

MANAGING CONFLICT IN COMMUNITY FORESTRY:

A CASE STUDY OF TANAHUN DISTRICT, NEPAL

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ABSTRACT

Owing to the community forest conflicts at users' level there is growing need to conduct comprehensive in-depth study. This case study follows qualitative research methods and theoretical approach to analyze the conflict situation. The research is based on the notion that each community has its own ways of producing and managing forestry conflict. The main objective of the study is to obtain a better understanding of the forestry conflicts, particularly Ratanpur Community Forest of Tanahun, Nepal. It is hoped that this knowledge is pivotal and can contribute to providing inputs for conflict management and policy measures.

Many ethnographic techniques such as focused interview, participant observation and semi-structured interview were used to record and understand the conflict culture. For data analysis, participatory tools such as ranking, brainstorming and vane diagramming were used in stakeholder analysis. A descriptive hermeneutical approach (understanding and interpretative) that includes condensing, organizing, categorizing and elaborating respondents' views with respect to the model/theory was used to understand the causes, level, and options of conflict management. Index of Relative Ranking (IRR) and Weightage Mean (WM) were used to prioritize the criteria and reasons.

The analysis reveals that the dependency of people on the forest for their livelihood, proximity to the forest, and traditional use right were relatively imperative in assessing the well-being status of the stakeholders. Likewise, conflict in the area is not only caused by impairment of interest but also caused by the incompatibility of perception, emotion and behavior with varying intensity. Regarding the option of conflict management the result shows that the higher-level conflict seeks for adopting the compromising option while low-level conflict searches for taking on consensus and accommodation through negotiation and collaboration/Alternative Dispute Resolution (ADR).

The study recommends for considering the notion of behavior, emotion and perception and interest while formulating conflict management strategy/plan and devising a practical guideline for analyzing stakeholders in community forestry. Further research on latent conflict, collaborative approach and testing and prioritizing well being criteria are also suggested.

Key Words: *Conflict, Community Forestry, Stakeholder, Perception, Emotion, Behavior, Interests and Collaboration*

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ABBREVIATIONS

ADR	Alternative Dispute Resolution
BATNA	Best Alternative to Negotiated Agreement
CBNRM	Community Based Natural Resource Management
CDO	Chief District Officer
CF	Community Forestry
CFDP	Community and Private Forest Division
CIFOR	Center for International Forestry Research
CM	Conflict Management
CS	Civil Society
DDC	District Development Committee
DFO	District Forest Office
DoF	Department of Forest
FAO	Food and Agriculture Organization
FECOFUN	Federation of Community Forest User of Nepal
FRN	Forest Resource of Nepal
FUC	Forest User Committee
FUG	Forest User Group
HMGN	His Majesty's Government of Nepal
I ²	Importance and Influence
ICM	Interactive Conflict Management
IRR	Index of Relative Ranking
LRO	Land Revenue Office
LSGA	Local Self Governance Act
na	Not applicable
NGOs	Non-governmental Organizations
NPC	National Planning Commission
OP	Operational Plan
RFD	Regional Forestry Directorate
VDC	Village Development Committee

CHAPTER 1

INTRODUCTION

1. 1 Research Context

Forest is an important natural resource for economic and social development of a developing country like Nepal. It contributes directly to the survival of rural people by fulfilling forest related needs of women, poor and marginalized people as well as commercial needs of well off people (Gilmour and Fisher, 1991). Agriculture production system of the country, which forms basis of income for Nepalese people, is directly and indirectly based on forest resources (NPC, 1998). However, the forest resources are over-exploited and reduced by 1.7% per year (FRN, 1998). Pandey (1999) states that population and poverty are the main causes of decreasing forest resources. The decline of forest resource has many adverse effects on ecological and life support system and, so, has made the Nepalese government to pay attention to the situation and review its policy.

The government has focused on community forestry, which is based on the principle of common property regime. The devolution of power to community in managing forest resource is undertaken in community forestry program, which shows a considerable success in handing over natural and plantation forests to the local Forest User Groups (FUGs). FUGs are granted with usufruct rights to forest through legal enactment. To date more than 10969 FUGs are registered and about 847,282 hectares of forest is managed under this system (DoF, 2001). The formulation of Master Plan for the Forestry Sector 1988 and a series of Forest Acts and Regulations strengthened government acceptance of the principle of decentralization for governing the community forest.

Although forest resources managed under common property regime or community forestry has become a common practice in the history of resource management Agrawal (2001), Ciriacy-Wantrup and Bishop (1975) and Bromley and Cernea (1989) argue that it might have some problems due to its institutional failure to control and access over the forest resources.

The pluralistic view of stakeholders expressed emotionally and perceived differently towards resource management system has sometimes confused people some confusion ranges from grass root level to policy level.

Whether it is a local dispute within and between users or a national level dispute over the shared resources, people everywhere compete to ensure or enhance their quality of life. The conflict may unfold as a simple war of words or it may escalate to armed confrontation (Buckles, 1999).

Forests are associated with many social and biophysical setting of the environment. The unequal and complex setting makes difference in equal access, degree of relationship and dependency on the forest (Buckles and Rusnak, 1999 and Bhatia, 1997). The issue of equity and equality in strengthening institutional and distributional aspect of community forestry is pivotal these days. Furthermore, these are not only technical domains but also more importantly a social discourse shaped by social process and human activities in community forestry. However, the government strategies are focused on management and control of forest resource through technical solution (Upreti, 2001).

These complexities associated with community forest management suggest that the methods adopted to manage Nepal's forest are still insufficient. The interests, opinion, and belief of marginal people have not fully been incorporated in their operational plan. Many plans have not fully addressed issues of equity, empowerment and gender, especially among under privileged communities. The value and indigenous and traditional system of forest management have been ignored. As a result, several conflicts have erupted and developed at different stages of community forest management.

1.2 Rationale of the Study

Forest provides people with a number of physical goods and services. Many parties and interests are involved in forestry sector due to its multiple functions (FAO, 2000a). Furthermore, Daniels and Walker (1996) and Anderson et. al. (1998) contend that conflict in

forest is normal and inevitable. Community forest management has become the subject of discussion throughout the country. Many policies have been changed to enable the country manage its resource more sustainably and effectively. During this process, several conflicts have erupted at different scales and intensities in many parts of the country.

Understanding the level (extent) and causes of conflict is very important though it is time and context specific. Yasmi (2002) argues that it provides a basis for designing conflict management strategies so that conflict could be handled properly in time. Nevertheless, such extent of conflicts is still not receiving proper attention at the level of researchers, planner and implementers.

Some cases of the conflict in community forestry in Nepal are studied by Tumbahambhe and KC (1995); Malla (1995); Shrestha (1995); Siktel (1995); Kharel (1997) and Paudel (1997). These studies focus on general causes, roles, and impact of conflict and general prescription for its resolution. However, some of them remain unsolved. In-depth and comprehensive study is hardly done about analyzing conflict from stakeholder perspectives in terms of their interest, power, and relationship and well being. Upreti (2001) who researched on natural resource conflict suggests further research to understand conflict dynamics in community forestry.

District Forest Office has been facing many conflicting situations, which are perceived as major challenges in the course of implementation of community forestry program (DFO, 2002). Conflict in Ratanpur forest for four years is one of the challenging issues at the movement. DFO offers some scientific evidence and facts to manage the issues (Personal Communication to District Forest Officer, 2002). In view of this fact that the research is intended to fulfill the gap in order to understand and provide some input for developing conflict management options and mechanisms.

There are not enough studies on conflict related development interventions and their policy implications. Looking at the current status of natural resources conflict study, especially from Nepalese perspective it become clear that there has been no systematic and in depth study on

the change in clear methodological improvement in conflict resolution/ management. I argue that understanding the dynamism of conflict and its management can ascertain sustainable community forestry in Nepal. It is necessary to explore and analyze options for alternative ways of managing conflicts, thereby creating harmony within and/ between the stakeholders. This field-based research may be a valuable tool for consensus building in managing dispute at local as well as national level.

1.3 Limitation of the Study

This is an exploratory and case study research. The generalization of finding and recommendation has limited scope since the situation may not be similar to the Ratanpur community forest. Carrying out participant observation and such behavioral research within a limited time and resource is itself difficult task. The information obtained and interpretation made by researcher may not free from subjectivity in some ways though much attention had been paid to verify the data through the use of multiple tools and methods. The unit of analysis of the research is mainly collectivities or groups. Who were really paying the cost of conflict based on social attributes such as gender, ethnicity, and wealth class has not been covered that may be the basis of latent conflict. The analysis could not different the level of conflict with respect to its causes and social actors involved. The use of Glasl's model of conflict and its escalation limits analyzing the policy domain conflict in community forestry.

1.4 Objectives

The general objective of the study is to obtain a better understanding of conflict dynamics in community forestry, and the specific objectives are:

- To analyze the stakeholders involved in terms of their interest, influences, relationship and their well being status in relation to community forestry,
- To analyze the exiting causes and level of conflict for the study area,
- To review existing conflict management practices and strategies mainly used in forest resource management.

1.5 Research Questions

To accomplish the objective mentioned above the following research questions are formulated.

Introductory question

1. What conflict can be identified in the research area and what is the issue of disagreement?

Social actors involved in a conflict

2. Who are the groups involved in conflict over forest management?
3. Who do they represent?
4. What are the relationships among the groups?
5. What are interests and potential impacts of the stakeholders?
6. Who have greater influence and importance among them?
7. What is the situation of stakeholders?, and whose well being counts the most?

Underlying causes of conflict

8. How did the conflict arise?
9. How do different stakeholders perceive the conflict?
10. What values, emotions, interests or behaviors are challenged?

Level of conflict

11. How does a conflict manifest itself?
12. What behavioral norms do actors perform, what are the motives behind these behaviors (i.e., values, emotion or interest)?

Preferred conflict management strategies and practices

13. What are the general practices for managing the conflict?
14. What is the relationship between practices and strategies of conflict management?
15. Which practice are preferred most and why?
16. Which strategy do they offer for the existing conflict?

Concluding question

17. What lesson can be drawn from the collected information regarding conflicts between different collectives and options for management?

1. 6 Overall Research Processes

The research encompasses six steps. Figure 1.1 illustrates those steps and their outcomes as well as in which chapter these outcomes are organized in this report.

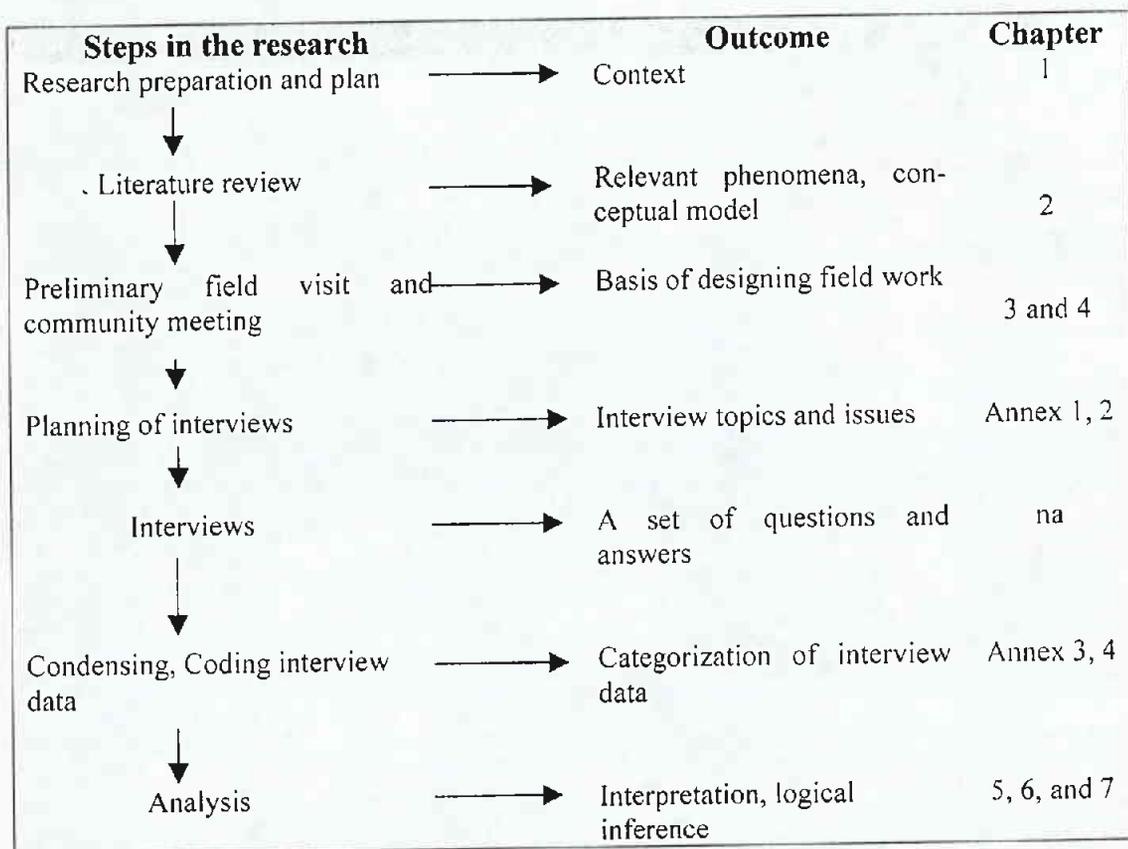


Figure 1.1 Overall research process and outcomes

1. 7 Organization of the Thesis

This thesis is organized into seven chapters. The first chapter deals with context, rationale and limitations of the study, research objective, research questions and the overall research processes. It also gives motivation for the research. Chapter two is the literature review,

which provides the main concepts used in the study, such as stakeholders, conflict, level of conflict, and conflict management theory, etc. Besides that, it reflects relevant research findings with regard to natural resource conflict in general and community forestry conflict in particular. Based on the literature review, conceptual model was developed to provide direction for the entire research processes.

Study area and history of conflict is dealt in chapter three. Subsequently, chapter four gives a detail of methodology. Following issues are discussed; criteria for site selection and process, sampling techniques, data collection and data analysis.

Chapter five is the main part of the thesis in which research findings are presented. It demonstrates stakeholder analysis in terms of their interest, impact, importance and influence, well being status and relationship and conflict degree. In subsequent sub chapter different types of conflicts that take place in the study area along with stakeholders involved, the underlying causes and the level of the conflicts are mentioned. An integrated conflict model is illustrated in an attempt to depict the conflict situations and to give a full picture of what is going on. Chapter six discusses several interesting points, striking phenomena, lessons learnt and new insights based on the findings presented in the previous chapter. The discussion also shows some points that could be an advancement of our knowledge regarding community forestry conflict. Finally, the last chapter presents several conclusions of the research and recommendation for government as well as for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Understanding Conflict: Theoretical Perspective

Turner (1986) reviewed classical theories of conflict and summarized Karl Marx's (1818-1883) theory as:

A social system systematically generates conflict that tends to be manifested in the opposition of interest. It is inevitable and pervasive in nature that mostly occurs over the distribution of scarce resources, power, and material wealth. Conflict is the major source of change in society.

He states that George Simmel (1956), Dahrendorf (1958) and Max Weber (1964-1920) also support the theory of Marx and view power, authority, and wealth are the scarce resources.

Many scholars define conflict differently. A broad review of scholars' definition of conflict is provided by the Walker and Daniels (1997, p 15-16) who provide a list of terms used in defining conflict: struggle, hostilities, tension, contradiction, disagreement, violence, opposition, revolution, dispute, incompatibility, competition, strategic behavior and interaction. He perceives conflict as a part of human life.

Table 2.1 Definitions of conflict*

Author(s)	Definition	Key Terms
Coser (1956)	Social conflict is a struggle between opponents over values and claims to scarce status, power and resources.	Values Opposition Scarcity Power
Schelling (1960)	Conflicts that are strategic are essentially bargaining situations in which the ability of one participant to gain his ends is dependent on the choices and decisions that the other participant will make.	Strategy Bargaining Dependent
Deutsch (1973)	A conflict exists whenever incompatible activities occur ... one party is interfering, disrupting, or in some other way making another party's actions less effective.	Incompatibility Interference Effectiveness
Wall (1985)	Conflict is a process in which two or more parties attempt to frustrate the other's goal attainment ... the factors underlying conflict are threefold: interdependent, differences in goals, and differences in perceptions.	Goals Interdependence Perceptions

Pruitt and Rubin (1986)	Conflict means perceived divergence of interest, or a belief that the party's current aspirations cannot be achieved simultaneously.	Interests Aspiration Beliefs
Turner (1986)	Conflict means contest, competition, and tension from manifest clashes between social factors	Contest Competition Tension
Conrad (1990)	Conflicts are communicative interactions among people who are interdependent and who perceive that their interests are incompatible, inconsistent, or in tension.	Communication Interdependence Tension Perception
Katz and Layer (1993).	Conflict is a situation state between at least two interdependent parties which is characterized by perceived differences that the parties evaluate as negative	Interdependence Differences
Tjosvold and Van De Vliert (1994)	Conflict – incompatible activities – occurs within cooperative as well as competitive contexts ... conflict parties can hold cooperative or competitive goals	Incompatibility Cooperation Competition
Shrestha, (1995)	Conflict generally occurs when people have different views or perceptions on an issue, when someone's interest is not considered or fulfilled while making a decision or when others' interest is encroached	Perception Interest
Folger, Poole, and Stutman (1997)	Conflict is the interaction of interdependent people who perceive incompatible goals and interference from each other in achieving those goals.	Interaction Interdependence Incompatibility
Walker and Daniels, 1997.	Conflict is a perceived divergent of interests, or disagreement in opinions, practices, principles manifested in different forms (grievance, conflict and dispute)	Divergent Interest, Disagreement Opinion
FAO (2000a)	Natural resource conflicts are disagreement and disputes over access to, and control and use of, natural resources	Disagreement Access and control

* Except sixth, eighth, tenth, thirteenth all remaining definition are taken from Walker and Daniels (1997) p: 16

For forest resource management, there is no universal definition of conflict. In general conflict is often interpreted as something negative or something to avoid. People often associate conflict with war, disease, struggle, a trial, an explosive and as a mess (Hocker and Wilmot, 1995, cited by Walker and Daniels, 1997). However, conflict scholars do not hold this view (Walker and Daniels, 1997). A brief review of how leading scholars define conflict reveals that conflict is not inherently positive or negative. Rather, it has the potential to be either.

While it is impossible to arrive at one single definition, it can be observed from the table that conflicts generally have some common characteristics as follows:

1. Conflict involves two or more interdependent parties or stakeholders
2. There is some level of communication and interaction

3. There are one or more underlying causes (e.g., perceived incompatibility, interests, perspectives, goals, aspirations, competition, emotions, resources scarcity, etc.) that provide incentive to compete.
4. Finally, we can observe the intensity or escalation of conflict.

To grasp an understanding of a particular conflict it is fundamental to take into account those characteristics, thus the focus of this study. Many scholars argue that getting insights into those issues would offer strong foundations for conflict resolution (Pendzich, 1994 et. al.; Anderson, 1996 et. al.; FAO, 2000a; and Daniels and Walker, 1999).

2. 2 Characteristics of Conflict

To obtain deeper insights into what constitutes a conflict, this section explores a brief elaboration of those common characteristics. Stakeholders involved, underlying causes, and levels of conflict are discussed respectively.

2. 2. 1 Stakeholders

Stakeholders employ many somewhat synonymous terms; for instance, Walker and Daniels (1997) use the term "parties" and FAO (2000a) refers to "stakeholders" when analyzing conflicting issues in natural resource management. Sociologists refer to social actors (Ling in Ramirez, 1999), groups, etc. All of those terms are regarded as identical and may be used interchangeably throughout the text.

Freeman cited in Ramirez (1999) defines a stakeholder as "any group or individual who can affect, or is affected by, the achievement of a corporation's purpose". Walker and Daniels (1997) affirm that parties are entities (i.e., individuals, groups, organizations, and governments) capable of making decisions directly or indirectly. They have a stake in the outcome. Taking their view into account, conflict can be analyzed within each of these entities.

At a global level, conflicts often involve different nations too. Territorial dispute in Sachen Glacier area between India and Pakistan (All, 2002), international river disputes as described by Nader (1995) are examples of this. Nader describes the following disputes; Colorado river dispute between the US and Mexico (1940s), Jordan river conflict between Israel and Jordan (started in 1960s), the Ganges river dispute between India and Bangladesh (1950s – 1977) and Lake Lanoux dispute between France and Spain (1917 – 1929).

Conflict may entail two or more groups. In conjunction with this, Kanta and Cook in Buckles (1999), indicate conflict over benefit sharing and transparency in joint forest management that existed between Forest Department and Forest Protection Committee. Inter-group violent conflict over material resources in Sudan is observed by Suliman in Buckles (1999) and various degrees of power among stakeholders in the use of marine resource (fishes) results into conflict in Galapagos Island of Ecuador (Viedo in Buckles 1999). Conflict between rural community and park authority due to exclusion of local community over the use of park resource in Indonesia discussed by Fisher et al. in Buckles (1999). Conflict within and between the communities on ownership issues in watershed resource and government policy is discussed by Hirsch et.al. in Buckles (1999) in Lao PDP. Likewise conflict between village communities for using scarce natural resources in Himanchal Pradesh is perceived as potential source of conflict and suggested for reducing dependency on local resource base (Shahnawaz, 2000).

Caplan (1995b) notes several land conflicts between the Limbus and high-caste Hindus in Eastern Nepal. Upreti (2001) indicates land, forest and water resources conflict among the groups and between different organisations. Conflict between park authority and local people in Chitwan National Park (Sharma 1991; Nepal and Weber, 1993). Many conflicting parties involved within and between groups and organisations cited in the study of Yadav 1996, Kharel, 1997 and Shrestha, 1995.

Major stakeholders identified in community forestry are FUG, DFO, VDC, NGOs, Donors, DoF, MOFSC, RFD, and DDC where the expected role of FECOFUN and VDC is to coordinate and support FUG in resolving conflict. The role of DFO is to regulate over all

community forestry program in the district through facilitating, empowering and monitoring the users' activities (Acharya et. al., 1998). FUG themselves shall have responsible to conserve and manage the forest handed over as prescribed processes.

Analyzing influence and interest, role and relationship, capability, and contribution of different stakeholders for resource management is acknowledged by many authors (Ramirez, (1999); Lewis (1996); MacArthur (1997); Mayers (2001) and Chevalier (2001). For sustainable forest management, Colfer et. al. (1999, p1-29) has proposed seven criteria for assessing the well being of the concerned stakeholders. These criteria are: proximity, pre-existing rights, dependency, poverty, indigenous knowledge, culture/forest integration and power deficit. Likewise, Forest Regulation 1995 under section 26 defines some criteria to determine who shall be the primary stakeholder (user) of the proposed community forest. These criteria are: i) traditional dependence on the forest, ii) distance from the forest iii) willingness and capacity of people to manage (HMGN, 1995). Assessing the well being and stakeholders' preference of these criteria including other local criteria is one of the research interest.

To summarize, conflict can be analyzed from the point of view of stakeholders involved in it:

1. Between individuals (e.g., marital disputes, conflict between men and women over the use of trees)
2. Between collectivity (e.g., between aboriginal people and government, between nations, etc.)
3. Finally, conflict might also take place between an individual and a collectivity.

Categorizing actors into those groups is useful as it allows analysis on the relationships of conflict within the same level and also between different levels. This study is confined to conflict between collectivities.

2. 2. 2 Underlying Sources of Conflict

Conflict may take place because some factors stimulate a conflictual situation. What are those factors? It depends on the context of the conflict being analyzed. Different contexts may involve different factors. In this section some common and general-driving forces are elaborated. Incompatibility may appear in conflict because of different interests and belief. The nature of incompatibility may be described as follows (Wehr 1979 cited by Walker and Daniels, 1997)

Fact-based: disagreements over what the “facts” of the issue are; what true or accurate is; what “reality” is. In fact, reality is something viewed differently by different individuals or groups. Conflicts arise when persons or group unreflectively take their own ideas as objective reality and automatically use them as the context within which they judge less familiar objects and events. This way of looking at reality is termed ethnocentrism (LeVine and Campbell, 1972). Ethnocentrism is the technical name of this view of things in which one’s own group is the center of everything, and all others are scaled and rated with reference to it.

Values-based: disagreement over what should be the determinants (criteria, bases, priorities) of policy decision, a relationship, or some other issues in conflict. With respect to this, Ayling and Kelly (1997) believe that conflicts in forest management arise when selected stakeholders view forest resources from their particular perspectives and attempt to pursue their goals in isolation.

Interest-based: disagreement over who will get what in the distribution of scarce resources. With regard to scarcity, Homer-Dixon (1999) argues that environment scarcity is an important cause of civil violence. He indicates that preliminary research reveals that scarcities of critical environmental resources – especially cropland, fresh water, and foods – contribute to violence in many part of the world. Further, Ayling and Kelly (1997) give another example of how different interests may contribute to conflict. They state that, in Canada, conflicts over clear cutting of forests and limitation of fish catch are frequently re-

ported in media. For instance, those concerned with biodiversity strongly oppose clear cutting.

Jurisdiction-based: disagreement over who has authority or jurisdiction over the problems and issues of the conflict. Van den Berg (1999) gives an example of this. She states that in Cameroon the State's claim to forest management and control directly conflicts with local notions of forest tenure. The Bantu and Bagyeli people living in South Cameroon consider the forest as their principle source of subsistence and maintain detailed rules on control over and ownership of land and other forest resources.

Person-based: disagreement pertaining to personal factors, such as interaction styles, idiosyncratic actions, personality-related behaviors, effect of physical setting, and the like. In the example of marriage disputes in Mafia Island of Tanzania, Caplan (1995b) describes how men stimulate disputes or women interact with each other in their daily life.

History-based: disagreement related to the history of the issue(s), the conflict, and the conflict relationship, as perceived by parties in conflict. In the case of Aboriginal and Maori people, their struggle over land rights can be seen as part of a historical dimension. Why do they want to get their land recognized by central government law? It is because historically long before the European settlement they had used the land (Van Meijl, 1999).

2. 2. 3 Causes of Conflict

Nature resources are embedded in an interconnected space where a complex and unequal social relation among the stakeholders existed. Such asymmetrical relationship of power can lead to differ in access and control over scarce resource, which ultimately exacerbate conflict in the society (Buckles and Rusnak in Buckles 1999 and Homer-Dixon, 1999). Natural resource is not only a material part of life but it has also symbolic value that is perceived differently by different ethnic groups. (Chevalier and Buckles cited in Buckles, 1999). The differences in gender, age and ethnicity cause intra group conflict in natural resources (Bhatia, 1997; Upreti, 2001; Saigal, 2001; Sarin, 1997 and Yadav, 1996). The ambiguity of

ownership, incompatibility of forest policies, contradictory forest, laws and bylaws cause conflict between groups (Regmi and Balbase, 2002). Warner (2000) reports four principal causes of non-violent conflicts in community based natural resource management (CBNRM): demographic change, natural resources competition, developmental pressures; structural injustices.

FAO (1997) has also reported six types of conflict in natural resource management based on the involvement of stakeholders and according to resources. Kharel (1997) analyzed 20 cases of community forestry conflict by use of FAO approach (Actor – resource – stake approach) and found that conflicts over access to the resource have higher frequency in its occurrence. Under this criterion she pointed out stakeholder exclusion, prohibition of traditional use rights, inequality in resource use and distribution. The other source identified by FAO 1997 are: conflict due to change in resource quality and availability, conflict regarding authority over resources, conflict that is value based, conflicts associated with information processing and availability, conflicting resulting because of legal/ policy reasons.

Upreti, (2001) in his study used anthropological and social setting approaches and conducted research on the conflict over natural resources (land, forest and water) and concluded that socio-economic inequalities, poor governance, access and control of resources, ignorance of local needs and interests, discriminatory application of laws and regulations, demographic pressures, lack of learning based participatory conflict resolution mechanisms are the root causes of conflict in natural resource management of Nepal.

It is evident from the above discussion that incompatibilities or divergences cause conflict. In another word, every conflict involves some degree of incompatibilities. However, it must be borne in mind that not all incompatibilities result in a conflict (Glasl, 1997 cited in Yasmi 2002). Difference is just a fact of our daily life, thus differences are not identical to conflict. Glasl contended that conflict would arise only if other social actors perceive those differences as impairment. In his model Glasl (1997) proposes four types of differences that may be seen as impairment by other actor groups

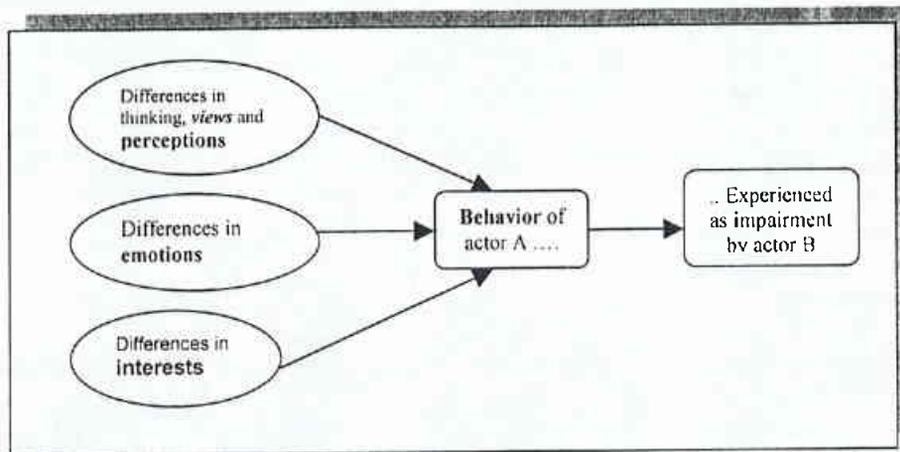


Figure 2.1: Glasl's model of conflict

This model suggests that if a certain behavior of an actor is perceived as impairment by other actor, then a conflict will arise, otherwise not. This model is useful because it is more comprehensive and it takes into account the idea of Walker and Daniels (1997) as well. Moreover, it allows better analysis with respect to the relationships among those factors and stakeholders involved in a certain conflict situation. For that reason, this study adopts this model.

