

Indian Journal of Modern Research and Reviews

This Journal is a member of the 'Committee on Publication Ethics'

Online ISSN:2584-184X



Research Article

Colonial and Post-Colonial Forest Governance: Environmental Change and Contested Commons in Chamba, Himachal Pradesh

Dr. Abha Yadav

Assistant Professor, Department of History, S.K. Govt. College, Kanwali, Rewari, Haryana, India

Corresponding Author: * Dr. Abha Yadav

DOI: <https://doi.org/10.5281/zenodo.21643284>

Abstract

Historically, forests in the Himalayas have been used as ecological resources, cultural landscapes and common property resources which support the livelihoods of rural communities and the maintenance of biodiversity. Forestry has been a critical aspect of agricultural, pastoral transhumance and people's livelihoods in Chamba district since the dawn of time. The governance of these common resources, however, experienced a significant change over successive colonial and post-colonial regimes, both in terms of its administration, ownership and use. Although much has been written on colonial forestry and environmental history in India, few studies have looked to how colonial forestry has continued on to the present day and how it has affected environmental change and contested commons in an Indian valley of contested forest ownership, Chamba. The paper explores how forests governance evolved across time, through changing legal frameworks, administration and conservation policies, and the impact thereof on customary rights, forest management and common property resources. The study method is qualitative historical approach which is based on the District Gazetteer of Chamba, forest laws, administrative reports, government publications and relevant scholarly works. The results show that the colonial forest policies institutionalised state control by legal classification, scientific forestry and regulation of customary resource use, but the post-colonial forest governance did not significantly change the institutional framework though some more focus was laid on the conservation of biodiversity and participatory governance. The study concludes that the current environmental issues in Chamba are much more embedded in the history of governance in the kingdom than environmental changes in recent times. The paper merges three streams of thought – environmental history, political ecology and commons theory – and helps to understand how governance has affected the socio-ecological landscapes and competing understandings of commons in the western Himalayas.

Manuscript Information

- ISSN No: 2584-184X
- Received: 20-06-2026
- Accepted: 26-07-2026
- Published: 28-07-2026
- MRR:4(7); 2026: 223-233
- ©2026, All Rights Reserved
- Plagiarism Checked: Yes
- Peer Review Process: Yes

How to Cite this Article

Yadav A. Colonial And Post-Colonial Forest Governance: Environmental Change and Contested Commons in Chamba, Himachal Pradesh. Indian J Mod Res Rev. 2026;4(7):223-233.

Access this Article Online



www.mrrjournal.in

KEYWORDS: Governance of forest resources, environmental history, contested commons, common property resources, gaddi pastoralism, chamba, western Himalaya.

1. INTRODUCTION

Cultural heritage is defined as the material and immaterial elements by which societies express their identity and continuity through. The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (1972) defines cultural heritage as those monuments, groups of buildings, sites and cultural landscapes which have been shaped by human society and the natural environment.

Forests, rivers, alpine pastures and agricultural systems are part of these cultural landscapes in mountain regions, and the ecological adaptations that have taken place over many centuries, the customary institutions, and community-based resource management. Chamba district is located in the north-western Himalayas of India, and is a unique socio-ecological region that has been dependent on forests for livelihoods and biodiversity for centuries. Forests are the main feature of the district and are dominated by deodar (*Cedrus deodara*), kail (*Pinus wallichiana*), chir pine (*Pinus roxburghii*), fir (*Abies pindrow*), spruce (*Picea smithiana*) and oak (*Quercus* spp.), all of which historically have provided local communities with timber, grazing areas, fuelwood, medicinal plants and other forest products.

Forests are one of the main natural resources in the District of Chamba which play an important role in the economy of the district and give support to settled farmers (Government of Himachal Pradesh, 1997) and transhumant pastoralists Gaddi (Forest Survey of India [FSI], 2023). In the pre-colonial era, forests were mainly managed under customary systems involving practices of access control on common property resources in the Himalayan region. Before the advent of colonial administration, forest management in the Himalayas was primarily through local institutions based on access control practices to forest common property resources. These arrangements were completely altered by the advent of British colonialism characterised by scientific forestry, legal categorisation and centralised administration. As a result of the various forest laws passed, the forests were increasingly defined as state regulated resources with increasing access limitations for the communities and a reorientation of customary rights towards commercial timber harvest, revenue generation and administrative control (Guha, 1983; Guha, 1989).

Forests policies have changed from a forested post-colonial era towards an era of biodiversity conservation and participatory forest management, but many of the institutions created during colonial times remain influential in forest governance in the region (Gadgil & Guha, 1992). Previous scholarship has focused on the Himalayan forestry, political ecology and common property resources but there is little historical research that has looked at the continuity between colonial and post-colonial forest governance and its implications for environmental change in Chamba. To fill this void, the present study explores the evolution of forest governance in Chamba based on the available archival records, District Gazetteer of Chamba, forest legislation and government reports and literature. The paper also shows how environmental histories,

political ecology and commons theory help to better understand socio-ecological change in the western Himalayas by incorporating the perspectives of environmental history, political ecology and commons theory.

2. LITERATURE REVIEW

Environmental history is gaining prominence as an interdisciplinary research specialty for the study of the relationship between people and environment. Environmental historians recognise that the environment is not just a vehicle for the representation of historical events, but is also a product of political institutions and socio-economic processes engaged in by humans and other actors (Worster, 1988). In the context of the colonies Grove (1995) showed that the growth of conservation was a part of the growth of imperial expansion, and the colonial governments came to be more and more interested in controlling the environment by using scientific management. Guha (1989) has demonstrated how British forest administration in India had a deeper impact than just introducing new management practices, it had completely altered the customary structures of forest management in India by replacing a communal management with a centralised forest administration.

