

DISASTER RECOVERY IN RURAL COMMUNITIES: A CASE STUDY OF SOUTHWEST LOUISIANA

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ABSTRACT

This paper provides a descriptive case study to develop a better understanding of the disaster recovery and rebuilding process in the three parishes (counties) in South Louisiana that were hardest hit by Hurricane Rita in 2005. The data come from a number of sources: official documents, news articles, published data and personal observations. This case study implications raises questions about current approaches to disaster recovery. It also suggests strategies for practice, program development, and policy are suggested.

Introduction

In the late summer and early fall of 2005, Hurricanes Katrina and Rita destroyed most of New Orleans and the communities along coastal Alabama, Mississippi, Louisiana and Texas. More than a year later, many of these communities remain in ruins. Residents in most of the rural communities, especially those communities decimated by Hurricane Rita, are eager to rebuild their home and their lives. However, the recovery and rebuilding process has not moved along as it should. It is difficult to understand why without knowing more about the social forces affecting the recovery and rebuilding process.

This paper provides a descriptive case study undertaken to develop a better understanding of the disaster recovery and rebuilding process in the three parishes (counties) in South Louisiana that were hardest hit by Hurricane Rita. The data come from a number of sources: official documents, news articles, published data and personal observations. Both my residence and work plunged me into the middle of the hurricane recovery process. At the time Hurricane Rita struck, I was living in Vermilion Parish, one of the three parishes in question, and working for the Louisiana Cooperative Extension Service in Community Development. After the hurricane, I headed up the Hurricane Rita Recovery Task Force for the Louisiana State University Agricultural Center. I spent the next nine months working in the field in Southwest Louisiana in those parishes devastated by Rita.

Hewitt (1995) suggests that the voices of active participants in the recovery process are mostly missing in the long-term community recovery literature. I hope to provide some of that voice in this paper.

(S)ome of the most important developments in the understanding of disaster in recent years, come from workers on the ground....More broadly significant are studies by those who have spent extended periods in, and paid attention to the larger social and environmental context of the places where disasters have occurred (Hewitt 1995:326).

This paper is based on those nine months in the field. In the first section, I begin with a brief overview of the disaster recovery literature and recovery processes. In the second section I talk about the profound impacts of the storm on the people and communities in the parishes. In the third section, I discuss the role of outside expertise in the disaster recovery and community rebuilding process. In the fourth and concluding section of the paper, I discuss the implications of this study for managing long-term community recovery.

Disaster Recovery: A Brief Overview

In a moderately short time frame (roughly half a century) disaster response and recovery has been approached from a number of diverse perspectives, including structural functionalism (Bates and Peacock 1987), conflict (Stalling 1988), and symbolic interaction (Nigg and Tierney 1993; Nigg 1995). In the process, it has also evolved through at least two distinct paradigms: hazard and vulnerability.

The earliest body of research, which began to emerge as a recognizable research literature in the 1960s, framed the environment as an agent of disaster or hazard. Accordingly, risk and disaster are embedded within the natural environment, technology, or the built environment. Inherent to this paradigm is the conviction that individuals, businesses and communities are victims of extreme events and dependent on outside or professional assistance for their recovery (Burton, Kates, and White 1978; Flint and Luloff 2005; Hewitt 1995; 1998).

Later research began to acknowledge the role of social vulnerability, manifested through preexisting social structures and conditions, in the explanation of the impacts and responses to disasters (Pettersen 1999; Rolfe and Britton 1995). Like the hazard paradigm, this perspective discounts the capacity of local communities to respond appropriately and constructively to disaster (Flint and Luloff 2005; Hewitt 1995; 1998; Kreps 1984; Picou and Martin 2006; Saenz and Peacock 2006). More recently, as disaster research evolved along with other social science research, researchers are acknowledging the importance of both the hazards and vulnerability paradigms (see Hewitt 1995; Flint and Luloff 2005). Today, most researchers

recognize that both environmental and social processes affect the impacts of disaster and the disaster recovery process.

Nonetheless, a number of questions remain unresolved and continue to be debated or ignored in the literature. Some researchers posit differences in disaster risk and recovery according to whether the event is natural or technological in nature and whether the effects are therapeutic or “corrosive” (Erikson 1976; Freudenberg 1997; Picou, Marshall, and Gill 2004). Other questions concern whether or how disasters create long-term social change (Bates et al. 1963; Nigg and Tierney 1993; Stallings 1988). Both of these arguments have a persistent presence in the community disaster recovery literature. Conversely, the capacity of the community to act has been largely excluded in research on the recovery process (Flint and Luloff 2005).