Adoption of this model means that the study focuses on the four notions of incompatibilities or differences; perceptions, emotions, interests and behavior. The four notions are defined in their simple forms.

As described by Greenberg (1993) and Sekuler (1990) perception is the process through which we select, organize, and interpret information brought to us by our senses in order to understand the world around us. Hence, it is an idea, a belief or an image somebody has as a result of how he/she sees or understands something (e.g., event, object, etc.) around him.

Emotion in its most literal sense is defined as any agitation or disturbance of mind, feeling passion; any vehement or excited mental state. Most of the time it is referred to as a strong feeling and is part of a person's character (Goleman, 1995). In his explanation Goleman elaborates some basic families of emotion, among others; anger, sadness, fear, enjoyment, love, surprise, disgust and shame.

Interest is termed as the quality that something has when it attracts somebody's attention. Interest also expresses mental excitement of various kinds and degrees. It may be intellectual, or sympathetic and emotional, or merely personal; as, an interest in philosophical research; an interest in human suffering; the interest which an avaricious man takes in money getting, etc. Interest is thus a "stake" that somebody has towards a particular thing (Goleman, 1995).

Finally, behavior is portrayed as the way somebody behaves or acts, especially towards other people. Behavior is the most visible among the four notions that have been described earlier. In short, it is nothing more than what the people do or act upon (Greenberg, 1993).

2. 2. 4 Level of Conflict

The level of a conflict defined by Glasl 1997 is reviewed by Jordan (1997) who states that conflict can be analyzed by looking at its escalation. Escalation means increasing the intensity of the conflict. The form and intensity of conflicts vary widely by place, and over time within any community (FAO, 2000a).

Glasl's 9-stage escalation model is helpful in terms of defining the level or intensity of a certain conflict (Jordan 1997 after Glasl, 1997) (see Table 2.2). With painstaking detail, Glasl shows how the parties in the course of conflict escalation increasingly lose conscious control over the situation, and how their behavior comes to be determined by a destructive situational logic. The escalation stages are defined by the implicit behavioral norms regulating the interactions between the parties. Characteristic patterns of in-group and out-group images, motives, moods and forms of interaction accompany each stage. Glasl points out that there is a threshold at each stage, critical action that escalates the conflict a further step. As an example one could mention actions that lead to loss of face for one conflict party (threshold between step 4 and 5), or present an ultimatum (threshold between step 5 and 6). The crossing of a threshold means that new weapons are allowed, and entails a transformation in how the parties perceive each other and the situation.

Table 2. 2: A nine-stage model of conflict escalation

Stages	Conflict issues	Behavioral norms	In-group/out-group cognition and attitudes	Threshold to next level
1. "Hardening"	Objective issues Hardening standpoints	Straight argumentation	Awareness of mutual dependence Nascent role expectations Nascent in-/out-group formation, "skins" form around groups Suspiciousness about hidden motives	Tactical tricks used in the argumentation
2. "Debates and polemics"	Objective issues and relative position, superiority Ability to influence	Verbal confrontations Tactical feints in argumentation Debates	Affinity inwards Fixation at standpoints Ambivalence cooperation/competition Suspiciousness Counterpart has "typical behavior"	Action without consultation
3. "Actions, not words"	Objective issues and self-image Freedom of action Prove one's own mastery Blocking the counterpart	Action without consultation Accomplished facts Symbolic behavior (jargon) Decreased verbal communication – increased non-verbal communication Extended social arena	Blocked empathy "Counterpart not capable of development" In-group conformity pressure	"Deniable punishment behavior" Covert attacks directly aimed at identity of counterpart
4. "Images and coalitions"	Counterpart is the problem Win or lose Save reputation	"Deniable punishment behavior" Exploitation of gaps in norms Formation of coalitions Attacks on core identity	Dual cognition (black/white) Coherent enemy image Attribution of collective characteristics to counterpart Self-image as only reacting to counterpart	Loss of face
5. "Loss of face"	Fundamental values Expose counterpart Rehabilitate dignity	Attacks on the public face of the counterpart Restore prestige	Enemy "unmasked": perceived as morally corrupt Guilt symbiosis in-group	Ultimatum Strategic threats
6. "Strategies of threats"	Control of counterpart	Presentation of ultimata Panic-ruled actions Self-binding statements Extension of conflict	Own actions are only reactions Perceived impotence → rage Need for control	Execution of ultimata Attacks on counterparts sanction potential
7. "Limited destructive blows"	Hurt counterpart more than one's own group Nothing to gain Survival	Attacks at sanction potential Threats + interrupted communication	Counterpart prepared to do anything Counterpart not human Power-thinking dominates Malice important motive	Attacks at core of enemy Effort to shatter enemy

8. "Fragmentation of the enemy"	Annihilate counterpart Survival	Attacks at vital functions Actions to shatter counterpart Attacks on cohesive function	Annihilation fantasies Fascination with mechanical annihilation mechanisms	Giving up self-preservation Total war
9. "Together into the abyss"	Annihilation at any cost	Total war with all means Limitless violence	Accept one's own destruction if counterpart is destroyed	-

Source: Adopted from Glasl 1997 from Jordan 1997 and Yasmi, 2002

This model is practical for analyzing the intensity of conflict because it enables researcher to study the conflict issues, behavior norms and in group or out-group cognition. It gives clear demarcation (threshold) between different levels of conflict.

2.3 Conflict Analysis in Community Forestry in Nepal

Many researchers in Nepal have carried out case studies research on community forestry conflict which focus mainly on the stakeholders involved and their stake. The main tools they adopted were RRA and PRA tools. The finding of previous case studies are summarized in the form of actors and stake oriented approach that are developed recently by FAO 1996 though not all cases followed the approach. In this approach, there are three dimensions of natural resource conflict: the dimensions of actors (or "stakeholders" group of people, government structures, private entities), the dimension of resources (various categories of land, forests and trees, defined by rights of access, use and ownership), and dimension of their interaction or stakes (economic, political, socio-cultural and environmental). The Table 2.3 shows the conflict among and between the different stakeholders.

Table 2.3: Analysis of conflict cases of community forestry in Nepal.

Researchers	Actors	Stake (conflict about)	Efforts to resolution
Tumbhahamphe and K.C., 1995	Within Buchhung FUG, Baglung (people from two VDC)	Boundary, competition for scarce resource	Community meeting and mediation by
Kharel and Regmi, 1995	People of different wards and people of different VDC, Kavre	Stakeholder inclusion, resource use and forest boundary	Active persuasion and investigation by Ranger
Shrestha, R. K., 1995	FUGs and Royal Army in Okhaldhunga	Forest boundary and land ownership	Village leaders (<i>Mukhiya</i>) mediated

Singh and Streak, 1995	Leasehold groups and the rest community in leasehold districts	Land ownership, boundary, forest rules, stakeholder inclusion, participation, resource use	Suggested for mediation, communication and facilitation
Malla, 1995	DFO and Jalbire women FUG (Gorkha)	Deviation from operational plan	Fact finding and proceed through Government officials
Shrestha, K.B.	Intra FUG, Dang, DFO and FUG, Dhankuta Between FUG, Kaski	Leadership, Deviation of OP, Access to forest resources	Suggested for training, communication and effective implementation of CF policy
Siktel, 1995	People of same FUG of different VDC, FUG and FUC, and FUG and DFO staff	Stakeholder inclusion and traditional use right, Participation, benefit sharing, Resource use	Self initiation for negotiation, transparency be maintained
Kharel, 1997	Intra-members of Raniban FUG, Between two FUG, Members between FUG, Between FUG and FUC, and Member between two VDC of two FUG	Resource use and management, boundary and traditional use right, traditional use right and dualism in membership, Implementation of OP, benefit sharing and participation Boundary and traditional use right	Suggested both local customary practice and intervention by third party (Ranger), empowerment of weaker parties
Paudel, 1997	Within users of Mulban CF, Between users and non users in Lahachwok VDC	Preparing and implementing calendar of operation, benefit sharing, Membership, resource use, elite domination	Collaborative decision Motivation Arbitration
Thakur, 2000	Within user group (Handikhola FUG, Hansapur)	Power, membership, resource use, ethnocentric, blocking of forest	na

FUC* = Forest User committee

2. 4 Views on Conflict Management

Institutionally, Bostedt and Marrsson cited in Hellström (2001, p 13) have divided conflict resolution institution within an existing framework of law into adversative institutions (governmental or judicial) and cooperative institutions (negotiation groups). Upreti (2001) describes informal (based on customary law) and formal (litigative) institutions. Adding some practice in informal institutions, Castro and Ettenger (1996) argues that people in diverse societies use peer pressure, gossip, ostracism, violence, public humiliation, witchcraft and spiritual healing at local level to manage the conflict.

Pendzich et. al. (1994); Anderson et. al. (1996), Singletray, et. al. (nd) after Burgess and Burgess, (1997) offer a wide spectrum of conflict management techniques named as

Alternative Dispute Resolution (ADR) which includes fact finding- investigation of key issues; facilitation- assistance of third party to run productive meeting, negotiation, mediation, conciliation, arbitration. These techniques are based on collaborative rather than competitive strategies. The aim is to either prevent or anticipate the environmental conflict by using procedures other than traditional courtroom litigation or formal agency adjudication where a judge issues a decision based on the merits of the cases as presented by lawyer or disputing parties.

Constructive confrontation views conflict and its management as a health care metaphor. Burgess and Burgess in Daniels and Walker (1999) stress on making the confrontation more constructive through diagnosis, treatment and monitoring. Fisher and Ury (nd) develop some strategy for principled negotiation. They emphasize to separate the problem from the people and focus on interest rather on position. Furthermore defining objective criteria for searching options to reach best alternative to negotiated agreement (BATNA) is stressed. Besides these, Lewis (1996, p1-6) suggests involving all stakeholders in the resolution process and understanding the power is crucial.

Recognizing natural resources system and issues associated with them is complex, Walker and Daniels (1997) portray conflict management as a triangle of three interrelated dimensions: substance (issue of conflict), procedure (existing mechanisms), and relationship (stakeholders behaviors). Improving any dimension views as 'conflict progress'. It is stressed that collaborative approach, in which interdependent stakeholders have meaningful opportunities for "voice," is often considered as a alternative options for conflict settlement (Gray, 1989 in Daniels and Walker, 1999). They argue that it encourages system thinking, joint learning and open communication, and focuses on appropriate change.

Addressing on natural resource conflict, Upreti, (2001, p155-156) reviewed existing conflict management practices and proposed an alternative learning based-methodological approach, which is defined as 'Interactive Conflict management' (ICM). The theme of the approach is to prevent and anticipate the potential and actual conflict. Four steps, namely, joint conflict assessment/ analysis, developing intervention strategies and a plan and its implementation, and reflection and modification are designed to handle the conflict. He argues that the

success of ICM depends on mobilizing local resources, keeping effective communication among the conflicting parties, developing the capability of concerned stakeholders.

Warner and Jones (1998) often view conflict as obstacle as well as catalyst in community based natural resource management and they portray five strategies or options of conflict management. These are consensus, compromise, accommodation, withdrawal, and forcing.

Box 1: Options of Conflict Management Strategy

Force— adversarial negotiations; legal channels; some electoral systems; mass media to rally public support; public protest; threat of withdrawal; lobbying.

Withdrawal— avoidance; opting out; deployment of delaying tactics; postponement of decision; temporary boycott; strikes.

Accommodation— maintain relationships; ‘goodwill’ nurtured.

Compromise—arbitration; cost-benefit analysis; trade-offs.

Consensus— direct consensual negotiation (no facilitator); third party facilitated/mediated negotiations.

Source: Warner and Jones, 1998

These options are also discussed in Singletray et al. (nd) after Walmot and Hocker (1998) and Upreti (2001). Viewing these options from relationship and goal perspective, (+) sign is used to show high concern, (-) sign for low concern, and (*) for some concern.

Table 2.4: Options for dispute resolution

Options	Personal goals	Building relations
Competition (win/lose):	+	-
Accommodate (Lose/Win):	-	+
Avoidance (Lose /Lose):	-	-
Compromise (Win some/Lose Some)	*	*
Collaborate (Win/Win)	+	+

For the propose of the study, five strategies developed by Warner and Jones (1998) are used since these strategies are found widely used in different conflict management practices ranging from informal to formal (Upreti, 2001). The recently emerged approaches, namely collaborative approach, adaptive management, interactive conflict management adopt these strategies directly or indirectly. Although the pluralism views consensus as skepticism, the approach is common in community forestry in Nepal. Warner and Jones used these strategies in managing conflict especially in forestry. The operational definition of these options from respondent perspective is attached in Annex 7.

2.5 Conceptual Framework for the Study

The literature study conducted for the purpose of this research reveals that in studying conflict, the following aspects must be taken into account; stakeholder dynamics, underlying causes and the level of conflict (escalation) and the notion of conflict management. Thus, it is also discussed in this thesis. It is with the hope of capturing and enlightening current perspectives and understanding of forestry conflict in the study area that the following conceptual model is proposed. This conceptual model provides a framework for this study.

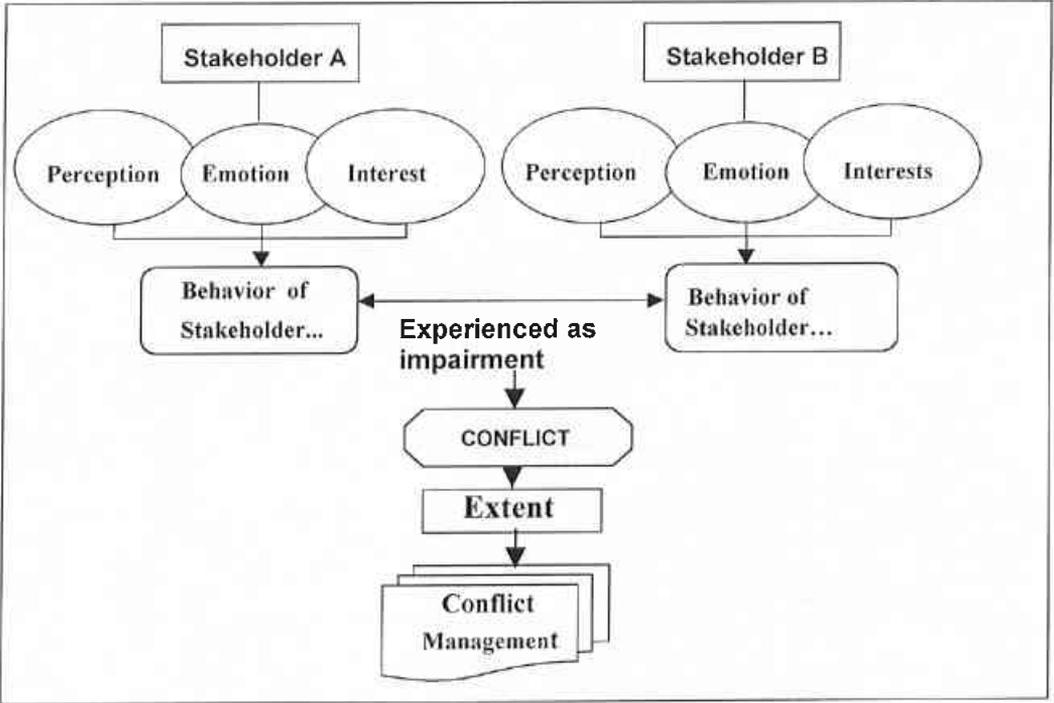


Figure 2.2: Conceptual framework for understanding conflict

Source: modified from Glasl, in Yasmi (2002)

CHAPTER 3

THE STUDY AREA AND GENESIS OF CONFLICT

3.1 Glimpse of the Tanahun

The study area is in the Tanahun District which is situated in the Western development Region of Nepal, from 27°3" to 38°5" latitude north and 83 °75" and 84° 34" longitude east. It lies 150 km southwest from Katmandu, the capital city of Nepal. The area of district is about 1546 sq. km. Its headquarter lies in Damauli. The altitude of district is from 240 to 2325 meter from sea level and its topography is characterized by northwest to southeast running hill chains with moderate to very steep slope, deeply cut river valleys and gentle to moderate sloped plains. The climate varies from sub-tropical in the south to mild temperate in the north with the average annual rainfall about 1761 mm. The average maximum temperature is 25° Celsius and the average minimum temperature is 15° Celsius (DDC, 2000).

The total population of Tanahun district is 316,126 with 62898 households (HHs). The population density is 204 people per sq. km. The population growth rate is 1.69 per year and family size is 6.6 per household. The demographic compositions of the district is heterogeneous and comprise of Magar (27%), Brahmin and Chettri (25%), Gurung (13%), Newar (8%), Kami, Damai and Sharki (13%) and the others (14%). Majority of population (91.7) follow Hindu religion and minority of population (7%) follow Buddhism (CBS, 2002).

The land use pattern of the district is forest (49.7), shrub (4.1), grass (2.3), cultivated land (41.01% and sand and gravel (2.8). Of cultivated land, 4327 ha is owned by female and 25322 ha by male, which is 1: 5.85 in ratio. About 93 % of total populations depend upon firewood for cooking and heating purpose, of which 47% is supplied from private and community forests and remaining is from the government forest. The time required for getting fuel wood is up to one hour (25% HHs), one to two hours (23%), two to three hours (16%) and more than three hours for the rests. (RMR Tanahun, 2000).

The district is politically is divided into three constituencies, 13 *Ilaka*, one municipality, 46 VDCs, 425 wards, 1470 settlements. The major political parties are Nepali Congress and Nepal Communist Party (UML) and Rastriya Prajatantra Party (RPP).

3. 2 About Mirlung VDC

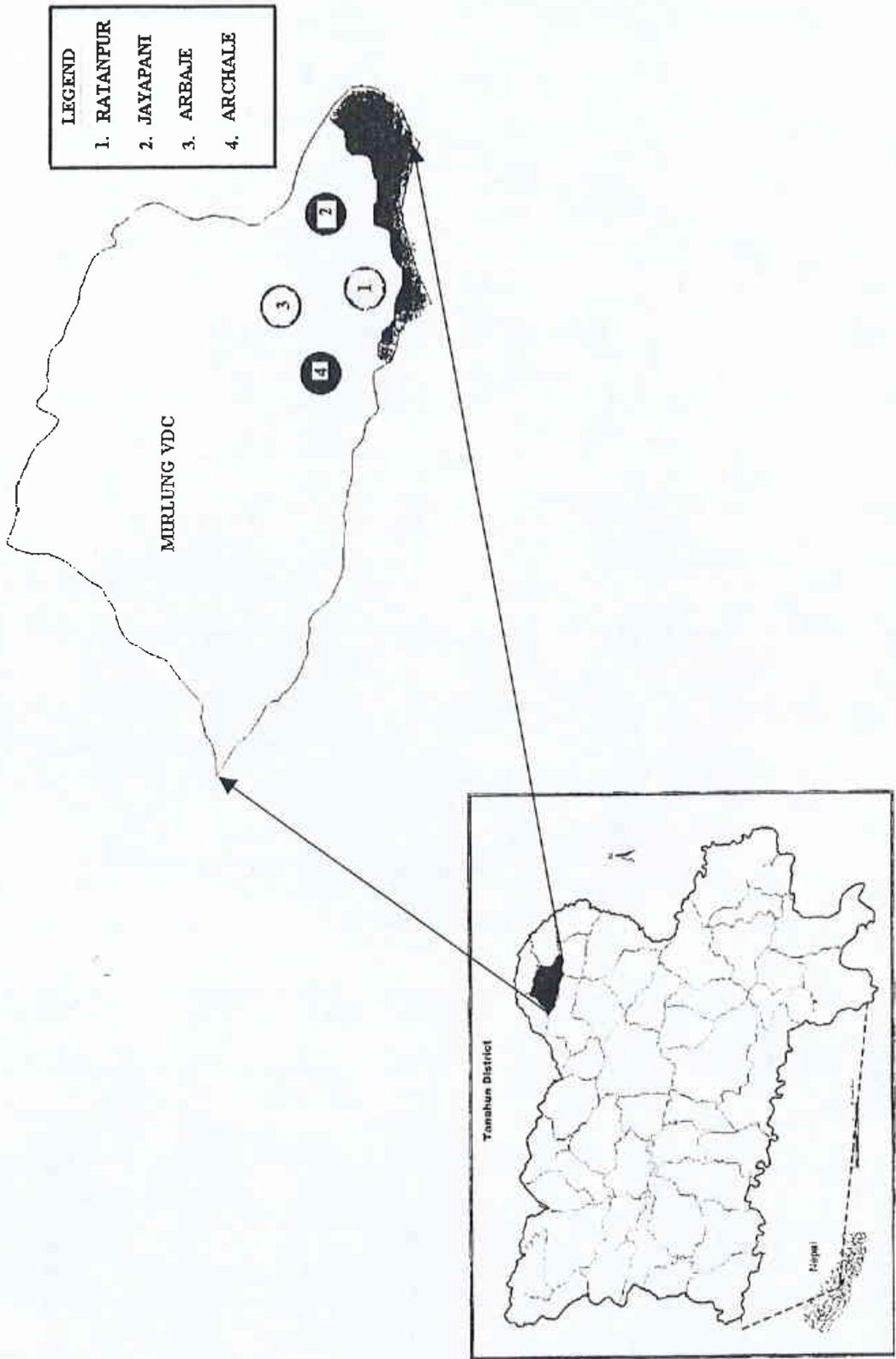
The Mirlung VDC is situated in the northeast of the district, at 5 hours walking distance from Dumbre Bazaar in rainy season and at two hours distance walk from Chandrawati Bazaar in winter season. Demographically, there are about 1518 households where 6914 populations are settled. The male population is 3022 and female is about 3892 in 2001 (CBS, 2002). The Caste composition of the VDC has Brahmin (9.73%), Chettri (54.36%), Newar (1.34%), Gurung (19.8%) and Magar (4.03%), Kami, Damai and Sharki (7.39%) and others (3.35%). The VDC is relatively densely populated (RMR Tanahun, 2000).

Of the total households, only 261 have their own low land (Khet), and 242 HHs have upland Bari land (RMR Tanahun, 2000). Majority of inhabitants rely on subsistence agriculture and are hardly able to fulfill their annual food requirements. Some of them are engaged in teaching and business in addition to agriculture. Temporary migration for labor work within the country and abroad is common for them. There is dissent between powerful people and tenant about the right, so the proper utilization of land is lacking and production potential is limited. Farmers rare local breeds of livestock mainly cows, buffaloes, goats and poultry.

3. 3 About the Case Study Site

There are four settlements in ward No 1 and 2 of Mirlung VDC, mainly involved in the case of conflict of Ratanpur Community Forest. In these wards, the total households are 140 and 176 with the population of 710 and 719 respectively (CBS, 2002). These settlements are, namely, Ratanpur, Arbaje, Archale and Jayapani. For the forest most of the households of Ratanpur have membership and the rest of the settlement have no any membership of forest users groups of that forest. So they were grouped into other settlement for the study. The map of research site is presented in figure 3.1.

Figure 3.1: Location of the study area



3. 3. 1 Ratanpur Settlement

Ratanpur, a settlement of Mirlung 1 and 2 is occupied by five hamlets namely; Simgaun, Dhakalgaun, Uppalogaun, Tallo dhakalgaun and Sautole (see table 3.2). These settlements are close to each other around a football field. The population composition is tabulated in below.

Table 3.1 Household and population composition of Ratanpur settlement.

Hamlets	Households	Population	Major ethnic groups
1. Simgaun	28	150	Brahmin and Chettri
2. Dhakalgaun	17	110	Brahmin, minorities
3. Uppalogaun	29	175	Chettri
4. Tallo dhakalgaun	18	110	Brahmin
5. Sautole	15	96	Brahmin
Total	107	531	

Source: Archival study, DFO Tanahun, 2003

The settlement is mainly Brahmin dominated. However, Chettri people show their power saying that they are the descendants of *Kaji Mukhiya*, from antiquity. The history of Ratanpur reveals that the time of *Kaji Mukhiya* was terrible for the rest of the people as the former forced the latter to comply with their will to consume public resources like forest resources.

Ratanpur settlement, comprising of 107 households, registered a forest user group in DFO for the management of Ratanpur forest, which is about 79 hectare. The forest is dominated by Sal and is located to the south east of Ratanpur. Before the *Rana* regime, the forest was named as '*Sanad Ko Ban*', for which *Chitadar and Talukdar* were nominated for collecting revenue and controlling the forest. After the *Rana* regime, though the forest was nationalized, the access and control over the forest rested on those who were elite. It is claimed that the forest of Ratanpur is the *Sanad* of Simgaun and Dhakalthari and *Kaji* of Uppalogaun. The forest was handed over to them as community forest in 1999.

3. 3. 2 Other Settlements

Jayapani settlement is just adjoining to the Ratanpur in the east having 38 households mainly dominated by *Chettri*. The estimated population is about 173. They have relatively more social tie with the people of Ratanpur since time immemorial. It is believed that the *Mukhiya* of Jayapani settlement in the past controlled a patch of Ratanpur forest.

Arbaje, a settle of 45 households, which is located to the north of Ratanpur, has a Magar dominated community. The estimated population is about 205. Some of inhabitants of the settlement are retired pensioner and have agriculture land adjoining to Ratanpur forest. They have no any forest upon which their *de-facto* use rights have been maintained. They used the forest of Chowkchisapani for fuel wood purpose that takes about one and half hour to walk from the settlement.

Archale on the other hand, is the largest populated settlement among the settlements. It is situated adjoining to the Ratanpur in the west. The settlement comprises of 112 households with mix of Magar, Gurung, Brahmin, Chettri, Kami, and Sharki. The estimated population is about 509. They have developed their own social system to use forest resources from Archale forest. About 30 households have maintained pre-existing right and have controlled some patches of national forest. All together they have also controlled and managed the rest patches of forest distributed in and around the settlement. The forest is mainly *Schima* and *Castanopsis* dominated. They used to take timber from Ratanpur forest before.

3. 4 Genesis of Conflict in Ratanpur Community Forest

A desk study from archival of concerned case of Ratanpur community forest was carried out in District Forest Office, Tanahun that helped sketching a glimpse of conflict history, which is presented in table 3.2. This study helps to understand different actors involved in the conflict of Ratanpur community forest and provides insight about origin of conflict and its escalation through a formal series of actions illustrated by different stakeholder. In addition to this it indicates the initiatives and processes that were adopted for managing the conflict.

Table 3.2: Time line of Ratanpur community forest conflict

S. N	Events	Time	Initiator
1	Ratanpur Forest Users Group (RFUG) formed and registered and about 79 ha of national forest handed over to the group. 13 households were added in-group at the time of registration.	At the end of 055/56	DFO and FUG
2	Jayapani people used to claimed on the forest	In the beginning of 056/57	38 households from Jayapani
3	DFO endorsed the issue and circulated to the FUG for its consideration if the assertion is logical and ordered for inquiry to Range post	In beginning of 056/57	DFO
4	Informed FUG to submit their own logic and clarification for not to including them after the report of Range post submitted to DFO which was in favor of the counterpart	In beginning of 056/57	DFO
5	FUG made decision for granting forest products to the claimers if it is surplus.	In the beginning of first trimester of 056/057	Ratanpur FUG
6	VDC recommended DFO for considering the demand of Jayapani	First trimester of 056/057	VDC Chairman
7	Representatives invited from different group and discussed but not reached in conclusion	At the end of first trimester of 056/57	DFO
8	Field visit made and operational plan suspended, only protection of forest was allowed	At the end of first fiscal year of 056/57	DFO
9	FUG requested to open up the forest especially for agriculture implements and firewood	Beginning of second trimester of 056/57	Ratanpur FUG
10	FUG was asked to submit its clarification about why did it not obey the order of DFO and not included the claimers	Beginning of second trimester 056/57	DFO
11	Submitted a clarification stating that: Suspension of OP at the time of informal visit by DFO is illegal, people of Arbaje and Jayapani have no traditional use right, Arbaje and Jayapani people are destroyer rather constructor.	Beginning of second trimester 056/57	FUG of Ratanpur
12	DFO endorsed the letter for breaking down the group. However, no progress proceeded in this regards	In the beginning of second trimester 056/57	DFO
13	Disputing party meeting held at Range post in consultation with DFO staff. The representative from Arbaje, Ratanpur, Archale and Jayapani agreed on forming a separate FUG. Archale took back the claim.	Beginning of second trimester of 056/57	Representative from Archale, Arbaje, Jayapani, Ratanpur and DFO
14	No progress made for forming separate FUG, Ratanpur people requested to get a order of circulation.	At the end of second trimester of 056/57	Ratanpur FUG

15	FUG decided to categorize the FUG, and incorporated people of Jayapani, and Arbaje into third and fourth category stating that they will not have any voting right and timber will be provided at additional costs.	At the end of second trimester of 056/57	Ratanpur FUG
16	DFO reacted on the group decision and suggested categorizing only into two groups. Concession for forest product was conditional.	At the end of second trimester of 056/57	DFO
17	Many request letters issued to open up the forest to the user of Ratanpur. They claimed that their counterparts have been collecting the forest products from their so called own forest while people of Ratanpur have been facing massive scarcity of the forest because of suspending OP.	Second trimester of 057/58	Ratanpur FUG
18	Meeting of disputant parties held with the facilitation of DFO staff. The representatives agreed to formulate a collective FUG and revise their operational plan including all patches of forest of Mirlung 1 and 2.	Beginning of first trimester of 058/59	DFO
19	Archale people neither agreed to merge their forest to Ratanpur nor to form a separate community forest. Since many elite have been controlled over the national forest	Beginning of first trimester of 058/59	Archale
20	Delegation to DFO continued	Through out the year of 058/59	Ratanpur, Arbaje and Jayapani
21	DFO ordered to reformulate the group to RFUG based on the previous understanding. But no one took initiative. However, DFO gave permission to collect firewood and small sized timber for Ratanpur people.	At the end of second trimester of 058/59	DFO
22	DFO circulated to put Range post view to allow FUG for collection of timber and firewood. Ranger stood up with the demand of FUG.	At the beginning of first trimester of 059/60	DFO
23	People of Arbaje and Jayapani blamed that DFO gave permission only to Ratanpur without consulting them. They filed a petition to DFO to punish those who fell down the green trees of Sal and harvest more timber than prescribed in OP.	In the middle of Second trimester of 059/60	People of Arbaje and Jayapani
24	DFO ordered Range post to keep an inquiry and punish them if they exceeded the plan	In the middle of Second trimester of 059/60	DFO
25	FUG requested to get additional harvests and gave full permission to implement the operational plan.	In the middle of Second trimester of 059/60	Ratanpur FUG

CHAPTER 4

METHODOLOGY

4.1 Site Selection

Selection of the site was one of the most critical parts prior to the fieldwork. To help define an appropriate site for the study several criteria were developed and District Forest Office was consulted. This section illustrates the criteria used and the processes involved in site selection.