Gadgil and Guha (1992) also pointed out that the colonial forestry was mainly aiming at commercial timber production and revenue while neglecting the welfare of the forests and society thereby causing future ecological and social impacts that lasted even after the colonial era. There has been a lot of research on the governance of common property resources in environmental governance and institutional theory.

However, the idea of common-pool resources being severely overused has been disputed by Ostrom (1990) who found that local institutions, through the creation of collective rules, and the involvement of local people in their governance, can sustainably manage a common. To emphasize this institutional angle, Agrawal (2005) proposed that we should think of environmental governance as a process that involves the interaction between states, communities and environmental knowledge, which then affects the management of resources. Such contributions moved the centre of scholarship from a state-centred conservation approach to a socio-ecological systems approach to forest governance that involves a multitude of institutions.

One more analytical lens to assist in an understanding of power, authority and governance in relation to environmental change is provided by political ecology. Bryant (1998) claimed that there is no such thing as environmental issues without political and institutional frameworks in which access to natural resources occurs. Likewise, Robbins (2012) has found that, across many cases of environmental conflict, land, development, conservation and governance of resources are also often competing over values. In the Indian context, Sivaramakrishnan (1999), and Rangarajan (1996), described the ways in which the colonial forest administration reconfigured landscapes by legally categorizing the land, by using scientific forestry and by enforcing it through the tenets of the

bureaucracy, establishing an institutional framework that still shapes forest governance. The links between forestry, pastoralism and environmental sustainability have been studied in the Himalayan region in a growing number of ways. Research on pastoral Gaddis has shown that seasonal transhumance is an adaptive socio-ecological system which has traditionally ensured the sustainability of alpine pastures in terms of livestock production (Bhasin, 1988; Axelby, 2007). The findings of these studies underscore the critical role of the customary institutions in shaping and managing the use of natural resources such as the use of pastures in mountain environments with respect to ecological resilience.

However, most of the current research programs on the Gaddi pastoralism focus either on anthropological or ecological aspects, and the historical process of forest governance, and its linkages to environmental change, have received relatively little attention. While there is significant scholarship available on colonial forestry, environmental history, political ecology and common property resources, much less work has investigated the historical continuity of colonial and post-colonial forest governance in the case of Chamba. Research on forest legislation, conservation policies, pastoral livelihoods or ecological change often focuses on one aspect only and lacks a holistic view of the interplay of the previous over time. Furthermore, the historical sources have been largely under-exploited to understand the trajectory of forest governance in the western Himalayas at the district level, especially the District Gazetteer of Chamba, administrative reports and archival records in the region.

To this end, the current research takes an environmental historical approach to explore the forest as a contested commons, cultural landscape and ecological resource in the context of a number of forest governance regimes in Chamba. The paper brings together historical records and theories of environmental history, political ecology and commons governance to provide a more nuanced understanding of the historical processes which still affect environmental governance and community access to forest resources in the western Himalayas.

3. METHODOLOGY

A qualitative historical research design has been used to

analyse the forest governance and environmental changes in the context of Chamba, HP. The research is located in a multidisciplinary field of environmental history that studies the interactions between societies, political institutions and ecosystems throughout history. The study does not view forests as exclusively ecological resources, but as socio-ecological spaces that have been historically created through governance and customary regimes, and environmental transformations. Primary and Secondary sources of research were used. The District Gazetteer of Chamba, historical forest legislation, administrative reports, government notifications, forest policy documents and forest administration official records are the primary sources. Secondary sources include scholarly books, peer-reviewed journal articles, government documents and reports, and academic studies on environmental history, political ecology, commons governance, pastoralism in the Himalayas and colonial forestry.

The sources chosen were those that are historically relevant, authentic, and relevant to the study of institutional change in forest governance. Collected materials were analyzed through the thematic content qualitative analysis and systematic identification and interpretation of emerging themes were conducted on forest regulation, administrative institutions, customary rights, grazing regulation, environmental changes and common property resource management. Multiple document analysis was used to gain a historical perspective, where continuities, changes and contradictions of forest governance throughout the colonial and post-colonial periods were identified. By comparing archival and government documents with one another, and with scholarly works, the accuracy of the historical analysis was improved and reliance was minimized on the individual administrative sources (Bryman, 2016; Creswell & Creswell, 2018). This study has an interpretative analytical approach rather than quantitative approach. It does not aim to quantify the changes that took place in the environment, but to trace the historical process of how governance institutions became different from the time they were customary commons to when they became legally defined landscapes. Special focus has been placed on the relationship between the state policies, ecological conditions and the local communities and the conditions of contemporary environmental governance in Chamba have been explained.

Table 1: Sources Used in the Study

Source Type	Examples	Purpose
Primary Sources	<i>District Gazetteer of Chamba</i> , Forest Acts (1865, 1878, 1927), Government Notifications, Administrative Reports	Reconstruction of historical forest governance
Secondary Sources	Books, peer-reviewed journal articles, government reports	Historiography and theoretical interpretation
Policy Documents	National Forest Policies (1894, 1952, 1988), Forest (Conservation) Act, 1980	Analysis of policy continuity and institutional change

Source: Compiled by the author.

