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A Different Way Home

Resettlement Patterns in Northern Uganda

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Abstract

After decades of civil conflict leading to massive internal displacement of people, Northern Uganda is peaceful again and hundreds of thousands of displaced people have returned to the area. Using data from maps and satellite imagery, we examine the placement of homes before, during and after the conflict. Examining two study sites, one that experienced a great deal of violence over an extended period of time and one where the experience of violence was more limited, we observe the clustering of home placement in the post-conflict period. As resettlement occurs, there is also evidence of increased location of homes in close proximity to roads at the site with high levels of violence. This research informs what we presently know about the choices of returnees and has implications for service provision and the reclamation of property rights after conflict.

Keywords: resettlement, Uganda, post-conflict, property rights, displacement, LRA

Running Title: A Different Way Home

The conflict in Northern Uganda between the Lord's Resistance Army and the Ugandan government began shortly after Yoweri Museveni and his National Resistance Army (NRA) took control of Uganda in 1986. The NRA was unable to assert complete control over various active insurgencies in Northern Uganda. The most notable of the insurgent groups came to be known as the Holy Spirit Mobile Forces, led by prophetess Alice Lakwena.¹ Following her defeat in 1987, some of its members joined with her father, Severino Lukoyo, in the Holy Spirit Movement and later with her cousin, Joseph Kony, who led the Lord's Resistance Army (LRA). While there are differing interpretations of the LRA's motivations, reports from those well-acquainted with the movement identify a political and antigovernment agenda in the actions of the LRA (Dolan, 2009; Finnström, 2008). Regardless of their goals, it is the effect of LRA's violent tactics and the government's response that are the focus of this research project. We will examine the impact of the violence in Northern Uganda on displacement and resettlement patterns. The following article proceeds in five parts. First we give a very brief overview of the conflict and the events which have led to the opportunity for people to return to their homes. In the second section we discuss what we know about resettlement from previous observations of population return after protracted conflicts. Then we present our research design and methodology, a spatial study of resettlement in two areas of Northern Uganda, one which had high levels of violence and displacement; the other with lower levels of violence and displacement. In the following section, which presents our findings, we note changes in settlement patterns at both study sites. In the last section, we address possible explanations for the changes in settlement patterns and the implications on property rights and service provision.

OVERVIEW OF THE NORTHERN UGANDA CONFLICT

The conflict between the government and the LRA was one in which civilians were not just victims of collateral violence, but specific targets. In this regard, it is similar to many of the ‘New Wars’ of the twenty-first century in which the displacement of civilians is a strategic goal (Kaldor, 1999). In this regard, it shares characteristics with conflicts in Congo and Sudan, in which the displacement of civilians is intentional and has occurred in waves over many years of violence. In a survey conducted in 2005 in Gulu, Kitgum, Lira, and Soroti of 2,585 respondents in Internally Displaced Persons (IDP) camps, 40 percent had been abducted by the LRA, 45 percent had witnessed the killing of a family member, and 23 percent had been physically mutilated at some point during the conflict (Pham et al., 2005). The LRA has gained notoriety for its extraordinarily malevolent practice of abducting minor children to serve as soldiers, servants and sex slaves. In addition to direct violence, local populations suffered from the trauma of displacement and with it, the lack of food and shelter.

Most of the violence took place in the Acholi districts of Gulu, Kitgum, and Pader, but in the later stages of the war, violence also occurred in the Lango subregion -Apac, Lira and even as far as east as Teso. Approximately 1.8 million people were displaced by 2005, comprising ninety-four percent of the population in Gulu and 39.5 percent in Lira (Pham et al., 2005). There were two main causes of internal displacement. First, people fled violence as it touched homes and neighbors. Second, the government enacted a policy in some areas (such as Gulu) to move people into camps in an effort to ‘protect’ the endangered population (Dolan, 2009; Weeks, 2002).²

The statistic of 1.8 million displaced people encompassed only those who resided in IDP camps and were officially counted, not those who moved to major cities and trading centers for safety. Beginning in 1996 people in the Gulu district of Uganda were compelled to live in camps by the Government of Uganda to ensure that they were not victims of violence and did not provide support to the LRA ("A catastrophe ignored," 2004; Roberts et al., 2008). By 2002 the Government extended this policy to the districts of Pader and Kitgum. However, contrary to their articulated purpose, the IDP camps were not safe havens for those living in them. Camp populations were victimized by disease and malnutrition, in addition to continuing, unchecked LRA violence. Instead of staying away from the camps the LRA frequently targeted them for attack (Dolan, 2009; Human Rights Watch, 2005). Indeed, for a variety of reasons, life in the camps was not good for those forced to stay there. In interviews conducted by the Refugee Law Project, none of the interviewees had anything positive to report about their experience of life in the IDP camps (Refugee Law Project, 2007a).

