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PAPERS, ABSTRACTS AND PROCEEDINGS

OF

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Madison, Wisconsin, October 11, 2007

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OF
The Second Annual
Himalayan Policy Research Conference

Thursday, October 11, 2007, Madison Concourse Hotel and Governors' Club,
Pre-conference Venue of the 36th South Asian Conference at the University of
Wisconsin-- Madison, (October 11-14, 2007)

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Session 4: Environment and Pollution

Chair: Murari Suvedi, Michigan State University

Discussants: Keshav Bhattarai, University of Central Missouri, Alok Bohara, University of New Mexico

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Welcome Note from Editors

On behalf of the editorial board of the *Himalayan Journal of Development and Democracy (HJDD)* and the Conference organizing committee, we would like to thank all the participants at the Second Annual Himalayan Policy Research Conference held at the venue of the University of Wisconsin's 36th Annual South Asian Conference.

Nepal Study Center (NSC) was established at the University of New Mexico three years ago with an objective to promote policy research activities related to Nepal, the Himalayan region, and the countries in South Asia. We remain dedicated to creating platforms to enhance knowledge sharing, particularly in the areas of development, democracy, conflict and the environment. Among its other prominent activities, NSC publishes two e-journals (*Himalayan Journal of Development and Democracy* and *Liberal Democracy Nepal Bulletin*), organizes an annual Himalayan Policy Research Conference (HPRC), and maintains an electronic repository to allow scholars to upload, store, and disseminate policy research.

The first HPRC in 2006 was an important milestone for us. We are highly pleased to report the grand success of the Second HPRC on 11 October, 2007, as well. These conferences, supported by other research activities at NSC, are likely to facilitate the creation of an Association for Himalayan Policy Research within a few short years.

Association for Himalayan Policy Research: Through its activities, NSC aims to create a global network of scholars, professionals, and policy practitioners interested in the development of Nepal and the Himalayan region. This should culminate in the formation of an Association for Himalayan Policy Research soon in the future. Journal publications and the Himalayan-focused conferences at the University of Wisconsin are important elements of the support needed to sustain such a network and association. Appreciating these activities, many scholars from North America, Europe, the Far East, Australia, and Nepal are joining this network.

We are grateful to the University of Wisconsin's 36th Annual South Asian Conference for giving us the pre-conference venue. We are also thankful to those who have, as listed in the acknowledgement section,

provided financial support to conduct this conference. We appreciate the help from the staff and graduate students of the Department of Economics, UNM, and the goodwill and support of many friends of NSC.

Finally, we would like to thank our guest editors Professors Vijaya R Sharma and Gyan Pradhan for their help in preparing this issue of *HJDD*.

Sincerely



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Above all, NSC is grateful to all the participants, and especially those coming from outside the US, for making the event highly successful.

PAPERS AND ABSTRACTS

Discrimination, Exclusion and Political Participation

Class, gender and generation: mediating factors in Dalit identities in Kathmandu, Nepal

Sambriddhi Kharel*

University of Pittsburgh

Introduction: There is a growing resistance from Dalits against the ongoing caste discrimination in the Nepali society (Dahal *et al* 2002; Jha 2004). In this process Dalits are both assertively deploying and redefining their “traditional” identities. Despite the constitutional ban on caste discrimination, there persists an upper caste monopoly on education, jobs, and political power. This research studies the complex and changing dynamics of Dalit identity in Nepal, within a context of growing resistance and organized social movement against caste discrimination and exclusion. More specifically, this paper examines differentiation and variation in the reproduction of Dalit identities during a period of political mobilization and (presumably) heightened consciousness across (i) socio-spatial boundaries, (ii) intersections of caste, class and gender, and (iii) dimensions of social consciousness and response/agency.

Methodology: The findings are based on a research carried out in the period from February 2006 to June 2007, with householders from three Dalit communities living in Kathmandu and with Dalit activists and leaders, using an ethnographic approach of in-depth, semi-structured, face-to-face interviews, participant observation, and field notes. I interviewed participants from 15 households (43 interviews) making up a purposive sample from three occupationally segregated Dalit neighborhoods: *Deula/Podae*[†] (sweeper caste), *Biswakarma/Kami*[‡] (metal worker caste), and *Pariyar/Damai*[§] (tailor/musician caste). The first two communities may be considered lower income group while the third community an upwardly mobile group.

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† The community members preferred to be called by their surname *Deula*, rather than their caste (*Podae*), because it has a derogatory connotation of “sweepers”.

‡ *Kami* is a term used to refer to traditional metalworkers. Since it is increasingly viewed as a negative term, people in this caste group started referring to themselves as *Biswakarma*.

§ The term *Pariyar* has started being used to refer to the group of people historically known as *Damai*.

The ongoing political insurgency in Nepal not only required that I capture the “politicized” voices of Dalit leadership, but that I also record for long-term purposes this unique moment in Nepal’s history.

Findings: The findings are analyzed in relation to the following themes that emerged in relation to Dalit identity and resistance: the complexity of their everyday experiences of discrimination as Dalits living in the Kathmandu valley, their level of consciousness, agency, and resistance towards humiliating and discriminatory caste based practices, and the gender dimension of these themes.

Identity: Unlike the strong political consciousness observed among Dalit activists who have started identifying openly as Dalits, other interviewees in the above three communities were hesitant to call themselves Dalits, because of the stigma attached to castes that were historically considered untouchables. The interviewees did not perceive their identity as a political one, which is necessary to carry out a fight for their rights. Only a small group among them had a general political understanding of the term ‘Dalit,’ as that of historically suppressed, oppressed, deprived and excluded people. But, the majority understood the term in its stigmatized everyday connotation – as low-caste people or untouchables. The findings show that caste identity is a crucial social marker for Dalits, as it is for other castes. While this identity benefits the upper caste Brahmin and Chettri groups, it costs the Dalits dearly. Activists talked about how caste prejudice and negative stereotypes of Dalits were deep-rooted and persistent. Professional Dalits might be educated, clean, and of middle class status, but they would still be seen as *polluted* because of their birth in the lower castes.

Discrimination: Despite living in Kathmandu – a “modern” urban space, Dalits still faced discrimination. But, the nature of the discrimination could be different from community to community. All respondents acknowledged that discrimination had declined since historical times, and that their children would not have to go through what they and their ancestors went through. Most respondents felt that caste-based discrimination had more to do with age or generational differences. Unlike the *Deulas* and *Biswakarmas*, the *Pariyars* (the upwardly mobile group) claimed that they did not face discrimination and that caste issues were almost irrelevant for them in this ‘modern age.’

Consciousness, agency and resistance: Resistance usually occurs against political, economic, ideological and symbolic domination and exploitation of the subordinate groups. There are different kinds of resistance — overt or covert, and organized or unorganized. The findings

of this research show that, in general, the respondents of both the *Deula* and the *Biswakarma* communities had internalized the hegemonic values in everyday life, through adaptation and compromise in relation to the dominant order. Their agency was manifested in the resistance at an individual level and in what might also be called everyday acts of resistance, for example fighting in water taps/wells, criticizing and mocking upper caste rituals and practices, boycotting public religious functions, tea shops, and refusing food from upper castes when they went to do wage labor (Scott 1985). Another more transformative form of resistance was in the cases whereby Dalits ignored or sidestepped, resisted, and acted against the prevailing hegemony, in instances of inter-caste marriages and the conversion to Christianity in both the *Deula* and the *Biswakarma* communities. I did not find converts in the upwardly mobile *Pariyar* community, who were proud of upholding religious tradition. In a search for equality and human dignity, some Dalits have joined religions that preach equality. Christianity has provided a legitimate platform to frame a critique of Hindu caste norms. It also exempts them from costly social investments that Hinduism incurs through costly rituals and festivals, which are economic burdens on the poor. The conversion is a challenge to Hinduism.

There is a generation gap and a generational difference in perspectives and attitudes towards discrimination and resistance. The older respondents said they did not want to fight because they had to live close to other caste groups. They felt that time, laws, and the recent democracy movement would solve their problems. But, the younger generation felt that it was their right to live freely and demand rights. They showed eagerness in taking initiatives and in organizing, but they did not know the procedures for addressing the injustices. Respondents asserted that there were no institutional mechanisms to improve their condition and that, unless their material conditions of employment, health, housing, and education were addressed, fighting for their rights would be hard. Even though they dared to organize, they were afraid of losing jobs, being ridiculed, and being boycotted. The cost of being revolutionary outweighed the benefits that could show up only in future.

Gender implications: Findings suggest that women felt the oppression on a day-to-day basis, more than men, because of the gendered division of labor, the general gender ideologies, and the gender role expectations. This is not to undermine the discrimination Dalit men faced. Men also were victims of discrimination in their workplace and in the community, and they were excluded by the state. In the household level,

however, they had male privileges. Dalit households also were patriarchal in nature characterized by gender hierarchy and male domination, as is the patriarchal nature of the Nepali society in general (Bhattachan 2001; Acharya 2003). It is important to note that patriarchy is not monolithic and studies have found that lower caste women have more autonomy than higher caste women (Bennet 1983; Cameron 1998; Kapadia 1995; Watkins 1996). According to the findings of this research, Dalit women of all the three communities had to bear the burden of household work, child rearing, and working. They were heavily involved in reproductive labor, with help from spouses and other men in some cases. Women shared their experiences of discrimination from high caste women that pertained to water issues; men were exempt from such water-related tasks and thus enjoyed a distance from this form of everyday inter-caste interaction and did not have to deal with such discrimination.

Men's controlling conservative attitudes restricted women and greatly reduced the scope of female autonomy, particularly in areas where women were confined to the domestic sphere. An important difference among the above-mentioned three communities is that the caste identity of *Biswakarma* and *Pariyar* are tied to male occupations of metal working and music/ tailoring, whereas the occupational identity of *Deula* – sweeping – is gender neutral. This made a big difference in the status and autonomy of women within their household. In the *Deula* community, gender relations were less hierarchical, and gender ideologies relatively liberal, because of women's income-earning ability and therefore a better bargaining position within the household.

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Political participation and civic literacy in Bajung: an empirical study with correlation analysis

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A certain minimum level of political knowledge is considered necessary in democracy, and the political knowledge is considered to increase political literacy and competence, which may foster citizens' engagement in associations and their participation in politics. The following quotes show that scholars have differed on the relationship between political knowledge and civic engagement and political participation:

There is near universal agreement that more knowledgeable people participate at a much higher rate (Pop kin and Dimock 1999; 137).

We know that decline in political knowledge and voter turn out has coincided with a rise in educational level, a surprising fact since more educated persons tend not only to be more knowledgeable but to vote more (Nie, Junn, and Stehl-Barry 1996:34).

If we control for socioeconomic class, we know that more highly educated strata generally earn higher income, and the better-off vote (Dopplet and Shearer 1999:18).

We also find that education has less of an effect on participation than age: people vote more as they grow older. But age included at least two distinct elements: life experience and generation (Coulson 1999).

Given the above backdrop, I have tested the hypothesis that the political knowledge will be a significant factor to promote civic engagement and electoral and other forms of political participation of citizens. I use a bivariate correlation analysis, assuming political knowledge as an independent variable and civic engagement and political participation as dependent variables. The research finds that, compared to other citizens, politically knowledgeable citizens in the village of Bajung in Parbat district of Nepal engaged more in civic and political activities. This finding may provide decisive policy implications towards the enhancement of the level of political knowledge of the people to improve their political participation.

Democracy, exclusion and informal institutions in Nepal

Mahendra Lawoti**

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Informal institutions or conventions or codes of behaviour play significant role in constraining human behaviour that have important political consequences. Despite a lot of focus on institutionalism, informal institutions' role in political behaviours and outcomes has not been scrutinized thoroughly in political science. This paper investigates the contribution of informal institutions to the political exclusion of marginalized groups such as Dalit, indigenous nationalities, Madhesi, minority religious groups, and women in democratic Nepal (1990-2002). Scholars have pointed out the role of formal institutions like the unitary state and the first-past-the-post electoral method in the exclusion. But, formal institutions do not account for all the exclusion. Not a single Dalit was nominated to the cabinet during 1990-2002. This was not due to formal restriction, but because of informal norms that influence behaviour of political leaders and people. In this paper I will discuss the role of patriarchy on the exclusion of women, hill nationalism and the exclusion of Madhesi, and caste system and Bahunbad and the exclusion of indigenous nationalities and Dalit. I will also discuss how nepotism, and patronage, and clientelism helped to perpetuate political and social exclusion. I will look at the trend of political exclusion during the democratic years of 1990-2002 and will analyze the political consequences of social norms and attitudes of parliamentarians towards the marginalized groups' issues. Analyses of informal institution are important, because even if formal institutions are changed, exclusion may still continue because informal institutions may persist. The exclusionary informal institutions may have to be tackled to produce more inclusive polity.

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Conservation and Resource Management

Leadership for environmental education and conservation: a case of green space park at PN Campus, Pokhara

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Murari Suvedi^{***}**

The city of Pokhara in Nepal is facing a tremendous growth pressure, and the municipality has not been able to maintain open space for public use. There are no plans for the development of a nature park or green place where people could see, feel, and touch ornamental plants and flowers in nature. Further, Pokhara municipality lacks an open green space where people could walk, jog or spend leisure or free time.

