

## **Political ecology framework for studying mountain tourism:**

Case: Adapting analytical model for Everest tourism<sup>1</sup>

### **Abstract**

This paper aims to design an analytical framework for study and research in mountain tourism. The contribution of the tourism interventions to the development of the destinations and its indigenous people can be analyzed by the use of this framework. It assesses the impacts of the tourism interventions to the landscape and ecology, culture and livelihood of the indigenous people and overall socioeconomic power relations of the people in tourism destinations. The analysis can be linked to the principles of equitable tourism and effectiveness of the sustainable tourism development strategies in reference to the sustainable mountain development policies.

**Key words:** Political ecology, equitable tourism, indigenous people, sustainable tourism development

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<sup>1</sup> Developed by: Mr. Sundar Kumar Sharma, School of Arts, Kathmandu University.

Contact Phone : 977- 9803098006, Email : [sharmak.1979@gmail.com](mailto:sharmak.1979@gmail.com)

This research theme is developed by consultations with senior researchers and scholars in the field of mountain tourism (Prof. Stan Stevens, Dr. Sanjaya K. Nepal); Development Experts and Instructors ( Dr. Prabin Manadhar, Prof. R. Baumgartner), Academicians (Mr. Samesh Adhikari , Dr. Sagar Raj Sharma , Prof. Mahesh Banskota).

[Developed as a part of Research framework model for studying 'Political Ecology of Everest Tourism' (Research in progress), June 2009].

## **1. Background**

International tourism started in Everest region in 1950. When the summit of Everest was finally reached for the first time in 1953, the world's attention was drawn not just to the mountain, but also to the people who inhabit at its base (Rogers, 2007).

After the opening of the Everest region to commercial tourism in the mid-1960s, tourism rapidly expanded in the early 1970s to become the leading component of the local economy (Rogers, 2007).

The Khumbu (upper belt) and Solu (lower belt) directly to the south are two different belts of Everest Region having different sociophysical settings. Khumbu is inhabited by roughly 3500 people residing mostly in eight major villages of Khumjung, Kunde, Namche, Pangboche, Phortse, Thame, Thamo and Thamote. Over 90 percent of the total population belongs to the indigenous Sherpa ethnic group. Khumbu has less than 0.2 percent of arable land. (Please see annex for Map of Solukhumbu District; Research sites are indicated in the map.)

The lower belt Solu is inhabited by ethnic Sherpas as well as Khaling Rais, Magar, Tamang and Gurung. Peoples living in Solu historically have closer ties with lowland Nepal whereas peoples of Khumbu had historically closer social and cultural ties with Tibet.

Everest tourist numbers have grown from no visitors in 1949 to approximately 20 people in 1964, 600 in 1971, 5000 in 1980, 10,000 in 1991, and 25000 in 2001(Rogers, 2007). Rogers has also provided the account of the national park entrance station data for the 1997-1998 fiscal years, what indicates that 18, 511 tourists were accompanied by 20,551 staff and 2,386 pack animals. An additional 13,838 commercial porters transported food and supplies into the park, much of which was consumed by non-resident visitors.

Nepal's overall tourism revenues in 1995-1996 fiscal year were US \$ 116 million, which accounted for 3.8 percent of the country's US\$ 3 billion gross domestic product (GDP) and 18 percent of all foreign earnings (Nepal Ministry of finance 1997 and Sharma 1998 as cited in Rogers 2007).

By 1999, Nepal's tourism revenues had risen to US\$150 million, and constituted 3.5 % of GDP (Lohani 1999 as cited in Rogers 2007).

In 1994, Everest tourism attracted 59 of the 107 high-altitude mountaineering expeditions visiting Nepal, and these Everest climbing expeditions paid 77 percent of the fees collected from climbing expeditions that year by Nepal government. (Gurung, 1998 as in Rogers 2007). In 1995, 13 percent of Nepal's total park entrance fees were from Sagarmatha National Park. (Gurung, 1998 as in Rogers, 2007) and 18 percent (15000 permits) of the trekking permits issues in Nepal were for the Everest region (Nepal ministry of tourism 1996, Sharma 1998, as cited in Rogers 2007). In this view, Everest Tourism has its significant contribution to Nepal's tourism Revenue.

Tourism activities in the Everest region are confined within the Khumbu. Khumbu has now adopted four primary types of tourisms: luxury tourism, religious tourism, trekking tourism and climbing tourism.

Khumbu area has two air stripes, a hospital, dental and eye care clinics, a high school, grade schools in every village, a plethora of bridges made of modern construction bridges, luxury hotels and lodges whereas the lower belt, Solu, of the same region is out of the reach to the benefits from the Everest tourism.