Though no formal agreement has been concluded, a tentative peace has existed in Northern Uganda since 2006. Joseph Kony and his band of approximately 2,500 soldiers fled Uganda and are currently in Central Africa where they have been pursued by the Ugandan People's Defence Force as well as by US forces. Relations between Museveni's government and the LRA continue to be volatile, but the shift in the conflict's locale has allowed for the gradual resettlement of the displaced. The government has encouraged people to return to their original areas of residence. People who were displaced at various times during the conflict, by their own choice as well as those forcibly displaced by government anti-insurgency strategies, are now going home. In

December 2010, it was estimated that only 182,000 IDPs remained in original or decongestion camps (Internal Displacement Monitoring Centre, 2010).

Post-crisis resettlement studies have tended to concentrate on the administrative aspects of resettlement—the evaluation of state policies, governmental, and NGO repatriation efforts (Allen, 1996; Allen et al., 1994; McDowell et al., 2002; Pantuliano, 2009; United Nations High Commissioner For Refugees, 2000). Other works seek to articulate the conceptual framework of terms like “home” and “return” in the refugee context (Graham et al., 1997; Nyers, 2006; Stefansson, 2006; Warner, 1994).

One of the goals of this article is to determine whether the settlement patterns after the conflict in Northern Uganda are similar to those before the conflict. This is an interesting question for a number of reasons. First, while one might expect people to want to recreate their previous lives and re-establish homes where they previously existed, it could also be the case that the trauma of displacement and the duration of the conflict lead people to choose other homes and livelihoods. Second, whether people choose to return to their previous homes has bearing on the property conflicts that will arise and therefore what the demands on local administrative structures will be. Lastly, examining the changes in settlement patterns in Northern Uganda adds to the body of knowledge regarding the effects of long-term conflict in Africa, a particularly important issue given that there are several ongoing regional conflicts which, like that in Northern Uganda, are long in duration, cross national boundaries and displace large numbers of people. Darfur and the conflict in the Eastern Democratic Republic of Congo are examples.

Historically, the Acholi people in Northern Uganda settled in and around villages with compounds sometimes quite scattered. Girling noted that their spatial organization related to a cultural commitment to patrilineality and primogeniture. Tying the household locational choice to a specific lineage also extended to higher levels of socio-territorial organization (Girling, 1960). Villages settled around the household of the lineage's leader, maintaining a distance from one another which was always within earshot. This arrangement was a collective security precaution in case of the arrival of a threat.

During the violence in Northern Uganda normal life was destroyed. The social fabric of communities and even families was torn apart by experiences of violence, displacement and the abnormality of camp life. As violence escalated in Northern Uganda people either moved into camps or urban areas for protection and in response to government demand. Despite the fact that the causes of displacement into rural and urban zones are identical, the 300,000-600,000 people who have fled into Northern Uganda urban spaces have been excluded from post-conflict recovery discussions and plans, though urban displacement exists under the jurisdiction of international IDP legislation (Refugee Law Project, 2007b; Weeks, 2002: 20). This group of displaced people was not counted in the totals that we have noted above and did not receive humanitarian assistance. Yet, the threat of LRA abductions compelled many nearby towns to keep their homes and night-commute into urban areas such as Gulu (Human Rights Watch, 2003). Burgeoning urban populations contrasted with rural areas which were visibly depleted of their population. A 2005 report noted that "Most of the land in the Acholi districts (Gulu, Kitgum, and Pader) lies arid and is overgrown with bush. Villages have been abandoned....." (Pham et al., 2005, p.: 15).

