

CHAPTER - I

Introduction

1.1 Background of the Study

Nepal, the only Hindu Kingdom is commonly known as the birth place of Lord Buddha, the land of Mt. Everest and home of Gorkhas. In 1974, the late king Birendra, during his coronation, forwarded a proposal declaring Nepal to be made a 'Zone of Peace' which was later on recognized by one hundred and sixteen countries. Nepal once a peaceful country is now in a critical juncture due to various internal conflicts one of which has been the Maoist insurgency that started its movement in the name of 'people's war' since 13 February, 1996. There has been deterioration in law and order, peace and security and development and economic activities. Killing of children, students, farmers, innocent people, members of the security forces and rebels, bombing and destroying private and public infrastructure have been in the daily news of the country. Consequently, millions of people have been suffering from this menace.

Nepal with its geo-political location and unique political development, has more than two centuries of Nation State history and has undergone several types of political systems, such as direct rule of monarchy, Rana family rule for 104 years (1947-1950), a decade of democratic system (1950-1960), 30 years of party-less panchayat system with active role of the king (1960-1990) and 12 years of parliamentary democracy (1990-2002). During all these political systems, Nepal has had a long tradition of feudalistic pattern of governance in which the entire state machinery geared towards fulfilling the interest of a handful of upper caste ruling elite. Available evidences demonstrate that the common people were

subjected to extreme exploitation and marginalization over a long time spanning.

The Rana rule was over thrown in 1951, heralding a new era of awareness about individual freedom and fundamental rights of the citizens. However, the people at large, could not experience any substantive change in the system as the state with influential central of the king and old ruling class that were not readily willing to relinquish the privileges they were enjoying.

In 1960, the parliamentary system government was prematurely dismissed. It was followed by 30 years of the partyless panchayat system operating under the direct and absolute control of the king and supported by the army and established economic and political interests.

After the restoration of democracy in 1990, the past eight years (1990-98) remind us of the same numbers of years in the 1950s (1951-59) as a political instability and the leaders being clamored for power, often times, at any cost, meaning even indulgence in blatant violence of law and criminal activities. The only difference was that the center of power had shifted from royal palace to political parties and their influential leaders. On the other hand, democratic changes swept through Nepal in 1990, bringing hopes and aspirations to many in a country plagued by some of the lowest standards living in the world.

The state failure in delivering its promises made by the constitution, the peoples' war was avowedly introduced with an armed struggle with the proclaimed aim of overthrowing the government and establish a peoples' democratic republic towards the creation of a socialist society. Since the outset of violence, more than 10,000 people-primarily policemen, suspected insurgents, informants and also innocent civilians have been killed. The

conflict has been intensified since the spring of 1998, with almost daily violent incidents in some areas of the country. The influence of the Maoists is strong in the economically and socially deprived north and west. But violence has now spread almost all over the country demanding for more democratic rights for all.

People discouraged by a lack of progress and advancement, resort to violence and extremist ideologies. Hunger breeds support for extreme activities among the rural people. State functionaries and development bureaucracies are weak. The gap between the government rhetoric and performance frustrated many villagers. All these factors in turn has helped the insurgency¹.

The major causes of the conflict are said to be structural inequalities, injustice, bad governance, corruption and so on named differently in different context. However, if we look the present conflict from another point of view, in the context of rural area dominated Nepalese society, one of the root causes is inequality to the access of ownership of Natural Resources due to long existed environmental injustice. Majority of rural people and their failure to meet social, political and economic needs because of scarcity of resources, along with the distributive injustice, depriving ultra-poor, has fueled civil war further more.

"It is important to note that all social, economic and political conflicts are interrelated to natural resource conflict"². Several efforts have been made to utilize available natural resources to increase the economic growth of the country. As a part of this National policy, attempts have also been

¹ Shrestha, C.B. (2003): "Nepal Coping with Maoist Insurgency", Kshitiz Publication, Kathmandu, P. 114

² Upreti, B.R. (2004): "The Price of Neglect; From Resource Conflict to Maoist Insurgency in the Himalayan Kingdom", Brikuti Academic Publication Kathmandu, P.

made to reform the land use pattern and ownership, the agricultural system, forest management and to develop new irrigation systems and so on with the aim of sustainable development on the basis of equity in benefit sharing.

But Despite these efforts, to a great extent, there are political, economic, social and cultural factors that have impacts on the causes of environmental injustices. Politically some are powerful and some are powerless. Politically alienated groups are the victims of injustices as they lack participation in environmental activities. Like political power, economic hierarchies that are inherent in a society are the root of environmental injustices. Furthermore, there is a relationship between environmental injustice and caste and gender. This discriminatory practices rooted in ethno-caste system is also seen in environmental issues.

In this regard, environmental justice demands egalitarian practices at the local, national and international levels. Man is both creature and monlders of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. "Both aspects of man's environment, the natural and man-made are essential to his well-being and to the enjoyment of basic human rights even the right to life itself"³.

Hence, in the present context of Nepal, environmental justice focuses on how the environmental repercussions of human actions affect social equilibrium. Environmental justice demands sustainable use of NRs., elimination of environmental hazards, equitable access to NRs., and proportionate distribution of benefits arisen from sustainable use of NRs. It embraces knowledge, power, ownership and creates a condition of self governance. The principle of clean air, land, water and food to be a

³ Declaration of the United Nations Conference on the Human Environment, Held at Stockholm in 1972, P. 1.

fundamental right. The right to participate as equal partners at every level of decision-making including needs assessment, planning implementation, enforcement and evaluation. It is the most effective means to empower people and correct injustices which protects their inborn right to enjoy NR and ultimately helps to resolve on going conflict by establishing egalitarian society.

1.2 Statement of the Problem

The kingdom of Nepal is in the state of conflict. The on going conflict between the forces of CPN (Maoist) and HMG/N about a decade has claimed the lives of more than ten thousand people. "The specific identification and the causative factors of insurgency can not be figured out as other pure sciences. But as per the manifests and demand of various political organizations, the CPN (Maoists), reports and publication of NGOs, Civil societies, government institutions, the media including international donor communities, the problems of insurgency can be identified as: historical, political, social, legal, socio-cultural, religious, economic, gender, discrimination, injustice, inequality, poverty, unemployment, underemployment, mal-administration, nepotism, corruption and the failure of the rule of law and governance etc"⁴.

Furthermore, ethnic communities, women, Kamiyas and other socio-political and economically marginalized groups have been excluded from the political mainstream and are not represented in the decisions making process of the legislative and the executive from the local level to the national level as well as other state mechanisms. These are the core areas of the problem identified as the contributing factors to the Maoist insurgency.

⁴ Shrestha, C.B. (2004): "Nepal Coping with Maoist Insurgency", Kshitiz Publication, Kathmandu, P. 22.

So far, whatever types, magnitude and intensity of political changes have occurred in Nepal in the past under any brand of political system - be it during the 104 years autocratic family rule of the Ranas or be it in the authoritarian partyless panchayat rule, all such changes revolved around the ruling cities and urban people only; it has never passed beyond their inner circles. This is exactly why none of the political systems/transformation has really changed the brutal fact that majority of the total population. "Rural people" remained suppressed, oppressed, depressed, exploited, subjugated and discriminated by the ruling elites.

"Human existence, life style and economics depends safely on 'Solar Capital' and 'Earth Capital'⁵: Nepal is one of the least developed country of the world despite its tremendous possession over Natural Resources. The state policies and Mechanisms were and are limited to fulfill the needs of high class people and their access to Natural Resources. This situation led to exclusion of rural poor from access and control over natural resources and they could not uplift their living standards. The high class people have capacity and power to enjoy environmental assets and are over exploiting them to fulfill their needs. On the other side, rural poor, not being able to afford, are compelled to live on degraded environment leading to further deterioration of environment and they themselves are victims of the same environments. So this deprived situation has affected to their access to opportunities like sources of income, nutritious food, safe water, green environment, and other related potentiality of lives from time immemorial.

This long lived vast discriminations regarding access to NRs. gave birth to 'haves' and 'haves not' in Nepal. Even today, more than 38% of people are under absolute poverty live who can't manage or can hardly

⁵ Lekhak, H.D. and Lekhak, Binod (2003): "National Resources Conservation and Sustainable Development in Nepal", T.U. Book Center, Kathmandu, P. 4.

manage their two time meals and a pair of clothes. The fundamental sources of income of Nepalese people is Natural Resource, particularly land, and its quality and quantity under possession determines a person's socio-economic and political status.

Access, allocation and distribution of NRs. and power relation are some of the major issues in conflict. Differential access and control, changes in access pattern and inequitable access have frequently caused several social conflicts born out from varying socio-economic and political interests of different strata of people with multiple impacts on all aspects of lives.

Nepal's economy largely depends on the use of NRs. base. "The historical content is a strong determining factor in the present governance of N.R. and management of associated conflicts. Population pressure and poverty are said to be the main causes of NRs. deterioration. Land, water and forest are the three most important resources for the survival of the vast majority of the Nepalese people"⁶. Nepalese people have low per capita income with comparison of developed countries; this reality can be broken through only by the sustainable management of NRs.

According to the census of 2001, 38 percent of Nepalese people are below the poverty line. Poverty in Nepal particularly in rural areas is widespread and deeper in the most remote areas of the hills and mountains. Poorest households in these areas tend to have very small landholding of 0.5 ha. or not at all. There are also marginalized and very poor population of ethnic minorities and certain occupational cast groups. Rural poor have particularly difficult time with work burden and low health in these areas. In this situation, available NRs. must be used with highly reasonable manner in order to improve living standard of present population as well as of future

⁶ National Planning Commission (NPC, 1997-2002): Ninth Five Year Plan, Kathmandu, P. 45.

generation. Such N.R., being foundation of National Development, have presented promising and relatively untapped opportunities for increasing and relatively untapped opportunities for increasing the income of the very poorest segments of the population. They can play crucial role in economic and social life in the Nepalese context.

However, the proper importance has not been given to the provisions of environmental justice. A few studies have been conducted on the issues of environmental justice. In Nepal, there are disparities regarding to the access to Natural resources, benefit sharing, access to right to information, participation in policy making or decision making process and access to judicial process on the grounds of class, caste, gender, economic status and political power in environment related issues. Furthermore, environmental injustices, in Nepal, are embedded in its social structure. Inequalities inherent in society are clearly seen in environmental injustice. Thus, environmental justice is affected by factors like caste, gender, class or political power⁷.

This deprived and excluded situation of rural poor masses from Nature's gift which are essential for livelihood, particularly in a country that is still in the feudal state of development, i.e., agriculture dominated. Outwardly, this type of environmental injustice seems to be simple with general impacts over environmental and Natural resource issues only. But, in depth study and insight on injustice issues reveals several multiplier effects on socio-economic, cultural and political life of a society and even of a nation. These multiplier impacts can be economic inequality and class division social stratification, caste and gender discrimination, political

⁷ Adhikari, Jagannath and Ghimire Sharad (2003): "Vatavaran Nyaya Ka Lagi Jana Abhiyan", "Vatavaraniya Nyaya Strot Sangalo Martin Chantari Vikas Thaha Anusandhan Kendra, P. 25.

division and disorder and lastly, social disharmony and conflicts originate in long run of time. The same thing is happening in our country presently. Environmental injustices gave birth to various social, cultural, economic and political variances in society and as a single result of these variances, Nepalese society is now in social conflict called "Maoist Insurgency".

In this line, some gamine questions may arise in the context of Nepal, to address environmental justice issues and concerned conflicts management:

-) What are the environmental injustices and social disparities found in Nepalese society?
-) What are the strategies and policies so far undertaken to solve those environmental injustices and disparities so as to get equity in their to all?
-) Are the strategies and policies effective both at National and local level?
-) What can be done to reduce such injustice and inequality to establish social equity and harmony along with present social conflict resolution?

The present study has been take up with a view to answer these questions and to support the policy makers to address these issues so as to help for conflict management on the basis of equity on NRs. benefit sharing.

1.3 Objectives of the Study

The general objectives of the study is to assess the environmental injustice and emergence of associated social conflict (Maoist Conflict) for its proper resolution in the context of Nepalese society. With in the general objective of the study, following objectives are formulated specifically:

- To identify the degree and nature of environmental injustice on the matter of access and benefit sharing.
- To assess the causes of environmental injustice.
- To explore the correlation between injustice and social equity.
- To provide general guide line for policy makers, planners, I/NGOs and government to create policies for equal access over environmental resources like land and forest resources on the basis of equity.

1.4 Hypothesis

Environmental injustice and inequity in distribution of Natural resources results to social disparity and conflicts in society which deserve environmental justice for establishing egalitarian society and for conflict management, as a fundamental approach.

1.5 Rationale of the Study

The Nepalese Society, at the beginning of the 21st century, is passing through the greatest upheavals in its entire history in the form of the 'Maoist's Movement' and has created irreparable damage in socio-economic and political aspects of life which the nation is not in a state to sustain. The very on going conflict is said to be 'The revolutionary peoples' war' of the oppressed classes, regions, nationalities, gender and communities against the out model semi-feudal and semi-colonial social order to get emancipation from the exploitation, social barriers and taboos, political exclusion and particularly from economic hardships of the majority of population.

Nepalese society may get rid from the present conflict with the provision of social justice. The concept of social justice involves the view of

society in which distribution of resources is fair and all members are safe and secure from all sorts of injustices. Social justice becomes a necessary condition for equality, social stability and democratization and prosperity of society.

In the developing country like Nepal, majority of the population directly depends on NRs., particularly on land and forest resources, for their sustenance. Access to land and other NRs. determine their quality of life as they lack other alternative sources of income. Since, historical times, a larger portion of such NRs. were controlled by a small percentage of the population. Since the poor had little or no access to land, a very small but powerful group of people acquired a disproportionate share of resources and political power. They made rules and instilled traditions that suited their own agenda. The poorest are not only powerless, they are also voiceless and must stoically suffer social, economic, political and environmental hardships. Hence, they are easily attracted and involved/used in violence in the name of so called 'Maoist's Movement' with dreams and hopes to break such long lived deprivation.

Nepal is small in size but rich in NRs. which play significant role in economic development. Nepal is also known as 'Nature's Paradise' because of its richness in Natural Resources and such NRs. are major component for the visualization of its beautiness in the world. Natural Resources are the fundamental ornaments of Nation, which determine the degree of economic development and level of National prosperity. Nepal's second position in water resource possession in the world, huge forest resources, fertile land and beautiful topography have blessed her with lots of potentialities for her prosperity. These potentialities can obviously play a vital and fundamental role in sustainable development of the nation and for upliftment in entire living standard of all citizens.

Here, in this regard, environmental justice intends to resolve social inequalities which germinate injustice. It is based on egalitarian viewpoint which emphasizes the equal right for all with the aim of social transformation directed towards meeting human needs and enhancing the quality of life economic quality, health care, shelter, human rights, species preservation and democracy using resources sustainably.

Environmental injustices and social inequalities can be correlated in Nepal as it is embedded in its social structure and is affected by factors like caste, gender, socio-economic status and political power. Nepal has disparity regarding access to NRs. and their ownership, benefit sharing, participation in policy making, quality and quantity of their consumption on the basis of class, caste, gender, and political power in environmental issues. Thus, the basic rationale of the study lies on focusing the issues of environmental injustices and on their multiple effects happened/occurred on entire life that have germinated social disorder and inequality. Furthermore, the study aims to find out proper solutions to the present social conflict through environmental justice that will be helpful in reestablishing peace and social justice in the country.

1.6 Limitations of the Study

The present research is primarily the study of environmental injustice and concerned social conflicts existed in Nepalese society. The subject matter is of extensive and broad in nature. Therefore, there will be following limitations in accordance with objectives, time and available resources:

-) The study will be confined to the study of environmental injustices and associated social conflicts only.
-) It will not cover all aspects of Nepalese society and its factors influencing conflicts.

-) The idea availed from primary sources may not tally with data of other sources.
-) The concept, assumptions, generalized conclusions will be based on the findings of the researcher and may not tally with that of others.

CHAPTER - II

Organization of the Study

The over all purpose of this chapter is to review briefly the different existing literature concerning environmental justice and its significance in a sustainable society. Similarly, literature on the field of conflict, over the natural resources, literatures related with land and forest of Nepal, existed political economy of natural resources, and literature concerned with Maoist Insurgency have been reviewed on various grounds in the context of Nepal.

2.1 General Overview of Environmental Justice

The phrase 'Environmental Justice' contains two separate words "environmental" and "justice". The term environmental means related to environment. Environment is anything which is on and around the earth. It includes biological, physical and cultural factors. Biological factors are living beings such as animals, plants and microorganism and physical factors are both natural and man made which are non-living things. Air, water, land, atmosphere etc. are natural factors. Man made aspects are buildings, rules and regulations, social institutions and society. Social and cultural factors are also a part of environment. Justice, in common parlance, relates to the settlement of disputes by the judicial or quasi-judicial bodies. In the environmental context, justice is related to and equity for all.

Robert D. Bullard, in his famous book "Dumping in Dixie: Race, Class and Environmental Quality (2000)", defines environmental justice as equal right for all. He is of the view that environmental justice embraces the principle that all people and communities are entitled to equal protection of environmental health, employment, housing transportation and civil right and laws. It is said that there can be no social justice without environmental justice. Environmental justice is about a social transformation directed

towards meeting human needs and enhancing the quality of life - economic quality-using resources sustainably. A central principle of environmental justice stresses equal access to natural resources and the right to clean air, water, affordable shelter and the right of a safe work place. Therefore, the environmental justice movement remain inseparable from other social injustices such as poverty, racism, sexism, unemployment and other discriminations.

