

Section I: Introduction

Chapter 1: General introduction

1.1 Introduction

Forests are one of the most important natural resources for sustaining people's livelihoods. They are invaluable especially to rural poor who live in and around forests and use them for food, medicine, clothing, shelter, and spiritual needs. Worldwide, about 350 million of the world's poorest people depend on forests for survival. Another one billion rely on remnant woodlands and farmland trees for their fuelwood, food and other household needs (WCFSD 2000). Poverty is a major challenge of the twenty-first century. 1.2 billion people survive on less than US\$1 a day and 2.8 billion on less than US\$2 a day, with most of them living in rural areas (World Bank 2001). At the regional level, the Asia-Pacific region occupies about one-fifth of the world's land area and is home to about 67 percent of the world's poorest people (UN-ESCAP 2003). Some of the world's poorest countries, such as Nepal, are in Asia, where many people depend on forest resources for their livelihoods. The appropriate management of forests for reducing poverty has never been so important.

Collective action has always been fundamental for human society and plays a crucial role in effective management of natural resources. The success of formal cooperatives in Europe and North America in the early 20th century led to many state-sponsored cooperatives in developing countries from the 1960s onwards (Meinzen-Dick et al. 2004). Influenced by development paradigms in the 1970s, it was presumed that communities would fully engage over a large range of activities. However, dissatisfaction with community initiatives led to a greater emphasis on either the state or the market to deliver services, leading to instances of state and market failures. This led to renewed interests in involving local groups in natural resource management.

Policy makers and scholars have reconsidered the role of local communities in forest use and management. Community Forestry (CF), as an approach based on collective action, has been increasingly accepted as suitable for the sustainable management and utilisation of forest resources, particularly in developing countries (FAO 1978; Shepherd 1985; Arnold 1991; Mallik & Rahman 1994; Victor et al. 1998; Arnold 2001b; Brown et al. 2002a). Accordingly, forest areas owned or managed by communities have doubled in the last fifteen years, occupying more than 25 percent of the forest estate in developing countries. The area is expected to double again by 2015 (Bull & White 2002). The importance of participatory management of forests was affirmed by the 1992 Earth Summit in Rio de Janeiro, and reaffirmed by the 2003 World Summit on Sustainable

Development in Johannesburg and the 12th World Forestry Congress in Montreal in 2003. Currently, as many as fifty countries claim to be pursuing activities that would devolve some control over forest resources to local users (FAO 1999b).

Despite the popularity of CF, there are some major challenges. One fundamental challenge is to initiate and sustain effective collective action by local people for regulating the use of forests. Collective action is defined as a process in which a group of people acts jointly and voluntarily in the pursuit of their shared interests. It is, however, important to note that collective action is used to denote the community-level action for institutional development, implementation and coordination of activities and sharing of outcomes in CF. While such collective action is applicable in various situations, this thesis focuses only on the collective action for self-governance and management of forest resources.

Sustained collective action depends on a group of users who make rules and decision-making structures to institutionalise and control the access to and use of the forest. We need to understand how and why collective action is likely to emerge and continue, how and why members of the group cooperate, and which processes lead to or do not lead to socially desirable outcomes. These issues are associated with the processes of emergence, evolution and consequences of collective action (White & Runge 1995; Heckathorn 1996; Poteete & Ostrom 2003; Meinzen-Dick et al. 2004). However, the analysis of processes and outcomes has usually been dominated by a narrowly focused approach, based on a prior supposition of atomistic behaviour, zero sum interactions and human rationality within socially artificial boundaries (Ostrom 1990; Uphoff 1993). These conditions have predicted insufficient cooperation and hence, tragedy. The role of social, cultural, economic and political processes operating at different levels and impacting on people's decision to cooperate, and the actual processes of personal and social learning, has largely been ignored.

This thesis examines the Nepalese experience with CF, which is regarded as one of the most progressive CF programs being implemented in one of the poorest countries in the world. The Nepalese CF policy and practices are interesting because they are large in scale, supported by legislation and relatively effective in the context of subsistence economy, deep-entrenched socio-cultural inequity and rural poverty.

1.2 The research problem

This research has been driven by inquiry on three closely related questions of collective action processes and outcomes; a) when people cooperate, b) how and why collective action in CF emerges and evolves, and c) what leads or does not lead to equitable outcomes?