4.1.1 Criteria for Site Selection

To the focus the study on deeper understanding of conflict that involves different social actors and interests in forest management, the research site was selected according to the following criteria:

1. Forest area: The site must be a community forest area since the research is about conflict in community forest management.
2. Multiple stakeholders or presence of more than one social actors. In the forest-selected area, there are two or more interdependent actors (multiple stakeholders setting) because this study intends to look at who are actually involved in what kind of conflicts.
3. It is based on the suggestion of the workshop organized by the District Forest Office, Tanahun. Since DFO staff prioritized the conflicts and they ranked membership issues in Ratanpur community forest as most serious based on its durability and effects.
4. As fieldwork was allocated limited (i.e., it was for approximately two months including preparation phase), it would be better to have a site in which some information could be collected from secondary sources. Moreover, it enables the researcher to build on and make use of information and knowledge based on previous records.
5. I myself as a researcher have some experience about the origin of conflict since I have worked in the district as an Assistant Forest Officer. I used to make several visits and

meeting with them. I am interested in the matter even after I left Tanahun and joined at the IOF for the study. This previous experiences and institutional memory helped me possible to capitalize the respondent's opinions and views, though such anthropological study hardly accomplish within two months.

4. 1. 2 Site Selection Process

Office based conflict analysis was initially carried out at district level through workshop with DFO staff and archival study. They were asked to prioritize the issues of conflict prevailing in community forestry in the district. They prioritized control and access over forest resource, i.e. membership issue, is the most serious on based on frequency, of occurrence. The area and scale of prioritized conflict by DFO staff is presented in Annex 6.

Based on discussion with DFO staff and keeping in mind the criteria proposed above, it was then agreed that this research is be conducted in Ratanpur community forest where more than three settlements are encountering for the forest.

4. 2 Unit of Study and Sampling Techniques

Fundamentally, the research is a case study of conflict in Ratanpur Community Forest. The social phenomena and individuals of different settlements in relation to the forest are the basis of analysis. Each household was treated as a sample and total households were assumed to the population. One tenth of populations, i.e. thirty respondents, were selected for semi-structured interview by use of stratified random sampling.

Excluding those who were selected randomly, additional respondents were selected adopting snowball sampling. In this technique, as Bernard (1998) illustrates, you locate one or more key individuals and ask them to name others who would be likely candidates for your research. Key persons from different settlements were selected based on the record of District Forest Office, Tanahun and verified from the focus group and was interviewed. Based on his/her reference next key informant was identified and subsequently interviewed.

The process would be stopped if there was less variability found about the information. These methods selected those interviewees who were mainly customary leaders, teachers and *Ilaka* (range) member of District Development Committee (DDC) and Forest User committee members. It was fruitful in giving deep insights on the situation and local context.

Besides this, the Haphazard-sampling technique (Bernard, 1998) was employed for informal interview. The fundamental purpose was to verify the information obtained. As Bernard illustrates, it involves nothing more than grabbing whoever will stand long enough to answer your questions. This kind of technique was useful because it allowed me to get a feel of “what’s going on out there” in the study area. It was also useful to have discussions with DFO staff because they shared some useful and stimulating insights regarding different social conflicts in the area. However, I encountered with two drunkards who threatened me while adopting the methods. I experienced it as one of the shortcomings of that technique.

In total there were more than 54 people interviewed. According to Maas (1998:21 in Yasmi, 2002), for an exploratory and in-depth work, a sample size in the range of thirty to fifty is large enough and sufficient. Hence, the respondents in this study are considered more than enough. Table 4.1 shows a detail size of sample entertained in the study.

Table 4.1: Sample size for multiple sample techniques

Households status		Sampled size				Total
		Ratanpur	Arbaje	Archale	Jayapani	
Total Households		107	45	112	38	291
Sampled households	Random (stratified)	9	6	9	6	30 (10%)
	Snowballing	5	3	3	3	14 (5%)
Other informants*		4	2	2	2	10 (3%)
Total		18	11	14	11	54 (18%)

* Used only for verifying the data.

4. 3 Data Collection

4. 3. 1 Secondary Data Collection

Secondary data were collected from the District Forest Office, Statistical Bureau of National Planning Commission, District development Committee, Line Agencies, and previous research findings, monographs, related to the topic via Internet, libraries. The secondary data are useful in providing background information on the study area and enriching the information that has been gathered during the literature review. Desktop study was carried out for acquiring the information of history of conflict from the archival available in DFO office.

4. 3. 2 Primary Data Collection

Primary data were collected using following ethnographic techniques.

Informal Interview and Meeting

Informal interview and meeting were executed with DFO staff and representatives of stakeholders in the study area. This was done during the first week of the fieldwork. After discussing with the representative of the stakeholders some criteria and indicators were developed to assess the well being of the stakeholders that were later on asked to prioritize in semi structured interview. Likewise, better conflict management options and reasons on preference were also enlisted for developing short questionnaire for semi-structured questions. Southwold-Llewellyn (1999) cited in Yasmi (2002) argues that informal interviews represented by casual conversation are essential during the first part of the research. She contends that informal interviews help very much in terms of building rapport with villagers, which is one of the keys for the success of field research. It must be mentioned that informal interviews may give negative consequences too. It may influence informants' reaction during semi-structured interviews because they have known in advance

that they would be interviewed. I was fully aware of this possible consequence and I limited myself in such a way to minimize the influence on the subsequent semi-structured interviews.

Semi-structured Interview

Semi-structured interviews were adopted to gather information about different actors' perspectives on conflict: causes and intensity of conflict and options for conflict management, preferred conflict management practices and assessing well being of stakeholders in terms of membership. For this purpose an interview protocol is used (see Appendix I). This technique was adopted because of its major advantage, namely the comparability of results. Semi-structured interviews also allow researcher to dig deeper into issues discussed during the interview and give more opportunity for probing (Southwold-Llewellyn in Yasmi, 2002).

Focus Group Discussion

In order to take information about conflict and analyze the influence and importance of stakeholders, and to know the existing relationship among the stakeholders and to understand the extent and occurrence of conflict, seven focus group discussions (7-12 member in each group) were carried out separately in each settlement and with DFO staff.

Representative from different stakeholders actively participated and carried out pair wise ranking about the extent and occurrence of conflict and existing relationship among them based on their experience and perception. The size of circle shows the degree of conflict and relationship. The discussion was useful in understanding and verifying the defined characteristics of stakeholders.

In addition to this, stakeholders' interests and their potential impacts were also analyzed and stakeholders affected from the conflict were also ranked. The tools used in analyzing stakeholders emphasized the facilitation of discussion among local groups who are in one way or another involved or affected by a particular set of resource management initiatives.

Chevalier, (2001) states that it is essential to understand who are the stakeholders and what interest, power and relationship existed among them for managing existing or potential conflict over the natural resources.

Participant and Field Observation (Obtrusive)

Southwold-Llewellyn cited in Yasmi (2002) stresses that it is important to crosscheck what people say they do and what they really do. Most frequently people being interviewed answer in the form of an ideal situation; however, their actual behaviors may not necessarily be in line with such ideal things. Bernard states that:

“Interviewing people gets at information about their attitudes and values, and what they think they do. When you want to know what people actually do, however, there is no substitute for watching them or studying the traces their behavior leaves behind” (Bernard, 1998: 271).

To ensure the validity of that the information gathered from the interview, obtrusive observation was adopted. In obtrusive observation people know about the presence of the researcher. This technique also has negative side. For instance, because people know that a researcher is observing him/her, they may change their behavior or they may behave in the way the researcher expects them to. However, as Bernard (1998) argues, after a while people will behave in their normal ways, especially once the rapport between researcher and people has been established.

From field observation forest of Ratanpur and other patches of forest, namely, Laundry, Archale, Raipale and Chwok upon which settlement have direct or indirect access were assessed and distance from the settlement was recorded. Likewise observing farmers' daily activities and their mobility was another important way to absorb information, thus enabling me to get insights in their activities and to have some opportunities to discuss the matter with them in an informal way. Some of the farmers demonstrated the forest and forest products that they used these days, and some of them talked about the problems that they have with other stakeholders. King (2000) also stresses in the use of participant observation to understand about human communities, behavioral pattern and human interaction. However, it

sometimes intends to be the mere process of observing often influences the subjects that are being observed.

To make sure that information is well documented, field notes were maintained, and information was recorded in tape throughout the field period. At the end of each day at least one hour was spent to record events, observation, judgments, feeling and other relevant information in the diary. At a later stage, the field notes were used to support the interview data. Revisiting with few informants was normal in the course of data collection. Finally, I made frequent consultation with forestry field staff, local people and key informants. Through consultation, I got confusing information clarified. It also stimulated some insightful thinking.

To conclude this section, it is valid to say that this research has employed various techniques in data collection, such as desktop study, interview, field and participant observation and consultation with field staff (triangulation). In the course of data collection I tried to recapitulate my institutional memory so that I could understand respondents' intuitive thinking and views. The combination of these techniques has a major advantage, that is, the conclusion drawn from different kinds of sources and techniques is likely to be more convincing and accurate than only relying on a single technique (Bernard, 1998).

How People Perceive Researcher

Not many people but only few from the study area had known me as a Forest Officer. I began my talk with those who I was familiar with. I introduced myself stressing on my present status and position to the representatives of FUG and those people from other settlements who usually come to DFO. They knew that it is an academic research that may help them to manage the problem encountered for four years. I learned there the curiosity and encouragement I found they want to share the ground reality based on their experience and observation. However, some of them replied that I knew the things. This made me somewhat doubtful whether they would support me or not. But later I found they were appreciating my presence at that time. It was a corner stone for me to proceed on with the study. I requested

them to convey the message to their respective neighbors so that they would also cooperate me in this regard. The informal meeting and talks with the people also made it possible to build trust with the people, which is one of the fundamental step to carry out the research.

4. 4 Data Analysis

In general, data analysis means a search for patterns in data—recurrent behaviors, objects or body of knowledge. Once a pattern is identified, it is interpreted in terms of a social theory or the setting in which it occurred (Neuman, 1997). Thus it further argues, a qualitative research moves from the description of a historical event or social setting to a more general interpretation of its meaning. In line with this, Neuman (1997) underscores that a qualitative researcher analyzes data by organizing it into categories on the basis of themes or concepts. The process of condensing, organizing, categorizing and coding is widely adopted in carrying out such anthropological and cultural research. It is known as descriptive hermeneutical (understanding and interpretative) approach (Hellström, 2001). To understand the case, various written material and field notes were used. A comprehensive approach that is adopted in the study is presented in the following Figure 4.1.

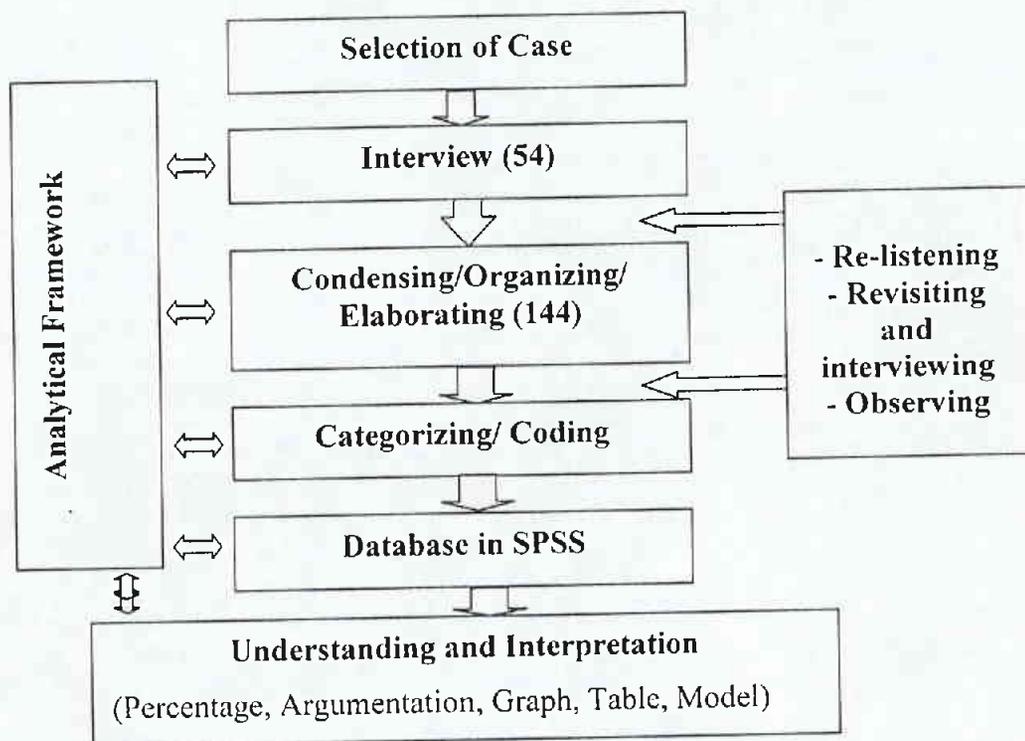


Figure 4.1: A methodological path from data to interpretation

4. 4. 1 Condensing, Categorizing and Coding

Specifically, the analysis of interview data was carried out in the following stages:

1. The interview text of each interviewee was condensed following the three major themes. The themes were based on the research questions provided in the interview protocol (see Annex1). Codes/labels were assigned in the field note and interview texts according to the themes as the first attempt to condense the mass of data into categories. Then the coded texts were recorded in a separate table covering all themes. Firstly, in the second column of the table categories of interviewee's response were recorded (note: first column is for respondent code). These categories reflect the key themes in the research questions and show important issues raised by interviewees with regard to the themes.
2. The second stage was to record the elaboration and argumentation given by each interviewee following the categories mentioned in the first stage. Recording the elaboration and the argumentation was critical since it helped in making final interpretation. For this the process of moving from entities to parts, re-listening the interview tape was followed.
3. At this stage coding of each interview response is done (see Annex 2 for description of coding scheme). A complete result of coding the interview texts is presented in Annex 3 and 4). In the example in Table, it is shown in the bottom of the table that the final code for the respondent R10 (read respondent number 10 from Ratanpur settlement) is R10-RO-P-L2-COM. Following the coding scheme in Annex 2 this code can be read as follows;
 - R10 is for tenth respondent of Ratanpur settlement,
 - RO is for the conflict between Ratanpur and the other settlement
 - P is for the cause of the conflict (in this case it is caused by perception),
 - L2 is for the level of conflict (in this case it is level 2), and finally
 - Com is for the conflict management option (compromise).

Table 4. 2: Condensed interview text for underlying causes, and level and options of conflict

Resp*	Issues	Argumentation	Coding
R10	<p>Step 1</p> <p><u>Causes</u></p> <ul style="list-style-type: none"> • User identity • Availability of Sal timber • Limited Capacity of forest <p><u>Level</u></p> <ul style="list-style-type: none"> • Many debate and discussion • No conclusion • Escape from talk <p><u>Resolution</u></p> <ul style="list-style-type: none"> • Compromise 	<p>Step 2</p> <p>Among disputing parties, Arbaje and Jayapani people intended to be as rightful as the user of Ratanpur. Ratanpur FUG allocated only 15% of total harvest to outsiders including them. It may be insufficient but the capacity of forest is limited so we can't provide them sufficient amount. We have criteria for membership, which they don't meet.</p> <p>They had many debate, discussion but could not reach into conclusion. They don't offer again to talk on in this issue especially to Arbaje and Jayapani.</p> <p>Slightly losing and gaining principle</p>	<p>Step 3</p> <p>Perception</p> <p>Level 2</p> <p>Compromise Final code: R10- RO-P-L2 Com</p>

* Response number

All the final codes recorded were used to produce a database of all respondents' response (see Annex 3 and 4). This database was fed on SPSS 11 to find out the pattern of interview responses by performing multiple descriptive analysis tools.

It should be noted at the outset that the interpretation made in this way is not free from subjectivity. Being largely based on interview data, what is called data in this research is nothing more than the researcher's own construction of other people's construction of what they and their conflict partners have said or done in various conflict situations. However, as Geertz cited by Hellström (2001) argues, this is almost inevitable in most cultural research

where the line between the mode of representation and substantive content is difficult to draw.

4. 4. 2 Index of Relative Ranking (IRR)

Scale and indexes were used for the quantitative interpretation of qualitative data, particularly ranking and scaling. They can be used to measure or assess attitude and other form of qualitative reactions. Their use in social science is common, and they are significant because they provide quantitative measures that are amenable to greater precision, statistical manipulation and explicit interpretation (Miller, cited in Tiwari, 2000). Tiwari indicates that Index of Relative Ranking (IRR) can be calculated by using following Formula:

$$IRR = (R_1S_1 + R_2S_2 + \dots + R_nS_n) / nr$$

Where,

IRR = Index of Relative Ranking

R_1 = Rank of first order

S_1 = Score of last order

R_n = Rank of last order

S_n = Score of last order

n = Number of observation

r = Total rank given to particular attribute

4. 4. 3 Stakeholder Analysis

The tools and techniques developed and illustrated by Mayers (2001), Colfer et. al. (1999) and Clevallier (2001) were used to explore the interest, importance, influences and well being of the stakeholders. Five point and four point Likert scales were used to analyze relative importance and influence of stakeholders.

CHAPTER 5

ANALYSIS AND RESULTS

5.1 Stakeholder Analysis For Ratanpur Community Forest

Stakeholders, group of people from different settlements are assessed and analyzed in terms of their interests, influence and importance, well being and relationship. It starts with the description of stakeholders and their respective interest and potential impact in Ratanpur Community Forest, followed by stakeholders' influence and importance and the priority of stakeholders based on the effect of intervention of community forest. Finally, the well being of the stakeholder is assessed and prioritized.

5.1.1 Stakeholders, their Interest and Potential Impact

The concerned stakeholders were initially listed out from desktop study and later on it was verified from group discussion. The concerned stakeholders for Ratanpur forest and their respective interests with its potential impact on the community forest program are summarized in Table 5.1.1. The potential impact that may result in due to multiple interests was categorized positive and negative.

Table 5.1.1: Stakeholders, their interest and impact in Ratanpur community forest

Stakeholders/groups	Interests	Potential impact
People of Ratanpur	• Maintain dominant position based on traditional use right in CF	-
	• Protection and management of the forest	+
	• More income from CF	+
	• Monopolize over the sales and distribution of forest products	-
	• Sustainable supply of forest products	+
	• Institutionalize the community forestry program	+

People of Jayapani	<ul style="list-style-type: none"> • Influence on community forest activities, • Access and control over the forest resources • Obtain membership of Ratanpur CF • Build social relation through community forest 	<ul style="list-style-type: none"> - +/- + +
People of Arbaje	<ul style="list-style-type: none"> • Equal Access and control over the forests • Secure use right in the forest for their generation • Maintain subsistence livelihood through getting forest products • Influence on community forest activities 	<ul style="list-style-type: none"> +/- + + -
People of Archale	<ul style="list-style-type: none"> • Maintain subsistence livelihood through getting Sal timber from the forest • Keeping status quo of forest through adopting traditional forest management approach • Get validation on the elite controlled forests from the DFO 	<ul style="list-style-type: none"> + - -
District forest Office	<ul style="list-style-type: none"> • Success of community forest • Control over community forest users • Empowered users • Providing more opportunity for all 	<ul style="list-style-type: none"> + - + +

Source: Community Meeting in field, 2003

The table shows the variability of interests of different stakeholders. Some interest of each stakeholder perceived negatively. This pluralistic view leads the situation to conflict. However, the net potential impact of interests is still a matter of further discussion.

5. 1. 2 Stakeholders' Situation

Stakeholder situation in terms of their expectation and reality in relation to legal status was analyzed and presented in the Table 5.1.2. The analysis is based on the information obtained in the course of participant observation and informal discussion.

Table 5.1.2: Stakeholder situation

Settlements	Situation	
Ratanpur	Expectation	Full control over Ratanpur forest
	Actual	Only partial control due to intervention of DFO
	Legal status	Registered (<i>de-jure</i>)
Jayapani	Expectation	Control and access over Ratanpur forest, <i>Schima</i> forest of own and Sal forest of Laundari (Chwok VDC)
	Actual	Control only in own forest (Jayapani) of <i>Schima</i>
	Legal status	<i>De-facto</i>
Arbaje	Expectation	Control and access over the forest of Ratanpur, Raipali and Chwok
	Actual	Chwokali forest for firewood and Samjur forest for timber
	Legal status	Kind and concession (practice)
Archale	Expectation	Control and access over Archale and Ratanpur forest
	Actual	Control over their own Archale forest and timber were getting from Basantapur and Samjur forest.
	Legal status	<i>De-facto</i> practice in Archale forest and costumer for timber
DFO	Expectation	Good governance
	Actual	Not all settlements are equally benefited from DFO service
	Legal status	Implementing agency of HMGN for CF program

Source: Participant observation and focused interview in the study area, 2003.

This situation reveals that there are some gaps between actuality and desire (expectation) that cause the conflict among them. The causes were to be escalated in around these situations. DFO, on the other hand, were added as the conflicting party since the notion of different settlement could not address in time.

5. 1. 3 Importance and Influence of Stakeholders

To analyze the power (influence) and interest (importance), key respondents (5-12) in a group from each settlement were gathered and familiarized with the concept of importance and influence. They understood importance as the priority given to satisfy their own interests and needs and influence was taken as a power defined by four standards. These are perceived ability of creates rules, decision-making, enforced compliance and adjudicate dispute. Respondents agreed to score their perception using five-point scale; 1 for extremely low importance and influence, and 5 for extremely high importance and influence. Table 5.1.3.and 5.1.4 shows the relative importance and influence of different stakeholders for Ratanpur forest.

Table 5. 1. 3 Importance of stakeholders in Ratanpur community forest (N= 32)

S. No	Settlement (Stakeholders)	Scale of Importance in %					Mean	IRR
		EL				EH		
		1	2	3	4	5		
1	Ratanpur	-	-	3.3	36.7	60	4.57	0.91
2	Arbaje	-	23.3	46.7	30	-	3.07	0.56
3	Jayapani	10	66.7	13.3	10	-	2.23	0.44
4	Archale	30	60	10	-	-	1.8	0.36
5	DFO	80	20	-	-	-	1.2	0.24

The analysis reveals that the forest of Ratanpur is primarily urged for Ratanpur people, followed by medium interest of Arbaje and Jayapani and relatively low interest for DFO and Archale. For Archale, they have traditionally controlled a separate national forest though it is not formally handed over to them. DFO, on the other hand, has almost no interest since they don't consume any forest products from the forest. DFO staff perceived that they have no particular interest in the community forest. In the mean time they agreed that there might have been some hidden interests, which are beyond the norms and ethics of civil servants.

movement they are unlikely to be the focus of the conflict in Ratanpur Forest. DFO, on the other hand, has highest influence but the least interest. It means DFO is not target beneficiaries of community forestry. Its interests is especially providing services to the other stakeholder timely and behave equally. Because of the highest influence, there might be a killer potentiality from DFO if the community forest is not operating well and conflict among other stakeholders is continued.

5. 1. 4 Who Affected the Most?

Respondents were asked to prioritize those who had directly affected from handing over of Community Forest. Respondents prioritized group (settlements) in four orders namely; extremely affected (4), just affected, (3), slightly affected (2), and least affected (1) based on the availability of forest products, additional cost and burden they felt due to conflict, disturbance over their usual practices. The relative priority on the affected parties is presented in Table 5.1. 5

Table 5. 1. 5 Stakeholder priority perceived by respondents

Stakeholders	Frequency of priority (Number)					IRR
	1	2	3	4	Total	
Arbaje	4	4	10	14	32	0.80
Ratanpur	0	4	14	9	27	0.79
Jayapani	0	5	15	12	32	0.76
Archale	6	17	3	4	30	0.54
DFO	16	10	2	0	28	0.23

The table shows that the Arbaje settlement (IR= 0.8) is the most affected and the DFO (IR= 0.23) is the least. When researcher discussed about the reason, Arbaje people said:

The rest of the settlements have their own forest within their ward though they have got it as a formally handed CF. But people of Arbaje have not any forest, until now we depend upon the forest of another VDC.

It is a valid interview since when I made visits and asked people of Chwokchisapani, they argued that it is mandatory for Arbaje people to pay NRs 100 per year to enter the forest where Chokali people have maintained *de-facto* use right. They perceived that the control over the forest is determined by the political boundary of forest.

The people of Ratanpur, on the other hand, claimed that they have double pressure. Firstly DFO suspended their operational plan, which restricted them from getting forest products from the community forest and consequently resulted pressure on fruit and fodder trees. Secondly, they felt a discriminatory behavior of DFO since people of other settlements had not been restricted to collect firewood from other patches of national forest, over which *de-facto* use and control right have been maintained.

DFO staff perceived that the working morality and spirit has been declining since they were blamed as a group of corrupted personnel. District Forest Officer perceived most of his time spent on dealing with people, political leaders, and their subordinate staff. However, he realized and stated that they had learned a lot from the case of Ratanpur. At least, field staff should allocate much time for field investigation while they are facilitating for group formation.

The effect of conflict is multi-dimensional. The major points illustrated by the representative of stakeholders in informal discussion were further asked with the respondents. Their response on the following statement is summed up and presented in Table 5.1.6.

Table 5.1.6 Respondents perception over the effects of conflict

Statements	Respondents response (n= 44)		
	Increased	Same	Decreased
Intra-group cohesiveness and mobilization	30 (68%)	14 (32%)	-
Inter-group relationship	-	17 (39%)	27 (61%)
Forest resource condition	15 (34%)	24 (55%)	5 (11%)
Availability of forest products	-	8 (19%)	36 (81%)
Degree of awareness towards CF	28 (63%)	16 (37%)	-
Feeling of power	22 (50%)	18 (41%)	4 (9%)
Institutionalization of CF at local level	10 (22%)	9 (21%)	25 (25%)

This table shows both negative and positive impact of conflict over the Ratanpur forest. The majority of the respondents (>60%) perceived that the degrees of awareness about the community forest policy and practices, and intra group mobilization and cohesiveness have been increased. On the contrary, more than 50% respondents viewed that the availability of forest resource was dramatically decreased and the relationship between the groups was also harmed, the process of institutionalizing aspect of CF was also stunted though people's awareness is increased. The condition of forest is observed as the same by 55% of the respondent, which is very interesting. About the reasons one respondent told that they were not allowed to harvest the forest products for two years by DFO. During that time there had been a check and balance condition. Stakeholders had fear from their counterpart.

5. 1. 5 Status of Stakeholders' Well Being

To understand and weigh the well being of the stakeholder criteria of Colfer (1999) and HMGN (1996) were discussed and finalized. Indicators were developed in local context, which are presented in Annex 6. The ground reality was verified by field and participant observation and was attended the informal meeting with the people of these settlements in many times.

Based on the criteria and indicators respondents were asked to put the value so that qualitative information could be interpreted into quantitative way. The value was assigned in each criteria based on the value of indicators as i.e. high = 1, medium = 2, and low = 3. Following Table 5.1.6 indicates a well being of stakeholders in term of identified and agreed criteria and indicators.

Table 5. 1. 7: Assessing the well being of the stakeholders

S.N.	Criteria	Mean			
		Ratanpur (n=14)	Jayapani (n=9)	Arbaje (n=9)	Archale (n=12)
1	Proximity to the forest	2.64	2.33	1.38	1.77
2	Dependency on the Forest	2.36	2.22	2.08	1.77
3	Pre-existing use rights (<i>De-facto</i>)	2.29	1.89	1.38	1.23
4	Interest and capacity to manage	2.29	1.78	1.5	1.54
5	Damage of wildlife	1.86	1.78	1.5	1.38
6	Land in and around the forest	2.0	1.86	2.0	1.5
7	Alternative patches of forests	2.29	2.14	1.71	1.85
8	Cultural linkages with the forest	2.0	2.0	2.0	2.0
Total Mean		2.21	2.00	1.69	1.63

The table reveals that people of Ratanpur settlement have the highest mean value, followed by Jayapani, Arbaje and Archale respectively. It means Ratanpur and Jayapani have relatively higher stake in relation to defining which is more than medium. Although Archale people have the least weightage i.e. low, it is not very far from the average mean. It means that their reactions should also be considered for defining the membership.

