abstract

Community relocation is an understudied phenomenon, and as a mitigation measure it is often dismissed before decision makers gave it adequate consideration. This research reviews the relevant literature on relocation and resettlement in response to disaster or hazardous situations. We also apply best practices to alternative scenarios for community relocation in response to coastal land loss and coastal restoration. The objective of this research is to further our understanding of the significant characteristics of residents' sense of community and combine that understanding with sociological community theory. We then create relocation scenarios that could be applied to a potential community relocation and resettlement.

1.0 Introduction

The world is becoming increasingly vulnerable to disasters. As the global population increases and as more people migrate to hazard prone areas, disasters are reaching catastrophic proportions. Coastal zones represent a particularly vulnerable area given that scientists now describe climate change as inevitable. Coastal communities are on the front lines, and conventional development may increase this vulnerability. As a result, future development decisions must be viewed through the lens of risk reduction. Far more resources and political will are needed to protect exposed coastal communities.

The latest reported data show that the number of people in the coastal regions of the United States affected by weather-related disasters has increased by 65 times over the past 30 years (International Federation of Red Cross and Red Crescent Societies 2002). Hurricanes, floods, droughts, and coastal land and wetland loss threaten to make life unlivable on coastal shores long before rising sea levels swallow them up.

Worldwide, sea-level rise is already eroding coastlines in areas where critical infrastructure and populations are most concentrated. Coastal flooding is inundating farmland and freshwater supplies with salt, forcing some residents to consider abandoning their homes forever. In the Marshall Islands, farmers are resorting to growing crops in old oil drums to avoid planting in saline soils. On the Carteret Atolls, off Papua New Guinea, rising seas have cut one island in half and left 1,500 people dependent on food aid from the mainland. Closer to home, south Louisiana is losing coastal land at an alarming rate. Such land loss increases communities' vulnerability to damage from hurricanes. The impacts of Hurricanes Katrina and Rita in 2005 were far reaching, destroying coastal communities throughout south Louisiana.

South Louisiana coastal communities share common vulnerabilities that hamper their ability to adapt to changes in sea level: small size and low elevation; wide distribution and remoteness; proneness to natural disasters; increasing environmental degradation; limited natural, human, and financial resources; loss of traditional coping mechanisms; and oil and gas-dependent economies. Existing adaptation options may be

unfeasible. Structural protection for coastlines in the form of restoration projects is expensive. The alternative is to abandon shorelines in a form of “managed retreat.” This research focuses on the viability of this option, the managed retreat of an entire community, or community relocation.

2.0 Community Relocation

To the degree that disasters force people to relocate either temporarily or permanently, disaster victims have been seen as environmental refugees, a term that has generated a considerable amount of recent debate. As associated with disasters, the phenomenon of forced migration is also complex. Unless explicitly limited to permanent, involuntary transfer to distant locations, the concept of forced migration refers to a variety of demographic movements, such as flight, evacuation, displacement, resettlement, and forced migration (Oliver-Smith 1996).

If the threat of disaster is immediate, flight or escape to the closest safe location is a frequent response. An impending threat may result in an evacuation that resembles flight. The evacuation may also be more organized and administered by internal or external agents. Displacement similarly can occur as the result of flight or be more planned in the sense that people are organized and obliged to move from one residence site to another either temporarily or permanently. If the movement is permanent, citizens may settle in new homes. Finally, as mentioned earlier, forced migration involves permanent, longer distance moves generally into completely different environments. Some of the forms of demographic movement may lead to others; flight or evacuation, for example, may lead to displacement and resettlement or eventually to forced migration.

Each form of demographic movement may vary along a number of scales or continua. These scales are associated with certain characteristics that refer largely to the social and environmental relations expressed in the particular context. Oliver-Smith (1996) explains that these include: 1) proactive – reactive; 2) voluntary – forced; 3) temporary – permanent; 4) physical danger – economic danger; and 5) administered – non-administered. These five pairs are best viewed as poles on a series of continua rather than as closed or opposing categories. In other words, these concepts have to be treated with a certain flexibility, because the reality of these migrations tends to be too complex to nail down within rigid categories.

Looking at each kind of demographic movement along the various continua presented reveals the wide variability that each can display. Flight, for example, generally tends to be proactive and forced, but not administered; it can be temporary or permanent, tends to be associated with physical danger, and may result in permanent displacement, resettlement, or forced migration. Evacuation, usually a response to physical danger, can have similar outcomes; it can be proactive or reactive but tends to be administered to a greater or lesser degree. Displacement can be an administered process of moving a population only a short distance. It can also occur when people move themselves out of harm’s way but remain in the same area or environment. Displacement can be temporary or permanent, voluntary or involuntary, and may be a response to both physical and economic harm. Forced migration involves moving further away to different environments and for longer periods of time, if not permanently. Except in extreme cases,

the coercive power or push factors in disaster induced forced migration will vary and may be balanced to some degree by pull factors or positive inducements to move.

Community relocation in response to disaster or hazardous locations is a rare event (Garrison 1985; Mileti and Passerini 1996; Raphael 1986; and Walters 1978). According to Walters (1978), people almost always rebuild damaged cities on the same sites rather than relocate to safer territory. Reconstruction is most often driven by the human interest to resurrect pre-disaster patterns of culture and human interaction, and it is this interest that all but guarantees that cities restore their pre-disaster character by repairing or replacing what was lost (Arnold 1993; Mileti and Passerini 1996). Because the relocation of entire communities is such an uncommon occurrence, there are few in-depth investigations of the relocation process, and an even smaller amount of research on the long-term consequences of relocation. So, why does the Federal Emergency Management Agency (FEMA) support relocation versus reconstruction after some disasters? To answer this question it is important to first examine the historical context of disaster relocation.

2.1 Historical Context

In 1927 the Mississippi River swept across Illinois and Missouri south to the Gulf of Mexico. The flood left millions of acres of land covered in waters as deep as 30 feet and displaced thousands of residents (Barry 1997). Floods continued to ravage many regions of the United States during the 1930s (Platt 1997), leading researchers and policy makers to question disaster recovery practices (Carter 1942). One individual who closely examined the nation's policies was Gilbert White, a scholar at the University of Chicago who served on the Water Committee of the Natural Resources Planning Board (Reuss 1993). His contribution was to propose nonstructural solutions to address flood hazards (O'Riordan 1997; Platt 1997). Particularly relevant to this study, White (1942) recommended that local solutions need to be acceptable and intelligible to the local citizens, but should always be part of a mix of responses, each economically feasible, socially agreeable, and environmentally accommodative. The significance of White's suggestion to return areas prone to flooding to open space and moving people out of harm's way remains viable if seldom fully realized.

2.1.1 Sustainable Redevelopment

After the flood of 1993, there was a push toward "sustainable redevelopment" – the practice of recovering from disasters in ways that improve the quality of people's lives, the durability of their communities, and the prospects for future generations (Becker 1994). A White House Task Force called for profound reforms in the nation's disaster recovery practices, including the use of sustainable redevelopment practices as communities attempted to rebuild from devastating floods. "Relocations, in particular, offer a unique opportunity to start from scratch in planning and constructing to assure that sustainable development becomes an integral part of the entire community" (White House Task Force, quoted in Becker 1994: 1). The federal government viewed the consequences of the 1993 flood as an opportunity to remove substantially and repetitively damaged structures from the floodplain. Community relocation made it possible to return areas of the floodplain to open space and at the same time reduce losses expected to occur due to future floods (Changnon 1996).

As a result of the White House Task Force recommendations, three Midwest towns were entirely relocated from the floodplain: Valmeyer, Illinois; Pattonsburg, Missouri; and Rhineland, Missouri. Initially, the communities that were rebuilding in a more sustainable manner after the disaster were heralded as revolutionary, representing a unique shift of paradigms, a transformation in the way people relate to the natural and constructed environment, and an innovative way for communities to envision their futures (Passerini 1998). While the three towns were designed to be models of post-disaster community relocation, some have argued that they ultimately failed because of the loss of community cohesion amongst their citizens. The government may have “won” in saving the towns, but did their residents ultimately lose their sense of community? Unfortunately, adequate follow up studies to determine the long-term outcome of the relocation efforts have not been published.

