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#### DISCRIMINATION, EXCLUSION AND POLITICAL PARTICIPATION

## The gender dimension of caste discrimination and resistance among Dalit communities in Kathmandu

Sambriddhi Kharel, University of Pittsburgh

This paper examines the gender dimension of caste discrimination and resistance towards caste discrimination among Dalit communities in Kathmandu, that of sweepers(*Podaes*) and that of metal workers(Kamis) and tailors( Damais). The findings are based on research using participant observation and in-depth interviews with householders in Kathmandu and with a small number of Dalit activists. Findings suggest that the statuses of Dalit women and Dalit men are not necessarily identical in a household. While the overall situation affects both men and women from these disadvantaged groups, gender, caste and class statuses intersect to marginalize Dalit women the most. In this research, gender relations suggest that Dalit households are patriarchal in nature characterized by gender hierarchy and male domination. In the Deula community, gender relations are less hierarchical and gender ideologies relatively liberal. One major factor for this is Deula women's income earning ability that accords them a higher status and a better bargaining position within the household. Gender domination and conservative gender ideologies are more prevalent among the metal worker and tailor castes. The gendered division of labor within the household means that women suffer more as a result of the lack of running water, fuel and sanitation facilities. Women are targets of caste and gender discrimination as they are involved in collecting water and fuel and they go to temples, areas where untouchability practices are still prevalent. Dalit women also demonstrate consciousness and agency through their everyday acts of resistance and in the process negotiate their identities.

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

Khadga K.C., Nagasaki University, Japan

A certain minimum level of political knowledge is required in democracy. The political knowledge increases political literacy and competence which fosters citizens' engagement in associations, and their participation in politics. "There is near universal agreement that more knowledgeable people participate at a much higher rate "(Pop kin and Dimock 1999; 137). Also, "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). Similarly, "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 (Coulson 1999): people vote more as they grow older. But age included at least two distinct elements: life experience and generation. We first address the former plainly related to knowledge."

Given this backdrop, my hypothesis states that the political knowledge will be a significant factor to promote civic engagement, electoral and other forms of political participation of citizens. This hypothesis was tested using bivariate correlation analysis, assuming political knowledge as an independent variable and civic engagement and political participation are as dependent variables. The research findings show that politically knowledgeable citizens in the village (Bajung, Parbat, Nepal) are engaging more in civic and political activities than others. The findings may provide decisive policy implications towards the enhancement of the level of political knowledge to the people of given areas.

#### Democracy, exclusion and informal institutions in Nepal

Mahendra Lawoti, Western Michigan University

Political exclusion of dalit, indigenous nationalities, madhesi, minority religious groups, and women in Nepal continued after democracy was restored in 1990. Scholars have pointed out the role of formal institutions like the unitary state, first past the post electoral method etc. in the exclusion. However, 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 rather due to informal institutions that influence behaviour of political leaders and people in Nepal. In this paper I will discuss informal institutions' role in political and social exclusion. I will discuss patronage, clientelism, nepotism, caste system, politics of loyalty and other informal institutions that have contributed in the perpetuation of exclusion in democratizing Nepal.

#### CONSERVATION AND RESOURCE MANAGEMENT

### Leadership for environmental education and conservation: a case of green space park at P. N. Campus, Pokhara

Padam Giri, P. N. Campus, Tribhuvan University, Nepal Krishna Shrestha, Michigan State University Bishwo Kallyan Parajuli, Tribhuvan University, Nepal Murari Suvedi, Michigan State University

City of Pokhara is facing tremendous growth pressure and the municipality has not been able to maintain open space for public use. In addition, there are no plans for the development of a nature park, or a 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 Campus is the largest campus of Tribhuvan University. Over 15,000 students coming from almost all hill districts of western Nepal study at P. N. 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—Seti River Gorge. In 2006, UNDP Global Environmental Facility funded a project to the Free Student Union of P. N. campus to develop this open space as "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 a new phenomenon in Nepal. During the past 25 years, Nepal 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, and it is true in Pokhara. As the cost of land is skyrocketing, people utilize every inch of land they own for building their homestead. Most public land has been used up for various uses such as school, health center, road and bus-park or a library. As a result, cities have lost most of the public land which could be developed as an open green space or a public park.

