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Displacement and Erosion of Informal Risk-Sharing: Evidence from Nepal

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Abstract

Informal networks are essential risk-coping mechanisms for people living in impoverished communities. However, the consequences of displacement on informal institutions have received limited attention. Our study of displaced indigenous households from the Shuklaphanta Wildlife Reserve in Nepal indicates that displacement followed by an inadequate land compensation scheme led to serious household partitions and adversely affected patrilineal kinship relationships. Moreover, poor harvests in the resettled communities and growing conflicts over the control of limited land gradually destroyed the traditional patron-client system of permanent agricultural. Overall, the erosion of informal risk-coping mechanisms has created a vicious cycle of poverty.

Keywords: Displacement; Informal safety nets; Poverty, Indigenous Groups; Nepal; Asia

1. INTRODUCTION

Studies show that the practice of conservation through displacement adversely affects people's welfare, and particularly that of economically marginalized people (Agarwal and Redford, 2009; Heming & Rees, 2000; Lam & Paul, 2011). On the other hand, a large body of literature argues in support of informal risk-sharing mechanisms serving as poor people's last resort when they experience acute economic hardships or similar shocks (Alderman & Paxson, 1994; Besley, 1995; Dercon & Krishnan, 2003). However, informal institutions are effective only when there is an inelastic supply of informal networks in the presence of a shock. To put it another way, informal risk-sharing is often considered to be the fall-back option for the poor in crisis. There is limited evidence on how such informal institutions themselves relieve an economic downturn or socio-political crisis. This paper examines this issue at a greater depth and employs a cross-disciplinary approach. More specifically, we analyze the effect of a conservation-led displacement on the level of informal risk-sharing among the rural poor in Nepal.

Almost 23% of Nepal's total surface area has been set aside for conservation (DNPWC, 2010). Large-scale displacements continue to represent the major conservation strategy yet the indigenous communities face social exclusion which has been historically rooted in the land settlement policies (Lam, 2009). The backdrop of this socio-economic upheaval involved a displaced indigenous group, the Rana Tharus, in the western-most districts of Kanchanpur in Nepal. The Rana Tharus community experienced a large-scale displacement due to the expansion of the Shuklaphanta Wildlife Reserve in 2001. Consequently, the Nepalese government carried out a land-based resettlement scheme on the principle that all displaced families should be given cultivable land in the resettled areas, which they previously lost due to the extension of the wildlife reserve. Furthermore, the social and cultural composition of displaced villagers should be maintained in the newly developed resettled communities (Bhattarai, 2001).

Based on a case-study comprising of a sample of 72 displaced and non-indigenous households from the Shuklaphanta Wildlife Reserve in Nepal, we attempt to find the consequences of displacement followed by a land-based compensation policy on informal risk-sharing between Rana households. We compare the level and effectiveness of three prominent interpersonal relationships, which shaped the agrarian informal institutions of Rana households over many generations, between before and after the displacement. First, we examine the household partitions in traditionally large Rana households, which have served as the main source of informal exchanges of goods and services over the generations. Second, we analyse the changes in patrilineal kinship relationships which have traditionally been a major source of informal security for Rana households, both economically and socially. Thirdly and finally, we discuss the changes in the patron-client system of permanent agricultural workers, the main source of agricultural labor for Rana landowners.

It has been well documented in the literature that informal risk-sharing is a fundamental risk coping mechanism for the rural poor (Coate and Ravallion, 1993; Fafchamps, 1992; Foster & Rosenzweig, 200; Ligon et al., 2001; Rosenzweig, 1988). These agrarian institutions are shaped by interpersonal relationships, which often supplement weak formal institutions such as social safety nets programs (Fafchamps & Gubert, 2006; Devereux & White, 2007). Diverse forms of informal safety nets include employing inter-household transfers of food, livestock and loans (Jodha, 1981; Rahmato 1987), borrowing grain from kin (Watts 1983), exchanging goods and services with neighbors and relatives (Kipnis, 1997), and credit arrangements with relatives (Agarwal, 1992).

However, the consequences of displacement and rehabilitation policies on rural informal institutions have received limited attention. When the social impacts of displacement on local communities have been addressed by cross-disciplinary scholars (Colchester, 2004; Goodall,

2006; West & Brockington, 2006; West et al., 2006), studies seldom touch the core aspect – the interlocking relationships between the changes in informal social networks and the implications for local livelihoods. In a recent study on Colombia, Valez and Bello (2008) show that forced displacement not only disperses and uproots families but also fractures their household structure and social fabric, thus leading to the erosion of informal securities. They find that 50% of displaced families had an intact nuclear structure, compared with 60% of families amongst the non-displaced population in the same residential or host areas. Another study shows that in Colombia only 9.2 percent of displaced households had the opportunity to ask for loans to relatives, neighbors, and friends, in contrast to 18 percent before displacement (Ibáñez and Moya; 2006). In a similar but somewhat different study of informal family safety nets in Poland in the post-1990s and during the transition from a Marxist to a capitalist country, Cox and Okrasa (1996) found that inter-household transfers dropped significantly and family networks became weaker after the transition. These studies illustrate the constraints on informal safety nets as coping strategies when sudden economic shocks and crises emerge.

Our paper aims to investigate the influence of displacement on informal risk sharing institutions. Both quantitative and qualitative evidence from our study suggests that displacement followed by an inadequate land compensation scheme led to serious household partitions in the wake of impoverishment. This also adversely affected the patrilineal kinship relationships. Moreover, the poor harvest in the resettled communities and growing conflicts over the control of limited land in the resettled areas deprived the traditional patron-client system of permanent agricultural workers and reduced kinship ties. This prompted a vicious cycle of poverty because food security for displaced Ranas to a large degree disappeared. The economic downturn resulting from the poor harvest coupled with erosion of informal risk-sharing networks appeared as a double whammy on the poor.

As a policy response, Cernea's (1997) 'Impoverishment, Risk and Reconstruction' (IRR) model has been widely used to design policy frameworks to mitigate the risks for people on the move. It primarily focuses on the economic risks to livelihoods, however, it fails to link them to simultaneous social and political risks. Kanbur's (2003) suggestion for generalized social safety nets shows merit but lacks credibility as there is no systematic evidence for the feasibility and practicality of such options, especially on how to prevent the erosion of informal safety nets. Our findings are in line with the increasing evidence that informal agrarian institutions facing crisis often lose their credibility to support the poor effectively. However, in this paper we provide a deeper understanding of the cultural, social and economic factors concerning the displaced Rana Tharus community in Nepal. We believe rich evidence along this line would help design more inclusive social safety nets that foster and maintain traditional informal networks. This latter task is outside the scope of this paper.

This paper contributes in two ways. First, we aim to fill the knowledge gap by demonstrating that conservation-led displacement not only impoverishes the poor and marginalized people further but also adversely affects kinship ties and other traditional risk-sharing networks. Second, we intend to stimulate the discussion of a more inclusive compensation package that restores traditional agrarian institutions. The paper is organized as follows. Section 2 provides an ethnographic account of the livelihood systems of Rana households and traditional agrarian institutions. In section 3, we provide a brief overview of the Shuklaphanta Wildlife Reserve and the land-based resettlement program. Section 4 discusses the survey methodology and empirical findings. In section 5, we discuss the contemporary history of agrarian institutions and a deeper understanding of the socioeconomic transformation of Rana Tharus households. This is followed by concluding remarks. For the purpose of maintaining privacy, people's names in this paper are pseudonyms.