These issues of marginalization of peoples in the society of the indigenous groups can be further analyzed through political ecology approach keeping the socioeconomic power relations and human-environment relationships at the centre, while the impacts and effects of tourism interventions are to be assessed within the Political ecology framework.

### **Objectives**

Overall objective of this research is to investigate the issues and challenges in the sustainable development mountain tourism in the wider spectrum of environment-human relationships and the socioeconomic power relations among different stakeholders of mountain tourism. Based upon this investigation, it puts forward an analytical model for the development of equitable mountain tourism.

Within the framework of an analytical model based on the discourse of political ecology; the case of Everest tourism is analyzed for following research objectives.

General:

- a. To assess the impacts of Everest tourism to the socioeconomic power relations among tourism stakeholders and ecology of the region.

Specific:

- b. To assess the impacts of Everest tourism to the socio-economic power relations of the indigenous people
- c. To analyze the pattern of income distribution from Everest tourism

## **2. Statement of problem**

By the later, 1990s tourism had become the world's fastest growing industry, involving an estimated 625 million people and earning receipts of nearly US\$ 500 billion per year. Receipts from international tourist travel grew by an average annual rate of 8 percent during 1990s, with mountain tourism accounting for an estimated 15 to 20 percent of worldwide tourism revenues by the end of the decade (WTO, 1999 as in Rogers, 2007). But, all these figures of benefits are elite captured. Though different tourism development programs generate higher revenue it ends up with further marginalization of the low income groups.

Socioeconomic power relations of the peoples in the indigenous society and the vulnerable biogeography are the major issues of the Everest tourism. The tourism intervention in Everest region should go beyond ecological impacts and revenue generation. It should be equitable for the overall development of the region and the people. Actually there is no better alternative for socio-economic development except tourism for this region and hence, Everest tourism should be equitable to the peoples of indigenous society of Solukhumbu.

To address these issues, a greater focus is needed on the rights of the indigenous people. There is marked gap in the socioeconomic power relationships among the people of the two different belts (Khumbu –upper belt) and (Solu-Lower Belt) of the same region. The socioeconomic marginalization of the lower belt people and some people of the lower economic class of the upper belt shows that Everest tourism is still questionable in terms of equitable growth and distributive development (Sharma, 2009).

According to the study of Adhikari, R. (2006) local participation and involvement is the promotion of tourism, decision making within the various communities is powerfully dominated by the local businessmen and educated elites, with vested economic interests. Based upon a household survey of the Khumbu, Pharak and Solu, Rogers and Aitchison (1998, as cited in Rogers 2007), concluded that 'while there have always been economic differences between the communities in the area, it would appear that the inequalities between them are widening due to differences in tourism involvement. If tourism development is left to the market forces, it is probable that income and inequalities will widen. This indicates that Everest tourism has significant impact in socioeconomic power relations of the people but the questions to be searched now are how and why so?

The issues of the degradation of the landscape in Everest region, the marked gap in the socioeconomic status of the people of different belts of the same region and the impacts of tourism interventions in the indigenous people's culture, occupation and livelihood strategies suggest for the critical need of fulfilling the research gaps in the context of the socioeconomic marginalization of the people within the region and the actual contribution of the tourism interventions to the development of that region.

A numbers of research works, books, articles and films have highlighted both the positive and negative effects of tourism. In Clint Rogers (2007) words, out of those many have testified about what tourism has done to the Everest region and the Sherpas, few have explained why and even fewer have explicitly drawn any practical lessons from it. This suggests that there is lack of studies on the ecological analysis and socioeconomic power relations of the people of this region to be studies and further link to the development policies so as to sustain the future of Everest tourism.

Based on the discussions above, only further research and analysis can tell us more on the following research questions.

1. Why are some indigenous groups of people poorer than others in Everest region?
2. Why are indigenous people of lower belt (Solu) of Everest region, not benefiting from the tourism revenue? What is the reason behind the marginalization of the lower belt of Everest region?
3. Why people of low income groups do not have opportunities for entrepreneurship development in tourism activities?

4. What are the impacts of tourism in terms of ecology, landscape change, and socio-economic power relations? Is it better if Everest tourism is halted?
5. What is the conflict of interest among different classes of people regarding the intervention of Everest tourism?
6. What are the concerns of the indigenous people to be taken into account in order to prevent them from being further marginalized? How far tourism related activities have endangered indigenous knowledge?
7. Why are people from southern belt poorer than the people from northern belt in Everest area? Why the benefits have not flown to southern belt?

### **3. Analytical Framework**

Analytical framework of this research is Political Ecology Framework. Political ecology deals with the interrelationships between ecological impacts and socio-economic power relations. According to Belsky (2002) Political ecology framework is a "trans-disciplinary perspective" for the study of fundamentals in the attempt to understand environmental change.