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 P. N. Campus Free Student Union feels that students should demonstrate a novel role in nation building and change the publics' opinion about their role. Thus, the Free Student Union 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 the environmental education and serving leisure time and recreational needs of the public living around their college campus. The leadership of the Free Student Union realized that it would be their great pride to develop the P. N. 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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The paper takes in stock of a research project on integrated water and forest management in Begnas watershed in Nepal. The paper demonstrates that while the results on the ground has been laudable, much more efforts are needed to consolidate the gains and to seize the window of opportunity provided by the strongly and rapidly evolving community-based natural resource management institutions in the country that can contribute positive policy reform, build synergy and enhance the capacities of local institutions communities to pursue integrated resource management for unleashing the country's potentials to fulfill and exceed MDG targets and reduce poverty.

From the information obtained through action research, the paper explains that while abject poverty and chronic deprivations are visible, community-resource management equation has been rather favorable. Despite the positives of community-based institutions, their strong emergence has neither resulted in consistent poverty reduction nor has created the fundamentals for the euity-based institutional development. Nepal was also under armed-conflict for more than a decade until recently which seriously undermined community based institutions' efforts on poverty reduction, economic and social progress. Furthermore, the tradition of isolated community driven initiatives or institutional arrangement continues to override the overall essence carried by integrated community-led natural resource management. This clearly demands a re-think on longheld tradition of isolated community-based management actions for natural resources such as water and forest resources. It is also a pointer to the urgency of strengthening local government institutions and local community institutions to identify, plan and implement local level management actions for reducing inter-institutional disparities for achievement of poverty reduction targets and achievement of MDG outcomes.

#### The human dimensions of land change in Lamjung, Nepal

Milan Shrestha, University of Georgia

Among land change scientists, there is growing recognition of the need for an integrative, multilevel approach to study the relationships of agricultural modification activities and

global land-use and land-cover change (LULCC). This comes as a crucial step to move beyond the primary area of transition (i.e., conversion of forests) to study changes in agricultural areas, mainly the changes in land-use strategies resulting in different agricultural intensification levels that are too dynamic and often subtle to be detected from satellite data alone. This emerging research theme, however, lacks sufficient knowledge regarding the extent to which agricultural land-use strategies contribute to LULCC and *vice versa*. The need of such knowledge is even greater for the mountains, one of the most understudied fragile ecosystems of the world, where agricultural practices rely on forests, livestock, and cultural-ecological adaptations.

This paper presents the results from an anthropological study conducted in Lamjung district of Nepal, which used a hybrid, multi-level approach to integrate household, community and ecological data with remote sensing and GIS applications to study LULCC trajectories of the last 40 years. The results of remote sensing analysis based on a set of multi-date Landsat data (1976, 1984, 1990, 1994, 1999 and 2004) to detect LULCC trajectories show the dynamic transitions between forest, agricultural land and shrubland in the last four decades and suggest that there is no linearity in land-cover change as generally assumed. This period also coincides with the changing context of smallholding in this mountainous landscape; in particular, changes in the rules of resource allocation, growing influence of the cash economy, and shifting agricultural preferences, mediated the effects of population pressure and poverty in smallholders' decision to change agricultural land-use strategies. Finally, by analyzing the household and community contexts (i.e., socio-cultural, demographic, economic, and ecological) under which mountain smallholder change their agricultural land-use strategies, this paper extrapolates the relationships between finer scale agricultural *processes* and broader scale land-cover change *patterns*.