Prithwi Narayan (PN) Campus is the largest campus of Tribhuvan University. Over 15,000 students coming from almost all hill districts of western Nepal study in this campus. It is situated at the bank of the Seti River in Pokhara. Its building and property is spread over a land area of 35 hectares. This is one of the largest plots of open-space land within Metropolitan Pokhara. The campus buildings occupy only a part of this area, and most of the land owned by the campus is left barren. Half of the campus land is protected by a compound wall and the other half has a natural boundary: the Seti River Gorge. In 2006, UNDP Global Environmental Facility funded a project to the Free Student Union of PN Campus to develop this open space as a “green space park” where university students could learn about environmental conservation and demonstrate an appropriate use of the open space to serve the leisure and recreational needs of growing urban population of Pokhara.

Urbanization is a relatively new phenomenon in Nepal. During the past 25 years, the country experienced a tremendous pressure of rural-urban migration. Many people moved to the cities in search of jobs, employment, and education. The conflict between the government force and the Maoists during the past decade further contributed to the rural-urban migration. As a result, there is an increasing pressure on land in urban areas, including Pokhara. As the cost of land is skyrocketing, people utilize every inch of land they own for building their homestead. Most

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public land has been used up for various uses such as school, health center, road, bus-park, or library. As a result, cities have lost most of their public land which could have been developed into open green spaces or public parks.

There is a wide spread public perception that college and university students are involved in political activities than in learning and constructive work of nation building. The leadership of PN Campus Free Student Union (FSU) feels that students should demonstrate a novel role in nation building and change the public opinion about their role. Thus, the FSU decided to work under the guidance of faculty members and campus administration to develop their campus land as an open green space park. They feel that they are committed to devote their time and energy in constructive work of conserving nature by promoting environmental education and serving leisure time and recreational needs of the public living around the college campus. The leadership of the FSU realized that it would be their great pride to develop the campus area into a beautiful green space in Pokhara by managing an open-space preservation and conservation area, by demonstrating environmental stewardship within campus compound through practices such as recycling, proper disposal of waste to keep the area free from paper, plastic or glass bottles.

Community-based integrated natural resource management: policy options and areas of intervention

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Introduction: Local level community based organizations for natural resource management have emerged as primary development institutions in Nepal. Community forest user groups (CFUGs) and water users associations (WUAs) have evolved into local level democratic institutions. Farmer Managed Irrigation System can be viewed as example of local communities proving their capacities in establishing a successful institution for collective benefits (Pradhan and Bandaragoda 1997). Similarly, after the legal provision to decentralize forest management in 1980s, CFUGs have evolved as strong and formal local level institutions that account not only for the protection of forests but also for various developmental activities in villages (Soussan *et al* 1995; Soussan 1998).

While the situation on ground for developmental prospects through community based institutions look optimistic, the overall national scenario imparts a bleak picture. The Millennium Development Goal Report 2006 probes the country's development performance and stresses that conflict remains a major problem, along with glaring issues of exclusion and discrimination. The report underscores the country's overall dramatic progress in cutting poverty from 42 percent in 1996 to 31 percent in 2004. This development, however, was not equitable, and the intensification of violence and the political instability have taken a heavy toll on the economy and the people (HMG Nepal/National Planning Commission and United Nations Development Programme, 2005). Conflict severely jeopardized livelihoods of agriculture-based population through destruction of forests, water systems, agricultural fields and other natural resources. The activities of CFUs were severely curtailed due to restrictions imposed on entry to forests by the government and due to security threats from the rebel groups. The population displaced by the conflict tended to encroach on forest areas, which undermined not only the

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productivity of the forests that were being regenerated but also disrupted the community social fabric that instrumented the process of regeneration efforts. This paper presents the results of an action research project conducted in Begnas Basin and finds that community actions, planning, organizing capacity and functionality are still possible in such conflict situations for undertaking new and corrective environmental-policy making tasks.

Begnas Basin and Natural Resource Management Institutions:

Begnas Basin is a micro-basin of the Seti River, one of the major tributaries of Gandaki River System, with an area of 3406 ha, which may be subdivided into 1838.5 ha of mountainous upper watershed and 1567.5 ha of downstream valley floor, which is virtually a wide flatland. Begnas Lake lies at the interface of the two subdivisions. In 1988, the reservoir area of the lake was increased from its original size of 266 ha to 300 ha by constructing a 540 m long and 6.9 m high earth fill dam. This basin is undergoing rapid land use changes due to new market pressures in the region and due to constructions of irrigation systems, urbanization, and delineation of community forest areas.

The upper watershed has considerable forest cover, while the valley floor has only a marginal forest cover and is dominated by cultivated land. The upper watershed communities are relatively more dependent on the forest for firewood, fodder, timber, leaf-litter, leaves, fruits, etc., than the valley floor people who have greater access to alternative energy. Forests in the past were badly degraded due to heavy pressure for the extraction of various forest products; however in the subsequent years, community forestry program contributed tremendously in regenerating and re-stocking the forests in the watershed. Several CFUGs have been managing forest areas in the watershed. The main sources of water for human activities in the Begnas Basin are rainfall, natural gullies or rivers, springs, and the Begnas Lake, and the main usages of water are domestic consumptions, irrigation, fisheries, and recreations (boating and tourism). There are irrigation users groups, boaters' association, fishers' group, mothers' groups and youth clubs. The upper watershed has a total of 15 farmer managed irrigation systems (FMIS) and the valley floor area has the Begnas Irrigation System (BIS) Water Users' Association (WUA).

Process of creating common platform for integrated natural resource management: The participatory action research in Begnas Basin involved a series of four steps for creating a common platform for integrated natural resource management:

A) Resource and livelihood assessment: The first step of this research revealed that forest and water resources had significant livelihood impacts at household level, especially for the poor, in the form of increased availability of irrigation water and increased availability of fodder, litter and timber, and that the participation of poorer households in the forest management was increasing. CFUGs were involved in community development through use of their funds for employment generation and community cohesion by investing in drinking water, irrigation, temples and other activities that benefited poor households.

The research also found that cash and subsistence and non-market incomes formed an essential component of livelihoods. For small landholders or poor farmers, cash incomes came from working as wage labourers on neighboring farms: through contract farming, share-cropping, or off-farm seasonal labour works. For poor farmers, off-farm activities were alternative means of livelihoods and played a major coping strategy during crises.

Looked at from food security perspective, more than one-quarter of the households had food sufficiency for more than nine months, of which about half of them had year round food sufficiency. To the contrast, less than one-quarter of the households had food sufficiency of less than three months; these households were mostly poor who either rented nearby farmlands of richer households or worked as farm labours to earn their living.

The benefit sharing was more equitable among the forest users compared to the water users, as the benefit share of a forest user member was tied to the contribution made by the member, whereas the benefit share among water users was tied to the ownership of land and the contribution to management was not given importance. The management and decision making process was more egalitarian among the forest users. A large gap, however still existed in the success of both institutions in gender equality. Both institutions also lacked a coordinated effort for the management of natural resources, as each one was sector focused. There existed intra and inter institutional conflict between them. Those natural resources that fell into more than one political administrative unit (VDC or DDC) created conflicts between and among the communities. It appeared that involvement of local elected institutions could help to prevent and resolve such conflicts. Irrigation users could benefit more from the experience of forest users in the areas of protection of user rights, resource mobilization and benefit sharing. Likewise, the forest users could benefit from the experiences of irrigation users in resource management with

external intervention and in interaction with outside agencies. Appropriate integration of the functions of the both types of institutions could provide a common platform for better natural resource management by bringing them together for collective planning and decision-making.

B) Stakeholders and network analysis: Discussion with key persons and community institution representatives and brainstorming among the external facilitator groups including the government officials formed the second step of the research, which helped the research team identify locally-relevant stakeholder groups for creating a platform for integrated natural resource management. Stakeholder analysis, combined with the situational analysis and livelihood assessment, was more like a scoping phase for the research team to build rapport with community institutions in the Basin and to raise awareness among them for integrated natural resource management.

C) Consensus building: In the above steps, feedbacks were continuously elicited from local communities, government bodies, and relevant local users groups. Although many stakeholders could not immediately capture the concept of integrated natural resources management or the need of the same, people did come together to develop a common understanding of their problems and potential solutions. In the third step of the research, the researchers teamed up with local community institutions and organized workshops at the site and also at the district and national levels to share the results of the research with local stakeholder groups. These participatory workshops resulted in substantive consensus building and understanding among stakeholder groups for the initiation of creation of a common integrated platform.

D) Participatory action planning: After the above consensus building step, the representatives of CFUGs, WUAs, and other community institutions gathered over an interactive discussion forum and discussed about the development of a collective action for integrated natural resource management at the local level. The whole discussion was facilitated with the help of a local resource person from a local non-governmental organization called 'SORUP.' This discussion forum constituted an ad hoc committee of 13 members to devise the action plan for Begnas Basin management, to register the committee with the appropriate government agency, and to base its activities on a written constitution. This initiative for the creation of a common platform appeared to be a good starting point for community-led resource management interventions and for developing local institutions for integrated natural resource management.

Process of adaptive learning mechanism: The above example put forth by the action research in Begnas Basin suggests that institutional organizing capacity for integrated natural resource management (INRM) is considerably high, even during a period of severe conflict, if adaptations of existing institutions are undertaken. Although the process of creating knowledge and understanding local resource management in Begnas Basin took a longer time than anticipated due to the heightened conflict situation that curtailed the research staff's mobility and due to the need of organizing a much wider consultative process at local level for ensuring that the concept was generally understood by the stakeholders, but this loss of time was compensated when the communities took ownership of the process and the community institutions became the vehicles for pushing the INRM concept forward among local stakeholders. This made the process faster and presented a convenient mode for the research team to initiate policy dialogue between the local and central level decision-makers.

External environment affects INRM: Management of natural resources is impacted heavily by external factors such as political, environmental, social, technological and economic, which lead to changes in livelihood options and INRM strategies. Begnas basin has been impacted by the decade-long armed conflict, mainly by the increased out-migration of youth, which led to labour shortage and a declining trend in livestock keeping and farming practices. Agriculture has been replaced by the international and domestic remittances as the primary livelihood activity of many poor households.

Community mobilization: Mobilization of communities for resource management has been a strong component in the villages of Begnas Basin. But, conflicts arising due to absence of fair benefit sharing mechanism from natural resource management seem to be increasing, which is creating a social divide in many cases. For example, the construction of Begnas dam and additional irrigation canals has led to conflicts between head and tail-end users in downstream villages. The tail-end users that received adequate irrigation water from the source, *Khudi Khola*, now believe that water diversion due to creation of additional irrigation canals in the headwaters has caused less water flow in their irrigation canals. Similarly, in the upstream villages, the conflict over irrigation water from, *Dudh khola*, has created a social divide between two adjacent communities.

Infrastructure development: The construction of Begnas dam seems to have had both positive and negative impacts in the area. While

downstream communities benefited from better availability of irrigation water, some upstream communities lost their low-lying fertile lands. Developmental infrastructures such as road, telephone, and mobile services are becoming increasingly accessible to the communities in Begnas Basin, but unchecked infrastructure growth can bring about livelihood diversification and challenges to the basin's integrity in near future.

Poverty reduction: The PRSP, a three-year interim plan, pursues short to medium term targets of promoting labour-intensive employment opportunities by improving access of poor to land, credit, infrastructure, and technology. On the other hand, the Millennium Development Goal (MDG) pursues long-term targets of comprehensive sectoral interventions with provisioning of goods, services, and infrastructure. In this context, the INRM process can be a good link between the two plans and can bring a synergic strategy to accelerate economic growth as targeted by PRSP, through sustainable mechanisms such as localized community based strategies as envisioned by MDG. The other ways INRM can contribute to poverty reduction is to increase food production through integrated natural resource management, which may reduce the proportion of people who suffer from hunger.

Policy implications: This action research has presented strong evidences that implementation of INRM is possible at watershed/basin level by engaging community institutions and that INRM can significantly contribute to the goal of attaining food security in many of Nepal's impoverished areas. The results of the research point towards the following policy implications.

Many community-based organizations are well institutionalised in Nepal's watershed and they can be mobilized for the implementation of INRM; the entry points could be community forest user groups and water user associations. At any time during the INRM process, the strength of local multi-sectoral planning capacity cannot be bypassed or undermined.

The rapidity with which a common platform for INRM could be created in the Begnas Basin suggests that a simple but consultative process can generate interest and capacity for INRM initiatives at local level. Such a process can also ensure that there is minimal impact from the external environment, especially the decelerating forces such as civil strife. However, the result of the process is not sufficient to predict the sustainability of the platforms. Much more efforts, consultations, resource

requirement and continuous management of policy dialogues would be the prerequisite for a complete cycle of the INRM process.

As regards to the arenas for further policy reform, it has to be considered that only multi-dimensional approach to poverty reduction would add value to the intervention options that are available at watershed/basin level. Multi-dimensional interventions like INRM are more likely to focus on wider issues of social exclusion and thus may result in a better understanding of the causes of poverty and therefore of possible solutions. In country like Nepal where social, economic, cultural, political and ecological causes of poverty are inextricably inter-linked, INRM implementation at basin level could help to make interventions that can deliver more equitable developmental results by addressing an articulated definition of poverty and not just the economic poverty.