2.2 Community Theory

Social scientists continue to search for a precise and consistent definition of community. According to Altman and Wandersman (1987), there is a certain ambiguity associated with the term “community” because it has several meanings that are not always precisely differentiated. Even so, researchers have continued the study of this term because of its central importance to the discipline of sociology. The community is recognized as a key concept for understanding social life, and it is considered an important predictor of various other aspects of quality of life (Chekki 1990:1). For the purposes of this research, a community is defined as a group of individuals or institutions that share a given area of space, live within that area’s borders for a long duration, frequently interact with each other socially, and share a culture (Curtis and Aguirre 1973; Quarantelli 1978).

2.2.1 Relocation and Sense of Community

Human communities have their own culture comprised of the beliefs, values, norms, symbols, and language that members share. It is culture that symbolically bonds individuals to their towns and cities. People are likely to resist relocation because it threatens their social and cultural identity, which are place-oriented (Aneshensel and Stone 1982; Blazer 1982; Cobb 1979; Erikson 1974; Oliver-Smith 1982). Even when rational economic reasons for community relocation and structural changes exist, people may resist relocation if the move is seen as “...a step away from proven traditional strategies...ingrained in local culture” (Oliver-Smith 1982: 99). Handmer (1985) suggests that resistance to relocation after a natural disaster may be a last ditch effort to strengthen what remains of the sense of community. Resistance to relocation may be seen and felt as an affirmation of community identity and defense against cultural collapse. Sarason (1974: 157) suggested that the ingredients of sense of community are as follows: 1) the perception of similarity to others; 2) an acknowledged interdependence with others; 3) a willingness to maintain this interdependence by giving to or doing for others what one expects from them; and 4) the feeling that one is part of a larger dependable and stable structure.

2.2.2 The Community Context of Disaster Relocation

The community has been identified as one of the victims of natural disasters (see Barton 1969; Erikson 1976; Wallace 1957). One of the most widely known studies in this area is Kai Erikson's work on the Buffalo Creek flood in West Virginia. Erikson revealed a cultural setting in which the individual was deeply dependent upon the community prior to the disaster. The flood thus led to the destruction of more than the physical community; the damage included the loss of social networks, cohesion, and community identity.

Despite Erikson's (1976) discouraging findings, there is general agreement in the literature stating that opportunities arise out of the disastrous situations. Heightened levels of community solidarity are repeatedly reported in the immediate aftermath of a disastrous event (Barton 1969; Dacy and Kunreuther 1969; Drabek 1986; Oliver-Smith 1979). Drabek (1986) states that while an immediate response of post-disaster community solidarity has been well documented, we lack a general understanding of the dynamics that guide its demise.

Although used as a last resort, permanent relocation of communities away from hazard-prone areas is becoming an important mitigation option for emergency management authorities throughout the world. By moving citizens permanently, one realizes two special benefits. First, relocation prevents death or injury from hazards. Secondly, relocation provides monetary saving so that governmental hazards insurance programs need not pay for repeated restorations of the same residence in the same hazard area over a period of years. Simultaneously, there are three inherent problems with the use of a relocation policy: it constitutes a serious intrusion into citizens' lives; it is a costly endeavor; and non-hazard related relocations (such as for dam construction, civil unrest or urban redevelopment) have a long history of negative outcomes. One potential benefit of the coastal restoration projects currently underway is to prevent the need for community relocation by restoring coastal land and marsh that act as protection (from storms) and a source of livelihood (through work and subsistence) for coastal communities.

3.0 Relocation Scenarios

Displaced populations can be referred to as "resettlers" who are uprooted by development projects or as "refugees" who are fleeing military conflicts or natural disasters. There are significant differences between refugees and resettlers. These differences are important because it is on their basis that diverse innovative approaches to coping and recovery emerge, and these approaches can possibly be transferred in adjusted forms. There are also many similarities in the populations once they are uprooted and on the path to recovery. Similarities are equally important because frequently there is more than one solution to the same problem, and there is much to gain from exchanging knowledge on various solutions against similar obstacles. The common central issues of both groups of displaced peoples are: 1) the condition of being displaced; 2) the risks of impoverishment and possible destitution; 3) the rights and entitlements of the displaced; and 4) the means of reconstruction of their livelihoods.

The relocation of populations can be successful or unsuccessful, and scenarios presented below represent both of these possibilities. Success or failure depends in large part on how the relocation effort addresses the variable of "access" to the means of reconstructing livelihoods. By deconstructing the variable of access, one is able to

understand that reconstruction of community, albeit in a different location, often reverses the processes of impoverishment that can occur with the same variables, but only if reconstruction is considered in a holistic, integrated way. Thus, the following scenarios approach community relocation with a dual emphasis – on risks to be prevented (or at least minimized) and on reconstruction strategies to be implemented. Most importantly, the logic of the scenarios suggests that preventing or overcoming the pattern of failure, oftentimes demonstrated as impoverishment, would require risk reversal. This could be accomplished through targeted strategies, backed up by adequate financing. Turning the unsuccessful relocation strategy on its head shows which strategies should be adopted and which directions should be taken. More specifically, the scenarios move from: 1) landlessness to land-based settlements; 2) joblessness to reemployment; 3) homelessness to house reconstruction; 4) marginalization to social inclusion; 5) increased morbidity to improved health care; 6) food insecurity to adequate nutrition; 7) from loss of access to restoration of community assets and services; and 8) social disarticulation to networks and community rebuilding.

3.1 Principles of Community Relocation

Despite the enormous diversity of project-specific situations (see annotations below), the empirical findings of many researchers reveal the presence of several basic regularities. Clear patterns emerge from this evidence. Comparing these empirical findings, we have identified common processes and constructed a general pattern of risk. The convergent and cumulative effect of these processes is the rapid onset of impoverishment. Before displacement actually begins, these processes are only impending social and economic risks. But if appropriate counteraction is not initiated, then these potential hazards convert into actual disasters of impoverishment.

The first principle of successful community relocation is that the community to be relocated should be organized. Furthermore, this organization has to be recognized by officials outside the community working on the relocation effort, and the two groups must develop a working relationship. A second principle lies in the idea that all potential relocatees should be involved in the relocation decision-making process as early as possible. Third, citizens must understand the nature of the multi-organizational context in which the relocation is to be conducted. By including citizens in the process of decision-making, the fourth principle can be realized, that is, special attention can be given to the social and personal needs of relocatees. Finally, the last principle for promoting relocation directs attention to the special concerns of racial, cultural, or economic minorities. By considering each of these principles, the risks associated with community relocation are less likely to threaten the success of the move.

Consider the first risk resulting from community relocation: landlessness. Expropriation of land removes the main foundation upon which people's productive systems, commercial activities, and livelihoods are constructed. This is the principal form of de-capitalization of displaced people, as they lose both natural and man-made capital. Unless the land basis of people's productive systems is reconstructed elsewhere, or replaced with steady income-generating employment, landlessness sets in, and affected families become impoverished.

The risk of losing wage employment is very high both in urban and rural displacements for those employed in enterprises, services, or agriculture. At the same

time, creating new jobs is difficult and requires substantial investment. Unemployment or underemployment among refugees often endures long after physical relocation has been completed.

Loss of shelter tends to be only temporary for many resettlers; but for some, homelessness or a worsening in their housing standards remains a lingering condition. In a broader cultural sense, loss of a family's individual home and the loss of a group's cultural space tend to result in alienation and status deprivation. For refugees, homelessness and placelessness are intrinsic by definition.

Marginalization occurs when families lose economic power and spiral on a "downward mobility" path. Middle-income farm households do not become landless, they become small landholders; small shopkeepers and craftsmen downsize and slip below poverty thresholds. Many individuals cannot use their earlier acquired skills at the new location; human capital is lost or rendered inactive or obsolete. Economic marginalization is often accomplished by social and psychological marginalization expressed as a drop in social status, in resettlers' loss of confidence in society and in themselves, a feeling of injustice, and deepened vulnerability. The coerciveness of displacement and the victimization of resettlers tend to depreciate resettlers' self-image. Often the relocated are stigmatized when viewed by host community members.

In developing nations, forced uprooting increases the risk that people will fall into temporary or chronic undernourishment, defined as caloric-protein intake levels below the minimum necessary for normal growth and work. Massive population displacement threatens to cause serious declines in health levels. Displacement-induced social stress and psychological trauma are sometimes accompanied by the outbreak of relocation-related illnesses, particularly parasitic diseases. Unsafe water supply and improvised sewage systems increase vulnerability to epidemics and chronic diarrhea, dysentery, and so on. The weakest segments of the demographic spectrum – infants, children, and the elderly – are affected most strongly. This risk is less likely to materialize in developed nations such as the United States.