2. AN ETHNOGRAPHIC ACCOUNT OF THE LIVELIHOOD SYSTEM OF RANAS

Rana Tharus (hereafter referred to as Ranas) were the first settlers in the Kanchanpur, the furthest western district of Nepal. When the Rana ancestors first came to Shuklaphanta, it was wild and comprised extensive forest and wildlife. Rana ancestors worked very hard to convert forest into arable land. After many years' effort, Ranas successfully integrated their agricultural knowledge into the micro-environment and created enough arable land. Many of them started to settle down in the Shuklaphanta permanently and the first Rana settlement, Rauteli Bichawa, was established. Since that time, agriculture has been their major livelihood for many generations. The characteristics of the soil and climate have led to the development of two planting seasons. In the wet season, rice is the major crop for irrigated land while corn is for non-irrigated land with some sesame and black lentils. In the dry season, wheat, mustard, lentils and beans are the main crops grown. The multiple crop planting system has reduced the risk of Ranas suffering economic distress caused by the seasonality of agricultural cycle and any sudden crop failure. Animal husbandry is an integral part of the Rana household economy because it produces dairy products for domestic consumption and ensures the supply of animal labor. In addition, the timber and non-timber forest products of Shuklaphanta also provided Ranas with fodder, furniture, fuel, handicraft and food. Prior to their displacement, Ranas enjoyed a highly stable subsistence agricultural system (Lam, 2009). Their traditional social arrangements which closely related to their economic activities have also played a crucial role in maintaining their subsistence livelihood system.

a) The concept and practice of *Badaghar* households

The formation, structure and management of Rana households are fundamentally linked to the issue of livelihoods. In the past, abundant land resources allowed Ranas to live in joint-family households. This particular household arrangement not only fulfilled labor needs but also ensured mutual security for every household member. The undivided and big households (known as '*Badaghar*'), over time, became the ideal household model for Ranas.

According to most Rana informants, the typical Rana household resembles a large family with more than three generations living under the same roof. Most of the Rana families never experienced household partitions since their ancestors migrated to Rauteli Bichawa. Typically, a *Badaghar* means a family of thirty to forty members. All household members take part in farming activities and contribute their income from the harvest. The household's total expenditure is shared by all and they typically use a single kitchen. This single kitchen has been an important symbol of the large family structure, as the size of a *Badaghar* is reflected in the time it takes to cook meals for all.

The cultural interpretation of *Badaghar* goes beyond the literal meaning of a joint-family household. A patrilineal joint-family household is defined as having up to fifteen members consisting of two or more agnates related lineally and/ or collaterally with their wives, married sons and their unmarried children (Gray, 1995, p. 57). In contrast, for Rauteli Bichawa Ranas, *Badaghar* means a household structure that has historical significance in a number of ways. Firstly, the popularity of *Badaghars* was very much related to economic realities. It dates back to the early settlements of Rana households in Rauteli Bichawa where land was abundant but the labor force was scarce. Particularly, clearing forests proved to be very labor-consuming work. Due to its geographical remoteness and endemic malaria, it was also hard to find seasonal workers from neighboring regions. Therefore, Ranas believed that larger families were preferable because they ensured a sizable labor force that enabled people to survive.

Secondly, the existence of *Badaghars* in Rana societies was also due to their cultural ideology and the sense of social security. Most Ranas were proud to have *Badaghars* and had a strong preference to live together. In-depth personal interviews with Rana household members reveal the fact that mutual love and bonds between family members and social security considerations were the two major forces that motivated them to live together. The people from older Rana generations frequently mentioned that having large families secured their livelihoods. As they became older the younger household members would gradually take over all responsibilities and look after them. Deepak from Rauteli Bichawa commented that,

We really want to have big families because we love each other very much. We always think if we need to separate, it may be difficult for survival, therefore we always prefer living together.

b) Traditional agrarian production relations

Household members had long been the primary source of labor input in the Rana agricultural system, even in the busiest farming seasons such as rice planting and harvesting. Besides household labor, the *Kamaiya* system (traditional patron-client system involving permanent agricultural workers) was another important facet of the old Rana society. The system differs from other bonded labor systems. According to Rankin (1999), many wealthier Rana families traditionally hired young workers from poor Rana families to work for them. The young *Kamaiyas* typically stayed with their masters' families and their primary duties included housework and agricultural work. Rankin (1999, p. 33) describes the indigenous Rana *Kamaiya* system as being practised through 'generous patronage' and 'integrated into the kinship systems and societies of their masters'. Furthermore the system served as a 'private safety net' for the poor Rana *Kamaiyas*. While salary was generally paid in the form of agricultural produce and

basic necessities such as food and clothing, they received temporary and long-term assistance if a crisis erupted.

Despite the fact that household members and the traditional patron-client system (*Kamaiya*) provided most labor resources, another form of labor, *Kurmaa*, which referred to the patrilineal kinship system, deserves mention. Although wealthy Ranas did not cooperate economically with *Kurmaas* during their difficult times, Ranas could always obtain help from their *Kurmaas* either in the form of labor or spiritual support. *Kurmaa* laborers differed from others because they never received any material return for their work. The close *Kurmaa* relations therefore served as dependable and flexible safety nets for most Ranas. Based on the available information garnered from interviews, previous generations of Ranas often invited their *Kurmaas* to live closer to them, for example their sons or male siblings. They believed this could guarantee mutual help and it was particularly noticeable in non-resettled Rana settlements.

3. A BRIEF NOTE ON THE SHUKLAPHANTA WILDLIFE RESERVE

During the 1960s, influenced by the growing global conservation ideology and the King's special interest in establishing protected areas in Nepal, Shuklaphanta¹ was first designed in 1969 as the Royal Sikar Reserve (closed to public shooting) in the western district of Kanchanpur, Nepal Kanchanpur (Figure 1). Later in 1976, it was officially declared the Royal Shuklaphanta Wildlife Reserve with a total area 155 sq. km as a response to the shrinkage of the forest area in Kanchanpur district. This had been caused by the rising population and demands on agricultural land and forest resources. The designation of the Park is a typical fence-to-fence management model which is part of the International Union for the Conservation of Nature and National Resources (IUCN) protected area categories, in which all settlements and human activities such

as cultivation, fishing and hunting are outlawed.

[Figure 1 is about here]

Although the Park is relatively small in size², it is ecologically important for many reasons. The Park is home to the world's largest population of Swamp deer (2000 at last count), and its extensive grassland and swamp along with the tropical and sub-tropical forests has supported some endangered species of tigers, elephants and rhinoceros. Moreover, a total of 349 bird species including six globally threatened species has been recorded in the Park (Upadhyaya & Yonzon, 2003). However, the on-going development of new settlements adjoining the Park and illegal settlements in the whole district has hindered preservation efforts in the Park. Activities such as logging, grazing and poaching have seriously damaged the natural environment and wildlife habitats. Since the Park area was relatively small for wildlife protection, an extension of the Park was mandated in 1981 to strengthen conservation of the flora and fauna in the area (Bhattarai, 2001). It was proposed to extend it by 155 sq. km for the reserve (see Figure 2). This time, a total of seventeen existing blocks of five villages inside the proposed extension area were affected.

[Figure 2 is about here]

a) The land-based resettlement program

Considering the large-scale turmoil that would have resulted from poorly implemented policy, the royal directives emphasized three principles:

- 1) All displaced families should be given land which they lost to the extension of the Park
- 2) All compensation land should be cultivable

3) The social and cultural composition of displaced villagers should be maintained in the resettled areas (Bhattarai, 2001, p. 270).

Figure 2 shows that seven places adjoining the Park were designed for resettling affected families and one major consideration in allotting land was on the basis of land registration record. The State decided to provide a similar landholding size to affected families who had official land documents or some sort of record in survey field books, while the rest which were identified as illegal occupations could only get five to ten kattas (0.035ha) of land. According to Bhattarai (2001), there was no appeal mechanism for these families against the decision of the State.

The Park's resettlement program, which took nearly twenty years (since 1981) was completed in May 2002. As pointed out by Bhattarai (2001) this delay had serious implications for the local livelihoods and the forest's preservation. The rapid encroachment in the resettlement sites amidst corrupt bureaucracy and dramatic changes in the political environment after the 1990 People's Movement³, made the resettlement commission outcomes worse. Over a period of 20 years the 18 commissions were unable to satisfactorily resolve the resettlement program because it became virtually unenforceable.