5. 1. 6 Preferred Criteria for Defining Member of FUG

All stakeholders agreed that the focus of debate on the Ratanpur forest is access and control over the Ratanpur forest. The preference over the criteria developed by the representative of the stakeholders was asked to the respondents and by calculating IRR preference was ranked for each settlement, which is presented in the Table 5.1.8 below.

Table 5.1.8: Criteria preferred for identifying users in community forestry
(Index of Relative Ranking in the cells of table)

Criteria	Archale (n=12)	Arbaje (n=9)	Jayapani (n=9)	Ratanpur (n=14)	Total (n=44)
Proximity to the forest	0.66	0.67	0.71	0.68	0.69
Traditional use right	0.68	0.60	0.61	0.69	0.65
Dependency and livelihood	0.68	0.70	0.69	0.73	0.71
Interests and capacity of the people	0.62	0.61	0.56	0.59	0.58
Land adjoining or inside to the forest	0.48	0.63	0.51	0.44	0.51
Wildlife damage (crop and cattle)	0.52	0.41	0.44	0.21	0.39
Existing knowledge and cultural linkages with forest	0.54	0.49	0.42	0.37	0.45
Ward basis (forest within the area)	0.56	0.42	0.54	0.35	0.46

Table 5.1.8 shows that livelihood and dependency (IR = 0.71), is the most preferred criteria in totality. Likewise, other criteria like proximity to the forest, pre-existing use right, interest and capacity to manage were ranked at higher priority. While other criteria like land adjoining to the forest, forest within the ward and cultural linkages and existing knowledge were kept at lower rank. Wildlife damage criterion perceived at the least (RI= 0.39), which is also reasonable since it has weightage more than one third.

Comparison of prioritized criteria for settlement indicates some interesting results. The people of Arbaje did not preferred traditional use right much and ranked it the fifth while the others ranked it the second and third. They prioritized land adjoining to the forest as the third since most of them have low land in and around the forest.

5. 1. 7 Relationships and Extent of Conflict among the Stakeholders

For describing relationship participants from different stakeholders categorized the relationship into following order: good, fair and poor. They elaborated the orders by defining the following criteria mentioned in table 5.1.9.

Table 5.1.9: Criteria for defining the relationship

Good	Fair	Poor
<ul style="list-style-type: none"> • Mutual cooperation and understanding among the stakeholder • Positive and direct 	<ul style="list-style-type: none"> • Appreciating other interest but not to cooperate to meet the needs of others • Some incompatibility in behavior and interest • Trust building- questionable • Neutral and both direct and indirect 	<ul style="list-style-type: none"> • Intend to impose its own idea, • Behavioral and interest based conflict accelerating on. • Initiator of the issue of debate • Inclined to negative but indirectly

The pair wise ranking matrix was used to assess the relationship among the stakeholders. Initially participatory ranking was done in each settlement and finally the four figures were discussed and merged to form a comprehensive chart of relation. The following Figure 5.1.2 shows existing the relationship among the stakeholders.

Jayapani	Good				
Ratanpur	Poor	Good			
Arhaie	Fair	Fair	Good		
Archale	Good	Good	Good	Good	
DFO	Fair	Fair	Fair	Good	na
	Jayapani	Ratanpur	Arhaie	Archale	DFO

Figure 5.1.2: Relationship among Stakeholders

When the relationship was discussed among the stakeholders, they confined their relationship with regards to the forest. However, they tried to interpret the relationship based on the existing interaction and cooperation in their daily life. Figure 5.1.2 it shows the relationship between Ratanpur and Jayapani is relatively poor. Towards District Forest Office, every settlement perceived the fair relationship. About the reason, people of Ratanpur were unhappy since DFO suspended their OP for two years while others blamed that DFO could not take any decision. It sympathized with them, but did not translate it into action. However, all participants agreed that in initial days of conflict the relationship of stakeholders with DFO was normal (good). Additionally, they stressed that the context and time govern the relationship.

DFO staff perceived that at least there should be some revision about the membership of the community forest. If users of Ratanpur do not rethink over it; DFO should enforce its power and authority. It means there might be a chance of further confrontation between DFO and Ratanpur in the future.

About the extent and occurrence of conflict, pair wise ranking was done in five-group meeting. Later the gist of the extent of conflict was merged as discussed with the representative of settlement group and finally reached into the consensus. Figure 5.1.3 shows the extent and occurrence of conflict among and between the stakeholders in Ratanpur community forest. The larger size of vane diagram means the higher degree of conflict and vice versa.

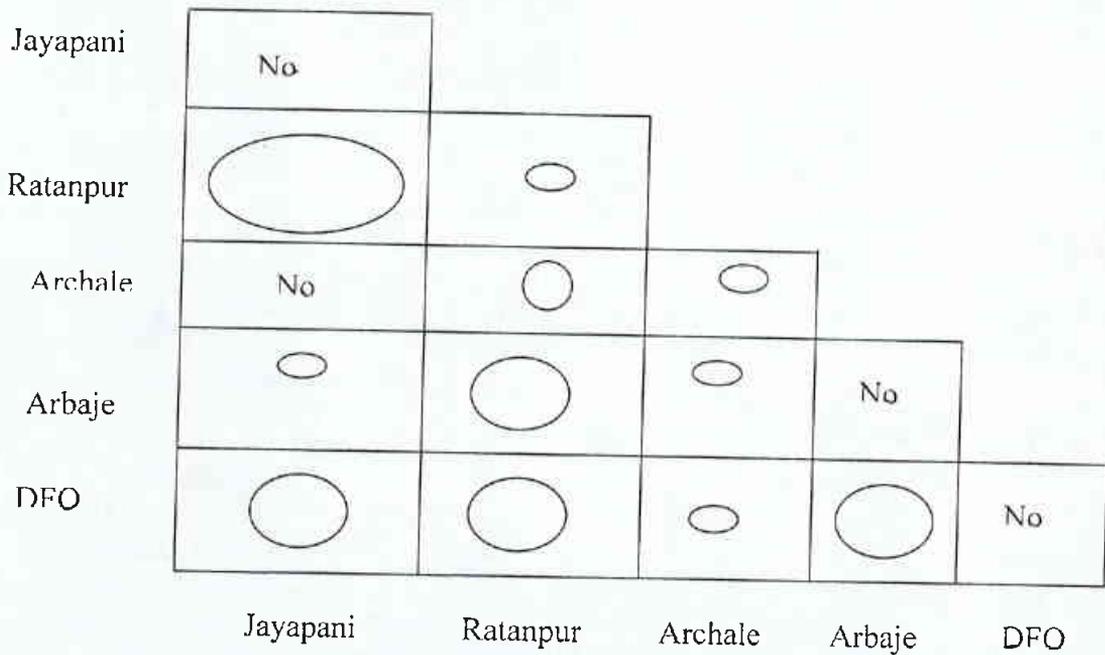


Figure 5.1.3: Extent and occurrence of conflict

From the diagram it is apparent that the conflict between Jayapani and Ratanpur was relatively severe. The respondents in focus group discussion said that there was attack and counterattack between them once. People of Jayapani blocked the source of water for Baisghare, a small hamlet within Ratanpur. The conflict between DFO and Ratanpur, Arbaje and Ratanpur, and Jayapani vs DFO perceived as medium sized. Since DFO had suspended the operational plan of Ratanpur and they were not allowed to harvest any products from the forests. People of Ratanpur and Arbaje said that the conflict with DFO was mainly because of lingering the decision and providing some concessionaries to Ratanpur people without managing the conflict. They did not specify the conflict within Arbaje, DFO and between Jayapani and Archale.

5. 2 Causes and Levels of Conflict

This Chapter portrays an assessment of conflict together with the underlying causes and level of the conflicts. It starts with a description of internal conflicts and subsequently follows inter-settlement conflict. In exploring these conflicts critical interpretation and judgment is given based on the information from literatures. The chapter also proceed on with an integrated model which illustrates an over all picture of conflict such as how stakeholders engage in varied conflict situations.

5. 2.1 Intra- settlement Conflict

5. 2. 1. 1 Causes of Intra-settlement Conflict

Ratanpur settlement is composed mainly of by five hamlets, namely, Suatole, Baisghare, Dhakalgaun, Dhakalgaun (Uppallo), and Simgaun. Majority of the respondent (45%) perceived that decision on including Sautole among users was wrong, while some people viewed that people of Simgaun intended to divide the forest for maintaining their *de-facto* use right. Contrary to this, more than 33% people were inclined to say that there are some behavioral problems since some political leader intentionally play dual role so that political benefit could be taken from other settlements than that of Ratanpur (see figure 5.2.1). A person of Ratanpur said:

The role of ex-chairman, a member of FUG confused us, since with his recommendation people of Jayapani get started claiming on the forest. His behavior within group was positive but when he met with the people of Jayapani he sympathized with them. The reasons might be some political benefits (excerpt from interview, refer to R13-IR in Annex 1).

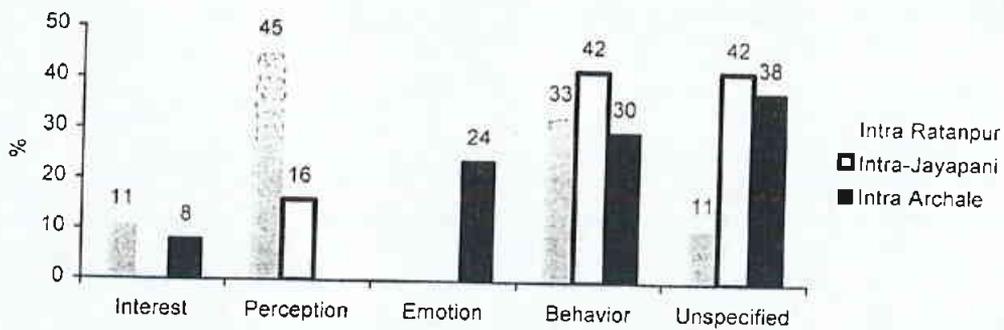


Figure 5.2.1: Causes of intra-settlement conflict

People of Arbaje did not report any conflict within the group. To Archale, 38% of the responses show that there was no conflicting situation while about one fifth and one fourth of the respondents indicated the behavioral and emotional conflict respectively.

The behavior of the elite people of Archale was found oligarchic over the access and control of some patches of the national forest. They exercised monopoly on the forest upon which people of lower economic class had almost no access. A respondent of Archale said:

Within our Archale group we debated to form a separate FUG and register it to the DFO. About 30% of total do not show their interest. It may be due to the fear of breaking down of their so-called private forest. Most influential persons are trying to misinterpret the concept of community forestry (excerpt from interview, refer to (A27-II-B in Annex 4).

Indicating the emotional reasons, respondents argued that:

Within Archale, we do not have so serious problem. But some people intend to formalize our socially controlled forest into community forest. Some are interested in merging it with Ratanpur forest (excerpt from interview, refer to A26-II-E in Annex 4).

Jayapani, 42% of the respondents claimed that the conflict among them is triggered by the behavior while 16 % indicated the perception-based problem, and 42% could not define the causes. A respondent from Jayapani suffered from the group behavior and expressed his view for conflict as:

Within Jayapani, though I am resident of the village, my society does not include me in the group. They have small patches of forest of Schima and Castanopsis. I am not involved though I am interested. I had to walk one and half an hour walk to Chokali forest for fuel wood. It is not

socially justified to give all punishment for one crime at a time. Natural resources are state property. No one is being deprived of the use of forest (excerpt from interview, refer to J9-II-P in Annex 4).

5. 2. 1. 2 Level of Intra-settlement Conflict

When asked about the level of conflict or the degree of seriousness of the conflict, the respondents gave different answers. In Ratanpur as well as Jayapani, it was considered that the conflicts were not yet considered very serious. The Figure 5.2.2 illustrates how the respondents perceived the level of conflict within the settlements.

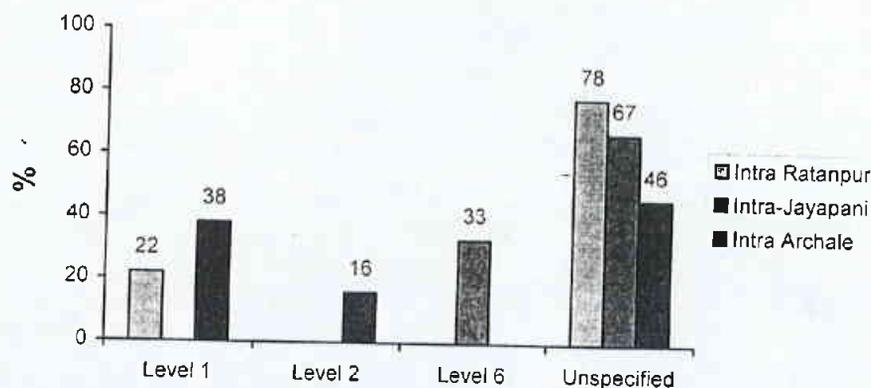


Figure 5.2.2: Level of Intra-settlement conflict

Seventy eight percent of the respondents from Ratanpur, 67% of the respondents from Jayapani, and 46 % from Archale did not specify level. About 38% of the respondents from Archale, and 22% from Ratanpur leveled conflict at one. It means that the conflict was still in the form of straight argumentation and fair debate. Of six responses of Jayapani, 33% indicated the conflict in a group at level six. However, it was not directly related to the conflict with Ratanpur forest. One respondent got surprised since few members were not included though they are within in the territory of Ratanpur. For Ratanpur one respondent said:

I think leaders of FUG are thinking for those who were missed from FUG at the time of group formation. There are some arguments put by them, which seems realistic (excerpt from interview, refer to R11-L1-in Annex 3).

For Ratanpur, respondents viewed the level and elaborated it,

I think internally we don't have any conflict. Every thing is all right (excerpt from interview, refer to J8-II-in Annex 4).

This means the problem was not striking for them. Likewise one respondent of Archale put his view about the level of existing conflict as;

We are just sharing the idea about the benefits that we poor were getting from our socially sanctioned forest than the elite within the most disadvantaged group but it has not been floored in community level (excerpt from interview, refer to A22-II-in Annex 4).

This means the problem was at the stage of mental argumentation. The disadvantaged people were trying to use tactful techniques for discussing with the elite.

While three settlements were merged for analysis since the three groups namely Jayapani, Arbaje and Archale have common features, they wanted to be either recognized as member or allowed to get timber and other forest products from the Ratanpur forest. Majority of the respondents (62%) unspecified the causes while 19% believed that the cause is interest of the people especially people of Arbaje intended to have access to Archale forest. The rest of the respondents argued that they have behavior-based conflict. More than 80% respondents could not indicate any level.

5. 2. 2 Inter-settlement Conflict

5. 2. 2. 1 Causes of Inter-settlement Conflict

In this section conflict between Ratanpur and other settlements including Arbaje, Ratanpur and Archale is discussed. In the past there was not any conflict among them. When the Forest of Ratanpur was handed over to the user of Ratanpur, they started not allowing the people residing in Arbaje, Archale and Jayapani to enter the forest. The forest of Ratanpur is the Sal dominated upon which many people have dependent for last few decades. The Figure 5.2.3 demonstrates how respondents from the different settlement perceived conflict for Ratanpur forest.

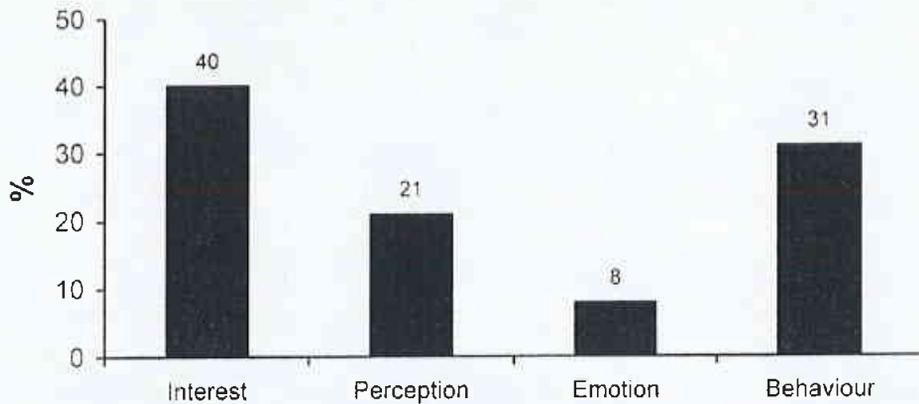


Figure 5.2.3: Causes of inter-settlement conflict

About 40% of total respondents expressed that the issues of conflict were of the interest of respondents. In fact, as discussed above the whole VDC has relatively low forest area. Additionally there is only one Sal forest, i.e., Ratanpur forest in Mirlung- 1,2. Due to the limited forest area people of Ratanpur were not interested to merge other settlements to their group. For the clarity some issues related to interest are excerpted from Annex 3.

Sal timber was usual construction timber of Arbuje, Jayapani and Archale before. But in Mirlung-1 and 2 Sal forest is distributed only in Ratanpur. They thought that they would be deprived of Sal if they were not considered as members (excerpt from interview, refer to R3-RO-I-in Annex 3).

People of Ratanpur also put view that control over the use of Sal timber accelerated the conflict. Jayapani people claimed their stake by saying,

Missing Jayapani in membership of FUG led problem seriously although we are adjoining to them, even to the forest.. We had more pressure from wildlife depredation. Not any compensation has been granted yet (excerpt from interview, refer to J2-RO-I-in Annex 4).

Besides these, the causes of conflict between Archale and Ratanpur are not only getting timber from the community forest rather getting membership. They suspected only whether the people of Ratanpur were supplied with timber in time at subsidized rate or not.

As I know we have no forest of Sal, which usually is used as construction material. We have problem with Ratanpur, as we are not getting Sal timber even if we are ready to pay subsidized price (excerpt from interview, refer to A26-RO-I-in Annex 4).

The people of Arbaje and Archale expressed more or less similar interest. They stressed that Ratanpur people should realize their realistic needs of forest products. One respondent from Arbaje said:

We have our land adjoining to Ratanpur forest. Agriculture crops have been damaged by wildlife but we are not getting any compensation. They don't consider our realistic need of forest. So the problem becomes quite serious (excerpt from interview, refer to A12-RO-I-in Annex 3).

Likewise, 31% of the respondents blamed that the problems of membership was caused by the behavior of people of Ratanpur with the people of other settlement. Ratanpur people claimed that it is the forest used by their ancestors for last few decades

Some elite People of Jayapani has access to state forest and control over it. Besides this, they are claiming on Ratanpur forest. They have followed double standard. If they convert it into community forestry the problem may not be so serious (excerpt from interview, refer to R5-RO-B-in Annex 3).

Pointing out on the behavior of Ratanpur people, respondent from Jayapani said:

The root problem of ours is not recognizing us as a member of that community forest. The representative of FUG did not implement the commitment made during joint meeting. They frequently changed on their decision. The working style with us seemed controversial (excerpt from interview, refer to J6-RO-B-in Annex 4).

Similarly respondents from Arbaje said that the driving force of causing conflict is the manner of people of Ratanpur.

We have conflict mainly with Ratanpur FUG because they prevented us from entering the forest after handing it over to Ratanpur. They invaded our traditional right because we have no alternative within our VDC. They did not pay any attention to our request and showed no sympathy with us (excerpt from interview, refer to A14-RO-B-in Annex 4).

About 21% of the respondents argued that the conflict between Ratanpur and other settlements is of misperception to each other. The perception of Ratanpur people towards others is far from reality. They saw that people of other settlement than Ratanpur do not give continuity to CF as they maintain open access rather than common property.

The interest of Jayapani and Arbaje was to exploit Sal forest through collapsing the Ratanpur group. But they did not succeed as FUG faced the challenges against it. So they become aggressive saying that their rights of using forest are being invaded by the people of Ratanpur (excerpt from interview, refer to R2-RO-P-in Annex 3).

The perception of Jayapani people towards Ratanpur is just opposite. One respondent from Jayapani said:

People of Jayapani are relatively poor and uneducated. So they used it as a weakness of ours and imposed their decision on us while forming FUG (excerpt from interview, refer to J4-RO-P-in Annex 4).

Respondent from Archale perceived that there is suspicion if Ratanpur FUG decided not to provide the timber. It depends upon the future actions of them.

We have some doubt people of Ratanpur because we need to take permission and need to pay money while purchasing of timber. If the price of timber is charged at high price it is hard to pay. What will we do if FUG decides not to provide timber in the future? (excerpt from interview, refer to A25-RO-P-in Annex 4).

About 8% of the respondents viewed that the causes of conflict for the forest are because of emotional. Some respondents argued that the use right should be defined based on the historical basis while others argued that users are to be redefined on the basis of actual demand of the forest products.

People of Arbaje and Archale and Jayapani intended to keep the Ratanpur forest as open as their forest. No one protested and made appeal against them. The forest area where they have an access is now being destroyed. But we people became aware and converted it into community forest. The issue of membership posed by them is only used as a bargaining chip (excerpt from interview, refer to R6-RO-E-in Annex 3).

Respondent from the Arbaje blamed that people of Ratanpur are cutting tree to meet their demand though the forest has been suspended from DFO.

Ratanpur people do not respect our voice though it is logical from our side. They frequently cut timber and utilize as per their requirement. But why are we deprived of the benefits? I think we don't have any option. So nation should look at for us (excerpt from interview, refer to A15-RO-E-in Annex 4).

For clarity on what issues are being contended by both sides. Table 5.2.1 provides some excerpts of the respondents' reactions on access and control on Ratanpur forest.

Table. 5. 2.1: Contentious views over access and control of Ratanpur Forest

Cause	Ratanpur's perspective	Other settlement's perspective
Interest	<ul style="list-style-type: none"> ▪ Limited forest could not supply Demand of all ▪ Only surplus Sal timber will be sold to the others ▪ Membership shall not be granted to others. 	<ul style="list-style-type: none"> ▪ Scarcity of Sal timber due to restriction on Ratanpur forest ▪ No any compensation of wildlife damage ▪ Monopolized over the use of Ratanpur forest
Emotion	<ul style="list-style-type: none"> ▪ Intention is to collapse Ratanpur community forest and convert it into an open access property. 	<ul style="list-style-type: none"> ▪ Not obeyed the instruction of DFO by Ratanpur people. ▪ Cut timber even if the OP was suspended
Perception	<ul style="list-style-type: none"> ▪ Political party encouraged others through exerting pressure to DFO. ▪ Motive to destroy the Sal forest. ▪ Not interested to form user group and keep their usufruct right over national forest 	<ul style="list-style-type: none"> ▪ Ignored and bypassed proximity and dependency criteria while forming user group. ▪ Took benefit our innocence
Behavior	<ul style="list-style-type: none"> ▪ Followed double standard i.e. not sharing their forest but claiming the others ▪ Part of pulling leg (not to see success of forest) ▪ Jealousy of the other people ▪ Entrusted community forest as a means of securing traditional right of Ratanpur 	<ul style="list-style-type: none"> ▪ Limited to enter the forest and posed fine ▪ Intended to avoid the issue of membership ▪ Not interested to discuss ▪ Showed feudal characters and showed historical position over the forest ▪ Not implemented the action plan as agreed.

Source: Excerpt from field interview, 2003 (annex 3 and 4)

5. 2. 2. 2 Level of Inter-settlement Conflict

In terms of level of conflict between Ratanpur and other settlement, respondents from both settlements were jointly perceived in the following way. Thirty six percent of the respondents believed that the current conflict was at level 3 and about 25 %perceived it at level 2, 25% at level 1 and 6% did not specify the level. Only 4% specified it at level 6 and 7.

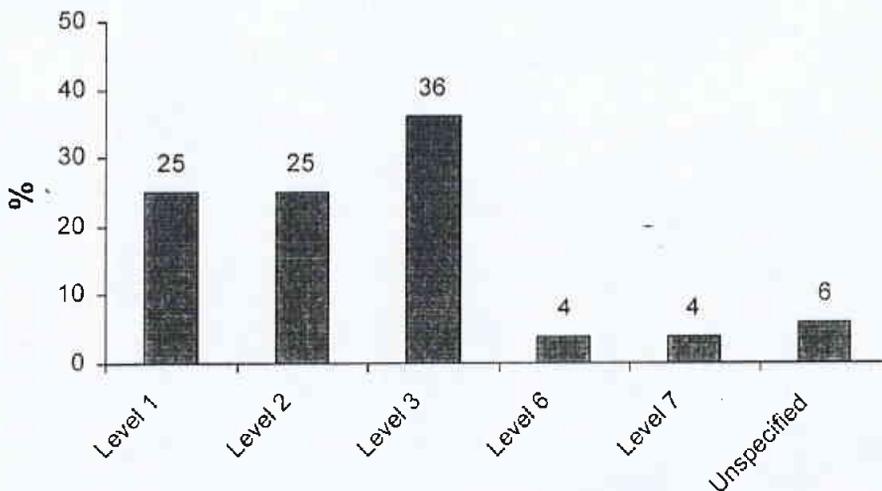


Figure 5.2.4: Level of Inter-settlement conflict

Some respondent from the Jayapani noticed conflict at level 7 saying that:

Once we had patrolled the Ratanpur forest and encountered with user of Ratanpur where they were felling green Sal. There was a person from our side injured. Later we blocked the water source, which originates from a gully of our upland (excerpt from interview, refer to J3-RO-in Annex 4).

It may be because of minor attack sometimes in the past. There were some people who made counter attack and took some effort of shattering. We had meetings and discussion with the consultation of DFO staff. But people of Ratanpur did not discuss it in friendly environment. One of the respondents argued that:

The debate with Ratanpur is positioned based. They don't want to cooperate in this respect keeping issue bypassing. We have requested them for managing the problem but they do not take an initiative (excerpt from interview, refer to J4-RO-in Annex 4).

Majority of respondents perceived that the conflict at level 3. One respondent from Arbaje elaborates it,

They intended to block our voice and compel their own mastery. The verbal communication changed into non-verbal confrontation since they frequently changed the decision made in collective meeting. How do they cut tree and distribute firewood and timber without informing us while there is no improvement in the debate? (excerpt from interview, refer to A15-OR in Annex 4).

5. 2. 3 Inter-settlement Conflict among the Other Settlements

Of the three settlements, no conflict was reported between Jayapani and Archale. However, There were some debates and contradictions between Jayapani and Arbaje and Arbaje and Archale. Of 44 respondents, only 8 and 6 respondents reported the conflict between them respectively. The percentage figure of causes and level of conflict excerpted from the condensed interview is shown in Figure 5.2.5.

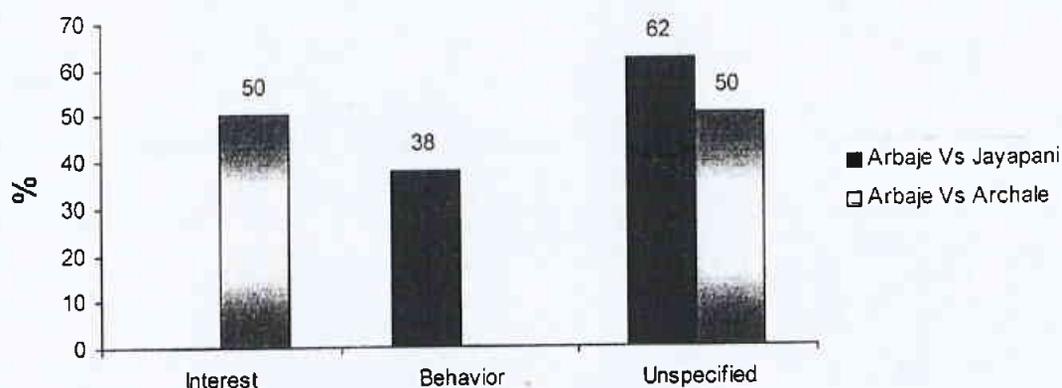


Figure 5.2.5: Causes of inter-settlement conflict among other settlements

The figure 5.2.5 it reveals that conflict between Jayapani and Arbaje could not be specified by 62 % of the respondents and behavioral problems was perceived by 38% of the respondents. One respondent from Jayapani said:

We have no problem with Archale and Arbaje. However, in the course of appealing to DFO, we were working together saying that we are not only 38 but also a group of 38+ 45. Now the working relation has more or less collapsed. The manner to interact with us is not so good since the case is now being pending (Excerpt from interview, refer to J3-IE-B in Annex 4).

For Arbaje vs Archale, 50% of the total respondents argued that the interest-based problem existed between Arbaje and Archale and the rest of the respondents did not specify the causes. People of Arbaje showed interest to collect fodder, grasses and firewood from the forest of Archale. A respondent from Arbaje said:

We have land around the forest of Archale people. The forest is still government-managed forest. We usually collect grasses and firewood by paying tax to Chokali people. However, when we are on farmland we should be free to collect dry wood for fuel. Some people from Archale do not allow us to collect the firewood (excerpt from interview, refer to A15-IE in Annex 4).

Regarding the level of conflict, Majority of the respondents for both cases indicated unspecified level. Only 13% for Jayapani vs Arbaje and 33% respondents for Arbaje vs Archale indicated that there was still argumentation between them.