The lion’s share of the existing work on disaster recovery focuses on either “short-term, immediate social responses to natural disasters” (Picou et al. 2004:1495; Quarantelli and Dynes 1977; Quarantelli 2003) or social, psychological and economic impacts of the disasters on individuals, families, groups and businesses (Arata et al. 2004; Bates et al. 1963; Dash et al. 2007; Morrow and Enarson 1999; Picou et al. 2004; Picou and Martin 2006; Saenz and Peacock 2006).

Other social science research on disaster recovery is concerned with the recovery process and factors that affect recovery. In the *Triumph Over Tragedy* publication on disaster recovery, Evans and Wiens (2004) discuss community disaster recovery as a process that typically unfolds over three major stages: relief, recovery and rebuilding. Some disaster researchers feel that this framework is too simplistic (Petterson 1999; Miletti 1999; Berke and Beatley 1997; Berke, Karetz and Wenger 1993). They maintain that the process of community recovery is actually chaotic, dynamic, and interactive, rather than orderly and progressive (Petterson 1999). Rubin (1995), on the other hand, conceptualizes community disaster recovery as consisting of three stages (minimal/restoration, foresight/mitigation, and visionary/community), similar to those suggested by Evans and Wiens (2004), but maintains that these stages are fluid, dynamic, and progressively more difficult.

Social science literature identifies other issues that may confound the disaster recovery process. Obviously, the level of destruction affects recovery. Hurricane victims who have not fully recovered from the individual and collective traumas are not concerned about long range community development. Until their immediate needs of family, shelter, food, clothing, and employment are met, they simply cannot move forward to think about rebuilding (Wilkinson 1991). Local leaders can also

be overwhelmed with the extent of the situation, but often cannot mobilize the resources to address the challenges created by the disaster (Flint and Luloff 2005; Rolfe and Britton 1995), especially in resource-strapped rural communities (Saenz and Peacock 2006). Still other factors include prior attention to emergency management, and political processes (Pettersen 1999).

Compared to the richness of research literature on disaster impacts, response and short-term recovery, there is relatively little research on long-term community recovery. It is frequently the least understood of the responses to disaster (Berke et al. 1993; Flint and Luloff 2005) Notable exceptions are the longitudinal study of Hurricane Audrey and long-term recovery in Cameron Parish, Louisiana by Bates, et.al, (1963), the work of Steven Picou and his colleagues on the Exxon Valdez oil spill in Alaska (2000; 2004) and the study of the effects of Hurricane Andrew on a south Florida community by Nicole Dash and her colleagues (2007).

Disaster research tends to focus on the immediate postdisaster experience; it does not routinely study the long-term recovery path. Such a time frame limits the opportunity to understand what conditions make communities more resilient or more likely to recover in the long term. Longitudinal studies of disaster recovery beyond the immediate postdisaster stage are needed to reduce vulnerabilities and increase capacities (Flint and Luloff 2005:402).

Flint and Luloff (2005) have proposed a model that takes account of both environmental (hazard paradigm) and social processes (vulnerability paradigm) and the capacity of local communities to act. This approach focuses on the intersections of the natural environment and local social interaction; it is based on the work of Wilkinson (1991). In recognizing the capacity for local action, this integrated approach provides the groundwork for understanding the long-term recovery process. Local capacity is defined in terms of interactional characteristics of communities and refers to the ability of communities to mobilize collective resources for the sake of the community (Flint 2004; Flint and Luloff 2005). According to this perspective, communities are more likely to take collective action in the long-term recovery process if they have the *capacity* to act (see Wilkinson 1991).

In the field, I found that all of these perspectives were useful in helping to understand the dynamics within those communities decimated by Hurricane Rita.

They all provided *some* insights into the factors that would affect disaster response and at least short-term recovery. However, the integrated model proposed by Flint and Luloff (2005), which is embedded within Wilkinson's approach to community action, provided a framework for understanding disaster impacts as well as a point of departure for understanding the long-term community redevelopment process.

Trauma and Loss in the Community

On September 24, 2005, Hurricane Rita made landfall along the Texas and Louisiana border. Although Rita was only a Category 3 storm when it hit, it was an expansive storm and wreaked havoc along the border and hundreds of miles on either side of it. In Louisiana, the coastal parishes of Cameron and Vermilion, and Calcasieu Parish which borders Texas, were hit the hardest. The damage in Calcasieu was fairly typical of the wind damage seen with most catastrophic storms. Lower Cameron Parish, however, was literally wiped off the map by a tidal surge, estimated to be between 15 and 20 feet high. Lower Vermilion and Cameron were inundated by rapidly and violently rising waters. In some places people and animals huddled on rooftops until rescued by neighbors.