[Table 1 is about here]

It took almost six years to gather information on household composition and land distribution. During the 4th and 5th Commissions, surveys were carried out but they failed to properly document each household's name and gender composition. Moreover, the surveys did not distinguish between landowners who were the original inhabitants or encroachers, which caused further difficulties in land allocation resulting in *ad hoc* distribution. At the same time, the delays encouraged encroachers to resettle in new areas that were already occupied and this created less incentive for the affected families to resettle. Also, many affected families often

supported by political parties resisted leaving and this resulted in further delay. Above all, the number of affected households increased three-fold in 11 years, from 1199 in 1987 (4th commission) to 3397 in 1998 (15th commission), which put further pressure on forest areas. Finally, a total of 2108 hectares of forest land was cleared to resettle 2249 households in seven locations (Table 2.2). These households were categorized into four groups: 1) Households with proper landownership (926), 2) Households with registered land but without ownership title (100), 3) Households confirmed as encroachers (954), and 4) Households under investigation (169). The remaining households received no compensation; they were identified as settling in the Park after the announcement of the extension program (Pandey & Yonzon, 2003).

[Table 2 is about here]

In October 2001, the Park authority decided to enforce the extension program with the help of the army. This action was undertaken by the Park management under the authority of the State. Remaining households inside the extension area were forced to evacuate as the army deployed elephants to destroy their houses. The evacuation was completed in May 2002 (Pandey & Yonzon, 2003). However, the disputes continued even after the displacement was over. As documented by Bhattarai (2001, p. 319), the major objective of the project was to remove local communities from the Park with little sign of effort to restore people's livelihoods properly. Instead of paying Rs 2000 to the affected families to relocate, none of social safety net programs was implemented to restore people's livelihoods. As a result there was a steady deterioration in people's livelihoods with increasing poverty and rising social strife in local communities.

4 SURVEY AND EMPIRICAL OUTCOMES

a) A brief description of fieldwork on the Ranis

The fieldwork was motivated by the lack of evidence⁴ concerning the socio-economic impacts of conservation on marginalized social groups. We adopted a multiple research methodology including household survey, focus group discussion, participant observation and in-depth participant interviews. While the household survey was designed to capture a broader picture of the socio-economic conditions of the Rana society, the conventional anthropological techniques of participant observation⁵ and in-depth participant interviews were conducted to analyze more closely the daily livelihood practices of Ranas and the transformations in Rana society during the relocation and in the new settlement. Focus group discussions were also implemented to encourage the local inhabitants to enumerate the relocation experience in their own words. Discussion group participants included local leaders, ex-government officials and local people (both Ranas and hill migrants). Frequent discussions among locals also allowed us to verify the information under challenging circumstances such as the absence of baseline data and the political insurgency. Additionally, information from these group discussions complemented the survey outcomes by providing greater insights into the Ranas' growing impoverishment.

[Table 3 is about here]

Based on repeated consultations with the Park authority and some local NGOs, the indigenous Ranas from the Rauteli Bichawa village were considered to be the most appropriate subject of our study. The Rauteli Bichawa village, located in the western part of Kanchanpur district, was selected for several reasons, including its unique location and historical relevance. Before the establishment and extension of the Park, the Rauteli Bichawa village overlapped the Park area. It is the biggest park-affected village with more than 1,000 displaced households. As shown in Table 3, after the forced displacement in 2001, Rauteli Bichawa became the smallest administrative village in Kanchanpur district with only three existing hamlets - Iymilia, Jhilmila and Shivapur. Moreover, it was the first settlement for indigenous Ranas⁶. It was also the first

human settlement in Kanchanpur district and the Ranas originally settled in in this particular forest frontier (KDDC, 2002). The earliest settlements were Iymilia, Hariya, Bataya and Bichawa, which were located in the southern part of the Park and later extended to other areas such as the neighboring district, Kailali. Today, the Ranas are found only in Kanchanpur and Kailali districts in Nepal and the States of Uttaranchal and Uttar Pradesh in India.

Historical circumstances made the Ranas one of the dominant population groups in Rauteli Bichawa village. According to the ex-secretary of the Rauteli Bichawa Village Development Committee Office, before the displacement, the total population of Rauteli Bichawa in 2000 was 9,956 with 1,649 households (2005, personal communication). Official data on the Rana population is not available for many reasons, mainly because the Ranas are broadly classified as the 'Tharu' group⁷ and the Nepalese government does not publish national population census figures on Tharu sub-groups. Secondly, some local data is in the hands of the Maoists and consequently difficult to access. However, the information from the village office⁸ and the focus group discussions outcomes suggest that the total number of Rana households was 350 in 2000 (approximately 20 percent of the total households) and they were distributed unevenly in the nine hamlets (Table 3). After the forced displacement in 2001, the Rana population in Rauteli Bichawa declined to only 150 households, all of them settled in Iymilia and Jhimila. They were relocated to different villages and one of the biggest resettlement areas was Dhokka Block, which was located about 4 km from the old Rauteli Bichwa village (Figure 2).

The Rauteli Bichawa Ranas had to endure many new challenges and the ways in which they cope with them is central to our analysis. This provides us with the opportunity to probe the influence of forced displacement and transformation in landownership on the livelihood of indigenous Rana communities. Three field trips were conducted over a period of 18 months between 2004 and 2006. In particular, the visit in 2006 contributed to the current study in two

substantial ways. Firstly, the latest information on the Rana households enhanced the quality of our analysis on the relationships between resettlement and household livelihood status. Secondly, it helped us verify and share the main findings with local informants. The sample was restricted to a group of 72 households due to financial constraints and adverse socio-political conditions⁹. The comparison group, comprising of 30 Rana households, was selected from the two hamlets of Rauteli Bichawa village, Iymilia and Jhimila, located near the periphery of the Park (see Figure 2). The resettled group selected for our study included 42 displaced Rana households from the two hamlets, Rampur and Beldandi of the Dhokka Block.

[Table 4 is about here]

The Rana households within each hamlet were selected randomly. Also both genders responded to the household level questionnaire. However, the survey does not allow us to examine the socioeconomic impact of displacement on other dominant ethnic and caste groups¹ in Kanchanpur district who were also affected by the extension of the Park. Although we were unable to evaluate the overall impact of the relocation on the displaced people, it helped us identify the comparison group and the displaced Ranas to the best possible extent. Nepal is an ethnically diverse country and the heterogeneity in socio-economic circumstances across different ethnic groups makes it difficult to identify a closely matched control and treatment group at the baseline. In particular Kanchanpur has experienced substantial demographic changes due to the influx of hill migrants over the past thirty years (Pandey & Yonzon, 2003).

In this study, Ranas in both the comparison and the treatment (displaced) group shared similar socio-economic characteristics. They all lived in the Rauteli Bichawa village before the

¹ According to the 2001 census data, the caste and ethnicity distribution of the population in Kanchanpur were as follows: Chettri (30%), Tharu (20%), Brahmin (17%), Dalits (14%); Thakuri (5%); and others (14%).

displacement, speaking the Rana language and practicing the same daily rituals. While the landholding sizes varied among the Ranas, particularly Ranas from Ward 3 (Andaiya) being the richest, all Ranas were actively engaged in agriculture. Most of them were illiterate and experienced similar social changes such as the introduction of land reform policy, hill migration and the creation of Park. Thus, the relatively homogenous nature of the Rauteli Bichawa Ranas, provides good matching criteria between the comparison and the treatment (displaced) group.

b) Changing agrarian livelihood structure

The actual amount of land compensated was far from what the government originally promised. As shown in Table 5, the average landholding size for the resettled Rana households fell from 151.2 Kattas to 74.8 Kattas and from 88.8 Kattas to 38.2 Kattas in Rampur and Beldandi, respectively. The average difference of the landholding size is statistically significant at 1 percent. The Rana families who were categorized as illegal occupants because they did not have legal land registration were affected the most. They received on average around 11 percent of their actual land (only 2-10 Kattas), whereas the households with proper registration had an average compensation rate around 56 percent.

[Table 5 is about here]

According to the resettled Ranas, the quality of the land in the Dhokka Block was poor. The soil's poorer water storage capacity caused difficulties for rice planting. Field visits were conducted in the rice fields in Rauteli Bichawa and Dhokka Block. Most people in the comparison group of Ranas stated that the soil could keep water for almost one week so they had plenty of time to transplant rice. However, resettled Ranas pointed out that after ploughing and irrigating, they had to plant rice immediately because the soil would be dry out again within a few hours. On average, they had to spend double the time in ploughing the same size of land than

before. Altogether, the average productivity rate of the resettled households was about 21 kilograms of rice per Katta, which was less than half of what the households in the Rauteli Bichawa village produced on average. The mean difference in the productivity rate is found to be statistically significant at 1 percent.