For poor people, particularly for the landless and those without assets, loss of access to the common property assets that belonged to relocated communities (pastures, forested lands, wetlands, waterbodies, burial grounds, quarries, and so on) results in significant deterioration in income and livelihood levels. Typically, governments do not compensate citizens for the loss of common property assets. These losses are compounded by reduced access to some public services, such as schools. These losses can be grouped within this category of risks.

Displacement often tears apart the existing social fabric. It disperses and fragments communities and dismantles patterns of social organization and interpersonal ties; kinship groups become scattered as well. Life-sustaining informal networks of reciprocal help, local voluntary associations, and self-organized mutual service are disrupted. This is a net loss of valuable social capital that compounds the loss of natural, physical, and human capital. The social capital lost through social disarticulation is typically unperceived and uncompensated by the programs causing it, and this real loss has long-term consequences.

The risks described must be seen in their interconnectedness, as a pattern of variables. They affect populations frequently described as being risk averse. Yet this knot of risks is forced upon them with relocation, and affected people must deal with them

virtually simultaneously, as a patterned situation, not just one at a time. The result can create the crisis of failure.

Risk recognition is crucial for sound planning when relocating communities. More than offering a general warning, the recognition of risks serves as a matrix for on the ground assessment of how general risks vary in each local context. It helps identify the specific configurations of relocation risks for each given population. Such on the ground risk assessments leads directly to the planning of counter-risk activities. Use of risk recognition as a tool for relocation project preparation and actual planning of resettlement has allowed for the construction of the following community relocation scenarios.

The scenarios presented here are written to illustrate a mitigation action that receives little consideration and to suggest how to tie together the related concepts of disaster resiliency, economic vitality, environmental quality, and quality of life through community relocation. These scenarios are by no means comprehensive and focus on only a few issues that could be addressed in any community relocation effort. Although based on an actual community and real life events, these scenarios are primarily fictional. Despite the creative license taken with potential future social behavior, it is hoped that these scenarios will prompt readers to think about and discuss the possibility of using community relocation as a mitigation action.

3.2 Background

Isle de Jean Charles is a community of approximately 60 families. The coastal community residents are of mixed race, but the inhabitants all claim Native American status. The original settlers to the area were of Native American heritage, and all of the current day residents can trace their family lineage back to those original settlers. The town as it exists today is comprised of homes and an old cemetery. There is no business district, although some residents do work at home-based businesses. The town does not have a school, church, grocery store, or post office. Residents commute to towns in the region for work, although some of the townspeople work as commercial fishermen. The few children of the community are bused to area schools. Overall, the townspeople would be classified as lower to working class homeowners with deep ties to the coastal area.

Located deep within the wetlands of south Louisiana, the community has faced repeated flooding from storms, and has experienced many hurricanes. Most recently, the severe flooding from Hurricane Rita inundated every home. During a visit to the town in the summer of 2006, nine months after Hurricane Rita, evidence of the height of the floodwaters was still visible on some of the homes.

The United States Army Corps of Engineers (Corps) has proposed a levee construction project to protect against hurricane encroachment along a 70-75 mile path running through Terrebonne and Lafourche parishes. This proposal, known as the Morganza to the Gulf of Mexico Hurricane Protection Project, is scheduled for completion no sooner than 2020. Implementation of the Morganza levee system is part of the Louisiana Coastal Area Wetlands Restoration Plan. Once completed, the levee wall will provide hurricane protection to approximately 110,000 residents of both parishes.

The Corps has held numerous local meetings to inform Terrebonne and Lafourche Parish residents as to how the construction of the levee will affect them. The focus has been on where exactly the wall is to be built and how much it will cost. Left out of the

plans is Isle de Jean Charles, Louisiana. This small community, located in the southeast corner of Terrebonne Parish, falls outside the planned levee wall's path, leaving it exposed and unprotected. According to the Army Corps of Engineers, the additional costs required to include Isle de Jean Charles in the levee project are extraordinarily high, making it difficult to economically justify re-routing the project's projected path. As a result, Isle de Jean Charles, a historic Native American community, already facing severe wetland erosion, is particularly vulnerable to hurricane-induced high tides and faces total obliteration should a high category hurricane make landfall at its tip.

The Corps has proposed relocation of the Isle de Jean Charles residents to an undecided area, presumably somewhere in Terrebonne Parish, behind the levee wall. Despite this proposal to relocate, which is seen as a significantly cheaper alternative from the Corps's perspective, most of the residents do not wish to move away from home. Instead, they want the Corps to include their community in the levee alignment despite the Corps's claim that this is not economically feasible.

The scenarios presented here use the example of Isle de Jean Charles to explore how to successfully negotiate a community relocation effort, and how easily a community relocation effort can fail. The events leading up to the negotiation of the relocation are real, but the narratives of success or failure are fictional. However, both scenarios are constructed out of the best and worst practices as derived from the research literature.

3.3 Scenario One: Failed Community Relocation

What went wrong here? Simply put everything. Based on a cost-efficiency analysis that did not include any of the valuable, although not necessarily quantifiable assets of the community, a decision was reached to exclude the community from the protection of the proposed levee. This decision was reached without the input of the range of stakeholders that were to be affected by the proposed design. The exclusion of the community from the protected region of the proposed levee system was the result of excluding community representatives from the decision making process. Residents were quick to reject the proposal to relocate their community somewhere within the proposed protected region of the levee.

Not many of the residents trust the government given that distrust of outsiders runs deep in the community. The elders of the community do not have to think too far back to remember a time when they could neither pray nor go to school near white people. The suggestion for relocation fueled theories of conspiracies about greedy land speculators and oil interests. Racial tensions were heightened as community members organized not around the idea of relocation, but rather around the idea of how they could gain protected status from the federal government, the same entity they see as suggesting that they are financially expendable.

Residents are quick to pinpoint the risks they face through relocation. They express fears of becoming not only homeless, but perhaps more importantly, landless. In a broader cultural sense, the loss of a family's individual home and the loss of a group's cultural space tend to result in alienation. For many, homelessness and placelessness are intrinsic by definition. They understand landlessness to be the first step toward impoverishment. They question where the new community would be located since it was not specified in the Corps of Engineers' plans. Residents also worry that they will not

have easy access to their current places of employment or will lose access to new employment, knowing all too well that when families lose economic power they spiral on a “downward mobility” path.

The result has been a renewed interest not around the issue of relocation, but rather around the issue of how to protect their community from being relocated. They see the fate of the community as being tied to federal recognition that would ensure their right to tribal self-determination and autonomy. They have initiated the steps necessary to obtain official federal recognition as a Native American tribe that would, by law, afford them benefits and protections from the federal government they would not otherwise have.

3.4 Scenario Two: Successful Community Relocation

What could have gone right here? By employing a different approach when considering the location of the proposed levee and which communities to exclude, a very different outcome could have been achieved. The community of Isle de Jean Charles has a recognized tribal leader to act on behalf of the community. By including him in the discussions leading to the decisions of where the proposed levee would be located, it is possible that negotiations would have resulted in winning the chief over to the idea of relocating the community to a safer location within the protective walls of the levee.

Successful community relocation results when the community to be relocated is organized around the idea of how relocation might occur. The community organization has to be recognized by officials outside the community working on the relocation effort and the two groups must develop a working relationship. It takes time and negotiation to build a trusting relationship based on respect and understanding. When potential relocatees are involved in the relocation decision-making process as early as possible they will understand the nature of the multi-organizational context within which the relocation is to be conducted.

Further, by including citizens in the process of decision-making, the fourth principle can be realized, that is, special attention can be given to the social and personal needs of relocatees. Here is where the residents can come to “own” the idea of relocation, and recognize that they can recreate their community in a safer location. Finally, the last principle directs attention to special concerns involving racial, cultural, or economic minorities. Clearly the Isle de Jean Charles case involves all three of these considerations. By considering each of these principles, the risks associated with community relocation are more likely to emerge before becoming problematic to the success of the move.