Political ecology, as it has risen out of cultural ecology, the political economy of development, Marxism and post-structuralism encompasses a diversity of theoretical and methodological approaches (Bryant 1998; Peet and Watts 1996 as in Nightingale 2002). It has demonstrated the importance of examining the linkages between local environmental issues and global political-economic processes (Nightingale, 2002).

Political ecology emerged during the 1970s as a method of fusing cultural ecology – anthropologists' empirical studies of local environmental practice – with cross-scale analysis of the political economy (Escobar 1999a).

Academic work focusing on the interface between politics and the environmental degradation has often been labeled 'political ecology' (Blaikie, 1985 as in Stainer and Lopez 2001). Political ecology offers productive possibilities for developing understanding of political dimensions of conservation (Stott and Sullivan 2000; Zimmerer and Basset 2003; Peet and Watts 2004; Robbins 2004 as in Adams and Hutton, 2007). It also addresses the relations between the social and the natural processes, arguing that the social and the environmental conditions are deeply and inextricably linked (Adams and Hutton, 2007). According to Walker, (2005), political ecology is

today's most prominent inheritor of traditions in geography with deep historical roots in the study of *both* biophysical ecology and social science.

Schubert (2005) has suggested the combinations of two major theories e.g. human-environment relationship theory and Entitlement theory while dealing with 'Political Ecology in Development Research'.

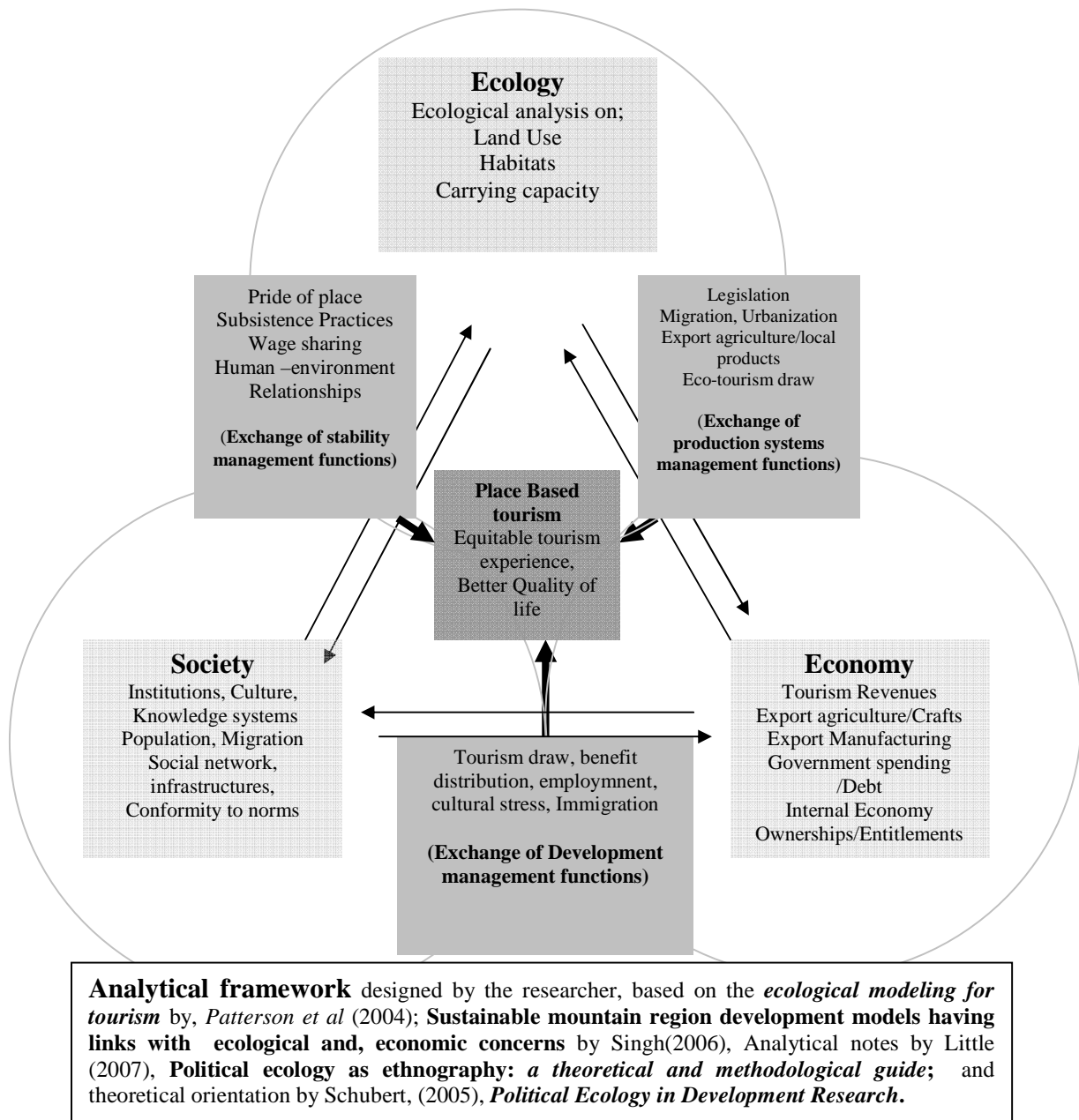
Problems arising over access to resources have been a key focus in many political ecology studies, especially those that have examined the often destructive impact of Western-driven conservation policies in many parts of Africa (D. Brockington 2002; R. Duffy 2000; R.P. Neumann 1998; R.P. Neumann 2003 as cited by Julian Bloomer, 2009). Jones (2008 as cited by Kepe et. al, 2008) has stated that political ecology is characterized by attention to ecological dynamics; a sensitivity to the role of the state and the wider global economy in shaping environmental change; emphasis on social difference, especially among decision makers; the acknowledgement of the centrality of poverty and inequality as key factors affecting environmental change; and "contextual analysis of multiple scales of influence".