While collective action is central to CF, it cannot be assumed that individual forest users will cooperate to manage and use forest resources in a sustainable way. There are contradictory explanations about collective behaviour of local people involved in participatory natural resource management. It has been argued that cooperation among self-interest driven individuals is often impossible because it may actually harm individual interests (Olson 1965; Hardin 1968). More recently, analysts have, however, shown that collective action among self-interested individuals is possible, but under certain conditions (National Research Council 1986; Ostrom 1990; McKean 1995; Arnold 2001a; Agrawal 2002; Casari & Plott 2003). Other scholars argue that the behaviour and actions of individuals are not exclusively determined by self-interest, but trust, norms and power influence actions and thereby offset pure self-interest (Petrzelka & Bell 2000; Granovetter & Swedberg 2001). Therefore, collective action and resource management are better understood by analysing them as embedded in social, economic and political situations (Peters 1987; Fisher 1994; Mearns 1996; McCay & Jentoft 1998; McCay 2002). Explanations of the issues of the emergence, evolution and consequences of collective action in community-based resource management remain disputed.

Collective action in CF does not necessarily lead to equitable outcomes. In fact, in this thesis I distinguish between equality and equity. Equality broadly refers to the same (i.e. equal) in size, amount, value and number of the matter under consideration. In the context of the thesis, equality refers to the principle of giving equal access, rights and shares to all forest users regardless of their differentiation in terms of wealth, ethnicity, gender and other attributes (called the *equality principle* hereafter). The equality principle is the formal provision of forest policy and practices in Nepalese CF. However, I argue that the formal provision of equality in CF can go wrong in two major ways.

First, it is extremely difficult to implement the equality principle in semi-feudal societies in Nepal with deep rooted socio-cultural and economical hierarchies and interdependencies. These formal provisions are likely to be manipulated by community elites during implementation processes through informal norms and practices. A case in point is the participation of all users in decision making processes. When decision making activities are organised, the higher caste male or ethnic leaders (i.e. elites) tend to be more active than other users because of the socio-cultural norms and traditional practices that are internalised and accepted as a way of life by communities. The disadvantaged groups¹ are passive or effectively ignored in the final decisions. Implementation of these decisions is also captured by the elites. The formal provisions of equality are less likely to challenge and overcome the informal and socially conditioned informal norms and practices.

¹ Disadvantaged groups in this thesis refer to the poor, women, lower caste and other users who are socio-culturally, economically and politically worse off, relative to other sections within the communities. It is often interchangeably used with minorities or marginalised sections, which is opposite to advantaged sections comprising wealthy, higher caste and other users.

Second, even when the equality principle is implemented, it can disadvantage the poor, women and other minorities. The formal equality of outcomes may be effectively inequitable. For instance, giving equal shares of fuelwood to poor and wealthy households does not mean that they will get a sufficient quantity of fuelwood to meet their needs. As the poor do not have sufficient complementary resources such as private lands or ability to employ others, equal access is often meaningless for them. The poor, who used to have relatively free access to forests under state control, are now regulated at the local level. It is impossible for the poor to access and use forests according to their wish, even if their essential needs are not met by CF. In this sense, the equality principle may actually create disadvantage. The issue at the heart of this thesis is whether and how the default equality principle of Nepalese CF policy and practice has actually led (or not led) to equitable outcomes.

The question becomes “what is equity?” Equity can be defined in various ways, but it broadly refers to fairness. Central to the equity debate is concern for the poor, women and minorities (Ringquist 1998). Equity cannot be equated to equality because equality principles may be biased against the poor and minorities. In the context of CF, I define equity in two ways: fairness in decision-making processes (i.e. procedural equity) and fair consequences of such decisions (i. e. distributional equity). A question then emerges; when are the processes and consequences fair? In hierarchal and unequal societies, in which collective action is likely to emerge and evolve, fairness may require unequal processes and unequal distribution of shares. In other words, equity may need positive discrimination² to the poor, women and other disadvantaged groups (called the *equity principle* hereafter). The equity principle is similar to the priority view pronounced as a superior approach to equality in theoretical literature (e.g. Raz 1986; Parfit 1991). This principle is important because it can potentially help to drive the existing unequal society towards equality. Specifically, while equity may be theoretically and practically more complex and challenging than equality, the issue of equity is important because the poor, women and other disadvantaged groups in Nepal are socio-economically and politically worse off than other sections of the society. This means that there are both moral and practical rationales for their concerns to be prioritised. The problem of understanding the underlying processes that lead to equitable (or inequitable) outcomes still remains.