Calcasieu Parish

Calcasieu Parish is part of the Lake Charles, LA metro area. It was moderately populated (185,419 people) and before Hurricane Rita, growing (9.2% increase in population between 1990 and 2000). With 77 percent of the population being high school graduates, the residents are slightly better educated than average (74.8 percent) in Louisiana. It is no surprise that per capita money income (\$17,710) and median household income (\$36,587) also exceed the Louisiana average. Almost half of the population in the parish lives in Lake Charles. The economy of the parish is based largely on oil and gas related manufacturing, retail sales and agriculture, primarily rice, sugarcane and cattle.

According to data collected by FEMA (2006), more than 61 percent of the buildings in Calcasieu Parish suffered significant damage from the winds. The damage in Calcasieu was fairly typical of the wind damage seen with most catastrophic storms. The large office buildings downtown suffered a great deal of wind damage, as did most homes. Roofs were completely blown off many homes. Most of the city of Lake Charles was covered in "blue roofs" and massive oak trees were down throughout the parish, blocking roads and tearing down utility lines. As late as June 2006, nine months after Rita hit, many roofs were still capped in blue.

Cameron and Vermilion Parishes

Cameron Parish belongs to the Lake Charles, LA metro area, but there is nothing urban about it. It is largely coastal marshland and wildlife is abundant. Less than 10,000 people live in Cameron Parish and before Rita hit, there were a little more than 3,500 (3,592) households in the parish. However, prior to the storm, Cameron Parish had been growing; between 1990 and 2000, the population increased by 7.9 percent. Cameron Parish is just south of Calcasieu Parish and most of the growth took place in the northern part of the parish adjacent to the City of Lake Charles. In contrast to Calcasieu Parish, the residents tend to be less educated than most of the people in Louisiana. Sixty-eight percent (68.1 percent) of the population of Cameron are high school graduates. Per capita income (\$15,348) is less than average (\$16,912) but at \$35,998, median household income is slightly higher than average (\$33,792). Much of the employment in Cameron is gas and oil industry related. There are relatively large numbers of shrimpers and oyster fisherman living and working along the coast. Cattlemen graze scattered herds of cattle in the marshy grasslands.

Vermilion Parish lies just to the east of Cameron. It is part of the Abbeville, LA micropolitan area. A little more than 55,000 people lived in the parish before the storm. It too had grown slightly over the past decade, increasing from 53,807 people in 1990. There were almost 20,000 (19,832) households in Vermilion Parish. The residents, like those of Cameron, are typically less educated than other Louisiana residents. In 2000 only 65.6 percent were high school graduates. Income in Vermilion Parish is lower than in both Calcasieu and Cameron. Per capita income in Vermilion Parish was only \$14,201 in 1999 while median income stood at \$31,544. Like Cameron Parish, Vermilion Parish is dependent on the oil and gas industry. It is also very agricultural. Rice, sugarcane and cattle dominate agricultural production. Vermilion boasts a number of shrimpers and a smattering of alligator farmers as well.

The southern portions of Cameron and Vermilion Parishes were decimated by Hurricane Rita. Cameron Parish, which had suffered the wrath of Hurricane Audrey in June of 1957, was hit with a massive tidal surge, drowning cattle and knocking houses off foundations and washing them miles into the marshes. Memories of Audrey, which killed close to 600 people (Gomez 1998), and the recent horrific images of Katrina pushing flood waters into New Orleans at a rapid rate probably saved the lives of Cameron residents. Practically everyone living in the southern

part of the parish evacuated before the storm hit; no deaths were attributed to the storm.

The property damage, however, was almost inconceivable. Some houses were completely splintered such that none of the pieces were recognizable. Most of the few buildings left standing in the small coastal communities in Cameron were gutted, their contents spilling out behind them in the marsh. Marsh grass and foul-smelling mud piled two and three feet high in the gutted houses. Those few buildings remaining upright had mud all over first floor ceilings and sometimes on the walls of the second floors. By the time first responders could get in, dead alligators floated through the water or lay rotting on the side of the roads. Massive balls of intertwined snakes floated among the debris. The shrimping and oil boats that didn't sink were shoved onto the roads and into marshes by the tidal surge. Oil, gas and chemical tanks were scattered along the roads and the marshes. More than a year later, the Parish had not yet finished removing the debris.

Conditions in lower Vermilion Parish were not much better. Homes flooded and many rural residents were stranded as Rita pushed northward. Unlike the residents of Cameron and Calcasieu, a significant number of the people living in lower Vermilion Parish did not evacuate. Deputies from the Vermilion Parish Sheriff's Department and agents from the Louisiana Department of Wildlife and Fisheries set out in boats to rescue those who were stranded.