4. Study Area

The district of Chamba is situated in the north-western part of H.P. state of India between latitude 32°11'–33°13' north and longitude 75°49'–77°03' east. The district has an area of around

6,528 km² and is part of the western Himalayan region with its northern and eastern boundaries abutting the Union Territory of Ladakh and Lahaul and Spiti, respectively, and the south being bordered by Kangra district and north-western border by

Jammu and Kashmir. The district is hilly with steep valleys, high altitude alpine meadow and dense forests, along with the river basin of Ravi, which has always been diverse and supported a variety of species and human settlements (Government of Himachal Pradesh, 1997). There is a considerable variation in altitude in the district which varies from about 600 m to more than 6,400 m above mean sea level, resulting in a variety of climatic and ecological zones. Subtropical plants are found at lower altitudes while higher mountain ranges are dominated by temperate and alpine plants.

Forests cover a substantial part of the district and throughout the years have been one of the most important natural resources of the district as per District Gazetteer of Chamba. As per District Gazetteer of Chamba, the forest cover in the district constitutes one of its valuable natural resources which has always been of significance to the district. The important tree species are deodar (*Cedrus deodara*), kail (*Pinus wallichiana*), chir pine (*Pinus roxburghii*), fir (*Abies pindrow*), spruce (*Picea smithiana*) and oak (*Quercus* spp.) that provide timber, protection to watershed, biodiversity conservation, and support rural livelihoods (Government of Himachal Pradesh 1997).

The Forest Survey of India has also conducted a comprehensive study of forests and forestry in the state of Himachal Pradesh and Chamba is one of the most forest rich districts of the state in contemporary estimates (Forest Survey of India 2023). The district is also of great cultural and historical value. Chamba had its own princely state for centuries till it got amalgamated in the Indian Union in 1948. In all these years forests continued to be deeply involved in the local economic systems, in the religious beliefs, pastoral mobility and governance. Forests provided traditional resources for the communities to use such as timber, fuel wood, fodder,

medicinal plants, and seasonal grazing. Of these communities, the pastoralist Gaddi community have an extensive system of transhumance - moving their stock from the lower valleys in winter and to the alpine pastures in summer.

They established a dynamic relationship between environmental sustainability and community-based resource management, with forests at the heart of both issues, reflecting these customary practices. Chamba is an ideal site to study the forest governance-environmental change nexus in the past. The colonial era witnessed colonial expansion of administrative action and its introduction of scientific forestry, legal forest classifications, and a growing state regulation of timber harvesting and grazing. These institutional changes over time changed the nature of forests from customary commons to legally regulated forests. Although since independence the emphasis in forest policies has shifted to the conservation of biodiversity and participatory management, many administrative principles which had been in place in the colonial period still had an impact.

In this context, the history of Chamba is relevant as a suitable context for the study of the institution change and their impact on environmental management and the contestation of commons in the western Himalayas. The district, in combination with its ecological diversity, a rich and long-standing pastoral tradition, historical forest administration and archival resources such as the District Gazetteer of Chamba, is deemed to be an appropriate case study in the study of the historical continuity between Colonial and post-colonial forest governance. An environmental history of Chamba can help us understand how the current socio-ecological context was shaped by a combination of governance institutions, ecological processes and community practices.

Table 2: Geographical and Environmental Profile of Chamba District

Parameter	Description	Source
State	Himachal Pradesh	Government of Himachal Pradesh (1997)
Area	6,528 km ²	District Gazetteer
Latitude	32°11'–33°13' N	Survey of India
Longitude	75°49'–77°03' E	Survey of India
Elevation	~600–6,400 m	District Gazetteer
Major River	Ravi	District Gazetteer
Dominant Forest Types	Subtropical, Temperate, Alpine	FSI (2023)
Dominant Tree Species	Deodar, Kail, Chir Pine, Fir, Spruce, Oak	District Gazetteer
Principal Pastoral Community	Gaddi	District Gazetteer

Source: Compiled by the author based on the *District Gazetteer of Chamba* (1997), Survey of India, and Forest Survey of India (2023).

5. The challenge of colonial forest governance and the transformation of commons.

The challenge of colonial forest governance and the transformation of commons. Before the amalgamation of forest administration in Britain, forests in the Himalayan region were largely controlled by customary institutions that determined access to forests and common property resources, including timber, grazing lands, fuelwood and others. These customary arrangements were rooted in local socio-cultural practices and manifested a mutually dependent community and natural environment. Forests were also part of a prince's territory, but in general, there were customary rights of the local

communities for grazing, collecting fuelwood, extracting fodder and taking advantage of the alpine pastures in a seasonal way. These practices were strongly linked to the subsistence economy and transhumance pastoral system of the Gaddi pastoral group of Chamba, who would migrate seasonally between the forests and pasture lands, where there was continuity of access (Government of Himachal Pradesh, 1997; Bhasin, 1988). This relationship was radically changed by the process of colonial expansion in the nineteenth century, which redefined forests as important economic resources instead of customary commons. The colonial state, as timber demand to facilitate railway construction, ship-building, military

construction and public works increased, it came into greater administrative control of forest resources (Grove, 1995; Guha, 1989). Scientific forestry, which brought with it the concepts of European forestry, encouraged sustainable timber production, legal regulation and bureaucratic management, and substituted systems of resource use that were negotiated at a local level with centralised administrative institutions (Brandis, 1897; Stebbing, 1922).