4.0 Literature Search

As a starting point, the literature search process focused on identifying and acquiring studies that report the empirical results of human settlement relocation analyses. This included formally published studies, Ph.D. dissertations, M.A. theses, technical project reports, and conference papers. The use of computerized searches on multiple disciplinary databases (including sociology, psychology, geography, and planning) using “relocation” as a keyword resulted in a listing of pertinent scholarly research literature. To locate technical project reports, we conducted computerized searches of agency databases, such as the United States Army Corps of Engineers and the Federal Emergency Management Agency. In addition, we used a comprehensive social science

disaster research database belonging to the Natural Hazards Research and Applications Information Center. The codification of the resulting material is representative of the social science knowledge base on community relocation.

4.1 Annotation Format

Annotations follow a similar format, including author, year, title, source of publication, annotation, and keyword. An example of an annotated source illustrating the format is as follows:

Author: Perry, Ronald W., and Michael K. Lindell.

Year: 1997.

Title: Principles For Managing Community Relocation as a Hazard Mitigation Measure.

Source: *Journal of Contingencies and Crisis Management* 5(1): 49-59.

Annotation: The two benefits of permanent relocation are: 1) prevention of death and injury, and 2) monetary savings to insurance programs. There are also two problems with a policy of permanent relocation: 1) it is an intrusion into citizens' lives, and 2) it has a history of negative outcomes. Factors associated with successful relocations in connection with hazardous environments are: 1) the community to be relocated should be organized; 2) all potential relocates should be involved in the relocation decision-making process; 3) citizens must understand the nature of the multi-organizational context of the relocation; 4) special attention should be given to the social and personal needs of relocates; and 5) there are special concerns with relocations which involve racial, cultural, or economic minorities.

Keyword: relocation, community, mitigation

As shown in the example, the "author," "year," "title," and "source" fields provide a standard bibliographic reference for the document. The "annotation" field provides a summary of materials related to community relocation covered in the document. The "keyword" field identifies general disaster response related topics covered in the document.

In the electronic database (found at <http://www.ucs.louisiana.edu/~jdd4556/>), the bibliography can be searched with any word in an entry. This means that in addition to words in the keyword field, all words in the "author," "title," and "annotation" fields are searchable terms. When the database is accessed, one or more terms may be entered. All records containing such terms are located and presented, with the search terms highlighted. An asterisk next to a search term (such as mitigate*) allows searches for word variants (such as "mitigate", "mitigates", "mitigation"). Annotations can be efficiently and flexibly organized for export as files or documents using these search capabilities.

4.2 Annotated Bibliography

Author: Aguirre, Benigno.

Year: 1983.

Title: Evacuation as Population Mobility.

Source: *International Journal of Mass Emergency and Disaster* 1: 415-437.

Annotation: An analytical perspective is used to examine the relationship of human evacuation and migration. The first part of the paper focuses on the variables of distance, permanence and voluntarism used to distinguish evacuation from migration. The paper then points out that the lack of interest in evacuation by students of migration, partly on the basis of the assumed clear-cut differences in these three dimensions, is unwarranted. The second part of the paper identifies three models that would provide a basis for a synthesis of the two types of geographical mobility—evacuations and migrations—as the result of subjective decision-making processes triggered by stressors, and as instances of collective behavior.

Keywords: proximity, voluntary, decision-making

Authors: Allenby, Brad and Jonathan Fink.

Year: 2005.

Title: Toward Inherently Secure and Resilient Societies.

Source: *Science* 309: 1034-1036.

Annotation: Recent years have seen a number of challenges to social stability and order, ranging from terrorist attacks and natural disasters to epidemics such as AIDS and SARS. Such challenges have generated specific policy responses, such as enhanced security at transportation hubs and planned deployment of a global tsunami detection network. However, the range of challenges and the practical impossibility of adequately addressing each in turn argue for adoption of a more comprehensive systems perspective. This should be based on the principle of enhancing social and economic resiliency as well as meeting security and emergency response needs and, to the maximum extent possible, developing and implementing dual-use technologies that offer societal benefits even if anticipated disasters never occur.

Keywords: resiliency

Author: Almedom, Astier M.

Year: 2004.

Title: Factors that Mitigate War Induced Anxiety and Mental Distress.

Source: *Journal of Biosocial Science* 36: 445-461.

Annotation: The effects of war-induced anxiety and mental distress on individuals and groups can either be mitigated or exacerbated by humanitarian action. This paper focuses on two key factors that protect the mental wellbeing of war-affected populations: organized displacement or assisted relocation; and coordinated humanitarian aid operations that are responsive to local needs. Qualitative data from two internally displaced person camps are presented. Analysis of these data serves to substantiate and refine a working hypothesis: that social support of the right type, provided at the right time and level, can mitigate the worst effects of war and displacement on victims/survivors. An integrated model of psychosocial transition is suggested.

Community maps and community history timelines were used as records of local knowledge that had not previously been sought and/or recognized as a means of dealing with war induced anxiety resulting from community displacement. Striking differences emerged between urban and semi-urban settings where little or no displacement had occurred and camps for those internally displaced in respect to the amount of detail provided for community maps, seasonal calendars, and history timelines.

Keywords: stress, psychological, social network, social support

Author: Bilharz, Joy A.

Date: 1998.

Title: The Allegany Senecas and Kinzua Dam: Forced Relocation Through Two Generations.

Source: Lincoln, NE: University of Nebraska Press.

Annotation: The author proposed to assess the psychological, economic, and cultural effects of relocation over two generations, documenting the short- and long-term consequences of the removal over a 30-year period. Bilharz employed standard ethnographic methods: community mapping and census taking, participant observation, structured and unstructured interviews, the life history method (three brief histories were taken), documentary and archival research, etc.

In Chapter One, "The Allegany Senecas," Bilharz presents information on the Senecas prior to the construction of the dam. Next is Chapter Two, "Involuntary Relocations: An Overview" in which she provides examples of and assesses the effects of natural and human-induced dislocations. She also includes a description of the "Scudder-Colson model," scenarios about other American Indian relocations, and national trends related to dam construction. In Chapter Three, "Building Kinzua Dam: Broken Treaties" Bilharz traces the history of the concept for a dam, federal executive and congressional support, the impact of the dam upon families, planning for the relocation, and proposed rehabilitation funds. Her subsequent chapter, "The 'New Places': Broken Hearts" includes a comparison of the two "Congressional towns" (Jimersontown and Steamburg), relations with non-Indians, and the application of the "Scudder-Colson model." In Chapter Five, "Making It in the Great Society" she discusses the rehabilitation funds, educational programs, economic and community development, and the threats of federal termination of the SNI. Likewise, sociocultural and behavioral adjustments to the relocation and the Southern Tier Expressway (Route 17) expansion are elaborated. In Chapter Six, "The 1980s: Rebellion and Reassessment" she describes and contrasts the two Congressional settlements as "very different communities." Bilharz also considers the effect of the SNI employing more than four hundred Senecas, the effects of enhanced educational opportunities, and impacts on traditional and cultural activities. Lastly, she provides a reassessment of the removal and the effects on the Seneca political parties (People's Party, Seneca Alliance, Seneca Coalition for Change, and the emergence of the woman-oriented Sovereign Senecas).

In the chapter entitled "The Legacies of Kinzua Dam" Bilharz considers the problem of the Salamanca leases, defeat of the referendum on casinos (May 1994), and the results of the 1996 SNI elections. She considers the peaceful and confrontational rallies (April 13

and 20, 1997) over tax-free sales of gasoline and cigarettes by Indians to non-Indians, thoughts on the Governor of New York “George Custer PaTAXi Indian Hater,” and taxation as a political issue in the 1998 elections. In the “Conclusion” the author contrasts the Allegany removal with contemporary relocations (Innu-Naskapi in Labrador and Ojibway at Grassy Narrows, Ontario). She also evaluates her use of the “Scudder-Colson model” and suggests several modifications (reported below), and she discusses new political activism and gender issues.

Her database for these assessments includes information on the relocation of 160 families comprising 537 individuals (plus an additional 13 who were serving in the military for a total of 550), and 98 persons who lost most of their land as a result of the creation of the reservoir. Bilharz also notes that “26 ‘estates’ of deceased Senecas were destroyed” (p. xx)-- “estates” connotes inherited lands. It is from these data that she generalizes and synthesizes sociocultural, psychological, and behavioral characteristics about the relocatees. Undercounts of actual or potential dislocated persons appears to be a common characteristic among the studies of displaced persons, so that her accurate accounting provides a solid base from which to make assessments about the Senecas.