Community Forestry (CF) in Nepal

At the policy level, the thesis examines collective action in Nepalese CF, which was initiated by the government in an attempt to preserve the deteriorating forests through the collective action of local communities. In recent years, the process has evolved to the point that local people can form

² Positive discrimination is used as an equity principle that gives the priority to the poor, women and other disadvantaged users compared to other users within the communities. It is interchangeably used with “affirmative action” or “priority” given to the disadvantaged groups.

groups (i.e. Forest User Group or FUG) and take control over the use and management of forests. Nepalese CF is currently being guided by a 25 year plan (Master Plan for Forestry Sector or MPFS), which was commenced in 1989. The policy states that all forests in the hills are subject to handover to local communities as long as they are able and willing to manage them. The District Forest Office (DFO) staff of the Department of Forests (DoF) are supposed to facilitate the process of hand-over. This involves the establishment of FUGs, decision making and preparation of a local plan (called an Operational Plan) and implementation of the plan to manage forests and receive livelihood benefits on an equal basis. The forest legislation has been promulgated for the purpose of providing a legal framework, while operational guidelines are provided to the field staff with regard to how they are supposed to facilitate the initiation, establishment and implementation of CF processes. The revised forest policy in 2000 highlights the support from donors, NGOs (Non-government Organisation), local governments and civil society as helpful for FUGs in implementing CF activities.

There are many assumptions and policy provisions as to how the processes should proceed and how and why people cooperate in CF. However, very little is known about how the initiation and evolution of collective action work on the ground. In particular, the following key issues of Nepalese CF have been identified:

1. The formal organisation and establishment of collective action in CF has generally been initiated by the staff of the DFO. There are unresolved issues of non-inclusive participation, lack of awareness and the swift and DFO driven emergence of CF (Malla 2000; Springate-Baginski et al. 2003b).
2. CF in Nepal has gained popularity as a people-centred approach to promote sustainable management of local forest resources. There is significant anecdotal evidence that CF has improved the forest condition. However, evidence from rigorous qualitative studies is limited. Furthermore, there are few studies that question why the forest has improved (or not improved) and what are the implications of environmental change to the livelihoods of the poor, women and other disadvantaged groups within the FUGs.
3. Part of the rationale for local people being involved in collective action is that they receive benefits from CF. However, studies generally conclude that the benefits are very limited. There are issues of distributional equity as findings suggest that local people, particularly the poor, women and marginalised sections of the community, are worse off from the introduction of CF (see Baral 1999; Malla et al. 2003; Neupane 2003; Timsina 2003; Richards et al. 2003; Timsina & Ojha 2004).
4. The participation of users in decision-making has been considered a key factor in explaining the success of the CF program. However, even if their participation is generally

integrated in programmes and policies; mechanisms for making this a reality are rarely explored and monitored. Most people (particularly poor, women and other disadvantaged people) may have little say in decisions about the forests. Therefore, it is important to assess how and for whom decisions are made, and how forests are being managed in practice. There are calls for further study into non-inclusive participation and elite domination in decision and implementation processes (Lama 1999; Agrawal & Ostrom 2001; Nightingale 2002).

5. State-sponsored CF in Nepal represents a radical departure from past custodial forest management. The policy embraces the philosophy of decentralisation and aims to legitimise usufruct rights and to hand-over forest management responsibilities and authority to FUGs. However, when it comes to the implementation of the CF policy, the staff of the state's forestry department are often reluctant to devolve genuine power to communities. There is often an enormous gulf between words and action. Problems are essentially related to unequal power relations and control of key forest management decisions by the DFO (Bhatia 1997; Fisher 2000a; Nightingale 2003).

The above issues are related to collective action processes and outcomes, which are highlighted as areas of further analysis in the context of Nepalese CF (Fisher 1994; Fisher 2000a; Varughese & Ostrom 2001; Agrawal & Ostrom 2001; Kanel 2001; Pokharel et al. 2002; McDougall et al. 2003). Previous studies attempted to analyse some of these issues. Many studies have analysed equity issues in Nepalese CF (see Lama 1999; Timsina 2003), but they tend to focus on distributional equity and often equate distributional equity to equality of access, rights or shares. When studies analyse distributional equity as giving priority to the disadvantaged groups, they consider procedural equity as equality of participation. Little study has been conducted that breaks the duality between priority in distribution and equality in processes. The problem for most analyses is that they are too local as they often focus on internal characteristics of forest and forest users. The tendency has been to ignore wider social, economic and political factors operating at different levels and conditioning the collective action processes and outcomes at the local level. These studies have often produced an incomplete and misleading understanding on the above issues. Therefore, the problem is about how to analyse collective action processes and outcomes as embedded in the internal as well as external forces that influence CF.