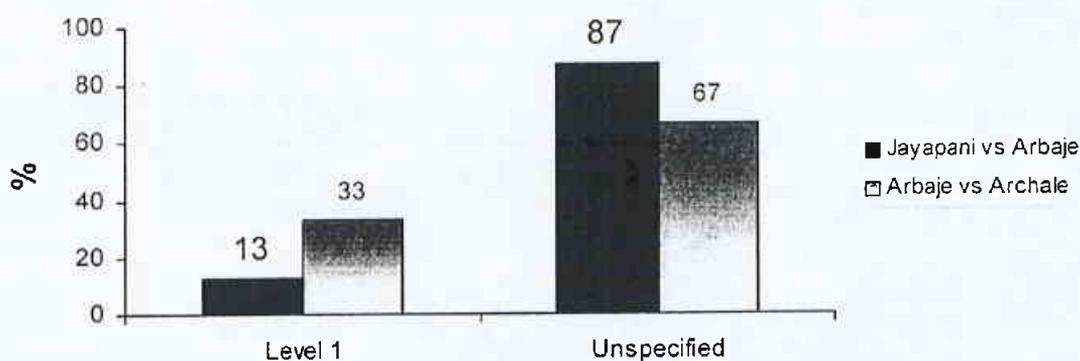


Figure 5.2.6: Level of inter-settlement conflict among other settlement

There is hardly argumentation between Archale and Arbaje, which is in implicit form (excerpt from interview, refer to A28-IE-I- L1 in Annex 4).

This mean the conflict between Arbaje and Archale is not exposed. However, it may erupt if the situation is not improved.

5. 2. 4 Conflict between DFO and Settlements

5. 2. 4. 1 Causes of Conflict

The section highlights conflict of settlements with District Forest Office (DFO) due to the handing over of Ratanpur forest to the Forest User Group (FUG) of Ratanpur. The main focus was thus drawing an attention to the conflict between DFO and Ratanpur, and conflict between DFO and other settlements. The figure 5.2.6 illustrates the causes of conflict based on the interviews with the respondents.

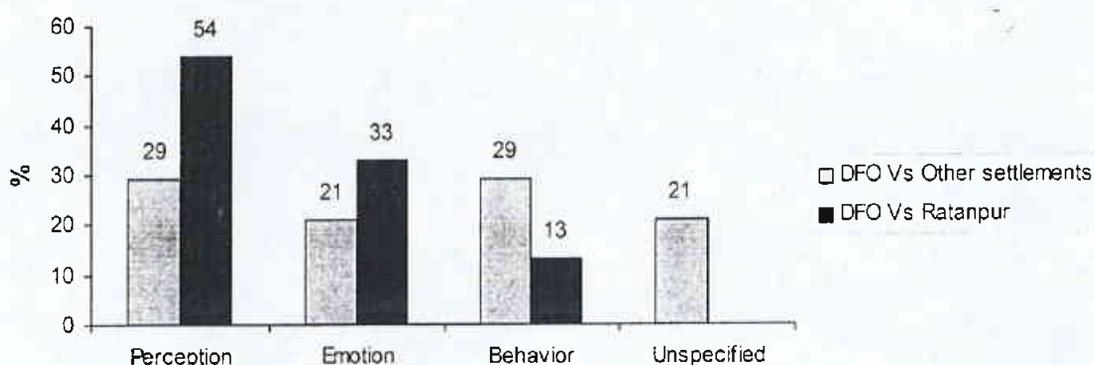


Figure 5.2.7: Causes of conflict between DFO and Settlements

Majority of the respondent of Ratanpur (54%) viewed conflict between DFO and Ratanpur as perception based and 33% argued it to be on emotional whereas 13% perceived it to be behavioral. Elaborating the main argument, respondents stated that.

We know that community forestry is based on our tradition and culture. So DFO should not forget the basic principle of community forestry. They have to decide the case in favor of us. Otherwise the forest shall vanish in future due to invasion of outsiders (excerpt from interview, refer to R11-RDFO- in Annex 3).

Since forest was handed over in 1999, people of Ratanpur could not take any forest products from the forest when petitions from other settlements were filed to DFO. And DFO partially suspended their operational plan stating that they shall not allow taking any harvests except protection work. The confrontation between them is expressed in many ways. However, the major emotional reasons stated by the respondents are,

Why did DFO not punish them although they illegally harvested the forest of Archale and Jayapani? Have they ever thought that the forest of Ratanpur has a limited capacity? It is not rational to include all users in a single forest and form an unmanageable group (excerpt from interview, refer to R14-RDFO-E in Annex 3)

They argued that people of other settlement were harvesting the products from another forests but DFO did not take any action against them. They seemed very sensitive about the capacity and managerial aspect of the forest also.

With regards to the conflict between DFO and other settlement, the study reveals that 29% of the Ratanpur respondents perceived DFO as not hearing their grievances of them. They have been appealing to DFO for last four years but the case has not been managed yet. Twenty nine percent of them believed that the confrontation was caused by the behavior of DFO. They argued that it is the responsibility of DFO to decide who should be the beneficiaries of the forest. Some of the respondents doubted the role played by DFO. They raised question why DFO intended to postpone the case and frequently used to tell them manage themselves (*Tapainharu Aamphai Milaunos*). About 21% of the respondent could not specify the reasons while 21% expressed the logic for some emotional reasons (see figure 5.2.7).

I think DFO office has not taken the issues so seriously these days. We suspect their role. People of Ratanpur are harvesting the forest though it has been suspended since long. They don't take any action promptly and try to avoid the issues (excerpt from interview, refer to A11-ODFO-P in Annex 4).

As mentioned earlier, some respondent from other settlements expressed their argument emotionally. They intended to see the Ratanpur forest as a national forest. They felt that

people of Ratanpur were not following the order of DFO to revise the their constitution while Forest Act obliges FUG to obey the order of DFO.

There was misunderstanding in the decision of DFO. Many people asked why DFO did not collapse the group when Ratanpur users did not obey the order of DFO (excerpt from interview, refer to J6-ODFO-E in Annex 4).

The perception towards DFO seemed not so negative. However, people of Archale were afraid of sharing their knowledge and practices with others. They perceived that at any time they might face the problem from DFO staff since they were felling trees and using timber without following any formal process. They took it as a potential source of conflict between Arbaje and DFO. They stated,

So far we have no conflict with DFO. I just came to know that some people complain about the issue of over harvest from our forest. We are doing best from our side. However, we have some fear whether we will be punished in this regard (excerpt from interview, refer to A26-ODFO-P in Annex 4).

The table 5.2.2 indicates wide ranges of issues indicated by different settlements as the underlying causes of conflicts with DFO.

Table 5. 2. 2 : Contentious views about the DFO

Cause	Ratanpur perspective	Other settlement's perspective
Interest	na	na
Emotion	<ul style="list-style-type: none"> ▪ Suspended operational plan without following the guided norms ▪ Compassion with the other settlement without understanding the real situation ▪ No action against illegal felling on national forest 	<ul style="list-style-type: none"> ▪ Poorly supervised while forming FUG, Inventory done at evening ▪ No collapsing of CF even if FUG cut green timber at the time of banning ▪ Few staff have motive of rent seeking ▪ Elite domination forest kept as it is.
Perception	<ul style="list-style-type: none"> ▪ Discretionary power of DFO and misinterpretation of Forest law created mistrust. ▪ Haphazardly handed over forest with out conducting extensive survey and extension ▪ The guts of FUG towards tradition is bypassed 	<ul style="list-style-type: none"> ▪ Intended to linger and avoid the case ▪ Not treated equally to all ▪ Issue of over harvesting by Ratanpur people ignored

Behavior	<ul style="list-style-type: none"> ▪ Inconsistency in the decision of DFO. ▪ Way of identifying group and conducting series of meeting is not transparent. ▪ Irrational decision showed suspected role of DFO (once formally registered the FUG and immediately suspended the OP). 	<ul style="list-style-type: none"> ▪ Played dual role (sympathized) ▪ Committed in word but not action to consider our voice ▪ Delayed in decision making ▪ Release of permission without managing the problem
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Source: excerpt from Interview 2003 (annex 3 and 4)

5. 2. 4. 2 Level of Conflict

The level of conflict between DFO and Ratanpur as shown in the Figure 5.2.8 is very interesting since 80% perceived at level 1, 7% believed it to be at level 2, while 6% and 7% perceived it at level 3 and unspecified respectively. Most of participants accused DFO staff for not supporting them while they used to come in the field for group facilitation and mediation. Some of them charged that DFO was biased to the people of other settlement since DFO did not take any initiative to formulate new group in other settlements.

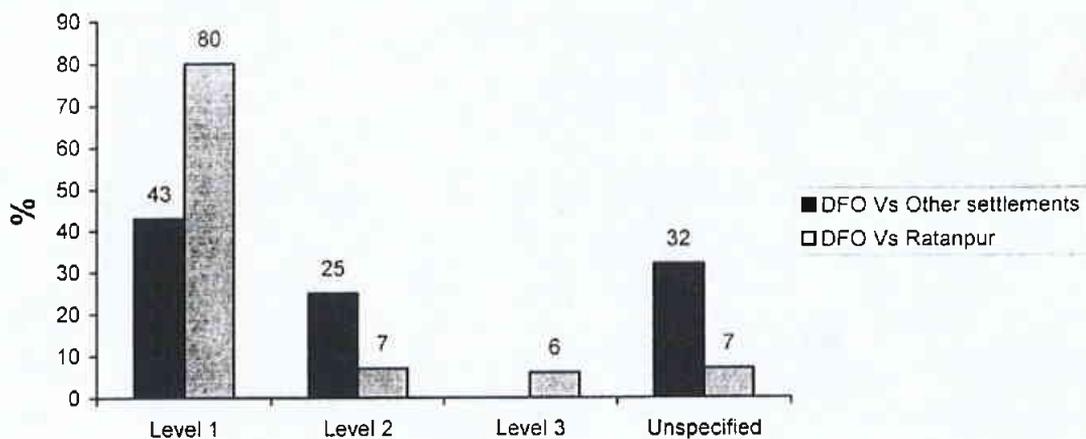


Figure 5.2 8: Level of conflict between DFO and Settlement

Respondent of Ratanpur elaborated the level 1 through following statement,

Our delegates met DFO several times and requested them to open up our forest for proper utilization. We organized many meetings even with other so-called stakeholders but problem remained the same (excerpt from interview, refer to R6-RDFO-L1- in Annex 3).

One respondent argued:

There were some disagreements at the time of delegation. They suspended our OP and ordered not to do any thing except protection. They suddenly took an action, rather than holding a discussion. They also did not take initiative to implement the agreement made by stakeholders' joint meeting (excerpt from interview, refer to R14-ODFO-L3- in Annex 3).

Regarding the level of conflict between DFO and other settlement, the figure 5.2.8 shows 43% of the respondents perceived the level at 1, 32% unspecified the level where as 25% at level 2. The figure shows that the case between them is not so serious. There are many debates and discussions while people were organized with the consultation of DFO.

We argued that DFO may correct the mistake that was caused by their subordinate staff but they are hardening and crystallizing the issue of their own kind (excerpt from interview, refer to J3-ODFO-L1- in Annex 4).

Most of the respondents from other settlements were not happy with the behavior of the ranger since he did not inform them in group assembly at the time of group formation. The way of responding to the people by DFO staff made them suspect especially Archale people. One respondent said:

I heard some of our members were invited as Tarekah by Range post staff. Formally they have not issued the letter of order yet (excerpt from interview, refer to A26-ODFO-L1- in Annex 4).

Elaborating the above statement, in group discussion, they realized that they felled many trees of *Schima* from their forest though it was not officially taken as community forest. Once some of the people were invited to understand the real situation of the cases by the ranger. Later on the case was kept pending. The situation made them confused whether the way of felling was taken positive.

5.2.5 An Integrated Model of Conflict in Ratanpur Community Forest

Figure 5.2.9 presents an integrated conflict model for Ratanpur Community Forest (see annex 10). This model demonstrates the social actors involved in conflicts. From this model it can be observed that there are mainly three categories of stakeholders, namely group of people in Ratanpur, group of people in other settlement: Arbaje, Archale and Jayapani, and District Forest Office. Within Ratanpur and other settlement there are several sub-groups identified as stakeholders. DFO is considered as outside body, which does not belong to either settlement.

The model shows the underlying cause of conflict among those social actors indicated by circle. Each circle shows the fraction causes. For example, we can observe the conflict between Archale and Arbaje caused by interest and unspecified equally. Another illustration can be taken from conflict between Ratanpur and other settlement where interest based cause is more dominant followed by behavior and perception. Within Ratanpur perception and behavior determine most of the conflict while interest plays smaller role.

Another thing that is illustrated by this model is the level of conflicts. The level corresponds with the size of arrow. It is obvious that the conflict between Ratanpur and other settlements is in a variety of levels from unspecified to higher-level i.e. level 3, 6 and 7 indicated by the thickest arrow. Broken arrow points out that the level is unspecified due to its potentiality in nature.

Finally the direction of arrow indicates which social actors perceive the conflict. If the arrows point towards a particular social actors the point of origin of arrow perceives conflict towards the direction of next stakeholders. For example, take a look at inter-settlement conflict between Ratanpur and other settlement. There are arrows of four categories in both settlements. It means respondents from both settlement perceive conflict between them. Likewise, people of Jayapani perceive unspecified level of conflict with Arbaje while respondents from Arbaje perceive both unspecified and level 1 conflict.

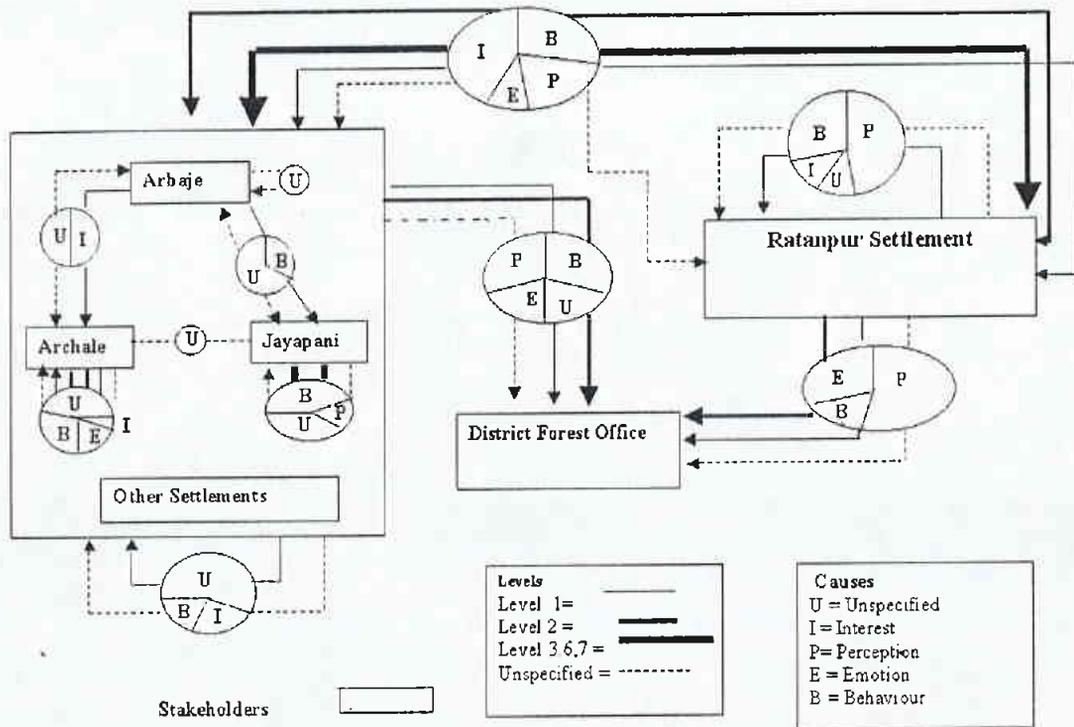


Figure 5.2.9 An Integrated Model for Conflict in Ratanpur Community Forest

5. 3 Conflict Management

5. 3. 1 Relationships among the Conflict Variables

The Cross tab tool from SPSS 11 shows the relationship among the variables. Here the relation of options of conflict management with causes and level is described.

5. 3. 1. 1 Relationship between Causes and Level of Conflict

This section concisely demonstrates relationships among different components of conflicts. Table 5.3.1 shows the relationship between the causes and the level of conflicts for Ratanpur community forest. The number in the table represents frequency. For instance, at level 1 twelve times interest based conflict was reported as an under-lying cause of conflict.

Table 5.3.1: Relationship between causes and level of conflict*

Levels	Causes					Total
	Interest	Perception	Emotion	Behavior	Unspecified	
Level 1	13	15	12	8	-	48
Level 2	5	5	1	12	-	23
Level 3	6	3	5	7	-	21
Level 6	1		1	2	-	3
Level 7	-	-	-	2	-	2
Unspecified	2	8	1	8	28	47
Total	26	31	20	39	28	144

The table reveals that perception and interest based conflicts in the study were mainly associated to the level 1, behavior was mainly with level 2 and 3, and about one fourth of behavior and one fifth of perception based conflicts could not be specified by the respondents. It means it was not so serious.

Similarly, two striking points can be inferred from the above table. Firstly, it is evident that, behavior was the highest cause of conflicts perceived by respondents, which reached up to seventh level, which may be difficult to manage. Out of total conflict statement, one-third falls upon level 1 and about 1/3 rd of conflict could not be specified. Level two and three covers about one third of the conflicts.

5.3. 1. 2 Relationship between Levels and Options of Conflict Management

The relationship between level of conflict and options for management is depicted in the table 5. 3. 2, which helps understand the possible indication for the future of conflict management.

* Please note that even though the total number of respondents is only forty-four from four settlement, the frequency of particular cause and level might be higher than forty four because each respondent indicated more than one conflict field

Table 5. 3. 2: Relationship between level and option of conflict management

Levels	Options						Total
	Consensus	Compromise	Accommodation	Force	Withdrawal	Unspecified	
Level 1	12	16	15	2	3	-	48
Level 2	7	6	5	4	1	-	23
Level 3	2	10	3	5	1	-	21
Level 6	-	-	-	3	-	-	3
Level 7	-	-	-	2	-	-	2
Unspecified	10	1	3	-	2	31	47
Total	31	33	26	16	7	31	144

From the above table it is clear that most of the conflict falls in level 1. and can be managed through adopting consensus, compromise and accommodation strategies while level three conflict is argued to be managed through compromise and followed by force. Those having no specification level found unspecified options. The relative frequency in compromise strategy followed by consensus and accommodation shows their priority on the options to manage the conflict respectively. Of total unspecified level of conflict two third were not found any options of management while about one fifth be managed through consensus.

5. 3. 1. 3 Relationship between Practices and Options of Conflict Management

The table 5.3.3 shows the relationship between practices and options of conflict management. In informal and alternative dispute management practice there are possibility of using all possible strategies except forcing in ADR. Forcing the disputants parties by village leaders found more common and followed by compromising - loosing and gaining strategy. For formal practice, consensus and accommodation strategies were completely ignored. Forcing strategy through which counterpart's interest is completely ignored found to have more common followed by compromise.

Alternative dispute resolution strategy, negotiation and mediation, was mainly associated with the accommodation and compromise followed by accommodation. There are many possibilities of using all strategies in ADR.

Table 5. 3. 3: Relationship between practice and options

Options/Strategies	Management Practices		
	Informal	ADR	Formal
Consensus	8	13	-
Compromise	10	14	12
Accommodation	5	7	-
Force/ Coercion	7	2	21
Withdrawal	8	2	5
Total	38	38	38

5. 3. 2 Conflict Management Options

Owing to the wide range of conflict situation, it is important to investigate the way those conflicts were being managed. The section gives an illustration of what conflict management options were perceived by the respondents to minimize or manage conflict.

5. 3. 2. 1 Options for Intra-settlement Conflict Management

Intra settlement conflict was found in three-settlements namely, Ratanpur, Jayapani and Archale. Arbaje people believed that they don't have any conflict within the settlement. The options/ strategies of conflict as indicated by respondents are presented on the following figure.

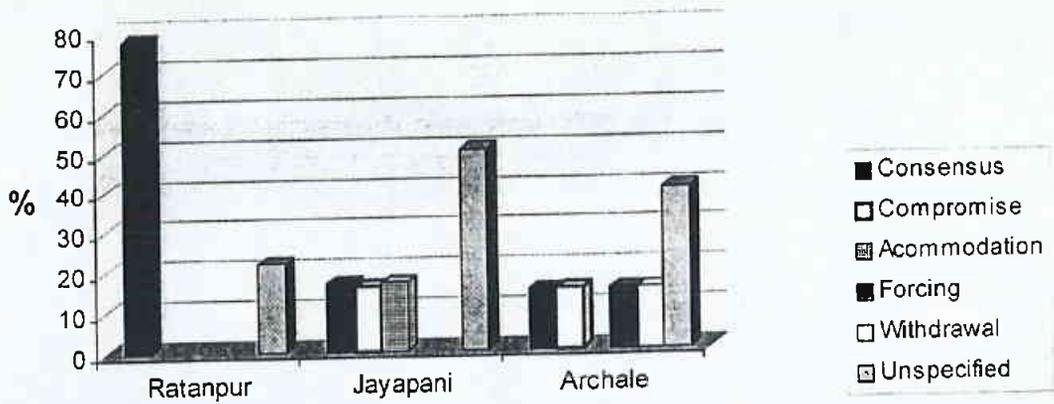


Figure 5.3.1 Options of Intra-settlement conflict management

Figure 5.3.1 reveals that for intra-conflict in Ratanpur, majority (78%) of the respondents perceived consensus to be the best strategy to manage the conflict. This means that any social issues regarding the community forest can be managed through the consensus. Only 22 %, one fifth of respondents unspecified the options.

In Jayapani, 50% of the respondents could not specify the options while about 16 % of the respondents perceived accommodation, consensus and compromise as be the better strategies respectively. Similarly for Archale, about 40% of the respondents did not specify the options. The remaining of the respondents argued equally on force, withdrawal, compromise and consensus.

Interestingly, among the other settlements, 80% of the respondents unspecified the options. It is due to unspecified causes and level of conflict. In other words, among them the conflict is not so serious. Very few responses were in favor of consensus, compromise and withdrawal. No one perceived force to be used for managing the conflict.

5. 3. 2. 2 Options for Inter-settlement Conflict Mangement

Inter-settlement conflict between Ratanpur and other settlement is the main concern of the research. However, options of inter-group conflict between DFO and other, and DFO and Ratanpur are also analyzed and discussed.

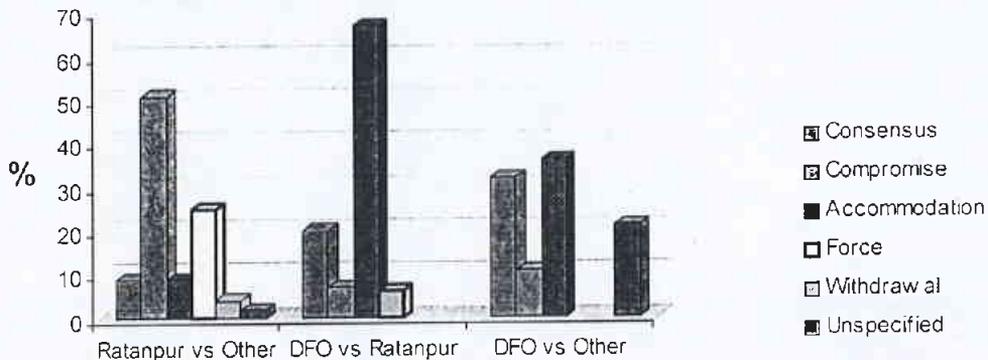


Figure 5.3.2: Options of inter-settlement conflict management

The figure 5.3.2 shows different options of conflict management for inter group conflict. For Ratanpur vs others, most respondents (51%) believed that there should be a compromise among the conflicting parties. And about 25% suggested for forcing. To have compromise there should be the favorable situation for discussion. They perceived that these settlements were not in the position of holding collective meeting without initiation of DFO. If some body calls for meeting, others do not participate. There needs facilitating. When respondents asked for the reason for preferring forcing, most of them believed that the problem is so serious. There is no favorable situation in which disputing parties could hardly manage the problem themselves. Some elites in other settlements were not interested to sacrifice the forestland in which it is claimed to have their own pre-existing right.

About the conflict between Ratanpur and DFO, majority of respondent (67%) from the settlement argued that the problem with DFO is trust building, which can be managed by maintaining good relation with DFO, i.e., accommodation. They intended to build

organizational relation without harming them. 20% of the respondent, on the other hand, believed that working in a collaborative way through consensus helps in minimizing the problems. From the result it seems that respondents of Ratanpur do not want to tussle any more, rather they want to keep good relation with the agency of Government, DFO.

Similarly the conflicting situation between DFO and other settlement is also shown in Figure 5.3.2. About 36% of the respondents preferred to follow the accommodation strategy while 32% believed in consensus and about 21 % did not specified the options. It shows that building consensus through maintaining good relation with DFO is believed to be the more viable strategy for them to solve the problem of membership and scarcity of forest products.

5.3. 3 Preferences to Conflict Management Practices/Mechanisms

In the study area, three methods of conflict management were found. These were informal practices, formal management practices and negotiation and mediation based alternative dispute resolution.

In informal practices village leaders, *Bandit Baje*, elderly people, teacher, and *Mukhiya Kaji* (traditional leader defined based on elite of *Rana* regime) acted as a mediator. People used to say that simple case of quarreling, separation, rape, attempt murder, suspected thief, access on forest resources were managed informally.

Formal CM practices, people used to follow litigation in which cases were filed in judicial offices of government, those related to natural resources, court, District Administration Office and VDC Office, Police Office. They all are formally working under a governmental regulatory framework. Since 1998 the Local Self Governance Act empowered VDCs to deal with conflict cases and they are actively involved in conflict management.

The third one is found some how informal but that has maintained some official records of cases. They have formed a formal committee or the committee assigns a person to act as a

mediator, arbitrator, facilitator, who have given some authority to manage the conflict. Sometime disputing parties meet directly and reach mutual agreement.

To identify respondents' preference on these practices they were asked for ranking. Their preference is depicted in the table 5. 3. 4.

Table 5. 3. 4: Preference to conflict management practices/mechanism.

Practices	Perceptions/ Response					
	Member (n= 14)		Nonmember (n=30)		Total (44)	
	IRR*	Rank	IRR	Rank	IRR	Rank
Customary Law/ practices	0.71	II	0.75	I	0.71	II
Alternative Dispute Resolution	0.79	I	0.75	I	0.75	I
Formal Practices	0.5	II	0.48	II	0.52	III

* Index of Relative Ranking

The table reveals that people having no membership with any Forest Users Groups mainly preferred both customary practice as well as negotiation or mediation based conflict management i.e. Index of Ranking IRR= 0.75 while formal members of FUG gave first priority to second practice, i.e. alternative dispute management. In aggregate, negotiation based practice is the most preferred and the formal practices under judicial system of government ranked at the least in the study area. However, in-group discussion they argued that one option never be perfect. The nature and complexity of issue may decide which would be the better option. However, they perceived that people intend to go through informal way initially. However, there was some exception in Jayapani.

A respondent took his position while he was requested to adopt the decision of Gaunsava about the sex scandal of his son with scheduled caste. Although his son who was blamed for the scandal accepted the case but his father never agreed on and decided to appeal the case in court. Local assembly intended to divorce by paying certain rupees to the girl though she has baby. Informal decision did not work at that time.

DFO staff while asked to present their view about better conflict management practice, most of them (80% where n= 12) preferred to alternative management practice. However, they argued that for complex issues of natural resource (forest), it might not work since the decision under this practice is not legally banned.

To analyze the trend of cases that were formally filed in court and semi-judicial offices of government, the number of cases registered for last five years was recorded from respective offices, which are shown in table 5. 3. 6. Except DFO, not all cases and complaints are natural resource related.

Table 5. 3. 5 Cases filed in judicial and semi-judicial offices (2055/56- 2059/60).

Fiscal year	DFO	CDO-	District Court	LRO*
055/56	9	27	458	3348
056/57	15	18	408	2995
057/58	3	17	315	2590
058/59	2	3	270	2236
059/60	2	2	260	2052

Source: collected from concerned offices, 2003, April

* All complaints and cases are included

The above table shows a decreasing trend of the cases in all offices. However, in 056/57 the number of cases in DFO was increased. About the reasons the DFO staff believed that there might be more controlled motive staff who used to prefer on managing conflict through formal process. One field staff at tea stall innocently expressed his view about the cases,

It is the decade of community forest. We should also follow the tradition and norms of the people since we have to work with them. It is hard to play dual role of police and extension agents. We don't care so much if the extent of forest crime is low. In an informal discussion with DFO staff, some of them said that they did not prefer to proceed all cases in a formal way since they used to face many hindrances in the field as well as in the District Attorney Office. They

realized they had a little knowledge on how to handle the cases so that it could be strong from their side.

Decrease in the number of cases in formal judicial offices may have several reasons. However, during the office visit, mid level staff (n= 15) from different organizations were asked to explain the major reasons based on their perception and experience. Most of them (70%) indicated the security problems that led more or less an absence of government representative in the field. People, on the other hand, might have threat from Maoists since they are trying to create mistrust in existing legal mechanism of government.

5. 3. 4 Perception towards Formal System of Conflict Management

To understand the perception of respondents about the formal mechanism of conflict management, a simple checklist type of questionnaire was asked with the respondents. The statements were designed after discussing with the focus group discussion with the representative of stakeholders. Table 5. 3. 6 shows the respondents perception towards formal system of conflict management.