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The human dimensions of land change in Lamjung district of Nepal^{§§§§}

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Introduction: Among land-change scientists, there is a growing recognition of the need for an integrative multilevel approach to study the relationships of agricultural ‘modification activities’ with global land-use and land-cover change (LUCC) (Moran 2005; Walsh et al. 2004). This new development comes as a crucial step to move beyond the primary area of change – the conversion of forests – to study the changes in agricultural areas, mainly the land-use strategies resulting in different agricultural intensification levels (Lambin et al. 2000; Laney 2004). There are, however, two challenges associated with this approach. One, these modification activities are subtle and dynamic to be detected with the existing remote sensing and ecological models (Liverman et al. 1998; Turner et al. 2003). Two, there is no sufficient knowledge on the extent to which agricultural land-use strategies contribute to LUCC and vice versa (Lambin et al. 2000). The need for understanding the human dimensions of LUCC is even greater for mountains. Mountains have one of the most understudied fragile ecosystems, and agricultural practices in mountains are relatively complex due to heavy dependence on forests, livestock, pastures and cultural-ecological adaptations (Netting 1981; Rhoades 1997). Rindfuss et al. (2004) argue that land change science should build upon a clear understanding of contextual history of human-environmental relationships, particularly by studying the way such relationships evolve, spatially and temporally, in a study area.

Lamjung as a case study: Similar to other Himalayan areas, Lamjung is believed to have witnessed rapid changes in population growth, disruption of customary rules, and penetration of market economy (Gurung 2004). The impacts of these factors are reported to include deforestation, declining pasture coverage, overgrazing, changing forest structures and species composition, and landslides (ICIMOD 1996). These

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reported impacts represent the dominant view on Nepal's deforestation discourse, which was dramatized as the 'Theory of Himalayan Environmental Degradation' (HED) between the years of 1970s and 1990s (see Ives and Messerli 1989; Blaikie and Brookfield 1987; Jodha 1995). It was perceived that massive deforestation in Nepal was mainly caused by an ever-increasing population of small landholders and their 'irrational' agricultural practices, causing a disastrous impact on the Himalayan environment and its long-term sustainability.

Over the years, many key assumptions of HED turned out to be more complicated, if not dubious (Ives and Messerli 1989; Thompson et al. 1986; Guthman 1997). Interestingly, the HED debate has resurfaced in recent years. It is being claimed that while the HED was over-generalized and to some extent exaggerated, it is anything but a 'myth,' since there is adequate evidence of environmental change (Ives 2005). The debate around HED points to the need of a more careful and contextualized analysis to match the highly diverse and dynamic mountain ecosystems (Forsyth 1998; Price and Thompson 1997). One of the major problems with the HED is that it focused too much on deforestation and ignored or over-generalized other important types of LUCC. For mountain communities with complex smallholding agriculture, the historical and contextual analyses of different types of LUCC are important to capture the real essence of environmental changes taking place in Nepal.

Land-cover change patterns: A change detection method based on Landsat series data of 1976, 1984, 1990, 1994, 1999 and 2003, along with the thematic accuracy assessment, has provided an in-depth analysis of the land-cover change trajectories. The trajectories illustrate the dynamic transitions between forest, agricultural land, and shrubland. They suggest that there is no linearity in land-cover change, as is generally assumed. One significant change is the loss of shrubland coverage to agriculture and forest over the years. Shrubland coverage decreased from 22.33 percent of total area in 1976 to 9.86 percent in 2003. The forest coverage steadily decreased from 44.2 percent in 1976 to 38.02 percent in 1990, but this decrease cannot be called a "massive deforestation," as is generally claimed in the HED debate. Forest coverage in fact increased in subsequent observation years to reach 42.22 percent in 2003. Agricultural land also expanded from 18.1 percent to 24.8 percent between 1976 and 2003.

Human dimensions: Most literature emphasize the demographic change, affluence (or poverty), and technological change as the driving forces of environmental change (Turner et al. 2003; Rindfus et al. 2004;

Moran 2005), and the HED literature were no exception. In this study, I explored and studied, along with demographic and social drivers, how the changes in institutional arrangements were linked to the transformation of smallholdings in Lamjung. The changes were categorized into (1) changing institutional arrangements with significant impact on landscapes and Gurung culture, in particular their labor network and social ties, (2) the growing influence of cash economy that followed with building of roads and with development of markets in Lamjung, (3) the outmigration and thus shortage of labor that resulted in changes in the pattern of use of agriculture and forest resources, and (4) the shifting of crop and food preferences as the result of downward movement of settlements and the adoption of new agricultural systems. Together, these changes mediated the effects of population pressure and poverty and influenced the land-use decisions of smallholders. To make the dynamics even more complicated, a relatively recent Maoist insurgency further impacted the social relations, labor availability, and the use of agricultural and forest resources — the most notable being the growing sense of insecurity that pushed the farmers to abandon distant farm lands and to focus on home gardens and prime paddy fields.

Institutional arrangements: The changes in institutional arrangements had profound effect on historically significant land-use strategies and Gurung culture. Effects include the disappearance of transhumance or migratory sheep herding practices, the abolition of *khoriya* (slash-and-burn) system, and the break-down of agriculture-forest-livestock interdependence. These traditional practices and institutions provided a social organization of much needed labor allocation for farming; but, the new rules of resource allocations brought about by the government, such as the abolition of customary rights of forest and pasture management and the initiation of community forestry programs (CFP) and other forest conservation programs abolished these traditional practices, as those were viewed as ‘backward’ and ‘destructive’ to the environment. In the changing context of smallholding, the focus of the new rules was to stop migratory herding practice, to ‘enclose’ livestock, and to encourage sedentary agriculture, so that they could be ‘governed’ (or levied taxes) properly. There is no doubt that forest coverage has increased due to outmigration during the early 1970s and due to the initiation of CFP and other forestry conservation initiatives; but, the new rules that have completely dislocated and replaced the traditional networks have been inadequate in providing the same level of safety cushion as was provided by traditional networks for years during the times of stresses and needs. Hence, smallholders had to seek alternatives and accept inferior options of

decreasing livestock number, keeping stall-feed animals and small ruminants, and engaging in agro-forestry in *baari* and *paakho*.

Household conditions and community contexts as the social drivers: Indeed, the impact of demographic factors – population pressure on forest resources and agricultural intensification and the outmigration – had been pervasive at the household and community level during the pre- and post-1970 periods; but, the recent trend has been the disintensification of agriculture, mainly because of lack of interest in agriculture among young population and a growing attraction toward non-farm jobs in the cities and overseas. Once non-farm employment started to draw labor away from agriculture, it created labor shortage and a drastic decline in transhumance, with its chain effect on declining manure availability, decreasing crop productivity, and increasing abandonment of distant cultivated land. This trend has resulted into a positive feedback to forests – a lower level of extraction, less imposition on forests, and even natural reforestation. This trend of abandoning cultivation of land has been exacerbated by the Maoist insurgency, a new phenomenon with a huge impact on agriculture land-use and farmers' livelihood.

The growth of cash economy has played an important role in monetizing goods and services, which further diminished the legitimacy of customary rules and authority structures. Only in the *Besi* areas there are some indications of increasing land-stress, because the competitions for 'prime lands' are raising levels of agricultural intensification. Those who can afford labor and other inputs have maximized the productivity of rice-based intensification.

The impact of changing economic and social relations is that smallholders are now faced with increasing demand for cash incomes and that their economic activities center mainly on markets and gateway towns. This is another reason for seeking non-farm employment, preferably wage earning in the cities and abroad to purchase commodities, to acquire production services, or to access basic services like education, health care and other contingencies. Besides breaking down or eroding customary rules and traditional support networks, the recent changes have pervasively influenced the choices and preferences of crops and land-use types. While millet, potato and corn still constitute the major diet source, rice is the most preferred staple. Similarly, the increasing accessibility has also influenced the mobility of people.

Conclusions: Changing institutional arrangements and growing influence of cash economy are the key driving forces of LUCC trajectories

in Lamjung, even though the impact of outmigration, under the population pressure and poverty, had been visible at the household and community levels in the recent decades. With the development of the Dumre-Besishahar road and other secondary roads inside the district, accessibility increased so fast that the effect of the cash economy is felt virtually in every aspect of smallholder households. Their synergistic effect resulted in the dynamic transitions or trade-off between forest, agricultural land, and shrubland. The land-cover changes are non-continuous in space, leading to complex landscape mosaics and overlapped patchworks. These results support the basic premise of this study that we must look beyond the popular notion that conceives land-cover change as simple and irreversible conversions from one cover type to another. The land-cover change patterns identified in Lamjung can be explained in terms of the expanding human modification activities (i.e., agricultural land-use strategies), which are mainly characterized by the shifting crop and food preferences, the changes in labor allocation, and the growing pressure of the cash economy. Complex and dynamic patterns of land-cover change cannot be fully addressed by remote sensing applications and ecological modeling alone; narrative details of historical facts and farmers' ecological knowledge of land-use are needed to fully understand the modification activities that give rise to a highly dispersed pattern of land-cover change.

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Political Structure and Democracy

Pursuing democracy: explaining political transitions in Nepal

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Nepal has been struggling to consolidate democracy for more than a half century. The 1950 Revolution, led by the Nepali Congress party, ousted the Rana oligarchy and bestowed sovereignty in the hands of Nepali citizens for the first time in the country's history. Political parties succeeded in bringing down the centuries-old feudal regime, but after a decade, they proved unable to manage and consolidate democracy. Failure to institute democratic practices and the pursuit of narrow party interests reduced the people's faith in democracy, creating an opportunity for a return to an autocratic monarchic (Panchayat) system in 1960. It took 30 years for the public to regain faith in the party system, culminating in the ouster of the Panchayat system in 1990. However, a consolidated democratic system proved to be elusive once again. What was unleashed, instead, was one of the most destructive forces in Nepali history. The Maoist peoples' war, launched by the Communist Party of Nepal (Marxist), has taken the lives of roughly 13,000 Nepalis. Meanwhile, the dysfunctional post-1990 political system paved the way for a comeback of autocracy in February 2005. This proved to be short-lived, though, as all of the major parties, including the Maoists, came together to force King Gyanendra out of power in April 2006. Several patterns can be observed from the modern political history of Nepal, but two deserve special attention.

First, political parties have been quite successful in bringing down autocratic regimes in Nepal, but only when all of the major parties work together for a common goal. A single party has never been able to topple an autocracy on its own. Mass participation was also critical in bringing down autocratic regimes in 1950, 1990, and 2006, and occurred only after the unison of the major political parties. What are the linkages between civil society and the party system that explain success in ousting autocratic regimes?

Second, although successful in toppling autocratic monarchies, political parties have yet failed to institutionalize democracy. What have

been the critical variables missing from past experiments with democracy in Nepal?

By offering some initial answers to these questions, this paper has three purposes. First, we draw upon the literature on social movements and protest cycles to explain the causes of mass participation in revolutionary movements. Second, we apply the insights of New Institutionalism to explain the failure of past experiments with democracy. Finally, we assess current prospects for democratic consolidation in Nepal.

Identification of natural resources at watershed level: an initial step in mainstreaming the federal structure of Nepal

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Federal restructuring of the nation state has become almost common agenda after April 2006 revolution in Nepal. Political parties, ethnic communities, and development planners have started to move towards federal direction in their understanding. Expectation revolution of people is ahead of other issues such as institutional framework and working processes. Identification of extractable natural resources meant for the livelihood of local people becomes the basic requirement to meet these expectations.

The three broad watershed level ecosystem-mapping, especially the forest ecosystem and agroecosystem – Koshi, Gandaki, and Karnali – reveal a basic inventory for the livelihood support of the people. Modernization of agriculture and the processing of non-timber forest products are viable ventures in Koshi, and the tourism and horticulture-related activities are viable in the Gandaki watershed. Likewise, Karnali watershed reveals the possibility of organic farming, horticulture, and rare medicinal plants for livelihood support. Niche specific biodiversity resources inventorization at village level will add the self-sufficiency, relieving the pressure on the central governments.

“Retainer” bureaucracy: an impediment to the process of democratic governance in Nepal

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The role of public bureaucracy is one of the most discussed characteristics of a state, especially if its political system is in a developing stage. In Nepal, up to 1990 the absolute power of monarchy was maintained through a traditional or pre-modern bureaucracy typically comprised of the caste and class elites. Merit was a superficial criterion. According to Riggs (1994), when non-merit appointees are able to retain their status as bureaucrats, they typically become a powerful political force. Compounded by their want of administrative qualifications, they start forming self protective networks in order to safeguard their special interests, especially their right to stay in office. Riggs calls these bureaucrats “retainers” and goes on to explain that after these retainers have held office for a long enough time, they become so well entrenched that they can successfully resist all efforts to accomplish significant reforms. Although Nepal has ushered in a modern system of government, the bureaucracy has hardly changed its pre-modern color. Today Nepal teeters dangerously towards political chaos. Corruption is rampant, unaccountability is rife, and there is a gaping socio-political inequality. The reason why the Nepalese case is so interesting is that, although the governing mechanism has a fairly modern legal rational base, the bureaucracy still holds its “traditional” hue. Is it theoretically possible to have a legal rational political system and a pre-modern bureaucracy at the same time? Does the traditionally inclined, un-evolving retainer bureaucracy act as an impediment to smooth functioning of a democratically elected, legal rational government? The paper seeks to answer these questions.