Blaikie, who is one of the pioneers in the field of political ecology has contributed comprehensive literature not only in linking environmental knowledge and politics, but also in showing ways that environmental analysis and hence policy can be reframed towards addressing the problems of socially vulnerable people which is based on the analysis within Political ecology framework (Forsyth, 2008).

According to Greenberg and Park, (1994) there are two major theoretical thrusts that have most influenced the formation of political ecology. They are; **political economy**, with its insistence on the need to link the distribution of power with productive activity and **ecological analysis**, with its broader vision of bio-environmental relationships.

Karl Marx, perhaps, came closest to defining the dialectic between individuals, their productive activity in human society, and nature (I.Mészáros 1970:104 as cited by Greenberg and Park, 1994) that political ecology seeks to address by his insistence that one must begin not with abstract premises or dogmas (K.Marx and F.Engels 1970 [1846]:42 as cited by Greenberg and Park, 1994), but with the productive activities of real individuals. This focuses attention on political economy as it transforms and is transformed by individuals and nature.

Political ecology expands **ecological concepts to respond to the inclusion of cultural and political activity within an analysis of ecosystems** that are significantly but not always entirely socially constructed.



(Conceptual framework specific to the Research on ‘Political Ecology of Everest Tourism’ is presented in annex)



#### **4. Literature Review**

Literature review has gone through various phases to depict the issues of tourism intervention in the people and environment of the mountain destinations. Major literature focused on the previous researches are basically from the issues of environment, culture, economy, Infrastructure development, and indigenous people of the region but there are no literature based on the political ecology framework which tries to encompass the issues of the disparities among the classes of the society, marginalization and exploitation of the indigenous people as a result of tourism interventions in the region forging links to concerned policies. Lately there are studies like that on '*ecological modeling for tourism*' by Patterson et al (2004), and '*Sustainable mountain region development models having links with ecological and, economic concerns*' by Singh (2006). Both of the research works are based on the discourse of political ecology.

According to Greenberg and Park (1994), Political ecology expands ecological concepts to respond to the inclusion of cultural and political activity within an analysis of ecosystems that are significantly but not always entirely socially constructed. They further stated that, more recently, perspectives have broadened throughout the social sciences to include the role of human activity in transforming and even defining ecosystems (urban ecosystems, agricultural ecosystems, damaged ecosystems, etc.). Environmental historians such as Crosby (1986) and Worster (1985, 1993) have begun to provide detailed insights into the past role of human societies in transforming the environment. A politically informed environmental history has also begun to develop (e.g. N.Christenson 1989; E.Jones 1981; L.Ladurie 1972; S.Pyne 1991; R.Rotberg and T.Rabb 1981; I.Simmons 1989 as opposed to J.Malin 1947; F.Turner 1920 as cited by Greenberg and Park 1994).

During the last twenty years, "political ecology" has emerged as a new field of research bringing together human ecology's focus on the interrelations between human societies and their respective biophysical environments and political economy's analyses of the structural power relations occurring between these societies (Little, 1999a; Sheridan, 1988; Stonich, 1993 as cited in little 2007). This field is the result of an intensive dialogue between the disciplines of biology, anthropology, geography, history and

political science, creating a unique trans-disciplinary space within the natural and social sciences.

An example of study on 'local political ecology' is Bassett's (1988 as cited by Schubert, 2005) case study on farmer-herder conflicts in northern Ivory Coast. He identifies the key factors that determine a political ecology approach: the contextualization of human environment interaction, a historical analysis, the examining of state interventions that determine land-use at local rural level and the sensitivity to regional variability.

