

Why Does Tenure Security Matter in Community Forestry? A Critical Reflection from Nepal

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Abstract

Nepal's community forestry (CF) programme, which has been in place for over four decades and has rich lessons to offer beyond the national border, is the largest tenure reform initiative in Nepal. Tenure security is one of the primary requirements to unlock the ecological and economic potential of CF through the conservation, management, and utilisation of forest resources. Despite some gaps and issues in policy and practice, positive outcomes of CF have so far been reported. In this paper, we analyse CF tenure reform policy and practice. We find that forest-managing communities have been enjoying access, use, management, and exclusion rights over forest resources. However, communities are not able to tap the economic potential of local forests, partly due to limited opportunities available for commercial harvesting of forest resources and forest-based enterprise development. There is still a lack of institutional capacity among forestry stakeholders to harness the potential offered by changing policy at national and international levels, primarily due to ambiguities in forest carbon ownership and unclear cost and benefit sharing arrangements among different levels of government and community forest user groups (CFUGs). Addressing such issues to secure forest tenure and thereby realise the full potential of forest resources, both ecologically and economically, could be an area of future intervention, particularly in the context of changing national development policies and international environmental initiatives.

Key words: Community forest, decision making, livelihoods, resources, tenure

INTRODUCTION

Nepal's community forestry (CF)programme, the largest tenure reform initiative in Nepal, has been in place for over four decades and has rich lessons to offer beyond the national border. The introduction of CF is often regarded as a major shift in Nepal's forest tenure regime, from a state-centric, top-down, bureaucratic approach to a bottom-up, participatory, and community-owned and managed system of resource governance. While it is usually hailed as a successful community-based model nationally, it is also widely acclaimed as an exemplary collective action effort for forest commons globally (Agrawal and Ostrom 2001). However, there are several critical gaps in policy and practice which warrant serious attention and are relevant to the ongoing tenure reform implementation process.

The CF programme as it stands today has evolved through long and complex dynamics of forest policy and politics within a dynamic actor landscape, changing international development agendas, and changing rural phenomena. It has followed an adaptive learning approach, and is being constantly informed by experiential learning and research-based evidence mediated by contemporary power politics at different levels of resource governance. During this process, the actual exercise of rights and responsibilities by the government authorities, local communities, and other stakeholders is also constantly shaped and reshaped. In this context, this paper tries to answer following pertinent questions regarding the ongoing tenure reform process around CF: what is the current status of tenure security for forest managing communities, and how is tenure security shaped by policy, legal and regulatory frameworks, and everyday institutional practices?

The paper is organised in six different sections. Section 2 provides a historical context of forest tenure reform and the evolution of CF in Nepal. Section 3 briefly describes the current state of Nepalese CF, including its outcomes and challenges. Section 4 analyses CF through the "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security (VGGT)", which was endorsed by the United Nation General Assembly in 2012 (FAO 2012). The paper flags some of the pertinent and contemporary issues related to tenure in section 5. Finally, the paper concludes with a look towards the future, indicating some important areas and ideas needing attention.

CHANGES IN FOREST TENURE AND THE EVOLUTION OF COMMUNITY FORESTRY IN NEPAL

The development of forest tenure in Nepal is unique. During the Malla and Rana regimes (1846-1951), local people largely managed the forests (which were known as indigenous and customary forests). In 1942, the Forest Service was established, which paved the way for the government-controlled forestry regime. The government controlled the forests and distributed them as private property to powerful elites, government employees, and the landlords, who held huge patches of land and forest with no clear boundaries.

In 1957, the first democratic government in Nepal nationalised all the private forests by introducing the Forest Nationalization Act 1957. This act was passed because the state desired to attain more control over forest resources, at least in principle, to weaken the feudal landlords. This step led to struggles between the state and the general public regarding the rights to forest resources. The Government of Nepal (GoN) then promulgated the Forest Act 1961, which brought further ambiguity into forest tenure. For instance, the Act imposed a requirement to acquire special permission from the forest officials to harvest trees even for household purposes. Failure to comply resulted in arrests. Gradually, the rights of local people to utilise forest resources was weakened and the state exercised monopolistic management rights over forests.

The Land Act 1964 and Land Revenue Act 1978, which were part of broader political and nation building initiatives, further reinforced the power of the state over forest resources (the state became the owner and custodian of all forest resources) and detached local people from the forests which exacerbated the mistrust between state agencies and public at large. As a result, deforestation accelerated, primarily in the southern lowland (Terai). It is often stated that the Land Act 1964 was a tool used by the then-King Mahendra to encourage the settlers of hilly regions to resettle in the Terai in order to create better socio-economic heterogeneity in the region.