#### POLITICAL STRUCTURE AND DEMOCRACY

#### Pursuing democracy: the rise and fall of autocracy in Nepal

Prakash Adhikari and James Timberlake, University of New Mexico

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 of mainstreaming of the federal structure of Nepal

Madan Koirala, Tribhuvan University, Nepal

Federal restructuring of the nation state has become almost common agenda after April 2006 revolution in Nepal. Political parties, ethnic communities, development planners have started to move towards federal direction in their understandings. 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.

Koshi, Gandaki and Karnali three broad watershed level ecosystem-mapping especially forest ecosystem and agroecosystem reveal a basic inventory for the livelihood support of the people. Modernizing agriculture, followed by Non Timber Forest Products processing is a viable venture in Koshi, followed by tourism and horticulture in the Gandaki watershed. Likewise, Karnali watershed reveals the possibility of organic farming, horticulture and rare medicinal plants for the livelihood support. Niche specific biodiversity resources inventorization at village level will be added the self-sufficiency relieving the pressure on the central governments.

# "Retainer" bureaucracy: an impediment to the process of democratic governance in Nepal

#### Sucheta Pyakuryal, University of Akron

The role of public bureaucracy has been one of the most discussed characteristics of a state, especially if the political system of a particular state is in a developing stage. In Nepal, up to 1990 the absolute power of monarchy was maintained through a traditional or a 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, unevolving retainer bureaucracy act as an impediment to smooth functioning of a democratically elected, legal rational government? The paper seeks to answer these questions.

## External influence in democratization of Nepal: a critical assessment of April 2006 political change

Anuj Mishra, University of Warwick, England Dwarika Dhungel, Former Secretary, Nepal

This paper seeks to critically assess the external influence in democratization process in Nepal as the title suggests. The paper establishes that the influence has been both positive and negative by examining the causal factors that has both aided and ailed the democratization process. While the external forces have exerted enormous influence in charting the course of politics in Nepal, which appears to be geared towards democratization; paradoxically the very influence has stunted the democratic growth in Nepal repeatedly. In particular this paper examines the influence exerted by Nepal's two neighbors, India and China, with the focus on time frames oriented towards the April 2006 political change.

The main thrust of the critique is the inter-play of realpolitik between India and China – which has sought neutralize each other's perceived advantage in Nepal—has not only distorted the much needed evolutionary and organic democratization of Nepal, but has also kept Nepal consistently destabilized state; thus creating a double helix of downward spiral, with the opposing factors necessitating each other's action. This pattern of cyclical destabilization has manifested in the domestic front with all the political forces in Nepal invariably getting tied to their respective power patrons externally and getting entangled in the proxy power contest internally. The paper centers its analysis on three phases of political developments, both over-lapping and inter-connected: the April 1990-Oct 2002 phase of parliamentary democratic experiment; the February 1996 – April 2006 phase of political polarizations and state crisis and the post-April 2007 scenario with the Maoists in the government.

A simultaneous examination of rise and fall in the power of Monarchy vis-à-vis the political parties; and a close examination of the rapid rise of the Maoists as the formidable political force able to challenge the state and their eventual concessions to join the political mainstream unpacks the inherent ramification of external influence in Nepal. Due to the complexities surrounding Tibet, China's strategic policy is influenced by the policy option seeking to create what it perceives as a stabilizing and predictable political force in Nepal, a role dutifully fulfilled by the institution of Monarchy until recently. Hence political stability over political freedom is a preferable policy option for China.

While India's strategic option is a policy response to China's perceived encroachment in Nepal. As a consequence India has sought to cultivate all the political forces in Nepal, sometimes one against the other, sometimes all simultaneously. Despite its ostensibly consistent stance on restoration of democracy and political freedom in Nepal, its policy package is guided by the best bargaining position it finds vis-à-vis the Nepali regime. The paper argues that while all the political forces in Nepal have eventually compromised their independence to the foreign powers, the Monarchy, especially the Gyanendra regime, despite its ostentatious policy independence was in fact the most pliable of all regimes in Nepal. However, when its usefulness was exhausted, due to mainly Gyanendra's own follies, the foreign powers had no qualms in withdrawing their much vital support to the Monarchy. Hence this paper's main argument is that a closer scrutiny of external influence in Nepal charts a predictable course of political development where democratization forms a paradoxical product of external power politics.