One young man videoed the water rushing through the window in his house. Within minutes enough water poured into the house to float the refrigerator. He and his father fled into the attic where they blasted a hole in the roof with a shotgun. The man swam through the floodwaters to get a boat and came back to rescue his father and other people stranded on their roofs.

When the waters stopped rising, cattlemen, many of whom lost their homes, rode horses through chest high water to rescue cattle standing in and stranded by the rapidly rising salt water. When the waters finally subsided, barges lay across roads and salt encrusted pastures where cattle once grazed. Concrete burial vaults had popped up out of the ground in cemeteries and floated away. Up until shortly after Christmas 2005, residents in Vermilion Parish were finding deep sea fish, small sharks and rays in their inundated rice and sugar cane fields.

According to Saenz and Peacock (2006) rural areas like Cameron and Vermilion Parishes struggle to recover from disasters.

(R)ural areas, because of their unique characteristics, are often more at risk in disasters, and socially vulnerable populations all too often lose out in the long-term recovery process (2006:1).

Given the rurality and depressed socioeconomic conditions in Cameron and Vermilion Parishes, community recovery has been slower in these parishes than in neighboring and urban Calcasieu Parish. With Lake Charles as the core city, Calcasieu Parish had the ability to mobilize resources unavailable to Cameron and Vermilion. Indeed, almost immediately after Rita hit, the mayor of Lake Charles began to organize resources to address both the immediate relief and medium term recovery issues. Hampered by extensive, catastrophic damages, and lack of resources, these processes took far longer to organize in Cameron and Vermilion.

Traumatic Responses

Many, if not most, of the victims in coastal Cameron and lower Vermilion Parishes appear to have experienced both of what Erikson (1976) refers to as individual and collective trauma. Both are consistent with the descriptions of post traumatic stress disorder described in the psychological literature on disaster recovery (see Evans and Wiens 2004). Erikson's descriptions of the sense of loss and hopelessness experienced by the survivors of the Buffalo Creek Flood are consistent with what I saw among the Rita survivors in the flooded coastal communities. Erikson could have easily described Rita victims when he stated:

Most of the survivors responded to the disaster with a deep sense of loss, a nameless feeling that something had gone awry in the order of things, that their minds had been bruised beyond repair, that they would never again be able to find coherence, that the world as they knew it had come to an end. These feelings, of course, were experienced as a generalized, pervading sense of gloom...(Erikson 1976:159).

Many of the people with whom I interacted tried very hard to transcend the expression of these feelings but could not do so consistently. Outbreaks of tears and flashes of anger were common. At an early community meeting, one Cameron resident, who was not allowed to go back to his property, threatened to shoot the National Guardsmen who were denying him access. It was not unusual for victims, both women and men, to cry, yell and scream during community meetings.

Emotions remained volatile and close to the surface during the entire time I was working in Southwest Louisiana.

Rita victims also appeared to experience collective trauma. However, what Erikson calls “loss of communality” I will refer to as loss of community, a much broader term than Erikson uses. Erikson describes collective trauma as the loss of social networks. In the Buffalo Creek flood, the loss of community was not tied to place as much as it was to the people with whom the victims interacted.

In Cameron and Vermilion Parishes, the loss refers to both the material and social resources attached to place. These losses are profound and affect the extent to which communities can rebuild after disaster. Wilkinson (1991) tells us how important these resources and the mobilization of resources are to community action. Proposing a phase model of community action, Wilkinson outlines a five-step process by which community actions take place: (1) awareness, (2) organization, (3) decision-making, (4) recruitment and resource mobilization, and (5) implementation and resource application. Because community resources are necessary for communities to address local issues and problems (Luloff and Bridger 2003), the loss of material and social resources attached to the hurricane-stricken communities can critically affect their ability for long-term community redevelopment. Furthermore, community interaction, which has been severely disrupted with the high levels of spatial dislocation in the coastal parishes, plays a major role in whether or not resources can be effectively mobilized (Luloff and Swanson 1995; Nigg and Tierney 1993).

The material and social resources attached to communities can be conceptualized as what many refer to as “community capitals.” Flora (1998) argues that when resources are used to create other resources, they become new forms of capital. These place based resources are often referred to as the community capitals and operationalized as financial and built capital, natural (environmental) capital, political capital, human capital, and social capital (see Flora, Flora, and Fey 2004.) The collective trauma and loss of community in Southwest Louisiana involved all six of the community capitals, albeit to varying degrees in different areas.

Loss of Community Capital

The coastal communities in Cameron and Vermilion Parishes are ecologically distinctive. The people living there are intimately attached to the landscape and social relationships are frequently governed by the landscape. The communities are built along Louisiana’s Chenier Plain (Gomez 1998). The cheniers are the sand and

shell ridges that are mingled in but rise above the coastal marsh. Groves of oaks grow in profusion on the cheniers.