The Master Plan for the Forestry Sector (MPFS) 1989 was a milestone policy document that acknowledged the fact that without the participation of local communities, Nepal's forests cannot be protected. It set an ambitious goal to hand over 60 per cent of the total forest area to local communities. With the subsequent emergence of multi-party democracy in 1990, the MPFS 1989 was operationalised with the enactment of the Forest Act 1993, Forest Regulations 1995, Community Forestry Guidelines 1995, and several other laws and their amendments. Much of these policy and legal provisions were community-friendly.

The Forest Act 1993 has realised the need for local peoples' participation in the management of forests. This arose due to the fact that the governmentmanaged forests were failing miserably in almost every way. The state had failed to protect existing forests or to meet the resource needs of the general public. Moreover, the state-control model was futile, bringing few benefits while imposing large transaction costs. It was realised that it took the state a better part of 30 years to promulgate people-friendly forest management policies. The Forest Act 1993 helped in most parts to undo the devastation caused by the Forest Act 1961. These documents provisioned the operational (access and use) and collective choice (management and exclusion) related rights as community forest user groups (CFUGs) rights. However, CFUGs do not have alienation rights, and therefore the security of their forest tenure remains as an issue. Also, there is no defined period or legal guarantee of tenure continuity, and the forest management plans are to be renewed by CFUGs and approved by district forest officer periodically (within 5-10 years).

THE CURRENT STATE OF NEPALESE COMMUNITY FORESTRY, AND ITS OUTCOMES AND CHALLENGES

Out of 14.7 million hectares (ha) of area of Nepal, forests cover 5.96 million ha (40.36%), and other wooded land covers 0.65 million ha (4.38%). So far, 17 per cent of the country's area (i.e. 38% of the forests) has been handed over to community-based regimes, mainly for CF, leasehold, and collaborative forestry (FAO 2016). The forest authority has handed over 2.10 million ha of forests to about 3.1 million households in 27,115 community groups over 25 years. This is the equivalent of 84,000 ha per year, 77 ha per group on average, or 0.66 ha per household on average. The CF is the largest community-based tenure regime in Nepal. As of January 2017, 19,361 CFUGs have been managing around 1.89 million ha of forest, which is 31 per cent of total forests of Nepal (DoF 2017).

The Forest Act 1993 is considered to be one of the most progressive laws and key milestones in establishing the practice of CF in Nepal. Various regulatory instruments, including Forest Regulations 1995, directives, and guidelines have been formulated for effective implementation of the Act and good forest governance. In 2015, in line with the new Constitution of Nepal 2015, the GoN has formulated a new Forest Policy 2015, which has emphasised on the need for clear and secure forest tenure, and recognition of the role of community and indigenous people (IPs) in the protection and management of forests. However, the Constitution has not explicitly recognised collective tenure rights of local people and IPs over forests. Nevertheless, the recognition of the CFUG as a legal entity and allowing them to use most of the rights associated with the tenure bundle (except alienation) are some of the positive aspects of current legislation in Nepal. Box 1 presents the key features of CF in Nepal (DoF 2015).

Benefit-sharing mechanisms play an important role in tenure rights for CF. The central government and local government frequently claim benefits from CFs as

royalties and taxes. The existing benefitsharing mechanism of community is as follows (Table 1), but it is yet to be fully

Table 1: Benefits-sharing Mechanisms in CF

Box 1: Key Features of CF

- The tenure period is not limited, instead regulated (usually by 5-10 years after the initial forest management plan).
- CF recognises traditional user rights.
- Users have the right to fix rates for forest products.
- There is no restriction or ban on the utilisation of forest products that are harvested based on an approved forest management plan.
- Users can revise forest management plans and rules.
- Users can utilise the income from forests for forest management, propoor activities, and community development.

functional, particularly for the utilisation of pro-poor focused resource use at the group and household level.

Legal reference	Tax	Royalty	Allocation of income to different groups of activities
Forest Act 1993	(VAT) collection	on commercial transactions of <i>Acacia catechu</i>	25% of the total income of CF for forest management.35% of the total income of CF for the poor.40% of total income for community development.