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

Steve Hege, Columbia University

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

Bishwa Koirala, University of New Mexico

Generally, effects of simple technologies at households' level are mostly non-monetary and hard to quantify, which, in result, are found unrecorded. The study finds that the micro hydro (MH) has a positive impact on income of rural households in Nepal and provides children electric light for their study. The study further reveals that the application of MH has contributed in reducing fuel wood consumption in the rural households. The study has made a policy recommendation to increase number of MH installation in rural areas of Nepal to enhance rural livelihood as well as forest resources management. The study reports that communities are more inclined to harvest fuel wood from government forest rather than community managed forests. It also reports that women and children have significantly less intensity to go for fuel wood collection after the installation of MH. The study has made another policy recommendation on ownership transfer of forest resources management from government to local communities.

# Coping with unreliable water supplies and willingness to pay for improved water supplies in Kathmandu

Hari Katuwal and Alok K. Bohara, University of New Mexico

Adequacy and quality are crucial for household water supply. One of the major problems with public utilities such as drinking water in developing countries is intermittent, insufficient and unreliable supply. Nepal is no exception to this. Water is not supplied round the clock, pressure is insufficient to pump it to the tap and the amount of water made available to the public, whatsoever, is not directly potable. To combat these problems, households engage in a variety of coping behaviors. Some of the major strategies for coping with intermittent and unreliable water supply are collecting, pumping, storing, treating and purchasing. This paper estimates the cost of coping with unreliable public water supplies and willingness to pay for improved water supplies in Kathmandu valley. Coping costs are calculated from respondents' answer on averting behavior, market price and the value of time. Willingness to pay for improved water supply is calculated using stated preference method and compared with the value obtained from revealed preference method. The paper also discusses effects of socio-economic characteristic of household on coping cost and willingness to pay for improved water supply.

## Prioritizing and estimating hydropower project construction risks: a case study of Nyadi hydropower project

Kamalesh Panthi, Florida International University

A World Bank study of eighty hydro projects indicated that final costs exceeded budget in seventy six projects. Final costs on half of the projects were at least 25% higher than estimates. This fact and numerous other evidences reveal that budget set aside for project execution 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 project no more profitable. Unless the investors are assured of an attractive rate of return finding a source of funding for these 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 are available, they cannot be applied owing to the very unique nature of the projects and their locations. In such circumstances, subjective judgments of the experts based on their experience are very useful inputs for the success of any projects. 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 that will prioritize the existing risks and assign a cost value to all the major risks through systematic risk analysis. The proposed methodology will be demonstrated through its application to a case study of Nyadi Hydropower Project in Nepal.

### Trade potentiality and ecological analysis of non-timber products in Himalayan Kingdom of Nepal

Krishna Poudel, Himalayan College of Agricultural Sciences and Technology, Nepal

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, it contributes up to 50 % of total annual family income. NTFPs subsector in Nepal contributes about 5 % of national GDP out of total estimation of about 15 % from the whole forestry sector (almost 1/3). More than 100 types of plant species are harvested from the wild and traded to international market mostly to India; 95 % of the NTFPs are collected from the wild and 90 % 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 in such trade to India.

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

The diverse geography and climate of Nepal has rendered it a unique land of NTFPs along with other natural resources. 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 of NTFPs for the welfare of Nepalese. The major constraints for such situation are considered to be low capital investments both by the government and private sectors for the overall promotion

of NTFPs including enterprise development and the perpetual marketing of quality products; government's unclear investment policy, lack of proper documentation on species availability (including bio-prospecting) & uses and poor awareness among public on its values.