Prospects and challenges in the transformation of Nepal's security sector

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The intricacies of power and dysfunction amongst Nepal's "security" actors demonstrate the simultaneously urgent and daunting nature of security sector reform within the larger framework of the peace process. While the cantonment of the Maoists' army has received much attention for its symbolic gesture towards disarmament and its numerous logistical and administrative failures, the process itself has achieved very little towards truly consolidating peace for the Nepal's future. The country continues to experience a breakdown of security due to the ill-prepared nature of the National Police and Armed Police Force still under the command of the Nepal Army coupled with the persistent exactions of the Maoists militias outside the cantonment sites. Nevertheless, minimal progress has been made by the political parties in formulating broader strategies for revamping and strengthening the security sector to address post-conflict scenarios. This paper aims to analyze the various components of the security sector apparatus in Nepal indicating some of the dilemmas and sticking points which have prevented and will continue to create obstacles for security sector reform. An overview of the cantonment process will also be presented along with the characteristics of the arms management negotiations, which provide some insight and framework for eventual security sector reform debates. Finally, policy options will be presented in favor of an integral strategy for the democratic transformation of all mechanisms related to security in Nepal with a focus on the strengthening of the protection of human rights and conflict mediation on national and local levels.

Water and Forestry Resources

A community-based micro hydro: a promise for rural development in Nepal

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Effects of simple technologies at household level are mostly non-monetary and hard to quantify and therefore unrecorded. The study finds that micro hydro (MH) has a positive impact on income of rural households in Nepal and that it provides children electric light for their study. The study further reveals that the application of MH has contributed to reducing fuel wood consumption in rural households and that communities are more inclined to harvest fuel wood from government forest rather than community managed forests. Women and children have significantly less intensity to go for fuel wood collection after the installation of MH. The study makes policy recommendations to increase the number of MH installations in rural areas and to transfer ownership of forest resources management from government to local communities.

Coping with Unreliable Water Supplies and Willingness to Pay for Improved Water Supplies in Kathmandu, Nepal

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Intermittent, insufficient and unreliable supply of drinking water is a major problem in developing countries. Nepal is no exception to this. Water is not supplied round the clock, pressure is insufficient to pump it to the tap, and whatever is the amount of water made available to the public, it is not directly potable. To combat these problems, households engage in a variety of coping behaviors, such as collecting and storing water in underground tanks, pumping stored water to roof-tanks, treating tap water before drinking, and purchasing water from water tankers at the time of shortages. This paper estimates both the households' costs of coping with the problem of unreliable public water supplies and their willingness to pay (WTP) for improved water supplies in Kathmandu valley. Coping costs are calculated from respondents' answers on averting behavior, market price and value of time. The willingness to pay for improved water supply is calculated using stated preference method, which is then compared with the value obtained from revealed preference method. This paper also discusses the effects of a household's socio-economic characteristics on its coping costs and WTP for improved water supply.

Our results show that the demand for water and WTP are significantly high in Kathmandu. Coping costs are statistically correlated with water tariffs and many household characteristics. It may be inferred from the results that consumers are eager to improve the quality of water service and that water utility levies can be increased to improve water service in Kathmandu. The two methods – coping costs and WTP – offer similar but statistically different results.

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**Prioritizing and estimating hydropower project construction risks:
a case study of Nyadi Hydropower Project**

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Background: A World Bank study of 80 hydropower projects indicated that final costs exceeded budget in 76 projects. Final costs on half of them were at least 25 percent higher. Numerous other evidences also reveal that budget set aside for project execution in most cases is unrealistic and insufficient to contain the risk of unforeseen cost increases. There are many instances of projects that have been abandoned midway of the construction phase as a result of large unanticipated risks, thereby making the projects no more profitable. Unless investors are assured of an attractive rate of return, finding a source of funding for projects becomes a daunting task. Investment decisions have to be made when there is little information about the scope of the project. New projects have to depend on historical evidences and experiences gained from previous projects of similar nature. However, such projects lack historical data and even if such data were available, they cannot be applied owing to the very unique nature of every project and its location. In such circumstances, subjective judgments of experts based on their experience are very useful inputs. In risk analysis, determining a numerical value to such judgments without distorting the subjective judgments is very essential. An approach is taken in this study to prioritize the existing risks and assign a cost value to all the major risks through a systematic risk analysis. The proposed methodology is demonstrated through its application to a case study of Nyadi Hydropower Project (NHP) in Nepal. NHP is a run-of-the-river (ROR) type 20 MW project located in Lamjung district. The feasibility study carried out in year 2000 projected its construction cost to be 32.25 million USD. It was expected to be complete in five years from the start of construction. The major structures of the project include a concrete weir across Nyadi River, an intake, and an underground de-silting basin. The water is taken to the powerhouse via approximately 3.7 km tunnel and 564 m underground steel penstock pipe. The powerhouse is located underground and houses three 6.7 MW turbine and generator sets. The construction of a 3.97 km long road to connect the powerhouse site to the nearest motorable road is considered essential for the project.

Methodology: All risk management literatures invariably describe risk management as a process comprising essentially of risk identification,

risk assessment, and risk response. The same approach has been taken in this study with an aim of keeping the method as simple and practicable as possible, yet exhaustive enough to determine the cost of such risks in the most accurate manner. To be practicable, subjective judgments are required as the inputs for the risk assessment model. The subjective probabilities obtained as the output from the risk assessment models are then used for estimating the cost variations associated with such risks. The summation of all these cost variations due to different risk factors on the project gives the contingency amount to be allocated to the project. The methodology consists of the following major steps:

Risk Identification: A check list of generic risks was prepared for hydropower projects in general from the literature review. Risks were grouped into four main risk factors: quantity-related risk, unit-cost risk, schedule-related risk and global risk. The next stage of the risk identification process was to interview key persons of the project. The participants of the interview were engineers and geologists with sufficient managerial experience in hydropower projects. These people were from the consultant as well as from the contractor's organization. They were given the risk check list and were asked to review the list. They were encouraged to add any other risks based on their experience and also mention any specific risks pertaining to the projects they were involved with. Finally, all the risk sources were categorized into one of the above mentioned risk factors and any risk sources that were not perceived to have considerable threat to the project were discarded from the checklist.

Risk Assessment: Data collection for the risk assessment involved acquiring cost estimate or Bill of Quantities (BOQ) of the project and eliciting expert opinions through questionnaire survey. The BOQ, which contains line items or activities under each work package, was reviewed. Similar activities within the work package were combined. The aim was to produce a more concise base-cost estimate that contained fewer line items for which the risk assessment had to be performed. Questionnaires were prepared based on the revised BOQ, asking the project personnel to rate the importance and likelihood of risk factors and sub-factors for each work package individually. Additionally, the project personnel were asked to provide a range for all line item costs under the influence of each risk factor identified.

Risk Response: After all the relevant data were collected, analysis of the subjective data was performed to compute the relative weights of risk factors, sub-factors and work packages. A variant of the pairwise comparison technique was used to derive the relative importance of the

factors and sub-factors. This is one form of Analytical Hierarchy Process technique which uses direct rating on the basis of predefined numerical ratio scale. Once the relative importance of risk factors is obtained for each work package, this is combined with the cost ranges of line items to develop an activity-risk factor matrix for all the work packages. Using Monte Carlo Simulation technique to combine all the variations in cost due to the effect of these risk factors on the activity cost, risk-adjusted final cost was determined. The contingency for the project was then computed as the additional cost over the base cost of the project.

Results: Some of the major risk factors identified in NHP are: i) Over-break in tunnel excavation, ii) Unknown subsurface conditions of geology/ ground contours, iii) Civil disorder/ terrorism, iv) Equipment failure, and v) Unavailability of resources/equipment on time. Similarly, work packages involving tunneling works possessed higher relative risks. These included construction of headrace tunnel, tailrace tunnel, penstock tunnel and underground powerhouse. This is because of the fact that tunneling projects are sensitive to even slight disturbances. Tunneling process is a serial type of production system. Therefore, in such a system the possibility for changing the workplace location is limited, except when there are many tunnel adits.

Contingency percentage determined from the risk analysis was 20.20 percent. However, contingency allocated for the project for the civil works at the time of preparation of detailed feasibility study report was only 13.59 percent. Final cost overrun of the project is not available yet as the construction of the project has not started. Although the projected contingency from the risk analysis is higher by about seven percent than that of the contingency allocated at the time of preparation of the detailed feasibility study report, such increase in cost is normal. It should be noted here that the contingency allocated for NHP during the detailed feasibility study is an arbitrary one followed on the basis of normal trend for other construction projects. But, this value could be as high as that proposed in this study if the specific construction obstacles of NHP are considered.

The convention on international trade in endangered species: issues with implementation and compliance in Nepal

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The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has proven particularly difficult to implement due to the complex legal requirements that it places on parties. As with many other nations, Nepal has lacked national implementing legislation which has greatly hindered compliance and effectiveness of CITES in the country and, indirectly, in the region. Here we explore several case studies of actual and potential CITES violations in Nepal that have come to light in the past decade, especially as a result of the Maoist insurgency. We also review draft legislation (not yet passed) that is designed to implement the convention and to close gaps in enforcement. We predict that some gaps will remain regarding implementation and compliance with CITES. We make several recommendation to close those gaps via rule-making procedures during the formulation of Regulations and via the actions of the CITES Coordination Council, a provision in the draft Act that is designed to improve cross-sectoral cooperation.

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Conflict and Related Issues

An assessment of the causes of conflict in Nepal

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With the end of Cold War, the nature and consequences of conflict changed significantly in the world. Today there is conflict more between the peoples of a country than between countries. Thus, the reasons of conflict are changing with the lapse of time. As the number of deaths owing to conflict has been accelerating in the recent decades, it is of utmost importance to look into its causes. Against this backdrop the present study makes a modest attempt to find out the causes and correlates of conflict and its intensity using cross-sectional data of 75 districts of Nepal.

The Maoist conflict in Nepal started in 1996 from two districts of Mid-Western Development Region and spread all over the country within a decade. All 75 districts except two, Manang and Mustang, reported casualties as high as more than 13,000, and more than 200,000 displaced persons. After more than a decade, the conflict came to a halt with the signing of the Comprehensive Peace Accord on 21 November 2006. With this event, people's expectation has increased, which needs to be properly managed by the Government of Nepal; otherwise, the possibility of conflict relapse cannot be ruled out. Previous experiences of post-conflict countries reveal that there is 39 percent risk of conflict relapse in the first five years and an additional 32 percent risk in the next five years of post-conflict situation. This signifies the importance of looking into the dissatisfaction and causes of conflict while devising conflict prevention strategies.

The cost of conflict varied widely across regions and areas of Nepal. The direct cost in terms of number of killings was highest in the Mid-Western Development Region and lowest in the Eastern Development Region. The conflict was intensified with the mobilization of army in 2001, which led to the highest number of casualties in 2002 and a higher number of killings by that state, compared to those by the Maoist rebels. Local political workers were at the top of the list of people killed, followed by agricultural laborers, implying that the rural population and poor were more vulnerable to conflict risk.

There was a wide variation in the number of people killed across the districts, even among the districts of the Mid-Western Development Region, ranging from 30 in Humla to 904 in Dang, which implies that the level and intensity of conflict depended on a multitude of factors. On the whole, the average number of persons killed in a district of Nepal was 178. Excluding the Mid-Western Development Region, all other regions had their district averages less than the national average. This implies that the Mid-West was the worst affected region. In fact, three of the 75 districts – Rukum, Rolpa, and Dang of the Mid-West development region – share nearly 15 percent of the total casualties.

For the empirical assessment of conflict in this paper, conflict in a district was measured in two ways: the level of insecurity (high or low) and the number of people killed. Two linear regression models were estimated to look into the causes of conflict. In one model, a dummy variable represented the level of insecurity; the high level of insecurity was considered the presence of insecurity, whereas the low level of insecurity was considered the absence of conflict. The data on the level of insecurity was obtained from the classification of districts by the UN system of Nepal. In another regression model, the number of killed persons was the dependent variable, and altogether 21 independent variables were included for estimating their effect on the conflict.

The estimated results of the first regression model (level of insecurity as dummy dependent variable) suggested that economic, social and natural factors such as poverty incidence, income, food security, proportion of female in non-agricultural operation, composite development index, elevation, and caste polarization influenced the level of insecurity in a district. In particular, poverty incidence and low caloric intake were positively associated with conflict, whereas increase in income, share of female in non-agricultural occupation, level of overall development, proportion of Janjati population and elevation were found to dampen the likelihood of insecurity.

The second model estimated with the number of people killed in a district as the dependent variable suggested a different set of variables to affect the intensity of conflict. Literacy rate and proportion of Janjati population were negatively related with the number of killings, whereas an increase in food insecurity, share of female in non-agricultural occupation and the proportion of forest area aggravated the conflict. It is critical to note that this model found a positive association between the proportion of female in non-agricultural operation and the intensity of conflict, whereas the other model suggested a negative association between the two. This

contradictory set of findings needs further investigation. However, there is no contradiction between the two models in the finding that the intensity of conflict was higher in a district with a larger proportion of forest.