Table 5. 3. 6 Perception towards formal system of conflict management

Statements	Response (N=44)			Total
	Agree	Disagree	Don't know	
More expensive	31 (70%)	3 (7%)	10 (23%)	44
Delay in decision	34 (77%)	2 (4%)	8 (18%)	44
Hindrance/ more formalities	29 (65%)	4 (8%)	11(25%)	44
Not easy access	24 (54%)	15 (34%)	5 (11%)	44
Political intervention	23(44%)	8 (18%)	13 (29%)	44
Influence of power and money	26 (59%)	7 (15%)	11 (25%)	44
Less transparency	18 (40%)	13 (29%)	12 (27%)	44
More discretionary power to government offices	20 (44%)	6 (13%)	18 (40%)	44

Source: Field survey, 2003.

The table shows that more than 50% of the respondents perceived formal system of conflict management as more expensive, time consuming and more hindering. There can be an influence of power and money. About 40% of the respondents agreed that there is political

intervention, less transparency and more discretionary power of government officials. About 34% did not agree to have less accessibility. It may be because of presence of VDC and police post adjoining to VDC. About the discretionary power, 40% of total respondents did not give any response.

5.3.5 Reasons for Preferring Alternative Dispute Resolution (ADR)

Respondents were asked to put their reasons for preferring alternative dispute resolution. The following reasons pointed out as the strengths /opportunities in the ADR. These points were ranked on the basis of respondents' preferences by calculating Index of Ranking (See table 5.3.7).

Table 5.3.7 Reasons for preferring ADR techniques (N= 44)

S. No.	Reasons /Statements	IRR*	Rank
1	Both disputing parties can be benefited (Conflict management builds upon shared interest)	0.66	I
2	It follows interactive and more flexible process	0.62	II
3.	Foster a sense of ownership (sometimes disputing parties themselves become facilitator, mediator)	0.60	III
4.	Less expensive	0.56	IV
5.	Decisions are made in time.	0.53	V
6.	It is based on social settings. It respects local tradition and culture while taking decision.	0.51	VI

* Index of Relative ranking

The table reveals that the strongest point of preferring ADR is the decision, which is built upon the shared interests of disputing parties. Generally it follows consensus and collaborative approach while taking decision. The average reasons are feeling of a sense of ownership, interactive and less expensive. The least but also important reason is learning based approach used in the techniques, which has 0.51 index value. However, respondents in group discussion argued that ADR is neither always feasible nor effective. Furthermore, unless the disputing parties trust each other and legal binding of decision ignored, the intervention of third party for mediation or bringing them in negotiation table is skeptical.

CHAPTER 6

LESSON LEARNT AND DISCUSSION

This chapter provides discussion of the findings that have been presented in the previous chapter. The discussion is organized into six sections. The way people defined conflict is discussed first. Stakeholders' dynamics in conflicts are discussed in the next section. In section three, discussion is mainly directed to the underlying causes and level of conflict with its applicability with Glasl's model. The subsequent section is devoted to discussion on conflict management options. In the last section, it focuses on the current debate on collaboration and its potential use in community forest conflict.

6.1 Understanding Conflict

This study indicates that the respondents perceived conflict as a "problem" which is caused by management and utilization of scarce resources, power difference and heterogeneity of social structure. For example, people of other settlements are mainly fighting for getting timber and sharing equal power with the people of Ratanpur. Additionally, people of Archale are not able to form community forest due to oligarchy of the elite. The situation is consistent with the observation of Coser in Walker and Daniels (1997), Marx in Turner (1986) and FAO (2000a) that conflict is a struggle or disagreement over something inter alia values, interest, scarce resources.

Conflict sometimes is hardly emerged because stakeholders do not notice the condition. It is not specified and remains in latent form. Similarly, low-level conflict is perceived negatively. For example, conflict within Ratanpur that is still in the form of "hardening stand points and debate" (Glasl in Jordon, 1997). On the contrary, it is logical to say that respondent views higher-level conflict rather negatively. Some strategies threat and some destructive bowl occur at these levels. They match with Glasl model.

The way people define conflict (i.e., whether it is negative or not, whether it is negotiable or not) – is greatly influenced by its level. The higher the level the more likely that the conflict

is viewed as negative, destructive, thus to be avoided and vice versa (Yasmi, 2002). Generally conflict carries negative connotation and an obstacle of development, which is not always true. Because conflict is not only unavoidable, but also desirable to the extent that it can lead to negotiated, innovative agreements among stakeholders or the groups. The positive result is expected to occur between Ratanpur and other settlement. For example, an understanding of exchange of forest products between Ratanpur and Archale is one of the progressive decisions.

6. 2 Stakeholders dynamics

6. 2. 1 Stakeholders: interest, impact, and relationship

Forest resource of Ratanpur has interconnected the people of four settlements in multiple dimensions. The incompatibility of interest of Ratanpur and other settlement such as maintaining dominant position of Ratanpur people based on the traditional use right and claiming on the forest without contribution from other settlements perceived as a seed of conflict. Such incompatible interest, which is obvious since the society, is itself a space of such unequal and complex social relationship (FAO, 2000a, Buckles & Rusnak, 1999).

Pluralism (a situation of multiple institutions, norms, ideas, values, culture) has positive and negative impacts on community forest that cannot be eliminated but be reduced. For example, the level of awareness towards community forest is increased and at the same time intra group harmony is developed and reinforced. The degree of conflict and the relationship, on the other hand, has become poorer and worsened in Ratanpur vs. Jayapani and DFO vs. other settlements. These resultant impacts support the arguments of Upreti (2001) and Hellström (2001).

Conflict is constantly moving and changing in terms of its causes and level (Glasl in Jordon, 1999). The relationship between stakeholders and extent of conflict is also not static. In discussion, the respondents of Ratanpur expressed that they were happy enough with DFO at the time of handing over the forest, the relationship was quite good and not any incompatible

behavior existed. Later on the relationship is disturbed while DFO decided to suspend their operational plan. Stakeholders involved in conflict changed in the course of time. People of Jayapani started debate appealing to DFO and Ratanpur. Subsequently it expanded to four settlements and now it was not only confined to the local level but also to district level since DFO was also reported as counterpart. Hence, The consequences may affect additional stakeholders and take place in wider scales such as regional, national. Ramirez (1999) and Buckles (1999) discuss similar dynamic situation of relationship in their studies.

6. 2. 2 Influences and Importance (I²)

The power of stakeholders and its influence helps analyzing and understanding of how stakeholders affect the policies and institutions and looking at the challenges that need to be faced in conflicting situation (Mayers, 2001). In the study, the people of different settlements are found to have different level of influence and interest. The higher importance and influence of the stakeholders shows higher stake in Ratanpur community forest. For example, people of Ratanpur who have higher I² need to have major concern for developers and planners and implementers. The higher influence of DFO is relatively dangerous for failure of community forestry program since there is possibility of misuse of power. The 'spillover effect' of enforcing such power was experienced since it was perceived as a counterpart rather than mediator.

The analysis shows that people of Archale settlement have relatively low influence and importance. They can be considered as secondary stakeholders since they have indirect stake in the outcome of the conflict. The reason is that the elites people who are supposed to have more influencing power, are not interested to form a community forest since they were blamed that they have been maintaining on *de-facto* ownership over some patches of national forest. They were often found allies or sympathizers with other stakeholders rather adversary. DFO, on the other hand, had no direct interest but indirectly affected by the outcome of conflict. The office can be considered as tertiary stakeholders.

Some people of Jayapani mainly *Dalit* (minority) and Arbaje, perceived that certain skill is associated with high influence. In platform (*Chautari*), people from *Dalit* (minority) innocently told me that they didn't know why Ratanpur people had restrained them from the forest. They felt that that they could not read and write and were relatively poor, they could not become big people (*Kina Ratanpurale Ban Rokako Ho Thaha Chhaina, Saiad Thula Manche Banna Padnu Pardacha Holla, Tarra Hami Garib Lai Aaudaina*).

It means education and wealth were perceived as the source of power. The distribution of power with different stakeholders shows imbalance. Hence, from the stockholder's perspective, conflict in community forestry can be viewed as a dynamic balance of different interest, power and relationship.

6. 2. 3 Stakeholders' Well Being and Criteria

Assessing the well being of the stakeholders for the sustainable forest management has been widely accepted (Colfer et. al., 1999). Prioritizing the well being has become urgent to proceed with group formation process in community forest. The dependency of the stakeholders on forest for their livelihood is the most important criterion that could be a primary standard for defining FUG. Understanding stakeholder well being in the study means people of Ratanpur and Jayapani keeps more stake than others. CIFOR criteria developed by Colfer et. al. (1999) match with the context of Nepal's community forestry. The criteria stated in Forest Regulation 1995 also match with the finding. However, other criteria (land adjoining to the forest and damage from the wildlife) should be kept in mind while forming the FUG. The range of index value of all criteria identified by respondents falls between 0.33 and 0.66 in aggregate. It means they should be kept under consideration while forming forest user group.

The resulting analysis of stakeholders is capable of revealing critical entry points for managing conflict as well as searching potential risk. For example, the analysis shows Ratanpur and Jayapani people are in the vicinity of the forest and their well being status in relationship to Ratanpur forest is almost the same, i.e., more than average. Contrary to this,

people of Arbaje were found more affected but less well off and less influential. Thus, the weaker settlement needs to be empowered and be encouraged first by developing a conflict management strategy. Searching alternatives to cope with the needs of Arbaje can bridge the gap to some extent.

6. 3 Underlying Causes of Conflict and Applicability of Glasl's Model

Not only interest is the prime causes of conflict but perception, emotion and behavior of the stakeholders also take into account when looking at conflict situations. A study of Indonesia cited out by Yasmi (2002) also finds the similar notion. Emotion and thought are crucial to the course of developing conflict (Goleman, 1995). So developers and planners should change their ways in devising appropriate policies to deal with community forestry conflicts.

Glasl's model is groundwork for studying conflict in a systematic way, which helps focus on issues that triggers a conflict due to emotion, perception, and interest and eventually shapes the behavior of the stakeholders. However, I feel some drawback since it assumes rigid boundaries between the causes but conflict is associated with many interacting causes (see excerpt R9 Annex 3). Besides this, the admixture of two causes creates difficulty that makes some room to the researcher for further verification. In some cases it is hard to differentiate the causes whether it is perception or behavior (excerpt interview A212, first sentence perception and last one is behavior). Yasmi (2002) in Indonesia has also perceived similar problem. Some interacting causes in the model rather than strictly separating into unconnected cause would bring simplicity in analysis.

6. 4 Level of Conflict and Applicability of Glasl 's Model

Conflict might have different levels of intensity, depending on the situations and issues. The level of conflict can be seen as a continuum ranging from very low to very high i.e. it can be in the form of "straight argumentation" (e.g., conflict between Arbaje and Archale), "debates and polemics" (e.g., conflict between Ratanpur people and other settlement), and "limited strategies of threats and destructive blow" (e.g., conflict between Jayapani and Ratanpur to

some extent). The knowledge of the level of conflict is very important to seek out its settlement (Pendzich et. al., 1994; Nader, 1995; Ayling and Kelly, 1997 and FAO, 2000a). Different strategies and approaches for conflict resolution are required for different levels of conflict.

Glasl's nine-stage model (Glasl in Jordon, 1999) is a useful conflict analysis tool and a valuable mean for sensitizing people about the mechanisms of conflict escalation. This model assumes to have a progressive linear development of conflict intensity, meaning that a conflict develops from level 1 to the subsequent level linearly or spirally. However, it jumped up from 1, 2 to 3 and directly to 7 in the conflict between Ratanpur and other settlement. The level of conflict among and between the stakeholders was found to be different; it was based on a mental image formed in individual respondents by the conflict events.

The model is unable to reflect the policy sphere of community forestry and local governance. Local Self Governance Act (LSGA) 1998 and Forest Act 1993 are underway in Nepal (HMGN 1998 and HMGN, 1993). Each stakeholder tends to make claim on forest resources as far as possible because obtaining ownership means having more access over the use of forest resources. The typical example is the way stakeholders showed their desire on many areas of forests both in Mirlung and Chwokchisapani VDC. However, there are some contradictory provision between Forest Act and LSGA (Belbase and Regmi, 2002). For example, section 68 of LSGA stipulates that natural heritage including forest is the property of the VDC but Forest Act and Regulation do not grant such authority anywhere. The model prevents us from knowing the policy context that may induce conflict between Ratanpur and Chwokchipani VDCs about who has access to where. Consequently what is needed is to accommodating policy sphere for managing the conflict.

Conflict might not always escalate but in some cases it could also de-escalate. For example, respondents perceived that there was a serious threat when a small violence between Ratanpur and Jayapani in the issues of cutting forest. The degree of conflict between Ratanpur and DFO perceived by respondents was slightly increased when DFO suspended their operational plan but it became cooler after getting permission from DFO to collect

forest products. Daniels and Walker (1996) argue that de-escalation in conflict means improving the situation of conflict. However, I found the period is a resting stage of conflict that might be explicit again at higher level.

6. 5 Conflict Management

The study seeks multiple options for conflict management. The fact is supported by FAO, (2000b) "No single mechanism can be applied in any conflict situation as different situation and context might require different mechanisms". The higher-level conflict offers compromise and forcing strategies (e.g. conflict between Ratanpur and other settlement). The finding is supportive to the study of Yasmi (2002) since government who has power to force, is suggested for higher-level conflict. The lower level conflicts keep room for every option. Low-level conflict offers more communication and dialogue with the counterpart and searches for win- win solution through collaboration, consensus, and intends to maintain a good social relationship. For example, conflict within the settlement and conflict between DFO and settlement. The conflict perceived due to the behavior of stakeholders moves to higher level and offers more formal process. However, people do not prefer the formal practice. Their perception was similar to the findings of Upreti (2001) since it is believed that the processes and practices are not operating in the principle of good governances.

The negotiation based alternative conflict management preferred by the majority of respondents shows all possibility of using multiple options. About 64% of employees of Federal Government of USA show their willingness to use ADR (O'Laughlin, and Schumaker, 1998). However, I think it can work if both parties agree to sit together and offer to take help of third parties. The third party, a mediator, facilitator, arbitrator, or adjudicator, it depends upon the situation of conflict. It may be lengthy if both sides do not demonstrate willingness to take and give their positions. Although most of the respondents preferred the ADR stating many reasons, such as decision is taken under the shared interests of disputing parties (see table 5.3.8), there might be several barriers in the implementation of the process. One of respondents said,

What would we do if both stakeholders do not accept the decision? One could appeal to the formal office though it was managed ADR.

This argument is similar to that perceived by the employee of Federal Government of USA as a drawback of ADR (O'Laughlin, and Schumaker, 1998).

Methods of conflict management are not mutually exclusively (Lewis, 1996). It means failure of one practice does not affect the other methods. The number of cases decreasing in the judicial office does not mean that it would reach at zero level. It depends upon the nature of cases and respective social settings. Under complex situation, people go directly to the court. However, they didn't register the cases not only for security problem but also for many reasons, such as expensiveness of the cases, delay in decision, influence of power and money, inaccessibility to the judiciary etc.

The influencing power of DFO for managing conflict was not properly exercised. Respondents perceived controversial role of DFO. The initial motive for using formal measure rather than alternative method such as instructing FUG to include other settlements, prescribing for clarification, endorsing for taking back community forest (see table 3.2) made them suspicious in the eyes of Ratanpur. Similarly, people of other settlements perceived that DFO did not take action against Ratanpur for four years though they committed an offence.

The situation is more complex and subtle than it usually appears. It urges an intervention of third party to assist them, perhaps the anticipated changes can be achieved quicker. DFO can hardly maintain relative stability as a mediator since the motive of DFO staff was still to bypass the issue until and unless the users of Ratanpur request to renew their operational plan. Just creating pressure for the movement may not change the position of user group since it has been crystallized for four and a half years. The support of both VDCs namely Mirlung and Chwokchisapani and NGO like FECOFUN and consultants can expect to improve the situation.

6. 6 Conflicts, Collaboration and the Future

Conflict management is a sensitive issue. Dealing with it requires special knowledge and skill. It is often argued that consensus based collaboration would lead to better management of the forest resources (see table 5. 3. 5). This notion is also supported by Gray in Daniels and Walker (1999). In other words, there is common perception that participating all stakeholders would be a proper approach to the success of community forest management. However, the problems associated with natural resource especially community forest are complex since multiple stakeholders are embedded with a situation of pluralism, as discussed by Ramirez (1998). The Ratanpur community forest is no exception to the situation (see annex 3).

Acknowledging, recognizing, and incorporating the views, voices, interests, and concerns of Arbaje, Archale, Jayapani and Ratanpur people for managing conflict through collaboration is the fundamental pre -condition for social justice and equity and essential to ripen the situation for negotiation. Provided the situation, a wide range of learning and communication skill is necessary that helps stimulate thinking critically and enables them on sharing information to reach formal agreement.

The problems associated with the Ratanpur forest are implanted with many social and cultural taboos. Coping with one complexity doesn't mean that a new problem will not emerge. Moreover, adopting collaborative management itself can generate new problems or old problem may transform into a new challenge. What is needed to deal with the conflict is not only focus on the collaboration but also searching a broad based holistic and integrated approach that matches with the given conflict situation. Getting ready made or ' unique and objective' solution for managing conflict in natural resources is hard to achieve (Hellström, 2001, Walker and Daniels, 1997).

The interactive conflict management which is based on social learning and adaptive management propounded by Upreti (2001) would lead to an improvement in substantial, procedural, and relationship dimension of conflict if applied. The plan and action developed

after analyzing the conflict situation by concerned stakeholders, followed by its implementation may reduce confrontation among the stakeholders. The reflection over the outcome can provide a feedback for its modification. However, in the study, the agreement and plan proposed by stakeholders in consultation of DFO could not be implemented. The possibility of organizing meeting without facilitation from other is hardly possible (see the level of conflict in Annex 3 and 4).

Managing not only of Ratanpur forest but also developing strategy and plan to manage all the forests upon which people of these settlements have direct or indirect relationship in terms of their well being, can be one practical option. But the issue will extend to another VDC namely, Chwokchisapani and other stakeholders may emerge. A great deal of mistrust among stakeholders calls for mediation group since neither Ratanpur nor the others are interested to call meeting. In this regard, the role of Non-governmental Organization (NGO) and VDC could be pivotal since they can contribute through advocacy, education, facilitation, mediation, and arbitration in resolving the dispute. Although Local Self-Governance Act 1998 under section 33(1) provides some legal authority and functional responsibility to deal community level conflict, it could not be instrumental in the area since their poor institutional arrangement. Therefore, strengthening and empowering the local organizations and providing some dispute management skill to them can be a cornerstone for managing community forestry conflict.

CHAPTER 7

CONCLUSION AND RECOMMENDATION

In this chapter conclusions and recommendations are drawn based on the research findings and discussion in the previous chapter. Recommendations are presented with an intention to provide two things. In the first place, it is to offer some insightful alternatives for government authority and concerned institutions in dealing with community forestry conflicts. Secondly, it is also to give several options and directions for future research in the field of community forestry conflicts.

7.1 Conclusion

Conflict is pervasive and common phenomena in community forest management. A certain kind of change produces conflict if that change is perceived as incompatibility. For example, transferring management responsibility of state to user group for management of forest and limiting the usual right of the settlements generated the conflict in Ratanpur. This implies that in all community forests the notion of conflict must be carefully taken into account in such a way that it is anticipated and mechanisms are prepared to deal with it so that positive social changes and improvement in forest management can be achieved accordingly.

Community forestry comprises of multi-stakeholders having pluralistic situation since their level of interests, ideas, understanding and acts differ among and between the groups, which are embedded with the unequal and complex social and cultural settings. The dimensions do not necessarily confine on its original situation. This study shows DFO has in the course of time appeared as counterpart. It means as the context of conflict changes to wider social and environmental settings, the social actors involved are also expected to increase.

The processes of identification and formation of Forest User Groups (FUGs) are very crucial for the success of community forest. Stakeholder analysis provides a basis for mapping their

situation in terms of power, needs and expectations, relationship and well being. Prioritizing stakeholders on the basis of these attributes help develop working strategy for intervention in community forestry. Among four settlements Ratanpur and Jayapani have more influence and importance and their relative well being status is also high. The cost of conflict does not necessarily matches with their respective well being. The question who pays greater cost of conflict and who counts the most does not mean the same. For example, the cost of conflict paid by Ratanpur and Jayapani perceived slightly low as of Arbaje. How the cost can be mitigated is one of the strategic challenges for resource managers (DFO).

Interests are the crucial cause of conflict but also emotions and perceptions are becoming important constituents of conflict stimuli. In other words, it is not just differences in interests but also differences in emotion and perception that result into a conflict (see Figure 5.2.9, an integrated model of conflict). Furthermore, the relative deprivations, expectations, legal pluralism (*de-facto* and *de-jure*) often involve as potential causes of conflict.

The intensity of conflict can take different levels, thus can be seen as continuum. Nonetheless, a conflict does not necessarily develop progressively or linearly from a lower to the higher level, instead in some cases it might develop from a low level to a very high level very rapidly. For example, physical assault between Ratanpur and Jayapani escalate the conflict to an extreme. However, conflict does not only constantly escalate but de-escalation (getting in lower intensity) on its degree also occurs. Consequently conflict should be viewed dynamic process.

Intra-group conflicts are relatively not so complex as inter group conflicts. However, the potentiality of intra-group conflict like in Archale is expected to encounter due to differential social strata. In a "traditional" community like one in Archale, elite dominance is still rampant and dominated people tend to be reluctant to take different side from their leader or elite. For example, about one third of Archale people have an access to and control over many patches of Archale forests but two third of people do not oppose the issue of equal right over the forest. Such covert form of conflict needs to be studied.

The ways of managing conflict in forestry are informal, formal and ADR. ADR is perceived as a more preferred, which keeps room to tab any strategies or options. Though it follows more interactive and participatory process it cannot substitutes the other systems. The belief of society in customary laws and practices is still strong. Under the complex situation, endorsing the case in judicial office is often urgent that is possible only in formal process. Decreasing the number of cases in judicial offices and viewing them negatively such as time consuming, costly and having influence of money and power may bring confrontation in the practice. What sort of role that expected to play by DFO in relation to conflict in community forestry, is a pragmatic issue. However, building trusts and harmonizing with people are essential to ripen the situation negotiable.

Choosing “the best” conflict management options is strategic. It must be realized that there is no single panacea for resolving any kind of conflicts. Preferred conflict resolution mechanisms as perceived by stakeholders involved in the conflict are useful to be considered in an attempt to manage the conflict. For example, higher-level conflict offers more compromising strategy and lower level mainly prefers to consensus option.

6.2 Recommendation

The following recommendations are formulated based on the results, analysis, discussion and conclusions that have been presented. These recommendations have implications both on policy and implementation level and are intended to serve government and research institutions.

1. Recommendations for government regarding community forestry conflict are elaborated below.

Policy level:

- It requires to take into account the notion of emotions, perception and behavior of stakeholders in trying to understand and address community forestry conflict.

- Government should devise a detail framework/practical guideline of stakeholder analysis for identifying users and developing strategic plan for managing conflict in community forestry.
- A framework for defining the role of DFO, VDC and Civil Society to institutionalize alternative dispute resolution is needed.

Implementation level

- Identifying importance and influence, relationship and assessing well being of stakeholders help to understand the ground reality. Therefore, DFO and its respective staff should effectively perform the stakeholder analysis in the course of formulating group and developing operational plan.
- Formulate an integrated and holistic plan with the involvement of these settlements to manage inter-settlement conflict. DFO should take an initiative.
- It is recommended that local institutions such as VDC and Civil Society (CS) be involved and empowered to formulate conflict management strategy and plan. It is very important to adopt the principle of good governance since Local Self Governance and devolution of power to local level is underway in Nepal.
- Develop the knowledge and capacity of DFO staff and local institutions to deal existing and potential conflict.

2. Recommendations for research are given in the following points.

- The research is mainly focused on settlement or community level. It is indispensable to analyze the conflict from the point of view of gender, ethnicity, and class or latent conflict so that expected cost and benefit of conflict would be assessed.
- Willingness of government officials and obstacles in adopting ADR in community forestry.
- Testing of well being criteria and its prioritization at district and national level that can help developing conflict management strategy in identifying the FUGs.
- Research on the issues of good governance and empowering local institutions in building their capacity.

REFERENCES

- Acharya, D.; Niraula, D. R. and Ghimire, K.** (eds), 1999. Community forestry for everybody forever. *Proceeding of the Third National Community Forestry Workshop* (27-29, Oct, 1998). Kathmandu, Nepal, DoF/ Ministry of Forest and Soil Conservation.
- Agrawal, A.** 2001 *Common Resources and Institutional Sustainability*. Mimeo, USA Department of Political Science, Yale University.
- All, A.** 2002. A Siachen Peace Park: The solution to half- century of international conflict? *Mountain Research and Development*, Vol 22(4): pp 316-319.
- Anderson J.; Gauthier, M; Thomas, G. and Wondelleck J.** 1996. Addressing natural resource conflicts through community forestry: Setting the stage. In Chandrasekharan, (eds). *Proceeding on Global E-Conference on Addressing Natural Resource Conflict Through Community Forestry*, June-April 1996. Rome, Italy, Forest, Trees and People Programme of Food and Agriculture Organization.
- Anderson, J.; Clement J. and Crowder L. V.** 1998. Accommodating conflicting interests in forestry- concepts emerging from pluralism. *Unasylva*, Vol 49 (194): 1998/3-10. Rome, Italy, Food and Agriculture Organization.
- Ayling, R. D and Kelly, K.** 1997. Dealing with conflict: natural resources and dispute resolution. *Commonwealth Forestry Review* 76(3): pp182-185
- Belbase, N. and Regmi, D. C.** 2002. *Potential for Conflict: Community Forestry and Decentralization Legislation in Nepal*. Kathmandu, Nepal, International Center for Integrated Mountain Development.
- Bernard, H. R.** 1998. *Research Methods in Cultural Anthropology*. London, Sage Publications.
- Bhatia, A.** 1997. Power, equity, gender and conflict in common property resource management in HKH. *Himalayan Parayabaran*. Vol (5): pp 48 - 60.
- Bromley, D. W. and Cernea, M. M.** 1989. *The management of common property resources: Some conceptual and operational fallacies*, World Bank Discussion Paper (57). Washington, D.C. The World Bank.

- Buckles D. and Rusnak, G.** 1999. Conflict and collaboration in natural resource management. In Buckles D.(eds). *Cultivating Peace: Conflict and Collaboration in Natural Resource Management*. Canada, IDRC/World Bank.
- Buckles, D.** (eds), 1999. *Cultivating Peace: Conflict and Collaboration in Natural Resource Management*. Canada, International Development Research Center. World Bank.
- Castro, A. P. and Ettenger, K.** 1996. Indigenous knowledge and conflict management: exploring local perspectives and mechanism for dealing with community forest disputes. In Chandrasekharan, (eds). Proceeding on Global E-Conference on *Addressing Natural Resource Conflict Through Community Forestry*, June-April 1996. Italy, Rome, Forest, Trees and People Programme of Food and Agriculture Organization.
- Caplan, P.** 1995b. Introduction: Anthropology and study of disputes. In: Caplan, P. (ed.). *Understanding Disputes: The Politics of Argument*. Oxford, London, Berg Publishers.
- CBS,** 2002. *Population of Nepal: Population Census 2001- Selected Tables (Western Development Region)*. Kathmandu, Nepal, HMGN (NPC secretariat, Central Bureau of Statistics)/ UNFPA.
- Chevalier, J.** 2001. Stakeholder analysis and natural resource management . Carleton University. Ottawa. www.carleton.ca/~jchevali/STAKEH2.html - 101k. July 13, 2002
- Ciracy-Wantrup, S. V. and Bishop, R. C.** 1975. Common property as a concept in natural resource policy. *Natural Resource Journal*, Vol (15): pp 713-727.
- Colfer, C. J. P.; Prabhu, R.; Gunter, M.; McDugall, C.; Parro, N. M. and Parro, R.** 1999. Who counts most? Assessing human well being in sustainable forest management. *Criteria and Indicators- Tools Box Series No (8)*: pp1-29. Indonesia, Center for International Forestry Research.
- Daniels, S. E. and Walker G. B.** 1996. Collaborative learning: Improving public deliberation in ecosystem-based management. *Environment Impact Assessment Review*, Vol (16): pp 71-102.
- 1999. Rethinking public participation in natural resource management: Concept from pluralism and five emerging approaches. Paper Presented at the FAO Workshop

- on *Pluralism and Sustainable Forestry and Rural Development*, 9-12 Dec 1997. Rome, Italy. Available in On-line Mountain Forum Library.
- DFO**, 2002. *Annual Report*. Tanahun, Nepal, District Forest Office.
- DDC**, 2000. *Tanahun District: A Glance*. Tanahun, Nepal, District Development Committee.
- DoF**, 2001. *Community and Private Forest Database*. Kathmandu, Nepal, Department of Forest, Ministry of Forest and Soil conservation.
- FAO**, 2000a. Conflict and natural resource management. Rome, Italy.
- , 2000b. Conflict management series: Proceedings electronic conference on *Addressing Natural Resource Conflicts through Community Forestry* (January-May 1996). Rome, Italy, Community Forestry Unit Forests, Trees and People Programme, Forestry Department.
- , 1997. Proceeding of Electronic Conference on “ *Addressing Natural Resource Conflict Through Community Forestry*” in Jan-May, 1996. Prepared by D. Chandrasekharan. Community Forestry Unit. Bangkok, Thailand, Forest Trees and People Programme.
- , 1996. Proceeding of Electronic Conference on “ *Addressing Natural Resource Conflict Through Community Forestry*”. Community Forestry Unit. Bangkok, Thailand, Forest Trees and People Programme.
- Fisher, J. R.; Ury, W.; Patton B.** (nd). What is Negotiation: Principle of effective negotiation. A Paper Presented in Seminar, 16th January 1996, Thailand.
- FRN**, 1999. *Forest Resource of Nepal (1989-1998)*. Department of Forest and Survey. MOFSC/HMGN. Publication No 74.
- Gilmour, D. A. and Fisher, R. J.** 1991. *Villagers Forests and Foresters: The philosophy, Process and Practices of Community Forestry in Nepal* (2nd Ed). Kathmandu, Nepal. Sahayogi Press Pvt. Ltd.
- Goleman, D.** 1995. *Emotional Intelligence: Why it can Matter more than IQ*. New York. Bantam books.
- Greenberg, J., Baron, R. A.** 1993. *Behavior in Organizations: Understanding and Managing the Human side of Work*. Fourth edition. Boston, Allyn and Bacon.
- Hellström, E.** 2001. Conflict culture- Qualitative comparative analysis of environmental conflict in forestry. *Silva Fennica Monograph (2)*: pp1-109. The Finish Forest Research Institute.