The study was initially conceived to identify ten important NTFPs, but in the course of the study during the various interaction programs organized for feedbacks, participating stakeholders suggested the study team that rather than limiting the selection to only ten species, it might be preferable from investment point of view to relax the restriction and consider more species for practical reasons. So, the study now endeavors to prioritize and recommend four species of MAPs and other NTFPs for promotion via private sector investment in each of the three climatic zones of Nepal from the list of 30 species already selected by the national level Herbs and NTFPs Coordination Committee (HNCC) of HMG/N and additional four species viz. Bel, Chammomile, Lemongrass and Mentha selected by the study team by considering high potential for their promotion based on professional experience, market demands and the suggestions received from various stakeholders. The study identifies the top priority species from among the priority species designated by HNCC and additional four species are also recommended for promotion by team based on their prospects. for low risk investment by private sector toward commercial promotion of NTFPs. Species prioritization for commercial promotions has been attempted by considering practically applicable criterion like 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 by further illuminating and simplifying the criteria already set by HNCC, Nepal and also reviewing the criteria set earlier by National Medicinal Plant Board (NMPB), India. Moreover, the prioritization criteria of other related development organizations like NSCFP, SNV, ANSAB, BDS MaPs, etc have also been thoroughly reviewed and developed criteria with proper justification to attain the set objectives.

This study is envisioned to invite the private investors (national and international) in the overall promotion of MAPs and other NTFPs of Nepal by indicating the socio-economic and environmental opportunities available to participate in such venture. General objective of the study is to compile and prioritize 10 NTFPs out of the already prioritized 30 species by HMGN/DPR for making concerted efforts on commercial promotion. The study intends to prioritize the top 10 NTFPs based on the parameters like market price, collection potential, bio-physical characteristics, export value, technological aspects and value addition potential. Further, detail 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.

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

Joel Heinen, Florida International University

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 in Nepal, and we review draft legislation (not yet passed) that is designed to implement the convention and close gaps in enforcement. We predict that some gaps will remain regarding implementation and compliance with CITES in Nepal, and make several recommendation to close them 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.

#### **CONFLICT AND RELATED ISSUES**

#### An assessment of the causes of conflict in Nepal

Bishwa Tiwari, Tribhuvan University, Nepal

With the end of cold war, the nature and consequences of conflict changed significantly. Today there is conflict more between the people 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 utmost important 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 data of a cross section of 75 districts of Nepal. Started from two districts of Mid-Western Development Region in 1996, the Maoist conflict in Nepal spread all over the country within a decade. All the districts but two, Manang and Mustang, reported casualties. Its cost varies widely across regions and areas of country. The direct cost in terms of number of killings was highest in Mid-Western Development Region, and lowest in Eastern Development Region. The conflict intensifies with the mobilisation of army in 2001, leading to highest casualties in 2002, and higher killing by state compared to that of Maoist rebels. Political workers were at top of the list of people killed, followed with agricultural labourers, implying that poor are more vulnerable to conflict risk.

Across the districts, a wide variation in the number of people killed exists even in Mid-Western Development Region, implying that level and intensity of conflict depend on several factors. In this study, the results of regression model with level of insecurity as dependent variable found 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 polarisation are the variables that govern level of insecurity in a district. In particular, poverty incidence and low caloric intake are found positively associated with conflict, whereas an increase in income, share of female in non-agricultural occupation, composite development index, proportion of Janjati population and elevation dampen the likelihood of insecurity. A separate model estimated with the number of people killed as the dependent variable has found a different set of variables affecting the intensity of conflict. Literacy rate and proportion of Janjati population have been found negatively related with the number of killings, implying that as they increase, the number of killings decreases. On the other hand, it has been found that an increase in food insecurity, share of female in non-agricultural occupation and proportion of forest area increases human insecurity. It is critical to note that the study found a positive association between proportion of female in nonagricultural operation and intensity of conflict, suggesting that increase in female's proportion in non-agricultural operation also enhances intensity of conflict. This finding needs further investigation as its effect was found negative when the dependent variable was the level of insecurity in a district. However, the finding that intensity is higher in a district, with larger proportion of forest area, is plausible and does not contradict with other studies. Unlike many other empirical studies, a significant effect of caste and