The results of the above two models are generally comparable with those of previous studies. Yet, this study has value addition in two aspects. The first is the finding that conflict is not only due to economic reasons but also because of social and ethnic reasons. This is evident from a negative relationship of level of insecurity with the proportion of Janajati population. In a district where the proportion of Janajati population was higher, the level of insecurity was lower. This finding is in conformity with the finding of few other studies including that of Gurung (2004), who found an inverse relation between the proportion of Janjati population and number of insurgency-related deaths. In particular, Gurung found that the Western Hill districts with the highest number of insurgency-related deaths had the second lowest proportion of Janjati population, while the Central Mountain districts, with the lowest insurgency-related deaths, had the highest proportion of Janjatis. However, such a clear negative relation was not evident in case of Dalit population of Nepal.

The second important value addition of this study is that conflict is a result of mismatch between political empowerment and economic empowerment. With the growing political empowerment, people were not becoming more economically empowered, and thus there was conflict. This finding has a significant policy implication for improving service delivery and for providing employment and income earning opportunities in districts. The overall conclusion of the present study is that there is a need for recovery and reconstruction in all the three dimensions – political, economic and social, and that an over-emphasis on any one dimension can jeopardize the post-conflict situation and obstruct the way to a lasting peace. The overall policy implications of the findings are that increasing employment and income opportunities, improving food security, and decreasing caste polarization, together with bringing political progression as per the Comprehensive Peace Accord could prevent conflict relapse in Nepal. If the state fails to meet the rising expectations of the people, it would be difficult to bring a long lasting peace in the country. This vindicates the strategies taken by the Government of Nepal in the formulation of three-year interim plan, which focuses on creation of employment with the lens of inclusion and reintegration through massive investment in rehabilitation and reconstruction, and successive progression of the state.

Inequality, polarization and violent conflict: the Maoist insurgency in Nepal

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Is inequality associated with conflict? There is little doubt about the importance of this question and the implications it has for governance and government. Conflict is costly for society. In its cheapest form it alters the social and productive fabric of society that has been built over generations, and in its more expensive form it can destroy them beyond repair. If ameliorating inequality can forestall conflict, the role of government as an agency that can capably redistribute wealth and income is critical. To be sure, inequality need not be the only source of conflict. Weak rule of law, biased or ineffective enforcement of property rights and dearth of social capital are examples of poor or missing institutions that may aggravate conflict. Their absence can trigger conflict independently of inequality. When interacted with weak institutions, it is a trigger.

We empirically examine this association between inequality and conflict. The setting is the Maoist rebellion in Nepal that has claimed thousands of lives since it began in 1996. The regional variations across villages in Nepal afford a rich experiment, without having to use cross-country data, for exploring the nature of association between conflict and inequality. When using cross-country data, the heterogeneity in cross-cultural norms, institutions, and unique historical settings can produce different reference points or anchors, and a lack of common anchor within the sample can bias the perception of the threat and hence the measurement of such variables. Cultural and historical differences may influence the perception of acceptable levels of violence in cross-country settings. Our micro level sub-national data avoids such cross-cultural heterogeneity and differential perceptions.

This research departs from previous empirical studies in three respects. First, the empirical specification is motivated by rational choice theory. The theory clearly brings out the logic for why, when society becomes unequal, agents may resort to forcible redistribution by unlawful means. In the absence of effective institutions these means can and do turn violent. The theory is used to produce testable hypotheses about the relationship between inequality and conflict. The issue variables in our

model thus have a strong link with underlying theory. Second, our data are sub-national, at the village level, within Nepal. Thus, they suffer less from heterogeneity problem than do cross-country data or even the district level data that have been used frequently in the literature. Empirically, we model killings by Maoists using a hierarchical (count-data) model in order to account for the remaining heterogeneity in the data. Third and perhaps most important, we go beyond the popular Gini index to measure inequality. We employ measures of economic polarization as ethnic polarization does not seem to be a good predictor of Maoist's Peoples War in Nepal.

Using negative binomial count data models with test and correction for endogeneity, results from multi-level analysis are robust and highly significant irrespective of the measure of inequality (*GINI* or *POLARIZATION*) used for the analysis, indicating that distributional outcomes do matter significantly when it comes to violent conflict. However, inequality or polarization is not the only source of violent conflict. As discussed in this paper, poor institutions such as weak rule of law, weak enforcement of property rights, and dearth of social capital can help to propagate the conflict. Our empirical results find support to the hypothesis that social capital generates valuable spillover effects in the form of shared value, norms, self-governance and understandings among the villagers that encourages the community members to cooperate among themselves that helps deterring the violent conflict.

Another important finding of our research is that transfer of resources from the central to the local governments can play vital role in lowering the violence as it may provide a sense of hope, connectedness and opportunity to the local people. In the backdrop of widespread poverty in the villages of Nepal, we also find a significant positive association between level of poverty and the intensity of violence. The policy implications of these findings are that government policies towards balancing the unintended inequality combined with grants and targeted transfers for reducing poverty can potentially solve much of the problems for which the Maoists are blamed. Such policies can deliver expected outcomes provided that the transferred funds find their way to the intended beneficiaries. International agencies, local institutions, Non-Governmental Organizations (NGOs), and civil society can play meaningful roles by developing a productive partnership to achieve such objectives in the light of widespread perceptions that corruption is rampant in the government offices and such corruption also engenders poverty. Motivating such partnership towards promoting social networks in the local communities

would provide an added bonus for creating lasting peace as we find that social capital helps to inhibit the violence by promoting understandings among the community members.

Recruiting rebels: indoctrination and political education in Nepal

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In 1996 the Communist Party of Nepal-Maoist (CPN-M) launched a guerilla-based armed rebellion against the government of Nepal. Grounded in long-standing grievances regarding economic, social, and geographical marginalization, the CPN-M garnered widespread support throughout the rural areas of the country. The result was an exponential growth of the organization and a resultant escalation of armed violence. This paper explores how the CPN-M was able to attract and mobilize potential rebel and militia supporters. It argues that while structural variables like social and economic inequalities provided an important context in which the Maoists operated, the mechanism for the CPN-M's successful recruitment strategy lay in its focus on indoctrination and political education. The sectors of society to whom the Maoists appealed were largely ignored by traditional political parties, making them especially receptive to Maoist political discourse. By linking villagers' dissatisfaction with their daily lives to larger problems in the political system, the CPN-M was able to exploit these grievances for the purposes of rebel recruitment. The importance of indoctrination was central to the CPN-M strategy and superseded even military training and arms acquisition as the focus for its efforts in expanding the organization. The case of Nepal hence highlights a hitherto overlooked aspect of rebel mobilization: the importance of local political education and indoctrination.

Dissonance in heritage: the case of Lumbini, Nepal

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Heritage can bring a number of benefits to different stakeholders, ranging from individual spiritual values to economic prosperity to the nation through tourism. However, if there are differences in interests and expectations among stakeholders, that may create conflict in heritage and consequently poses a threat to its preservation and management. The purpose of this paper is to discuss heritage issues and conflicts with a case study of Lumbini, the birth place of Lord Buddha. Lumbini has recently been a national icon for tourism promotion and has been able to attract about 40,000 pilgrims and tourists (not including Indians and Nepalis) every year, mostly from Asian countries. From both heritage and tourism point of views, Lumbini is different from many heritage sites. Lumbini is surrounded by non-Buddhist population, which is a major impediment for preservation and management of the heritage. This situation complicates “community involvement,” one of the principles of sustainable development. As a result government and international agencies have been trying to manage the site without much local involvement.

The paper uses heritage dissonance theory to discuss the issues and conflicts of heritage preservation and management of Lumbini. The paper draws upon the author’s five visits to Lumbini since 1983, including semi-structured interviews with the people associated with various organizations responsible for managing Lumbini including the Lumbini Development Trust (LDT), Ministry of Culture, Tourism and Civil Aviation, Nepal Tourism Board, and Tourism for Rural Poverty Alleviation Program (TRPAP), local villagers, local businesses, tourist guides, and tourists. This paper has also used archive documents and unpublished tourism data collected by the LDT.

This paper argues that if the people living around religious heritage sites do not have the same faith, the site is controlled by the government and international agencies. Within the two dominant religions around the site, Hindus feel somewhat connected with the site and are more interested in preserving the heritage, whereas most of the Muslims are indifferent. Both groups see the heritage as an economic resource than spiritual value.

National and international agencies have conflicting goals. Nepal, until recently a Hindu Kingdom, used Lumbini as a political icon to gain international support. After the inclusion of Lumbini in the World Heritage Site list, UNESCO is pointing fingers to the master plan which has a greater influence of Japanese Buddhist Society. The government of

Nepal, on the other hand, is desperate for financial assistance to implement the master plan to develop the area.

Despite the importance of spiritual and academic interest of Lumbini and its great potential for attracting international visitors, the area has not been able to draw tourists. Although the number of tourists and pilgrims has a growing trend, the government and locals have been unable to get enough economic benefits. The diversification of tourism products by the TRPAP without much in-sight of tourism may not be appropriate; rather, it is recommended to increase the length of stay of tourists through the development and promotion of other Buddhist sites around the area including Kapilvastu and Devdaha.

Political predictions in Nepal

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“The Madhesi movement is the beginning of the end of Nepal. It is not because the Madhesis want to break the country into pieces but mainly because our leadership is too insensitive and incapable of keeping a diverse people united.” (*The Himalayan Times*, 1 Feb. 2007)

It is a prediction open to question. It is risky for the country and equally for the credibility of the man who made the prediction. However it was made by the man who had made a similar prophecy in 2004 (*The Himalayan Times* 13 Sept. 2004) that there would be an uprising of the Madhesis, which came out to be true in 2007.

Is it safe to make political predictions in a country like Nepal? It is not; but some people do it and come out right. What makes them guess correctly is something different. Nonetheless they cannot be dismissed in their claims with evidences.

There were a series of open predictions made regarding King Gyanendra after he was enthroned. In that sense, there was no element of surprise in his rise and fall in power. It was said he would take over before he took over. It was said he would not behave as a constitutional monarch, and he did not. It was said he would imprison the leaders before he did so. So on and on...

Similarly, many things were said about the Maoists, their forthcoming tactics, their movements in the offing, and their potential actions. They too lent credence to those prophecies coming out true fully or partly.

There is no denying of the important role India plays in the political development of Nepal. Things said over the last few years about its actions and reactions in Nepal have too come out correct. India is a big factor in the decision making in Nepal; the signs and symptoms of its master plan have clearly been stated and the events taking place accordingly.

In this context, things that might appear mysterious or inexplicable in the Nepalese developments in general have mostly been foretold and, therefore, look logical, though painful.

Poverty, Development and Finance

Economic inequality in the ‘democratic’ Nepal: dimensions and implications

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Published reports have indicated that economic inequality greatly increased in Nepal during the era of parliamentary democracy that began in 1990. This paper revisits these inequality estimates by utilizing the same original, Nepal Living Standard Survey data collected in 1996 and 2004, on which the reported estimates are based. But this paper goes beyond the specific resources and methodologies used in the reported, official estimates toward providing a more comprehensive picture of economic inequality. Simply looking at household income and especially consumption does not provide adequate basis to draw a specific patterns of inequality for the country, it is also important to incorporate inequality of household wealth in the equation. In addition to providing a comprehensive picture of economic inequality with its potential sources, this paper examines the demographic and spatial determinants changing or un-changing the horizontal and vertical forms of inequality. Appropriate social, political, and policy implications are also drawn.

The use of a consistent methodology to aggregate different forms of household consumption, income, and wealth in a more inclusive manner capturing the actual access of households to different kinds of resources indicates that the degree of economic inequality was much higher in Nepal in both years 1996 and 2004 than the one reported in the official statistics. While the eight years covered in the analysis saw marginal increase in inequality of household consumption and income, together with slight decrease in inequality of household wealth, this does not necessarily provide a very contrasting picture. The official estimates tend to significantly attenuate the level of inequality for both survey years. But this underreporting appears to have been much more pronounced for 1996, a sign that inequality estimates may be more comparable between the two survey years. House rental, employment, business, and remittance appear to be the major sources of inequality in income, where as the ownership of real estate and businesses appear to be the leading sources of wealth inequality, even though the latter form of inequality slightly declined during the eight years of political turmoil in the country.

The horizontal form of inequality, already quite large in the 1990s, had increased considerably by 2004, especially along the caste/ethnic and spatial lines. While the middle and lower caste Hindus and Muslims did not change their economic positions compared to that of the high caste Hindus, the Newars considerably improved their position and the Janajatis considerably worsened their position. Quite surprising was the sharply deteriorating economic position of the Janajatis, who were reasonably well-positioned in 1996, despite contrary arguments by some commentators of ethnic politics. There was also a very large and widening divide in access to economic resources along rural/urban, regional, and ecological distinctions. This together with the picture of rising vertical inequality especially within some of the groups with changing inequality dynamics suggests that the society of Nepal and its different groups have grown increasingly unequal.