The CF programme has made considerable progress to meet its goals and has had significant impacts on forest management, livelihood improvements, and community development. It has significantly contributed to the protection and improvement of forests and forest landscapes in the middle hills (Kanel and Dahal 2008; Pokharel et al. 2008; Larson et al. 2010). Luintel (2016) empirically demonstrated that CF has significantly higher positive impacts on biodiversity conservation compared to government management. Branney and Yadav (1998) show that CF in the eastern hills helped to increase stem areas by 51 per cent and basal areas by 29 per cent. Since the establishment of CF, the grass and shrub lands of the middle hills have been converted into productive forests (Jackson et al. 1998; Gautam et al. 2003). CF is now widely recognised as a successful development initiative that has had positive impacts both inside and outside the forestry sector (e.g., Pokharel et al. 2007; Luintel et al. 2009). A recent study showed that CF has significantly higher positive impacts on equity in benefitsharing at the household level than that of government-managed forest commons (Luintel et al. 2017). Most CFUGs are able to manage forests and generate a group fund. Such funds are being used for local community development activities such as school building construction, road and trail construction and maintenance, providing irrigation facilities, and constructing community buildings (Dahal and Capistrano 2006; Luintel et al. 2009). CFUGs have developed policies to support poor and disadvantaged community members in a variety of ways. For example, there are provisions for a 50 per cent quota for women in the executive

committee and exclusive benefits for Dalits and the poor, and for providing funds to support income-generating activities for poor households. In some cases, CFUGs have funded the education and health care of poor students.

Key CF success factors are largely supportive policies and legal environments, willingness to innovate and pilot new approaches amongst service providers (both state and non-government) and the communities, changing within political landscape of the country, and the availability of support from externally funded projects. The changed role of forests, communities, and foresters might have also caused such changes. For instance, in CF, forests are considered as a means for livelihoods, which may not be necessarily considered for revenue and profit only. Local communities are considered to be forest managers, not merely laborers and consumers. Foresters are considered as advisors or facilitators rather than administrators and regulators. Lessons from Nepalese CF have influenced other development initiatives in Nepal and also CF approaches in other countries.

Despite these successes, several issues and gaps remain, particularly in the context of the tenure rights of communities. The legal autonomy of CFUGs has been curtailed by a series of administrative orders, circulars, and other decisions that have increased the transaction costs of forest utilisation and have hindered the growth of forest-based enterprises and employment generation. In addition, ad hoc decisions, such contradictory and controversial directives or guidelines which have often been prepared without wider consultation with relevant local community representatives and civil society, have tempered the legal rights of CFUGs to forest ownership and access, use, harvesting, and management of forest resources. Communities' forest management decisions and implementation of those decisions often suffer due to topdown instructions of the state authorities. Similarly, CFs generally remain underutilised, and their acknowledged potential to supply more forest products remains unfulfilled, particularly due to passive forest management (Yadav et al. 2003). Also, the economic contribution of CF remains poorly understood (partly due to difficulty in measurement) in terms of labour contributions and benefits accrued to different households, and the overall income generated and shared. Handing over CFs has been subject to intermittent delays due to the introduction of ad hoc directives and still piloting competent forest management models such as collaborative forest management and community-based conservation in protected areas.

VIEWING COMMUNITY FORESTRY THROUGH VGGT PRINCIPLES

Legality

The MPFS 1989, Forest Act 1993, Forest Regulations 1995, various directives¹, and operational guidelines² provide the legal and operational frameworks of CF. The MPFS 1989 recognised CF as a priority programme. However, the legal framework, which was crafted after 5 years of the MPFS, identified three communitybased forestry regimes (community, pro-poor leaseholds, and religious), with different tenure arrangements, often contradicting and conflicting in approaches and cost-benefit sharing mechanisms.

Consequently, forests were fragmented and local communities were confused with different legal and operational arrangements. This has created unfair competition between community based forest management (CBFM) regimes and has delayed the transfer of tenure rights to local communities.

The Forest Act 1993 and Forest Regulation 1995 have recognised CFUG as a legal entity, that has legal rights to exercise all elements of the tenure bundle except alienation rights. The strongest aspect of the forest legislation is that the community has rights to prepare the forest management/operational plan, which has to be approved by the district forest officer. Some authorities and researchers have argued that the level of tenure rights in CF depend upon the provisions made in the approved forest management plan, which is a contractual instrument. However, Forest Act 1993 has explicitly defined that the CF can only be established based on the transfer of tenure rights to the local community, therefore the forest rights transfer process is not guided by the contract laws.