Chairs, Benjamin try to define environmental justice, in the book entitled "Environmental Justice in Social Justice (1993)", as a "movement that confronts the immorality of upper and middle class people consuming the most energy and producing the most waste, while it is the health of the poor that is most affected by the resulting population". Environmental justice is concerned, in a broad aspect, with the processes through which inequalities arise from social, political and environmental decision making, action and policies. It is intended to create a mechanism to resolve class, gender, and caste related disparities in bearing negative impacts on environmental degradation and pollution, access to natural resources and shearing benefits arising from natural resources. Social justice and elimination of institutionalized discrimination are to be the major goals of environmental justice movement. Environmental justice intends to resolve social inequalities which germinate injustices. It so requires a commitment to provide equally as it is essential to give environmental justice. Equality here needs appropriate opportunity for all or the absence of special privileges or the end of discriminations. Many concerns have emerged in recent years that poor communities are compelled to bear a disproportionate burden of the negative impacts of pollution. In response, environmental justice movement has sought to ensure that no particular part of the population should be disproportionately burdened by the negative effects of

pollution since every one has equal right to pollution free and healthy environment which include clean air and water, safe work place and shelter and adequate health care etc.

In the book titled "Environmental Justice in South Asia: An overview in environmental justice issues in South Asia" (2004: 2), Chitra, Gopal Krishna links issues of environmental justice with poverty. He mentions issues of environmental justice as: "Environmental injustice in each South Asian Countries essentially springs from the fact that the poor are over whiningly dependent on their immediate environment for sustenance. But they lack control, control over them is near total. As the disadvantaged sections have no power to make decisions or manage their environment, their stake in sustainably managing their resources is reduced. As there is intense competition for resources, the poor are only blamed to contribute to the degradation of the environment. But it is the rich who are primarily responsible for the deterioration. Government policies, however, do not acknowledge this and the rich are rarely made to pay for the ecological damage they caused. In fact, state policies are most often designed to divert the benefits to the rich."

2.2 Classification of Environmental Justice

The fourfold classification of environmental justice presented by Robert R. Kuehn in the book titled, "A Taxonomy of Environmental Justice (2000) help for clear understanding of the concept. He explains four concepts of justice: distributive, procedural, corrective and social justice.

a. Environmental Justice as Distributive Justice

Distributive justice mainly concerns with equal protection for all from environmental hazards and the distribution of the benefits of environmental programs and policies. There should be no discrimination on the grounds of

race, caste, class, gender and the like to enjoy the 'right to life' i.e. pollution free environment.

Focus of distributive justice is on inequitable distribution of benefits of environmental policies and programs. The benefits of environmental resources should be equally distributed. People should have an equal right of access to natural resources and to use environmental resources in their locality. Distributive justice emphasizes on the spirit that if people have an equal share in benefits of environmental policies and programs without any discrimination, environmental justice will be achieved.

b. Environmental Justice as Procedural Justice

Procedural Justice is concerned with decision making process. It is a political justice which aims to empower people to make their own decisions and does not rely on paternalistic policy making by government. This is the right to equal treatment in which rights of the individuals including those of the minorities are well protected.

Procedural justice focuses on greater public participation and access to information for minority and low income populations. This principle of environmental justice demands that public policy based on mutual respect and justice for all peoples, free from bias and discrimination, and insists on the right to participate as equal partners at every level of decision making. People can decide for themselves how to balance environmental risks and economic benefits rather than having those decisions made by others. All people irrespective of their artificial differences should have equal power in decision making and implementation process related to the management of environmental resources.

Decentralization of decision making power should go along with empowerment of local people through technical information and other resources. Proper knowledge and information on the management of environmental resources encourage people to participate in decision making process. Information and knowledge help people to understand the areas of injustices they are facing and creates in them desire to fight for justice.

c. Environmental Justice as Corrective Justice

Corrective justice is contained in the verdict of the judicial bodies delivered after hearing the statements of the parties in disputes. The aim of this norm is to correct the erratic behavior of the party in dispute. Corrective justice involves fairness in the way punishments for law breaking is assigned and damages inflicted on individuals and communities are addressed. Corrective justice involves not only the just administration of punishment to those who break the law, but also a duty to repair the losses for which one is responsible. The judiciary in an environmental context should do its best to provide people with justice or fair judicial decisions relating to the environment. The judiciary should be independent and the judicial process with in the access of the depressed.

d. Environmental Justice as Social Justice

The concept of social justice is very wide term. It includes with in its fold everything pertaining to; the protection of interests of minorities to the eradication of poverty and illiteracy. Social justice is that branch of the virtue of justice that moves us to our best efforts to bring about a more just ordering of society in which people's needs are more fully met. The demands of social justice put stress that the members of every class have enough resources and enough power to live in and benefits human being

with out any discriminations. Whoever they are, be accountable to the wider society for the way they use their advantages.

Integrating environmental concerns into a broader agenda that emphasizes social, racial and economic justice, social justice view refers to this aspect of environmental justice as 'social equity' an assessment of the role of sociological factors (race, ethnicity class, culture, life styles, political power and so forth) in environmental decision making. Hence, it is often described as a "marriage of the movement for social justice with environmentalism" and considers to a moral principle such as that all people are equal.

2.3 Development of Environmentalism and Environmental Justice

In Cambridge Advanced Learner's Dictionary, environmentalism is defined as "an interest in or the study of the environment, in order to protect it from damage by human activities." Much environmental activism is directed towards conservation as well as the prevention or elimination of pollution. Environmentalists often clash with each others over issues of the management of natural resources, e.g. the atmosphere and global warning controversy. However, whatever name they give to their movements. Conversation movements, ecology movements, peace movements, green parties, green and eco-anarchists and subscribe to very different ideologies, they support the same goals as those who call themselves 'environmentalists'.

To point the historical context, the first wave of concern about environmental issues can be traced back to the emergence of conservation and nature protection groups in the latter part of 19th century and the early 20th centuries, reflecting a growing middle class interest in the protection of

wildlife, wilderness and natural resources. Two often conflicting concerns dominated the early environmental movement: (i) Natural resources conservation, (ii) Wilderness and Wildlife preservation. Conservation allowed for resource extraction and the prevention attempted to prevent such practices.

From the 1950s onward, a third concern has influenced the modern environmental movement: Human welfare ecology. Modern environmentalism emerged from the late 1960s has been defined as "of growing public concern about the state of the planet, new political ideas about the environment and a mass political movement"⁸. During 1960s and 1970s mainstream environmental groups focused on wilderness preservation and conservation through litigation, political lobbying and technical through evaluation. People of color in America were engaged in collective action mobilizations for basic civil rights in the areas of employment housing, education and health care. On the basis of these concerns, the environmental movement emerged as a significant mass movement in the 1970s. The problem is concerned with distributional inequity "low income and minority communities continue to bear great health and environmental burdens, while the more affluent and whites receive the bulk of the benefits"⁹. The Crux of the problem is that the mainstream environmental movement has not fully recognized the fact that social inequality and imbalances of power contribute to the environmental degradation, resource depletion, pollution and environmental hazards that disproportionately impact people of color and working classes. There is generally a lack of concern over 'justice' in the main stream environmental movement.

⁸ Carter, Neil (2001): *The Politics of Environment: Ideas, Activism and Policy*, Cambridge University Press P. 1.

⁹ Bullard, Robert D. (1994): "Overcoming Racism in Environmental Decision Making", Cited in David E. Camcho (ed.); *Environmental Injustices, Political Struggle: Race, Class and the Environment*, Duke University Press, London, 1998, P. 35.

By the end of the 1980s, the concept of sustainable development had been launched by the Brundtland Commission, which defines it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

2.4 Issues Among Nations: Needs of Global Action

The environmental degradation is a consequences of development and industrialization and the ruthless exploitation of environment. The present environmental scenario is, to a great extent, the product of exploitation at the hands of the developed world. The developing countries are rich in natural resources. The developed nations are also dependent on the developing countries for important raw materials. However, they do not pay appropriate price for them. This has been one of the issues among them between the North and the South.

The developed nations have used environmental assets for their industrial development and generated massive wealth, material comforts, high standard of living and consumerism. Their practices have generated pollution and ecological destruction and extinction of biodiversity, as a result we are going to face the crisis of the survival. Thus, at international level, we are compelled to face a crisis generated by the deeds of others.

"Disputes at the international level include allegations that governments and multinational corporations are exploiting indigenous people and the impoverished conditions of developing nations" (Kuehn, 2000). The present patterns of exploitation of the world's resources and resultant environmental problems have started depriving us of precious gifts of nature. The resources of planet are fast approaching exhaustion.

On the other hand, the equilibrium between man and nature has been disturbed. Humanity has been threatened by environmental degradation. The major areas of global concern are as follows:

- * Land and ground pollution
- * Water pollution
- * Air pollution
- * Atmospheric pollution - global warming, Ozone depletion and acid rain.

Some transboundary issues, such as the conservation of endangered wildlife, natural habitats and marine life, have been around many years. Other problems which were once pre-dominant by regional or local in cause and effect, such as deforestation, desertification and water scarcity now have international dimensions. A new range of issues including climate change, Ozone depletion and biodiversity loss are truly global in that they affect everyone.

International efforts to protect the environment began in 1972. Before that, there were no specific international laws to protect the environment although there were some international conventions related to the control of pollution. The first global conference on human environment took place at Stockholm in 1972. The conference led to the adoption of the Declaration on Human Environment. Its principle 1 states that man has fundamental right to freedom, equality and adequate conditions of life in the environment of a quality that permits a life of dignity and well being, and he bears a solemn responsibility to protect and improve the environment for present and future generations. Principle 21 emphasizes that every state is under a duty not to cause any harm to the environment of others. Besides this, there have been various conventions and agreements to protect the environment.

International environmental problems require international solution. They can be solved with the cooperation among states. No state can solve them alone. Reductions of pollutions, bio-diversity, conservation, equitable benefit sharing of natural resources by nations etc. are major international issues. So, the needs for economic and environmental justice are essential at international level. The present pattern gives benefits to a small minority and it is destructive for the environment.

2.5 Principles of Environmental Justice

Environmental Justice has its formal origin in the USA. It made its initial formal appearance on October 27, 1991 when the United Church of Christ's Commission for Racial Justice convened the first national people of color leadership summit held in Washington D.C. adopted a seventeen point declaration of the principles of environmental justice:

- Environmental justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- Environmental justice demands that public policy be based on mutual respect and justice for all people, free from any form of discrimination or bias.
- Environmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
- Environmental justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water and food.

- Environmental justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.
- Environmental justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive material, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
- Environmental justice demands the right to participate as equal partners at every level of decision making including needs assessment, planning, implementation, enforcement and evaluation.
- Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
- Environmental justice protects the right of victims of environmental injustice to receive full compensation and reparation of damages as well as quality health care.
- Environmental justice considers governmental acts of environmental injustice a violation of international law, the universal declaration on Human rights and the United Nations Convention on Genocide.
- Environmental justice must recognize a special legal and natural relationship of Native people to the government through treaties, agreements, compacts and covenants affirming sovereignty and self determination.
- Environmental justice affirms the need for urban and rural ecological policies to clean up the rebuild our cities, and rural areas in balance

with nature; honoring the cultural integrity of all our communities, and providing fair access for all to the full range of resources.

- Environmental justice calls for the strict enforcement of principles on all people without any biasness.
- Environmental justice opposes the destructive operations of multinational corporations.
- Environmental justice opposes military occupation, repression and exploitation of lands, peoples and cultures and other life forms.
- Environmental justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
- Environmental justice requires that we, as individuals, make personal and consumer choice to consume a little of Mother Earth's resources and to produce a little waste of possible; and make the conscious decisions to challenge and reprioritize our life styles to insure the health of the natural world for present and future generations.

2.6 Environmental Justice issues in South Asia

Environmental equity issues need to be looked at from urban as well as rural perspectives. There are completely different sets of problems in urban and rural areas as far as the environment is concerned. In both the cases, those that suffer are the poorer and weaker section of society. As the government in South Asia looked to the west and become determined to catch up, their policies favoured the urban centres. Obviously, no one could fore see and assess how cities would grow. Failure to provide even the basic

amenities to the vast majorities living in rural areas created two different classes of people within these countries. The differences in services provided by the state between cities and villages lured thousands of people from villages to cities for more comfortable lives. Rural areas were depopulated as those with skills and knowledge migrated to cities. But with rapid urbanization, the facilities of the cities, too, were soon stretched to the limits. Eventually, the cities hosted their own poor in huge sprawling slums.

Upadhyaya, in the book named, "Justice for All" (2003) mentions following issues concerned with environmental justice in South Asian perspectives.

A. Land

In developing regions of the world, particularly in South Asia where the bulk of the population is directly dependent on land for sustenance, economic disparities and inequalities are pronounced. For the vast majority of people in South Asia, land and access to Natural resources, determines the quality of life. Since historical times, a large portion of this resource was controlled by a small percentage of the population. As the poor had little or no access to land, a very small but powerful group of people acquired a disproportionate share of resources and political power.

In recent times, governments have tried, mostly unsuccessfully, to institute land reforms to redistribute physical resources more fairly. Despite few cases, most of them were only political diversions to create vote banks of poor, rural constituencies. Their right over land has been marginalized and they are removed from decision making, even on matters that directly affect them. The poorest are not only powerless, they are also voiceless and must stoically suffer social, economic and environmental hardships. Due to lack of other sources of livelihood, landless people tend to over exploit even

marginal land which are fragile and prone to natural disasters. As their pressure intensifies, people are compelled to deforest to get land for cultivation. This trend leads to unsustainable use of other natural resources on one hand, and on the other, the poor get further poorer and threatened even to their life.

B. Air Quality

Human beings have been dumping wastes into the atmosphere long time ago and these pollutants have disappeared with the wind leading to air pollution. Air pollution is defined as the presence of substances in the air in a concentration sufficient to interfere with comfort, safety or with false use and enjoyment of property. Air pollution is considered to be one of the most dangerous and common kind of environmental pollution that has been reported to prevail in most of industrial towns and cities through out Asia to the highest extreme.

It has been noticed that main sources of air pollution are: (i) Motor vehicles, (ii) Industries, (iii) Fossil fuel based plants. The most generally released pollutants include carbon dioxide, carbon monoxide, sulphur dioxide, nitrogen oxides, hydro carbons and particulates.

Ironically, those that are more responsible for most of air pollution (owners and vehicles etc.) are more likely to be able to avoid the polluted air and able to afford the treatment for medical consequences if necessary. But those poor that are neither directly responsible for air pollution, nor do they can afford for treatment needed in air related health hazards.

C. Water Quality and Quantity

Water has traditionally been considered as a free commodity gifted by nature. Water related crisis present the most serious environmental

challenge today. There are numerous problems related to water but they can be broadly grouped into two categories: (i) Water quality (ii) Water quantity.

In developing countries, irrigation accounts for more than 90% of all water consumed. Concerned looming water shortage ahead, environmentalists argue that water consumption must be reduced by 10% where as the agriculturists, taking into account population growth, leman that water availability must increase by 20% to meet the increased food production for the population of 2025. As the most densely populated region in the world, South Asia will be affected most by the growing need and looming severe water scarcity in future. Hence, immediate action is necessary since it takes years before any proper water conservation strategy can become effective and reaches that are hardest hit by the scarcity always.

Water related problems as such:

1. The bulk of water comes from natural surface and ground water sources which is contaminated due to the effluents received from industrial wastes.
2. The most significant and probably widespread pollution comes from agriculture sector due to the use of fertilizers, pesticides and insecticides making them unfit for human consumptions.
3. The drainage and sewage system made in the past are no longer suitable for increased population of cities. They rapidly flood during rainy season and bring water-borne diseases and epidemics that victimizes the poors.
4. Large dams generally have extensive impacts on rivers, watersheds and aquatic ecosystems.

5. Ground water levels are falling due to over-extraction. There problems dominate ground water use:

(i) Depletion due to over draft, (ii) Waterlogging and Salinization due to inadequate drainage and insufficient conjunctive use; and (iii) pollution due to agricultural; industrial and other human activities.

D. Displacement and Resettlement

Perhaps the greatest injunctive meted out to poor people comes in the form of marching orders to. Move to a new location, "for their own benefit" as the government steps in to bring in development to their 'dreary, poor primitive' lives"¹⁰. Time and again, development activities have forced rural people to sacrifice their original inhabitant, livelihood and way of life. Communities have been promised of attractive resettlement packages or threatened and even forcefully removed. But the record of making good on promises of proper resettlement and adequate compensation is poor. So, it is debatable whether the sacrifice of the poor is worth of it or not. Because in the absence or proper rehabilitation packages, evicted people do not get guarantee of livelihood in new areas. For instance, many affected communities gravitate to the slums of town and cities from where, in due course of time, they are forced to relocate once again.

World Commission on Dams (WCD) findings on Displacement of People:

- (i) Indigenous and tribal people suffer from negative impacts on livelihood, culture and spiritual existence.
- (ii) Gender gap widows in affected community and women borne a disproportionate share of socio-economic costs.

¹⁰ Upadhyaya, Madhukar (ed.) (2002): "Justice for All, Promoting Environmental Justice in South Asia", Jagadamba Press, Kathmandu, P. 26.

- (iii) Negative impacts on eco system are observed due to weak implementation of mitigation measures, lack of monitoring and due to the poor coordination with people.

E. Biodiversity Conservation: People Vs Wildlife

Developing country receive encouragement and large amounts of assistance from well-meaning donors for their efforts to conserve nature and protect wildlife. In many instances, there efforts to protect the biodiversity involve the establishment of nature parks and wildlife reserves. However, people living in around such parks and reserves are not satisfied over the preservation of wildlife and natural heritage. Local people are prevented from using forest and other resources on which they traditionally depend on. While conservation and protection measures are necessary to prevent misuse of resources even with in traditional life styles and stricter controls are required to regulate use of forest products and protect wildlife. Native communities are controlled on the basis of rules and regulation set by externals. Many such sites have been declared as protected for the benefit of the global community with restrictions imposed on those who have been dependent on them for centuries. That is why, most 'parks-affected' people question the policies that keep them away from their traditional sources of food, fuel and fodder. Many can't understand why they must change practices they have followed for generations. Their concern are expressed over the fact that banning access to forest has meant reduced on lost incomes, fewer livestock, lower food production and other deprivations forced on indigenous people.