We do not clearly know whether this episode of the inequality trajectory connects the dots to create a broader view of inequality in Nepal. But these changing economic inequality dynamics are helpful to explain some of the recent turns of political events. First, the Maoists appear to have been able to capitalize on these unintended consequences of the economic liberalization policies of the governments formed under the rubric of parliamentary democracy. Second, the more recent issues of ethnic factionalism and ethno-politics may have been a byproduct of the parliamentary democracy of the 1990s, especially if the Janajatis were truly better off than most other ethnic groups and especially the high caste Hindus in the early (or prior to) 1990s as the data here suggest. Finally, part of the mass frustration fueling these and many other problems in Nepal may have been a complete lack of redistribution in the form of developmental, infrastructural, or social policies among the different groups especially along spatial lines. After all, as many believe inequality can fuel social unrest, further inciting political violence, which is what appears to be happening in Nepal today.

Poverty reduction in Nepal: a clinical economics approach

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Introduction: According to Sachs (2005), development economics resembles modern medicine and if development economics is to be effective, economists need to be trained to think like clinicians and adopt the thoroughness, understanding and realism of modern medicine. A clinical economics approach to addressing the challenge of extreme poverty and the prospects of economic growth in developing countries involves a thorough examination of the problem followed by an appropriate treatment routine. Sachs (2005) suggests that in order to examine an impoverished country, the clinical economist should go through a diagnostic checklist that includes the following: the extent of extreme poverty, economic policy framework, fiscal framework, physical geography and human ecology, patterns of governance, cultural barriers to economic development, and geopolitics. Following Sachs (2005), this paper adopts a clinical economics approach and attempts to undertake a systematic “differential diagnosis” of the nature and scope of poverty in Nepal. Subsequently, we will examine the causes of poverty and the determinants of household per capita income in Nepal. Ultimately, we hope to propose programs and institutions to address the critical barriers to poverty reduction that are identified through the differential diagnosis. As Sachs suggests, these strategies will be much more effective if the right questions are asked from the start. Given the current tumultuous environment in Nepal, it is difficult to be sanguine about the prospects for improving living standards. However, regardless of what political situation emerges in the near future, political stability will not endure without sustained improvement in living standards.

The poverty dimension: In terms of per capita income, Nepal is the poorest country in South Asia and among the poorest in the world. However, between 1995/96 and 2003/04, poverty rates declined considerably across the country — the headcount poverty rate declined from 42 percent to 31 percent. Urban poverty declined from 22 percent to 10 percent, and rural poverty declined from 43 percent to 35 percent. There has been an improvement in the standard of living as well. Agricultural wages have increased, as has the ownership of durable goods and consumption of luxury goods. The proportion of households reporting

inadequate food consumption declined, and self-assessments of adequacy of housing, clothing, health care and children's schooling improved. Nepal has also improved some of its human development indicators. Infant and child mortality rates declined although there are large regional variations. Nepal's achievements are particularly impressive given the difficult and conflict-ridden environment. While the reduction in poverty has been quite remarkable, overall inequality actually widened during the period — the Gini coefficient increased from 0.34 to 0.41.

A number of explanations have been put forth to explain Nepal's rather impressive achievements in reducing poverty. First, a significant increase in remittances helped to increase consumption. The proportion of households receiving remittances increased from 24 percent in 1995/96 to 32 percent in 2003/04. It is estimated that more than one million Nepalese (roughly 1 out of every 11 youths) worked abroad, primarily in India, the Gulf and East Asian countries. Moreover, the average real remittance amount has risen by more than 80 percent. Second, as a result of improving productivity and a tightening labor market, agricultural wages increased by about 25 percent in real terms over the past decade. Increased demand, together with improved connectivity and better access to markets, has stimulated entrepreneurial activities and allowed for non-agricultural wages and incomes to rise. Non-agricultural wages rose by 20 percent during the period and skilled wages doubled. Third, the growth in urbanization from 7 percent to 15 percent during the past ten years has moved workers from low productivity jobs in rural areas to higher productivity jobs in urban areas. Finally, the decline in fertility which began in the 1980s has reduced household size and the dependency ratio.

Although Nepal has made significant gains, poverty is still pervasive and multifaceted, and it remains Nepal's most pressing problem. Poverty in Nepal is by and large a rural occurrence — about 90 percent of Nepal's poor inhabit rural areas. In 52 districts, the average proportion of people living below the poverty line is 35 percent, four percent more than the national average. In more than 25 remote districts in the mid-western and far-western hills and mountain regions, poverty afflicts 45-60 percent of the population. While overall poverty declined by 56 percent in urban areas during the said period, rural poverty declined by only 20 percent, serving to underscore the pattern and pace of economic growth in rural and urban areas and the resultant disparity in economic opportunities. Rural poverty has suffered primarily due to stagnation in the growth of agriculture, the main source of income and employment, as well as the lack of access to basic social and economic infrastructure.

Human development: It is also possible to measure poverty more broadly in terms of access to basic social and economic infrastructure which help to improve quality of life at different levels of income. Access to education is probably the most important, because it enables one to climb out of poverty over time. Access to healthcare, safe drinking water and sanitation also contributes to improved living standards and life expectancy. Over the past two decades, Nepal has made significant progress in terms of such qualitative indicators. However, human development indicators are still low, and as with income poverty, wide variations exist within the country. For instance, the Human Development Index (HDI) is much higher in urban areas than in rural areas due to better access to services, resources and opportunities in urban areas. For similar reasons, the HDI is much higher in the hills than in the mountain areas. In addition, many large cities and towns including Kathmandu Valley are located in the hills. The HDI is higher in the central, eastern and western regions due to the concentration of trading centers and productive economic activities.

Gender-based disparities: Nepal has made significant progress with regard to female life expectancy, female literacy, and primary and secondary school completion rates. However, large gender gaps remain. For instance, life expectancy and average years of schooling are much lower for females compared to males. It is also apparent from the data that female-headed households tend to be poorer and spend less on consumption than their male-headed counterparts. While about 13 percent of all households nationally are headed by females, that proportion for households in 13 mountain and remote districts is more than 20 percent, helping to explain the higher poverty incidence in the mountain region. Moreover, women constitute only about a third of the paid labor force and their wages for the same type of work are lower than those for men. For example, women agricultural workers earn about 20 percent less than men. As a general rule, a woman's share in household assets and resources is more uncertain than that of men. Traditionally, it is men who inherit family land and control the allocation of household income and assets. And women's legal right to inherit parental property is still limited. Women in Nepal are also largely without influence in the public domain. Women make up only about 8 percent of the civil service and 4 percent of those holding officer level positions. Women are also under-represented in national and local governments.

Ethnicity and caste-based differences: Several waves of immigration over the past 2000 years in Nepal have resulted in a pluralistic society with diverse ethnic, caste, linguistic and religious communities. There are about 60 recorded castes and ethnic groups (mostly Indo-Aryan and Mongol) and 70 languages (mostly Indo-Aryan and Tibeto-Burman). There are many indigenous ethnic (Janjatis) and caste (Dalits) groups who have been historically disadvantaged. Such groups continue to lag behind in terms of income and assets, educational achievement, human development indicators, and representation in the power structure. Although one does not observe a simple correlation between rank in the traditional caste system and poverty level, there are broad linkages. The poverty level among the lower social castes is generally much higher (ranging from 45 to 70 percent) than that of groups higher in the social ladder. The HDI for Janajatis and Dalits fall below the national average and well below that for Newars, Brahmins and Chhetris. Notwithstanding some government efforts after 1991, there has not been much success in improving the educational, economic or welfare status of Dalits and Janajati groups. It is telling that high caste Brahmins and Chhetris have more than twice the level of participation in the civil service, public office and political leadership, and Newars nearly three times their population share. In contrast, the hill Janajatis have about 30 percent and Dalits only 3 percent of the participation they would have if they were represented in proportion to their population share in the country.

Summary: The preceding discussion suggests that the poor in Nepal share several common characteristics. People who tend to remain poor are households of agricultural wage earners, those who are landless or have small land holdings, those with illiterate heads of households, and those living in households with seven or more members. There are broad correlations between the caste level and the level of poverty. Hill and Terai Dalits represent the poorest segment of the population despite a decline in poverty from 58 percent to 46 percent. Although there are some exceptions, the poverty level among the lower social castes is generally much higher than that among the upper castes. Poverty also varies by gender. Female-headed households tend to be poorer than male-headed ones. Women's labor force participation in the paid labor force is still very small. When they enter the labor market they tend to earn significantly less than men for the same type of work. Thus, the level of poverty seems to be positively associated with the degree of social, political and economic inclusion. Women and ethnic groups on one hand and remote districts on the other have both been left out of the mainstream of

development because they lack empowerment, representation, voice as well as access to economic opportunities and resources. As might be expected, the prolonged Maoist conflict has also been a contributing factor. One study found that a lack of economic opportunities (measured by higher poverty rates or lower literacy rates) was significantly associated with a higher intensity of violent conflict: a 10 percentage point increase in poverty was associated with 23-25 additional conflict-related deaths (Do and Iyer, 2006).

Future research: In order to examine the causes of poverty more fully, the next step is to examine the determination of household income in Nepal so that a well-grounded anti-poverty strategy can be formulated. We will need to explore the causes of poverty in a local context to provide insight into the core characteristics of poverty and determine who are likely to be poor in Nepal. For this purpose, the following limited probabilistic (logit/probit) model could be estimated:

$$P = F[E, H, LHW, FS, CE, RU, ES, NE, MS, AP, AI, CP]$$

where,

P = poverty
E = education
H = health
LHW = land holdings and other wealth
FS = family size
CE = caste and ethnicity
RU = rural/urban dwelling
ES = employment status
NE = nature of employment
MS = migration status
AP = access to power
AI = access to information
CP = cross product between variables

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Rural vulnerability and tea plantation migration in Eastern Nepal and Darjeeling

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This paper will analyze migration from rural eastern Nepal to tea plantations in eastern Nepal and Darjeeling and the potentials such migration might represent for coping with rural vulnerability and food scarcity. The examination is undertaken in the context of a regional history of agricultural intensification and migration, which began in the eighteenth century with Gorkhali conquests of today's Mechi region and continued in the nineteenth and twentieth centuries with the recruitment of plantation laborers from Nepal to British India. For many Rai and Limbu people, this intensification resulted in social marginalization, land degradation due to over-population and over-farming, and eventual migration to Darjeeling to work on British tea plantations. The British lured Rais, Limbus, and other tribal peoples to Darjeeling with hopes of prosperity. When these migrants arrived, they benefited from social welfare practices unknown to them under Nepal's oppressive monarchal regime. British welfare policies inspired India's Plantation Labor Act of 1951, which granted workers housing, health care, food rations, and schooling for their children. For almost two centuries, Rai and Limbu migration to Darjeeling was an escape from rural poverty and oppression in Nepal, but plantation life introduced them to different forms of inequality.

Since the end of British colonialism, tea plantation development in Darjeeling has declined, and rural Nepalis have diversified their migration coping strategies, traveling much further abroad to work in service sectors from Dubai to Tokyo. In the last fifteen years, the Nepali tea industry has come into its own, and Nepal now exports nearly 93 percent of its tea. Formerly a regional product, Nepal tea is gaining consumer demand in Japan, Germany, and the United States. Known primarily for jute, ginger, and potato crops, the eastern districts of Ilam, Dhankuta, Tehrathum, and Sankhuwasabha are becoming important centers of tea production, although eighty percent of Nepal's tea comes from Ilam. The manager of Ilam Tea Producers claims that the promise of steady work on tea plantations across eastern Nepal has attracted farmers unable to meet their needs under subsistence farming. He estimates that nearly 7,000 families have benefited from the recent boom in Nepal tea production. The manager of Guranse tea estate in Dhankuta claims: "If we

create the proper atmosphere, we can make five Darjeelings in Dhankuta and attract buyers and tourists at the same time.”

This paper explores whether work the Nepal tea industry, which requires internal migration, presents a sustainable alternative to transnational migration for rural Nepalis. I specifically address the emergence of organic and fair-trade practices on tea plantations and the potential of such agricultural strategies to improve the lives and health of rural Nepalis. I answer these policy and research questions through a comparison between Darjeeling and Nepal. My intention is to extend and historically contextualize my current dissertation research on fair-trade organic tea production in Darjeeling.

Remittances and their effects in Nepal: a microeconomic study

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Introduction: Theory suggests that international migration is generally beneficial to both the source and host countries. To the extent expectation of higher incomes drives migration, the world economy is better off because the migrant produces more in the host country than in the source country. From a purely statistical standpoint, however, the source country may gain little from emigration under certain circumstances. Before emigration, income produced at home by the migrant in excess of what the individual consumed was shared by others, either in the family or outside. If the remittance sent home later by the emigrant falls short of this share for others, the household and the society in the source country may be worse off. It is likely that in Nepal this has not been the case and the net gain has been highly positive. Observers believe that remittances by individuals working abroad have become an important source of income for many poor households in Nepal.

Unfortunately, not much empirical evidence is available on the impact of international remittances in Nepal. Most of the studies on remittances in South Asia have been conducted on one or more of the following four countries: Bangladesh, India, Pakistan, and Sri Lanka. A recent World Bank study by Maimbo, *et.al* (2005), for instance, also limits itself to these countries. Some of the important questions that have motivated my project, in the context of Nepal, include the following: “Do remittances facilitate consumption smoothing (Yang and Choi, 2005), or investments in human and physical capital (Rapoport and Docquier 2004), or help households overcome liquidity constraints (Taylor and Rozelee, 2003)?”