Gomez's description of this landscape highlights its uniqueness:

...the ridges that cross Louisiana's Chenier Plain rise to maximum elevations of 10 feet above sea level and occupy a mere 3 percent of the region's total area. The remainder is marshland: a vast, wet grassland interspersed with bayous, canals, ponds and large lakes. These wetlands compose nearly one-third of Louisiana's coastal marsh, which in turn accounts for 40 percent of the marshland in the contiguous United States (Gomez 1998:15).

These wetlands, described by the people who lived there as "paradise" (Gomez 1998: x) supported a wide array of livelihoods. Much of the coastal marshland described by Gomez was destroyed by Rita. Historically, the people who settled these regions made their livings off the land and were dependent on the generosity of the landscape.

Before Rita, residents combined modern occupations, such as working in the oil and gas fields or service industries, with the more traditional wetland activities based on raising cattle, fishing, trapping, and the harvest of alligators and waterfowl. Most of the families living in these coastal communities have lived there for generations and are embedded within extensive social networks. They possess a rich cultural legacy defined as much by the natural environment as history. Because of this historical attachment to the landscape, the loss of place and the physical community caused by the flooding appears to be as profound in Southwest Louisiana as the loss of the social networks in which the victims were embedded.

The attachment to the land is particularly evident in Cameron Parish, where 70 percent of the participants at a state and federally sponsored recovery meeting (Louisiana Speaks) in January 2006 stated they were ready to move back to their communities immediately; only 21 percent wanted to wait until it was a safer place to live. In Vermilion Parish, 60 percent reported they wanted to wait until their communities were safer places to live. None of the participants from Vermilion were willing to move back at that time. In general, most of the locals believed that the longer residents stayed away, the less likely they were to return. In rural Cameron and Vermilion Parishes, this represents one more loss of human capital.

It was obvious from the storm damages that the communities of Southwest Louisiana lost valuable resources. Much of the coastal marshland and other systems of the natural environment were either seriously damaged or destroyed. Most of the physical infrastructure and built capital in lower Vermilion and Cameron Parishes was destroyed. As residents relocated, human and social capital, and some political capital, were also lost. Inevitably, some of the cultural capital, which was documented in great detail in the Bates et al., (1963) study of Hurricane Audrey and Gomez's (1998) study of the Chenier Plain, was also depleted as the population (especially the elderly) dispersed. This appears to be particularly true for Cameron Parish, where even today, only about one third of the residents appear to have returned (Kurth and Burckel 2006).

Recovery and Rebuilding: Outside Expertise

Rolfe and Britton (1995) point out that political conditions after a disaster also affect community recovery. All levels of government desire to be perceived as proactive and tend to favor highly visible relief and recovery activities. Short-term needs of the population generally take precedence because the affected public exerts significant pressure to address immediate needs. However, the resolution of immediate needs is frequently inconsistent with a well-planned, long-term and sustainable recovery processes. These highly visible recovery policies tend to have short-term impacts and eventually short-circuit sustainability. Emphasis on the short term contributes to chaotic, as opposed to well-planned, recovery.

Hundreds of organizations assisted in the immediate relief stage of recovery. Far fewer have been involved in the long-term redevelopment process. Although the recovery and redevelopment processes have involved many players, at the local, state and federal levels, the most visible efforts have been orchestrated at the state and federal levels through the Louisiana Recovery Authority (LRA) and the Federal Emergency Management Authority (FEMA) and their federal agency partners. The most prominent of the Federal agencies were the U.S. Department of Agriculture (Rural Development) and the U.S. Department of and Housing and Urban Development. Local governments were obviously involved but were frequently overwhelmed by the catastrophic events. They generally deferred to state and federal governments.

The Louisiana universities were also engaged in the redevelopment process within those areas in which we had expertise.¹ In general, we worked with local governments. For the most part, we were not engaged by either the LRA or FEMA until later on in the recovery process when the FEMA personnel in the field offices requested the assistance of the Louisiana Cooperative Extension Service in the recovery and rebuilding planning process.

The process was consistent with the observations made by Rolf and Britton (1995). It was chaotic at best. The confrontational relationships between the state and federal governments that began in the immediate aftermath of Katrina colored efforts in the hurricane recovery and rebuilding processes throughout the state. In the nine months in which I was in the field, the process was characterized by conflict, uncertainty and inconsistency. Both the state and federal government struggled to be perceived as more proactive than the other (see Dynes and Aguirre, 1978 for a discussion on control in disaster recovery). Many of us in the field (including some of the veteran FEMA professionals) felt that much of the chaos in organizing for the recovery planning process was the result of Federal and state governments competing with each other, rather than working together toward a shared vision. In the following, I briefly describe the roles that the LRA and FEMA played in the planning process and the various efforts that took place in Southwest Louisiana during this time.