The objectives of CF policy are inspired by both conservation and social concerns relating to sustainable forest management and social justice respectively. Social justice is seen to complement conservation objectives. Social justice is essentially about finding and involving the actual groups of people who are dependent on, and genuinely interested in, the management and benefit-sharing of forests. There are assumptions that people will collectively act to achieve sustainable forest

management if they feel that the system is fair and that their own interests are being addressed. Empirical studies on equity are inadequate. Many studies have therefore highlighted the need for further analysis on issues of equity (see Messerschmidt 1986; Fisher 1990a; Malla 2000; Agrawal 2001b; Sharma 2002; Timsina 2003; Malla et al. 2003; Jodha 2004). This thesis focuses on how and why local forest users in Nepalese CF initiate and sustain collective action and what leads them to achieve (or not achieve) equitable outcomes.

1.3 Rationale of the study

The dynamics involved in the initiation and sustainability of effective collective action strongly influence the sustainability of decentralised natural resource management. The failures of community based natural resource management programmes in the 1970s were caused by the little attention that was given to understand how collective action arises to deal with different issues, and how it is sustained. Without addressing these critical issues, the current policies to decentralise and devolve natural resources to communities and empowering the poor and minorities and delivering a range of services through community-based organisations, also risk failure. While different theoretical explanations have attempted to address issues of collective action in a reductionist way, it is useful to analyse collective action and decentralised natural resource management as being shaped not solely by individual self-interest, but also by trust, reciprocity, social and economic ties, relationships and other contextual factors operating at different scales. Without a sense of social, economic and political relations, in which individual users are embedded, we cannot understand the emergence and dynamics of collective action, which is necessarily situated in a social system.

Many previous studies have focussed on the success of Common Property Regimes (CPR) held under community ownership (e.g. Wade 1988; Ostrom 1990; Bromley 1992b). When equity is analysed, it is often equated with equality. Since equity is concerned with the poor, women and minorities who are worse off than other sections of the community, *equity as priority* is considered a superior concept to equality (for e.g. Raz 1986; Parfit 1991). This is particularly so in hierarchal and unequal societies, where the equality of processes and shares does not seem fair for the poor and minorities. Therefore, equity, defined as giving priority to the poor, women and other disadvantaged people, is ethically and practically justified. This research on equity has policy implications as well as practical significance.

There are fundamental reasons why equity should be highlighted in the analysis of collective action. While not all decentralised natural resource management explicitly aims at, or expects to, promote equity, concern over equity is one of the fundamental principles of community involvement in natural resource management (Anon 2003), and is considered as the legitimate

basis for community-based natural resource management (Li 2002). Equity is important in decentralised natural resource management because the decentralised policy has now emerged to address issues of poverty alleviation and sustainable development.

There are some critical reasons to focus on equity as an evaluation criteria for the analysis of community-based natural resource management. In the context of forest management, although efficiency and equity are two criteria acknowledged by many authors (e. g. Bardhan 1993; Baland & Platteau 1996; Heltberg 2001; Bardhan et al. 2002; Baland et al. 2002), it is economic efficiency that takes precedence over equity in most analyses (Agrawal 2001a). Since the questions of equity have been neglected and there is a persistent tendency to put them aside, I lay aside the question of efficiency and focus on equity. This, however, does not imply that efficiency is irrelevant.

Unlike many countries in Asia, community forestry in Nepal is implemented on a national scale and supported by legislation. It is widely regarded as relatively effective in comparison with other government-initiated development activities. The CF policy is often considered as one of the most progressive forest policies in the world in terms of devolving authority over forest use and management to local communities. Conceptually, CF in Nepal is a paradigmatic example of participatory forest management for the international community (Springate-Baginski et al. 2003a).