The Survey and data: This research is part of a project that is based on primary data collected from a survey of 166 households in Nepal. Of several hundred households approached, approximately 200 had one or more members who had either returned home temporarily or permanently after working abroad or were still working there. The response rate was over 80 percent. Three interviewers were hired and trained to fill out the survey questionnaires. The survey was conducted in the summer of 2007 in three village clusters, or village development committees (VDCs), and in several hotels of Kathmandu where migrants

were temporarily staying on the way back to their homes in Nepal or to the country of work at the end of their leave.

Well over 90 percent questionnaire completion rate was achieved in the VDCs of two districts, namely, Makwanpur and Lalitpur. A high attrition rate of over 50 percent, however, occurred in the VDC chosen from Dhanusa district. In this VDC, interviews were refused outright in many cases, and in many others, the respondents agreed to being interviewed but withdrew upon hearing specific questions. The break-offs occurred when questions were asked about the migrant's earning abroad or the amount remitted home. The survey design was sensitive to the ethnic tension brewing in many parts of Tarai at the time of the survey. All the households in the chosen VDC in Dhanusa were Maithili speaking.^{****} The interviewer selected to conduct the survey there was from a neighboring VDC and possessed the cultural and ethnic (including caste) characteristics of most of the residents of the survey VDC. Despite such care taken to maximize cooperation from the households, relatively few (22) usable responses could be elicited.^{*****}

The interviews in Lalitpur and Makwanpur, and most at the Kathmandu hotels were conducted in Nepali. Because of inadequate information, 8 questionnaires from there were discarded from the study. The results are discussed next.

Regional profile of workers: The usable sample size consists of 156 households. Hills contributed 55 percent (86) to the sample whereas Tarai's share was 36 percent (56) and Kathmandu valley's 9 percent (14). Besides Dhanusa where a survey met with a partial success with 22 individuals interviewed, the Tarai districts represented in the sample from the Kathmandu interviews were Rupandehi (8), Morang (6), Siraha (6), Kapilbastu (4) and Sarlahi (4), plus three other districts with two individuals each. The hill representation came from Makwanpur (48), mostly as a result of a direct survey conducted there, Sankhuwasabha (10), and nine other districts (28). From Kathmandu valley, Lalitpur contributed all 14 to the sample.

Age and education: The mean age of migrant workers at the time of migration was 26.8 years and the standard deviation 6.8 years which shows significant dispersion. Dropping two outliers from the sample leads

^{****} The single Nepali-speaking household that had lived in that VDC for three generations had migrated about a dozen years ago to Janakpur or Kathmandu.

^{*****} The interviewer noted a few concerns raised in the villages that the survey could be a ploy to extract private information and could be used against the respondents.

to an approximately normal distribution for the age at migration with little skewness and thin tails. Individuals going abroad for work had a median education of 7 years with a standard deviation of 3.5 years. Eighty seven percent of migrants were 40 years of age or younger. Three countries in the Middle East – Qatar, Saudi Arabia, and UAE – had a 75 percent share in our sample of migrant workers while Malaysia accounted for 22 percent. Forty percent of all workers had gone to Qatar alone. There was little variation in the mean years of education across workers going to the four main countries, with Malaysia receiving slightly more educated workers (7.5 years) and Saudi Arabia slightly less (6.8 years).

Household Income: There were some gaps in the information on total income and consumption from domestic sources. Four households were therefore dropped from the sample since their total income was equal to zero despite the fact that they had some cultivated land. This reduced the sample size to 150. The median household now has 7 members and per capita income for all households is Rs.13,927 per year. The sample income distribution is highly positively skewed, with median (Rs. 7,390) just over half (53 percent) of the mean. Though none of the households in the sample can be called very rich, the degree of income inequality is still very high. The poorest 50 percent of the households earned only 11 percent of total income whereas the richest 10 percent received 33 percent, and richest 5 percent 21 percent of income. The richest 10 percent of the households earn 4.4 times the income of the poorest 40 percent.***** Finally, the regional distribution reveals that the per capita income in the Hills is the lowest at about Rs 11,000, the Tarai averages Rs 15,000, and Kathmandu valley Rs 30,000.†††††

Asset distribution: The main forms of household wealth are land, houses and livestock. The households also have durable goods such as radios, bicycles, TVs, and gold and silver. Since houses are not actively traded in villages, a better indicator of marketable assets would include land and livestock. The value of land around home, cropland and dry land, and the value of different livestock animals together constitute household wealth in this study.

We find some amount of wealth diversification by the sample households. Instead of relying on land as the main source of income, more households get income from their labor services and small businesses. The

***** The calculated Gini index of income inequality equals 0.556 which exceeds national inequality substantially. However, note that income is a poorer base on which to measure inequality than is consumption.

††††† Note, however, that the valley supplied only 14 households to the sample.

correlation between total income and total wealth is indeed positive but rather low at 0.228. Much like income, the wealth distribution is highly skewed to the right with thick positive tails.

Types and conditions of work: Over 60 percent (90 of 148) of respondents who worked abroad had an unskilled job. Of the rest, skills were smoothly distributed over a few categories, namely, machine workers (8), carpenters (6), salesmen (6), and others including drivers, cooks, and painters and decorators (4 each). Trying to correlate unskilled jobs with education, we find 66 of the 90 workers with an education level 2 (5th to 8th grade) or level 3 (9th to 12th).

The median length of work abroad for sample workers is 36 months. That is also true of workers who went to work in Malaysia despite the fact that emigration to Malaysia is of a relatively recent origin. The minimum work period was recorded at 12 months and the maximum at 11 years. Many migrants had to work outdoors and over 40 percent of the sample complained about extreme hot or cold conditions in which they had to work. About a third (48 of 150) also reported that they were not able to secure the type of jobs they were promised back home by the manpower agencies that sent them. All migrants had a full time job, but many (about a half) would have worked elsewhere if a choice was available. Work at a second job was explicitly discouraged and people found working elsewhere would be harshly treated. Only 10 individuals reported having taken a second job. Most workers (74 percent) did, however, get to work overtime at their place of work.

Wages and benefits: The median monthly wage of migrants was Rs10,500 (roughly \$150) and the interquartile range (IQR) Rs3,000. Eight percent of individuals were outliers and five percent extreme outliers.***** These high wage individuals worked as housekeepers, cooks or drivers. The median overtime pay was Rs 2,300, a relatively small number because of the fact that 26 percent of the respondents did not work overtime. Most workers also received in-kind benefits such as free residence (70 percent), free transportation to and from work (65 percent), and health care for non-major illnesses and accidental insurance (60 percent).

Remittances: Average remittances equal Rs 6,847, or about \$100, per person per year. The largest annual average remittance is Rs 12,766, sent by individuals in their first year. This may not fully reflect the actual pattern because of the small subsample of only 8 people (or 5 percent) out

***** outliers are over 1.5 times the IQR above the third quartile, and extreme outliers are over 3 times the IQR above it.

of 148 in the 12-month category. Those who have completed 2 or 3 years of stay abroad are found to remit the lowest amounts but the amount remitted rises as length of work increases beyond 3 years. There are a few clear outliers in the group with the longest stay where the standard deviation of the money remitted far exceeds its mean.

Before-after comparison: We also look at the economic situation of the households with a migrant before migration and after. Most of the respondents were recent returnees who completed their contracted time and its extension abroad, and were starting to adjust back to their conditions at home. Only 20 percent of people surveyed were on vacation or leave visiting their families in Nepal, and were in the process of going back to their work. This helps our analysis in one sense. It indicates that the respondents could assess a little better the change in the household consumption and standard of living because of migration. In comparison, the relatives of those who worked several years abroad may have some recall problems about not so recent past if they have gone through a gradual improvement in their standard of living due to remittances.

The mean difference test indicates that the total expenditures of households before and after are significantly different. The logarithms of these expenditures are approximately normally distributed. The calculated *t*-statistic on the log-differences equals 13.83, well above the critical *t* of 2.36 at one percent level. This shows that the sample households have achieved a significant improvement in their living standards. The median difference in total expenditure (in level form) equals Rs. 52,000 per household or 175 percent more than before.

Regression results: Finally, our basic econometric analysis shows that the household spending has a significant positive relationship with income, wealth and remittances. The basic results appear below:

$$spend_i = -5.0432 + 0.1554incm_i + 0.1931wlth_i + 1.0824remit_i + \varepsilon_i$$

$$\begin{matrix} (-2.27) & (2.38) & (2.74) & (5.79) \end{matrix}$$

$$\bar{R}^2 = 0.292, \quad N = 142, \quad F_{3,138} = 20.41,$$

where all the variables are defined as natural logarithms of their levels and all except *wlth* are annual flows in rupees, *spend* is the total household spending on consumption and other things, *incm* is the household income other than remittances received, *wlth* is the value of household wealth other than houses, and *remit* is the average amount of remittances received per year. Income and wealth, or wealth and remittances are not highly correlated which indicates a large influence of remittances on

consumption. The significant and large coefficient for the remittance variable exhibits its huge influence on spending (one for one in percentage terms) that might reflect a high degree of household optimism about future. Remittances do not seem to have a large effect on wealth although some households are found to use a significant part of the remittance money on the purchase of land and improvement of housing.

Conclusion: It would be interesting to analyze the dynamics of the use of remittances on consumption versus home improvements and acquisition of land. Our estimation on the remittances averaged out for the years migrants have stayed abroad has suppressed any such dynamics from analysis. Furthermore, while the present segment of our project has highlighted the change in household consumption and expenditure, the causal relationship between remittances and poverty of the surveyed households needs to be established. This part of the study is currently under way.

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The effect of remittances on child labor and child education in Nepal

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Remittances from international sources form an important part of the typical Nepalese household's income. We analyze the effects of household international remittance and non-remittance income on educational achievement and the amount of child labor using Heckman's two-step analysis. For the analysis of educational achievement, the ratio of years of schooling to age is the independent regression variable, and a dummy variable representing whether or not the child has attended school at all is used as the select variable. For the analysis of child labor, the number of hours spent working in the labor force is the regression independent variable and a dummy variable representing whether or not the child has worked in the previous year is the select variable. It is determined that remittance income from international sources positively contributes to child welfare, but much less so than the same amount of income from other sources. Several socioeconomic variables, such as caste and the child's gender, are also analyzed, and in many cases found to have significant effects.

Environment and Pollution

Trade potential and ecological analysis of non-timber products in the Himalayan Kingdom of Nepal

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Non-timber forest products (NTFPs) have been welfare, subsistence or livelihood commodity since long; these are traditional source of food, fiber, medicine, etc. In some rural hilly areas, they contribute up to 50 percent of total annual family income. The contribution of the whole forestry sector to gross domestic product of Nepal is estimated at 15 percent, of which NTFPs contribute almost one-third. More than 100 types of plant species are harvested from the wild and are exported to international markets, mostly to India. About 95 percent of NTFPs are collected from the wild and 90 percent are exported to India in raw form. Amala, Atis, Chiraito, Tejpat, Guchhi chyau, Jatamansi, Jhyau, Kutki, Pipla, Ritha, Sugandhawal, Sugandha Kokila and Timur are the major NTFPs exported to India.

The importance of medicinal and aromatic plants (MAPs) has increased progressively over the last two decades. Herbal remedies are increasingly becoming mainstream consumer products manufactured by multinational companies and sold globally through super market chains and other outlets. Food supplements, cosmetics, fragrances, traditional cuisine, dyeing and coloring agents are just a few of the applications where medicinal, aromatic and dye plants are finding increasing use by the day. As a result there is a growing demand of Nepalese MAPs and NTFPs.

The diverse geography and climate of Nepal has rendered it a unique land of NTFPs. However, the commercial exploitation without any conservation measures has threatened many species. The high mountains are highly praised for high value (potency) low volume NTFPs, hence they fetch higher prices. In spite of all advantages, the country is not able to harness the full potential for the welfare of the Nepalese. The major constraints are (i) low capital investments by the government and private sectors for the overall promotion of NTFPs, enterprise development, and perpetual marketing of quality products, (ii) government's unclear investment policy, (iii) lack of proper documentation on species availability (including bio-prospecting) and uses, and (iv) poor public awareness on the values of NTFPs.

The study was initially conceived to identify ten important MAPs and NTFPs to present information to national and international private investors on socio-economic and environmental opportunities available for investment on those species. But, in the course of the study during the various interaction programs organized for feedbacks, participating stakeholders suggested the study team to consider more than 10 species from investment point of view. So, the study considered a list of 30 species already selected by the national level Herbs and NTFP Coordination Committee (HNCC) of the government of Nepal. The study has identified four top priority species for low risk private sector investment in each of the three climatic zones of Nepal, by considering market value, export data, ease of cultivation, parts used in trade, range of distribution of species, threat category, status of legal protection, local processing opportunity, ethno-botanical importance, etc. A total of 17 new criteria are developed by the study team for prioritization of species, by further illuminating and simplifying the criteria set by HNCC of Nepal, the criteria set by National Medicinal Plant Board (NMPB) of India, and the criteria developed by other related development organizations. More detailed information will be compiled for the short listed species on their conservation status, domestication potential, market demand and legal protection so that appropriate policy and promotional measures can be developed and advocated for required changes.