Chris Dolan uses the phrase “social torture,” to further emphasize the intentionality of the suffering inflicted upon the population by both UPDF and LRA troops during the conflict between 1986 and 2006 (Dolan, 2009). In order to survive in this insecure setting, some IDPs took the initiative to self-protect, sometimes sleeping away from the camp at night out of a fear of LRA attacks on the camp. Poor protection and miserable camp conditions inflicted damage on the integrity of the IDP’s social relations. Exposure to violence and sexual activity among minors fostered a generation disconnected with traditional norms of living; the roles of adults also shifted dramatically when removed from their normal livelihoods and contexts (Nannyonjo, 2005).³ Community elders voiced concerns that delinquency among the youth in the IDP camps would lead to urbanization by creating a generation “unwilling or unable to adjust to normal rural life” (Weeks, 2002: 36).

DISPLACEMENT AND RETURN

Research chronicling the return strategies of refugees and displaced people (RDPs) in other contexts indicates that they do not necessarily return to their pre-conflict residence. Instead, many choose to relocate to ensure physical and economic security (Alden Wily, 2009; Bascom, 1996; Jansen, 2010; Kibreab, 2002; Stefansson, 2006). Two general trends describe the voluntary relocation strategies of displaced people. First, returnees tend to relocate near a border or political boundary in order to establish simultaneous access to the resources (land, homes, assistance) available in their original country and the country or location of their displacement. This has been noted in both refugee and internally displaced populations (Kibreab, 2002; Stefansson, 2006). Second, refugees and displaced people tend to gravitate toward urban centers as rural lifestyles become unfeasible or unappealing after people are exposed to refugee

camp contexts (Bascom, 1996; Holt, 1996). Of course, these are neither mutually exclusive nor comprehensive descriptions of possible relocation strategies. For example, Johnson documents a group of displaced Sudanese who simply followed food and medical distribution centers, moving based upon the itinerary of the relief airlifts (Johnson, 1996: 179-180). Furthermore, it should not be assumed that all displaced people *want* to return to their original property after displacement (McDowell & Eastmond, 2002; Ó Tuathail, 2010; Rogge, 1994). As Alden Wily notes “Millions of people cannot be expected to endure or participate in the horrors of war, leaving their homes, sometimes for a decade or more, and not develop marked new awareness, skills and aspirations” (Alden Wily, 2009: 34).

The duration of a conflict influences the return strategies of the displaced population; longer conflicts have deeper impacts on the economic and social lives of the displaced, predisposing returnees to favor relocation near borders or urban sites (Bascom, 1993; Rogge, 1994; Weeks, 2002). A decade after the end of the thirty-year Ethiopia-Eritrean war that displaced thousands of Eritreans into Sudan, a large population of the formerly displaced Eritreans settled just within their new border (Johnson, 1996; Kibreab, 2002).⁴ When asked about prospects for return, respondents from the Wad el Hileau camp questioned their ability to resume life in their place of origin despite their desire to return (Bascom, 1996). As an alternative, many respondents considered the border area of southwestern Eritrea to be a superior location for settlement because of its “more arable land, less proneness to drought, and close proximity to wage labour opportunities in Sudan”(Bascom, 1996: 76). Gaim Kibreab’s study found the motivators for relocation were rooted in a disinclination toward returning to a rural life and a disinterest in igniting property conflicts with the people who had come to cultivate their land, some of whom were relatives (2002).

Where conflict breaks out it is common for civilians fleeing violence to settle immediately across borders with neighbor states or regional boundaries in the closest safe area to their residences. Many of them remain in these areas after the conflict is over for both economic and social reasons. This has been observed both in the Eritrean case noted above and in the case of internally displaced Bosnians. Bosnians forcibly displaced during the 1992-1995 war in Bosnia-Herzegovina mirrored the Eritrean case of near-boundary resettlement, relocating in proximity to the boundary between the Federation of Bosnia and Herzegovina and the Republika Srpska in order to have access to employment, educational, and commercial activities in both parts of the country (Jansen, 2010). Other minority Bosniaks chose to stay in urban areas, reflecting a second trend – the relocation into ethnic enclaves at the margins of municipalities (Jansen, 2010: 9). Younger Bosniaks, with weaker ties to specific property and communities, visited their pre-war residences but decided against living there, much to the disappointment of the older Bosniaks who nostalgically equated “home” with their pre-war residence (Jansen, 2010; Ó Tuathail, 2010; Stefansson, 2006).