1.4 Objectives of the research

This thesis aims at improving the understanding of human-environment interaction, cooperative human behaviour and social justice in participatory natural resource management. In so doing, it aims at contributing to the theory, policy and practice of collective action and equity in CF. It also endeavours to address issues associated with improving the livelihoods of the forest dependent poor people through CF. The main objectives of the study are:

1. To overview the concept and history of CF, and specifically, to present the history of Nepalese forest policy and current practices in relation to the issues of collective action processes and outcomes.
2. To examine the theoretical foundation of collective action and equity.
3. To assess forest conditions, and explore various stakeholders' perceptions on the processes and outcomes of collective action.
4. To analyse the processes and outcomes associated with the emergence and evolution of collective action, with a focus on the distributional and procedural equity.

1.5 Research methodology

This study adopts an integrated approach examining multiple actors, scales and methods with a focus on local level CF processes and forest users. In order to investigate collective action, this study considers the FUG a key focus and a unit for analysis. Three FUGs from Nepal have been selected for study. Particular attention is given to the poor, women and socially marginalised sections. The study moves upward to the district, national and international level actors. Besides forest users, focus is on the state forestry staff operating at various levels. Other actors, such as donor organisations, NGOs (Non-Government Organisations) and university personnel are important, but forest users and DoF staff are more directly relevant for this study. The combination of the process analysis and actor oriented approach (hereafter, the process-actor approach) is used to understand how CF is being driven, who is driving it and why CF is advancing in a certain direction.

The study examines the cooperation between, and perceptions of, various actors with regards to the access to, and management of, forest resources. This is related to a political ecological approach and specifically, with an actor-oriented approach, which focuses on the interests, characteristics and actions of different types of actors in a given context. This approach is particularly suitable for understanding the actions of different actors operating in different scales and socio-economic structures.

The study also combines quantitative and qualitative research methods. The integration of the methods is useful for CF situations where natural and social phenomena are involved. Quantitative methods, such as RFA (Rapid Forest Assessment) and HQI (Household Questionnaire Interview) are used to collect information on forests, demography and other variables. Nevertheless, they do not provide direct statements of what people are thinking and are insufficient to understand the relationship and perceptions of participants. Qualitative methods, such as SSI (Semi-structured Interview), group discussion, participant observation and informal talks complement the quantitative methods.

1.6 Organisation of the thesis

This thesis consists of thirteen chapters presented in seven sections (Figure 1.1). Following this introduction (i. e. Section/Chapter One), **Section Two** provides background about CF in two chapters. Chapter Two briefly reviews the concept and historical development of CF in the international context. Chapter Three provides contextual information on Nepal and discusses the history of forest policy, with particular focus on the emergence and evolution of CF. Then, the current field processes of CF as prescribed by forest policy in Nepal, followed by the issues and

challenges of CF are described. This section identifies the issues of collective action processes and procedural and distributional equity in Nepalese CF.

Section Three (Chapter Four) establishes the theoretical foundation of the thesis by situating the research firmly within social sciences. It discusses theories of collective action and equity. It is argued that many contemporary theoretical explanations of collective action and CPR (Common Property Regimes) are problematic because they draw principally from a narrow and self-interest focussed rational choice tradition. In this study, the concept of embeddedness, particularly from a political ecological perspective, is emphasised. This helps to better understand social, economic and political forces within which CF is situated. Additionally, it is argued that equity should be understood and implemented as giving priority to the poor, women and other disadvantaged groups of the community.

Section Four (Chapter Five) describes the research methodology used in this study. An integrated process-actor approach is described, involving the combination of quantitative and qualitative research methods.

Section Five consists of five chapters that present information about the local level case study sites and the results. Chapter Six establishes contextual information on three case study sites. It also presents the results of the RFA (Rapid Forest Assessment). The results of three case study sites studied at the local level are presented in Chapter Seven (Laglaga Pakha FUG), Chapter Eight (Bagbhanjyang FUG) and Chapter Nine (Pragatisil FUG). These chapters describe the processes for the emergence and evolution of collective action. Chapter Ten describes the findings of a multi-level/multi-stakeholder study. The findings indicate that the CF processes and outcomes of collective action are inequitable in terms of prioritising the poor, women and other disadvantaged groups within the FUG.

Section Six consists of two chapters, each of which analyses the findings presented in the previous section. Chapter Eleven analyses and explain the emergence of collective action in CF, while Chapter Twelve examines the evolution and outcomes of collective action with a particular focus on the procedural and distributional equity. The analysis suggests that, while the forest condition has improved, collective action processes and outcomes are not equitable. On way to address issues of equity and collective action in CF, is to look at CF as a socio-cultural, discursive and political process.