- HMGN**, 1993. *Forest Act 1993*. Kathmandu, Nepal, Ministry of Law and Justice, His Majesty's Government of Nepal.
- HMGN**, 1995. *Forest Regulation 1995*. Kathmandu, Nepal, Ministry of Law and Justice, His Majesty's Government of Nepal.
- HMGN**, 1998. Local Self-Governance Act. Kathmandu, Nepal, Ministry of Law and Justice, His Majesty's Government of Nepal.
- Homer-Dixon, T. F.** 1999. *Environment, Scarcity, and Violence*. New Jersey, Princeton University Press.
- Jordan, T.** 1997. Glasl's nine stage model of conflict escalation: A summary. Available at Internet. 522.telia.com/~u52220602/Escalationmodel.html - March 8, 2002.
- Katz, N. H. and Lauer J. W.** 1993. *Conflict Resolution Building bridges*. California, Crown Press Inc.
- Kharel (Sharma), R.** 1997. *Conflict in Community Forestry in Nepal*. A Thesis of M. Sc. in Environmental Forestry Submitted to United Kingdom, School of Agriculture and Forest Sciences, University of Wales.
- Kharel, S. and Regmi S. C.** 1995. Bokse Mahadevsthan forest conflict. *Banko Janakari*, vol. 5(3): pp116-119. Kathmandu, Nepal, Forest Research and Survey Center.
- King, A.** 2000. A brief review of participatory tools and techniques for the conservation and use of genetic resources. In Sthapit, B. and Hansen, E.F, (eds). *Participatory Approaches to the Conservation and Use of Plant Genetic Resources*. Denmark ,IPGRI, Center for Development Research.
- Lewis, C.** 1996 (eds). *Managing Conflict in Protected Areas*. Gland, Switzerland and Cambridge, UK, IUCN- The World Conservation Union .
- MacArthur, J.** 1997. Stakeholder analysis in project planning: origins, applications and refinements of the methods. *Project Appraisal*. Vol 12(4): pp 151-165. England, Beech Tree Publishing.
- Malla, S.** 1995. Jalbire women's community forestry group. In Nepal Madhyasthata Samuha: Case Studies on *Conflict Resolution and Community Mediation in Nepal*. ICIMOD's Participatory Natural Resource Management Program. Communities Forestry Case

Study Series CR 003/96. Regional Forestry Training Center (RECOFTC)/ FTTPP/ FAO.

- Mayers, J.** 2001. *Power tool series: Stakeholder power analysis* (Draft). International Institute for Environment and Development. james.mayers@iied.org (March 21,2001)
- Nader, L.** 1995. Civilization and its negotiations. In: Caplan, P. (ed.). *Understanding Disputes: the Politics of Argument*. Oxford, Berg Publishers.
- Nepal, S. K. and Weber, K. E.** 1993. *Struggle for Existence: Park People conflict in the royal Chitwan National Park, Nepal*. Studies in Regional Environmental Planning, HSD Monograph, 28. Bangkok, Thailand, Asian Institute of Technology.
- Neuman, W. L.** 1997. *Social Research Methods: Qualitative and Quantitative Approaches*. Third Edition. Boston, Allyn and Bacon.
- NPC,** 1998. *Ninth Five-Year Plan 1997-2002*. Kathmandu, Nepal, National Planning Commission.
- O'Laughlin, J. and Schumaker, J. R.** 1998. Barrier to using alternative dispute resolution (ADR) in federal natural resource agencies. USA, *Martin Journal of Conflict Resolution*, No1.
- Pandey, D. R.** 1999. *Nepal's Failed Development: Reflections on the Mission and Melodies*. Kathmandu, Nepal, Nepal South Asia Center.
- Paudel, S. K.** 1997. Conflict in two community forestry user group at Kaski district. *Banko Janakari* 7 (1): pp 23-27. Kathmandu, Nepal, Forest Research and Survey Centre.
- Pendzich, C.; Thomas, G.; and Wohlgenant, T.** 1994. The role of alternative conflict management in community forestry. Thailand, FAO, FTTPP, Working Paper NO 1.
- Ramirez, R.** 1998. Participatory learning and communication approaches for managing pluralism. *Unasylva*, No 194. Rome, Italy, Food and Agriculture Organization.
- Ramírez, R.** 1999. Stakeholder analysis and conflict management. In Buckles D. (ed). *Cultivating Peace: Conflict and Collaboration in Natural Resource Management*. Canada, IDRC/World Bank
- RMR Tanahun,** 2000. *Resource Mapping Report, Tanahun District*. PDDP/ NPC/UNDP. NEP/95/008.
- Saigal, S.** 2001. Emerging issues in the institutionalization of joint forest management in India. *Environmental Management*, Vol 26(3): pp 269-281.

- Sarin, M.** 1997. Integrating gender and equity sensitive conflict management in community forestry policies. In Proceedings of Satellite a Meeting to the XI World Forestry Congress (10-13 Oct) on *Integrating Conflict Management Consideration into National Policy Frameworks*. Rome, Italy, Community Forestry Unit Forests, Trees and People Programme, Forestry Department.
- Sekuler, R. and Blake, R.** 1990. *Perception* (Second edition). New York, International Edition.
- Shahnawaz,** 2002. Alternative economic opportunities for mitigating conflict over natural resources in Himalayan valley. *Mountain Research and Development*. Vol.22 (4): pp 424-327.
- Sharma, U.** 1991. *Park People Interaction in the Royal Chitwan National Park Nepal*. PhD Dissertation submitted to Arizona University, USA.
- Shrestha, K. B.** 1995. Community forestry in Nepal: An overview of conflict. In Amtzis, J, (ed). *Conflict Resolution in Forest Resource management*. Workshop Report 10-13 Oct 1995. Kathmandu, Nepal, GTZ/ ICIMOD/ FAO.
- Shrestha, R. K.** 1995. Conflict in Chandane Jorkuwa, Gnimi and Bhankunda community forest. *Banko Janakari*, vol. 5(3): pp 120-122. Kathmandu, Nepal, Forest Research and Survey Center.
- Siktel, K. P.** 1995. FUG conflict in Dolkha and Ramechap. *Banko Janakari*, Vol 5(3): pp 116- 119. Kathmandu, Nepal, Forest Research and Survey Center.
- Singh, B. K. and Sterk A.** 1995. Conflict Management in the leasehold groups: A discussion. In Amtzis, J. (ed), Workshop Report on *Conflict Resolution in Forest Resource Management*. Kathmandu, Nepal, ICIMOD/ GTZ/ FTTP/FAO.
- Singletray L.; Ball, A. and Rebori, M.** (nd). Managing natural resource disputes: A comprehensive guide to achieving collaborative agreement. *Cooperative Extension Bulletin-EB-00-04*. University of Nevada, pp 24-25.
- Thakur, D. N.** 2000. *Causes and Effects of Grass root Level Conflicts in Community Forestry Implementation*. A Thesis for the Master Degree in Sociology Submitted to Tribhuvan University, Kathmandu, Nepal.

- Tiwari, I. P.** 2000. *Employment Creation and Income Generation in Rural Regions: People, Places, Activities and Incentives in Nepal*. Center for Rural and Urban Studies and Transfiguration, Lekhnath xxiii 433.
- Tumbahamphe, N. and KC, D.** 1995. Buchhung forest: A case study on conflict resolution. Seminar Paper on *Conflict Resolution in Natural Resources*. In Bhatia, A. (ed). ICIMOD's Participatory Natural Resources' Management Programme. Kathmandu, Nepal, International Center for Mountain Development.
- Turner, J. H.** (ed) 1986. *The Structure of Sociological Theory*. Chicago, Illinois. Massachusetts: USA, Addition-Wesley Publication Co.
- Upreti, B. P.** 2001. *Conflict Management in Natural Resources: A study of Land, Water, and Forest Conflict in Nepal*. Ph. D. Dissertation, The Netherlands, Wageningen Agriculture University.
- Walker, G. B. and Daniels S. E.** 1997. Foundation of natural resource conflict: Conflict theory and public policy. In Solberg, B and Miina, S (eds.). *Conflict Management and Participation in Land Management*. Joensuu, Finland, European Forestry Institute Proceeding No. 14, pp 7–36.
- Warner, M and Jones, P.** 1998. Assessing the need to manage conflict in community based natural resource projects. *Natural Resource Perspective*. ODI working Paper 35. UK, Overseas Development Institute.
- Warner, M.** 2000. Conflict management in community based natural resource projects: Experience from Fiji and Papua New Guinea. *Natural Resource Perspective*. ODI working Paper 135. United Kingdom, Overseas Development Institute.
- Yadav, B. D.** 1996. *The Role of Forestry Organization in Conflict Resolution in Community Forestry Management in Nepal*. Master Degree Thesis Submitted to the University of Reading, London, UK.
- Yasmi, Y.** 2002. *Conflict in Forest Management*. A Masters Degree Thesis Submitted to Wageningen University, the Netherlands.

Annex 1: Interview Protocol and Checklists

This interview guide was used to give direction during interviews with different groups of stakeholders. Deeper information was obtained through probing depending on the situation, issue arisen during interview and cooperativeness of the respondents. Thus, wording might have slightly changed without losing the essence of the interview objectives.

Social actors involved in a conflict

1. Who are the groups involved in conflict over community forest management?
2. How are other parties contesting your interest of yours with regard to Ratanpur forest?
3. What is your interest in Ratanpur forest?
4. How do you prioritize the criteria for defining a member of community forestry?

Underlying causes of conflict

5. How did the conflict arise?
6. How do different actors perceive the conflict?
7. What values, emotions, interests or behaviors are challenged?
8. Is the current management of Ratanpur forest in line with your expectation?, and How?

Level of conflict

9. In what form does the conflict manifest itself?
10. What is the current level of conflict? How hot is it is?
11. Have you discussed with your counterparts? Is there any improvement in the conflict situation?
12. What types of events do occur after conflict? How will you behave?
13. What behavioral norms do actors perform?, what are the motives behind these behaviors (i.e., values, emotion or interest)?

Preferred conflict management strategies and practices

14. What are the general ways of managing the conflict?
15. Which processes, forum and practices do exist for improving the conflict situation?
16. Which practices do you prefer most and why?
17. How do you perceive formal system of conflict management?
18. Which strategies do you offer for managing the existing conflict?

2. Checklists

2.1 For informal meeting and the focus groups discussion

- Criteria and indicators for defining well being status of stakeholders
- Reasons and perceptions for preferring some conflict management practice most and other the least
- Relationship, importance and influence of stakeholders and extent of conflict
- Stakeholders' situation in terms of expectation and reality
- Interest and potential impact of stakeholders
- Parties affected by the conflict

2.2 For Participant Observation

- Forest area distribution and accessibility
- Participant's dependability and daily mobility in relation to forestry
- Alternative forest areas and its accessibility
- Verification of data obtained from group discussion

Annex 2: Coding Scheme

Settlement (actors) involved

Ratanpur = R
Jayapani = J
Arbaje = A1
Archale = A2
District Forest Office = DFO
Others = A1, A2, J (O)

Field of Conflict (Conflict Area)

Intra-conflict Ratanpur = IR (1)
Conflict between Ratanpur and other settlements = RO (2)
Conflict between Ratanpur and DFO = RDFO (3)
Intra-conflict (within other individual settlement) = II (4)
Intra-conflict (Among other settlement) = IE (5)
Conflict between other settlement and DFO = ODFO (6)

Cause of Conflict (Based on Glasl's conflict Model 1997)

Interest based = I
Perception Based = P
Emotion Based = E
Behavioral based = B
Unspecified = US

Level of Conflict (Based on Glasl's nine stage model of conflict escalation, 1997)

Level 1 = L1 (1)
Level 2 = L2 (2)
Level 3 = L3 (3)
Level 4 = L4 (4)
Level 5 = L5 (5)
Level 6 = L6 (6)
Level 7 = L7 (7)
Level 8 = L8 (8)
Level 9 = L9 (9)
Level 10 = unspecified (10)

Conflict Management Options (Jones and Warner, 1998)

Consensus = Con (1)
Compromise = Com (2)
Accommodation = A (3)
Force = F (4)
Withdrawal = W (5)
Unspecified = U (6)

Note: Number in parenthesis (1, 2....) is assigned for entering data in SPSS

Annex 3: Condensed Interview of Ratanpur Settlement

Resp. No.	Causes of conflict (argumentation and elaboration)	Level of conflict	Management Options	Coding
R1	The problem is mainly associated with the people of Arbaje, Jayapani for not including them as users in group at the time of forming group. We did not allow them to enter the forest and take any products from the forest	The problem with them becomes so serious. They frequently requested us as well as DFO but our assembly did not agree with their appeal. Even DFO didn't take any considerable decision. They did not implement the commitment made in our joint meeting. So they are not reacting to us.	Compromise	R1-RO-I-L2-COM
R1	District forest Officer suspended our operational plan without giving any logical reason. We don't know why did DFO initially approve our OP at the end of fiscal year. After four months they suggested us to consider the interest of other people.	DFO coerced us to consider their membership and suspended our operational plan for last four years. Every staff took stake in favor of them. But we took our stand keeping with some logic.	Accommodation	R1-RDFO-E-L1-A
R1	Including 13 households of Sautole in Ratanpur FUG, those who had no any <i>de-facto</i> use right to forest before, had increased the expectation of remaining people of Jayapani to be user of the forest.	Unspecified	Consensus	R1-R-P-L10-CON
R2	The interest of Jayapani and Arbaje was to exploit Sal forest through collapsing the Ratanpur group. But they did not succeed as FUG faced the challenges against it. So they become aggressive saying that their rights of	They confronted with us. They directly reported to DFO with out consulting us. Sometimes they threat people of Ratanpur by showing non-verbal behavior	Compromise	R2-RO-P-L3-COM

	using forest are being invaded by the people of Ratanpur.	such as cut off of water pipeline. They blocked us to meet their interest.		
R3	The problem within the FUG is not so serious. However some member intend to play dual roles especially <i>Uppallogann</i> (Baieghare) so that their <i>de-facto</i> use right could continue in the future.	Unspecified	Consensus	R3-IR-P-L10-CON
R3	The problem with Jayapani is due to keeping their argument to have an identity in community forest of Ratanpur. We don't agree to mix them since we have contributed a lot in the protection of the forest.	The problem is serious since they have crystallized the issue and viewed it unilaterally saying that everybody should have right to involve in community forest. We have many debates and verbal confrontations with them.	Withdrawal	R3-RO-P-L2-W
R3	Sal timber was usual construction timber of Arbaje, Jayapani and Archale before. But in Mirtung-1 and 2 Sal forest is distributed only in Ratanpur. They thought that they would be deprived of Sal if they were not considered as members.	I personally think that the present situation is taking its own stand and hardening the issue. They don't raise positive issue that they can contribute to protect the forest.	Compromise	R3-RO-I-L1-COM
R4	The problem between DFO and FUG remains in the process of trust building. DFO's power to order FUG seemed more discretionary. DFO has no fixed criteria to define FUG. So the membership conflict prevails.	We had conducted many meetings to take action to restore our right. We wanted the DFO to clarify why they partially suspended our OP.	Accommodation	R4-RDFO-P-L1-A
R4	The problem is of distortion of democracy. People of Jayapani wish to join and want to take benefit with out contributing anything. Their demand is rather idealistic since they wish to take forest products if Ratanpur people consider	Unspecified	Withdrawal	R4-RO-P-L10-W

	their demand.			
R4	Within the FUG, people of Simgaun intended to divide the whole Ratanpur forest into four blocks based on proximity and traditional use right. It is not so logical as some people have no traditional forest. Seven households of <i>Pandit</i> are still missing in user.	We have informal discussion and argumentation though our efforts seem fruitless.	Consensus	R4-IR-B-L1- CON
R5	Some elite People of Jayapani has access to state forest and control over it. Besides this, they are claiming on Ratanpur forest. They have followed double standard. If they convert it into community forestry the problem may not be so serious.	The problem is serious. They intended to take revenge for us. They blocked our water resources and patrolled on the to pose threats. Their motive was to force us to rethink on our decision. So it was one of the tactful technique	Force	R5-RO-B-L6-F
R5	DFO took the decision to suspend operational plan hurriedly. He misinterpreted forest law, that helped to increase an expectation of disputing parties especially people of Jayapani.	We had three meeting with DFO and took our stake through logic. We think they intended to harden the issues.	Accommodation	R5-RDFO-P-L1- A
R5	Out of 107 users of Ratanpur, 15 households had low influence though their need of forest products is quite high. When they decided to include us among uses, it encouraged people of Jayapani to claim on the forest.	Unspecified	Consensus	R5-IR-P-L10- CON
R6	People of Arbaje and Archale and Jayapani intended to keep the Ratanpur forest as open as their forest. No one protested and made appeal against them. The forest area where they have an access is now being destroyed. But we people became aware and converted it into community forest. The issue of membership	We had three meetings with DFO. We took our stake through logic. We are standing on our decision.	Compromise	R6-RO-E-L1- COM

	posed by them is only used as a bargaining chip.				
R6	DFO staff did not motivate the people of Ratanpur and others. They could not facilitate productive meeting. At the same time they could not propose holistic proposal of community forest in and around the VDC. Forming of FUG in Ratanpur concentrated them in the forest.	Our delegates met DFO several times and requested them to open up our forest for proper utilization. We organized many meetings even with other so-called stakeholders but problem remained the same.	Accommodation	R6-RDFO-P-L1-A	
R6	The leadership within the group could not convince the rest of the people. In contrast to this very few members are implicitly backing them up based on cultural and political background. It helps create more gaps among the conflicting parties.	Unspecified	Consensus	R6-IR-P-L10-CON	
R7	People of Jayapani do not want to share the forest upon which they personally controlled some parts of national forest. Their demand for membership is not so rational since they have not taken any initiative to have community forest.	Jayapani people have no actual stake in the forest but they dared to claim on the back force of leader of Nepali Congress. They always talk about membership but never talk about the legality of their use right to existing forest. So there is fair discussion for membership.	Compromise	R7-RO-P-L1-COM	
R7	The Extension program of DFO is quite insufficient. Even people of Ratanpur do not know what will happen if they violate the order of DFO. They don't know that group may	Unspecified	Accommodation	R7-RDFO-P-L10-A	

	collapse if they are not handled with proper attention of DFO.			
R7	Limited use of forest products makes people more suffering from community forestry. Ratanpur FUG could not supply sufficient forest product to the surrounding VDC. It created a kind of crisis among Arbaje and Jayapani, which has the cause of conflict.	Because of membership issues there was collision between Arbaje and Jayapani though they were neutral before. Later on they don't want to talk with us. If we defend our logic they become aggressive and show non-verbal behavior perceiving us as a competitors.	Compromise	R7-RO-I-L3-COM
R8	Ranger from DFO office did not publish the notice at the time of group formation. Household visit and <i>Tole</i> meeting was quite poor. Though I belong to Ratanpur I was not informed timely.	To solve the problem I proposed DFO to reform user group and extend the forest area. But they could not manage the forest that was controlled by the people of Archale illegally.	Consensus	R8-RDFO-B-L1-CON
R8	Every society has culture of pulling leg to some extent. There are some people of Jayapani and Arbaje who usually follow a culture of pulling leg. Now here we people of Ratanpur suffered.	We had good social relation before but in forestry case we don't want to talk with them since they can't come to compromise.	Accommodation	R8-RO-B-L3-A
R8	Not only the Archale but also people of Mirlung VDC have limited access of forest of Sal, which brings the situation complex. If we considered them as members of the forest it would be unmanageable as the group will be large.	I think each side is taking its own position rather than realizing the actual situation. We never told them that they had not been deprived of Sal timber if we have surplus resources	Compromise	R8-RO-I-L2-COM
R9	It is Jayapani people who have kept some patches of national forest and entertained as private property. Why do they not take initiative to convert it into common property? It has been	People of Jayapani are sly. They want to play and get benefit from multiple sides. To be the member they form coalition with Arbaje	Force	R9-RO-B-L3-F

	practiced since long. Even DFO does not know whether the forest is private property or national.	and extended the issues to external arena. However, we have no concern with them.		
R9	DFO neglected the case at the time of handing over the forest. It is his foolish decision to take back most of the authority of user by suspending OP directly from the field. I think Forest Act does not provide such authority to DFO.	We had written and verbal argumentation with DFO to manage the problem.	Consensus	R9-RDFO-E-L1-CON
R9	Nepali Congress Party on behalf of people of Jayapani urged DFO to take a prompt action against the Ratanpur FUG. It is actually not felt need of Arbaje and Archale and Jayapani.	We don't want to consider their request because the issue is politicalized. They reach into agreement in the joint meeting but nothing implemented in the real life.	Accommodation	R9-RO-P-L2-A
R10	Among disputing parties, Arbaje and Jayapani people intended to be as rightful as the user of Ratanpur. Ratanpur FUG allocated only 15% of total harvest to outsiders including them. It may be insufficient but the capacity of forest is limited so we can't provide them sufficient amount. We have criteria for membership, which they don't meet.	They had many debates, discussions but could not reach any conclusion. They don't offer again to talk on this issue especially to Arbaje and Jayapani.	They need to make their own CF and then the exchange of forest product is possible	R10-RO-P-L2-COM
R10	People of Jayapani and Arbaje were restricted to enter the forest. On the contrary, they have claimed that it is not a worthy decision saying	They showed action oriented behavior and formed collision to dominate us and intended to	Accommodation	R10-RO-E-L3-A

	that they used the forest from the time immoral.	disturb our system of forest management.		
R10	The changing role and behavior of DFO encourage them to claim on the forest. DFO office itself registered the group where Ranger submitted a written report. Promptly they suspended the operational plan for two years and now the OP is almost release in favor of group. It is not a rational decision that people expected from a reputed civil office.	We have some debate with DFO. Its changing role made us suspicious. Now we don't discuss with each other.	Accommodation	R10-RDFO-B-L2-A
R11	Ratanpur village comprises of four hamlets. Even few members are still missing since they have not seen a keen interest at the time of group formation. Now we have some debates and discussions on them. In addition, we are facing the problem of migration. The role and responsibility of migrant people are yet to be decided.	I think leaders of FUG are thinking for those who were missed from FUG at the time of group formation. There are some arguments put by them, which seems realistic.	Consensus	R11-IR-I-L1-CON
R11	It is the people of Ratanpur who have <i>de-facto</i> right in the forest. They have their own <i>Chitaidar and Mukhaulti</i> in the past. The forest was popular as a ' <i>Sanad Ko Ban</i> '. People's attitude towards the system still persists. So they are reluctant to compromise with Jayapani.	It becomes position and prestige-based issue for us. So we want to see that people of Jayapani, though they are very close to the forest, request us for the use of forest within our tradition and norms. It is worthless to spend time for discussing the issue of forest.	Compromise	R11-RO-B-L3-COM
R11	We know that community forestry is based on our tradition and culture. So DFO should not forget the basic principle of community forestry.	We had many discussions with DFO. Still they argued that people of Jayapani have to be	Accommodation	R11-RDFO-P-L1-A

	They have to decide the case in favor of us. Otherwise the forest shall vanish in future due to invasion of outsiders.	considered. So we kept silence.		
R12	People of Jayapani and Arbaje are interested to collapse the community forest and convert it into an open access forest for all. It is our parent's property that needs to be transferred to our generation to take benefit from the forest. We have been protected it since time immoral.	I heard that some people of Jayapani got tampered after formation of FUG. Sometimes they threatened us through more satiric and nonverbal communication.	Force	R12-RO-E-L3-F
R12	DFO's decision to revise the membership is realistic to some extent. However, they can't impose on us. We have right because we are legalized group.	We still have straight argumentation with DFO.	Accommodation	R12-RDFO-P-L1-A
R12	Within the FUG, VDC ex-chairman and <i>Ilaka</i> member of DDC are also members. They reside just adjoining to Jayapani. The recommendation of considering them and their sympathy help increase the expectation of Jayapani people.	Unspecified	Unspecified	R12-IR-B-L10-US
R13	People of Jayapani and Arbaje were not permitted to enter the forest. On the contrary, they have claimed that it is not worthy decision as they have used the forest from the time immemorial. They intended to disturb our system of forest management.	They showed aggressive behavior, formed a group of protest and also attacked us once.	Compromise	R13-RO-E-L3-COM
R13	The role of ex-chairman, a member of FUG confused us, since with his recommendation people of Jayapani get started claiming on the forest. His behavior within group was positive but when he met with the people of Jayapani he sympathized with them. The reasons might be some political benefits.	Unspecified	Consensus	R13-IR-B-L10-CON

R13	DFO without understanding the actual situation showed compassion them compassion with them which made the problem more complicated.	I heard DFO argued in favor them while they were in delegation. We made suspected the activities of DFO. However, we have debates with them.	Consensus	R13-RDFO-E-L1-CON
R14	People of Jayapani became jealous after handing over the forest to us. They tactfully generated the idea that it is not only their problem but also of Arbaje. Then, with the support of political force they started protesting against FUG in the name of demanding membership and equal right for them	It is not a debatable issue. So we don't like to talk with them in this regard although they frequently reported their grievances to DFO office.	Withdrawal	R14-RO-B-L3-W
R14	Why did DFO not punish them although they illegally harvested the forest of Archale-and Jayapani? Have they ever thought that the forest of Ratanpur has a limited capacity? It is not rational to include all users in a single forest and form a unmanageable group.	There were some disagreements at the time of delegation. They suspended our OP and ordered not to do any thing except protection. They suddenly took an action, rather than holding a discussion. They also did not take initiative to implement the agreement made by stakeholders' joint meeting.	Accommodation	R14-RDFO-E-L3-A
R14	I think, within the group we don't have any conflict	Unspecified	Unspecified	R14-IR-US-L10-US

Annex 4: Condensed Interview of Other Settlements

Jayapani Settlement (J)

Resp. no	Causes of conflict (argumentation and elaboration)	Level of conflict	Management Options	Coding
J1	I know that people of Jayapani had also traditional right, which was seized after restoration of democracy. Ratanpur people singly formed informal group. However we were allowed to take forest product. They charged small amount in the name of school improvement. Later they totally restricted which surprised us. The cause of conflict is to redefine our customary right of using forest.	We have still straight argumentation but they tend not to discuss friendly with us.	Compromise	J1-RO-B-L2-COM
J1	DFO had not supervised well at the time of forming group. The nature of some staff seemed corrupted. I heard that they did forest inventory at night. What was the reason behind it? They ignored consensus-building process.	We had several meetings with DFO staff. We kept our stand since we are very close to the forest.	Accommodation	J1-JDFO-E-L1-A
J1	We people of Jayapani are very closer to the forest. However, they don't include us. We have suffered from wild life damage too. So far for Arbaje, they are farther from us and have no traditional right though they have also scarcity of forest.	We made some agreement with them but as an institution they require to take initiation. So agreed points are implemented such as making a large sized community forest including other forest areas and households of disputing parties. But plan is confined only in book. For Arbaje no specified level of conflict existed.	Compromise Consensus	J1-RO-P-L3-COM J1-IE-US-L10-CON