Measuring ‘Quality of Life’ of the Central Development Region of Nepal through integration of remote sensing and census data

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‘Quality of life’ varies from place to place due to several factors, including topography, biophysical endowment, access to infrastructure and markets, government policies, and demographic situations. Extant literature suggests that satellite-based measurements of land-cover changes can be related with population changes, farming practices, living conditions of people, the alteration of surface and sub-surface hydrology, and fragmentation of wildlife habitats. A survey of this literature finds consistent strong relationships between settlement locations and road network, which are further influenced by the nature of land use systems.

Our research adds to the growing number of remote sensing-based analyses that deal with land-cover dynamics, land use and cover changes in the Center Development Region (CDR) of Nepal during the last three decades. First, we develop a spatial database of land-cover change at the scale of Village Development Committee (VDC) unit-levels in the CDR for the years of 1975, 1990, 2000 and 2005, by using images from four different sensors: Landsat Multispectral (MSS) images of 1975, Thematic Mapper (TM) images of 1990, Enhanced Thematic Mapper (ETM) images of 2000, and the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) images of 2005. Second, we bring the remote sensing and topographic information into a geographic information system (GIS) platform to examine the relationships between land-cover changes and socio-demographic variables, including population change, migration, income levels, poverty, employment rates, and proportional educational levels. This study spatially identifies deforestation areas by using transition matrices for the periods of 1975-1990, 1990-2000 and 2000-2005. It uses simple regression analyses for finding relationships of the above variables with deforestation.

The study has grouped elevation levels in meters into various classes (500 – 999, 1000 – 1499, 1500 – 1999, 2000 – 2999, 3000 – 3999, and 4000 – 4999). It finds a strong relationship between deforestation and

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elevation levels during the period of 1975 – 1990, indicating that people preferred to live in the higher elevation areas during this period due to the fear of malarial disease in the Tarai. But the analyses reveal a significant relationship between deforestation and lower elevations during the periods of 1990 – 2000 and 2000 – 2005, indicating the contemporary reality of Tarai's improved habitation situation in terms of 'quality of life.' Road network and malaria eradication have made Tarai's living conditions much more habitable after the 1990s. Likewise, our analyses further reveal significant relationships between deforestation and variables like population of *have-nots*, migration from other regions, districts, villages, and municipalities, government services, male population of 20 – 29 age group, female population of 15 – 39 age group, male illiterate population, and female illiterate population for the period of 1975 – 1990. For the periods of 1990-2000 and 2000-2005, in addition to the significant variables identified above, roads and river areas also were significant at 95 percent confidence interval. These analyses suggest that deforestation occurs due to both bio-physical and socio-economic factors. Deforestation in an agrarian economy means lost opportunities for local populations, because the rural people have to spend more time on fuel and forage collection, instead of other more productive agrarian work. Deforestation also means that the rural people are experiencing rising expenses due to increase in prices of fuel for cooking. Further analyses suggest that technological innovation and institutional improvements might have alleviated deforestation rates somewhat, but the implementation of these improvements has been marred by the civil war and political instability prevailing in the country for the last one and a half decades.

We also analyze the relationships between land tenure and deforestation and find that low levels of tenure security and the absence of well-defined property rights have often led to deforestation. Tenure insecurity and the present high net value of use of forest rather than its 'alternative uses' have encouraged local people to over-use forest resources. In addition, financial incentives for logging and timber production have also encouraged deforestation. We also observe a low probability of deforestation within a protected area because of deployment of military personnel. Our analyses also reveal that distances to infrastructure and markets have significant impacts on prices of forest products. Easy market access and high population density have high correlations with deforestation. Of equal significance, extremely low incomes, low wage rates, and "have-nots situation" that prevail in this part of Tarai among rural poor, landless and 'near-landless' sections of population do not give us much hope that the deforestation situation will

improve in the near future, since the immediate needs of survival of these impoverished underclass can, in the short-run, be only provided by the continued use and over-use of nearby accessible forest resources.

Although our focus is on the Central Development Region, we argue that the analytical and monitoring methods used in this case are transferable to other regions with similar environmental and socioeconomic characteristics to enable spatial imagery coverage of land use and cover change to be used to correlate, link and explain socioeconomic and bio-physical variables' influences on deforestation.

Second Himalayan Policy Research Conference

Survey Feedback Report

Nepal Study Center conducted its Second Annual Himalayan Policy Research Conference 2007 at the University of Wisconsin's pre-conference venue of the 36th South Asian Conference. Of the 40 abstracts submitted initially, 26 papers were presented at the conference. The conference was organized in seven sessions, and it occupied two rooms for a whole day. A wide range of topics were covered such as: environment, poverty, inequality, conflict, natural resources, GIS, land use, remittance, ethnicity and gender. Most papers were driven by analytical approach but with deep policy implications.

On average, there were about 40 to 50 participants attending the sessions at any point. Participants came from the US, Nepal, Sweden, Switzerland, and Japan. Several doctoral students also participated from various universities. Participants were served complimentary breakfast and lunch as well as snacks and drinks throughout the day. A presentation on various activities of the Nepal Study Center during the lunch hour was well received. The conference ended with a dinner gathering at a Nepali restaurant Chautara on the State Street. Judging from the survey report and feedback comments, the conference was productive and a big success (see Appendices A, B, and C for details).

Survey Results

We conducted a survey among the participants of the conference to gather feedback. The survey questionnaires were distributed towards the end of the day and we received feedbacks from 29 participants. The survey questions and the summary of the responses on each question appear below:

1. This is our second annual HPRC conference. What is your opinion about continuing this event in future on a scale of 1 to 10 (10: strongly in favor)? _____

Mean = 9.7, median = 10.
(Out of 29 scores received, 26 were a perfect 10. This highly favorable rating was mostly because of the overwhelming policy focus of the research presented.)

2. NSC is thinking about putting together a proceedings volume of the conference. Would you be willing to contribute your expanded version of the abstract?
Yes _____ No _____ Not Sure _____ Not Applicable _____
90% Yes, 10% Undecided
3. On a scale of 1 to 10 (10 being highest), what is your likelihood of attending the HPRC in Madison next year:
(a) if held on Thursday, like this year, _____
(b) if held 3 days later on the following Sunday _____

The response was somewhat tilted towards the Thursday schedule. A group discussion among a few of us saw pros and cons with both schedules, but thought a Thursday schedule would be more attractive to those who would come there to attend the UW's South Asia conference. It is also worth noting that the HPRC's policy research focus complements the UW's South Asian's primary theme of culture, language, history, arts, and religious studies.

4. If this Conference were to be held at the University of New Mexico (during a weekend), what would be your likelihood of attending the HPRC next year on the scale of 1 to 10 (10 highest)? _____

Mean = 7.6

5. Rate the overall satisfaction with the 2007 conference on a scale of 1 to 10 (10 highest): _____

Mean = 9.7

6. NSC is taking a knowledge transfer initiative sending faculty/doctoral students to Nepal to conduct training/workshop/lectures to help Nepali scholars and institutions. Would you like to help and be contacted for this?
Yes ____ (email: _____) No ____ N/A

If yes, what would be the area of your skill-set?

What time frame would you prefer? Summer _ Fall _ Spring _
Other/All _

There was a strong positive response: 75 % yes

(Knowledge skills mentioned in responses: biodiversity, GIS and remote sensing; cultural policy; econometrics; environmental economics; resource economics; women's health issues; conservation biology; poverty and inequality; political science)

7. There has been a suggestion to change the NSC's name to reflect its wider regional scope to help enhance participation and generate funding opportunities. Show your best choice as 1, then 2...:
- Himalayan Studies Center _____ Himalayan Policy Studies Center _____

South Asia Studies Center _____

Center for Himalayan Policy Studies _____

Keep the current name: Nepal Study Center _____

Seventy five percent of the respondents preferred to widen the scope of the policy research area by changing the name of NSC. Twenty five percent preferred to name it *South Asian Studies Center* while a strong majority was split between *Himalayan Policy Studies Center* and *Center for Himalayan Policy Studies*. This debate will continue for a while because much of the resource currently bears the name of NSC.

Appendix A
Survey Questionnaire

1. This is our second annual HPRC conference. What is your opinion about continuing this event in future on a scale of 1 to 10 (10: strongly in favor)? _____

2. NSC is thinking about putting together a proceedings volume of the conference. Would you be willing to contribute your expanded version _____ of _____ the _____ abstract?
Yes _____ No _____ Not Sure _____ Not Applicable _____

3. On a scale of 1 to 10 (10 being highest), what is your likelihood of attending the HPRC in Madison next year:
(a) if held on Thursday, like this year, _____
(b) if held 3 days later on the following Sunday _____

4. If this Conference were to be held at the University of New Mexico (during a weekend), what would be your likelihood of attending the HPRC next year on the scale of 1 to 10 (10 highest)? _____

5. Rate the overall satisfaction with the 2007 conference on a scale of 1 to 10 (10 highest): _____

6. NSC is taking a knowledge transfer initiative sending faculty/doctoral students to Nepal to conduct training/workshop/lectures to help Nepali scholars and institutions. Would you like to help and be contacted for this?
Yes ___ (email: _____) No ___
N/A ___
If yes, what would be the area of your skill-set?

What time frame would you prefer? Summer _ Fall _ Spring _
Other/All _

7. There has been a suggestion to change the NSC's name to reflect its wider regional scope to help enhance participation and generate funding opportunities. Show your best choice as 1, then 2...:
- Himalayan Studies Center ____ Himalayan Policy Studies Center ____
- South Asia Studies Center ____ Center for Himalayan Policy Studies ____
- Keep the current name: Nepal Study Center ____

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HJDD invites four categories of material:

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Research Notes that are short: 2,000-4,000-word.
Book Reviews that are 1,000-2,000 words (newer books).
Comments that discuss material published in previous issues.

Manuscripts should be submitted as a Word document attached to an email.

Mailing Address:

Electronic submissions are highly encouraged. Send your manuscript as a Word file attachment to an email addressed to Editor Professor Alok K. Bohara: bohara@unm.edu, 505-277-5903, Department of Economics, University of New Mexico.

Format and Style of Manuscript

We encourage prospective authors to examine the previously published material in our journal for style guidelines (abstract, references, footnotes, headers, tables, charts). A set of preliminary instructions is given below.

1. Manuscripts should be typed in Times Roman font (12 points), double-spaced, on standard 8 1/2" x 11" formatting, using 1 inch margin on all sides. Use American spelling.
2. The front cover page should contain the following information: title of the paper, author's name, and date.
3. Authors' affiliation and current job title should be presented as a footnote at the bottom of the cover page along with the necessary acknowledgement and corresponding address and email .
4. The second page should include the title of the paper, and an abstract of around 100 words, and some keywords on a separate line.

5. The third page should begin with the title at the top followed by the body of the manuscript. Do not include the name(s) of the author(s). This allows us to expedite our blind reviewing process.
6. The References should be presented at the end of the manuscript in an alphabetical order. Do not number the references.

Books should be cited as given in the following example:

Yates, D. (1982). *Bureaucratic Democracy: The Search for Democracy and Efficiency in American Government*. Cambridge MA: Harvard University Press.

Journal articles should be cited as follows:

Bertelli, A.M. and L.E. Lynn (2003). "Managerial Responsibility." *Public Administration Review*, 63(3):259-268.

A reference in the text could be cited in various ways:

According to Douglas Yates (1982, p. 151), the state can wield power to.....that links policymaking to the democratic popular will (Bertelli and Lynn, 1998) and magnitude of substantive delegations (e.g., Bawn, 1995; Epstein and O'Halloran, 1995, 1999).

7. Just before the reference section, all the endnotes should appear numbered as 1. 2. 3. ...under the title Notes . So, avoid putting footnotes on each page.
8. If applicable, appropriately numbered tables and charts should also be provided at the end of the manuscripts rather than in the main body of the text. Do not cut and paste tables from the excel or any other statistical software. That is, you must create a table in word. Avoid using the vertical line in a table.
9. The tables containing titles should be numbered Table 1:, Table 2:, whereas figures and charts should be numbered Figure 1:, Figure 2:. Do not use vertical lines while constructing tables. Titles for tables should appear at the top of the tables, but the figure numbering and titles should be placed at the bottom of the figures and charts.
10. Do not insert any clipart or box inside the text, and do not use any color. Please use plain text while typing the manuscript.

Format for Revision and Resubmission

When you submit your revised manuscript, you should also submit a cover letter explaining how you addressed the reviewer's points -- comment by comment-- by citing the page number, and paragraph location where you have made the changes. For example, a portion of your cover letter to the editor may contain:

Referee # 1, comment #1:

"I found the results of the model with GR and VFG interesting. However those results are not well integrated into the text."

Author's response:

The reviewer's comment has been addressed on page 13 (second paragraph) with the line that begins with "The negative effect of GR could be interpreted as" A foot number 5 at the end of the manuscript has also been added to further clarify the seemingly contradictory effect of GR by citing two other similar findings in the literature.

Referee #1, comment #2:

[Referee's comment reproduced.]

Author's response:

[Author's explanation.]

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