F. Women and Environment

The consequences of a degrading physical environment have a direct and immediate impact on women, particularly in South Asia because

women traditionally take on the role of obtaining fuel, fodder and water. Compelled by low production from degraded land, men migrate to cities in search of employment opportunities. Women became more responsible to take care of marginal land and family. The disproportionate share of burden of poverty borne by women has two-fold impact. On the one hand, their work load for family survival increases and on the other, their share in food and nutrition intake decreases further. They do not have adequate calorie intake in their diet and many pregnant women suffer from anemia and pregnancies. Women migrated to cities suffer harder as they are loaded with hard work and children together as they lack members or neighbours to help them. They also suffer psychologically since they can't mix freely in urban social circles.

2.7 Right to Environment as a Fundamental Right

Environmental Rights are grouped into two sets: (i) The right to participate in regulatory process and (2) The right to live free from pollution. The first one is procedural whereas the second one is substantive. The solutions incorporated into the environmental justice movement frame demand both procedural rights (e.g. access to information, fair hearings, meaningful participation in the decision making process) and the substantive one (e.g. reduction to toxic threats to all communities, increased employment opportunities, better housing, improved health care)¹¹.

The right to environment is included in third generation of human rights. The first generation consisted of civil and political rights conceived as liberties against state abuse and economic, social and cultural rights

¹¹ Pulid, Laura (1994): "Restructuring and the Contraction and Expansion of Environmental Rights in the United States", Cited in Camacho, David E. (1998); Environmental Justices, Political Struggle: Race, Class and the Environment Duke University Press.

where regarded as claims against exploiters and oppressors belonging to the second generation. The third generation consisted of solidarity rights belonging to peoples and covering global concerns like development, environment, humanitarian assistance, peace, communication and common heritage¹².

This fundamental right based notion is based on the following right of every one:

- (a) to an environment that is not harmful to their health or well being.
- (b) to have the environment protected for the benefits of present and future generations, through reasonable legislative and other measures that:
 - (i) prevent pollution and ecological degradation.
 - (ii) promote conservation and
 - (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

2.7.1 Right to Life

Man is both creative and moulders of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evaluation of the human race on his planet, a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made are

¹² Marks Stephen P. (2004): "The Right to Development: A Primer Center for Development and Human Rights", Sage Publications, New Delhi, P. 29.

essential to his well-being even the right to life itself (Declaration the United Nations Conference on the Human Environment, Stockholm, 1972).

2.7.2 Environmental Health

Environmental hazards represent major health concerns for urban and rural health threat. "It is almost impossible because individuals have virtually no control over the quality of the air they breathe, the food they eat or the water they drink. They are almost completely dependent on some one else to protect them from environmental hazards¹³.

Yet not all individuals are equally at risk. It is no secret that the poor are usually hired for the worst jobs. Workplace exposure to environmental hazards poses a greater health risk than any either known factor. Hundreds of individuals involved in these struggles met in October 1991 at the first National people of color environment Leadership Summit, where they outlined seventeen 'Principles of Environmental Justice'. These principals declare clean air, land, water and food to be a fundamental right. They affirm the right to all workers to a safe and healthy environment.

2.7.3 Right to Compensation

In the past few years, the legal community has displaced considerable interests in the issue of environmental justice. Filing lawsuits, offering training and orientation, publishing dozens of articles. In the principle of environmental justice, it is stated that "environmental justice protects the rights of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care (The first national people of color environmental leadership summit, 1991)". When elected

¹³ White, Harvey L. (1991): "Race, Class and Environmental Hazards", Cited in Camacho (ed.) op.cit., P. 63.

officials fail to support a movement agenda, some organizations turn to the courts to cader their grievances.

2.7.4 Right to Public Participation in Decision Making

The demand for procedural right was formally codified in the seventeen "principles of environmental justice. Principle seven demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation (The First National People of Color Environmental Leadership Summit, 1991). It is vital that people have the opportunity to be heard in a meaningful manner before decisions are taken which may lead to environmental justice. Unless people have access to the information necessary for their role to meaningful participation in environmental decision making, however, will be ineffective to caders the problems of environmental justice. It requires the release of information relevant to protection of the environmental right. It is the most effective means to empower people and correct injustices.

2.7.5 Right to Information

The right to access to information is a critical element to empower people. It embraces knowledge and power and create a condition of self governance. The lack of information is a barrier to participation in decision making process. Citizen deliberation is essential if there is to be a collective effort addressing environmental problems and solutions. Because the environment crisis is a political one, thoughts on the environment must be cast in political terms. The workers should be provided with information about the environmental situation of their work place so that workers can refuse works that are harmful to health. Similarly, every citizens shall have

the right to demand and receive information on any matter of public importance on environmental issues.

2.8 Environmental Justice in Nepalese Context

Nepal is not free from the problems of environmental injustice like other South Asian nations. However, movement in the name of environmental justice has not yet taken place in Nepal as in other countries of the region. Environmental injustice in Nepal essentially springs from the fact that the poor are overwhelmingly depend on their immediate environmental for sustenance. But they lack control over these environmental assets. As the disadvantaged sections have no powers to make decisions or manage their environment, their access and right in managing their resources in reduced. The government policies, however, do not acknowledge this and the rich enjoy open privilege in the issues of natural resources. Infact, state policies are designed to divert the benefits to rich.

2.8.1 Factors Affecting Environmental Justice

Environmental justice mainly deals with a disproportionately adverse impact of pollution on lower socio-economic classes and inequitable distribution of the benefits arisen from the environmental related activities. There are disagreement about the causes and its possible solutions. To a great extent, political, economic, social and cultural factors have an impact on the causes of environmental injustices.

A. Political Factors

Politically some are powerful and some are powerless. Political power is concentrated in the hands of a few groups. Majority of the people are deprived of any real influence over major decisions that affect their lives

politically alienated groups are the victims of injustices. Due to the lack of their participation in environmental activities, politically powerless mass has to suffer from environmental injustices.

B. Economic Factor

Like political power, another cause of injustices is economic power. Those who are economically powerful can have influence over politics. They can make policies to fulfill their own interests. The hierarchies of power that are inherent in a society are the root cause of environmental injustices. Poverty is one of the cause of environmental injustices.

C. Socio-Cultural Factors

There is a relationship between environmental injustice and caste and gender. Discrimination on the basis of caste and ethnicity, race, sex, economic class is rampant in society. This discrimination is also seen in environmental related activities. "Discriminatory practices rooted in ethno-caste system have dominated Nepalese culture for centuries"¹⁴.

Though the constitution of 1990 and other laws prohibit all forms of discrimination on the basis of caste, race, religion, sex, tribe etc. but in practice discrimination still continues. The justifiability of environmental rights is not firmly established as these rights are not contained in the constitution of kingdom of Nepal, 1990, explicitly as fundamental rights. They are contained in the constitution as directive principles and policies of the state and are not justifiable. The constitution states that "the state shall give priority to the protection of the environment and also to the prevention of its further damage due to physical development activities by increasing the awareness of general public about environmental cleanliness, and the

¹⁴ Nepal Human Development Report (2004): Empowerment and Poverty Reduction, UNDP, Nepal, P. 4.

state shall also make arrangements for the special protection of the rare wild life, the forests and the vegetation. "Though the directive principles address issues of environmental rights, they are not enforceable in the court of law. The supreme court of Nepal has extended that "right to life" as right to clean and healthy environment.

However, the proper importance has not been given to the provisions of environmental justice. A few studies have been conducted on the issues of environmental justice. There are disparities regarding to the access to natural resources, benefit sharing, access to judicial process on the grounds of class, caste, gender and political power in environmental issues.

2.9 Environmental Issues in Nepal

According to the Environmental Report: Nepal (2001), the key environmental issues are related to forests, soil, solid waste, water and air. Nepal has environmental problem in both rural and urban areas. Nepal has joined the international efforts to protect global environment and has enacted acts, rules, regulations, policies and programmes and implemented to protect the environment within the nation. Judiciary has also played a significant role in protecting the environment. Attempts have also been made through school and university education.

Despite all such state efforts, environmental problems are found both in rural and urban areas of Nepal. The state of environmental report of Nepal has categorized the significant environmental issues into three levels.

A. Most Urgent

- | | |
|--------------------|--------------------------|
| * Depleting forest | * Solid Waste Management |
| * Degrading land | * Water pollution |
| * Air pollution | |

B. Moderately Urgent

- * Dwindling biodiversity
- * Desertification
- * Haphazard Urbanization
- * Forest fire
- * Ground water depletion
- * Food security
- * Glacial lake outburst and flood event
- * Food security
- * Alternative energy

C. Less Urgent but Still Significant

- * Waving Fisheries
- * Decreasing biomass energy
- * Transboundary movement of wastes
- * Noise pollution

2.10 Environmental Problems: Reasons in Nepalese Context

Nepal has a challenging task in meeting the twin needs of economic and social development as well as sustainable environmental management simultaneously. But the problems related to environment and sustainable development in Nepalese context are identified as follows:

1. Weak implementation of environment laws and action plans.
2. Lack of adequate knowledge/awareness about environment and sustainable development.
3. Shortage of economic resources for programs relating to the protection and preservation of environment and ineffective use of available resources.
4. Formulation of development plans without proper identification of local, regional and national problems.
5. Rapid population growth and mass poverty.
6. Inability of government and non-government organizations to reach remote areas.
7. Inadequate commitment of related organizations.

8. Absence of rewards for environment preservation and of fines and other forms of punishment for its destruction.
9. Unacceptably high dependence on forest for fuel wood, fodder and construction leading to a widespread deforestation.
10. Unsystematic clearing of forests for human settlements.
11. Inadequate preservation of natural resources.
12. Lack of knowledge of appropriate technology and inability to incrementally modernize traditional technology.
13. Unsystematic urbanization and industrialization of the country.
14. Weak coordination between and monitoring of concerned agencies.
15. Managerial problems at local level.
16. Lack of organized disposal cremation facilities.
17. Increasing squatter related problems.
18. Inadequate participation of local bodies in environment related action plan formulation.
19. Lack of proper utilization and preservation of indigenous herbs.
20. Air pollution resulting from bad roads, old vehicles and lower quality fossil fuel use.
21. High prevalence of acute respiratory infection resulting from heavy indoor air pollution in rural areas.
22. Solid waste management insufficiency.
23. Excessive utilization of pesticides and chemical fertilizers.

The National Human Rights Action Plan aims to curb the situation with the following objectives:

-) To improve environmental laws so that they meet contemporary international standards.
-) To achieve optimum benefit from the sustainable use of natural resources.

-) To ensure people's right to live in healthy environment.
-) To ensure equitable access to the natural resources.

Environmental justice in Nepalese context means to ensure the right to access to natural resources for sharing proportionate benefits and security of livelihoods for all in environment related activities. Likewise, it aims to conserve the environment and ensure right to works and play in dean and healthy environment for all without any discrimination embedded in our society on the grounds of economic status, caste, gender, political power etc. The principle of environmental justice attempts to empower local people through ensuring right to information and decentralization of power to enhance public participation in decision making process of issues related to environment and protection of the rights by judiciary.

2.11 State Efforts in Environmental Justice

The constitution of Nepal, 1990 declares that the 'state shall give priority attention to the conservation of the environment and also make special arrangement for the rare animal species, forests and the vegetation of the country [Aritcle: 26 (4)]. The constitution also provides for the establishment of a natural resources and environment committee in the house of representatives with powers and functions of evaluating the policies and programs, resource mobilization and administration in collaboration with the line ministries.

Local Authorities

The District Development Committee (DDC) requires to formulate and implement plans for the conservation of biological diversity and soil under section 189 (g) (1) of the local self governance act, 1998. Similarly, section 28 (h) (2) requires village development committee (VDC) to

formulate and implement programmes for the conservation of biological diversity and soil.

(a) National Parks and Wildlife Conservation Act (NPWC) 1973

It has been a key instrument in protecting biodiversity with in protected area system. Protected Areas (PAs) were initially established in Nepal for the protection of wildlife. However, the objectives have now been broadened to include the preservation of natural, historic, scenic and cultural values. According to the latest estimates, 26, 695 km² (18.32%) of the total area of Nepal is now declared to protected. The 1973 act provides the legal basis of the management of PAs. The act was later on amended four times in 1970, 1982, 1989 and 1994 and recognizes following six categories of PAs in Nepal.

(i) National Park

The NPWC Act defines a national park as an area set aside for the conservation and management of Natural Environment, including the ecological, biological and geomorphologic association of aesthetic importance. To develop the area for eco-tourism is the second objective, provide that it copes with sustainable conservation.

(ii) Strict Nature Reserve

This is an area of unusual ecological or other significance, set aside for the purpose of scientific study. The inaccessible lower Barun Valley, fed by the Saldima River, a glacier-fed tributary of the Arun River, is the most pristine area in the Makalu Barun National Park, and Reserve, the first in Nepal.

(iii) Wildlife Reserve

A wildlife reserve is an area established for the conservation and management of plants and wildlife and their habitat.

(iv) Hunting Reserve

It is an area set aside for the conservation and management of wildlife to provide opportunities for legal recreational hunting.

(v) Conservation Areas

This type of protected areas is managed according to an integrated plan for the conservation of the natural environment and the sustainable use of the natural resources contained within it.

(vi) Buffer Zone

It is a designated area surrounding a national park or a reserve within which the use of forest resources by local people is regulated to ensure sustainability.

Table 1: Protected Areas of Nepal

S.N.	Category and Name (Year of establishment)	Area (km ²)	Altitude (m)
I.	National Park (NP)		
	Royal Chitwan N.P. (1973)	932	150-815
	Royal Bardia N.P. (1976/1988)	968	152-1494
	Shivapuri N.P. (2002)	144	1366-2732
	Khaptad N.P. (1984)	225	1000-3276
	Makalu Barun N.P. (1991)	1500	435-8463
	Sagarmatha N.P. (1976)	1148	2800-8850
	Langtang N.P. (1976)	1710	792-7245
	Shey Phoksundo N.P. (1984)	3555	2000-6885
	Rara National Park (1976)	106	1800-4048
	Total	10,288	
	Category and Name	Area (km²)	Altitude (m)
II	Wildlife Reserve (WR)		
	Koshi Tappu W.R. (1976)	175	90
	Parsa W.R. (1984)	499	150-815
	Royal Suklaphanta W.R. (1976)	305	90-270
	Total	979	
	Category and Name	Area (km²)	Altitude (m)
III	Hunting Reserve (HR)		
	Dhorpatan H.R. (1987)	1325	2850-700
	Total	1325	
	Category and Name	Area (km²)	Altitude (m)
IV	Conservation Area (Ca)		
	Kanchanjanga C.A. (1977)	2035	1200-8598
	Manaslu C.A. (1998)	1663	1360-8163
	Annapurna C.A. (1986/1992)	7629	1000-8082
	Total	11,327	
	Category and Name	Area (km²)	Altitude (m)
V.	Buffer Zone (BZ)		
	Royal Chitwan N.P.	750	
	Royal Bardiya N.P.	328	
	Makalu Barun N.P.	830	
	Langtang N.P.	420	
	Sheyphoksundo N.P.	449	
	Sagarmatha N.P.	275	
	Total	3,015	
	Total Area Protected	26,970	
	% of Nepal Territory	(18.32)	

Source: DNPWC (January 2001).

B. Buffer Zone Management Regulations, 1996 and Buffer Zone Management Guidelines, 1999

NPWC was amended to incorporate for provision of conservation areas and Buffer zones to facilitate people's participation in conservation, design and management of buffer zones.

C. Himalayan National Park Regulations, 1979

These regulations make special provisions for people living with in National parks to collect fire wood, leaf litter, fodder and small pieces of timber and also to graze animals on park rangelands.

D. Forest Act, 1993

Forest of Nepal are classified into National Forests and Private Forests. The act divides National Forests into 5 sub-categories i.e. (1) Government Managed Forests, (2) Community Forests, (3) Leasehold Forests, (4) Religious Forests, (5) Protected Forests.

E. The Environmental Protection Act, 1996 and Environmental Protection Regulation, 1997 and Amendment 1999

This act and regulations have made Initial Environment Examination (IEE) and Environmental Impact Assessment (EIA) mandatory for any sort of development proposal involving forest, industry, roads, irrigation or drinking water, tourism, solid waste management of agriculture.

F. Aquatic Animals Protection Act 1961

It is concerned with protection of Wetlands and aquatic animals.

G. Soil and watershed conservation Act 1982

H. Water Resources Act, 1992

I. Livestock Health and livestock Service Act 1998

J. Protected Area System and Buffer Zone Management Strategy

The Department of National Parks and Wildlife conservation Strategies Collaboration developed with local residents, NGOs, INGOs and donors. Major programs are: The Makalu Barun National Park and Buffer Zone, The Terai Area Landscape Project, The Northern Mountain Conservation Project, CARE International's Buffer Zone Development Project, The World Wide Fund for Nature's, Kanchanga Conservation Area Project and The London Zoological Society's Wild Life and Domestic Veterinary Programme. Central to all these programmes is the participation of user's group in the conservation and sustainable use of biological resources and the equitable distribution of benefits to local communities.

K. The National Conservation Strategy

It has been jointly prepared by HMG/N and IUCN, Nepal in 1988 emphasized the need of establishing appropriate policies, regulations and management approaches for the sustainable use of biological resources.