This was a pivotal moment in the history of forest governance in British India with the establishment of the Imperial Forest Department in 1864. Collaborating with Dietrich Brandis, systematic forest surveys, forest law and administrative regulation became the core of colonial forestry. Forests became more and more thought of as state land, with management plans based on commercial productivity, scientific research, and income generation as opposed to customary rights and community use (Brandis, 1897; Ribbentrop, 1900). As a result, access to timber, grazing lands, and other forest resources was increasingly restricted via permits, taxes and legislation. The larger colonial changes also had their impact on the regime of

forests in Chamba. The district had unique ecological and administrative traits as a princely state, but there was growing focus on the control of forest products of economic value such as deodar and other high value timber species. Forests were one of the main natural assets of the district with timber, resin, forest grazing land, forest products and forest-based revenues being the main benefits of the forests (District Gazetteer of Chamba, 1997). As government control of forests increased over time, the traditional rights of the commons were replaced by the rights of the government, and communities' rights to access forests became more dependent on government than on customary rights. The change in forest governance in Chamba was not only an administrative adjustment but an overall transformation in governance. It represented a radical change in the social-environmental dynamics, where forests became a means of governance, economic production and territorial control. As such, this historical move set the institutional building blocks for the subsequent legislation and "post-colonial" conservation policies, and so the legal framework that formalised colonial forest administration cannot be neglected.

Table 3: Changing Characteristics of Forest Governance in Chamba

Aspect	Customary Governance	Colonial Governance
Ownership	Community/Princely customary rights	Increasing state control
Forest Use	Subsistence, grazing, fuelwood	Commercial timber and regulated extraction
Management	Customary institutions	Forest Department
Grazing	Traditional seasonal access	Permit-based regulation
Primary Objective	Livelihoods	Revenue and resource control

Source: Compiled by the author based on Guha (1989), Brandis (1897), Government of Himachal Pradesh (1997), and Gadgil & Guha (1992).

6. Legal transformation of forest governance:

From 'commons' to 'State' control. The institutional (legal) changes in forest governance over time in colonial India did not happen overnight, but over a period of time various laws were enacted and state control was extended over forests and common property resources. Every piece of legislation was accompanied by new administrative arrangements which further increased government control of forest settings and diminished the autonomy of customary institutions. This has led to forest governance moving from locally negotiated resource management systems to a legally centralised administrative system.

6.1 The Indian Forest Act, 1865

The first systematic effort by the colonial government to make a legal claim to territories that were deemed to have national value was through the Indian Forest Act of 1865. The Act, though little in extent, gave the government the power to establish forest lands as state property and to control their utilization, especially if they were of strategic significance for railway construction and public works, as in the case of many forest lands in south-western New South Wales (Brandis, 1897; Stebbing, 1922). The law did not set up an extensive administrative system, but was more of a legal framework on which future forest policies were built. The importance of the 1865 Act from the environmental historical point of view is not so much in its administrative effects, but in the conceptual shift

of forest. Forests were no longer seen as a customary resource and source of livelihood but as an economic resource that needed scientific management and government regulation. The change was the start of institutional intrusion into longstanding patterns of community resource utilization such as grazing, fuel wood collection and timber extraction. The concepts behind the Act were reflected in the administration of forests in the Himalayan areas, although the implementation of the Act differed from region to region in British India, as the deodar, a species of great commercial value, gradually came under increasing administrative control in the Chamba area. The increasing importance of forests to the District of Chamba is prominent with respect to forest wood production, grazing land and forest revenue as described in the District Gazetteer of Chamba (1997). Thus, the institution of modern forest governance in Chamba was built up over time rather than a reform of governance.

a. The Indian Forest Act of 1878

The Indian Forest Act of 1878 was a turning point in the colonial forest administration, as it gave a major boost to the administration of forest resources by the state. The Act, in contrast to the Act of 1865, introduced a classification of forests in a systematic manner, and classified forests into Reserved Forests, Protected Forests and Village Forests, which resulted in different categories of forests with different legal status for ownership, access and utilization (Indian Forest Act,

1878; Ribbentrop, 1900). Of these types, Reserved Forests were the most formally protected, and customary rights were only formally acknowledged when formal administrative enquiry was made. Protected Forests on the other hand allowed some community activity within the forest under government control and Village Forests were supposed to be used to manage resources locally, but were used to a lesser extent during the colonial era (Stebbing, 1922).

This categorisation in a major way changed the relationship between communities and forests, and introduced a new concept of customary rights as legally recognised privileges, which required state approval. The legal changes had important implications in the context of the Himalayas, as they affected pastoral communities that are reliant upon forest landscapes for

their seasonal mobility. As in other parts of the region, the everyday governance of forests and alpine pastures was shaped by the growing administrative control, but in varying ways in the different regions. Increasing administrative control over time restructured the customary governance of forests and alpine pastures in Chamba, where transhumant grazing was central to the regional economy. The legislation did not totally bar community use, but gradually integrated traditional usage in a bureaucratised framework of permits, regulation and official supervision. In turn forest became a new landscape governed by a new type of law: the National Forest Policy (1894). The first comprehensive statement of forest management objective of British India was made in the National

Table 4: Evolution of Colonial Forest Legislation in India

Legislation	Primary Objective	Major Provision	Implication for Forest Governance
Indian Forest Act, 1865	Establish state authority	Government control over selected forests	Beginning of legal forest administration
Indian Forest Act, 1878	Scientific forestry	Reserved, Protected and Village Forests	Expansion of state control and restriction of customary rights
National Forest Policy, 1894	Commercial management with limited local use	Functional classification of forests	Balance between revenue generation and regulated community access
Indian Forest Act, 1927	Consolidation of forest law	Codification of previous legislation	Institutionalisation of modern forest governance

Source: Compiled by the author based on Brandis (1897), Ribbentrop (1900), Stebbing (1922), and the Indian Forest Acts