It is possible that in the aftermath of the violence and social disruption that has occurred in Northern Uganda people will want to return to their former lives and livelihoods, replicating their previous settlement patterns with no discernable difference. However, consistent with the literature discussed above we posit that there will be changes in patterns of return and the re-establishment of households and livelihoods. Anecdotal reports suggest that Ugandan returnees are following the trends of refugees described above. For example, many who have returned or relocated still habitually visit IDP camps near their village in the hope of receiving

reconstruction assistance from the government (Okino, 2009). The maintenance of more than one food and physical security source is suggestive of the refugee strategies found in Ethiopia and Bosnia-Herzegovina.

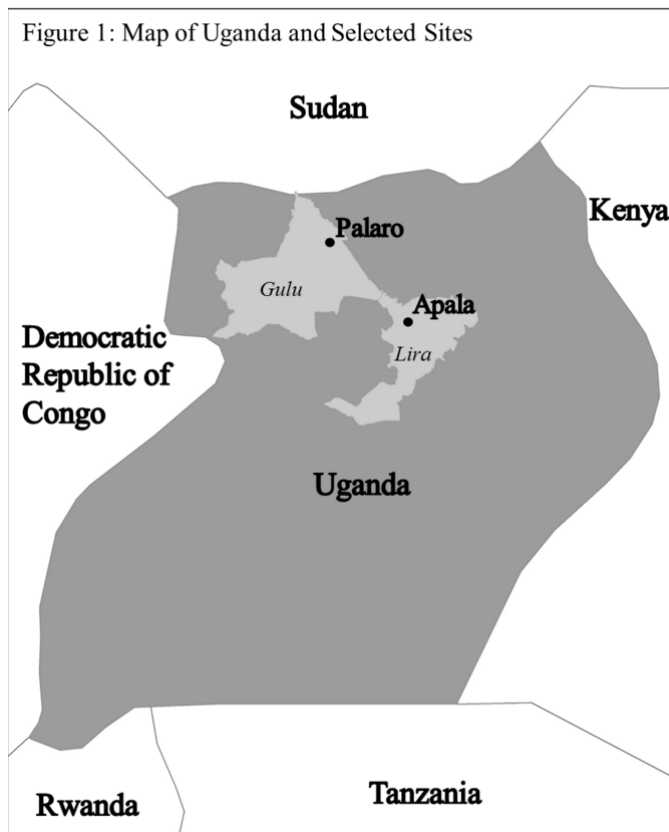
RESEARCH DESIGN

We used satellite imagery to examine specific areas of Northern Uganda before, during and after the conflict. The goal was to investigate how settlement patterns had changed due to violence, displacement and return. Satellite imagery has been used previously in the study of conflict, specifically in the identification of changes in settlement and land use. Madden and Ross (2009) use Geographic Information Systems to examine refugee settlement patterns in Northern Uganda. Another example is Witmer and O'Loughlin (2009) who use GIS to examine agricultural land use in post-conflict Bosnia.

Acquiring satellite images proved to be more difficult than we had anticipated as we were not able to access data from immediately before the conflict (early 1980s) and had to make do with maps from an earlier period (late 1960s) that detailed the placement of homes. Budget and time constraints on the project limited us to two sites. We chose our sites using three methods: 1) analysis of published research on Northern Uganda; 2) data on population distribution; and 3) similar geographic characteristics such as proximity to population centers.

We chose two sites that were similar in population at the time we were conducting the research in early 2010: Palaro, which is in the Acholi sub-region where there had been sustained violence over several decades and a displacement of 95% of the population (Pham et al., 2005), and Apala, in the Lango sub-region where violence was more concentrated in the time period

between 2002 and 2005 and a smaller percentage of the population displaced (Pham et al. estimates around 30%). We used population data available from the LandScan 2008 Global Population Database available through Oakridge National Laboratory.⁵ The data are derived from population estimates by the Geographic Studies Branch, US Bureau of Census. We confirmed the LandScan data with available Ugandan government sources. We remain somewhat skeptical of the accuracy of this data, particularly given the fact that we are examining periods of conflict and post-conflict. Consequently, we restricted our use to case selection.