L. Nepal Environmental Policy and Action Plan, 1993

It is the first government document that recognized the need for appropriate management of grass land ecosystem.

M. Biodiversity Profiles Project, 1995

This prepared list of flora and fauna found in different physiographic zones of Nepal. Nepal has finalized the Nepal Biodiversity Action Plan with the joint effort of ministry of forest and soil conservation, Global Environment Facility and UNDP.

N. Establishment of ICIMOD in Nepal

The international center for Integrated Mountain Development (ICIMOD) was established in Kathmandu in 1984 with the primary objective of promoting economically and environmentally sound development in mountain ecosystem and improving the living standard of mountain people in Hindu-Kush Himalayan region. ICIMOD acts mainly as a facilitator for generating new mountain specific knowledge of relevance to mountain development. It has completed several activities related to biodiversity in last few years and produced documents such as banking on biodiversity and managing Agro biodiversity.

2.12 Land Reform Programmes in Nepal

Land and its ownership have been prestigious symbol of social status and the main sources of economic and political power in Nepal. "The government has used land to obtain military, administrative and political objectives, as well as for pleasing relatives and friends"¹⁵. A bewildering number of ownership and tenorial practices, skewed distribution of land property, and the rise of a long time of exploiting intermediaries (rent and revenue collecting agents, merchants and money landless) have existed in the state.

I.. Land Tenure in Nepal

Land tenure refers to arrangements or right under which the holder operates the land of a holding. A holding may be operated under one or more tenure forms. In Nepal, land distribution has been skewed with in varied land tenure systems. For the example of the census of agriculture, there are three forms of land tenure, namely (CBS, 1996: 25, CBS: 2003):

¹⁵ Pokhrel, Bharat (2004): "Rural Political Economy of Nepal", New Hira Books Enterprises, Kathmandu, P. 141.

- a. Land owned by the holding
- b. Land rented from others and
- c. Land under other tenure forms.

The main and long existed forms of land tenure in Nepal may be classified as: Raiker, Guthi, Jagir, Kipat, Raikar, Rajya, Rakam and this tenure system had proved to be fruitless and unscientific. The following table shows the land tenure structure of Nepal before 1950 A.D.

Table 2: Area Under Various Forms of Land Tenure, 1952

Forms of Tenure	Area (Hectare)	Percent of Total
Raiker	9,63,500	50.0
Birta	7,00,000	36.3
Guthi	40,000	2.0
Kipat	77,000	4.0
Jagir, Rakam etc.	1,46,500	7.7
Total	19,27,000	100.0

Source: Regmi, 1999b: 19.

II. Land Reform Measures and Policy Instruments

The various land tenure systems and sub-systems have had far reaching effects on land and agricultural development in Nepal. The agrarian system that existed during the Rana Regime (1846-1951) encouraged social and economic differentiation in the agrarian community and a trend toward the concentration of land ownership and absentee land ownership. The problems of land system included:

- a. Feudalistic holdings, landed aristocracy, uneconomic holdings,
- b. Unequal distribution of farmland and farm income with heavy peasant indebtedness,

- c. Conflicting and harmful land tenure practices,
- d. Insecurity of occupancy and tenancy rights,
- e. Arbitrary, unrestricted rent and labour-exacting practices,
- f. Exploiting and unproductive intermediaries such as rent and revenue collectors, merchants and money lenders,
- g. Lack of effective development-oriented land administration,
- h. Lack of irrigation credit and marketing facilities and agricultural production services and
- i. Lack of land use and development policy.

III. Pre - 1960 Land Reform Measures

Lively discussion on the need for adopting agrarian reform measures for production increase and economic development went on throughout the 1940s and 1950s and various measures were attempted. These included:

- a. Tenancy Rights Security Act, 1951
- b. Royal Land Reform Commission, 1952
- c. 13 - Point Program, 1955
- d. Land and Cultivators Records Compilation Act 1956
- e. Land Reform Act, 1957
- f. Birta Abolition Act 1959

The most drastic of these was the Birta Abolition Act which did away with the feudal land tenure system. Despite some achievements, the absence of dependable implementation machinery, lack of firmness and clarity in government policies, and considerable influence of the feudal elements severely constrained these measures.

IV. The Land Reform Act 1964 A.D. (2021 B.S.)

The Land Reform Act 1964 was designed essentially for the same purpose for which the Agricultural Reorganization Act, 1962 was enacted.

"While many land reform measures have not been effective, the 1964 and Reform Program made the most incisive intervention in systems of landownership and tenancy in the history of Nepal, with profound social and psychological consequences"¹⁶. There are some provisions which are quite typical of the Land Act 1964. These typical provisions have been made in respect on the compulsory saving scheme and agricultural debt, ceiling on the size of land leased in by individual tenant or his family repossession of land by landholders from their tenant's etc. The main provisions of the Act may be summarized under the following heads:

A. Ceiling on Land Holding

No individual landholders or his family could hold more than 25 Bighas of land in the Terai and Inner Terai, 50 Ropanies in Kathmandu Valley and 80 Ropanies in the Hills. It was, however, provided that an individual or his family could retain, over and above the specified maximum limits, land not exceeding 1 Bigha in the Terai and Inner Terai, 5 Ropanies in Kathmandu Valley and 10 Ropanies in the Hills for residential use. Besides, every son above the age of 16 and every unmarried daughter above the age 35 even when living together with his/her parents were treated as separate families. So, the parents living together with four sons all above 16, were legally entitled to hold as much as five times than the specified maximum size of land. Thus in effect, the ceiling on landholdings could be much higher than what the specified limits had indicated. All these had only reduced the quantity of surplus land, which the government was going to acquire under the act.

¹⁶ Regmi, Mahesh C. (1999b): "Land Onwership in Nepal", Adroit Publishers, Delhi, P. 2007.

Table 3: Ceilings on Land Holdings (hectares)

Region	Landowners		Tenants	
	Ag. Land	Homestead	Ag. Land	Homestead
Terai	16.4 (25 Bighas)	0.83 (1 Bigha)	2.5 (3 Bighas)	-
Kathmandu Valley	2.7 (50 Ropanies)	0.4 (5 Ropanies)	0.5 (8 Ropanies)	-
Hills	4.1 (80 Ropanies)	0.8 (10 Ropanies)	1.0 (16 Ropanies)	-

Source: Regmi, 1999b: 201.

B. Acquisition of Surplus Land and Its Distribution

Implementation of the provision indicated that there were 66,000 hectares of land above the ceiling of which about 34,000 ha. had so far been redistributed. The government had acquired land above the ceiling which was distributed in a specified order of priority the first priority being given to the existing tenants. The price of land so distributed was determined by the government and was supposed to be paid by the recipients either entirely in one installment or in 10 annual installments.

Table 4: Redistribution of Land Under 1964 Act (hectares)

Region	Cultivated Area	Above Ceiling	Confiscated	Distributed
Terai	1518785	58913	33676	23534
Eastern	167247	9153	4676	3380
Central	364879	6645	943	377
Far Western	133382	25173	1053	559
Kathmandu Valley	42577	7062	149	54
Other Hills	764638	405	6	-
Total	2326000	66380	33825	23588

Source: K.C., 1986: 7.

C. Grant of Tenancy Right and Ceiling on Tenanted Land

Tenancy Rights were granted to those who were actually tilling land at that time of the commencement of the act. But no tenant was entitled to lease in more than 4 Bighas in the Terai and Inner Terai, 10 Ropanis in Kathmandu and 20 Ropanis in the hills. The logic behind this very low ceiling may be such that tenants will be more hardworking and painstaking when the size of tenanted land is made small than when it is made large. Whether it is borne out of facts or not, the logic works against the interests of the tenants.

D. Regulation of Rent and Rental Contract

The Land Act, 1964 like the agricultural Reorganization Act, had fixed the maximum rate of rent at half of the total annual output of land. But where the prevailing rates were lower than the specified rate, the lower rates would remain effective. Similarly, tenants were allowed to deduct seeds for the next year before output was shared with their landholders. This is well pointed out by the following table.

Table 5: Agricultural Rent, 1964

Grade of the Land	Kathmandu Valley (in Pathi per Ropani)		Terai Districts (in Mounds per Bigha)	
	Irrigated Rice Land	Unirrigated Maize Land	Irrigated Rice Land	Unirrigated Maize Land
Abal (Grade I)	23.00	10.12	15.0	8.5
Doyam (Grade II)	18.75	7.25	44.5	6.5
Sim (Grade III)	13.00	4.37	8.5	6.5
Chahar (Grade IV)	8.62	2.87	5.5	-

Source: Regmi, 1999b: 204.

E. Compulsory Saving Scheme

Among the most significant features of the land reform was the provision for compulsory savings for mobilizing the scattered saving of

individual farmers, in accordance with the principle of maximum utilization of domestic resources. Under the act, both the tenants and landholders were required to make compulsory savings every year out of the annual output of main crop of their land. These savings, which are to be made in kind in respect of land under food grain crops and in cash in respect of land under cash crops, should be deposited in time with "Ward Committee". They carried an annual rate of interest of 5 percent and repayable in cash, kind or in both after 5 years at lump sum basis. The stated objectives of the scheme were (1) to fulfill the requirements of agriculture through institutionalized sources and rectify the defects to traditional sources, emancipation of peasants from exploitation; (2) to lay the foundation of cooperatives in the village; (3) to develop the saving habits among the peasants; (4) to encourage agro-based industries and (5) to achieve uniformity in agriculture development atleast for a minimum level of living.

F. Regulation of Agricultural Debt

The 1964 Act had compelled rural money lenders to submit details of the load advanced by them to the farmers for agricultural purposes, before the Bhumi Sudhar Adhikari. He was authorized to determine the actual amounts of principal and interests that were to be realized from the indebted farmers. While determining these amounts, the Adhikari used to see that if the lender had already realized interest twice as much as the principal, the outstanding loans would be considered as having paid off.

The Land Reform Act 1964 have been effective, particularly in the context of limited resources and complex problems, to raise mass consciousness, mobilize class organization, avoid various harmful tenures, identify tenants and to create land records. But various studies undertaken in the past years indicate that it has failed in altering the skewed land

distribution, in protecting tenants from the exploitation of landlords and in intercepting old debts of the farmers.

2.13 Management of Forest Resources in Nepal

Forest Management, in the broadest sense, deals with the over all administrative, economic, legal, social, technical and scientific aspects involved in the conservation and use of forests. In other words, it is the designing and carrying out a set of activities for conserving and using a forest, based on a set of objective and on the physical and socio-economic context¹⁷.

Policies for forest managements in Nepal were decided on the personal interest of the Rana rules until 1951. HMG/Nepal, thereafter, formulated several policies and plans with regard to forest resources development and management. Following are the major policies and legislations related to forestry sector:

- Private Forest Nationalization Act, 1957
- Forest Act, 1961
- Forest Protection Act, 1967
- National Forestry Plan, 1979
- The National Park and Wildlife Conservation Act, 1973 and Its Amendment 1993
- The Soil Conservation and Watershed Act, 1982
- National Conservation Strategy, 1988
- Master Plan for the Forestry Sector, 1989-2010
- Forestry Sector Policy 1989
- The Forest Act 1993 and Amendments, 1998
- National Environmental Policy and Action Plan, 1993

¹⁷ FAO (1993): The Challenges of Sustainable Forest Management: What Future for the World's Forest", United Nations, Rome, P. 207.

- The Forest Regulation Act, 1995
- The EIA Guidelines for the Forestry Sector, 1995
- Environmental Protection Act, 1996
- Buffer Zone Regulation Act, 1996
- The Plant Protection Act, 1997
- The Environmental Protection Regulation, 1997

A. The Master Plan for the Forestry Sector, Nepal (MPFSN)

MPFSN is a major effort directed towards the sustainable management of forest resources. This master plan presents a comprehensive strategy for 21 years (1989-2010) of management of forestry in Nepal. The plan mainly focuses towards developing procedures for handing over the government owned forests to the communities and the private sectors, based on a partnership between the ministry of forest and soil conservation and the local people dependent on these forests that encourages the management of all components of the forests including trees, shrubs, grasses and medicinal plants.

The Plan has following objectives

I. Long Term Objectives

- To meet the peoples' basic need for fuel wood, timber, fodder and other forest products on a sustained basis and to contribute to food production through on effective interaction between forestry and farming practices.
- To protect land from degradation by soil erosion, floods, landslides, desertification and other effects of ecological imbalance.
- To conserve the Eco-system.
- To contribute to the growth of local and national economics by managing the forest resources and forest based industries.
- Creating opportunities for income generation and employment.

II. Medium-Term Objectives

- To promote peoples' participation in forest resources development, management and conservation.
- To develop the legal framework needed to enhance the contribution of individuals, communities, and institutions for forest resources development, management and conservation.
- To strengthen the organizational framework and develop the institutions of the forestry sector to enable them to carry out their missions.

B. Community Forestry as a Strategy for Sustainable forest Management

Nepal is a world leader in the field of community forestry. The program is a highly prioritized program of MOFSC. Forest Act 1993 defines the community forests as "part of National Forests, handed over to the Community Forest User's Group (CFUGs) by the District Forest Officer (DFO) for development, protection, utilization and management together with authorization, sales and distribution of forest products independently according to an approved operational plan." To date, more than 11,000 forest user groups are managing about 9.4 lakhs hectare of community forest in the country¹⁸.

Community Forestry is now the main emphasis in Nepal's forestry sector and is aimed at providing environmental, social and economic benefits to the CFUGs. The master plan for the forestry sector of Nepal (MPFS) 1989 has defined clear guide lines to put all community forestry management works under the control of CFUGs if they are capable and are

¹⁸ Community and Private Forest Division (CPFD) (2003): "Forest User Group Data Base Record", Kathmandu, P. 1.

willing to manage the legal forest. In the beginning, the focus of the community forestry policy was to stop degradation of forest land and meet the basic needs of rural people for forest products through protection of existing forests and reforestation of degraded one. The MPFS, 1989 has laid due attention on people's participation to improve forest productivity, income generation activities and sustainability of the C.F. After the restoration of democracy in 1990, the government introduced a very progressive forest act 1993 and Forest By-Laws 1995 in order to decentralize authority and responsibility for C.F. The act and By-Laws established the procedure framework for establishing user-based approach in forest management as well as confirmed the role of the CFUGs as both the forest manager and the only beneficiary of the respective forests.

Community forestry is one of the most successful strategies for the sustainable development of forests in Nepal. Many donors working in Nepal are supporting for the development of C.F. program. Since the program has been acting as a key economic source for rural development. "The objectives of the C.F. program of Nepal are to fulfill the daily needs of forest products of the rural communities; creation of employment and income generating opportunities of the community in order to support on local and national level economic growth, sustainable management of forest resources and ensure healthier environment"¹⁹.

2.14 Peasant Insurgency and Communist Movements

Thapa, Shankar (2001: 1-9), in the book titled, "Peasant Insurgency in Nepal" writes that peasant insurgency has great historical and political significance in Nepal. No doubt that the peasant cultivators in this

¹⁹ MOFSC (2003): "Banko Janakari", A Journal of Forestry Information for Nepal, Vol. 13, No. 1, Department of Forest, Kathmandu, P. 57.

Himalayan kingdom have played a vital role in production process. But they were never given priority or supported by the rulers and their sub ordinates. The lack of other means of production compelled the entire population to rely on agrarian activities. The inequalities imposed by the landowners, intermediaries and other from of the privileged classes always suppressed the peasants and exploited them to an extreme degree. The ruler cultivators were compelled to work on the land and pay high rates of rent, taxes and other customary levies. In addition to that, they also gave various other Koshelee (Gifts) in kinds. Therefore, it was more profitable for the landowners to let land far cultivation rather than to cultivate it themselves, because they exacted up to two-thirds of the grass produce as rent. However, they had no any obligation to do anything during the entire production process. It was the responsibility of cultivating peasants to fertilize and upgrade the land, manage seeds and increase production.

This situation was worst during Rana regime. The status of tenants in 'Jagir, Birta and Guthi' tenure was most vulnerable. Tenants had to pay rent even in the event of crop failure. At the same time, the rich landowners offered loans for which they charged exorbitant interest rates up to 60% which excludes Koshelies in kinds. This situation continued even after the restoration of political power in 1951 i.e., the end of the Rana rule.

Generally, in the feudal mode of production and also Asian mode of production, privileged classes exploited peasants to the extent that they were compelled to live in vulnerable conditions. The status of landowners provided them with powers and privileges on land and its utilization. It has been a nightmare throughout Nepal's modern history that land was the property of those who did not cultivate it. The cultivators were denied of all possible rights on land. Infact, the cultivators spent entire life or even generations relying on the land for survival. They were supposed to be

evicted at the will of landowners or the intermediaries. The state mechanism, of all time, never noticed to the peasant community who rendered vulnerable services in the course of national development.

The end of the Rana Regime marked both origin and steady growth of peasant activities. It has both political and economic significance in the history of Nepal. The very situation of the peasant led to accumulate dissatisfaction and it was obvious for them to find a way out to express their dissatisfaction when Rana Regime was over thrown in 1951. The peasant's dissatisfaction was institutionalized under the Akhil Nepal Kisan Sangh (ANKS), an umbrella organization of Nepal Communist Party. It should be understood that entire history of peasant movement was designed under the influences of communist ideology. The communist party of Nepal are its architect. The communist activists worked on behalf of the peasants. They raised voices against exploitative landlords and their intermediaries. They put forward various demands to improve the conditions of peasantry and secure land rights. Thus, Nepalese peasants remained very important for the communist. The ANKS and Jana Adhikar Surakshya Samiti (JASS) served the immediate interest of the communists to lead peasant society brought about perceptible changes in Nepal, particularly to popularize the communists. The peasant leader were influenced by the communist ideology. Therefore, the interests of the communist party were accommodated in peasant movements. The communist leaders were very active in the peasant front. They took care of tailing peasantry. They organized series of movements right after 1951 to fulfill professional demands. Hence, the final and ultimate output of such series of movement is the Maoist Insurgency which unboubtly peasant dominant.