Regarding the issues of resource use and conservation of the environment, Zimmerer (2006), one of the pioneers of political ecology researches, inferred that rapid growth of this interface of conservation with livelihoods and resource use is driven by factors that range from the territorial expansion of the protected areas to the management emphasis, politics and discursive strategies that are deployed in these broadened conservation efforts. It means political ecology of a small territory is webbed by complex dynamics. Hence, the diversifying issues of environment and socio-economic power relations have direct linkages to the policies and management strategies.

The study of local environmental problems in their social context, often drawing on participant observation, arguably represents the foundation of today's political ecology.

Focusing to the governance issues from the perspectives of Political and cultural ecology Zimmerer has typically suggested that environmental governance at the local level is politically necessary and pragmatic for the socially just undertaking of conservation and environmental management that occurs in or near protected-area landscapes (Nietschmann, 1984; 1995; Stevens, 1997 as in Zimmerer, 2006).

These issues of political ecology in natural resources governance are intricately linked to the issues of the environmental degradation and resources conflicts scenario of Nepalese mountain region. They have a wider arena of the policy debates in the global development forum too. Previous researches in mountain geography of Nepal indicate that the finding of the researches continue to confront many of the issues that face policymakers in mountain regions and, continues to offer an all important scientific and critical perspective on the conduct of global mountain debate (Price and Funnel, 2003).

The biogeography of the mountain region is different from that of the plains. According to the assertion from Singh (2006), Development in the mountains has to have a different

approach, given the fragility and vulnerability of the Himalayan ecosystems due to the uniqueness of mountain specificities.

As the discourse of political ecology is centered on appeals to ethical values, solidarity, autonomy, ecological responsibility and democracy (Becker and Raza, 1999), it can occupy broader space in issues of conservation and development of the biogeography of such regions.

With the increasing realization that the natural resources of mountain areas are vital for both highland and lowland people, the Global Agenda for Sustainable Development has brought mountains to sharp focus. The complexity of such issues continues to receive considerable attention at the global forum like the WSSD (World Summit on Sustainable Development, Johannesburg, August 2002) and Bishkek Global Mountain Summit (October 2002). These events have arrived at a consensus that mountains would require specific approaches and resources for sustaining livelihood needs and improving the quality of life. This would require an integrated approach, which gives due consideration to closely intertwined aspects of human socio-cultural/socioeconomic systems and natural ecosystem components/processes (Singh 2006).

Regarding the interventions of tourism in the fragile mountain ecosystem, recent research of Awang et.al (2009) has suggested that the nature of tourism development is a highly contested one, which among others, is susceptible to influence from the surrounding milieu, invoked by factors such as politics, economics, culture and the environment.

Speaking on the complexity of the global-local nexus-and the complicated interactions among economic, cultural and environmental elements to create local development outcomes, Milne and Ateljevic (2001) has strongly asserted that we can not understand the context of local tourism development unless we grapple with this complexity and better understand how key stakeholders (government, industry, community, tourists) interact both within and between multiple nested scales.

Addressing the conflict of interests on the conservation of parks and protected areas, Adams and Hutton (2007), said that the political ecology of conservation is highly complex and diverse. Ideas of nature are laid out on the ground in PAs, and the needs, rights and interests of people are bent to fit the resulting conservation landscape. All this takes place against the backdrop of a wider social assault on nature through processes of

industrialization, urbanization, pollution, and the conversion of terrestrial and marine ecosystems to industrial purposes. This assertion is applicable to the degradation of the natural environment of Everest region due to tourism pressure; and overwhelming conflict of interests among different classes of people and park administration in Sagarmatha National Park.

In the same issue, Rogers (2007) inferred that the impact of tourism on indigenous peoples and their environments that have occurred as a result of the conflicting interests of the various participants in the economic development process have led to considerable social and environmental problems for indigenous groups.

Dealing with the political ecology of Everest tourism, literatures on the specific issues of socioeconomic power relations and environmental degradation are briefly reviewed here.

### **Marginalization of low income groups and Threats to the Indigenous Cultures**

According to Rogers (2007), developing countries and their indigenous populations and natural environment are seen as ripe opportunities for the accomplishment of the major goals of economically and politically powerful governments of developed countries. These goals are mainly centered at expansion of global market and creation of economic dependency.

The tourism entrepreneurship development opportunities, infrastructures and services like; lodges, shops, travel companies etc., are mainly confined within the Khumbu peoples, for a instance: there are very few cases of lodge development by non-Khumbu residents (Stevens 1993, as cited by Rogers, 2007).