Bilharz develops three hypotheses (pp. 3-5): 1) Seneca women would be more negatively affected by the forced relocation than Seneca men; 2) the Longhouse would emerge as a political symbol of Seneca unity; and 3) the emotional trauma and stress felt by the children would coalesce in political activism after they became adults. Her analysis suggests that the initial hypothesis cannot be supported, that there is a mixed assessment about second conjecture, and that the third is demonstrated.

The influence of the Quakers during the early 1800s resulted in the Senecas shifting from the matrilineal longhouse extended family household with matriarchal authority to nuclear family dwellings, where the men became sociopolitically and economically more powerful. Hence, women were excluded from the political realm. However, the removal in 1964 was followed closely by several other events. Women gained the right to vote in 1964 and, in 1966, the prerogative to hold office in the SNI. In addition, a Seneca Women's Awareness Group (SWAG) began exercising political influence. Women were also critical elements in the educational system and are, once again, a focus of the family organization. The role of the removal is a key element in this matriarchal resurgence. In addition, economic and educational programs planned and executed by women are very successful. However, Bilharz notes that the most successful entrepreneurs among “Indian” men on each reservation had non-Seneca wives. The children of these families are ineligible for enrollment in the Seneca Nation of Indians.

While the number of native speakers has declined, and the use of the Seneca language is a key element in the performance of the rituals, the younger generation of English-only speaking Senecas comes to the Longhouse in increasing numbers to participate in the sacred dances. However, this has a counter effect leading to an emphasis on competitive pow-wow dancing and the fashioning of elaborate dance costumes. The cash dance prizes are often substantial.

Her third hypothesis is demonstrated. The evidence shows that the children lacked an effective way of dealing with the grief and anxieties of relocation, the Senecas concept of community was altered, and the extended family role diminished, especially the role of grandparents. A number of Senecas who were children and suffered psychological traumas during the removal have become the social and political leaders of the current generation of young adults. Some of them became active participants during the confrontations during the construction of the Southern Tier Expressway (New York State Route 17) through the Allegany Reservation and were involved in the Interstate 90 confrontation in the Cataraugus Reservation. At one point, construction equipment was “held hostage” (p. 123) and militancy on the part of some Senecas and New York State Police was avoided. The potential for major bloodshed was very real and was featured in local newspapers and in the national press.

Bilharz characterizes Seneca sociocultural adaptations, the forging of new social networks, attempts to invigorate the native educational system, and the increased awareness and involvement with local, tribal, state, and national politics. In addition, she determines that the dam remains a “potent symbol” to the elders who regard the inundated area with an almost spiritual significance. On the other hand, the younger Senecas, many of whom were children when their families were relocated, continue to feel powerless. Often the young people regard the dam with disdain, sometimes blaming their parents for the current land shortage on the reservation, and they continue to mistrust government agents and agencies. Indeed, Bilharz states that young Senecas have an “increased distrust of federal and state governments” (p. xxiv).

After thirty years, the Kinzua Dam, and the more recent construction a 16-mile portion of the New York Southern Tier Expressway (Route 17) through the heart of the Allegany Reservation, remain significant issues. Land ownership, rents, and taxes in the City of Salamanca, New York (also located on Seneca land) also present complex problems. Bilharz also proposes to use the “Scudder-Colson model” as a framework for assessment and elaborates its potential use. According to the originators, the multidimensional stresses of mandated relocation include physiological, psychological, and sociocultural parameters. These may include increased mortality, trauma, grief, or modified behaviors. Scudder and Colson’s hypothesis proposed four stages: 1) a Recruitment Stage (planning and implementation), 2) a Transition Stage (with adjustment requiring at least two years), 3) a Stage of Potential Development, and 4) the Handing Over or Incorporation Stage. Some societies never reach Stages 3 or 4. Relocates may have different responses to Stage 1- they may welcome the removal, or relocate themselves prior to being displaced, or they may actively or passively resist displacement.

She confirms the Scudder and Colson proposition that there are differential responses in the SNI government and bureaucracy versus the general Seneca population, the former adapting and adopting federal and state policies much more quickly than the general populace. Indeed, the transitions do not progress at the same rate for every person because of economic position, individual initiative, and psychological stresses, among other factors. In addition, relocatees who had higher incomes and better local or national standing had a better chance of influencing local government policies and of becoming

entrepreneurs. Likewise, Scudder and Colson anticipated modifications in religious rituals, and the changes in the Seneca Longhouse ceremonies are significant. Bilharz suggests eliminating the distinction between Stages 1 and 2. The Seneca people and their government reached Stage 3 by the mid-1970s.

This volume is a signal contribution to Iroquoian studies because it is the only 20th Century ethnographic community study of Seneca peoples. Likewise, there were no diachronic analyses of the effects of relocation on children until this analysis. The elders suffered significant psychological effects and increased mortality, confirming the results of studies in India. In addition, there is no similar longitudinal research that can be used to assess the Scudder and Colson construct. Bilharz documents significant sociocultural change in Seneca society during the pre- and post-relocation eras, noting the breakdown in the sense of “community.” Major administrative, bureaucratic, economic, and social changes have occurred, and some religious change is also found, particularly regarding the Longhouse and the Seneca prophet Handsome Lake. The Longhouse has, indeed, become a focus of Seneca politics and culture. During the past 30 years the younger generation has now risen to power but remembers the Cornplanter Grant and Allegany Reservation when they were children, and views the Kinzua Dam as a symbol of distrust of the federal and state governments.

These young adults were sensitized by the removal and have become interested in radical politics. Renewed ethnic pride is evident in the creation of a competitive drum (named “The Treaty of 1794”), pow-wows and traditional native dancing, and the welding together of disparate political factions as a result of the Route 17 confrontations. The “common foe” has united the Senecas of both reservations, and the social and economic differences between Allegany and Cataraugus that were growing during the 1980s are, apparently, diminishing. Educational opportunities were enhanced but, because the SNI employed so many young adults in reservation-based programs, an unanticipated result was that the high school dropout rate remains elevated. Those young Senecas who go away to college have few opportunities for employment upon their return. This means that the nation is losing some of its best young people and more and more enrolled Senecas are leaving the reservations. This is exacerbated by the problem of the lack of suitable reservation land noted above.

Keywords: TVA, culture, racism, failure, social network, minority, exclusion

Author: Brun, Catherine.

Date: 2003.

Title: Local Citizens or Internally Displaced Persons? Dilemmas of Long Term Displacement in Sri Lanka.

Source: *Journal of Refugee Studies* 16: 376-397.

Annotation: People who seek refuge from conflict, but do not cross an internationally recognized border, have attracted increased attention from the international humanitarian community since the end of the Cold War. While refugees who flee the country may obtain a legal status and protection under the Refugee Convention, internally displaced persons (IDPs) are still under the jurisdiction of their own state and should in principle have the same rights as other citizens of the country. The article analyzes local

consequences of people being designated as IDPs, exemplified by Sri Lanka's protracted crisis of internal displacement. Locally, 'internally displaced persons' becomes a social category, and the meaning of the category is modified from the original definition made by the humanitarian regime. War and the forced and voluntary movement of people within Sri Lanka create unequal access to citizenship rights. The IDP status is often regarded as essential in order to secure special needs for assistance and protection. However, the article shows that the IDP status in Sri Lanka also separates IDPs from other citizens, and may restrict rather than secure rights.

Keywords: failure, displaced, minority

Authors: Colic-Peisker, Val and Farida Tilbury.

Date: 2003.

Title: "Active" and "Passive" Resettlement: The Influence of Support Services and Refugees' own Resources on Resettlement Style.

Source: *International Migration* 41(5): 61-91.

Annotation: This research explores the process of resettlement among recent refugees in Perth, Western Australia. The authors propose four refugee resettlement styles created through the interaction of factors clustered as: 1) the social features of refugees (their human, social, and cultural capital), and 2) the host society's responses to refugee settlers (Australia's resettlement policy and services and the broader influence of the host society's responses to refugees). The authors propose that refugees approach their resettlement in predominantly active ("achievers" and "consumers") or passive ("endurers" and "victims") ways and that these are differentially successful strategies. The argument developed in the article is supported by data from two qualitative research projects. The fieldwork targeted refugees from Yugoslavia and the Horn of Africa as well as resettlement service providers. Medicalization of the refugee experience is a factor that may influence refugees to adopt a passive "victim" role, so the authors propose that a greater emphasis during early resettlement should be placed on refugees' own culturally defined priorities such as employment and stable housing.