Louisiana Recovery Authority

On October 17, 2005, roughly a month and a half post-Katrina and almost a month post-Rita, Louisiana Governor Kathleen Blanco organized the Louisiana Recovery Authority to “lead the state’s recovery and rebuilding efforts.” (LRA 2006). The manifest purpose of the LRA was to work:

¹The LSU AgCenter’s Hurricane Rita Recovery Task Force was formed in early October 2005. The Task Force organized, developed, and began implementing a plan for short, medium and long-term activities that fell within our range of expertise. These areas included crops and livestock, housing, community and rural development, fisheries and aquaculture, forest-based resources, housing, and youth and family development. We worked directly with the parish governments of the affected parishes and with the City of Lake Charles. We also worked with other partners within the LSU system. Faculty in the LSU College of Art and Design were active in providing the Southwestern coastal communities assistance in architectural design. Other universities, such as the University of Louisiana in Lafayette, also provided assistance with architectural design.

with Governor Blanco to plan for Louisiana's future, coordinate across jurisdictions, support community recovery and resurgence, and ensure integrity and effectiveness. Working in collaboration with local, state and federal agencies, the authority is also addressing short-term recovery needs while simultaneously guiding the long-term planning process (LRA 2006).

The Board, designed to perform as an advisory group for the Governor, is composed of 33 directors, all appointed by the Governor and confirmed by the Senate. An examination of the biographies of these political appointees suggests that none have any experience in disaster recovery management. However, most have some history of working with civic organizations and community improvement projects and were generally perceived as people who could mobilize critical resources for recovery. In November 2005, the LRA contracted with two nationally recognized architectural and urban design firms to help in the rebuilding process.

Federal Emergency Management Association

In contrast, FEMA mobilized personnel from all over the country to work in hurricane recovery in Louisiana. They organized the Emergency Support Function 14 (ESF-14) Long Term Community Recovery Teams for Southwest Louisiana in October. Some of the FEMA personnel had been working in the Katrina area and in October were detailed to work in the Southwestern parishes. Some were full-time employees and others were hired as consultants specifically to work on the Louisiana hurricane recovery. A few had worked in hurricane recovery; others had worked through disasters in other states. FEMA personnel working in the parishes worked out of FEMA "Storefronts." Because FEMA was not well regarded in coastal parishes, Storefronts were policed by the National Guard. Other FEMA personnel worked directly out of FEMA Headquarters in Baton Rouge, Louisiana. Eventually, FEMA brought in subject area specialists from other Federal agencies and hired a number of local workers to aid in the long term recovery process.

However, the ESF-14 teams struggled to provide the needed assistance in long term recovery. A long-term FEMA veteran related:

ESF-14 ha(s) constant changes in leadership in Louisiana.... Each time a new Leader entered, they brought their "team".... Boom, everything changes, both internally as to staff's policy formulation and external

relationships such as with the Governor's office...and the LRA... It was naturally volatile, in flux. There as no “even keel” of dogma or theory to stabilize the situation when the leadership switches occurred.... None of the leadership teams had an educational or work background in planning. I can't begin to tell you how many times we heard the phrase, “I'm not a planner, but...” Can you imagine the calamity if we built suspension bridges that way, where the chief designer would say, "I'm not an engineer, but...?”

The saga of ESF-14 transformation continues. FEMA leaders tend to come from military or engineering backgrounds: precise and decisive. Those are two words that don't describe intergovernmental relations. Fuzzy and incremental are words better suited to this realm. Against that background, it's easy to see why ESF-14 was so conflicted. The wrong people following the wrong methods to get the wrong outcomes (Confidential personal communication 2006).

Recovery Planning Processes

Parish Recovery Efforts. FEMA and the LRA, working in tandem out of the hurricane recovery headquarters in Baton Rouge, shouldered most of the responsibility for community recovery in the aftermath of the two hurricanes that devastated the south Louisiana coastline. However, remnants of the tensions between the Louisiana state government and the Federal government that developed post Katrina seemed to interfere with the development of a good working relationship between the two organizations.

Sources from inside the hurricane recovery headquarters reported that considerable struggles over ownership of the process pervaded all of their activities. The process became chaotic and plans were ever changing. Those of us in the field worked with FEMA personnel heading up the long term community recovery planning process (ESF-14). FEMA attempted to implement the same type of bottom-up community planning processes they had used in other disasters to create disaster recovery plans. The LRA approach, on the other hand, was to follow the guidelines set by their architectural firm consultants and was much more of a top down process.