6.2 Forest Policy of 1894.

The policy had the aim of specifying the role of forests in the colonial economy, unlike previous legislation, which was mainly concerned with the legal aspect. It aimed at achieving the balance of commercial timber production, protection of the environment and agriculture needs and forest under state control (Government of India 1894). Conservation was accepted but the main goal was the efficient use of forest resources with the aim of promoting imperial economic interests. The policy drew a distinction between different types of forests, based on their main uses protective forests, forests of commercial timber, minor forests providing local needs, and grazing lands. This functional classification was the result of the colonial government appreciating that forests had several ecological and economic functions. However, commercial timber production was still given priority, especially in the production of species like deodar and teak which were needed for public works, railway construction and building (Stebbing, 1923; Brandis, 1897). The consequences of the 1894 Policy in the mountain areas like Chamba went beyond the forest management aspects. The policy recognised that forests were an integral part of the rural landscape and were essential for rural livelihoods for grazing, fuelwood and fodder, but these traditional sources of livelihood were not governed by community control, but rather by administrative regulation.

As a result, the use of the common property resources became more and more dependent upon the sanction of the state, increasing the importance of the state as the main manager of the forest landscapes and decreasing the autonomy of the customary institutions (Guha, 1998; Gadgil & Guha, 1992). The Policy was of particular environmental historical

significance in terms of the shift towards colonial forestry management. It understood the value of forests for protection of the soil, watershed and climate while at the same time considering them as economic tools. This double strategy introduced a dual regime of governance, in which conservation and commercial exploitation worked side-by-side and were both controlled by the state. The policy goals not only led to the gradual transition from customary commons into a socio-ecological landscape under regulation in Chamba, where forests contributed to ecological stability and pastoral livelihoods, but also resulted in a complex patchwork of various legislative and policy structures that regulated the use of forests. The policy goals not only led to the gradual transition from customary commons into a socio-ecological landscape under regulation in Chamba, where forest supported ecological stability and pastoral livelihoods, but also to a complex patchwork of various legislative and policy structures that regulated forest use. This system of governance continued to affect forest management long after the colonial era and is reflected in some of the principles outlined in forest policy during the post-colonial era.

6.3 Institutionalisation of Colonial Forest Governance Indian Forest Act, 1927

The Indian Forest Act of 1927 was a culmination of colonial forest laws as it combined all the previous forest laws into a single legal document to regulate forest management, protection and utilisation in British India. The 1927 Act was different from the acts of 1865 and 1878 because it did not just create state authority or classify forests, it also strengthened the administrative powers of the state with regards to forest

resources. It established the control of forest produce, gave greater powers to the state to control reserved and protected forests and tightened the penalties for unauthorised extraction of forest produce, grazing and cultivation, and for the transportation of forest produce (Government of India, 1927). The Act's unique aspect was its provisions on customary rights. The law did not view community access as a right, but rather as a right that had to be claimed by individuals/communities in front of designated Forest Settlement Officers. The rights that could not be legally asserted were curtailed or even eliminated making customary rights akin to privileges that could be regulated by the State (Guha, 1989; Sivaramakrishnan, 1999). This represented a major institutional transformation, one where forests increasingly were formally managed in an institutionalized manner, instead of in customary ways.

The Act also strengthened the Reserved Forests, Protected Forests and Village Forests created under the previous legislation, and empowered the forest officials to regulate grazing, harvesting of trees, charcoal, shifting cultivation etc. and also regulate movement of forest produce. These provisions led to a greater focus of administrative control over forest landscapes and the wider authority of the colonial state to control ecological resources and community livelihoods (Indian Forest Act, 1927; Stebbing, 1923). The 1927 Act had implications going beyond forest conservation in the context of the Himalayas. Forests were vital for the mountain communities for their seasonal grazing, fodder, fuel wood and

other subsistence needs. As a result, customary systems of resource management were subjected to the legal framework and traditional systems were gradually being replaced and modified by statutory regulation as it grew in scope. The scope of statutory regulation thus began to change traditional systems of resource management by bringing customary practices under legal control. In the area of Chamba whose pastoral economy was based on access of forests and alpine pastures, these institutional changes helped in the gradual change of customary commons into regulated lands with the imposition of permits, restrictions and official supervision (Government of Himachal Pradesh 1997; Bhasin 1988). Forests, from an environmental historical angle, are seen as the institutionalization of the colonial forest governance under the Indian Forest Act, of 1927.

But most importantly, it was more than just a colonial legacy as many of the legal principles that it contained have continued to shape forest administration since Independence. Later forest policies were increasingly focused on conserving biodiversity, ecological protection and involvement of the local communities, but the organizational structure of forestry, defined by the 1927 Act, stayed essentially unchanged. The continuity serves as an important basis for comprehending the historical connections and relationship among colonial governance and current environmental management in Chamba.

Table 5: Evolution of Colonial Forest Legislation and its Governance Implications

Legislation	Principal Objective	Governance Outcome	Relevance to Chamba
Indian Forest Act, 1865	Establish state authority	Beginning of legal forest administration	Initial regulation of commercially valuable forests
Indian Forest Act, 1878	Scientific forestry and forest classification	Reserved, Protected and Village Forests	Restriction of customary rights and grazing
National Forest Policy, 1894	Functional management of forests	Conservation combined with commercial utilisation	Greater regulation of timber, grazing and forest use
Indian Forest Act, 1927	Consolidation of forest law	Institutionalisation of state-controlled forest governance	Legal framework that continued to influence post-colonial forest administration

Source: Compiled by the author based on Government of India (1927), Brandis (1897), Ribbentrop (1900), Stebbing (1923), Guha (1989), and the *District Gazetteer of Chamba*