[Table 6 is about here]

Before the extension of the Park, agriculture was the Ranas' main source of livelihood. Most of the Ranas were landowners cultivating their own land. Once resettled a sizable portion of them became landless. This caused a significant change in the livelihood choices; we find that almost 27 percent of the displaced Ranas started contractual agricultural work for others to meet their economic needs (Figure 3). According to their responses, difficulties with current livelihoods have been the biggest change in their lives.

[Figure 3 is about here]

c) Family Breakdown in the Resettled Villages

[Table 7 is about here]

The resettlement program started in 1988 and continued until 2001. In the first phase, about 200 households received land as compensation from the government. All of them were from Rauteli Bichawa village including 60 Rana households. In 2001, when the second phase of the resettlement program was administered, the remaining households from the seven hamlets (part of the Park extension) of the Rauteli Bichawa village were forced to move out, and as a result another 100 households were relocated to Dhokka Block of whom 10 were Rana households (Table 7).

[Table 8 is about here]

Based on the official statistics, the number of displaced Rana households in Dhokka Block was originally around 55 households in 2001. However, by the time the research was conducted in 2005, the number of Rana households in Dhokka Block increased to almost 150. The figure reflected the fact that fast and extensive household partitions had happened among Dhokka Block Ranas. As is evident from Table 8, almost 80 percent of the displaced Ranas experienced family break ups whereas the same was experienced by only 43 percent of the Ranas in Rauteli Bichawa village. The mean difference in the family break up rate is found to be statistically significant at 1 percent.

[Table 9 is about here]

The delay in household partitions of Dhokka Block Ranas may be linked to their longer historical control over land than Iymilia and Jhilmila Ranas. A majority of household separations of Dhokka Block Ranas happened before 1995 and in the most recent period after 2001. The timing corresponded with important developments in Park policy. In the early 1990s, the Park authority started to allocate land to affected families. In 2002, the authority carried out a forced resettlement program. During the 1990s, although most Rampur Ranas were granted land in Dhokka Block, they did not leave Rauteli Bichawa immediately because the enforcement policy was weakly implemented. Many households practiced double cultivation in both old and new land. Their landholding size and productivity in fact doubled. They received substantial income from selling surplus agricultural products and some Rana landowners became even wealthier. Extensive landholding and sufficient food preserved the existence of huge *Badaghars* in Dhokka Block.

However, the situation changed completely when the authority carried out the resettlement program in 2002, and most displaced Ranas found it difficult to survive due to the dramatic shrinkage in landholding size. After the displacement, some of them became landless because that had sold parts of their land in Dhokka Block as they did not have enough labor. To make things worse, the new land in the resettlement areas could not provide enough food for their subsistence needs. They worked hard but they never got enough food from their own land. More arguments occurred between household members and this made household partitions inevitable. Such partitions first occurred between married male siblings and then extended to the father and sons. The more generations and members a *Badaghar* household had, the faster and more serious was the break up. This happened to Rampur Ranas who were once large landowners.

[Table 10 is about here]

The average size of the household for the resettled Rana families who experienced family break ups stood at 8.2 whereas the average family size was 12 for the resettled Rana families who did not experience any family break up. Table 10 compares the average number of married couples in a family. Overall, the number of couples was significantly lower (statistically at 5%) for the displaced Rana households against the comparison group of Rana households. This supports the fact that a majority of the displaced Rana households were separated among the married siblings. It was reported that one resettled *Badaghar* household broke up into six households within ten years. As an illustration, in Figure 4 we provide a brief outline of Bhogy Rana's family break up process, which is discussed in more detail below.

[Figure 4 is about here]

Bhogy Rana was an indigenous landowner of Rauteli Bichawa. He received a total of 220 Kattas of land as compensation. Like most affected Rana families, Bhogy Rana's household did

not move out from the Park immediately but practiced double planting when they received compensated land from the government 14 years ago. This substantial landholding still could not satisfy the growing number of family members and gradually arguments between family members made the partition inevitable. The key to partition was the continuous disputation over control of the land. About ten years ago, three brothers agreed to break up the big household into three smaller joint-family households headed by Bhogy and his two brothers, Ram and Chataa. However, the first separation did not solve the family conflicts. Within six years ago, Ram's two married sons and their families decided to separate from their parental household. Each household received 15 Kattas of land. In 2000, the old Bhogy household was forced to move out from the Park, leading to further decline in their landholdings, harvest size and livelihoods. As a result, Chataa's second married son requested a household separation and the other members also had to consider partition. In 2004, Bhogy only owned 80 Kattas of land and his two sons told us that they planned to split up when after their father's death. In only 10 years, the Bhogy household broke up into six smaller households.

d) Social relationships in resettled villages

This social outcome of the displacement was not what the policy-makers had envisaged. To minimize the social impacts of displacement, the resettlement area was designed keep the affected communities together with same cultural background. This was particularly the case in the Rampur area of Dhokka Block. Rana communities from Rauteli Bichawa were grouped together. The aim was to maintain their community network and cultures. However, as Figure 4 shows, more than half of them did not have any relatives or friends living around them. Although the level of loss in social networks due to displacement among displaced Ranas differed, more than 90 percent of them felt lonely.

[Figure 5 is about here]

Many Ranas, since they moved to Dhokka Block, found it difficult to get help from neighbors and relatives in times of economic hardship. Out of 42 households surveyed in the Dhokka Block, 19 households responded that they did not receive any help. Monetary and food support was practically non-existent, and this was primarily because every Rana household in Dhokka Block became poorer. An alternative coping strategy was to obtain loans. Previously, loans of smaller amount were popular, which Ranas could repay in a short time following a moderate harvest. This used to help them overcome temporary food shortages and contingency expenditures such as marriage and mortuary rites. Based on our household survey, 17 resettled Rana households had debts which had accumulated only after they were displaced to the new settlement areas. The amount of loan varied from Rs 5,000 to Rs 40,000, and all of them were received in cash. In more than 70 percent of the cases money was used to purchase food.

A quick look at the complex credit system in rural Nepal reveals that traditionally credit followed the norm of kinship in villages and is part of the local moral economy (Levine, 1988). Previously, in some cases credit was given free of interest. However, in the present context Ranas became the victims of the vicious loan cycle. They faced much higher interest rates compared to what it used to be. Caplan (1970) and Levine (1988) argued that indebtedness is a critical factor in influencing social relations at the village level for several reasons. First, debtor-creditor relationships reflect the local power structure, often making the debtor the subordinate group. Levine's (1988) careful observation on multi-ethnic villages in Humla district noted that instead of caste status, indebtedness is indeed the key issue in determining the character of power relations. She concludes that the rich people from either higher or lower castes who can control the credit have the power in the village. Secondly, their studies also indicated that serious indebtedness is one of the major contributors to 'landlessness'. Levine (1988, p. 214) states that 'the vicious cycle of debt may lead first to temporary mortgaging and then progress to permanent

alienation of farmland.’¹⁰ Indeed, Dhokka Block Ranas faced increasing pressure to sell their land to repay the debt.

The story of Buli Rana clearly illustrates the relationship between impoverishment, indebtedness and landlessness. His family moved to Dhokka Block five years ago. The land he received as compensation could only provide a half-year’s food supply for his family. He could not get any job in the village so for another six months, and his family depended completely on loans to buy food. Even though the interest rate reached 60%, he had to accept this because he could not get any help from friends or relatives. Ranas also had to apply for loans because they could not manage the expenses associated with marriage, medical treatment, house repairs and funeral rites. Due to the accumulation of loans, some even needed to sell land to repay their debts. Similarly, the Chanaru family moved to Dhokka Block sixteen years ago after they received three *bighas* of land as compensation, which could only meet half of their need. With no foreseeable alternative, Chanaru received an agricultural loan from the bank. He also needed money for medical treatment and festival celebrations. As a result, just after moving to Dhokka Block three years ago, he started to sell land in order to survive.