CHAPTER - III

Research Methodology

This chapter deals with the procedure (Research methodology) adopted to collect qualitative and quantitative data for the present study. Research methodology is a format of methods that has to be followed as a guiding principle in a scientific study. It is a science of methods/rules and it deals with every step of method adopted for the study. This chapter is further divided into many sub-sections such as selection of the study area, research design nature and sources of data, sampling method, data collection techniques, method of data analysis, and limitation of the study.

3.1 Rationale of the Study Area

Budhabare VDC of Jhapa district was selected for the study because of its successful stories on the matter of land distribution, community forest management, development of horticulture and mainly due to prevailing peaceful societal environment inspite of civil war going on in the country. Though, it is a rural area closely attached with hill area that is affected by present conflict, almost full social harmony exists in Budhabare. This state of social harmony is typical in a country suffered from civil war. There may be other reasons behind the peacefulness of the VDC but the basic reason is the good quality of life of majority of people achieved through environmental justice. Budhabare VDC is the first one where Land Reform Act of 2021 B.S. was implemented and inaugurated by the King Mahendra himself. Likewise, community forestry has played very vital role in uplifting socio-economic life of the people. Moreover, the area is highly green and healthy due to the horticulture and cash crops of individuals. These all have uplifted living standard of the native people. Another reason behind selecting this VDC was that it is a virgin area for the research of natural

resources and environmental justice maintained in the equitable distribution of them.

3.2 Research Design

The research design for the study consists of both descriptive and analytical research design. They were needed since there was no prior study on environmental justice and were also needed to describe the state of social conflict. Descriptive research design has been adopted to describe the socio-economic, political and environmental condition of the area where as analytical research design has been used to analyse them. Facts are described and analysed elaborately from rural households with a view to provide an in-depth understanding of socio-political peacefulness maintained from environmental justice in the study area. Furthermore, to make research scientific, special attention was paid on elements of research design: subject for investigation, methodology, data gathering, data analysis and on report writing.

3.3 Nature and Source of Data

This study is based on both primary and secondary data. Besides it, data are also qualitative and quantitative in nature. Primary data were collected through fieldwork using tools like observation, questionnaire, interviews, and others, and the secondary data were collected from various sources such as: various books, journals, articles, papers, reports, records, Acts and regulations related to environmental justice and conflicts. Secondary data has been used to extend and elaborate for strengthening the context provided by the primary data.

3.4 Sampling Method

The data has been generated by using probability sample (simple random and clusters sampling) to meet the purpose of the study with out any biasness. Out of the total population of three wards (5, 7 and 8 number wards 16 & 17 households were selected randomly from each ward respectively.

3.5 Technique of Data Collection

We know that the reliability and validity in the result of any research depends on its techniques used for data collection. Hence, for every study, the data collection techniques are most important to obtain reliable information. So, to make the study factual and scientific, this study had also used different techniques such as questionnaire, interview, observation, key informants interview and focus group discussion.

3.5.1 Questionnaire

Questionnaire is list of questions asked with respondents to obtain actual facts. In this study, many questions were used to get actual information about environmental injustice, causes of environmental injustice, about conflict, causes of conflict, resolution methods, methods of obtaining environmental justice and social equality and others. Mainly, structured and unstructured questionnaire were used for the collection of data.

3.5.1.1 Structured Questionnaire

Only one set of structured questionnaire was used for each households. Household survey was conducted to gather more information with the help of structured questionnaire.

3.5.1.2 Unstructured Questionnaire

During the period of research, unstructured questions were prepared to get the information on socio-economic, political and environmental variables. A total of 50 sampled households were interviewed using this questionnaire to collect data on socio-economic condition, state of environmental justice and views over social conflict of the sampled households. These types of questionnaire were very helpful to obtain required facts.

3.5.2 Observation

Observation is the basic anthropological tool for the collection of qualitative data in the fieldwork. Participant and non-participant observation were the main source for obtaining primary data. Observation was followed to find out the relationship between the environmental justice and social equity for the present conflict management. In reality, observation intensively helped to obtain primary qualitative data regarding degree of environmental justice and sources of income from them, upliftment in the quality people's life and finally about social harmony of the study area.

3.5.3 Key Informants

Key informants are important sources of anthropological data. Interview was taken with key persons such as the then witness of 2021 B.S. land reforms programme, chairman of CFUGs, chairman of the VDC, teacher, political activist, social worker and the member of Bar Association of Jhapa. They provided indepth information on various concerned issues of the study area that helped to meet the objective of the study intensively.

3.5.4 Focus Group Discussion

Focus group discussion was very compatible during the field survey and also successful to achieve reliable information. In course of time, a list of household was prepared for the focus group discussion. Three focus group discussions were carried out. Among them, one was of members of community forestry, one was of the members of the VDC and the last one consisted of local villagers from all sectors of lives. Focus group discussions were found every successful in getting the holistic views on issues of environmental justice and social conflict management.

3.6 Method of Data Analysis

Information does not speak by itself. The information collected in the field are to be analysed and interpreted in order to make the research meaningful. Analysis is the careful study of available facts so as to draw conclusion from them on the basis of established principle and sound logic. For the purpose of this study, different data obtained by using various sources are scanned and tabulated under different headings. Data gathered from primary and secondary sources were analysed according to their nature. Qualitative data has been descriptively analysed where as quantitative data has been analysed and interpreted on the basis of statistical tools like percentage, frequencies, mean, correlation and different charts.

CHAPTER - IV

Location Description of the Study Area and Programmes

4.1 Geographical Feature of the Study

Budhabare village Development committee (VDC) was named after the weekly market (Hat Bazaar) held once a week on the day 'Budhabar'. Budhabare VDC is located in the North-East part of Jhapa district which is situated at the southern part of Mechi zone. Geographically it lies at 88⁰-04'-05" to 87⁰ 59'-44" east longitude and from 26⁰ 45'-54" to 26⁰ 41'- 02" Northern latitude at an elevation ranging from 153m to 308m above the sea level. Budhabare VDC is surrounded by Kolbung VDC of Illam district in North, Dhaijan and Sanischare VDCs in South, Khudunakari VDC in west and Arjundhara VDC in south West and Santinagar VDC in East. It covers an area of 28.66 Sq. m and the distance from the district headquarter (Chandragadi) is 18 K.M. North.

A. Climate

As the major source of rainfall in eastern part of Nepal is Monsoon wind, climate of the region is affected by monsoon blowing from bay of Bengal. The elevation of Jhapa ranges from the lowest part of Nepal, Kechana with the altitude of 48.8m to 800m above from sea level. So climate of Jhapa varies since temperature differs with altitude. Generally southern part of Jhapa has hot climate whereas in northern belt climate is warm temperate differ with altitude. Broadly Jhapa falls in tropical climatic zone so as the Budhabare VDC as per the climatic feature.

B. Rainfall

Annual average rainfall of Budhabare is found to be 260.4 mm but actual amount differs with seasons. It receives maximum rainfall of 1029

mm and 836.7mm during June and July (rainy season) respectively where as rainfalls rarely at December and January (winter season).

C. Temperature

The average temperature of Budhabare VDC is 23.5⁰c with maximum of 29.8⁰c during may-June and minimum temperature 14.2⁰c during January-February. Hence, temperature varies with seasons as per its general feature in Budhabare too.

D. Natural Vegetation

Natural vegetations are essential for balanced eco-system and living organisms. Natural vegetation differs with diverse temperature, rainfall, climate and with relief and soil. Since monsoon type tropical climate is found in Budhabare, tropical vegetations are dominant. Tropical forests are located at south-east, North-west and Northern belt of Budhabare VDC.

Some major vegetations found in Budhabare VDC are Sakhuwa Sisau, Kadam, Pithari, Kumbi, Simal, Bar, Pipal, Jamuna, Amala, Khayar, Rajbrikche, Bans, Niwaro, Bhalayo and so on. Like wise supari, nariwal Lichi, Aaru, Anpa, Katahar, Amba, Nimbu etc are major fruits found in the VDC.

E. Land Use Pattern

Though the land of the VDC has been used for various purposes, mostly it has been used for Agriculture. In agriculture also, previously planted grain crops have been gradually replaced by cash crops like Nuts, coconuts, tea, coffee, ginger and so on. Similarly due to rapid population growth, agriculture land is rapidly changing into settlement area. Besides

these, some parts of the Budhabare VDC are occupied by Jungle, Rivers and roads and markets.

4.2 Population Distribution of the Study Area

According to the census 2001, the total population of Budhabare VDC is 20696 with 3771 households. The total numbers of male population is 10698 and females are 9998 out of the total population. The population density is 722 people per square kilometer.

Table 6: Ward wise population composition of Budhabare VDC

Ward No.	House holds	Male	Percent	Female	Percent	Total	Percent
1	490	1347	54.2	1134	45.7	2481	12
2	427	1152	53.2	1011	46.8	2163	10.4
3	301	874	51.6	818	48.21	1692	8.1
4	303	859	50.7	835	49.3	1694	8.2
5	336	1032	52	950	48	1982	9.6
6	591	1558	50.5	1522	49.5	3080	14.9
7	425	1219	51.4	1155	48.6	2374	11.5
8	250	730	51.3	691	48.7	1421	6.8
9	678	1927	50.5	1882	59.5	3809	18.4
Total	3771	10698	51.60	9998	48.4	20696	100.00

Source:- CBS, 2001.

Above table shows, in the total population of the VDC, male are more than female. In ward no. 6, the population is highest where as the least population is in ward no. 8.

4.3 Economy of the Village

As in other parts of the country, the economic activities of the people of Budhabare VDC is mainly based on agriculture. Almost all people are

engaged in agriculture activities for their livelihood. The main agricultural products are rice, maize, millet, wheat, potato, nuts, coconuts, mango, cabbage, cauliflower, ginger and other vegetables. Besides agriculture, animal husbandry has also been adopted as an integral part of agriculture. Most of the young generations are found in abroad for foreign employment. Very few people are engaged in trade and commerce and in service sectors like teaching, government civil workers, lawyers, doctors army and police force. Due to the justice maintained in the distribution of land, majority of the population produce enough crops to feed them the whole year. Although traditional method of cultivation still prevails, farmers are seen adopting modern methods and equipments of farming for diversification and commercial outputs.

4.4 Socio-Cultural Pattern

Society is a web of social relationship. Every people live in society and want to do something and more about the phenomena. Culture is an umbrella term for the human being. Generally culture is man-made factor, so all human activities are included in culture. Culture is a factor of development and social prosperity. The study area is composed of various ethnic/caste groups like Brahmins, Chhetries, Newar, Kami, Damai, Limbu, Magar, Sarki, Rai, and so on. Every cast love their own cultural norms and values. But due to modernization, socialization, acculturazation, education, transportation, and communication, their strict conservative behavioral attitudes are changing. So generally, all people seem to have same behavior owing highly closeness to each other. Give respect and take respect is major slogan of the local people. principally, high cast people(Brahmin) do not take wine, meat, other intoxicating things, which are common to the so called untouchable & lower cast people. Despite diverse ethnic languages,

Nepali is spoken by all. Birth ritual, marriage, death rituals are found to be similar to all caste people in study area.

4.5 Educational Status of the Study Area

Education is light of life, only eternal wealth of human beings which begins from the womb of the mother and ends to tomb. It is the power of knowledge. In the study area, all of the young generation takes more or less education. There are four secondary schools, two lower secondary schools, nine primary schools and one + 2 college with in the VDC.

Table 7: Educational Status in Study Area

Educational Status	No. of member in sampled House hold	Percent in Sampled H.H	VDC level (Percent)
Illiterate	38	14.29	23.6
Literate	56	21.05	28.1
Primary level	68	25.56	38.7
SLC level	42	15.79	4.9
Campus level	55	20.68	4.1
M.A and above	7	2.63	0.6
Total	266	100	100

Source: Field Survey, 2005.

4.6 Health Facilities

Health is wealth. Healthy mind in a healthy body in healthy environment can achieve goals of sustainable development including all aspects of human being. In Budhabare VDC, there are two health posts (One alleopathic + one Aayurvedic) from where people get health facilities. Every ward of the VDC has one female community Health Volunteer (FCHV). FCHV provides general health facility like diarrhea, headache, worms, scabies, family planning medicines to the local people. Besides, the VDC

has one village Health worker (VHW) who provides polio and vitamin A capsule to the children as well as, he supervises FCHVs. Similarly, there are lots of community health workers (CHW), community Medicine Assistant (CMA) and Assistant Nurse Midwife (A.N.M.) and technicians. They provide health facilities to the local people. To meet the demand of transport during emergency, one Ambulance service is in existence run by the local people. Moreover, medicine shops of all types (Allopathic, Aayurvedic and Homeopathic) are in enough numbers opened by private owners that fulfill demands of medicine.

4.7 Transportation and Communication Facility of the Study Area

Transportation and communication are the main pivot of the development. Higher the accessibility of networking, higher the access of prosperity. Rural-urban linkage is only through social overhead capital (soc). Urban development is necessary for rural development. There are various typology and components of rural-urban linkage, among then transportation, communication, services, and institutions are the vital components.

Jhapa district is a plain and developed district of eastern development region and same is the rank of Budhabare VDC among other in matter of soc. The VDC is highly accessible in both for communication and transportation. The public communication office is providing local, national and international services since 2053 B.S. later on , private telephone line has been distributed sufficiently to all wards of the VDC. Budhabare VDC is better served with electricity, so television, radio, and computer are common to the natives. Regarding the newspaper almost all national daily (popular) and local newspaper, weekly and other all sorts of magazines are in easy access to all interested people. For better transportation, road of all

kinds; black-topped, gravelled and rough are spread in all wards of the VDC. So, people are in reach of all vehicles like bus, truck, tractor, taxi & Rikshaw for travel.

4.8 Institutional Status of the Study Area

Physical infrastructure of the VDC is good Mechi highway goes almost through the mid-part of the VDC. Because of availability of basic infrastructures such as electricity, transportation, communication schools postal office and health post, degree of awareness is very high among the native people. So, for over all upliftment and facilities of life, various institutions are formed with various purposes. With the existence of such institutions, people are able to maintain social solidarity, unity, strength, green environment and higher living standard in totality

Table 8: Institutional Status Available in Budhabare VDC

Types of Institution	No. of Institution
Religious Institution/temples	17
Social institution	4
Educational institution/school	18
Sports institution	2
Skill developing counter	1
Health counter	2
Environment promoting society	1
Agriculture service sub-counter	1
Livestock service sub-counter	1
Post office	1
Film hall	1
Oil/rice mill	7
Biogas support center	1
Community forestry	2
Bank	1
Finance/cooperative	2
Red cross	1
Communication office	1
Drinks	3
Total	67

The table shows that educational institutions are highest in number which denotes the educational attachment of the people. Like the educational attainment of the people. Likewise, all sorts of institutions related to all aspects of life are in existence. These all have made Budhabare as an ideal VDC in Jhapa district.

4.9 Description of the Programme: Land Reforms and Community Forestry Programme

4.9.1 Land Reform Programmers: The Budhabare Pilot Project

The then Budhabare Gaun Panchayat (now Budhabare VDC) was also based on the traditional land tenure system viz.; Zamindari system. It comprised almost the dozen villages with the population of about 4000 during 1964 A.D. The land reform Act, 1964 was first implemented in Budhabare naming as, "The budhabare pilot project" by his majesty the King Mahendra on February 1, 1964.

I. Land Ceiling and Distribution

To meet the objective of the land Act, 1964, the loaned above the ceiling (above 25 bighas) was confiscated from six land lords and distributed tenancy certificate to 18 tenants by His Majesty himself. For this, the government had made concrete measure in respect of land record, record of yield, tenancy rights and others. The prevailing land had been graded into four grades: Abal, Doyam, Sim and Chahar. This is how the state had maintained justice in matter of land ownership before four decades in Budhabare VDC.

II. Integrated Development Programmes

In addition to land reform measures, an integrated approach was followed for over-all development in Budhabare. During the fiscal year 1964-65, a new tax program was initiated for these purposes: to generate internal revenue for social development and be spent by the Gaun Panchayat on Local requirements like availability of social and other economic services to pay off the debt of the Budhabare cooperative society. The cooperative society had opened a consumer's store and provided storage, agricultural inputs and marketing facilities to its members. The source of capital for the society was the co-operative Bank, although compulsory saving had been utilized to a limited extent. Again, the provision of credit for diversified crops further speeded up the agricultural activities and it was estimated that through additional cropping and better methods, production had increased by nearly 600 metric tons per year. Further more, non-tiller farmer were encouraged to sell out their lands to the tiller and to spend on industrial development of the VDC.

The main objectives in Budhabare as in other places was to (a) augment agriculture production, (b) finance the tillers where by the tillers could buy their lands and (c) provide attractive alternative investment opportunities. The assumption of the integrated project was that it could be hold out for the future development of Jhapa district and there by for opening up the development perspectives of rural Nepal.

4.9.2 Community Forestry: Sustainable Forest Management and Environmental Justice Perspective

Community Forestry (CF) is now the main emphasis in Nepal forestry sector and is aimed at providing environmental, social and economic benefits to community forestry User groups (CFYGs). The CF programmed

in Budhabare VDC seems to have lunched in 2051 B.S. and there are two CFUGs:-

- i) Adarsha Namuna Community Forestry User Groups
- ii) Tentale Community Forestry Users Groups

4.9.2.1 Adarsha Namuna Community Forestry Users Group

The very CFUGs was legally formed on Mangsir 1, 2053 covering 175 H.a. of land. The CFUGs is surrounded by Kalika C.F. (Dhaison) in South, NawJyoti C.F. (Mechi Nagar) in east and by Magurmadi C.F. in west. Initially, number of CFUGs member were 256 which is now is 1047 in total. Adarsha Namuna C.F. has included ward no. 5, 7 and 8 as its member coverage area.