Keywords: resettlement, culture, social network, racism, minority

Authors: Dasberg, Haim, and Gabriel Sheffler.

Date: 1987.

Title: The Disbandment of a Community: A Psychiatric Action Research Project.

Source: *The Journal of Applied Behavioral Science* 23: 89-101.

Annotation: This article discusses individual and communal responses to the stress an Israeli cooperative agricultural settlement in Sinai underwent as it faced disbandment required by the Egyptian-Israeli peace treaty. The authors belonged to a team of five mental health professionals who studied 40 families, beginning more than a year before the evacuation to shortly thereafter. Using both direct observation and interviews, the team studied sources of and responses to stress. They found the main stressors to be acute changes in the settlers' expectations, roles, and identities, and responses to be both adaptive and non-adaptive. The authors report that although most of the settlers coped with the evacuation well they generally suffered damage to their abilities to sustain communal relationships, which may have lasting effects. The article presents preventive

measures that may have aided these evacuees and could prove useful for others who are to be uprooted in the future.

Keywords: psychological, social network, stress

Authors: Ekstrom, Mats.

Date: 1994.

Title: Elderly People's Experiences of Housing Renewal and Forced Relocation: Social Theories and Contextual Analysis in Explanation of Emotional Experiences.

Source: *Housing Studies* 9(3): 369-392.

Annotation: Transformation of the urban environment, forcing people to leave their homes either temporarily or permanently, is a widespread phenomenon in the Western world. To those whose homes are affected, the process often has a strong emotional meaning. This article shows how various contributions to a sociology of emotions together can deepen our knowledge of the socio-psychological mechanisms that lie behind elderly people's greatly varying emotional experiences of housing renewal and forced relocation. Mechanisms regarding five groups of emotions are presented: (1) trust, mistrust, security and insecurity, (2) powerlessness, self-estrangement and belonging, (3) guilt, shame, pride and dignity, (4) the feeling of having been violated, and (5) stress. An intensive interview study of elderly people in three neighborhoods in a middle-sized Swedish town is presented, showing how these mechanisms are expressed in the encounter between the housing renewal process and the everyday life of elderly people. The article shows how peoples' concrete emotional experiences are related to the nature of the renewal process, the meaning of home and life history.

Keywords: age, trust, stress, psychological

Author: Embree, John F.

Date: 1944.

Title: Community Analysis – An example of Anthropology in Government.

Source: *American Anthropologist* 46(3): 277-291.

Annotation: The War Relocation Authority (WRA), a government agency charged with the duty of caring for persons forced to leave restricted military areas, was set up by Presidential edict on March 18, 1942. The chief duty of the WRA was with Japanese nationals and Japanese-Americans residing in the United States. Ten relocation centers were established housing from 7,000 to 18,000 people each. The situation created by the relocation raised many special problems in human relations for the WRA. The evacuees had little in common, and the community organization was said to be "highly artificial." Social problems would arise and reach the point of explosion before the staff realized there was anything wrong. The staff had little time to devote to problems of social relations. The idea that advisors were needed received some attention, but not much administrative action. This resulted in an internal crisis. The causes of the trouble were: 1) a general settling down process in the center with some struggle for power among the community leaders; 2) a number of grievances which had become more or less chronic such as the governments "broken promises" concerning just what a relocation center would be like; and 3) attempts to administer the center through use of young Japanese Americans, which ran counter to the established order of the Japanese community whereby older people hold positions of authority over younger people. "...the problem

was primarily one of local administration and what was needed was not so much an increase in military control but rather an improvement of the administering organization on the one hand and a better understanding of attitudes and social developments within the center population on the other” (p. 280). Chronic housing grievances included overcrowding and a lack of privacy. The surrounding community attitudes were very hostile toward the inhabitants. Community analysis would be concerned with the group investigating and analyzing the causes of social upset, not with apprehending individual lawbreakers. The analyst would be interested in “why” not “who.” The analyst functioned to find out: 1) the causes of recurrent trouble, and 2) suggest changes in the local situation that might overcome the difficulty. Why did the WRA registration program cause so much trouble? The problems concerned: 1) the need for knowledge of and reckoning with evacuee attitudes; 2) the need for giving better advance information on the procedures and purposes of a new program both to the project staff and to evacuees; 3) better communication between the evacuees and project staff as to the motives and aims of the program and the procedural problems; and 4) the need for some evacuee participation in and responsibility for carrying out a program successfully.

Keywords: trust, minority, racism, culture, communication, exclusion

Author: Erasmus, P.A.

Date: 1998.

Title: Waaihoek: Resettlement Without Light.

Source: *South Africa Journal of Ethnology* 21(3): 135-140.

Annotation: The article indicates that considerable resistance to relocation existed among the residents because: 1) they had not been consulted in the matter (very little know-how of the bureaucratic procedure existed, with the result that the residents tended to interpret the whole process in personal and racial terms); 2) they were offered inadequate compensation (they felt that the white city officials sought to deprive them of things they valued); and 3) they were granted only three months respite before evacuation. The relocation procedures in this case (as it is in most cases) did not allow for the transfer of the social system. The authors state that it is important to recognize that: 1) the decision to migrate was not taken voluntarily but was forced on the people; 2) the objectives of the relocation were formulated and the process conducted by white officials whose cultural frame of reference with regard to the importance and meaning of kinship, the nuclear family, peer-group membership, neighborhood ties, etc. differed from those of the Waaihoek residents; and 3) kinship is of maximum importance in the period immediately after resettlement, because people need it to restore order to their world and to integrate themselves into their new environment.

Keywords: exclusion, racism, decision-making, social network

Author: Garrison, Jean L.

Date: 1985.

Title: Mental Health Implications of Disaster Relocation in the United States: A Review of the Literature.

Source: *International Journal of Mass Emergency and Disaster* 3:51-65.

Annotation: This article examines the stress of relocation following disaster by reviewing related literature. In general, the author found that the literature suggests that

perceptions related to housing quality, the sense of home and of belonging, increased indebtedness, availability of social support, other adverse events affecting the individual, and the degree of perceived control are critical variables in determining the mental health outcomes of individuals experiencing relocation. The author concludes that vulnerability to stress reactions following relocation is likely to be related to class and ethnicity rather than to age.

Keywords: stress, psychological, class, minority, age

Author: Goetz, Edward G.

Date: 2002.

Title: Forced Relocation vs. Voluntary Mobility: The Effects of Dispersal Programmes on Households.

Source: *Housing Studies* 17:107-123.

Annotation: The deconcentration of poverty in the United States has involved both voluntary and mobility programs for low-income households and involuntary relocation of families through government action. This paper examines the effects on families of these two different strategies. Using data on over 600 families in the Twin Cities region of Minneapolis/Saint Paul, the study reveals only sporadic support for the hypothesis that voluntary or involuntary participants in the deconcentration efforts will report improvements in their living conditions, or report better condition than a control group of public housing and Section 8 (non-dispersed) residents. Several possible explanations for the lack of program effects are offered, including, 1) the fact that the study results are based on short-term experiences of the families studied; 2) previous studies did not include families who chose to participate in relocation, and this created the possibility of selection bias of families that may be more motivated, less dysfunctional, or more dissatisfied with their previous living conditions; 3) the inclusion of a sizable immigrant population that is not typical of other relocation efforts that have been studied; and 4) it is possible that conditions experienced by families in other cities were much worse than the neighborhood conditions of those studied in Minneapolis/Saint Paul. The evidence presented here questions the rationale that all displaced and relocated families will experience benefits from relocation processes.

Keywords: poverty, success, benefit

Authors: Goodman, Patricia G., Edwin G. Vaughn, and Derek Gill.

Date: 1992.

Title: Relocation or Proximity? Major Factors Associated with Prolonged Impact Following Dioxin Contamination and Flooding in Missouri.

Source: *International Journal of Mass Emergency and Disaster* 10: 115-132.