5. DISCUSSION

To get an estimate of the increasing vulnerabilities after displacement, the household respondents were asked, “How many months do you have enough food for?” The average food security for the comparison group was 9.5 months whereas it was 8.5 months for the displaced Rana households (Table 11). Because of the higher variation in the landholding sizes we also looked at the level of food security per unit of land they owned (in Katta). Once measured this way, the displaced Rana households have average food security for only 6 days which is almost half of

what the comparison group had. This indicates two important things. First, given the same land size the resettled Ranas have significantly less food security compared to the comparison group of Ranas. This directly points to the low productivity of the new settlement area. Second, resettled Ranas with a very small plot of land had to rely on food sources other than cultivating their own land.

[Table 11 is about here]

Before the expansion of the Park, the *Badaghar* structure provided informal safety nets for most Ranas. However, changes in the economic landscape motivated by new developments in demography and socio-economic reality significantly challenged the maintenance of traditional Rana households. Within the lifetime of most Ranas, they first experienced household fission since they settled in Rauteli Bichawa. They realized that a big family could no longer offer them food security like before. It was evident that the rapid decrease in food security caused by the Park extension program had resulted in faster and more conflict-ridden household partitions in resettled Rana households than non-resettled households.

It was apparent that the rising number of land conflicts had undermined the traditional *Kamaiya* system (patron-client production relations) and *Kurmaa* relations (patrilineal kinship connection). Both had long contributed to household production and served as an important private security net for most Rana households in terms of maintaining adequate subsistence levels. When the landholdings of most Ranas declined, the amount of cultivation and production also declined and as a result they could not afford to hire temporary and permanent workers as they had before. Thus, the transformation of production relations was closely associated with the patterns of landholding and household structure. The declining social relations not only hampered the production relations, it also affected the trust and solidarity among the *Kurmaas* at the local level. Household surveys among the resettled Rana village Dhokka Block revealed a mix of

competitive, resentful and apathetic attitudes among the Rana *Kurmaas*. Although they lived close to each other, they seldom talked to each other or had any social interactions. Both the rich and the poor Dhokka Block Ranas felt that they did not expect to receive any help from *Kurmaas*.

Dramatic changes in both landownership and household relations had made new production relations and systems inevitable. Increased impoverishment in Rana society meant that the pressure to produce had fallen on the shoulders of household labor only. Based on our detailed observations, the displaced Ranas adopted different strategies to overcome the temporary labor shortage and other livelihood problems in the gradual erosion of traditional production institutions like *Kamaiya* system and *Kurmaas* relations. The majority of Rana farming practices tended to concentrate on household members and non-*Kurmaa* kin, especially kin such as married-out daughters' families and wives' families. Agricultural workers were seldom hired by Ranas due to rising poverty. Moreover, Ranas had only close relations with married-out daughters and wives' kin in social get-togethers and festival celebrations. Only a handful of Rana families would employ casual workers, and then only during the most critical planting times such as rice transplanting and harvesting. However, the employment period tended to be as short as possible.

Another coping strategy was practiced when some of the Rana families with small and medium landholdings extended their social networks to neighbours and friends. Ranas formed small working groups including Pahaaris. A few Ranas in Beldandi village of Dhokka Block worked with their Pahaari neighbours. They exchanged labor and oxen for ploughing and transplanting rice seedlings. The new alliance went beyond household, kinship and caste boundaries because it allowed them to exchange news about prospective employment and economic opportunities available in the neighbourhood. For example, Pachan Rana, besides agriculture, relied on tenancy and wage labor for survival. He worked as a construction worker,

leased land from landlords and later planned to move to India as a migrant laborer. All these employment opportunities were initiated by his friends rather than any of his *Kurmaas*. Also, when his family had no food left to consume, he received a non-interest loan and wheat from his friends. Most of his friends shared similar economic circumstances.

[Figure 6 is about here]

To sum up, the shift in *Kurmaa* relations after serious household partitions was inevitable and now the *Kurmaa* did not act as a major social and economic security net for most Ranas. In the resettled communities, bad soil quality had doubled the workload for most Ranas. The help from *Kurmaas* was very important but due to conflicts over the control of limited livelihood resources, particularly land, made their relationship tense. Overall this led to a vicious cycle of poverty as food security declined significantly for the displaced Ranas. Figure 6 depicts a model describing the relationships between displacement, poverty and safety nets. On one hand, forced displacement coupled with inadequate land compensation resulted in unhappy harvests and less food. This not only impoverished them but also indirectly affected kinship ties and other sources of informal safety nets, making the poor more vulnerable.

6. CONCLUSION

In this paper, we use a cross-disciplinary approach to document the consequences of displacement followed by a land-based compensation policy on informal risk-sharing. We study indigenous Rana Tharus households who were displaced from the Rautelli Bichawa village due to the expansion of the Shuklaphanta Wildlife Reserve in the district of Kanchanpur in Nepal in 2001. We compared the level and the effectiveness of three prominent interpersonal relationships among the Rana Tharus community. We examined the household partitions in traditionally large

Rana households, changes in patrilineal kinship relationships and changes in the patron-client system of permanent agricultural workers.

Both quantitative and qualitative evidence from our study suggest that displacement followed by an inadequate land compensation scheme led to serious household partitions in the wake of impoverishment. This also adversely affected patrilineal kinship relationships. Moreover, the poor harvest in the resettled communities and growing conflicts over the control of limited land in the resettled areas ruined the traditional patron-client system of permanent agricultural workers and decimated kinship ties. Overall, this prompted a vicious cycle of poverty as food security fell significantly for displaced Ranas. The economic downturn resulting from the poor harvest coupled with erosion of informal risk-sharing networks represented a dual dilemma for the poor.

Despite a large body of research supporting the view that informal networks represent a basic but effective mechanism for helping the poor, the consequences of displacement and rehabilitation policies on rural informal institutions have received limited attention. In this paper, we aim to fill the knowledge gap by demonstrating that conservation-led displacement not only impoverishes the poor and marginalized people further but also adversely affects their kinship ties and other traditional risk-sharing networks. More importantly, however, we intend to stimulate further discussion of a more inclusive compensation package that restores the traditional agrarian institutions. In this paper, we provide a deeper understanding of the cultural, social and economic factors concerning the displaced Rana Tharus community in Nepal. We believe rich and conclusive evidence along this line of enquiry would more inclusive social safety nets be implemented because they will foster and maintain traditional informal networks. This task is left to researchers in the future.

References

Agrawal, A. and Redford, K. (2009). Conservation and displacement: An overview.

Conservation and Society 7(1), 1–10.

Agarwal, B. (1992). The gender and environment debate: lessons from India. *Feminist Studies* 18, 119-158.

Alderman, H. & Paxson, C. (1994). Do the Poor Insure? A Synthesis of the Literature on Risk Sharing Institutions in Developing Countries, in *Economics in a Changing World: Proceedings of the Tenth World Congress of the International Economics Association, Moscow*, London: MacMillan Press.

Besley, T. (1995). Non-Market Institutions for Credit and Risk-Sharing in Low-Income Countries, *Journal of Economic Perspectives* 9 (3), 115-127

Bhattarai, A.M. (2001). *Displacement and rehabilitation in Nepal: law, policy and practice*. New Delhi: Anmol Publications Pvt. Ltd.

Caplan, L. (1970). *Land and social change in east Nepal: a study of Hindu-tribal relations*. London: Routledge & Kegan Paul.

Cernea, M. M. (1997). The risks and reconstruction model for resettling displaced populations, *World Development* 25(10), 1569–87.

Colchester, M. (2004). Conservation policy and indigenous peoples. *Cultural Survival Quarterly* 281, 17-22.

Cox, D., Jimenez, E. & Okrasa, W. (1996). Family safety nets and economic transition: A study of Worker Households in Poland.

Dercon, S. and Krishnan, P. (2004). Food Aid and Informal Insurance in S.Dercon edited, *Insurance against Poverty*, Oxford University Press.

Devereux, S. & White, P. (2007). Pilots, principles or patronage: What makes social protection succeed in Southern Africa. Paper presented at the conference Social Protection and Ideologies of Welfare in Southern Africa, Oxford, 6 Dec.

DNPWC (2003). *Royal Suklaphanta Wildlife Reserve and proposed buffer zone management plan*. Department of National Parks and Wildlife Conservation.