Palaro is in the Acholi sub-region, 38 kilometers north of Gulu. Apala is in Lango, 22 kilometers north of Lira. The two sites are 110 kilometers from one another. Palaro is smaller than Apala in population and both have roads running through town.⁶ We had a great deal of difficulty finding pre-conflict sources of data which indicated settlement patterns in our areas of interest. We were eventually able to locate maps available through the Library of Congress which detailed settlement patterns in our two areas from 1967 (Apala) and 1969 (Palaro).⁷ Although the dates are not ideal, the maps indicated the location of individual huts in each of the areas. We photographed the maps and then georegistered the photos with ArcGIS 9.3.1.

In addition, we were able to purchase 25 km² satellite images of both Palaro and Apala during the height of the conflict and after.⁸ We were limited by the availability of images. For Palaro we purchased QuickBird satellite images (2.4 - 2.8 meter resolution) from 2003 and 2010. For the Apala images we were able to use an IKONOS satellite image (.5 meter resolution for black and white images .8 meter resolution for color) from 2006 and a WorldView-1 image (.5 meter resolution) from 2010. We imported these images into ArcGIS. In both Palaro and Apala the images from the height of the conflict (2003 and 2006 respectively) showed the presence of IDP camps in the towns.⁹

To illustrate the nature of the data we are using, below are two photos from Apala in 2006 and 2010. Even though Apala was outside the main area of the conflict – we can see quite clearly the impact of people moving into camps during the conflict. The mass of huts observable in Apala are mostly those of internally displaced people (IDPs). The photo from 2010 shows post-conflict Apala after the departure of the IDPs.

Figure 2

Apala, Uganda 2006



Figure 3

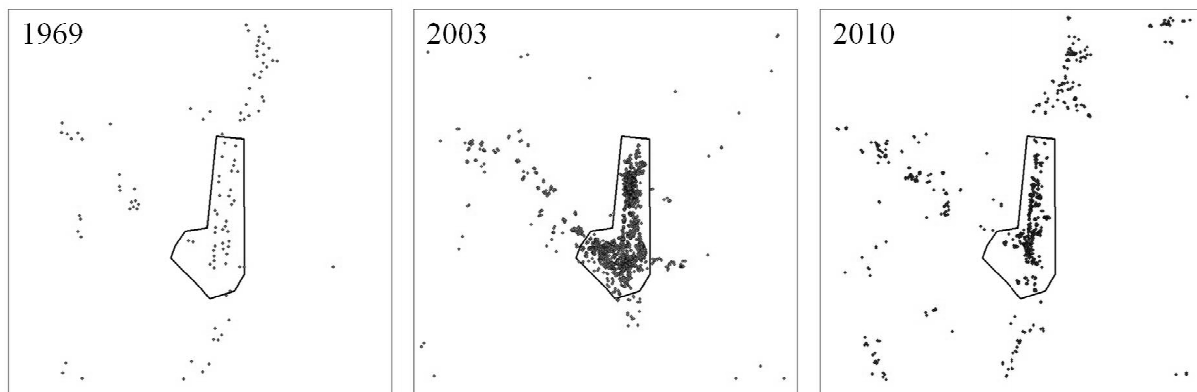


After importing the images we analyzed each and marked every visible hut both within the town and in the outlying areas over the entire 25 km² area. To ensure accuracy, all marked huts were double-checked by different people. The actual images were larger than those above and we were able to zoom in on specific areas as we marked the huts. The typical dwelling is a round mud hut with a thatch roof. Since the thatch needs to be maintained it is fairly easy to

identify huts that have been abandoned as they have no roofs. The nature of the houses also means that huts that have been abandoned for longer than a few years, simply disappear as the rain erodes the mud walls without the thatch to protect them. We drew a polygon around the urban areas so that we could examine settlement patterns within and outside of these boundaries. Figure 4 below illustrates the changing patterns of settlement in Palaro over time with urban polygons indicated.

Figure 4

Palaro Residence Locations



FINDINGS

We initially chose to examine the nature of clustering in settlement patterns using the nearest neighbor statistic in ArcGIS 9.3.1. The nearest neighbor statistic measures the average distance to the closest neighbor against the expected average distance. The expected average distance is the random distribution of the number of points (in our case households) within a particular area. Since people settle closer together in urban settings and further apart in the countryside we separated our data into these two areas by drawing a polygon around the urban settlement

and then calculating the nearest neighbor statistic inside and outside of that polygon as well as for the entire 25 km² area. If the nearest neighbor statistic is less than 1 then there is evident clustering with clustering increasing as the statistic approaches zero. If the nearest neighbor statistic is greater than one, it signifies a dispersed, or uniform distribution of points. The key variables in the calculation of the nearest neighbor statistic are the area and the location of the points.