It can be reasonably argued that the CFrelated legal provisions are stable. For instance, the Forest Act 1993 has been amended only twice during the last 20 years to change or include provisions related to benefit-sharing, punishments for wrongdoing office bearers, and harmonisation of CF with leasehold forestry. However, provisions of other legislation related to CF such as the Fiscal Act 2015/16, Environmental Protection Act 1997, Land Act 1964 and Local Self-Governance Act 1999 were not stable.

¹ Community Forestry Directive 1995; Forest Products of Community Forest Sales and Distribution Directives 2015; Forest Product Supply for Earthquake Affected People Directives 2016.

² Community Forestry Program Development Guideline 2008; Community Forestry Inventory Guidelines 1999

Recognition of Rights of Legitimate Tenure Holders

A legal provision is a pre-requisite for ensuring forest tenure rights. The Forest Act 1993 and associated regulations and directives have authorised district forest officers to transfer forest tenure rights to local communities based on their interest and management capacity (section 25 of the Forest Act 1993). Such legal provisions have opened enough space for local communities to demand for their forest tenure rights, where they have been depending on forests for livelihoods and well-being. However, the legal authorities have been exercising their discretionary powers during the delineation of CF and finalisation of management plans. Capacity development is urgent for local communities to enhance their negotiation power in order to secure forest tenure rights.

Safeguarding Users' Rights from Possible Infringements

The Forest Act 1993 has broadly indicated the authority and responsibility of government authorities (district forest offices, regional directorate, forest department, and forest ministry) to maintain the governance of forest tenure rights of local communities. Most of the authority to regulate CF is given to the district forest office (DFO). The regional directorate is given authority to protect the rights of local communities, particularly in the case where DFOs impede the rights of communities. While the forest department's role is more focused on implementation support, the forest ministry's role is at the policy level. In addition, different CF related directives, guidelines and approved forest

management plans have defined the roles and responsibilities of field-level forestry staff, local governments, and forestmanaging communities to maintain and promote forest tenure rights of local communities.

There are some contradictions between acts, regulations, and directives. For instance, while Forest Act 1993 has given rights to forest managing communities to utilise forest products and fix the price of forest products, the directive has imposed the provisions to allocate 25 per cent timber to the district forest products supply committee, which is led by the local government and other administrative agencies. Similarly, the directives have instructed the communities to follow government norms while fixing the price of timber, particularly when they sell timber outside the CFUG for commercial purposes.

Legal Rights and Their Level of Realisation

The national government and the Parliamentary Committee on Environment Protection have made decisions that reverse the progressive elements of the Forest Act 1993 and curtailed tenure rights of local communities. There are several examples of governments making ad hoc decisions and circulars to restrict the user groups' rights that have been granted under the forest law (FECOFUN 2015). Also, there have been some misuses of the legal provisions of the Forest Act 1993. For instance, according to the law, the district forest officer can withdraw CF under certain conditions (e.g., if communities are unable to implement the approved management plan, if communities conducted activities that significantly adversely affected the environment, and if communities violated legal provisions). However in practice, district forest officers have withdrawn many CFs without adequate compensation and free prior informed consent of local communities for the development of national priority projects (e.g., energy, road, irrigation and industrial areas), directly affecting the tenure rights of community forests (FAO 2016).

Ownership over Forests

Current ownership over forests under CF maintains owner and tenant relationships between the state and the CFUGs. The Forest Act 1993 has recognised only individual and state ownership over the land, including forested land. Legally, land ownership under CF belongs to the state. However, the Act has recognised state and collective ownership over the trees (aboveground resources) produced in the CF. The Act has delineated tenure rights to communities over forest products through various directives, and government decisions have made provisions for the sharing of timber products between communities and government. In the case of non-timber forest products (NTFPs), the Act has given rights to local communities to develop management plans and get them approved by the DFO. Without approval of such plans, communities will not be able to get NTFP collection permits and release orders from the DFO for commercial purposes.

Roles and Responsibilities of Tenure Holders

The rights, roles, and responsibilities of CFUGs and forest authorities are defined and made mutually accountable to each other in legislation, and elaborated in the respective regulations, directives, and operational guidelines.

These arrangements are found to be functional. However, in many instances, major actors have ignored the application of these roles due to weak enforcement of laws and regulations.