DNPWC (2008). Buffer zones of Nepal. In *the website of Department of National Parks and Wildlife Conservation, Nepal*, 19/2/2007 Access, <http://www.dnpwc.gov.np/mis.asp>.

DNPWC (2010). Protected areas: *In the website of Department of National Parks and Wildlife Conservation, Nepal*. 24/11/2010 Access, http://www.dnpwc.gov.np/protected_areas.asp.

Fafchamps, M. (1992). Solidarity Networks in Pre-Industrial Societies: Rational Peasants with a Moral Economy, *Economic Development and Cultural Change*, 41 (1), 147-74.

Fafchamps, M. & Gubert, F. (2002). *Contingent Loan Repayment in the Philippines*, mimeo.

Fisher, W.F. (2001). *Fluid boundaries: forming and transforming identity in Nepal*. New York: Columbia University Press.

Foster, A. D. and Rosenzweig, M. R. (2001), Imperfect commitment, altruism and the family: Evidence from transfer behavior in low-income rural areas, *Review of Economics and Statistics*, 83 (3), 389-407.

Gaige, F.H. (1975). *Regionalism and national unity in Nepal*. California: University of California Press.

Goodall, H. (2006). Exclusion and re-emplacment: Tensions around protected areas in Australia and Southeast Asia. *Conservation and Society* 4, 383-395.

Gray, J.N. (1995). *The householder's world: purity, power and dominance in Nepali village*. Delhi: Oxford University Press.

Guneratne, A. (2002). *Many tongues, one people: The making of Tharu identity in Nepal*. New York: Cornell University Press.

Heming, L. & Rees, P. (2000). Population displacement in the Three Gorges reservoir area of the Yangtze River, central China: Relocation policies and migrant views. *International Journal of Population Geography*, 6(6): 439-462.

Hutt, M. (ed.) (2004). *Himalayan People's War: Nepal's Maoist rebellion* Indiana: Indiana University Press.

Ibáñez, A. M. and Moya, A. (2006). *The Impact of Intra-State Conflict on Economic Welfare and Consumption Smoothing: Empirical Evidence for the Displaced Population in Colombia*, HiCN Working Paper no. 23, Households in Conflict Network

Jodha, N.S. (1975). Famine and famine policies: some empirical evidence. *Economic and Political Weekly* 10, 1609-1623.

Jodha, N.S. (978). Effectiveness of farmers' adjustment to risk. *Economic and Political Weekly (Review of Agriculture)* 13, A38-A48.

Kanbur, R. (2003). Development Economics and the Compensation Principle, *International Social Science Journal*, nr.175. UNESCO, Paris: Blackwell.

KDDC. (2002). *District Periodic Plan Kanchanpur (2059-060 to 2063-64)*. District Development Committee.

Kipnis, A. B. (1997). *Producing Guanxi: Sentiment, self, and subculture in a North China Village*. Durham, N.C.: Duke University Press.

Lam, L.M. (2003). *Change of perceptions of local communities and park-people conflicts in regard to Koshi Tappu Wildlife Reserve, Nepal*: Unpublished master dissertation, The University of Adelaide, Adelaide, Australia.

Lam, L.M. (2009). *Park, hill migration and changes in household livelihood systems of Rana Tharus in far-western Nepal*. Unpublished doctoral dissertation. The University of Adelaide, Adelaide, Australia.

Lam, L. M. & Paul, S. (2011). *Disputed Land Rights and Displacement: A Double Whammy on the Poor*. Working Paper.

Levine, N.E. (1988). Webs of dependence in Rural Nepal: debt, poverty and depopulation in the Far Northwest. *Contributions to Nepalese Studies* 15, 213-245.

Ligon, E. Thomas, J. P. & Worrall, T. (2001). Informal Insurance Arrangements in Village Economies, *Review of Economic Studies*, 69 (1), 209-44.

McLean, J. & Steffen, S. (2003). Conservation, relocation, and the paradigms of park and people management- a case study of Padampur villages and the Royal Chitwan National park, Nepal. *Society and Natural Resources* 16, 509-526.

Muller-Boker, U. (1999). *The Chitawan Tharus in southern Nepal: ethnoecological approach*. Stiz Stittgart: Franz Steiner Verlag Stuttgart.

Pandey, S.B. & Yonzon, P. (2003). *Resettlement history of the Royal Shuklaphanta Wildlife Reserve*. Resource Himalaya submitted to the Department of National Parks and Wildlife Conservation, Ministry of Forests and Soil Conservation of His Majesty's Government of Nepal.

Rosenzweig, M. R. (1988). Risk, implicit contracts and the family in rural areas of low-income countries, *Economic Journal*, 98, 1148-70.

Rankin, K.N. (1999). The predicament of labour: Kamaiya practices and the ideology of "Freedom". In *Nepal: Tharu and Tarai neighbours* (ed.) H.O. Skar.27-45, Kathmandu: Educational Enterprises, Mandala Book Point, Ratna Pustak Bhandar.

Sah, J.P. (2002). *Vegetation dynamics and their implications for the management of wetlands in the lowlands of Nepal*: Unpublished doctoral dissertation, Florida International University, Miami.

Upadhyaya, S.K. & Yonzon, P. (2003). *Societal diagnosis of the settlements in the Buffer Zone of the Royal Shuklaphanta Wildlife Reserve, Farwest Nepal*. Submitted to the Department of National Parks and Wildlife Conservation, Ministry of Forests and Soil Conservation of His Majesty's Government of Nepal.

Valez, O. R. and Bello, A. H. (2008). Family Breakdown in Bogota, *Forced Migration Research*, No. 34, Refugee Studies Center, University of Oxford

West, P. & D. Brockington. (2006). An anthropological perspective on some unexpected consequences of protected areas. *Conservation Biology* 20, 609-616.

West, P., Igoe, J. & Brockington, D. (2006). Parks and peoples: the social impact of protected areas. *Annual Review of Anthropology* 35, 251– 1277.

World Bank. (2010). Nepal at a glance. In *Nepal: Country in brief*, 24/11/2010 Access,
http://devdata.worldbank.org/AAG/npl_aag.pdf.

Table 1 The performance of eighteen commissions regarding the Park resettlement project

Time Period	Commissions	Performance and Major Problems
1981	1 st Commission	No work done
Mid-1982	2 nd Commission	Acquired 217 ha of forest land and clear-felled, but resettled none.
Early 1986	3 rd Commission	No significant work done
Late 1987 to mid-1988	4 th and 5 th Commissions	Household surveys and land allocations were carried out. However, the survey quality was poor and caused unfair land allocations.
Mid-1992 to 1995	6 th to 10 th Commissions	The Commissions were beset by party politics. Almost no significant work of resettlement was done.
Mid-1996 to 1999	11 th to 18 th Commissions	The Commissions were headed by politicians. All Commissions were short-lived due to the frequent change of government. Land was even distributed to unlisted households who commissioners knew personally.

Source: Bhattarai (2001) and Pandey (2003)

Table 2 Resettlement locations and land distribution

Resettlement locations	VDCs / Municipality	Land Grant (Ha)
Dhokka Block	Beldandi/ Rampur Bilashipur	680
Simalphanta	Jhalari	108.8
Butawari	Laxmipur	284.24
Baghphanta	Mahendranagar	565.76
Piparia	Mahendranagar	115.6
Sundarpur / Bandarpur	Suda	217.6
Banijhala	Krishnapur	136
Total		2,108

Source: Pandey and Yonzon (2003)

Table 3 The land acquisition and the Ranas in Rauteli Bichawa village in 2000

Village Area	Hamlets	Total Households	Rana Households
Part of the extended Park area	Badani Kheda	42	25
	Darak	170	126
	Andaiya	514	0
	Bhursa	193	27
	Lalpani	29	0
	Radhapur	68	26
Outside the Park	Iymilia	120	120
	Jhilmila	279	26
	Shivapur	234	0
Total		1,649	350

Source: Ex-Secretary of the Rauteli Bichawa Village Development Committee Office

Table 4 The number of Rana households in the four study settlements

	Rauteli Bichawa village		Dhokka Block	
	Iymilia	Jhimila	Rampur *	Beldandi
Total households	100	165	506	460
Rana households	90	20	126	19
Surveyed households	15	15	25	17

*The Rampur estimate was based on information provided by the ex-chairperson of Beldandi and Rampur Buffer Zone User Group Committee, Bhim Thapa.