A survey of Khumbu residents in 1982 by researcher Ivan Pawson stated that there were few Sherpas who did not feel that tourism and the affluence in Khumbu was having a generally beneficial effect (Pawson et al. 1984a, as cited in Rogers 2007).

But the people who are marginalized and have no access and opportunities to develop tourism entrepreneurship in the region,

Khumbu is connected with frequent air transport, during peak autumn season more than 30 scheduled flights (Data of 1999 as in Rogers, 2007) landed daily at the Lukla airport. Solukhumbu is the only one district of Nepal having largest numbers of airports. But comparatively other airports have less numbers of flights. The Phaplu airport near salleri

in the Lower belt (Solu) has few numbers of flights per week. This shows that the Infrastructures of the lower belt are underutilized.

According to Rogers (2007), contemporary tourism in Khumbu has gone through westernization by replacing the local products and services by western tastes and culture. There is a common trend of shift in occupation as other sources of wage-earning employment pay less than tourism work.

After years of close observation of Society and culture of Everest region, Stevens (1991 as cited in Rogers, 2007) has inferred that the cultural changes that occurred since the arrival of tourism are relatively superficial and do not signify an abandonment of local values for the consumer culture of the west.

### **Ecological changes and pollution problem in Everest Region**

Only about 2 percent of the total area of Khumbu is forested (Stevens, 1993 as cited in Rogers, 2007), but forest resources have long been an integral part of this region and of indigenous people's subsistence. The growth of tourism in Everest region has placed heavy demands on local forests. Deforestation and soil erosion are the problematic consequences. According to the data recorded by Sagarmatha Pollution Control Committee (1998), during one year period from July 1996 through June 1997, over 125,000 kilograms of fuel wood were transported Pharak into Khumbu ( Rogers, 2007).

A study by Byers (1995 as cited by Rogers 2007), showed that approximately 60 percent of the juniper shrub cover near the village of Dingboche had been lost since 1962, with the majority of the change occurring during the period of high tourism growth from 1984 to 1995, during which annual tourist numbers in the region increased from about 5,000 to 14,000.

A study of solid waste pollution in Sagarmatha National park, conducted in 1984, revealed that tourism was responsible for 90 percent of the trash generated in the area, and the worst offenders were found to be mountain climbers, tourist lodges, and trekkers (Basnet 1993, as cited by rogers, 2007).

### **Conflicts of Everest tourism**

Egbert Pelinck, the former director of International Centre for Integrated Mountain Development (ICIMOD) in Kathmandu, wrote: 'with few exceptions, the promotion of

tourism in the Himalaya until recently has lacked a specific focus on local community development and environmental stability” (Pelinc, 2000 as cited in Rogers, 2007).

Paul Rogers and John Aitchison (Rogers and Aitchinson, 1998), in their study of Everest tourism, concluded that “under free market conditions, the various actors involved are unable to guide the tourism economy towards the social and environmental ideals of the ecotourism. In this regard there is a need for stronger planning and coordination.”

Furer–Haimendorf (1995 as cited in Rogers 2007), in the context of socioeconomic power relations and emergence of social conflicts during the intervention of tourism in this region, asserted that “Sherpa village (in the 1950s) used to be characterized by their unity of purpose and the absence of factionalism. The interests of the villages were seldom in conflict. Now (in the 1970s), however the focus of many Sherpa’s interests has shifted to the personal economic possibilities provided by the tourism and success in this sphere.” This scenario has created a complex of conflicts of interest, competition over the resources and opportunities; and hence marginalization of the low economic class people of the region.

### **Tourism Planning and forging Policy Linkages**

Linking to significance of the planning and management policies of Everest tourism, Banskota and Sharma(1995 as cited in Rogers 2007), inferred that rather than charging exorbitant entrance fees to the visitors and placing a limit on visitor numbers, tourism carrying capacity of the Everest region could be increased through better planning and management of the effects of tourism.

Clint Rogers (2007) said that local residents of the entire Solu-Khumbu area should be intimately involved in the empowerment to direct planning and management of local tourism, conservation, and development activities. Linking this issue to the policy requirements, Rogers has asserted ‘to keep tourism development in the hand of local people rather than outside business interests, perhaps policies should be considered that would protect the economic opportunities and self-determination of local residents by prohibiting outside developers from owning local tourism businesses’. In this regard mountain tourism has to be forged for further links to the sustainable mountain development policies from local to global level initiatives with development agendas and development programs.