Annotation: The research reports on a comparative study of delayed recovery as explained by disaster type (natural vs. technological), proximity, and relocation. The samples studied included 109 flooded (natural disasters), 100 dioxin-contaminated (technological disasters), and 145 affected by both disasters at Times Beach, Missouri. Proximity (had or still residing on confirmed dioxin sites), and disaster type were significantly associated with delayed recovery. Relocation was not associated with recovery; however, lack of permanent relocation and attitudes toward relocation were

found to affect recovery among the dioxin sample; with younger respondents reporting greater effects than older respondents.

Keywords: proximity, attitudes, age

Author: Kirschenbaum, Alan.

Date: 1996.

Title: Residential Ambiguity and Relocation Decisions: Population and Areas at Risk.

Source: *International Journal of Mass Emergency and Disaster* 14: 79-96.

Annotation: Residential relocation is one means of coping with living in an area perceived to be at high risk for a disaster event. An analysis of household members who live in such an area showed the extent to which fear of a recurring disaster affects attitudes toward seeking a safer area to live. The intent to relocate is linked to specific sub-groups of families on the basis of how they comprehend the risks of remaining (educational level) and the extent of possible economic damage (level of assets). Links to relocation intent were found among a variety of independent variables that measured a broad array of attitudes, feelings, and behavioral acts. These links provide a focus on the possible determinants affecting a relocation decision. Such determinants include socio-demographic, physical/ecological, affective-emotional, and post crisis variables. Overall, the set of catalysts that decision makers took to be prime determinants in an intended relocation decision were primarily fears and emotions, which directly touched the respondents and immediate family members (particularly children).

Keywords: fear, risk, economic

Author: Lanphier, C. Michael.

Date: 1983.

Title: Refugee Resettlement: Models in Action.

Source: *International Migration Review* 17(1): 4-33.

Annotation: A model of refugee resettlement containing two axes is proposed: 1) volume of refugee intake and 2) emphasis on economic or cultural adaptation (not both). The resulting fourfold scheme yields three types of resettlement activities, which can be sustained over a protracted period of time: large volume/primary focus on economic adaptation, moderate volume/emphasis on economic adaptation, moderate volume/emphasis on cultural adaptation. The final scheme, large volume/emphasis on cultural adaptation, however, is said to be the type which is “structurally unstable and in practice would modify into another form.” The refugee resettlement practices of three major receiving countries, Canada, France and the United States, reflect principles derived from these three stable types. France and Canada exemplify moderate intake with emphasis on economic adaptation, although the province of Quebec uniquely demonstrates moderate intake/emphasis on cultural adaptation. Practices in the United States correspond to large volume/emphasis on economic adaptation.

Keywords: resettlement, cultural, economic

Author: Lev-Wiesel, Rachel.

Date: 1998.

Title: Coping with the Stress Associated with Force Relocation in the Golan Heights, Israel.

Source: *Journal of Applied Behavioral Science* 34(2): 143-161.

Annotation: This research sought to develop a multivariable paradigm to determine the contribution of personal resources in explaining stress. Personal resources were divided into three types: affective (potency and psychological sense of community), cognitive (political orientation and education), and instrumental (family status and gender). Potency involves the individual's deep belief in his own abilities and in a meaningful, orderly society. The analysis revealed that potency had a greater impact on stress than education or psychological sense of community. Anxiety was found to have an intervening role between demands and stress. According to this research, social services should be developed that promote the acquisition of personal skills on both the affective level (strengthening potency) and the cognitive instrumental level (obtaining an education to raise one's professional status).

Keywords: stress, psychological

Authors: McDonald, Michael J. and John Muldowny.

Date: 1982.

Title: *TVA and the Dispossessed: The Resettlement of the Population in the Norris Dam Area.*

Source: The University of Tennessee Press.

Annotation: One of the most notable agencies of the New Deal era, the Tennessee Valley Authority (TVA) was created with a warrant to plan for the socioeconomic improvement of "forgotten" Americans. The construction of the Norris Dam, it was thought, would benefit the region socially as well as economically. This book analyzes and assesses TVA's social experiment in modernization at the grassroots level, using population removal in the Norris Basin as a test case. The authors evaluate the agency's operating procedures, the changes it made in the Norris Basin, the physical and demographic characteristics of the area, and the people involved – both TVA's staff and the displaced individuals. The authors' conclusions about TVA's performance in the early days are sobering. Limited economic goals were realized at social cost, they find, and several reasons for this emerge. Legal challenges to the agency's constitutionality overshadowed its interest in socioeconomic experimentation. The three early directors interpreted the Authority's aims differently, and signs of executive stress were evident as early as 1933. Law limited the extent to which the TVA could modernize impoverished rural communities, and staff agriculturalists exerted a conservative influence that impeded innovation. Finally, the agency seems to have lacked a coherent policy at the grass roots.

"The people of the Norris Basin bore the tensions of the immediate confrontation with the TVA. They were the raw material of the TVA's planning experiments as much as were the elements of water and land, farms and forest" (pp. 6-7).

"In the short term TVA's 'social experiment' was a failure – a failure brought about by the lack of a coherent and unified grassroots policy; by conflicting directorial roles and administrative structures; and by highly variant and persistent conceptual views held by people within TVA of the agency's aims and goals" (pp. 264).

Keywords: TVA, minority, failure

Authors: Mileti, Dennis S. and Eve Passerini.

Date: 1996.

Title: A Social Explanation of Urban Relocation After Earthquakes.

Source: *International Journal of Mass Emergency and Disaster* 14(1): 97-110.

Annotation: This paper synthesizes the research record regarding urban relocation after earthquakes. Three alternative relocation responses after earthquakes are identified: relocation to a new site, intra-urban relocation, and reconstruction. The range of factors that have been documented to influence these responses are presented. These include patterns of culture, social organization, and political-economic conditions that exist prior to the earthquake. The human impacts of relocation after earthquakes are discussed, including equity and psychological effects. This research shows that pre-disaster planning for rebuilding cities after earthquakes is central to enhancing risk reduction effectiveness.

Keywords: urban, culture, psychological, minority

Author: Muggah, Robert.

Date: 2003.

Title: A Tale of Two Solitudes: Comparing Conflict and Development-Induced Internal Displacement and Involuntary Resettlement.

Source: *International Migration* 41:5-31.

Annotation: Development projects and war regularly lead to the internal displacement and involuntary resettlement of tens of millions of people each year. Though most relocated people settle spontaneously, a significant proportion is involuntarily resettled into planned “camps” and “settlements.” This article is primarily concerned with a relatively understudied category of forced migration studies: resettlement. It contends that until very recently, the theory, policy, and practice of resettlement for people internally displaced by development and war have been treated as intellectually and practically exclusive. Decision makers and scholars working on the subject frequently hold on to narrow disciplinary and bureaucratic interests and are unable or unwilling to look across institutional boundaries. As a result, policies and programs intended to resettle populations have been clustered into two discrete and disparate narratives. Each of these draw from distinct normative moorings, government and non-governmental interpretations of “success” and “failure,” and a division of labor closely tailored to the disciplines and expertise of those in the development and humanitarian communities. Though arising from separate traditions and conceived exclusively by donors, policy makers, and scholars, this article contends that they actually share many common features.

Drawing on a vast and rapidly growing literature, this article seeks to frame the key debates on development and war-induced internal displacement and resettlement. It begins with an overview of definitional issues – including “internal displacement” and “resettlement” – two concepts that are regularly contested and misunderstood. The article notes that in practice, resettlement of both types of populations is treated separately. The article then turns to a number of theoretical contributions to the study of development and conflict-induced internal displacement and involuntary resettlement. The article highlights their separate evolution in theory and practice over time. It closes with a brief

treatment of some of the common features of development induced internal resettlement and conflict-induced internal resettlement, including their political economy, their institutional and bureaucratic logic and similar patterns of impoverishment risks.

Keywords: resettlement, internal displacement, conflict

Authors: Muskatel, Alvin, and Ronald W. Perry.

Date: 1984.

Title: Disaster Management: Warning Responses and Community Relocation.

Source: Westport, CT: Quorum Books.