Nearest neighbor is a useful descriptive statistic for the Northern Ugandan case because it enables us to examine clustering in a way that controls for population growth, which we know has been extremely high in Northern Uganda. In Northern Uganda the overall growth rate from 1991-2002 was 4.6% compared to 3.2% for Uganda as a whole (UBOS 2009). The nearest neighbor function does not measure density, but the distribution of points (houses in our study) against a random distribution of the same number of points in the same area (Mitchell, 2009; Theobald, 2009).

Figure 5

Distribution of Homes using Average Nearest Neighbor

Apala		Pre-Conflict	Conflict	Post-Conflict
	Urban	1.089 (.512) n=14	.921 (.000) n=2335	.628 (.000) n=347
	Rural	.668 (.000) n=138	.464 (.000) n=773	.361 (.000) n=1643
	Combined	.653 (.000) n=152	.321 (.000) n=3108	.355 (.000) n=1990
Palaro				
	Urban	.953 (.582) n=38	.759 (.000) n=1481	.422 (.000) n=408
	Rural	.448 (.000) n=66	.326 (.000) n=231	.249 (.000) n=294
	Combined	.437 (.000) n=104	.274 (.000) n=1712	.230 (.000) n=702

Euclidian distance was used

p-values are in parentheses

years of data are Apala 1967, 2006, 2010 and Palaro 1969, 2003, 2010

Combined area for both sites is 25 km²

Palaro is the area with the higher level of conflict and displacement of our two sites. The area in which Palaro is located experienced greater displacement of the population during the conflict (Atkinson, 2009a; Dolan, 2009; Pham et al., 2005; Weeks, 2002). Apala also experienced both violence and displacement but violence came later to that area (beginning in 2002-2003) and displacement was more limited. In both sites we see evidence of increased clustering of homes during the conflict which we would expect as people left their homes and moved to IDP camps. Furthermore, Figure 5 identifies increased clustering of homes after the conflict in both rural and urban areas.

The decrease in the nearest neighbor statistics for the combined urban and rural areas is a result of the fact that there is a larger area over which the statistic is being calculated. So, for example, the urban area may be 6 km² and the rural area 19 km², but the entire 25 km² is used for the

combined statistic. Again, it is important to note that population was increasing rapidly over this whole period and we would expect population density to be increasing, particularly in the towns. However, use of the nearest neighbor statistic allows us to control for density changes by calculating the expected distance of a certain number of houses evenly distributed across an area against the actual observed distance between the residences. Actual and observed statistics used to calculate the nearest neighbor statistic can be found in the appendix.

Because of the esoteric nature of this statistic we also decided to examine the average distance of huts from a major road – one which was at least 6 meters across. Settlement close to roads is viewed as advantageous for a variety of reasons. Close proximity to the road means easier access to markets, towns and services such as the police and schools. Inadequate road access was noted as an impediment to resettlement by IDPs interviewed in a 2007 study (Refugee Law Project, 2007a). Moreover, a tendency of displaced Northern Ugandans to settle by major roads was also observed in a World Bank study (Rugadya et al., 2008). As a second test of whether settlement patterns had changed after the conflict, we also examined settlement in relationship to the main roads. Again, interview data suggest that access to roads was important to people in the area of return and that IDPs were relocating to areas around major facilities, such as school and health facilities, as well as along major roads (Refugee Law Project, 2007a; Rugadya et al., 2008).

Figure 6

Average distance of homes from a road in meters

Apala		Pre-Conflict	Conflict	Post-Conflict
	Urban	125.36 (104.77) n=14	119.42 (87.76) n=2335	68.19 (63.69) n=347
	Rural	576.87 (679.71) n=138	204.32 (118.14) n=773	530.75 (433.39) n=1643
Palero				
	Urban	97.475 (55.75) n=38	80.248 (65.78) n=1481	59.036 (51.58) n=408
	Rural	282.548 (382.67) n=66	371.086 (462.39) n=231	58.883 (51.41) n=294