Based on these literatures, it is applicable and important to fit the discourse of political ecology in mountain tourism development researches to address the major issues like;

1. Marginalization of low income groups and threats to the indigenous cultures
2. Ecological changes and pollution problems
3. Conflicts of interests among tourism stakeholders

## **5. Discussions**

Socioeconomic marginalization and underdevelopment of the mountain regions and their peoples is a global issue. Inequitable access to resources and inequitable income distribution are two major challenges to the sustainable and equitable development of the Mountain communities. The complexities of mountain development also lie within the socioeconomic power relations among different stakeholders of development interventions. In mountains, tourism is a major development intervention and it is still not equitable to the people of all economic classes. Viewing through the perspectives of equitable tourism, the major benefits should go to the destination and the host community. Hence, this implies for the need of using a comprehensive analytical model to assess the status of mountain tourism. This analysis helps for developing effective policies on Sustainable Mountain Development. Here, the case of Everest tourism is reviewed to address the multilayered complex issues related to the tourism interventions. This framework can be contextualized in different cases. It can be used to analyze the political ecology of the of tourism interventions in different mountain communities.

## **6. Conclusion**

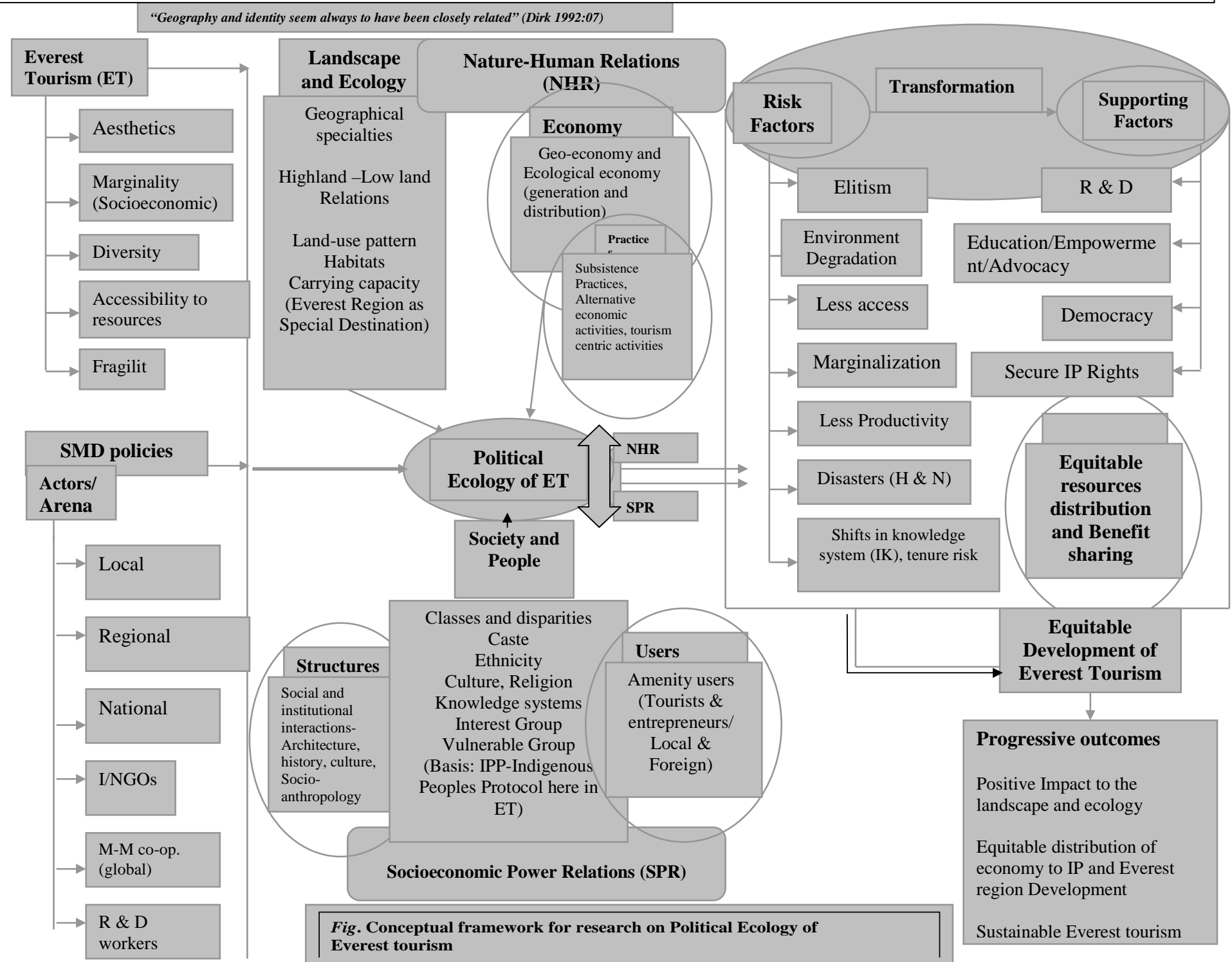
This research forms an analytical basis within the framework of 'political ecology of mountain tourism' for development of sustainable mountain tourism in Nepal and abroad by linking the issues of Everest tourism to the Sustainable Mountain Development policies. It further designs a comprehensive methodological guide to assess the socioeconomic impacts and environmental consequences on the tourism interventions, forming a basis for developing effective policies and programs for global Mountain Development.