Types and Boundaries of Rights

The Forest Act 1993, Forest Regulations 1995, and different directives have defined the types of tenure rights of CFUGs. The preamble of the Forest Act 1993 has mentioned that the objective of CF is to support environmental, economic, and social development of the general public and therefore the CFUGs can manage their forests to achieve these objectives (HMGN 1993). The laws, policies, institutions, and stakeholders have clearly recognised the management, access, and use rights of CFUGs over forests and associated products. The right to exclusion given to communities has been controversial while it is exercised, particularly when some households are excluded from the groups due to the imposition of unfair membership fees. Such practices require correction so as to secure rights for the poor over CFs. The Act has not recognised the alienation rights of CFUGs. However, CFUGs have been exercising this right, particularly for the development of eco-tourism activities in urban and peri-urban CF areas.

Tenure Rights and Conflicts

The Forest Act 1993, regulations, and different CF guidelines and directives have given ample rights to CFUGs for the enforcement of forest laws and implementation of approved forest management plans. According to the Forest Act 1993, CFUGs have the right to punish their members if they violate the provisions contained in management plans and by-laws. CFUGs have been able to mediate, resolve, or manage conflicts within the group without going through formal judicial processes (USAID 2006). Many such CFUGs have formed a subcommittee to handle conflicts.

CFUGs have rights to register appeals in the office of regional forest directorates if they are not satisfied with the decision of DFOs, including decisions related to the withdrawal of CFs. Similarly, as legal entities, the CFUGs have rights to go to judicial agencies (e.g., courts) to protect their forest tenure rights. While the Supreme Court has established the precedents to protect tenure rights of CFUGs, there are still some cases in the courts regarding tenure rights of CFUGs.

Despite the legal provisioning of tenure rights, these rights are not translated into practice, mainly due to centralised decision making processes, controversial and conflicting legal provisions, a lack of common understandings of tenure rights between state agencies and stakeholders, conflicting interpretations between individuals, and a lack of capacity development at the community level to exercise these rights. Therefore, it can be argued that community tenure rights in Nepal are insecure.

Continuity of Tenure Rights

The Forest Act 1993 has recognised the CFUG as an autonomous, corporate body having perpetual succession (Section 43). CFUGs can exist in perpetuity after registration. However, if the CFUGs

violate forestry laws, the DFO can withdraw the CF. The Forest Act 1993 and the Forest Regulations 1995 are silent about the time period of management plans. However, different guidelines (e.g., CF Development Guideline 2008 and CF Inventory Guideline 1999) have defined the period of forest management plans as 5-10 years. In practice, some CFUGs have made forest management plans for 20 years. Many CFUGs are not able to review their management plans due to a lack of resources and technical support from the DFOs, and impractical environmental standards (e.g., initial environmental examination, environmental impact assessments) imposed by the central government.

CONTEMPORARY COMMUNITY FORESTRY TENURE ISSUES

Untapped Economic Potential

Women, girls, communities from mid and far western region and some parts of Terai, Dalits, and minority ethnic groups still live in poverty, despite their proximity to and dependence on forest resources where timber and NTFPs have tremendous market potential. For them, rights to access and use of these resources are still a critical issue. An estimate shows that forests in the Terai and Middle Hills alone can produce 104.5 million cubic feet of timber annually, if harvested in a sustainable way generating income equivalent to USD 4.92 billion per year (Subedi et al. 2014). Moreover, despite the high potential for business and livelihoods through NTFPs, poor people are not able to adequately access and benefit from those resources (Ghimire et al. 2016).

Limited Space for Private Investors in CF-based Enterprise Development

The GoN has largely undermined the role of the private sector in the development of forest based enterprises, mainly within CF. The Forest Policy of 2015 and the 2nd amendment of the Forest Act of 1993 have made some provisions to promote private sector involvement in the management of forests. Hoverer, there is no enabling practical environment to encourage private sector investment in promoting forest-based enterprises (Kunwar et al. 2009). The investment of the private sector so far is insignificant, and intermediaries involved in the value chain have therefore captured all the benefits gained from such businesses.

Mismatch Between Policy Change and Institutional Capacity

As a result of recent changes in the political governance of the country (central unitary system to federal governance system), a number of policies were changed and more are likely to be changed or developed. However, little attention has been paid to developing institutional capacity (e.g., new skills, competencies, resources) of CFUGs and forestry field offices to translate those policies into practice. This mismatch resulted in ineffective implementation of CF policy and programs with poor outcomes. FAO (2016) has indicated that there exist major capacity gaps of key actors in terms of effective implementation of reformed forest policies into practice. Such gaps were commonly identified in government institutions.