In March 2006, the FEMA ESF-14 long term community recovery efforts ceased to exist as such. The “new” and highly publicized process became known as *Louisiana Speaks* and Louisiana, via the LRA, took more ownership of the recovery process. Many communities had already begun to work with their local

governments, FEMA ESF-14 teams, and the universities in the process of gathering public input to develop recovery and rebuilding plans. However, FEMA, working under the auspices of the LRA, organized a new series of meetings to collect public input data. The meetings were controversial; many of the residents in Cameron and Vermilion Parishes felt the meetings were redundant and that they were being penalized for taking initiative and organizing their own meetings. They resented starting the process over again.

Nonetheless, the LRA meetings were relatively well attended. The data generated from these meetings were used to put together a lengthy parish by parish recovery plan which was made public on March 20, 2006. The web site <http://www.louisianaspeaks-parishplans.org> was developed and paid for by ESF-14 and subsequently turned over to the LRA in April (Reid 2007). The parish recovery planning process appeared to be taking on some shape.

Neighborhood and Regional Planning Efforts. As the parish recovery processes were underway, the LRA was organizing another type of meeting. One of the urban design firms hired by the LRA initiated a set of charrettes (intense, week-long town planning events that are designed to solicit community input) in the City of Lake Charles (in Calcasieu Parish) and in the small towns of Delcambre and Erath in Vermilion Parish. The charrettes were received more favorably in urban than rural areas. In Lake Charles, the results of the charrette, which focused on downtown redevelopment, were greeted with a standing ovation.

The small shrimping communities of Erath and Delcambre (Vermilion Parish) were another story. Residents were violently opposed to the plan as it was unveiled. The urban design firm proposed demolishing the houses in the flooded sections and building a planned community on higher ground. The community would be surrounded by a manmade canal that would provide shrimpers access to the Vermilion Bay and the inlets where they fished. However, the homes the design firm proposed demolishing were built on property that had been in families for generations. The design team proposed a modern subdivision complete with covenants, retention ponds that could be used for recreational fishing, and plans for waterfront shops that would draw tourists and recreational fishermen into a struggling, limited resource fishing community. Residents were highly offended and very angry.

In July 2006, the consultants from the architectural firm began holding still more planning meetings in several locations throughout southern Louisiana. According to the LRA (2006), the goal of these meetings was to build a network of

stakeholders who would “begin creating the rebuilding scenarios that will guide the development of South Louisiana’s 25-year plan” (LRA 2006: Executive Summary). Once more, the Southwest Louisiana residents with whom we worked did not understand the need or the reason for these meetings and for the most part, resented “jumping through hoops.”

CONCLUSION

I began this study in an effort to develop a better understanding of the social forces affecting community recovery and rebuilding after natural disasters. Hurricane Rita left residents in Southwestern Louisiana living in disorder and disarray. The destruction was catastrophic. The landscape after the storm had passed was surreal; it resembled a disaster movie set. With few exceptions, the recovery and rebuilding process has been chaotic, rather than orderly and progressive.² This has been a defining moment in the lives of the people living along the northern Gulf of Mexico. As I began this study, I realized we do not know that much about *how* communities recover from disasters. Because we don’t understand the dynamics of disaster recovery and rebuilding, we are probably not doing as much as we can to help these communities and the people living in them.

What I found after nine months in the field was that we have a fairly good understanding of how to rebuild *physical* infrastructure. Indeed, FEMA’s expertise derives primarily from the military and engineering ranks. They brought in their technical expertise from other government agencies to provide advice on rebuilding roads, bridges and housing. The stumbling blocks in rebuilding infrastructure were not so much the “how,” but rather the “should we?” and “where do we find the resources?” The answers to these questions are more social than technical.

Rolfe and Britton (1995) and others (see Petterson 1999) have pointed out that the recovery process is largely dependent upon social forces. Pre-existing

²It has been mentioned previously that the City of Lake Charles and Calcasieu Parish appear to be on their way to full recovery. One reason for their ability to recover is that they did not receive the full brunt of the hurricane’s devastating tidal forces. I repeatedly heard people in Calcasieu Parish say that they were spared because Cameron Parish, just south of Calcasieu buffeted the storms forces. The natural and physical infrastructure in Lake Charles, although heavily damaged, was left more intact than that in neighboring parishes and communities. The other reason that the City of Lake Charles and Calcasieu Parish were able to move forward has to do with the exemplary leadership within the City and Parish. Both of these areas survived Hurricane Rita with a significant amount of their social and political capital intact.

socioeconomic conditions and pre and post disaster political environment are the most frequently cited factors affecting disaster recovery. After nine months in the field, I agree with these positions but feel that we need to dig much, much deeper and get below the surface of these arguments. We need to (1) develop a better understanding of community resources and how community action takes place after a disaster, and (2) educate policy makers on the social dynamics underlying community action and community redevelopment.