J2	Missing Jayapani in membership of FUG led problem seriously although we are adjoining to them, even to the forest. We had more pressure from wildlife depredation. Not any compensation has been granted yet.	I heard that they are internally trying to persuade our educated persons. Their intention is playing a strategic game saying that 10 people would be members if they requested us individually. I hate such dirty idea proposed by them. Their intention is to divide and rule over us.	Force	J2-OR-1-L6-F
J2	District forest officer along with his staff made visit to our forest and realized that we are actually suffering from the FUG of Ratanpur. At that time he promptly ordered not to implement OP. However, these days users of Ratanpur are felling tree but DFO has not taken any corner step.	We have many dialogues and discussion with the DFO. We have submitted petition to DFO.	Compromise	J2-ODFO-E-L1-COM
J2	Within the Jayapani people we don't have any critical problem. However, I heard that some elite members have encroached the national forest and kept controlled for their own use.	I think the real situation to be flashed out within the group. But it is in the form of taking own stand.	Consensus	J2-II-B-L10-CON
J3	People of Ratanpur monopolized the state property in the name of community forestry. Where should we go keeping out the adjoining forest for the forest product?	Once we had patrolled the Ratanpur forest and encountered with user of Ratanpur where they were felling green Sal. There was a person from our side injured. Later we blocked the water source, which originates from a gully of our upland.	Force	J3-OR-B-L7-F
J3	We have no problem with Archale and Arbaje. However, in the course of appealing to DFO, we were working together saying that we are not only 38 but also a group of 38+ 45. Now the working relation has more or less collapsed. The	Unspecified	Unspecified	J3-IE-B-L10-US

	manner to interact with us is not so good since the case is now being pending.			
J3	Within the Jayapani, one household is socially discarded since he did not obey our social norms. However, if he realized his previous guilt in our meeting he may be considered a group member.	It has no social relation for last eight years since he violated our Vedic culture by marrying one from scheduled caste. He would not be supported and included in the group though he requested us. It is we people who are trying to coerce him to follow the social norms that may be related to forest also.	Compromise	J3-II-B-L6-COM
J3	DFO staff did not follow investigation process intensively. The way of including 15 members by Ranger without prior discussion with forest user group is against the process of consensus building in the community.	We argued that DFO may correct the mistake that was caused by their subordinate staff but they are hardening and crystallizing the issue of their own kind.	Consensus	J3-ODFO-B-L1-CON
J4	People of Jayapani are relatively poor and uneducated. So they used it as a weakness of ours and imposed their decision on us while forming FUG.	The debate with Ratanpur is positioned based. They don't want to cooperate in this respect keeping issue bypassing. We have requested them for managing the problem but they do not take an initiative.	Force	J4-OR-P-L2-F
J4	Ratanpur forest is mainly our previous source of timber. We have not been allowed after it was recognized as a community forest. Where should we go for timber?	We appealed to DFO and also requested Ratanpur people but they didn't accept our request. Now no formal meeting and talk is held with them. Only our unilateral request could not solve the problem since their attitude seems position based and they intended to replace our	Compromise	J4-OR-I-L3-COM

		mutual dependency in case of forestry.		
J4	As I know that there is no conflict within group in relation to forest directly.	Unspecified	Unspecified	J4-II-US-L10-US
J4	I don't think we had no confrontation with DFO staff. We hope they will support to have membership.	Unspecified	Unspecified	J4-ODFO-US-L10-US
J5	The key problem of Jayapani people is be derived of Sal timber as well as other product from Ratanpur forest. We have no alternative forest within the ward. Chwok forest has not been used as it belongs to another VDC though it is also closer to us.	I noticed that both sides do not discuss any more. There is no confidence building between them. It is perceived that the further talk is useless since Ratanpur people are taking action such as open up forest for firewood and timber without informing us.	Compromise	J5-OR-I-L3-COM
J5	The problem with DFO is increasing. Principally DFO agreed that we people of Jayapani be included in the group. But they did not take any radical step for four years. In contrast to this, they partially released order to use forest products to Ratanpur without consulting us.	We had several delegations, meetings and visits to DFO but nothing worked well in the real ground.	Consensus	J5-ODFO-B-L2-CON
J5	There was a problem between Jayapani and Arbaje for implementing working strategy. We were working together to claim our right from Ratanpur. Later on they broke the mutual understanding. Why they decided so is still unanswered.	Unspecified	Unspecified	J5-IE-B-L10-US
J6	There was misunderstanding in the decision of DFO. Many people asked why DFO did not collapse the group when Ratanpur users did not	We reported the illegal work done by Ratanpur. Still we had the debate but no progress made.	Consensus	J6-ODFO-E-L2-CON

	obey the order of DFO.				
J6	The root problem of ours is not recognizing us as a member of that community forest. The representative of FUG did not implement the commitment made during joint meeting. They frequently changed on their decision. The working style with us seemed controversial.	We had several meetings with them but no decision is implemented. Now they do not talk in this regard.	Consensus	J6-OR-B-L3-CON	
J6	Within group we don't have any problem until now. Sometimes minorities posed problem of fund when we organize meeting for collecting fund for delegation.	Unspecified	Unspecified	J6-II-US-L10-US	
J7	Ratanpur people do not take an initiative to extend the forest area and do not principally agree to our membership problem. We have hardly got agriculture implements for four years.	We had several meetings with them but no decision is implemented. Now they do not talk in this regard. They intend to block of our request.	Consensus	J6-OR-B-L3-CON	
J7	I think the relation with DFO is fair. However, we are expecting some support from them.	We have frequent discussion with DFO.	Accommodation	J7-ODFO-B-L1-A	
J7	We have no concern with Archale for Ratanpur forest. However, we have cooperation for social services.	Unspecified	Unspecified	J7-IE-US-L10-US	
J8	It was good relation with DFO as they suspended OP of Ratanpur on behalf of our request. Now their role seems controversial as they release order for collection of dry wood without finalizing the issue.	The behavior of DFO has changed within three year. We suspect them, since DFO provided some concession to the FUG with out informing us. Debate and discussion is continued.	Accommodation	J8-ODFO-B-L2-A	
J8	There is serious conflict between Jayapani and Ratanpur. Ratanpur people do not grant any concession to us. Though we are also traditional user of that forest. At least we should be	We have no direct talk these days since they have not organized any the meeting. They are not interested to discuss directly with us. They tend to	Accommodation	J8-OR-B-L2-A	

	members for timber.	divert the issue of membership saying that we have also some patch of forest.		
J8	I think internally we don't have any conflict. Every thing is all right.	Unspecified	Unspecified	J8-II-US-L10-US
J9	We have some problem with Ratanpur people. They restricted us not to enter the forest without getting permission of them. Even we could not get easily timber of Sal for our domestic propose.	I heard that there is some straight argumentation with them.	Force	J9-OR-IL-L1-F
J9	I heard that DFO do not take the case so seriously. They express their sympathy only but do not coerce people of Ratanpur at the moment. I think they tend to avoid the cases by the end of time.	DFO provides some concession to them with out prior information to us. Their role seems contradictory.	Compromise	J9-ODFO-P-L1-COM
J9	Within Jayapani, though I am resident of the village, my society does not include me in the group. They have small patches of forest of <i>Schima</i> and <i>Castanopsis</i> . I am not involved though I am interested. I had to walk one and half an hour walk to <i>Chokali</i> forest for fuel wood. It is not socially justified to give all punishment for one crime at a time. Natural resources are state property. No one is being deprived of the use of forest.	I have been socially discarded. I don't get any support from the society. Their intention is to keep me under pressure. Even I have to hire agriculture labor from other villages. However we have not encountered physically.	Force	J9-II-P-L6-F

Archale settlement (A2)

Response	Causes (Argumentation and Elaboration)	Level of Conflict	Management Options	Coding
A21	We have a bit of problem with Ratanpur people. They prevented us from entering the forest without Permission from them. Even we could not easily get timber of Sal for our domestic propose. I think we don't have any conflict at the moment.	I heard that there is some argumentation about operationalizing our understanding in these days. Unspecified	Compromise Unspecified	A21-OR-I-L1-COM A21-ODFO-US-L10-US
A21	No problem within Archale people, even with Arbaje too.	Unspecified	Unspecified	A21-II-US-L10-US A21-IE-US-L10-US
A22	We have no forest, especially Sal forest, for house construction. We doubt that people of Ratanpur provide timber as per our demanded.	Some debate and understanding	Unspecified	A22-OR-I-L1-COM
A22	Within Archale, some elite people have controlled a large patch of national forest. They are taking benefit from so - called privately owned forest as well as socially sanctioned area of national forest. They are not interested in making a forest plan including those areas that are under their control as a community forest.	We are just sharing the idea about the benefits that we poor were getting from our socially sanctioned forest than the elite within the most disadvantaged group but it has not been floored in community level. We submit our grievances. It is under the process of inquiry.	Consensus	A22-II-B-L1-CON
A22	DFO did not care even if elite people encroached the forest area. Why DFO did not punish them? It is to be converted into community forest.		Accommodation	A22-ODFO-E-L1-A
A23	I think the problem with Ratanpur is not so complicated. We have a large patch of forest for 112 households. Out of 112, some people have traditionally secured <i>De-facto</i> use right by controlling some small patches of forest distributed adjoining to their farmland. We requested them	Principally we agreed together not to claim forest of each other.	Consensus	A23-OR-P-L10-CON

	to provide us Sal timber on concession rate.				
A23	There is no specified issue to be discussed among us and not any conflict with Arbaje too.	Unspecified			A23-II-US-L10-US
A23	We don't have any disturbance from DFO as I know.	Unspecified		Unspecified	A23-IE-US-L10-US A23-ODFO-US-L10-US
A24	The problem with Ratanpur is not serious. We hope that they will provide timber at subsidy rate if we request them. At the moment due to suspension of their OP we cannot get any product.	Unspecified		Compromise	A24-OR-P-L1-COM
A24	We have no problem within the group but sometimes people of Arbaje collect dry wood for firewood. Until now it has not become the matter of dispute. People of Arbaje have land adjoining to our forest.	Unspecified		Unspecified	A24-II-US-L10-US A24-IE-I-L1-CON
A24	DFO may interrupt us if we don't convert the forest into community forest. Until now they have not hindered us.	It is just internalized and hardening for Arbaje		Consensus	
A25	We have some doubt people of Ratanpur because we need to take permission and need to pay money while purchasing of timber. If the price of timber is charged at high price it is hard to pay. What will we do if FUG decides not to provide timber in the future?	Unspecified		Accommodation	A24-ODFO-P-L10-A
A25	People of Archale have traditionally controlled a patch of the national forest, managed and utilized it. If DFO looks at legal perspective it will be problematic. It is not yet shaped as formal community forest.	Some argumentation with them.		Accommodation	A25-OR-P-L1-A
A25	Some people of Archale occupied majority of forest patches served as private property. Has they right to monopolize over the state property? Who should manage the problem within our group? Most of them are identified	We have some fear from DFO but are not interrupted yet.		Consensus	A25-ODFO-B-L10-CON
A25	Some people of Archale occupied majority of forest patches served as private property. Has they right to monopolize over the state property? Who should manage the problem within our group? Most of them are identified	It has become a debatable issue and now we are discussing over it.		Force	A25-II-E-L1-F

A26	as elite class. So far we have no conflict with DFO. I just came to know that some people complain about the issue of over harvest from our forest. We are doing best from our side. However, we have some fear whether we will be punished in this regard.	I heard some of our members were invited as <i>Tarekah</i> by Range post staff. Formally they have not issued the letter of order yet.	Compromise	A26-ODFO-P-L1-COM
A26	Within Archale, we do not have so serious problem. But some people intend to formalize our socially controlled forest into community forest. Some are interested in merging it with Ratanpur forest.	We have meeting and discussion in this matter.	Withdrawal	A26-II-E-L1-W
A26	As I know we have no forest of Sal, which usually is used as construction material. We have problem with Ratanpur, as we are not getting Sal timber even if we are ready to pay subsidized price.	We have still straight dialogue with them.	Compromise	A26-OR-I-L1-COM
A27	In the beginning, we had some misunderstanding with Ratanpur people due to not including us as user. Later we discussed and concluded that we would not claim the forest of each party by the other. They are committed to provide timber to us but we are not getting it timely.	We have many dialogues and discussions with them.	Compromise	A27-OR-I-L1-COM
A27	Within our Archale group we debated to form a separate FUG and register it to the DFO. About 30% of total do not show their interest. It may be due to the fear of breaking down of their so-called private forest. Most influential persons are trying to misinterpret the concept of community forestry.	Within the group we debated and discussed but nobody was interested to take an initiative. We tried to talk with elite but they intend to escape from the issue.	Withdrawal	A27-II-B-L2-W
A27	Once we requested DFO to help us to make community forest. They visited the site. Later on they kept silence. Why they did not facilitate us. Are they getting some	We have no further communication to DFO. The issue is occasionally raised	Accommodation	A27-ODFO-E-L10-A

A27	incentive from them? We do not have any problems with Jayapani with forestry issue.	within the group. Unspecified	Unspecified	A27-IE-US-L10-US
A28	We have some problem with Ratanpur. It is caused by selfishness of both parties. They agreed to form a single and collective community forest. But later on some elites of Archale did not agree to do so.	Principally they agreed to exchange forest products but it was not effectively implemented.	Compromise	A28-OR-B-L10-COM
A28	There are some problem between Archale and Arbaje. People of Arbaje have land adjoining to the forest of Archale. Their crop is usually damaged by wildlife. But they did not get any compensation and forest products. They used to collect dry wood and grasses from the forest.	There is hardly argumentation between Archale and Arbaje, which is in implicit form.	Withdrawal	A28-IE-I-L1-W
A28	I do not notice any the problem of with DFO at the moment.	Unspecified	Unspecified	A28-ODFO-US-L10-US
A28	Within the group we have all rights.	Unspecified	Unspecified	A28-II-US-L10-US
A29	The problem we have with Ratanpur is superficial. Now we agree that they don't claim our forest and vice versa. But we shall share the product as per our group norms. Let see what happens in the future.	Unspecified.	Unspecified	A29-OR-I-L10-US
A29	I know that there is debate between Ratanpur and Jayapani. I think it is an issue of position rather than interest. As I know, even Jayapani has their small patch of <i>Schima</i> forest. They may develop mutual understanding like us.	I heard that they have hot discussion before. Now People of Ratanpur do not want to listen the problem of Jayapani.	Compromise	A29-OR-P-L3-COM
A29	As I know we are exploiting from the elite of Archale who claimed their superiority in the forest based on traditional right. Minority (people of less power) have to depend upon them for their subsistence life. So we could not file petition against them. It is due to poverty.	We are suppressed and hardened off the issues though it is critical.	Force	A29-II-B-L2-F
A29	I think currently we have some confusion that which law	Internal debate and discussion	Compromise	A29-II-E-L10-COM

	grants them the authority of privatizing the national forest. However, if the motive of elite remains the same, there might be confrontation with them.	is existed implicitly.		
A210	I think we don't have any problem with Arbaje and Jayapani so far.	Unspecified	Unspecified	A210-IE-US-L10-US
A210	There are some problems with Ratanpur. We depended on Ratanpur forest for fodder and timber. They used to charge few rupees in the name of school improvement from early 1990s. Now we are not getting timber for house construction. We have to go either to Basantapur or Satiswara VDC for taking timber though we have Sal forest within the Ward.	We have requested them and now they are ready for selling timber to us at subsidized price. However, some debates still continue since we are not getting timber in time.	Unspecified	A210-OR-I-L1-COM
A210	Within the group we have some debates in sharing of benefit. The benefit is not shared proportionately since few people have their so-called owned forest where we were not allowed. But they take equal benefit from informally managed national forest.	We have some discussion and argumentation. However the decision is not materialized in favor of us.	Compromise	A210-II-I-L1-CON
A210	We have some confusion with the role of DFO. I don't know why DFO staff could not seize the elite forest. Except you (researcher) no one dares to talk with elite people saying that every person has equal right in so-called elite occupied forest.	We informally appeal to DFO but nothing has progressed yet.	Consensus	A210-ODFO-E-L1-CON
A211	We have no serious problem but a minor problem with Ratanpur. We are not getting Sal timber for house construction even if we intend to buy..	Some dialogue and argumentation is continued.	Compromise	A211-OR-I-L1-COM
A211	I think internally we have no conflict at the moment.	Unspecified	Unspecified	A211-II-US-L10-US

A211	No problem with DFO.	Unspecified	Unspecified	A2211-ODFO – US-L10-US
A212	Conflict between Ratanpur and Jayapani seems severe. Since Jayapani people are very close to the forest and traditionally they use that forest. However, they are not given any right to control and access to the forest resources.	Once Jayapani people themselves started patrolling in forest and encountered with the member of Ratanpur while he was felling tree. There was physical assault. Now users of Ratanpur do not like to interact with them. The political party (Congress) is motivating people of Jayapani.	Force	A212-OR-B-L7-F
A212	People of Ratanpur are very sly. They want to secure their traditional use right by taking forest as community forest. However, their behavior is not good. They don't allow us in to the forest.	They pose superiority and exemplify their position rather than interest. No more talk made with us.	Compromise	A212-OR-B-L3-COM
A212	As far as I know we have no major problem. We live together. However, I heard that some people do not want to make community forest in our ward.	It is not a good decision. We have some internal debates in the group.	Consensus	A212-II-B-L1-CON
A212	No serious conflict with DFO; we hope that DFO will help to form a user group in Archale. I think they are willing to support us.	Unspecified	Unspecified	A212-ODFO-L10-US

Arbaje settlement (A1)

Resp No.	Causes (Argumentation and Elaborations)	Level of Conflict	Management Options	Coding
A11	The problem of Arbaje with Ratanpur people is serious. Since they did not accept us as FUG members. Initially we depended upon the Ratanpur forest for grass, fodder,	We have debates and many meetings but no initiated action is.	Consensus	A11-OR-I-L2-CON

	firewood, and timber. Now it is completely banned. They formed FUG without informing us, not even to our ward chairman.				
A11	I think DFO office has not taken the issues so seriously these days. We suspect their role. People of Ratanpur are harvesting the forest though it has been suspended since long. They don't take any action promptly and try to avoid the issues.	DFO do not cooperate with us though its role is not competitive. Many dialogues and debates are still underway for taking action.	Accommodation	A11-ODFO-P-L2-A	
A11	Within group we have no complication. We all need to pay NRs 100 per year to get firewood from the forest of Chokali people though it is not community forest. It is mandatory in their social setting and institution.	Unspecified	Unspecified	A11-II-US-L10-US	
A12	We have our land adjoining to Ratanpur forest. Agriculture crops have been damaged by wildlife but we are not getting any compensation. They don't consider our realistic need of forest. So the problem becomes quite serious.	Debate of Ratanpur is now pending. They don't like to talk to us. We don't believe they can manage the problem.	Force	A12-OR-I-L3-F	
A12	We have been frequently appealing to DFO. Initially they decided to suspend their OP. But from last year without managing the problem they provide few concessions to them. Treating equally is the responsibility of state.	DFO doesn't use their power. Our debate is still present, as they are not working well.	Consensus	A12-ODFO-B-L2-CON	
A12	We have no conflict within the group. But there was a working understanding with Jayapani to protest the decision of Ratanpur. Later the understanding could not work well. We heard that they would be benefited if they broke the understanding. But they are still suffering.	There were some arguments, especially fixing the date and person to be sent in delegation.	Accommodation	A12-IE-B-L1-A	
A12	Within the group every thing is all right.	Unspecified	Unspecified	A12-II-US-L10-US	

A13	We requested FUG of Ratanpur to consider our demand of membership. They kept silence. If they oppose us we will take further step to become members.	Straight argumentation and discussion.	Compromise	A13-OR-I-L1-COM
A13	DFO should treat all the people equally. We all are equal in the eye of state law. DFO did not strictly control the forest of Ratanpur. Where will we go if every community control national forest as community forest? Now-a-days the problem with DFO is serious.	We have straight argumentation with DFO	Accommodation	A13-ODFO-P-L1-A
A13	Within the group no problem exists.	Unspecified	Unspecified	A13-II-US-L10-US
A14	We have conflict mainly with Ratanpur FUG because they prevented us from entering the forest after handing it over to Ratanpur. They invaded our traditional right because we have no alternative within our VDC. They did not pay any attention to our request and showed no sympathy with us.	We had several meetings with Ratanpur with consultation of DFO. But agreed points could not be implemented. Debate is still continuing.	Force	A14-OR-B-L2-F
A14	With regard to DFO, they gave word but did not bring it into action. They did not seize timber that was over-harvested than that of prescribed sealing. We are still not getting any benefits from the CF.	They agreed to punish offenders but have not punished any one yet. There is the problem of mistrust. We felt whether DFO was treating issue tactfully to search for other options	Consensus	A14-ODFO-B-L2-CON
A14	No problem is existed with Archale and Jayapani	Unspecified	Unspecified	A14-IE-UN-L10-US
A15	Ratanpur people do not respect our voice though it is logical from our side. They frequently cut timber and utilize as per their requirement. But why are we deprived of the benefits? I think we don't have any option. So nation should look at for us.	They intended to block our voice and compel their own mastery. The verbal communication changed into non-verbal confrontation since they frequently changed the decision made in collective meeting. How do they cut tree and distribute	Force	A15-OR-E-L3-F

		firewood and timber without informing us while there is no improvement in the debate?		
A15	I do not understand why does DFO not collapse the group. They realize that we are also user of that forest. There might be some hidden interest of DFO staff.	Debate and argumentation from our side are continued.	Compromise	A15-ODFO-P-L1-COM
A15	We have land around the forest of Archale people. The forest is still government-managed forest. We usually collect grasses and firewood by paying tax to Chokali people. However, when we are on farmland we should be free to collect dry wood for fuel. Some people from Archale do not allow us to collect the firewood.	They are reluctant to express not to collect the firewood but it is internalized to take their stake.	Consensus	A15-IE-I-L10-CON
A16	We have conflict with Ratanpur because they do not recognize us as users. They decide an issue of harvesting timber autonomously.	They intended to block our voice and compel their own mastery. The verbal communication changed into non-verbal confrontation.	Force	A16-OR-I-L3-F
A16	We have no conflict with the people of Jayapani.	Unspecified.	Unspecified	A16-IE-US-L10-US
A17	Community forestry program of DFO creates conflict between Arbaje and Ratanpur. We have had no such dispute before. It is due to poor supervision of DFO at the time of handing over the forest.	We have formal and informal talk with DFO.	Consensus	A17-ODFO-P-L1-CON
A17	I noticed this problem for the first time in 2056 B.S. Since I could not get any forest product from the forest. Once I collected one head load of firewood, they seized it. Ratanpur people made hit and miss decision so that we could not proceed again.	We have just formal relation. They are not interested to organize participatory meeting and group assembly. They abandoned straight argumentation and try to get advantage without	Compromise	A17-OR-I-L2-COM

A17	We have no conflict with Jayapani people	consulting us.		
A18	The trust-worthiness of DFO has decreased since they do not take any corner step in our welfare. On the contrary, they mainly contact with Ratanpur and provide some concession.	Unspecified Argumentation for managing problem is continued	Unspecified Accommodation	A17-IE-US-L10-US A18-ODFO-P-L1-A
A18	With people of Jayapani we have no problem. They have their own forest though it is small and not of Sal.	Unspecified	Unspecified	A18-IE-US-L10-US
A18	We have no forest for fulfilling our daily needs. Ratanpur is our previous source. So we want to be the member of that forest.	Many meetings were held with them. But there was no anymore implementation.	Compromise	A18-OR-I-L2-COM
A19	I think the major problem exists with DFO, since it is their duty to satisfy the needs of all people. They intend to avoid the issue. The way of facilitating and arbitration is not effective, as rangers have been changed frequently.	We have lost time and money for delegation but they can never say that our stake is wrong. The debate is continued.	Consensus	A19-ODFO-P-L2-CON
A19	People of Ratanpur are affected by their feudal attitude for generations. They don't behave well. They have showed superiority complex. At the same time they intended to postpone the issue.	They are interested to dialogue with us. They always say that it is their property from antiquity. The logic is not rational since it is national property on which every body has equal right.	Consensus	A19-OR-B-L2-CON
A19	Some of people within our group do not take the issues so seriously. Since they are relatively rich who can fulfill their demand by other means.	Unspecified	Withdrawal	A19-II-B-L10-W

Annex 5: Criteria and indicators for weighting the well being of the stakeholder

S. No.	Criteria	Indicators	Value
1	Proximity to the forest	Very close (< 20 minutes to walk)	High (3)
		Close (20-40 minutes)	Medium (2)
		Farther (> 40 minutes)	Low (1)
2	Dependency to the Forest for their livelihood	Fully dependence in all forest products	High (3)
		Double products (Timber, partially firewood and grasses)	Medium (2)
		Only for timber (single)	Low (1)
3	Pre-existing use rights (<i>De-facto</i>)	Controlled and managed under customary law before	High (3)
		Partial customary practice and use	Medium (2)
		Used concessionary basis	Low (1)
4	Interest and capacity to manage the forest	Formed informal committee and protected and managed informally before	High (3)
		Interested in but not contributed before	Medium (2)
		Wishing only	Low (1)
5	Damage of wildlife	Human injuries, livestock depredation and crop damage	High (3)
		Livestock depredation and crop damage	Medium (2)
		Crop damage only	Low (1)
6	Cultivated land in and around the forest	All lands (both low and upland)	High (3)
		Lowland only	Medium (2)
		Upland only	Low (1)
7	Alternative forests in the ward	No options except Ratanpur forest in the ward	High (3)
		Same ward but alternative patches of forest existed	Medium (2)
		Different ward with alternative patches of forest	Low (1)
8	Cultural linkages with the forest	Holly places in the forest, sacred species, plants parts used for religious proposes	High (3)
		Plant parts from the forest used for religious proposes (leaf woody sapling of Sal)	Medium (2)
		Not specified	Low (1)

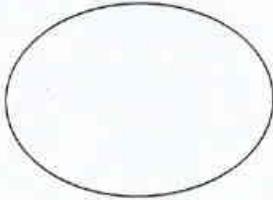
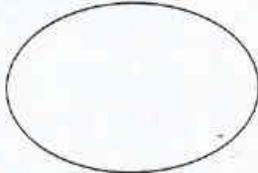
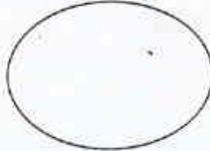
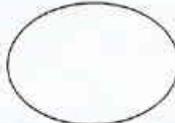
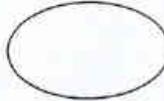
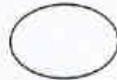
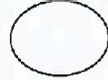
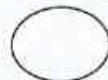
Note: Criteria and indicators are based on the Colfer et. al. (1999), Forest regulation 1995 and group discussion with the stakeholders.

Annex 6: Office based conflict analysis and mapping

Methods: Participatory meeting with office staff and archival study

Size of Circle: Scale and importance of conflict

Participants: 8 Rangers, 3 Community Mobilizers and one Administrative Assistant

Conflict issues in Community Forestry	Scale of conflict (based on frequency of occurrence and effect)
Access and control over community forest (Membership issue)	
Determination of community forest area (who belongs where?)- Boundary problem	
Misuse of group fund	
Unfair harvest, sale and distribution of forest products	
Contradictory legal provision	
Community fund mobilization	
Collection of gravel and sand from community forest	
Selection of executive body of user committee	
Social inequality and gender discrimination	

Annex 7: Operational definitions

Interest: Interest is an activated attitude or the stake that somebody/group has towards Ratanpur forest in term of satisfying their needs.

Emotion: Emotion is the outcome of the exited heart or disturbed mind of respondents that is expressed in the form of anxiety, anger, enjoyment, hate, surprise, sadness of the respondents.

Perception: Perception is the mental image of the respondent developed how he/she feels, sees and understands about social phenomena and events such as use right of forest, community forest, decision of FUG and DFO.

Behavior: Behavior is more visible notion that is expressed in terms of acts, actions, practices and reflexes.

Importance: The priority given to satisfy the need and interests of the stakeholders.

Influence: The Power or capacity of stakeholders that affects in taking decision, facilitating or impeding the achievement of own objectives.

Collaboration or Consensus¹ (*Sarokarwala Ko Chhalaphal Ra Sahamatima*)

It is an integrative option in which conflicting parties try to get win- win situation. The decisions are undertaken jointly with shared vision and needs of disputing parties. The goal will be maintaining social as well as interpersonal relationship. For this, they call for dialogue and discuss on issues openly through using public meeting. There will be direct negotiation. However, sometimes third party may help to facilitate the dialogue to reach on consensus.

Accommodation¹ (*Millaune/ Samandha Ramro Rakhne*)

Maintaining good relationship with their counterpart for the benefit of their forth-coming generation is emphasized. It is agreed that the situation would not be worse even if one party takes advantage without harming the counterpart. Hence, building social relationship is prime

objective of the stakeholders. Generally, respondents do not participate actively in the protest and tend to calm down.

Compromise¹ (*Kehi Lina Kehi Ta Dinu Nai Parchha*)

Objectively conflicting parties are intended to attain their own interests and goals. But ultimately there is trade off between stakeholders to gain primary interest at the cost of losing some secondary interests. Both social relationship and personal goal is any way maintained through requesting, bargaining, pressing, tricking. The option proceeds through ward assembly, mediation through village leaders, sometimes arbitration too.

Forcing¹ (*Kanun Lagayera/ Dababayera*)

Forcing strategy is dealt with the interruption of third party mainly the authentic body of government and its hierarchy. Some respondents defined it as a threat strategy used through coercing to counterparts to attain the personal goal with out considering the interest of them. The forcing option is governed by power, linkage and aftermath. Sometimes it is used as revenge where cooperation is prevented.

Withdrawal¹ (*Jhanjhatma Phasnu Bhandu Taidhi Rahaha Besh*)

The strategy of avoiding and bycotting confrontation that prevents worsening personal relation is understood as a withdrawal. The usual tactics that used to follow by the respondents are denying, ignoring, delaying, and opting out. This option is mainly for that person who tends to be neutral.

¹ Conflict management options adopted from Jones and Warner (1999) were revisited and discussed with the respondents at the time of Interview.

Annex 8: Meaning of commonly used Nepali words

Chautari: A resting-place of tree made up a platform with stones.

Chitaidar: Locally appointed guard to watch the particular patch of forest.

Dalit: Suppressed group of people in the society especially from so called schedule caste

Gaunsava: Village assembly organized formally and informally to take an action/decision on the issue concerned.

Ilaka: A politically defined area of the land comprised of more than two VDCs.

Mukhaya Kaji: Non-official land tax collector in the early period.

Pandit Baje: A person who professionally engages on ritual and religious activities of Hindus.

Sanad ko Ban: Forest granted for public use in *Rana* regime.

Talukdar: Local official concerned primarily with revenue collection under *Rana* regime of Nepal

Tarekh: Bail without keeping deposit.