I. Income Source and Budget Allocation

The Adarsha Namuna Community forestry Users Group mainly depends on its forest timber production sale for income source. Besides it the CFUGs earns from Grants, and 'Danda-Jariwana' from its members. This income source annually generates about 11 lakhs which the CFUGs allocates in different sectors of the CFUGS are:

- a. Administration:** Salary, Travel, Newspapers, Registers ad Stationary equipments and Miscellaneous
- b. Forest Management:** Thinning and punning, Numbering, Transport, Cutting, Selling and plantation
- c. Community Development Activities:** Infrastructure development, Health and Sanitation, Drinking water, Education and Sports, Skill Development and others.

II. CGUGS Formation and Peoples' Participation

The Adarsha Namuna Community Forestry User's group consists of 1047 number of total members from ward no. 5, 7 and 8 in totality. The demographic composition of the members is not caste-class bounded. All people from all castes and classes have equal access for membership holding. As per the management and implementation of all concerned programme, one executive committee is elected and formed by all members on the basis full democratic norms. The executive committee consists of 17 members in total out of which, one is women and 7 members from lower caste-class people. This highlights the spirit of equity being adopted for equal participation of all people.

For the over all management of the forest decision making process seems to be democratic. All members have one man- one vote right to elect executive committee members. People's participation has been found active. Both male and female from all strata of population are found involved actively form decision making to benefit sharing to a great extent. To obtain justice in benefit sharing, poor and marginalized people are provided special subsidy, grant and scholar ship to fulfill their basic needs. This provision has effectively addressed interests of ultra-poor. Hence, the feeling of 'ownership' over the forest is equally found among all members.

III. Adarsha Namuna CFUGs and Implemented Programmes

The CFUGs has implemented programmes that cover almost all aspects of rural life. Despite conservation of the forest, it has concentrated over the community development activities to uplift the living standard of the native people. Broadly those programmes are categorized on the followings:

A. Infrastructure Development Programme

The Adarsha Namuna CFUGs has given due attention for infrastructure development of Budhabare VDC. They include road construction and maintenance, dam and canal construction, bridge construction, Tube-wel construction for drinking water, Temple construction, biogas construction, and Toilet construction, school building construction and Small stream maintenance. It has allocated budget amounting NRs 71 lakhs for the development of roads alone till now. Similarly, sufficient amount of budget has been allocated on other infrastructure development activities which approximately value NRs 5 lakhs till now.

B. Forest Conservation and Management Programme

The Adarsha Namuna CFUGs has achieved due success in matter of forest protection and development of its multiple resources. Based on the norms of people's participation, forest management works like thinning and punning is conducted once a year with mass circulation of all members. Likewise, forest patrolling is also undertaken once a month by the members. To increase forest resources, plants like bamboo and Rubber plants (By Ghorkhali Rubber industry) are planted in sufficient numbers. The CFUGs has wisely adopted the policy of use and conservation for sustainable management of the forest. So, the members are provided their needs viz.; fodder, timber, fuel wood and others. All these activities have enriched both plants and animals. The number of animals like Deers and Monkeys, Leopards, Nigale has increased and varieties of birds are also found enough. All these have been possible due to active people's participation and staffs of the forest.

C. Social Welfare, Skill Development, Sports and Educational Programmes

To uplift the living standard of the native people, Adarsha Namuna CFUGs has launched various skill development activities, sports and educational, social service and poverty reduction activities from its annual budget. It has provided house wiring training to 40 native youths and hair-cutting to 22 youth, to make unemployed youth self-dependent. Similarly, to enhance educational attainment of ultra-poor children, 15 poor students are given educational grant annually. The CFUGs is yearly providing sports-equipment like football, volleyball, volleyball-nets to facilitate sports in the VDC.

As per the poverty reduction of the CFUGs, pigs and she-goats are distributed among ultra-poor household on revolving basis of the seed money. Furthermore, it had provided NRs 25000 to buy an Ambulance and also has negotiated to provide Ambulance service to 15 poor households on the provision of 50% discount. Beside these, the CFUGs have been providing timber & cash money to the victims of natural calamities. Hence, Adarsha Naman CFUGs is playing vital role to maintain justice in society & in all its aspects.

D. Objectives of the Programme

The Adarsha Namuna CFUGs has the following over-all objectives:

- To protect and manage the forest for meeting fodder & leaf-litter, fuel wood, timber and other forest based needs of the local people.
- To keep balance in environment/eco-system by preserving forest and dependent animals, birds & other organisms.

- To enhance forest based income activities and to make poor economically capable.
- To conduct reforestation on the open land of forest territory.
- To aware and encourage people for developing green environment by planting plants on their private land also.
- To carry out socio-economic activities for overall upliftment of the society.

Thus, the Adarsha Namana CFUGs aims to ensure that all villagers have equitable access to forest resources, full involvement of local native's women, occupational of groups, caste groups and rural poor in decision making on the basis of non discrimination spirit. People's participation is the strength of the CFUGs which shows effectiveness, equity, efficiency, and so forth. It has been proved as a key source for economic development of budhabare VDC.

CHAPTER - V

Analysis and Interpretation of Data

This chapter discusses the major findings of the study. It deals with the degree of environmental justice inherent in the study area. Besides, the chapter analyses socio-economic status of the native people, their perception over the on going conflict, and opinions which obviously represents people's voices that may be useful for present conflict management.

5.1 Socio-economic Profile of the Sampled Households

5.1.1 Population Composition of Sampled Households

It has been found that Budhabare VDC is heterogeneous in terms of caste/ethnic composition and they are living in different localities with different professions and activities. The social structure of the village is highly ethno-oriented. There are so many castes such as Brahmin, Chhettries, Newar, Kamis, Damai, Sarkis, Magar, Limbu, Dhimal and others. They have their own particular culture, customs, rituals and life style. In total, 50 households have been sampled out of the total population for studying various parameters.

Table 9: Caste/Ethnic Composition of the Sampled HHs

Caste/Ethnic Group	Sampled HHs		Percent of the Total Population
	No. of HHs	Percentage	
Brahmins	23	46	46.28
Chhettries	5	10	9.33
Kami	3	6	6.22
Limbu	2	4	5.45
Newar	2	4	5.32
Rai	2	4	4.67
Dhimal/Rajbanshi	5	10	7.37
Magar	2	4	3.28
Others	6	12	12.08

Total	50	100	100
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Source: Field Survey, 2005.

It is revealed from the above table that Bhahun and Chhetri are dominant castes with share of 46.28% and 9.33% respectively. Similarly, Kami, Limbu, Newar, Rai and Dhimal/Rajbanshi are other major castes of the study area. Besides them, other sufficient number of ethnic groups are found but their number accounts little in the total VDC area.

5.1.2 Educational Attainment

Education is self enlightenment and eternal power of knowledge which germinates potentialities of an individual for better wellbeing. It creates opportunities for livelihood. The study area is highly forward in the matter of education so, educational status of sampled household. The following table shows the educational status of the respondents in the study area.

Table 10: Educational Attainment of the sampled HHs

Level	Population No.	Percent	VDC Level
Illiterate	38	14.29	23.6
Literate	56	21.06	24.1
Primary	68	25.56	38.6
S.L.C.	42	15.79	4.9
Campus	55	20.68	8.2
M.A. and above	7	2.63	0.6
Total	266	100.00	100.00

Source: Field Survey, 2005.

5.1.3 Livestock Size

Livestock is one of the major sources of income for rural people. Animal husbandry is an integral part of rural agricultural Nepalese society.

In the past, livestock was the main economic indicator for measuring economic status of the people. People who had more number of livestock were used to be known as rich people. Being agricultural country, almost all rural people have some cattle due to both agricultural and income earning purposes. The given table shows the livestock status in sampled HHs.

Table 11: Livestock Holding Status of Sample HHs

Livestock No.	No. of HHs	Percentage
None	0	0.0
1-3	6	12
4-6	34	68
7-10	9	18
11 and above	1	2.0
Total	50	100.00

Source: Field Survey, 2005.

It has been found from the field survey that most of the respondents have 4 to 6 no. of cattles which is 68% of the total sampled HHs. The table also shows that 2% of the total HHs have more than 11 livestock kept with the purpose of commercial animal husbandry.

5.1.4 Energy Consumption Pattern/Trend

Energy does play an important role in meeting the basic needs. Access to modern forms of energy is a key determinant of the quality of life and the level of social development. Eventhough, modern energy is not a substitute for development interventions, it contributes to them and the lack of access to modern energy has been shown to correlate closely with many poverty indicators. In the context of Nepal, almost 75.58 percent energy is supplied by the traditional sources viz.: fuel wood, agricultural residues and animal dung. Commercial petroleum, electricity and coal, are also major

sources of energy. In the study area, fuel wood was seen as the major source of energy for cooking, heating and lighting. The present scenario of energy in the study area is shown in the following table.

Table 12: Energy Consumption Pattern of the Study Area

Source of Energy	Cooking/Heating		Lighting/Others	
	No. of HHs	Percent	No. of HHs	Percent
Fuel wood	40	80	-	-
Electricity	-	-	46	92
Kerosene	-	-	4	8
L.P.G.	4	8	-	-
Biogas	6	12	-	-
Total	50	100	50	100

Source: Field Survey, 2005.

According to the field survey, 80% of the sampled households depend on fuel wood for cooking where as 12% on biogas and 8% on L.P.G. for cooking. Similarly, for lighting, 92% and 8% of the households depend on electricity and kerosene respectively. This shows that people's access to energy is changing from traditional to modern sources of energy which is a good mark of development.

5.1.5 Occupational Status of the Study Area

Obviously, being agricultural country, majority of people in Nepal depend on agriculture for their subsistence. So is the case in Budhabare VDC where socio-economic status and sources of income of people are determined by the ownership of land. The more area of land an individual possesses, greater amount of income he gets and that income further leads to other potentialities of life.

Despite agriculture, people have followed other occupations viz.; business, service, teaching, traditional occupation, foreign employment, wage labour and others. The given table clearly shows occupational status of sampled HHs.

Table 13: Occupational Status of Sampled HHs

S.N.	Occupation	Frequency (HHs)	Percent
1.	Agriculture	27	54.0
2.	Business	6	12.0
3.	Service	9	18.0
4.	Labour	4	8.0
5.	traditional	2	4.0
6.	Foreign Employment	2	4.0
	Total	50	100.0

Source: Field Survey, 2005.

The above table points out that 54% of the sampled HHs directly depends on agriculture for their survival. Similarly, people seem to be adopting other professions along with agriculture. Therefore, we can generalize that development of a society begins from agricultural transformation and development. It multiplies further potentialities and opportunities in the society.

5.1.6 Occupationwise Income Status

Quality of life and degree of development in a society are determined by the occupation and sources of income of its members. It is a universal fact that economic development is the means to human development. To imagine a prosperous and peaceful society without generating sources of income of its members, is only a utopia. A hungry man better prefer to die rather than watching a handful of people enjoy a luxurious life. Like other

rural parts of Nepal, the chief source of income of people in Budhabare VDC is agriculture and integrated animal husbandry. This is better elaborated by the following table.

Table 14: Occupation Wise Income Status of the Sampled HHs (NRs./Year)

Annual Income Source	Minimum	Maximum	Sum	Mean
Agriculture	8000	1,52,000	3189500	109982.76
Horti Culture	2500	2,50,000	1236500	44160.71
Animal Husbandry	3500	35,000	340500	17025.00
Service/Business	26000	20,00,000	5232000	168774.19
Other Occupation	2500	20,00,000	3153500	150166.67

Source: Field Survey, 2005.

The table depicts out the fact that major sources of the sampled HHs are agriculture and animal husbandry. Although, the table shows equal income from other sources, but these are limited to few persons only. That's why, it can be generalized, at present, majority of peoples income rises with rise in agricultural outputs only.

5.2 Income and Employment Generation from Forest Based Industries

Forest resources have unlimited potentialities for economic development in Nepal if they are utilized properly. Both timber and Non-timber forest products can generate huge sources of income and employment opportunities for the people. The Budhabare VDC is a good example in this regard where more than two dozens forest based industries are in operation. Such industries are providing employment opportunities to more than 150 people directly. The table given below well describes benefits obtained from forest based industries.

Table 15: Benefits Generation From Forest Based Industries

Industry	No. of HHs	Income/Month (NRs.)	Annual Family Expenditure (NRs.)	No. of Employs
Furniture	4	3000-20,000	88,000-1,90,000	4-11
Wine Production	2	2500-8,000	50,000-91,000	Self
Fuel Wood Sale	1	5000-6000	62,000	Self

Source: Field Survey, 2005.

The table is self-descriptive about the benefits generated from forest resources. Out of total sampled HHs., 7 HHs (14%) are found directly depending on forest resources for their survival and they are well successful too. In the same manner, if Non-timber forest products are diversely used, they can undoubtedly be one of alternative sources of people's livelihood.

5.3 Forest Resources and Community Development Activities

Forest resources, if properly managed, can equally contribute for the over all community development along with personal benefits. This is well proved by Adarsha Namuna CFUGs of Budhabare VDC which the table pictures out.

Table 16: Contribution of Forest Resources in Community Development

Type of Programmes	Quantity	Total Amount (NRs.)
Road maintenance	8 k.m.	7,00,000
Culvert	4	2,00,000
Dam	2	1,00,000
Tube Well Distribution	8	24,000
Biogas Plan Construction	33	99,000
School Building Construction	3	1,50,000
Temple Construction	2	50,000
Electricity Pole Distribution	16	16,000
Skill Development Trainings	62	8,000
Poverty Reduction	18	18,000
Ambulance purchase	1	25,000
Free Timber-Fuel Wood Distribution	60	30,000
Natural Calamities Victims	27	27,000
	Total	14,47,000

Source: Field Survey, 2005.

From the above table, it becomes clear that community forestry can address almost all sectors of a rural social life. Even a small forest possesses huge potentialities for over all development. The Adarsha Namuna CFUGs is a good example on this regard which is clearly illustrated by the table.

5.4 Land Holding Size

Land is the primary means of production which determines the wealth of rural people. Land determines the level of family status in socio-economic and political aspects of life in Nepal till now. Greater the land holding size, higher is the status in society. The skewed distribution of this basic source of income in the past, had stratified society into poor and rich, ruler and ruled, suppresser and suppressed and haves and haves not. Due to the implementation of the land Act, 1964 as pilot project in Budhabare VDC, distribution of land seems to be equal; neither a farmer with more than 25 Bighas nor landless farmers in large number exist there. There is found justice in matter of land distribution.

Table 17: Land Distribution Pattern of Sampled HHs

Land Holding Size (ha)	No. of HHs	HHs (%)	Area (%)	Average Area (ha)	National Level		
					HHs (%)	Area (%)	Average area (ha)
Landless	6	12	0.00		0.8	0.00	
< 1	31	62	49.34		74.15	38.88	
1-5	10	20	31.82		24.30	53.81	
5-10	3	6	18.84		0.64	5.27	
10 and above	0.00	0.00	0.00	0.84	0.11	2.04	0.79
Total	50	100.00	100.00	0.84	100.00	100.00	0.79

Source: Field Survey, 2005, CBS, 2004.

The above table shows that 62% of households with less than 1 ha. occupy 40.34% and the HHs (31.82%) having 1-5 ha. of land occupy

24.30% of the total land. Only 18.84% of land has been owned by middle farmers with land 5 to 10 ha. with in the sampled HHs. This indicates equality in land ownership which has further contributed in establishing egalitarian society with unity and harmony among its members.

5.4.1 Correlation of Landholding with Other Variables

There is no debate on the fact that land has been prime factor that determines the socio-economic status of people in Nepal till now. It's ownership is the sole source of income of both people, either rural or urban. Hence, other essential needs and potentialities are also dependent on the quantity and quality of land. The ownership of this property has multiple effects on other aspects of life viz.; fulfillment of basic needs, comfortable equipments, social status, access to state mechanism and others.

Table 18: Correlation of Land Ownership with Other Variables

Pearson Correlation (1- tailed)	HHs with land	Landless HHs
Annual expenditure of sampled HHs on food	0.698	0.340
Annual expenditure of sampled HHs on clothes	0.861	0.687
Annual expenditure of sampled HHs on education	0.898	0.104
Annual expenditure of sampled HHs on health	0.479	0.544
Annual expenditure of sampled HHs on festival	0.909	0.529
Annual expenditure of sampled HHs on energy	0.514	0.746
Annual expenditure of sampled HHs on transport	0.456	-
Annual expenditure of sampled HHs on social activities	0.481	0.183
Educational attainment of sampled HHs (campus level)	0.653	0.668
Income of sampled HHs from agriculture	0.279	-
Income of sampled HHs from horticulture	0.732	0.814
Income of sampled HHs from livestock	0.393	0.521
Income of sampled HHs from other occupations	0.512	0.154
Food sufficiency months of sampled HHs	0.453	0.022

Source: Field Survey, 2005.

The table above clearly shows that there is strong positive correlation of landholding with other variables. As given in the table, there is strong positive correlation between landownership and festivals (0.698), education (0.898), clothes (0.961), food (0.698), health (0.479) and with horticulture (0.732). Similarly regarding landlessness, strongest positive correlation is with horticulture (0.814), with food (0.687) and with campus level education 0.668). Thus, the overall correlation scenario seems to be strongly positive. So, landholding (independent variables) highly influences other variables which are dependent.

5.4.2 Status of Private Horticulture

The study area is highly forward in matter of horticulture which has benefited native people economically and environmentally. Almost all people have changed from traditional food grain farming to cash crops which is their one of the main income sources. It has been proved that the norms of EJ can be obtained through the promotion of private horticulture which acts to meet both economic income and green environment.