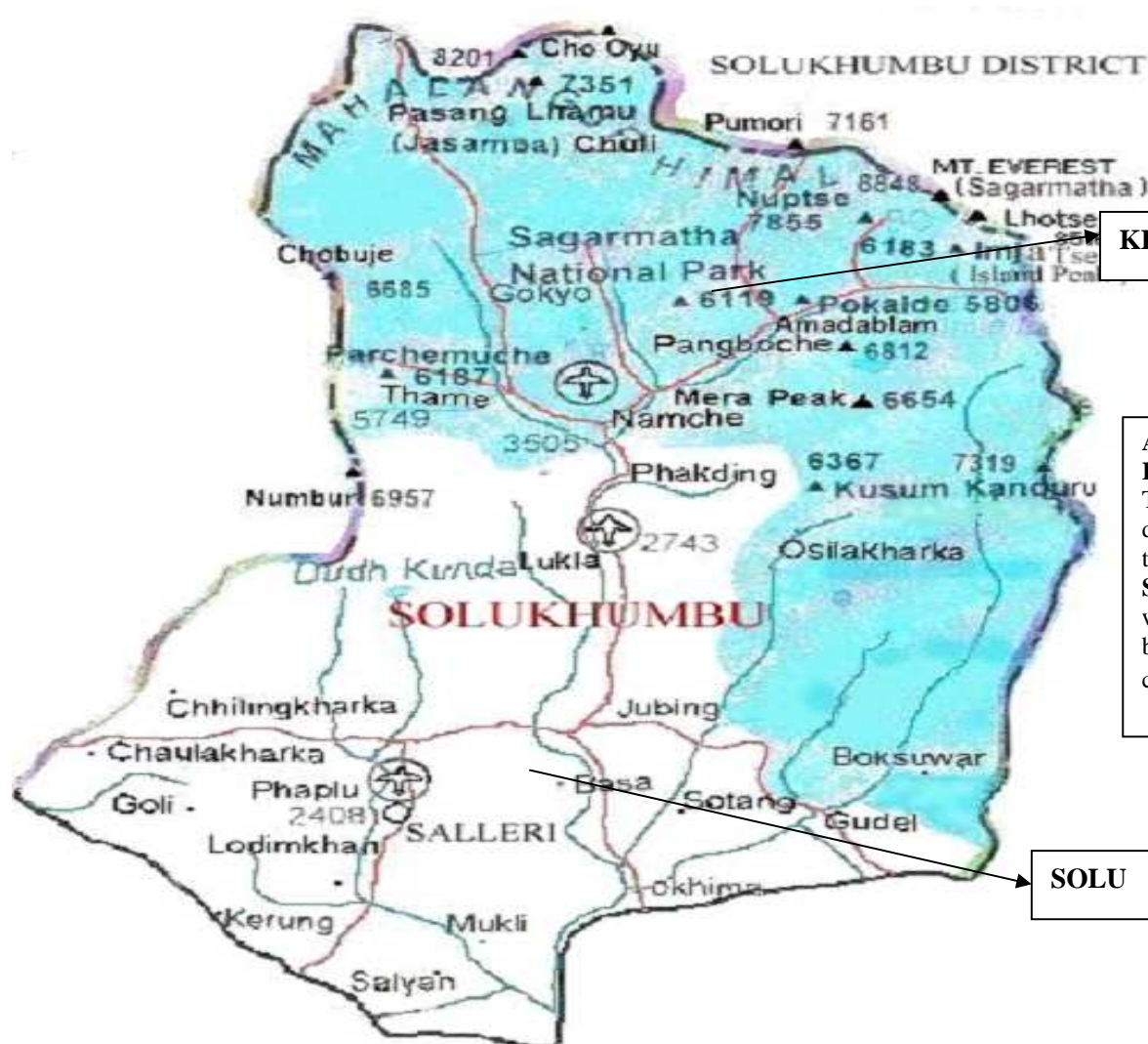
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**KHUMBU**

#### Annex 2: Study sites:

**Khumbu belt (Khumbu, Namche, Lukla) –** The belt where most of the economic development is concentrated more as compared to Solu belt

**Solu Belt (Nele, Chyalsa, Salleri) –** The belt which has minimal access to the economic benefits generated by the Everest tourism as compared to the upper belt of Khumbu.

**SOLU**