ethnicity dimension has been found in the study. It has been uncovered that as the proportion of indigenous population increases, the level of insecurity decreases. As the indigenous population consists of 59 ethnic groups, this indicates that when caste and ethnicity polarisation decreases the level of insecurity also decreases. Thus, one of the important value additions of this study is that it found social factor apart from economic factors as the correlate of conflict. The policy implications of the findings of the study are that increasing employment and income opportunities, improving food security, decreasing caste polarisation, together with bringing political progression as per the comprehensive peace accord could prevent from conflict relapse in Nepal. If the state fails to meet rising expectations of people, it is difficult to bring long lasting peace in the country. This implies that recovery and reconstruction has to consider all the three dimensions of post conflict reconstruction- political, social and economic - in order to prevent from conflict relapse and ensure long lasting peace. This also 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

Mani Nepal and Alok K. Bohara, University of New Mexico Kishore Gawande, Texas A&M University

We investigate the effect of inequality, measured by Gini and Polarization indices, on the intensity of Nepal's conflicts due to Maoist's People's War. The number of people killed by Maoist rebels during 1996-2003 in each Nepalese village is modeled as count data at the village level, with heterogeneity across villages in each district. We find strong evidence that greater inequality escalates deadly violence; the presence of social network and the government welfare programs may reduce it; and the level of income is unrelated to conflict but may mitigate effect of inequality on conflict. The inequality variables themselves have distinct effects. Polarization appears to be a more resilient inequality that causes conflict. A policy implication is that formal institutions that redistribute and lower poverty as well as informal institutions that create social capital help to reduce the conflict.

#### **Recruiting rebels: indoctrination and political education in Nepal**

Kristine Eck, Uppsala University, Sweden

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

Gyan Nyaupane, Arizona State University

Nepal is home to a strikingly natural and cultural diversity with two natural and two cultural sites designated as World Heritage Sites by UNESCO. These world heritage sites are great assets for the country's economic development through tourism. Despite this richness, heritage conservation faces a number of challenges including political instability, religious differences, ethnic conflicts, population growth, and poverty. This paper discusses issues and policy implications of managing heritage with a case study of Lumbini, birth place of the Lord Buddha.

#### **Political predictions in Nepal**

Aditya Shrestha, Journalist, Nepal

"The Madhise 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 it. However it was made by the man who had made similar prophecy in 2004 (*The Himalayan Times* 13 Sept. 2004) that there would be an uprising of the Madhesis that came out 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 and 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; and 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 development through microfinance in Pakistan's northern areas

Feisal Khan, Hobart and William Smith Colleges

Microfinance has become an increasingly important policy tool in ensuring that the benefits of economic development reach the poorest sections of society. The Pakistani government formally approved microfinance banking in 2001 and the First Microfinance Bank took over the Aga Khan Rural Support Programme's well-established village-level credit program in the mountainous Northern Areas. Since then the microlending program has expanded considerably and is generally considered among the more successful ones in Pakistan. How successful has the microfinance program been in raising household income in the Northern Areas, and how sustainable are its efforts? This paper argues that these issues need to be looked at critically and that microfinance, in and of itself, is no panacea. In the absence of overall economic growth and development in the region, microfinance essentially alleviates the symptoms of poverty without addressing its causes.

# Democratic but unequal? The scale, sources and policy implications of economic inequality in democratic Nepal

Udaya Wagle, Western Michigan University

The recent wave of rapid and radical turns in Nepal indicates that the changes of the 1990s were largely inadequate. Undoubtedly, the political liberalism instituted in the 1990s paved the way to more recent unfolding of the political landscape in Nepal. At the same time, there are arguments over the role of the economic liberalism adopted during this period, which increased economic inequality and revolutionized the masses in the countryside for positive change. Survey data and anecdotal evidence suggest that economic inequality massively increased in Nepal during the years of early parliamentary democracy. While political changes occur from a complex interplay of factors internal and external to a country and while the role of this growing economic inequality may or may not have been as instrumental as argued in Nepal, it is important to more fully understand the scale, nature, and sources of inequality during these years.