Table 19: Correlation of Horticulture With Other Variables

Pearson Correlation (1-tailed)	Horticulture
Income of sampled HHs by Agriculture	0.127
Income of sampled HHs by Livestock	0.674
Income of sampled HHs by other occupation	0.978
Annual expenditure of sampled HHs in Food	0.763
Annual expenditure of sampled HHs in Clothes	0.918
Annual expenditure of sampled HHs in Education	0.812
Annual expenditure of sampled HHs in Health	0.415
Annual expenditure of sampled HHs in Festivals	0.943
Annual expenditure of sampled HHs in Energy	0.755
Annual expenditure of sampled HHs in Transport	0.771
Annual expenditure of sampled HHs in Miscellaneous	0.856
Food sufficiency months of sampled HHs	0.256
Educational attainment of sampled HHs (S.L.C. Level)	0.191
Educational attainment of sampled HHs (Campus Level)	0.666

Source: Field Survey, 2005.

As pictured out in the above table, horticulture has strong positive correlation with secondary occupations (0.978), with expenditure on clothes (0.918), food (0.763), Education (0.812) and with campus level education (0.666). This indicates the fact that horticulture may overtake traditional agriculture both interms of economic gain and environmental protection. The table shows that horticulture has equal correlation with livestock (0.674) which integral part of rural agriculture.

5.5 Environmental Justice and Conflict Management: Perception of People

If we consider social conflict as a sole phenomenon, the forces that bring about such a phenomenon are inherently found with in a society. Similarly, the members of a society and their attitude towards the on going conflicts implies great significance while managing those conflicts. It is the universally accepted truth that the supreme authority of the state is vested in the people. That is why, solution to any problem comes from the voices of the very supreme authority, how they perceive the problem, causes and consequences of the problem and the methods for the solutions are best given by them. There can be no substitute model or method designed by outsiders for such problem to the one that originates from among the people.

5.5.1 Causes of Social Inequality and Disparities

Majority of the people has scientifically studied social stratification as one of the social phenomena. In common, they all have reached at the conclusion that the inequality in the distribution of land is the major cause for social inequality. The respondents viewed so along with logic that the land have played vital role in the production process and formation of capital in rural Nepal.

Table 20: Reasons for Social Inequality

Reasons	No. of Responses	Percent
Unequal land distribution	41	25.46
Mis/under utilization of natural resources	33	20.49
Domination of high class	30	19.00
Increasing Unemployment	15	9.31
Failure of state mechanism	13	8.00
Social traditional norms and values	13	8.00
Others	16	10.00
Total	161	100.00

Source: Field Survey, 2005.

As revealed by the above table, 41 (82%) respondents gave emphasis on skewed distribution of land for existing social inequality. Similarly, 33 (66%) respondents views that underutilization and mis-utilization of natural resources due to feudal social composition is another root cause of social disparity. Besides these, opinions vary among respondents on the topic but those comes on secondary priority.

5.5.2 Consequences of Unequal Land Distribution in Society

It has been a nightmare throughout Nepal's modern history that land was the property of those who did not cultivate it. The cultivators were denied of all possible rights on land. This situation led to accumulate peasant's dissatisfaction which has been institutionalized under the Maoist movement in Nepal.

Table 21: Consequences of Unequal Land Distribution

Consequences	No. of Responses	Percent
Class division	36	22
Exploitation of landless	34	21
Social and political instability	29	18
Gap in living standard	27	17
Mass frustration and agitation	15	9
Inequality in state resources access	11	7
Others	9	6
Total	161	100.00

Source: Field Survey, 2005.

As pictured out in the above table, 36 (72%) respondents believe that social class division is the consequence of inequality in the possession of land. Likewise, 34 (68%) and 29 (58%) respondents argue that skewed land distribution has resulted into the exploitation of landless peasants and social instability respectively. Other significant number of respondents believe that gap in living standard, people's frustration and agitation are also the consequences of landlessness of the real cultivators.

5.5.3 Impact of Inequality in Society

When social inequality is high, the probability of domestic conflict and violence increases substantially. With in inequalities too, income inequality implies core role for such social conflicts as income is the fundamental for social status in modern age.

Table 22: Impacts of Inequality in Society

Impacts	No. of Responses	Percent
Class division	34	27
Exploitation and social exclusion	24	19
Social conflicts	22	17
Socio-political instability	21	17
Mass poverty	13	10
Underdevelopment	12	10
Total	126	100.00

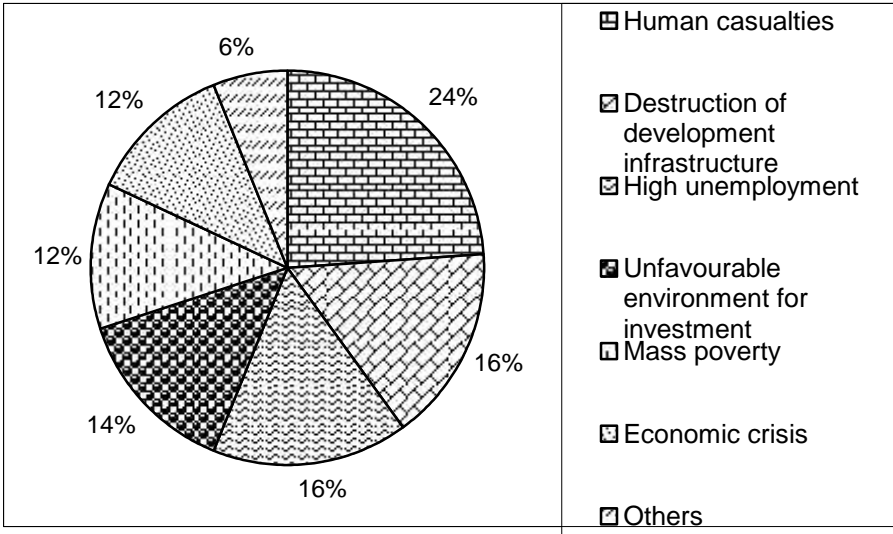
Source: Field Survey, 2005.

The above table makes clear that 34 (68%) respondents perceives social inequality and class division from the same perspective. Likewise, 24 (48%) respondents opines that social inequality is based on exploitation and social exclusion of its majority members. The rest but equally valuable opinions are socio-political instability (42%), mass poverty (26%) and underdevelopment (24%) which are strongly viewed by respondents as determinants of conflicts in society.

5.5.4 Consequences of Conflict in Economy

Since the violence invariably causes considerable distruction of property, not to speak of the lives lost, economic growth is adversely affected. Then gradually, multiplier effects are seen in every aspects of life. The respondent's opinions positively matches with the very concept as illustrated in the following figure.

Figure 1: Impacts of Conflicts in Economy



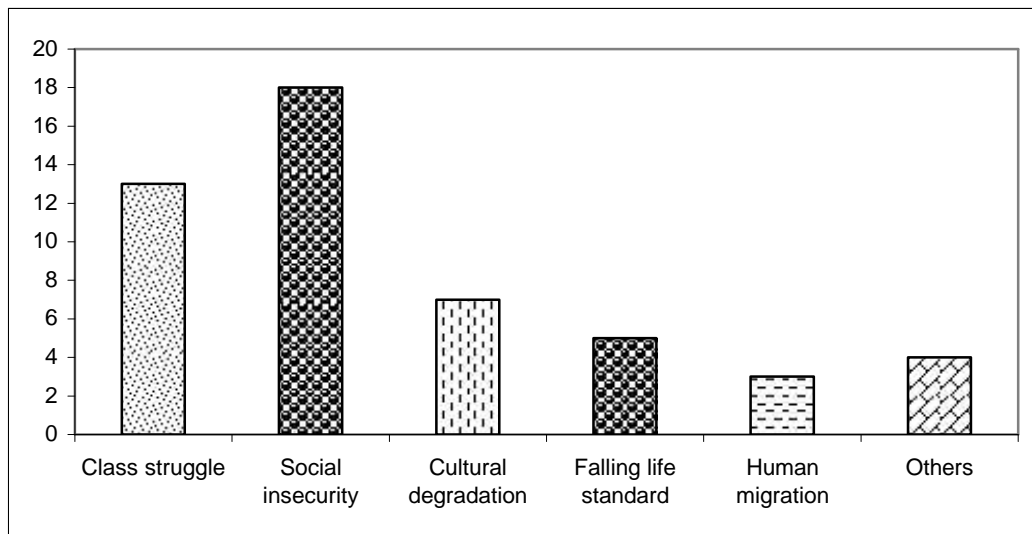
Source: Field Survey, 2005.

The above figure is self descriptive as it reveals that 24% of respondents considers Human Capital lost as the ultimate outcome of any social conflict. Similarly, 16% of the total respondents laid emphasis on the destruction of infrastructure of development activities where as others take increment in unemployment, unfavourable investment environment and mans poverty as inherent impacts of conflict in economic sector.

5.5.5 Impacts of Conflict in Social Sector

The strength and unity of a society gets degraded when it seeks to violence and conflict. Social norms, values, harmony, living standard, peaceful environment and so on become mere dream. As a result, citizens even migrate in search of security for peaceful life.

Figure 2: Social Impacts of Conflict



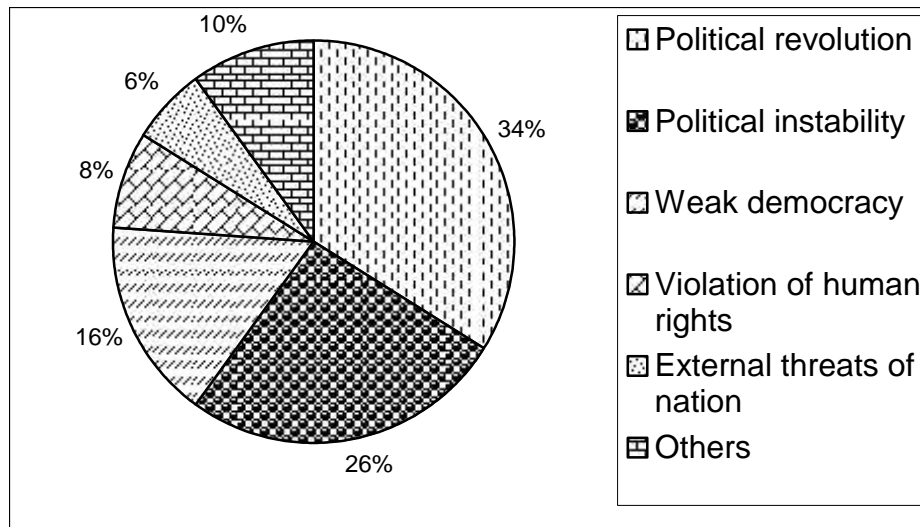
Source: Field Survey, 2005.

In the above figure, 18 (36%) respondents take social insecurity as the prime impact of conflict where as class struggle (13 respondents) come on second priority list. Similarly, 7 (14%) of the respondents opined cultural degradation and 5 (10%) of them viewed low living standard as impacts of conflict. This shows that social backwardness and conflict have cause and effect relationship.

5.5.6 Political Impacts of the Conflict

Political life also remain untouched by the on going conflict since politics becomes the driving force of any conflict later on. The state mechanism and conflicting groups come into struggle for power which affects both internal and external vested interests of political systems. Finally, the bitter out put will be weakening position of nation among international communities.

Figure 3: Political Impacts of the Conflict



Source: Field Survey, 2005.

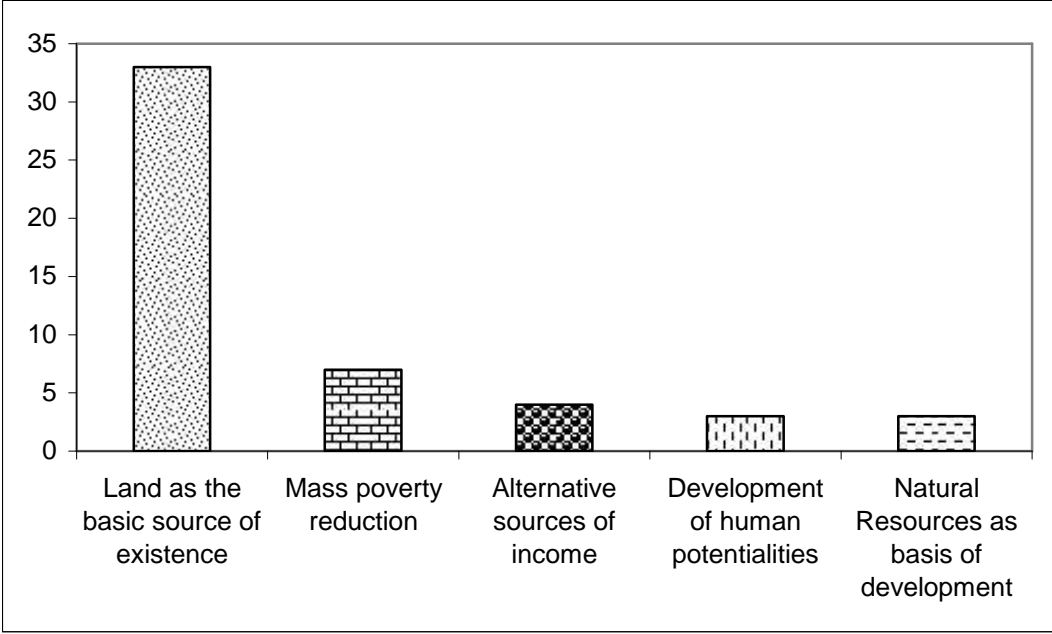
The respondents opinion and established notion in regard of political impacts of the conflict strongly matches with each other. The figure shows that 34% of respondents agree on political revolution as most possible outcome of the conflict. Similarly, political instability (26%), weak democracy (18%), violation of human rights (8%) and external interference (6%) are other consequences of the on going conflict in Nepal as suggested by the popular voice of the people (respondents).

5.5.7 Significance of Environment Justice in the Present Social Conflict Management

EJ refers to the right of people to a safe, healthy, productive and sustainable environment where 'Environment' is considered in its totality to include the ecological, physical, socio-cultural, political, aesthetic and economic environments. It refers to the condition in which such a right can be freely exercised where by individuals and group identities, needs and dignities are preserved, fulfilled, and respected in a way that provides for self-actualization and personal and community empowerment. To conclude,

it adopts the spirit of egalitarian society. The very rhetoric resemble with the popular voices of the Nepalese citizens who are represented by the sampled respondents of the study area.

Figure 4: Importance of EJ in the Present Conflict Management



Source: Field Survey, 2005.

The above figure includes that 33 (66%) of respondents viewed land as the basic source of income for existence. Similarly, 7 (14%) of respondents emphasized on the value of EJ for mass poverty reduction with the proper use of NRs. The respondents views, here, highlights the huge potentialities of natural resources prevalent in Nepal which can be prime source for prosperity of both Nepal and her citizens.

5.5.8 Methods to Materialize EJ in Society

EJ is broader in scope than environmental equity alone. It also refers to the cultural norms and values, rule, regulations, behaviors, policies and decisions to support sustainable communities where decent housing and adequate health care, safe job and decent paying, quality schools and

recreation, democratic decision making and personal empowerment and communities free from violence and disharmony are enjoyed by the citizens on the non discrimination basis. So the attainment of EJ seeks holistic approach with change in entire social system. The responses enlisted below highlights the very reality of our society.

Table 23: Methods to Materialize EJ in Society

Respondents Opinion	No. of Responses	Percent
Effective land reform programme	36	28
Eradication of all sorts of socio-economic discrimination	26	20
Proper utilization natural resources	18	14
Active people's participation in society	17	13
Effective implementation of all laws	15	12
Coordination among GOs, INGOs and CBOs	8	6
Others	9	7
Total	129	100

Source: Field Survey, 2005.

The above table reveals that effective land reform programme is supported in majority of responses (28%) and elimination of all socio-economic discrimination (20%) for getting justice in society. Moreover, proper utilization of natural resource (14%) and people's participation in social activities (13%) are equally supported by the respondents. This brings out the need of social acceptance over elimination of all sorts of discriminations along with state efforts.

5.6 Environmental Justice and Proposed Actors

The issues of environmental injustices are related to social problems which are outcome of various socio-economic discrimination and injustices inherent in society since long. So, the very issues of EJ are to be addressed from and by every sectors of society. As EJ is broad in nature, it demands similar efforts from all starta and sector of society. The sampled HHs of the study area and their opinions stress both top-down and bottom-up approach to get EJ principles implemented in practice. To mention in strict sense, the respondents views are more concerned with government, I/NGOs, community and individual as primary actors who combined efforts only bring fruitful results.

5.6.1 Role of National Government

Political process is one of the causes of environmental injustices. The state possesses the authority whose sole object is to solve problems and promote happiness of its citizens. There are essentially to groups in society. They are: (1) a small group of powerful elite and (2) the powerless masses. The elites are participant groups. They take part in political decision making process, where as the mass is excluded group. The unequal access to decision making and implementation of the government related activities generate inequality and injustice which is long existed reality of Nepalese politics. Therefore, to maintain order in society like other problems the government has to address the problems of environmental injustices. Here by, the relationship between the environmental justice movement and political movement is obvious.