Section Seven concludes the thesis by summarising the key findings of the study (Chapter Thirteen). This section synthesises the findings and links implications with the theory, policy and practice of collective action, thereby explaining the theoretical, policy and practical contributions

of the thesis. It also looks to the future and identifies areas of future inquiry for improving the understanding of human-environment interaction, collective human behaviour and social justice in participatory natural resource management.

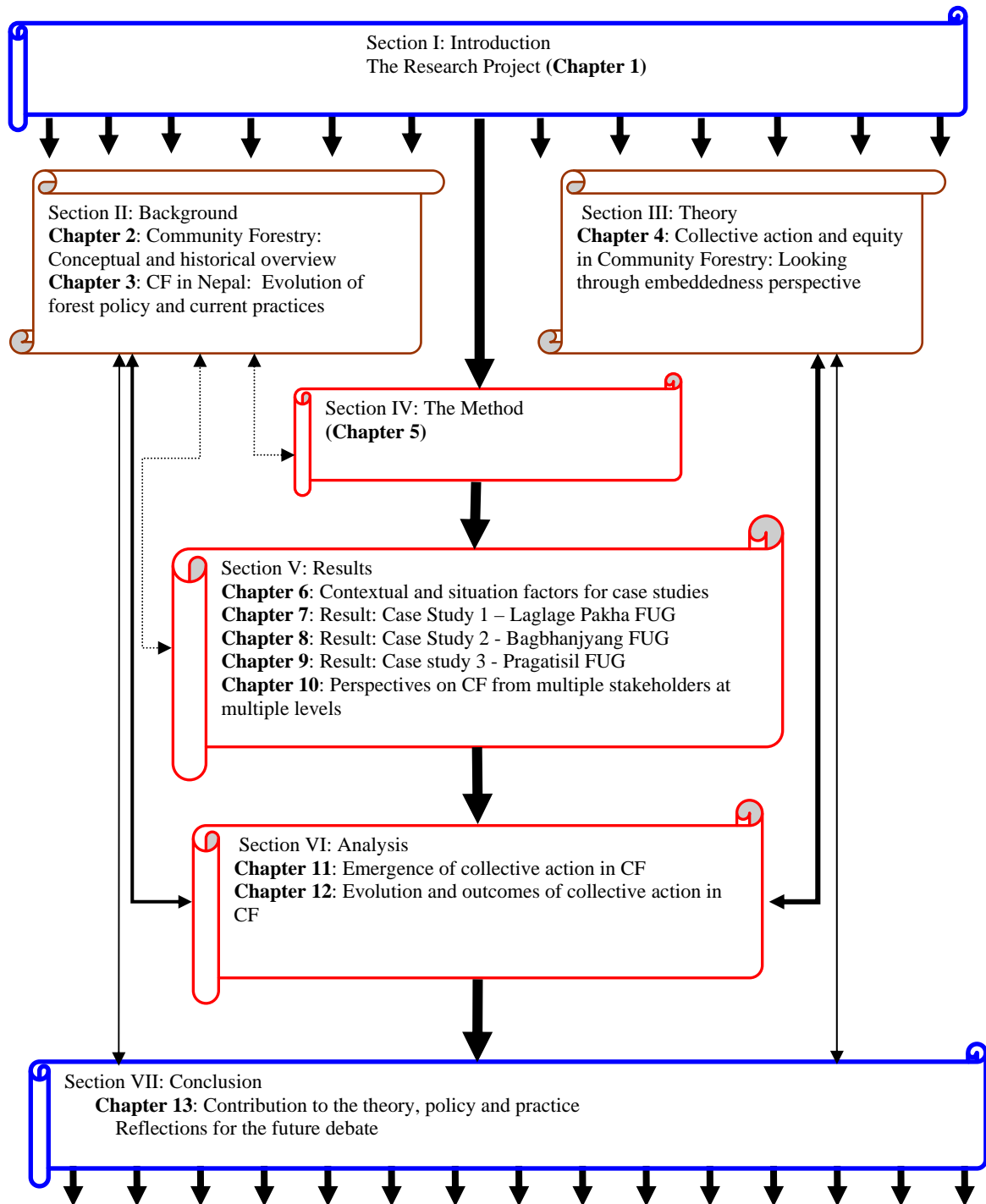


Figure 1.1 Outline of the thesis sections/chapters