7. The Ethno-ecology of Gaddi pastoralism and contested commons

In Chamba, a forest has been a means to sustain the livelihoods not just for the forest itself but for the people engaged in pastoral and agricultural activities and it has been a common property landscape throughout the history. One of these was the Gaddi pastoralists who has one of the more unique transhumant systems in the western Himalayas. Seasonal movement of lower valleys in the winter season and high-altitude pastures in the summer season was an ancient adaptation to the ecological diversity of the Himalayan region. The pastoral groups' mobility was regulated by traditional institutions that set grazing times, allocation of pastures, and mutual obligations, such that pastoralism and environmental sustainability balance each other (Bhasin, 1988; Axelby, 2007). Gaddi pastoralism was different from open-access pastoralism, where pastoralists maintained customary rules regarding when, where and how

grazing could be done. The institutional structures are similar to Ostrom's (1990) definition of "commons governance" in that collective resource management relies on norms that are accepted by local communities instead of open access. The creation of a scheme for seasonal migration allowed alpine meadows and lower forest ecosystems time to regenerate naturally, thus reducing pressure on individual grazing areas.

Thus, the sustainability of pastoralism was not only dependent on ecological conditions, but on community institutions which controlled the use of resources in different parts of the land. This changed forever when the colonial administration of the forest was expanded. CUSTOMS began to be incorporated into administrative procedures through permits, restrictions and official supervision as forests grew to be a legally defined state property. The imposition of forest laws did not end pastoral mobility, but rather made customary rights legal rights and subject to the state. As a result, grazing land was no longer

governed by communities, but rather legally recognised, and a wider shift from communities to bureaucratic control of landscapes took place (Guha, 1989; Sivaramakrishnan, 1999). The institutional changes were very important in Chamba because the mobility of pastoralists was closely linked to the availability of forest corridors, alpine meadows and seasonal pastures. Timing of migration and movement of livestock and use of common property resources by people and their animals were increasingly influenced by administrative regulation. In the District Gazetteer of Chamba, the interdependency of forest resources, grazing grounds and rural economy is also mentioned, which suggests that pastoralism was an integral part of the ecology in the district (Government of Himachal Pradesh, 1997).

Customary grazing systems continued to exist but were operating in a growing legal and administrative context which transformed the communities-forest interface. The changes affecting the commons went far beyond the grazing issues. The regulation also impacted the rural households' access to fuelwood, fodder, timber, medicinal plants, etc. The regulation also had an impact on the access to fuelwood, fodder, timber, medicinal plants, etc. which were utilized by rural households. Over time, forests became more than community managed spaces and were more and more regulated by legal rights, administrative rules and conservation goals. The institutional changes demonstrate that the contested commons did not only become a result of an environmental scarcity but because the rights, responsibilities and authority to common property resources were redefined by the governance itself. An environmental historical approach to the Gaddi experience shows how commons are not spaces of nature, but are dynamic historical institutions. They have developed as a result of ongoing interactions between the ecology, customary practices, and the state. Post-independence policies increasingly took into account community participation in forest management, but the institutional framework that was laid down during the colonial era remained significant in shaping the current debates on grazing rights, conservation of biodiversity and access to common property resources. Rather than being a purely contemporary environmental issue, the contested nature of commons in Chamba reflects the results of historical instances of governance.

8. Sustainable Agriculture and Livelihoods in a Changing Environment

The transition from colonial rule to independence in India in 1947 was an important political shift but did not signify a total change of the institutional framework. As forest governance gradually evolved from a focus on commercial timber extraction to the conservation of biodiversity and ecological restoration and sustainable resource management, many administrative structures, legal classifications and regulatory mechanisms that were introduced under colonial rule continue to influence post-colonial forest governance (Guha 1989; Sivaramakrishnan 1999). The forest governance in Chamba is,

therefore, an example of continuity and adaptation of forest policies. The National Forest Policy of 1952 basically maintained the state-oriented policy of forest management that had been passed on from the colonial era.

The policy acknowledged the role of forests as a source of protection and safeguards for soil stability, watershed protection and climatic balance however it still maintained the national interest over the protection and rights of the customary community (Government of India, 1952). The national assets of the forests were becoming more evident, and their management was seen as a task that needed to be scientifically planned and administered. As such, the traditional rights to grazing areas, fuel wood, etc., of forest resources were still subject to government regulation. With the passage of the Forest (Conservation) Act, 1980, there was a major change in the policy with regard to diversion of forest land for non-forest use. The Act aimed at lowering deforestation by mandating a review of land use in forests by the central government and hence greater protection for the environment on a national level (Government of India, 1980). The legislation was a significant step in Indian environmental governance, as it highlighted the need for better protection of the environment and sustainable living. The National Forest Policy of 1988 was another step in the change, as it acknowledged the ecological role of forests, and put the people in forest management. The 1988 Policy recognised that the rural and tribal communities rely on forest resources, emphasised conservation with community participation, ecological sustainability, and participatory governance, unlike the previous policies. (Government of India, 1988). However, the legally and administratively set up colonial structures largely survived, leading to the creation of a form of government which was characterized by community involvement within an existing institutional framework under the state. In Chamba, these policy changes have had an impact on forest governance as well as on the wider socio-economic changes. Mountain ecosystems and common property resources are under pressure due to expansion of road infrastructure, tourism, development of hydropower and changes in land-use. At the same time, efforts have been made to improve protection of forest ecosystems and to maintain the current control of grazing, timber extraction and use of forest produce.