Using data from the Nepal Living Standard Survey, this paper examines the economic inequality trend in Nepal. Data from the 1995/1996 and 2003/2004 waves of the Survey allow for an assessment of the policies of the early years of the parliamentary democracy beginning in 1990. Given the representativeness of the data for the entire country, any analytical outcomes derived will form a valid basis for the effects on public policies and people's everyday lives of the economic and political changes of this era.

I focus on both income and asset holding to determine how these economic resources were distributed across different sections. I aggregate income from different sources such as wages, salaries, agricultural production, business, and remittance to estimate household income. Asset holding is also an aggregate of the different forms of property including real estate and other tangible and intangible ones. This aggregation of data from both surveys allows for investigation of the overall degrees of inequality over time as well as their potential sources. Given that estimates reported in various publications using consumption data show a rapid increase in inequality during the period, I expect to find the distribution of income and assets even more unequal. As the process of economic liberalization massively increased business activities especially associated with foreign trade, I also expect unequal distribution of income and property related to businesses to be the leading sources of inequality.

Many have argued that inequality has increased along horizontal and spatial lines in Nepal as the historically advantaged groups have further consolidated their positions during the early period of parliamentary democracy. To investigate this, I will focus on the distribution of income and asset holding across different castes and (major) ethnicities and across geographic regions and rural/urban distinctions. Here, I expect to find inequality to have increased between the upper and lower castes and associated ethnicities and between urban and rural areas. Given the massive influx of population in Kathmandu and other major urban centers, I also anticipate growing inequality within these localities; hence rising vertical inequality.

This mostly descriptive analysis with comparative elements will provide a grounded understanding of the scale of economic inequality in Nepal. This understanding will help me draw specific policy implications for the country with usefulness to policymakers attempting to address the ever-increasing needs and expectations of Nepalis. Additionally, researchers will find it useful to understand the political economy of this country currently at the economic and political crossroads.

#### Poverty reduction in Nepal: a clinical economics approach

Gyan Pradhan and Rabindra Bhandari, Westminster College

The first and most important of the United Nations' eight Millennium Development Goals is to eradicate extreme poverty and hunger. The specific targets are to reduce the percentage of people living in extreme poverty (\$1 per day in 1993 PPP terms) and of those who suffer from hunger to 50 percent of the 1990 levels by the year 2015.

Although Nepal has made significant gains in improving the poverty situation during the past decade or so, poverty is still pervasive, multifaceted and the most pressing problem. According to the last two living standard surveys, the estimated proportion of the population living below the poverty line fell from 42 percent in 1995/96 to 31 percent in 2003/04. This decline in poverty is attributed to several factors that include: increased receipts of remittances, increase in average wages in the agricultural and non-agricultural sectors, increase in the number of economically active population, and growth in urbanization (from 7 percent to 15 percent). While the reduction in poverty has been quite remarkable, overall inequality actually widened during the period as measured by the Gini coefficient which increased from 0.34 to 0.41. Moreover, the incidence of poverty varies widely by region, gender, and ethnic and caste groups. Poverty is by and large a rural occurrence—about 90 percent of Nepal's poor live in rural areas. Femaleheaded households tend to be poorer than male-headed ones. Poverty is also generally

much higher among the lower social castes. Thus, the level of poverty seems to be related to 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.

Our research has two objectives. Following Sachs (The End of Poverty, 2005), we first describe and adopt a "clinical economics" approach in order to undertake a systematic "differential diagnosis" of the causes of poverty and the prospects for economic growth in Nepal. The diagnostic checklist 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.