Standard deviation is in parentheses

Years of data are Apala 1967, 2006, 2010 and Palero 1969, 2003, 2010

Road refers to an observable thoroughfare at least 6 meters across

In both areas we observe steadily decreasing averages in urban areas. Within Apala, our study area with less violence, we observe marked changes in the average distances of houses from a major road at the time of the conflict. The pre-conflict average in rural Apala is 577 meters, which shrinks to 204 meters at the height of the conflict. This change is not surprising due to the number of people who abandoned homes or were forcibly displaced. With the onset of peace, observations from the early months of 2010 show that the average distance from the road is 531 meters, near pre-conflict levels. Yet, in Palero, where the civil conflict lasted longer and violence was more pronounced, the changes in the rural area do not mirror what happened in Apala. There, average distance from road at the height of the conflict increased, presumably as more people abandoned their homes. The reason for the increase in the average distance from the road at the height of the conflict is that we have many fewer people living outside of Palero,

773 huts compared to 1643 huts after the conflict was over. However, as resettlement occurred, the average distance from a main road shrank dramatically to the point where the rural and urban averages are nearly the same.

DISCUSSION

The evidence we have gathered for this study indicates that civil conflict did change the settlement patterns of internally displaced people. When we examine the location of homes before, during and after the conflict, we can see that people are living closer together than previously. Nearest neighbor statistics that move closer to zero demonstrate a change in all areas towards greater clustering of households. We also observe the establishment of homes closer to major roads in the area of most pronounced violence. Our logic for both the nearest neighbor and distance from the road tests was the same: we would expect displaced people to exhibit different patterns of settlement when they return.

There are multiple potential explanations of the changes we observe. We will note three below, but we are unable to conclusively assert causation from the data presented here. The first possible explanation is that livelihood choices change with the displacement/return experience. This has been noted in other contexts (Alden Wily, 2009). Household demographics may change during displacement and this can have a bearing on livelihood choices. A second and related explanation is that people are changing the location of their residences to take advantage of new economic opportunities. Investigation of the economic cause is a worthwhile pursuit as economic opportunities figure prominently in the decisions of RDPs in other settings (Deininger et al., 2004; Stefansson, 2006). If they have no sunk costs of housing already invested elsewhere the threshold for making changes to previous homestead

locations is low. Interview evidence from displaced people in Acholi, where Palaro is located, suggest that some people are not returning to their previous domiciles, but in fact are, are “...tracing lineage and lands to areas of ancestral descent and opting to return to those...” (Rugadya et al., 2008: 5). The opportunity for resettlement seems to have provided the occasion for both ‘political opportunism’ and ‘invented histories’ of land claims that provide a justification for return to areas other than pre-displacement homes (Refugee Law Project, 2007a: 4). A final possible explanation for changes in settlement patterns is the experience of violence and trauma. We see clustering in all areas, as we expected, and we do see greater clustering in areas that experienced more violence. What is most interesting is the difference in the average distances of home locations from roads in the rural areas of the two study sites. In Apala, where violence was less pronounced and displacement was shorter in duration, rural settlement patterns appear more like they did prior to the civil conflict than they do in Palaro, where violence affected a larger percentage of the population and lasted longer. In Palaro we do not see a return to previous settlement patterns in terms of distance from roads, but instead witness people living much closer to roads than they had previously. Unfortunately, we cannot determine with certainty using remote data, whether it is livelihood choices, economic opportunities, security, a combination of these or something entirely different which motivates these different settlement patterns.

CONCLUSIONS

The literature on refugees suggests that returnees often settle in the closest safe location to their previous place of residence, typically on the border between states or urban areas within a country. For internally displaced people there isn’t always a natural border area providing both safety and access to previous property. From our data we observe greater

clustering of households and settlement in close proximity to roads – a clear change from previous patterns of settlement. Our findings have important implications regarding the re-establishment of the property rights of displaced persons.

Since people appear to be changing their residence locations we can anticipate that we will also see conflict over land claims in these areas. Where access to roads is more desirable, we should anticipate property conflicts to be concentrated around plots of land closest to the roads. This has two implications for post-conflict reconstruction efforts: 1) we should not expect people to return to the same homes they occupied prior to the conflict, and 2) resources pertaining to dispute settlement over land should be focused on areas where there is evidence of changed location of residences.