Thus, the current environmental governance in Chamba is not a straightforward shift from colonial to post-colonial governance or administration, but a result of interaction of history, ecology and development interventions. Environmental changes in Chamba cannot be explained just by ecological changes like change in forest cover or changes in biodiversity from an environmental historical point of view. Instead, it is a consequence of many governance eras over time which increasingly redefined who owns what, who has access to it and how it is managed. Colonial policies laid the foundations of the institutional frameworks for the state's management of forests, and post-colonial policies reframed the institutions to suit the new goals of conservation, sustainable development and community involvement. The resulting landscape is therefore

best understood as a historically constructed socio-ecological system in which environmental governance continues to reflect

the enduring legacy of colonial institutions.

Table 6: Environmental Indicators of Change in Chamba

Indicator	Historical Context	Contemporary Context	Suggested Source
Forest Cover	Community-managed landscapes	Protected and regulated forests	Forest Survey of India
Rainfall	Traditional climatic dependence	Increasing variability	India Meteorological Department
Hydropower	Minimal infrastructure	Expansion of hydroelectric projects	Government of Himachal Pradesh
Tourism	Limited	Rapid growth	Himachal Tourism Department
Grazing	Customary seasonal movement	Regulated access	District Gazetteer / Forest Department

9. DISCUSSION

The results of this study reveal that the process of a change in forest governance in Chamba is not simply a series of legislative changes. Instead, it is a historical process that has been ongoing for a long time that has gradually redefined the forest–community–state relationship. The shift to legally-regulated forests from customary commons created new patterns of ownership and access to forest resources, particularly those of women, and new institutions that still shape environmental governance today. The shift from customary commons to legally-regulated forests shifted patterns of access and ownership, with forest women as a particularly important group, and created new institutional forms that continue to affect the current way of managing forest resources.

This backs up Guha's (1989) idea that the colonial forestry was not just an economic enterprise, but a political one as well that was used as a way of extending the reach of the state to the world of nature. The analysis also reveals that colonial laws for the forest also laid the foundations for institutions which persisted after political independence. While post-colonial forest policies began to focus on conserving biodiversity, ensuring ecological restoration and involving communities, they kept many of the aspects of colonial laws and administrative structures, including legal classifications, procedures and regulatory structures. So, the institutional continuity is the hallmark of environmental governance in Chamba and not institutional replacement. The result is in line with that of Sivaramakrishnan (1999) who claimed that post-colonial forest administration in India has been developed by mere adaptation without the abolition of the coloniality of forest administration.

The example of the Gaddi pastoral community further demonstrates the need to consider common property resources as socio-ecological institutions, as opposed to open-access landscapes. In line with Ostrom's (1990) theory of commons governance, the customary grazing system was based on collective institutions, seasonal movements and negotiated rules that over the years, negotiated and managed the use of the resources. The customary practices were gradually integrated into the formal procedures and laws and community rights were replaced by formalised privileges through the process of statutory forest governance. The ongoing conflicts between conservation goals and pastoral livelihoods show that at present access conflicts to forests are not only related to the current changes in the environment, but also to historical governance

processes. The results also confirm the importance of political ecology in the understanding of environmental governance in mountain areas. The study shows that, in addition to ecological indicators, like forest cover or the level of biodiversity, the structures of governance, legal institutions, and administrative power have also influenced the environmental status. As Bryant (1998) and Robbins (2012) explain, the processes of political and institutional negotiations for access to natural resources cannot be divorced from environmental change. Forests in Chamba have developed at the same time as ecological systems, economic resources and arenas of governance, in which various competing interests of conservation, development and community livelihood co-exist. This study is thus an attempt towards an environmental history and has established the fact that what is happening in the forest today in Chamba is a result of the historical institutional changes.

The paper is not only descriptive, but also leverages environmental history, commons theory and political ecology as part of a district level case study. It emphasizes the need for pairing of archival materials and regional evidence on the environment to elucidate temporal changes in socio-ecological landscapes as a result of governance changes. In the process, the study contributes to the understanding of historical debates about sustainable forest management, community involvement and environmental governance in the western Himalayas that are still ongoing today.

10. CONCLUSION

The study explored the nature of forest governance's historical evolution in Chamba, HP using environmental history framework. It traces the evolution of Chamba's customary commons to the state regulated forests and shows how the environmental changes in Chamba have not only been a result of ecological processes, but of the various laws and policies that have redefined forest ownership, access and forest management from time to time. The results show that the colonial forest law established new legal systems, scientific forestry and new administrative institutions, which in their essence changed the traditional forest resource management systems. These institutional shifts over time changed forests from being community managed landscapes to state controlled socio-ecological systems, which altered the relationship between forests, pastoral communities and the state. The study also shows that forest governance in the post-colonial era did not supplant the colonial structures but took over numerous of their administrative and legal pillars to develop and build

structures that better cater to new priorities associated with conservation of biodiversity and ecological restoration as well as sustainable development. Thus, the current forest governance in Chamba has both continuity and change; conservation goals merge the questions of customary rights, grazing access, and common property governance which have been current since ancient times. The Gaddi pastoral community's experience shows that environmental governance entails much more than just current environmental issues, and is one that is tied to historical institutional processes. This study brings together the fields of environmental history, political ecology and commons theory to further the ongoing research of historical environmental governance in the Himalayan region. This research is a departure from studies that have investigated into forest laws or pastoralism alone and instead shows how the law, the environment and the community have collectively influenced forest governance in Chamba through the years. The detail about how local historical sources can be used to infer larger scale processes of environmental change is further demonstrated by the use of district-level sources. The study has broader policy implications.