Community Resources and Action

Socioeconomic conditions matter. It was easier to pull together the necessary resources in urban and relatively affluent Lake Charles than it was in struggling Cameron and Vermilion Parishes. Lake Charles recovered and is rebuilding faster than the communities in the rural Cameron and Vermilion Parishes. Those residents in Southwest Louisiana who want to rebuild and have the resources with which to rebuild, are rebuilding.

However, I also observed some other socioeconomic factors that affect the process of community recovery and rebuilding. We typically focus most of our community efforts on rebuilding the physical and financial infrastructure. We have paid less attention to the natural, human and social infrastructures. Yet, it is social interaction and social infrastructure that provide for community action and the social organization that allows for community development (Flora et al. 1997; Swanson 1992; Wilkinson 1991).

The importance of voice and power became obvious in my nine months in the field. Both became serious and contentious issues in the planning process. This was particularly the case in the City of Lake Charles; residents in African-American neighborhoods believed their voices were not being heard by the city and regional planners involved in the process. In other areas, such as the previously described small shrimping communities in Vermilion Parish, local residents did not feel that the outside experts (the planners and designer teams) listened or responded to their needs. Basically, in both cases, the technical experts failed to sufficiently engage community members in the planning processes and the “importance of local knowledge, action, participation and control in determining the nature of community response and recovery” (Flint and Luloff 2005:402) was not acknowledged.

However, despite the abysmally slow nature of recovery, there are some community redevelopment projects underway. They speak to the importance

of community action. Most of these recovery projects are relatively small and pertain to specifically targeted, community defined issues.³ They are for the most part, initiated and acted upon at the local level by local champions.

Educating Policy Makers

The political environment and the ongoing conflicts between the local, state and Federal levels of government have confounded the recovery process. It is highly likely that the process of devolution, which left local governments with more responsibility and fewer resources (Garkovich and Irby 1998) also impeded the ability of state and local government to address critical recovery and rebuilding issues. The local governments in Southwest Louisiana have to be commended for emergency preparedness and quick response to rising waters; no lives were lost in these areas. However, neither they nor state government had any plans or resources in place for rebuilding. The Federal government, on the other hand, could mobilize the disaster experience and expertise to manage the recovery and rebuilding, through FEMA,⁴ but therein lies a problem.

The Federal and state approaches for long term recovery are embedded within a hazards paradigm of disaster response and recovery. This paradigm relies on technical solutions to community recovery and bypasses the role of social interaction and capacity for action at the community level. The organizations with the most responsibility for disaster recovery are working under the assumption that communities and the people within those communities are incapable of addressing issues related to community redevelopment. They are, in essence, ignoring the complexities of the community development process.

³For example, a Sea Grant agent in Cameron Parish is working with local shrimpers and one of the local oil companies housed in Cameron Parish to get an ice plant started. Shrimpers and other fishermen lost the seafood industry infrastructure during Rita. Despite an abundance of shrimp in the Gulf of Mexico (the "Bubba Gump" phenomenon), work opportunities for fishermen were almost non-existent without ice. Bringing in an ice plant, although far less ambitious than the visionary projects identified in the many planning processes, is the result of locally based decision-making, mobilization of local talent, and leveraging of local resources and networks to find local solutions. However, it is an example of a project that will put a large number of residents to work and bring needed income into the community.

⁴A long-time FEMA contractor (who wishes to remain anonymous) reported to me that because of significant administrative and organizational changes, as well as large turnovers in employees, FEMA was not as effective and efficient as it had been in previous years.

So, as social scientists, what do we do to help policy makers develop an understanding of the process? First, we need to conduct more research on long-term community redevelopment so that we develop a better understanding of the dynamics of the community development process under conditions created by and associated with catastrophic events. The study of the impacts of Hurricane Audrey on Cameron Parish, Louisiana, that Fred Bates and his colleagues (1963) is a rare example of this type of comprehensive and in-depth work. Hewitt suggested this strategy in 1995. For the most part (and for many reasons, including funding), we have not been successful in implementing this type of research activity. Second, we need to make sure that we improve the policy relevance of our discipline and interact with the policy community to better inform public policy (Beaulieu 2005) on the social processes associated with disaster response and recovery. As Beaulieu (2005:25) told us in his 2004 Rural Sociological Society presidential address “The time is right for rural sociology ... to serve as valuable sources of information on policies that have, or might have, on rural people and places.”

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