This project has examined the resettlement patterns of returnees in only two areas of Northern Uganda. Given the little we know about returnee settlement patterns we would hope that further studies seek to replicate and add to our findings. We have not examined the use of fields to determine whether this too shifts over time. Should field use follow the pattern of home location this too would exacerbate conflict over land in areas with high levels of displacement.

The issue of settlement patterns and the reclaiming of property rights is an important social and political issue not just in Northern Uganda, but in other areas of Africa and the world where civil conflict has led to population displacement. In countries such as the Democratic Republic of the Congo and Sudan, lessons learned from the resettlement patterns of Northern Uganda will be highly relevant both in terms of forming expectations regarding the choices people will

make with regard to property rights and in providing the necessary resources to address conflicts which may develop over land use and access as people return.

Appendix - Nearest neighbor statistics with expected mean distances**Palaro Nearest Neighbor Summary**

		1969	2003	2010
Urban	Observed Mean Distance (OMD)	86.22	11.13	11.78
	Expected Mean Distance (EMD)	90.38	14.66	27.91
	Nearest Neighbor	.95	.76	.42
	Z Score	-.55	-17.73	-22.37
Rural	OMD	133.53	52.12	35.28
	EMD	297.54	159.90	141.80
	Nearest Neighbor	.45	.33	.25
	Z Score	-8.63	-19.64	-24.68
All	OMD	106.12	16.57	21.62
	EMD	242.82	60.39	94.22
	Nearest Neighbor	.44	.27	.23
	Z Score	-11.09	-57.47	-39.11

Apala Nearest Neighbor Summary

		1967	2006	2010
Urban	Observed Mean Distance (OMD)	81.88	.55	9.80
	Expected Mean Distance (EMD)	75.22	.028	15.62
	Nearest Neighbor	1.09	.92	.63
	Z Score	.66	-7.32	-13.29
Rural	OMD	140.76	41.37	22.09
	EMD	210.60	89.25	61.24
	Nearest Neighbor	.67	.46	.36
	Z Score	-7.48	-28.55	-49.58
All	OMD	131.52	14.41	19.88
	EMD	201.46	44.83	56.01
	Nearest Neighbor	.65	.32	.36
	Z Score	-8.24	-72.40	-55.08

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¹ See (Behrend, 1999) for a thorough description of the Holy Spirit Movement.

² The intentions of the government in this regard are contested.

³ Nolan describes the increased HIV/AIDS, suicide, and heaving drinking rates as only three of the many symptoms induced by the psychological and cultural debilitation of victims under social torture (2009:165-168).

⁴ Some have attributed this settlement pattern to the generation of a “social capital” among refugees (Kibreab 2002, Johnson 1996). Kibreab articulates, “Owing to their shared experiences of suffering, struggle and the dream of returning to an independent and prosperous country, the refugees developed social networks transcending the old forms of religion, ethnic, and clan-based loyalties” (2002:70). Perhaps in camps with relatively easy access to necessities, “cooperation and interaction” is more possible. However, it is unlikely that any lasting social cohesion can be forged among displaced people when physical and economic security concerns seem to be the overwhelming causal factor for near-border relocation.

⁵ LandScan™ Global Population Database. Oak Ridge, TN: Oak Ridge National Laboratory. Available at <http://www.ornl.gov/landscan/>. The site provides raster data – population data organized into visual pixels - over each 25 km² site.

⁶ The population of the two areas changed dramatically over time. Population statistics were projected by non-governmental organizations concerned with the location of IDPs in a war zone. Both towns had IDP camps and experienced radical changes in population - see photos in text.

Because of all these changes and our concern regarding the validity of the population statistics we focus on the location of huts.

⁷ Palaro is covered in the map entitled Patiko, 1:50,000, East Africa (Uganda) Series Y732 (D.O.S. 426) Sheet 14/4 Edition I-D.O.S. 1969, Library of Congress access number G840s 50 G7 Copyright Uganda Government 1969. UTM 36, Transverse Mercator projection. Apala is in the map entitled Aloi, 1:50,000, East Africa (Uganda) Series Y732 (D.O.S. 426) Sheet 33/1 Edition I-D.O.S. 1969, Library of Congress access number G840s 50 G7 Copyright Uganda Government 1967. UTM 36, Transverse Mercator projection.

⁸ Though there were peace talks underway in 2006 no one was yet returning to their previous places of residence.