Source: Household Survey 2005

Table 5 Land compensation

		Land holding (Katta) (Present)		land holding (Katta) (Before resettlement)	
		Mean	SD	Mean	SD
		Comparison	Iymilia	59.1	53.1
Jhimila	24.1		14.3		
Resettled	Rampur	74.8	49.2	151.2	94.2
	Beldandi	38.2	23.0	88.8	74.2

Source: Household Survey 2005

Note: Mean Land holding size is significantly different for the resettled households (at 1 % significance level) Land is measured in Katta

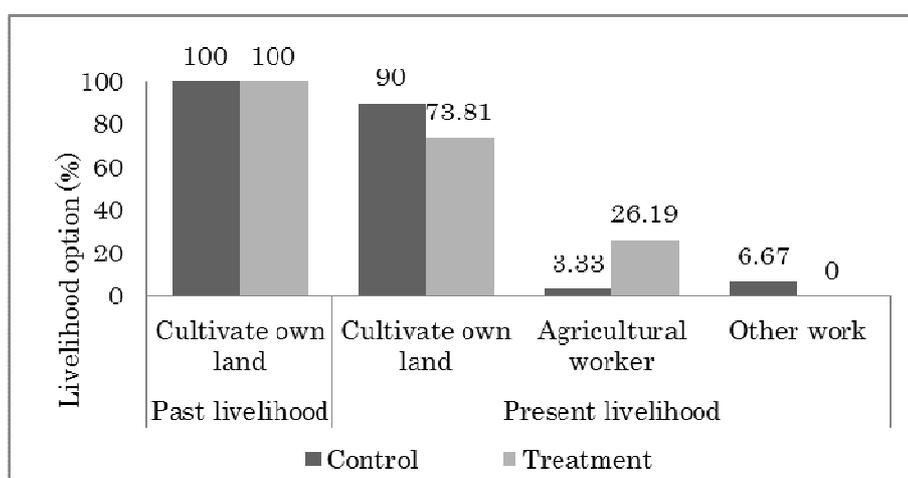
Table 6 Productivity Rate (Kilograms / Katta)

	Mean
Comparison group households	44
Resettled group households	20.9

Source: Household survey 2005

Note: Mean Productivity is significantly different for displaced group households (at 1 % significance level)

Figure 3 Livelihood Changes



Source: Household survey 2005

Table 7 Resettlement history of Dhokka Block

	1889-1992	1993-2000	2001	Total
All households				200
1988-1990				60
Rana households				60
Surveyed households	9	6	20	35
All households				100
1991-2001				10
Rana households				10
Surveyed households	0	0	7	7

Source: Household Survey 2005

Table 8 Had family break up since 1988?

	Comparison group	Displaced households
No	56.5 %	19.5 %
Yes	43.5 %	80.5 %

Source: Household survey 2005

Note: The difference is statistically significant at 1%

Table 9 Timing of household partition (year since)

	1990-1995	1996-2000	2001-2003
Comparison group	4	4	2
Displaced households	16	10	9

Source: Household survey 2005

Note: Precise information on year is available only for 43 households

Table 10 Average number of married couple in the household

	Experienced household break up?		Overall*
	No	Yes	
Comparison group	3.5	1.8	2.7
Displaced households	2.9	1.7	1.9

Source: Household survey 2005

* The difference is statistically significant at 1%

Figure 4 An Illustration: The Development of Bhogy *Badaghar* household

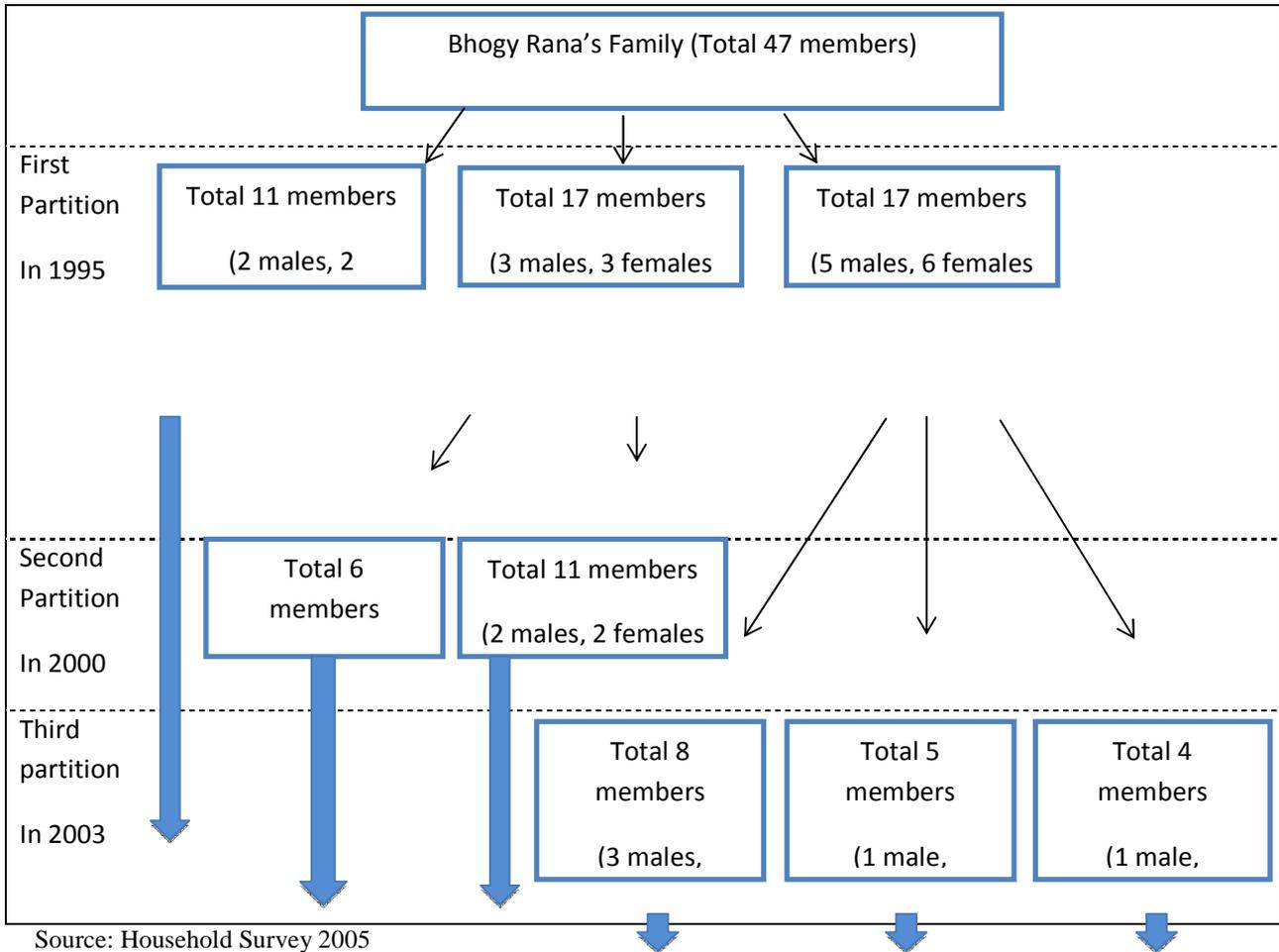
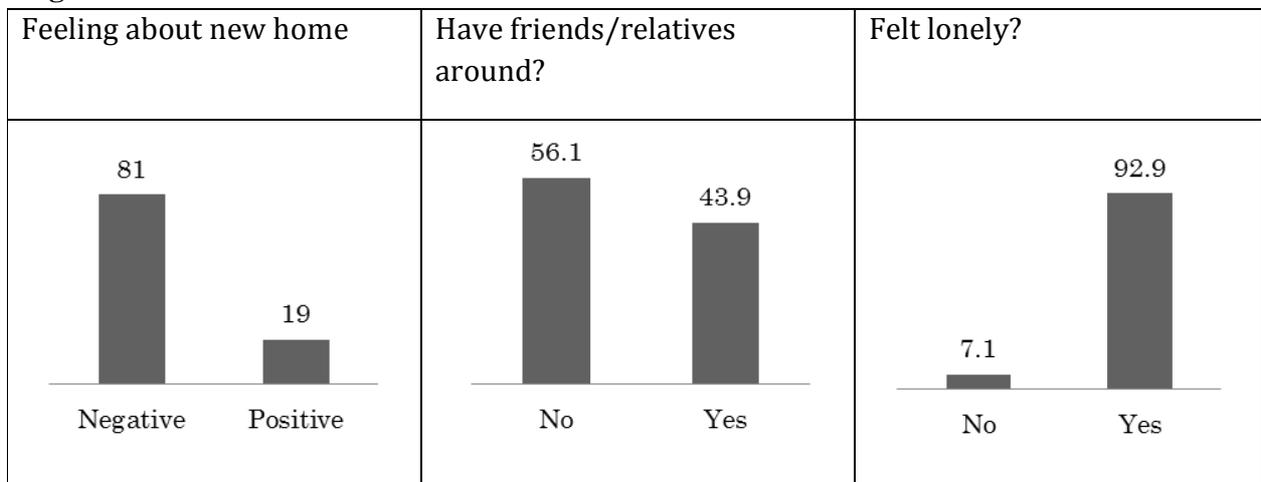