Ambiguity in Forest Carbon Ownership

In the context of reducing emissions from deforestation and forest degradation (REDD+), the ownership of forests in CF needs to be clear so as to access the benefits gained from selling carbon credits. As the rights over carbon in CF are not defined clearly, CFUGs may not get appropriate benefits from carbon credits, though they play an instrumental role in REDD+. Rather, CFUGs' rights over forest resources may be curtailed if the carbon storage aspect of forests becomes more dominant in REDD+ policy (Chhatre and Agrawal 2009). The Constitution of Nepal 2015 has given rights to regulate carbon to the central government. In addition, the 2nd amendment of the Forest Act 1993 has considered carbon storage as an environmental service which allows the central government's control over forest carbon. In such situations, tenure security over forest carbon has been one of the most fundamental issues to make sure that local people benefit from the protection and management of forests, including REDD+.

Unclear Arrangements to Share Forest Resources, Management Costs, and Benefits Accrued from CF Among Different Levels of Government and CFUGs

The Constitution of Nepal 2015 declares federalism as the form of governance. It is still unclear how CF resources, cost of forest management, and benefits generated from CF will be shared between or amongst the local, provincial, and federal governments and CFUGs. Existing single community based forest regimes may fall under different provinces, municipalities, and rural municipalities, leading to conflicts in defining boundaries and sharing of resources. It is equally uncertain if the rights of CFUGs will remain unaffected and continue to operate under the federal system, particularly in the context where local governments are more powerful in managing natural resources.

FUTURE OUTLOOK

The recognition of the rights of local communities is one of the pre-requisites to secure and strengthen forest tenure, sustain livelihoods, and generate income for the forest-dependent rural poor. After securing tenure rights, the time has arrived to change conventional narratives of 'forests for the environment' and move toward a narrative of 'forests for prosperity', allowing CFUGs to engage in commercial harvesting of forest resources. Such harvesting helps to promote forestbased enterprises and thereby maintain the motivation of local people towards the protection and management of forest resources in the long run. Forest-based enterprises may add value and generate income from forest resources and thereby contribute to the livelihoods of local people, generate local employment, help address poverty and food insecurity, and support the national economy.

Dynamic vision is necessary for the continuation of community rights even in changing political scenarios. For example, there is an urgent need to develop guidelines and strategies to ensure collective tenure rights of people over forest resources, particularly in the context of complex federal governance structures. According to the Constitution of Nepal 2016, the management of forests is a joint responsibility of the federal, state, and local levels of governance. In the absence of district governing structures, the roles listed in the concurrent list are to be unbundled and specified. Unlike in the past, the regulatory function for CF will fall to the local government. Rights, roles, and responsibilities that the current CF are enjoying as per the Forest Act and Regulations are to be devolved to the rural and urban municipalities. CFUGs then have to negotiate with the local governments about the sharing of not only roles and costs, but also the revenue and royalties. If handled properly, it can be an opportunity. Otherwise it could be a daunting task to settle the likely disputes between local governments and CFUGs. In order to achieve better outcomes from CFs, there should be secure tenure including property rights, enabling regulatory frameworks, strong governance, viable technology, adequate market knowledge, supportive bureaucracy, and enough resources and competencies.

REFERENCES

- Agrawal, A. and Ostrom, E. 2001. Collective Action, Property Rights and Decentralization in Resource Use in India and Nepal. *Politics and Society*, **29**(4): 485-514.
- Branney, P. and Yadav, K.P. 1998. Changes in Community Forestry Condition and Management 1994-1998: Analysis of Information from the Forest Resource Assessment Study and Socio-economic Study in the Koshi Hills. Project Report G/ NUKCFP/32. NUKCFP, Kathmandu, Nepal.
- Chhatre, A. and Agrawal, A. 2009. Trade-offs and Synergies between Carbon Storage and Livelihood Benefits from Forest Commons. *Proceeding of National Academy of Sciences of the United States of America*, 106(42): 17667-17670.
- Dahal, G. R. and Capistrano, D. 2006. Forest Governance and Institutional Structure: An Ignored Dimension of Community Based Forest Management in the Philippines. *International Forestry Review*, 8(4): 377-394.