Our second objective is to discuss and 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 economic growth and improving living standards. Yet, an articulate and comprehensive drive to promote economic development and utilize domestic resources efficiently is precisely what is needed. Regardless of what political situation emerges in the near future, political stability will not endure without sustained economic growth and improvement in living standards which has remained illusive for most of Nepal's population.

#### Rural vulnerability and tea plantation mgration in Eastern Nepal and Darjeeling

#### Sarah Besky, University of Wisconsin

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. I will contextualize this paper in 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 For many Rai and Limbu people, this intensification resulted in social India. 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% 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 and attract buyers and tourists at the same time."

This paper will explore whether work the Nepal tea industry, which requires internal migration, presents a sustainable alternative to transnational migration for rural Nepalis. I will 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 will 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

Mukti P. Upadhyay, Eastern Illinois University

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* (2006), for instance, also limits itself to these countries.

My research is based on a survey of about 200 households in Nepal. The survey follows stratified random sampling in two villages where emigration, particularly to the Middle

East, has occurred at a relatively high rate. There are two objectives of the study. *First*, I would like to identify who goes out. This part will examine household characteristics in several dimensions such as the household size, income and wealth, human capital and skills of emigrants, and other related characteristics. *Second*, the study will assess the impact of remittances on the emigrants' families back home. A goal of this part will be to analyze whether and how much consumption and investment pattern has differed from consumption and investment before emigration. Investment includes spending on schooling, health and housing as well as farm equipment, draft animals, and businesses.

A *third* objective of the study is to compare marginal expenditure patterns of migrant and non-migrant households, and those with and without remittances. Finally, this research should shed light on how remittances are affecting the incidence of poverty in the villages studied, and whether it can yield some implications for manpower development policy in Nepal.

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

Michael Milligan and Alok Bohara, University of New Mexico

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 off hours spent working in the labor force is the regression independent variable and a dummy variable representing whether or not 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**

#### The impact of foreign direct investment on environmental quality

Krishna Paudel, Louisiana State University Biswo Poudel, University of California at Berkley Kamal Upadhyaya, University of New Haven

The objective of this study is to assess the impact of foreign direct investment on environmental quality in home and receiving countries. For the purpose, we estimated parametric, semiparametric and nonparametric panel model of a set of developed and developing countries with a dependent variable as the lead content in gasoline fuel. The independent variables in the model were FDI, per capita income, corruption and population density to name a few. Results indicated that model fit is better when income and FDI are fitted in a semiparametric form compared to parametric and nonparametric forms.

### Measuring 'quality of life' of the central development region of Nepal by integration of remote sensing and census data

Keshav Bhattarai, University of Central Missouri Dennis Conway, Indiana University

'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. A large body of literature suggests that satellite-based measurements of land cover changes can be related with population changes, farming practices, living conditions of people, alteration of surface and sub-surface hydrology, fragmentation of wildlife habitats, and government investment in the built-up environment. A survey of literature reveals strong relationships between the settlement locations with the road network and the nature of land use systems. This research adds to the growing number of remote sensing-based analyses literature that deals with the landcover dynamics focusing on the land use and cover changes in the Center Development Region (CDR) of Nepal for the past three decades. First, this research develops a spatial database of land-cover change at the Village Development Committees (VDCs) levels of CDR for 1975, 1990, 2000, and 2006 by using images from four different sensors: Landsat Multispectral (MSS) images to capture the scenarios of 1975, Thematic Mapper (TM) images to capture the conditions of 1990, Enhanced Thematic Mapper (ETM) to capture the conditions of 2000, and the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) to capture conditions of 2006. Second, it examines the relationships between land-cover changes with sociodemographic variables including population change, the amount of preexisting development, the government investment in the built-up environment, income levels, poverty, employment rates, education level, and patterns of radiant surface temperature. It will utilize some statistical techniques such as Pearson's correlations and simple regression analyses to analyze the relationships among these variables. Although our focus is on the CDR, the methods of analysis should be transferable to other regions with similar environmental and socioeconomic characteristics to correlate socioeconomic variables of development with land use and cover changes.