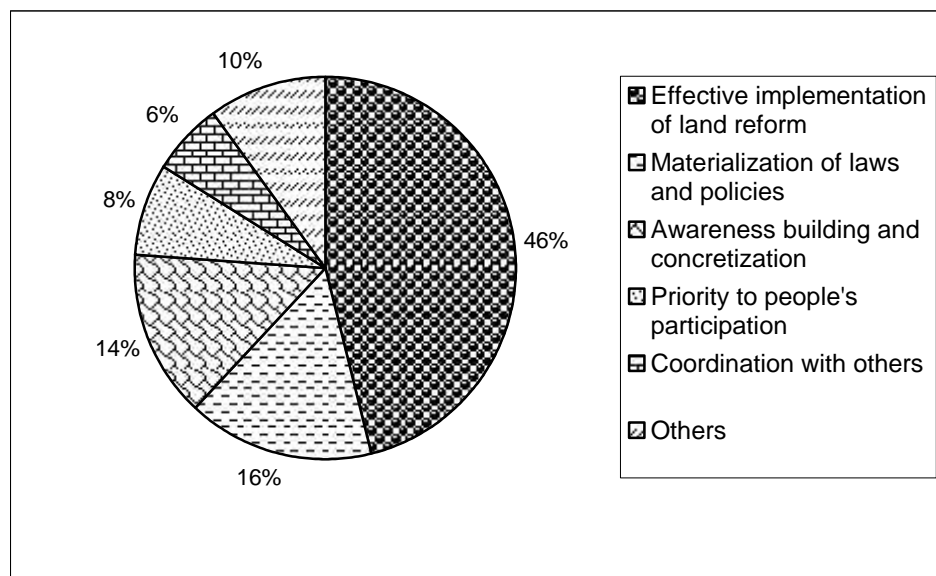
According to the opinions of the sampled respondents too, EJ requires 'centralized planning' which demands a high degree of state intervention particularly with respect to land distribution. They suggested that EJ

becomes a model for planning, a strategy involving purposeful management of natural resources with distributive justice.

The suggested role of the government as viewed by the respondents are as follows:

- Effective implementation of land reform acts in practices.
- Materialization of all concerned laws and policies strictly.
- Good coordination with international communities, INGOs, local communities and other concerned.
- Provision of active people's participation.
- Special provision of ultra poor and marginalized groups.
- Elimination of all sorts of discriminations.
- Provision of punishment and award.
- Development of insider's view in policy formation.
- Directive and leading role.

Figure 5: Role of Government in EJ



Source: Field Survey, 2005.

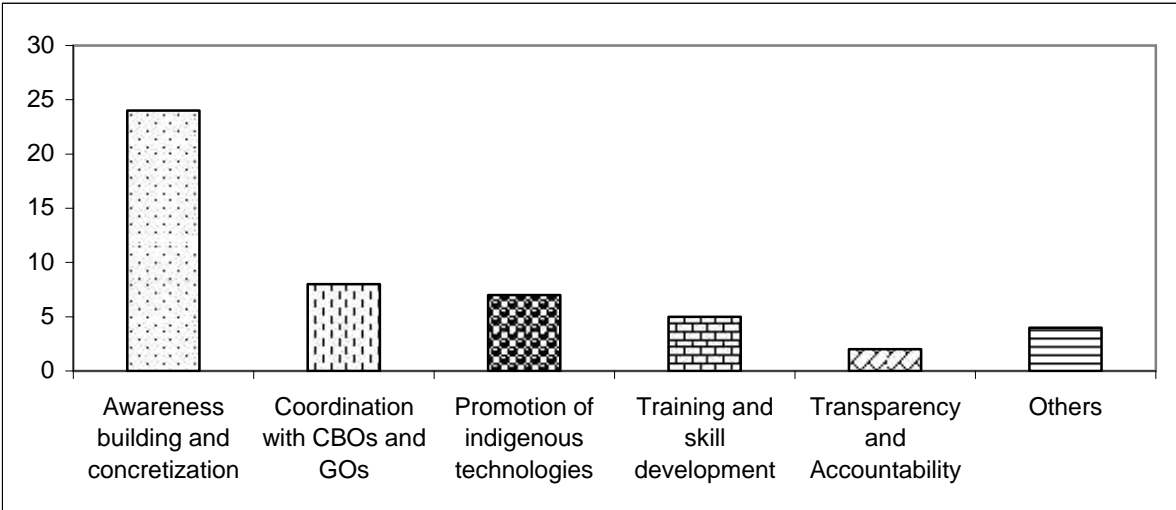
As revealed by the above figure, 46% of the respondents has clearly supported land reform programme and its materialization into practice by

the state for EJ in Nepal. Likewise, the government is expected to strongly implement all laws and polices concerned with environment by coordinating with line agencies.

5.6.2 Role of I/NGOs

Non Governmental Organizations, both National and International, can play vital role to eliminate environmental injustices. Their significance lies particularly on awareness building and concentizing people about EJ and causes of injustices among people. The figure below includes people's opinion as what role such I/NGOs may play to obtain greater degree of EJ.

Figure 6: Role of I/NGOs in EJ



Source: Field Survey 2005.

The figure shows that 24 (48%) of respondents think INGOs should actively involve to aware people about values of EJ and causes behind injustices inherent in society. They further said that INGOs have to necessarily coordinate with CBOs and GOs 8 (16%) in order to provide trainings and skill development programmes (10%) for enhancing rural technology (14%) and getting EJ principle fulfilled.

5.6.3 Role of Community in EJ

The development of a nation is possible only when the community gets prosperous. Hence, community and its members are foundation of a nation. The state laws and policies fails to achieve objective if its community and social members violate or disobey them. The something happened in previous government's efforts to ensure EJ in Nepal. This is the belief of the people of the study area, which is well pictured in the table below.

Table 24: Role of community in EJ

Opinion	No. of Respondents	Percent
Equality in people's participation	18	36
Feeling of natural resources as common property	12	24
Eradication of all social discriminations	7	14
Coordination with GOs and INGOs	5	10
Mobilization of local organizations	4	8
Others	4	8
Total	129	100

Source: Field Survey, 2005.

In the above table, 36% of the respondents opined that EJ can be achieved only through the massive people's participation. Similarly, 24% of them said that each community member must have feeling of natural resources as common property where as 14% laid emphasis on the eradication of all kinds of social discriminations.

CHAPTER - VI

Findings, Recommendations and Conclusion

6.1 Findings

The existence of conflicts in a society is not a new phenomenon. Rather, it is essential for social changes and development. The degree and phase of conflict is the matter of concern. The prevalence of conflict is of vital significance for continuous social process and has great influence in shaping and reshaping social relations and the power structure of the society if it is in constructive phase. But the very conflict becomes deadly destructive of human civilization if it is in destructive phase which is similar to 'Volcanic Eruption'. The poverty is said to be the root cause of the present Maoist insurgency which has adversely affected every sector of life in Nepal. Being semi-feudal and agrarian society, land and forest resources are basic factors of production and income sources that determine socio-economic status in Nepal. Because of various environmental injustices existed in Nepalese society, the whole society have been divided into poor and rich, first one being ruled and exploited by the second one. Such injustices are inherent part of our society and are reflected in its socio-economic and political life.

There is a relationship between environmental injustices and class, caste and gender. Discrimination on the basis of caste and ethnicity, race, sex, economic class is rampant in society. This discrimination is clearly seen in environment related activities. Such discriminatory practices rooted in ethno-caste system have dominated Nepalese culture for centuries. Though the constitution of 1990 and other laws prohibit all forms of discrimination on the basis of class, caste, religion, sex, tribe etc., in practice, discrimination still continues.

In the study of conflict, it is important to understand the role of human dimensions in resource governance. Land, forest and water are the most important natural resources for economic development of Nepal. Basically, conflict over natural resources is the outcome of societal arrangement, human intension and behaviours. Resource management decisions, and activities of resource users, performance of bureaucracy, functioning of user groups and associations, access to and control over resources, customary practices and stage laws, livelihood requirement and welfare of people are therefore important issues to be addressed in conflict management. Several researches and academicians have the view that natural resource management is not only a technical domain but it is more importantly a social discourse shaped and reshaped by social processes and intentional human activities. A plural legal situation can create several conflicts because of its uncertain and manipulative nature. Most of the legal reforms have yet to be translated into real practices. If and when they are practiced, power brokers manipulate them and the weaker section of society still feels uncertain and insecure. Exactly, the same events have occurred in Nepal since long the state tried to secure justice over natural resources.

Hence, the Maoist movement, from the environmental point of view, is neither a violence for political power, nor is it support to any communism. It is purely people's involvement for social justice and equity. As solutions to the problem, various methods might have been suggested, but the fundamental method lies on environmental justice which protects people's right over natural resources on the non-discriminatory basis. The problems of social inequalities and injustices are the outcome of the problems related to EJ. The EJ there by is concerned with the protection of environment and cultures of marginalized people, developing sustainable communities, safeguarding human rights, and shaping new environmental discourse,

ethics, policies and plans for establishing egalitarian society, the society of twenty-first century. EJ focuses on how the environmental repercussions. of human actions affect social equilibrium. That is why, EJ demands for the sustainable use of natural resources and proportionate distribution of benefits arisen from them. The goal is equal justice, and equal protection of natural resources. Hence, environmental injustices prevailed in Nepalese society are the basic causes of the on going civil war which needs EJ approach in empirical ground that demands egalitarian practices from the local to the national level.

The completion of the study has come with following findings:

1. There are discriminations on land holding operation and benefit sharing of forest, water and other natural sources on the basis of class, caste, gender and political power.
2. It is the ground reality of Nepalese society that NRs. are the primary sources of livelihood and prosperity and particularly land, forest and water are indispensable property of both people, urban and rural.
3. Discrimination is in existence due to restrictions in access to NRs. in the case of indigenous people despite their sole dependence on them for survival.
4. Benefit sharing is not equitable in community forestry, particularly dalit households have been denied the access to forest resources.
5. Contribution to conservation of forests varied for different groups of people. The physical labour required mainly come from the lower section of society and from women where as wealthier and powerful people are found active only in accounting systems and other decision making process which are not transparent.

6. Even though poor people derive a higher percent of their income from the forest, in terms of absolute amount, they derive less benefit where as households with resources like animals and land derive more benefits from the forest. But for survival, landless, marginal and small households depend more on forest resources. Accordingly, socio-economic conditions determine forest use pattern.
7. Local communities bear the negative impacts of development activities and urbanization in the form of depletion of NRs. and littering of garbage.
8. Justice in access to NRs. particularly in land ownership, enhance social equality. Out of the total respondents, 82% have occupied 81.16% of the land which is remarkable factor for uniformity in social status of the study area.
9. Majority of HHs (68%) have kept 4-6 number of cattles where as 18% have kept 7-10 and 2% of HHs have adopted animal husbandry (11 above) as a profession which proves it as an integral part of Nepalese agriculture.
10. As per the occupation, 54% of HHs are found directly involved in agriculture where as others have adopted service (18%), Business (12%), Labour (8%), Traditional works (4%) and 2% are in abroad for foreign employment. Equally significant number of respondents (14%) are found involved in forest product best occupation with income range of 2500 to 20,000 per month.
11. The community forestry has been found doing both nature's conservation and community development activities for which it has

spent more than 14 lakhs cash till now covering all aspects of life, particularly of needy people.

12. Majority of the HHs (82%) has assumption that inequality in land distribution is the sole cause of social stratification and class division. Similarly, 68% of the respondents viewed extreme exploitation of landless people as consequence of the skewed land distribution where as 58% opined social and political instability resulted finally from such inequalities and exploitations.
13. With regard to role of EJ in present conflict management 66% of HHs said that land is the sole property of Nepalese people for their survival and living standard upliftment.
14. To obtain EJ in practical ground, 72% of respondents laid first emphasis on effective land reform programmes by the state.
15. To sum up, EJ is affected particularly by political biasness towards the wealthier and more powerful class and it also affects political power and socio-economic status in society.

The concept of EJ deals with disproportionate sharing of ecological benefits and hazards in society which adversely affects the livelihood of people, particularly the marginalized. The unequal access not only to resources and healthy environment but to decision making, information and other civil rights comes under the preview of EJ. The look of these rights has caused and perpetuated environmental injustices to the greater extend in Nepal. Various studies examining the access to resources, environmental benefit and the process that influence people's livelihood have shown that social conflict is strongly associated with such issues of EJ.

6.2 Recommendation

On the basis of the findings of the study, the following recommendations are drawn which may be useful to formulate and adopt policies by the government, INGOs, CBOs and individuals in matter of securing EJ in entire society and also for the management of the present Maoist Insurgency.

- To reduce the magnitude of economic inequality, effective and fruitful land reform programmes must be implemented by the government in practice. The government should focus on materialization of all laws and rules that are concerned with environmental assets with proper coordination with line agencies and local people.
- As the government is the sole authority, it should follow market approach by providing favourable environment and incentives to private sector for commercialization and diversification of natural resources, with the aim of creating alternative source of income from local to national level.
- The state should give special attention on the elimination of all sorts of socio-cultural, economic and political discriminations inherent in with mass mobilization of citizens.
- The concerned bodies and authorities must keep reliable and perfect records and data of all sorts of natural resources. They must conduct research and development activities to meet the aims of EJ.
- All sorts of environmental laws, rules, regulations and policies necessarily match with the interests and norms of local people to ensure sustainable development. This can be achieved only through the participation of local people.

- Various non-governmental organizations (INGOs, CBOs) involved in the conservation of environment should necessarily focus their programmes on mass awareness building and concentration on issues of environmental injustices. They should adopt bottom up approach with proper coordination among all GOs. Their need is to be field tiger rather than paper tiger.
- The community should practically eliminate all sorts of discriminations found within the society. All community members must develop feelings of equality and equity among its members in the matter of environmental activities. Otherwise, no state law alone can eradicate such discriminations which are roots of environmental injustices.
- The members of society should believe on collective efforts to protect the environment and share benefits from it. They should perceive NRs. as common property over which all have equal inborn rights and violation of such rights should be taken as violation against society.
- The state and society are the enlarged form of individuals. So, each of them should respect and follow social and state values. The spirits of EJ can be fulfilled only through the efforts of an individual which demands changes in perception and behaviours.
- The social structure and resource deprivation trap have reciprocal relationship. So, the changes in the discriminatory structure of the society breaks resources deprivation trap which further can be milestone to break poverty trap. This is possible only through combined effects of an individual society and the state.

6.3 Conclusion

The Maoist insurgency is not the sole product of the failure of the last 13 years of multiparty democracy. Obviously, during the last 13 years, there were several serious weaknesses of the governance system that contributed to catalyze the escalation of the conflict. In fact, the Nepalese Maoist insurgency is the manifestation of combined result of century old inequalities, injustice, discrimination, poverty and governance failure. There is a strong and direct relations between the resource governance and resource conflict and their linkages with the Maoist insurgency. The long lived poor and discriminatory resource governance caused unequal access and control over resources. Poor and weaker section of the society got less but suffered more. When this inequality crossed the tolerance limit, the poor people frustrated and such frustration helped the mass movement like Maoist insurgency. It is easy to exploit frustrations and feelings of injustice of poor and marginalized people in favour of mass movement and revolution. Exactly that has happed in Nepal. Most poor and marginalized people, exploited by the local elites, power broker and politicians, are sympathizer of the rebels. They are now sympathizer not because they know the Maoist ideology or the policy and programme of the Maoist, but because they hope to see change in the century old exploitations, injustices and discriminations. Thus, to sum up in a sentences, it is a resource conflict taken place due to various injustice inherent in society.

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Appendix - I

QUESTIONNAIRE

1. General Information

Family No.: Village: Ward No.:

Name: Family Member: Age:

Sex: Religion: Occupation:

2. Educational Status

Level	Literate/ Illiterate	Primary	Secondary	I.A./B.A.	M.A. and Above
No. of Family Members					

3. Land Ownership Status

Types of Land	Cultivated by Ownership	Cultivated by Other	Cultivated of Others Land
Khet			
Bari			
Horticulture			
Residential			
Others			
Total			

4. Land Productivity and Types of Cultivation: Annual

Production	Types	Output (k.g.)	Market Value (Rs.)	Saving (Rs.)
Food grains				
Cash crops				
Others				
Total				

5. Food Sufficiency Status

Less than 6 months ()

Between 6 to 12 months () More than 12 months ()

6. Annual Family Expenditure Status

Types	Annual Expenditure (Rs.)
Food	
Clothes	
Education	
Health	
Energy	
Festival and Culture	
Transport	
Social Activities	
Miscellaneous	
Total	

7. Does your annual income meet annual expenditure?

Yes ()

No ()

If yes, because of

If no, because of

(a) Income from agriculture.

(a) Landlessness.

(b) Income from government service.

(b) Small amount of land.

(c) Income from teaching.

(c) Low land productivity.

(d) Income from foreign employment.

(d) Lack of irrigation of others.

(e) Income from business/wage work.

(e) Others.

(f) Income from others.

(f) Lack of alternative jobs.

8. Do you hold membership of community forestry?

Yes ()

No ()

9. What types of forest product do you consume from C.F.?

Type	Amount of k.g.	Market Value (Rs.)	Subsidy
Fodder			
Fuel Wood			
Timber			
Others			

10. Have operated enterprise/Industry based on forest products?

Type of Occupation	Types of Forest Products	Monthly Income	Benefits
1.			
2.			
3.			

4.			
----	--	--	--

If not, why?

11. Is there equity in people's participation for forest management and benefit sharing?

Yes () No ()

Why?

12. In your opinion, what may be the reasons of social inequality?

.....

13. What may be the impacts of such disparities in society?

.....

14. Unequal land distribution is one of the root causes of the present on going conflict. Do you agree on it?

Yes () No ()

Reasons:

15. What may be the effects of the conflict in different aspects of society?

a. Economic Sector

b. Social Sector

c. Political Sector

16. Equal distribution of natural resources can be one of the effective approaches of the present conflict management. What do you think?

Yes () No ()

How?

17. What should we do for equal distribution of natural resources?

.....

18. In your view, what roles are supposed to be played by the government, INGOs, community and individual to guarantee social justice through environmental justice?

a. Role of Government:

b. Role of INGOs:

c. Role of Community:

d. Role of Individual:

☞ Thank You ☞