- DoF. 2015. The National Forest Resource Assessment Report 2015. Department of Forests, Ministry of Forests and Soil Conservation, Kathmandu, Nepal.
- DoF. 2017. Database on Community Forests in Nepal. Department of Forests, Ministry of Forests and Soil Conservation, Kathmandu, Nepal.
- FAO. 2012. Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome: Food and Agriculture Organization.
- FAO. 2016. Report on Assessment of Forest Tenure Policies in Nepal: FAO Technical Cooperation Programme: Strengthening Forest Tenure for Sustaining Livelihoods and Generating Income TCP/RAS/3506. Bangkok: Food and Agriculture Organization.
- FECOFUN. 2015. A Glimps of Two Decades of FECOFUN. Federation of Community Forestry Users Nepal, Kathmandu, Nepal.
- Gautam, A. P., Webb. E. L., Shivakoti, G.P.and Zoebisch, M.A. 2003. Land Use Dynamics and Landscape Change Pattern in a Mountain Watershed in Nepal. Agriculture, Ecosystems and Environment, 99(1/3): 83-96
- Ghimire, H., Thapa, N. and Pradhan, S. 2016. Trade Winds of Change-Women Enterpreneurs on the rise in South Asia-Background Country Study- Nepal. United National Development Programme, Regional Bureau for Asia and the Pacific, Bangkok.
- HMGN. 1993. Forest Act 1993. Ministry of Forests and Soil Conservation, His Majesty's Government of Nepal, Kathmandu, Nepal.
- Jackson, W.J., Tamrakar, R.M., Hunt, S. and Shepherd, K.R. 1998. Land-use Changes in Two Middle Hill Districts of Nepal. *Mountain Research and Development*, **18**(3): 193- 212.
- Kanel, K. and Dahal, G.R. 2008. Community Forestry Policy and its Economic Implications: An Experience from Nepal. *International Journal of Social Forestry*, 1(1): 50-60.
- Kunwar, S.C., Ansari, A.S. and Luintel, H. 2009. Non-timber Forest Products Enterprise Development: Regulatory Challenges Experienced in the Koshi Hills of Nepal. *Journal of Forest and Livelibood*, 8(2): 39-50.
- Larson, A., Barry, D. and Dahal, G.R. 2010. Forests for People: Community Rights and

Forest Tenure Reform. London: Earthscan.

- Luintel, H. 2016. Do Forest Commons Contribute to International Environmental Initiatives? A Socio-Ecological Analysis of Nepalese Forest Commons in view of REDD+. PhD Dissertations and Theses, Paper 3087, Portland State University, USA.
- Luintel, H., Bluffstone, R.A. and Scheller, R.M. 2017. The Effect of the Nepal Community Forestry Program on Equity in Benefit Sharing. *Journal of Environment and Development*, 2: 1-25.
- Luintel, H., Ojha, H., Rana, B., Subedi, R. and Dhungana, H. 2009. Community Forestry in Nepal: Promoting Livelihoods, Community Development and the Environment. ForestAction and Livelihoods and Forestry Programme, Kathmandu, Nepal.
- Pokharel, B., Branney, P., Nurse, M. and Malla, Y.B. 2008. Community Forestry: Conserving Forests, Sustaining Livelihoods, Strengthening Democracy. In: H. Ojha, N. Timsina, C. Kumar, B. Belcher and M. Banjade (Eds.), Communities, Forests, and Governance: Policy and Institutional Innovations from Nepal (pp 55-91). New Delhi: Adroit.
- Pokharel, B.K., Branney, P., Nurse, M. and Malla, Y.B. 2007. Community Forestry: Conserving Forests, Sustaining Livelihoods and Strengthening Democracy. *Journal of Forest and Livelihood*, 6(2): 8-19.
- Subedi, B.P., Ghimire, P.L., Koontz, A., Khanal, S.C., Katwal, P., Sthapit, K.R. and Mishra, S. 2014. Private Sector Involvement and Investment in Nepal's Forestry: Status, Prospects and Ways Forward. Study Report, Multi Stakeholder Forestry Programme - Services Support Unit, Babarmahal, Kathmandu, Nepal.
- USAID. 2006. Conflict over Natural Resource at the Community Level in Nepal: Including its Relationship with Armed Conflict. United States Agency for International Development, Burlington, Vermont, USA.
- Yadav, N. P., Dev, O. P., Springate-Baginski, O. and Soussan, J. 2003. Forest Management and Utilization under Community Forestry. *The Journal of Forest and Livelihood*, 3(1): 37-50.