Annotation: In this case study analytical attention is devoted to understanding the process and outcomes of relocating a community in Arizona composed primarily of black citizens. The case study makes comparisons of minority versus majority group experiences. This comparison is important for two reasons: 1) historically, most relocations have involved minority citizens, and 2) there have been comparatively few studies of the process and implementation of community relocation. Relocation is viewed and presented from the standpoint of the authorities who must initiate and accomplish the move. Special attention is given to issues of the formation and implementation of public policy associated with relocation, including legislative problems, inter-agency cooperation, and local interest group conflicts. The authors elaborate on the guidelines for organizations charged with implementing community relocation, including: 1) identifying a community agent to bargain and enter into contracts with extra-community organizations on behalf of the community residents; 2) the acquisition of land for relocation; and 3) construct the buildings on the new site. The role of the community organization included: 1) keeping the community together while construction was underway; 2) developing a communication system to keep residents informed; 3) maintaining citizen commitment to the relocation plan; and 4) handling opposition to relocation by groups outside the community.

Keywords: success, decision-making, communication

Authors: Najarian, Louis M, Armen K. Goenjian, David Pelcovitz, Francine Mandel, and Berj Najarian.

Date: 2001.

Title: The Effect of Relocation after a Natural Disaster.

Source: *Journal of Traumatic Stress* 14(3): 511-526.

Annotation: This research study explored the association between relocation and PTSD (post traumatic stress disorder) symptomology on 25 mothers and their children. The study investigated the hypothesis that adults who were exposed to an earthquake and relocated to an intact city where there was no damage would show significantly lower levels of PTSD and depression than a comparison group of earthquake victims who had similar exposure and remained in the earthquake city and a comparable group who did not experience the earthquake. Findings of this study suggest that relocation did not diminish the prevalence of PTSD in the adults who witnessed the earthquake and were relocated to an intact city. Contrary to those who suggest that remaining in the disaster area minimizes PTSD symptomatology, the women who relocated were no worse than those who remained in the disaster city. The hypothesis that the adults who relocated would be less symptomatic than those who remained in the earthquake city was not

substantiated. The study results regarding levels of depression consistently indicate that the relocated women experienced significantly higher levels of depression compared to those who experienced the earthquake but did not relocate and those who did not experience the earthquake.

Keywords: psychological, depression, PTSD

Authors: Perry, Ronald W., and Michael K. Lindell.

Year: 1997.

Title: Principles For Managing Community Relocation as a Hazard Mitigation Measure.

Source: *Journal of Contingencies and Crisis Management* 5(1): 49-59.

Annotation: The two benefits of permanent relocation are: 1) prevention of death and injury, and 2) monetary savings to insurance programs. There are also two problems with a policy of permanent relocation: 1) it is an intrusion into citizens' lives, and 2) it has a history of negative outcomes. Factors associated with successful relocations in connection with hazardous environments are: 1) the community to be relocated should be organized; 2) all potential relocates should be involved in the relocation decision-making process; 3) citizens must understand the nature of the multi-organizational context of the relocation; 4) special attention should be given to the social and personal needs of relocates; and 5) there are special concerns with relocations which involve racial, cultural, or economic minorities.

Keyword: relocation, community, mitigation, success, decision-making

Authors: Riad, Jasmin K., and Fran H. Norris.

Year: 1996

Title: The Influence of Relocation on the Environmental, Social, and Psychological Stress Experienced by Disaster Victims.

Source: *Environment and Behavior* 28(2): 163-183.

Annotation: A review of the forced relocation literature suggested that relocation following a natural disaster contributes to the environmental, social, and psychological stress experienced by disaster victims. This study was designed to examine the effects of relocation on the wellbeing of victims of Hurricane Andrew. Respondents were 404 residents of southern Dade County (Florida) who were interviewed in their current residence six months after the hurricane. Results indicate that relocation was associated with higher levels of ecological stress, crowding, isolation, and social disruption. In addition, relocation and ecological stress interacted to predict psychological symptoms. Relocates living in poor conditions fared worse than either nonrelocates who lived under comparable conditions or other relocates who lived under better conditions.

Keywords: stress, psychological

Authors: Sanders, Sara; Stan L Bowie, and Yvonne Dias Bowie.

Date: 2003.

Title: Lessons Learned on Forced Relocation of Older Adults: The Impact of Hurricane Andrew on Health, Mental Health, and Social Support of Public Housing Residents.

Source: *Journal of Gerontological Social Work* 40:23-36.

Annotation: This article is an exploratory-descriptive study of older adult public housing residents who were forcibly relocated from the homes when Hurricane Andrew struck

Miami-Dade County in 1992. The subjects were all African American who lived in economically depressed, low-income communities. Almost 70% were female. The subjects suffered from an array of physical and mental health maladies that were exacerbated when they were uprooted from key support systems, including families, social services, and health care facilities they depended on. A variety of complaints surfaced about their new living arrangements, and almost 70% expressed a desire to return to their previous homes after long-term structural repairs were complete. Implications include the need for pre-emptive “elder-sensitive” strategic planning, the role of Public Housing Authorities in properly caring for older adults before and after a hurricane or other natural disaster, the need for appropriate training of public housing property managers, and the key role of social workers during post-disaster interventions with older adults and their families.

Keywords: social support, social network, minority, age

Authors: Smider, Nancy A. and Marilyn J. Essex

Date: 1996.

Title: Adaptation to Community Relocation: The Interactive Influence of Psychological Resources and Contextual Factors.

Source: *Psychology & Aging* 11(2): 362-372.

Annotation: This longitudinal study examined the interactive influences of psychological resources and contextual factors on short-term adaptation to community relocation in a sample of 102 older women. The effects of three psychological resources (environmental mastery, autonomy, and personal growth) and three contextual factors (pressure to move, difficulty of the move, and unexpected gains experienced) on emotional reactions to relocation were examined. The pattern of findings suggests that women with greater psychological resources were more resilient in the face of negative circumstances but that the emotional “boost” of unexpected gains was greatest for women with lower pre-move resources. These results underscore the importance of considering event-relevant psychological resources and contextual factors and including both negative and positive aspects of the process of adaptation.

Keywords: short-term, resilient, psychological, age

Authors: Sundet, Paul and Joanne Mermelstein.

Date: 1996.

Title: Predictors of Rural Community Survival After Natural Disaster: Implications for Social Work Practice.

Source: *Journal of Social Science Research* 22(1-2): 57-70.

Annotation: While not specifically addressing community relocation, this research investigated rural community survival factors. Faced with a natural disaster, the flood was another in a decade long cumulative economic and social challenge to durability. It taxed the core of the community vitality. Many communities fade or evaporate under such pressures while others not only survive but also flourish. Community development has focused on group processes and cohesiveness, economics on production, distribution and consumption linkages. Rural sociology points to social system cohesiveness while the contribution of social work has been on the application of crisis theory to the rural community. On the opportunity side, communities emerged appearing to “survive and

thrive.” On the danger side, communities seemed to “fail and pale” with three distinct types of failure: 1) annihilated – permanent and total destruction of all facets of community, physical and intangible; 2) hollow – existence of physical and political entity but barren of effective social organization and psychological dynamism; or 3) terminal – a demoralized community fractured and missing subsystems, withering vitality in remaining community institutions and diminished capacity and motivation to attend to the regular demands of sustenance. Pre-disaster community characteristics associated with post-disaster survival are: 1) demographic variables predicting outcome – poverty rate; 2) history – including governmental relations, presence of preexisting internal strife and horizontal integration of community subsystems; 3) ecological – the communities communication capacity, topography of the land, and proximity to external resources; 4) culture – homogeneity, ethnocentrism, permeability, individual/group orientation, common mores predict community survival. Of five subsystems the only one that affected the outcome was government. Having a weak government carried a high cost. A vibrant economy is not a predictor of community survival. Town officials, to the extent that the example of leadership and tireless efforts to learn and to respond in the midst of crisis were successful, were recognized as a major factor in community survival.

Keywords: survival, success, poverty

Author: Walker, Melissa.

Date: 1998.

Title: African Americans and TVA Reservoir Removal: Race n a New Deal Program.

Source: *Agricultural History* 72(2) 417-429.

Annotation: The 1933 Tennessee Valley Authority (TVA) project was meant to provide society with improvements but damaged the lives of many African Americans. The TVA brought electricity to many homes and helped control the Tennessee River, but many African Americans had to be relocated away from dams being built. African Americans undergoing life transitions were not given the help the government ostensibly offered because of entrenched racism.

Keywords: TVA, racism, minority

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