Historic context of Forest governance offers valuable lessons for present day forest planning, engagement of community and sustainable management of Mountain ecosystems. Policies balancing biodiversity conservation with livelihoods of local people will be more effective if they take into account the historical development of the customary institutions and common property resources. This study can be extended to other regions of the western Himalayas in future by integrating archival data, spatial and spatial-temporal analysis, and long-term environmental data to analyze the impact of historical governance on ecological resilience and sustainable environmental resource management.

11. Limitations of the Study

The present study is essentially qualitative in nature and has relied heavily on the historical analysis of archival documents, government documents, District Gazetteer of Chamba and published scholarly literature. These sources offer a wealth of information on the development of forest governance but are mostly administrative and do not necessarily reflect the views of local communities, especially pastoralist groups who traditionally share their knowledge orally. Furthermore, the study is very much geared towards institutional and policy developments and not quantitative environmental assessment. The current and modern challenges faced by the environment like forest cover change, variation in rainfall and infrastructure development etc. are discussed in the light of their history, but detailed spatial and statistical analysis are not considered in the present research. Incorporation of archival data with Geographic Information Systems (GIS), remote sensing, climate data and ethnographic fieldwork in future studies would give a complete study of long-term socio-ecological changes in Chamba.

REFERENCES

1. Agrawal A. *Environmentality: Technologies of government and the making of subjects*. Durham (NC): Duke University Press; 2005.
2. Axelby R. It takes two hands to clap: How Gaddi shepherds in the Indian Himalaya negotiate access to pasture. *J Agrar Change*. 2007;7(1):35-75.
3. Bhasin V. *Gaddis of Himachal Pradesh: A socio-cultural study*. New Delhi: Kamla-Raj Enterprises; 1988.
4. Brandis D. *Indian forestry*. Dehradun: Oriental University Institute; 1897.
5. Bryant RL. Power, knowledge and political ecology in the Third World: A review. *Prog Phys Geogr*. 1998;22(1):79-94.
6. Bryman A. *Social research methods*. 5th ed. Oxford: Oxford University Press; 2016.
7. Creswell JW, Creswell JD. *Research design: Qualitative, quantitative, and mixed methods approach*. 5th ed. Thousand Oaks (CA): SAGE Publications; 2018.
8. Forest Survey of India. *India state of forest report 2023*. Dehradun: Forest Survey of India, Ministry of Environment, Forest and Climate Change, Government of India; 2023.
9. Gadgil M, Guha R. *This fissured land: An ecological history of India*. Delhi: Oxford University Press; 1992.
10. Government of Himachal Pradesh. *District Gazetteer of Chamba*. Rev ed. Shimla: Department of Language, Art and Culture, Government of Himachal Pradesh; 1997.
11. Government of India. *National Forest Policy, 1894*. Calcutta: Government of India; 1894.
12. Government of India. *The Indian Forest Act, 1927 (Act No. 16 of 1927)*. New Delhi: Government of India; 1927.
13. Government of India. *National Forest Policy, 1952*. New Delhi: Ministry of Food and Agriculture, Government of India; 1952.
14. Government of India. *The Forest (Conservation) Act, 1980 (Act No. 69 of 1980)*. New Delhi: Government of India; 1980.
15. Government of India. *National Forest Policy, 1988*. New Delhi: Ministry of Environment and Forests, Government of India; 1988.
16. Grove RH. *Green imperialism: Colonial expansion, tropical island Edens and the origins of environmentalism, 1600-1860*. Cambridge: Cambridge University Press; 1995.
17. Guha R. Forestry in British and post-British India: A historical analysis. *Econ Polit Wkly*. 1983;18(45-46):1882-1896.
18. Guha R. *The unquiet woods: Ecological change and peasant resistance in the Himalaya*. Delhi: Oxford University Press; 1989.
19. Government of India. *The Indian Forest Act, 1878*. Calcutta: Government of India; 1878.
20. Ostrom E. *Governing the commons: The evolution of institutions for collective action*. Cambridge: Cambridge University Press; 1990.

21. Rangarajan M. Fencing the forest: Conservation and ecological change in India's central provinces, 1860-1914. Delhi: Oxford University Press; 1996.
22. Ribbentrop B. Forestry in British India. Calcutta: Office of the Superintendent of Government Printing; 1900.
23. Robbins P. Political ecology: A critical introduction. 2nd ed. Chichester: Wiley-Blackwell; 2012.
24. Sivaramakrishnan K. Modern forests: Statemaking and environmental change in colonial eastern India. Stanford (CA): Stanford University Press; 1999.
25. Stebbing EP. The forestry of India. Vol. 1. London: John Lane; 1922.
26. Stebbing EP. The forests of India. Vol. 2. London: John Lane; 1923.
27. UNESCO. Convention concerning the protection of the world cultural and natural heritage. Paris: United Nations Educational, Scientific and Cultural Organization; 1972.
28. Worster D. The ends of the earth: Perspectives on modern environmental history. Cambridge: Cambridge University Press; 1988.

Creative Commons License

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution–Non-commercial–No Derivatives 4.0 International (CC BY-NC-ND 4.0) License. This license permits users to copy and redistribute the material in any medium or format for non-commercial purposes only, provided that appropriate credit is given to the original author(s) and the source. No modifications, adaptations, or derivative works are permitted.

About the Author

Dr. Abha Yadav is an Assistant Professor in the Department of History at S.K. Government College, Kanwali, Rewari, Haryana, India. Her academic interests include Indian history, social and cultural history, historical research, and higher education. She is actively engaged in teaching, research, academic writing, and scholarly activities.