Figure 5



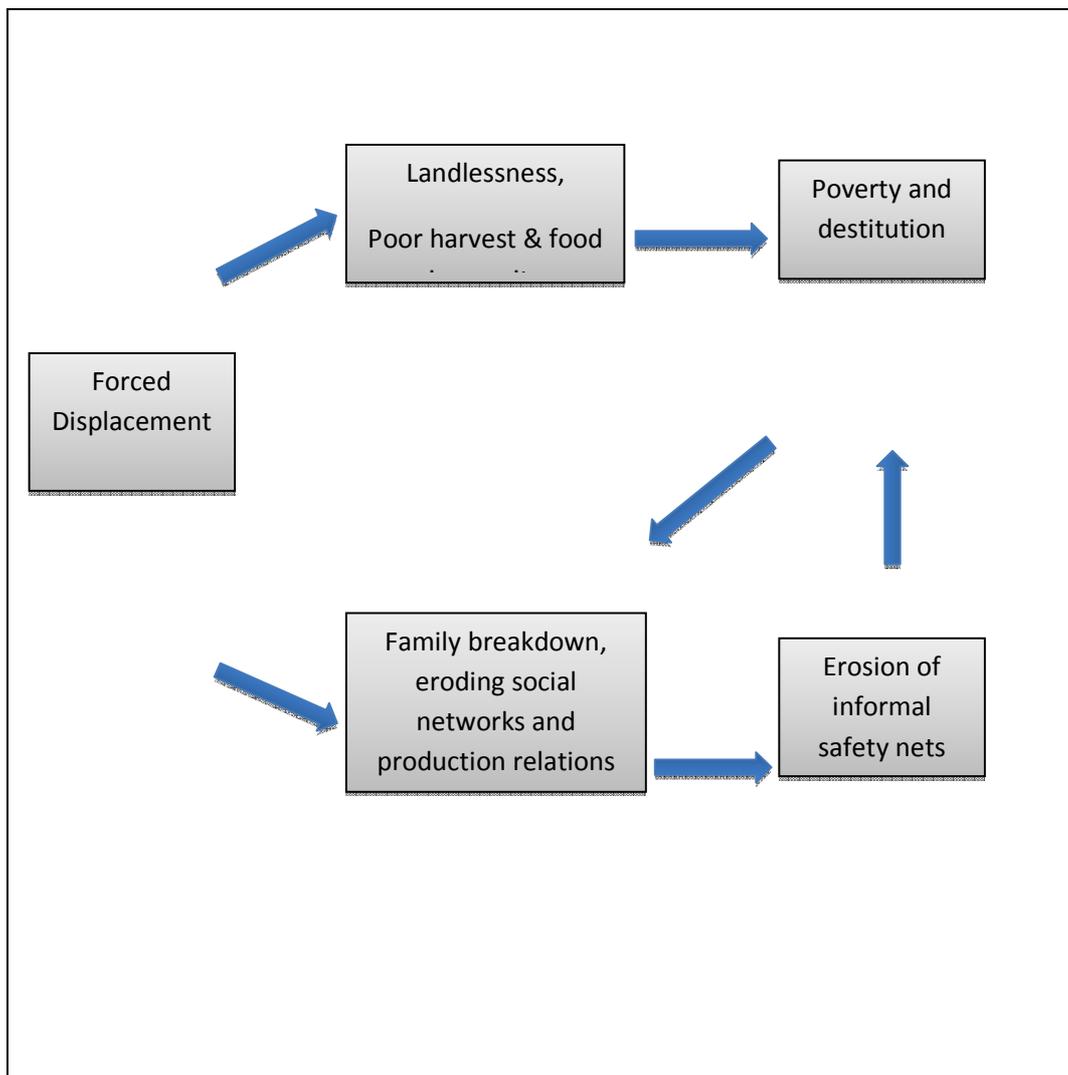
Source: Household survey 2005

Table 11 Food security

	Months	Days/Katta
Comparison group	9.5	10.4
Displaced households	8.5	6.0

Source: Household survey 2005

Figure 6: The Vicious Cycle of Poverty for the Rana Households



Endnotes

¹ After the downfall of the monarchy in 2006, all protected areas in Nepal have deleted the ‘Royal’ in their names.

² The largest protected area in Nepal is Annapurna Conservation Area (7,629 sq. km) and the smallest one is Rara National Park (106 sq. km) (DNPWC, 2008).

³ The 1990 People’s Movement (Nepali: *Jana Andolan*) in Nepal was a multi-party movement. It brought an end to absolute monarchy and eliminated the Panchayat system. It marked the beginning of constitutional democracy (see Hutt, 2004). In 2006, following the restoration of absolute monarchy in Nepal, the *Loktantra Andolan* was launched, which once again illustrated various political parties’ unity, leading some to brand it *Jana Andolan II*.

⁴ Although displacement is one of the most common conservation practices in protected areas in Tarai region in Nepal, its economic and social impacts have not been well documented (McLean & Steffen, 2003; Sah, 2002; Lam, 2003). Only McLean and Straede (2003) and Lam (2003) used an anthropological approach to evaluate the social impacts of displacement on local communities. However, these studies do not touch on the core aspect – how does this displacement influence local livelihoods and how do the locals react to such changes? The only comprehensive study to explore the complex relationship between Tharus and Chitwan National Park was done by Muller-Boker (1999). Studies on Ranas and Shuklaphanta are virtually non-existent.

⁵ The first author conducted fieldwork over a period of 15 months. During this time, she actively observed and participated in Rana daily social life including daily conversations, farming activities, festival celebrations, marriage ceremonies, rituals and collecting forest resources.

⁶ Despite the fact that written histories on the origin of Ranas in Kanchanpur are very few, their past has been recorded in the form of local oral traditions. Rauteli Bichawa Ranas claimed that

they originated in Rajasthan, India. Their descendants are currently known as Rana Tharus. Most Ranas refuse to be labeled 'Tharus' and identify themselves only as Ranas (Lam, 2009).

⁷ The argument about the exact number of people is an issue of debate between the State and ethnic groups in Nepal. Gaige (1975) has made an in-depth analysis of this. Some ethnographic studies have also shown that increasing the population is often a strategy that many ethnic groups use to increase their political influence (Fisher, 2001; Guneratne, 2002).

⁸ The secretary was a village local and therefore familiar with the composition of the local population.

⁹ The research was carried out when conflicts between the Maoists and Nepalese government were commonplace. The armed Maoists would regularly patrol the village particularly in Dhokka Block and one of their strategies was to foment frequent strikes. The researcher was interrogated several times by Maoists and their permission was needed.

¹⁰ The literature on livelihood strategies in South Asia has shown that loans are a common strategy for rural people who encounter regular economic difficulties. However, when indebtedness becomes a chronic problem, in many cases farmers have been forced to sell their most important assets such as land or livestock to repay the debt (Jodha 1975; Jodha 1978; Nabarro *et al.* 1989).