Chapter 6

FORESTS, FARMS AND PEASANTS: AGRARIAN ECONOMY OF THE HILLS

At the beginning of colonial rule peasants augmented their agricultural income from the forests in the hill areas. They freely moved into forests to collect various products and expanded cultivation whenever required. But as the colonial state strengthened its control over forests and wastelands, arable expansion become difficult. The situation worsened as population increased rapidly. This chapter is addressed to this agrarian crisis in the U.P. hills. I begin with a discussion of the nature of agriculture practices in the U.P. hills. How did ecology determine these practices? To understand how the agrarian economy transformed under colonial rule I begin with the changes introduced in the agrarian structure. Then I proceed to explore how the common village land slowly passed under the control of the state. One important feature of the hill agrarian economy was the frequent expansion of cultivation into the commons and forests. This frequency accelerated with mounting pressure on land. I examine this process of arable expansion and how this came to a virtual halt in the 20th century.

The Agrarian Setting

In this section I describe the agricultural setting in the U.P. hills. The entire region is mountainous. Agriculture was practised on the low lying areas of
the Tarai-Bhabar as well as on high altitude areas. The region is covered with high mountain ranges running parallel to each other. They were cut through by rivers and small streams coming down from the snow covered peaks of the high Himalayas. These river valleys were most suitable for cultivation. Therefore, the population concentrated in these valleys. Other regions were sparsely populated.

Altitude, slope and irrigation were important factors in determining the nature of agriculture. Land formation, soil quality, temperature, humidity and rainfall etc. were also important determinants. One important aspect to hill agriculture was sunlight. Of every mountain range one side is sunny (tailo) and other shady (saylo). The tailo was fully cultivated while saylo was avoided as it was less productive. But at very high altitudes the difference between the two slopes is less sharp.\(^1\) If the slope is gentle, the mountain ridge is terraced and cultivated. Cultivation sometimes continuously extends from river banks to the hill tops,\(^2\) and other times to river valleys.\(^3\) Forests begin where cultivation terminates.\(^4\) Thus most of the valleys have three sub-regions: forests and pastures in the upper part, terraced cultivated fields on gentle slope in the middle part, while fer-

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2. Ibid., pp. 72-3; "SRG,1842", p.124; *SRG,1896*, pp.16-7; Traill, "SSK", p.36.


tile warm irrigated fields on river banks constitute the lower part.\textsuperscript{5}

Regions between 3000 and 5000 feet above the sea level were most suitable for cultivation\textsuperscript{6} and the majority of populated villages lay in this zone. Above 5000 feet there is a marked decline in the quality and quantity of agriculture output.\textsuperscript{7} Nothing was generally produced above 7000 feet.\textsuperscript{8}

Irrigation was the most important factor in determining the quality of agriculture. Variations in water supply defined the contrast between two types of agriculture: wetland farming and dryland farming. Wetland farming was carried on in the low lands in river valleys where irrigation was possible. The best irrigated lands were known as sera.\textsuperscript{9} These lands had perennial water supply. Streams were dammed and channels (guls) were carried to the fields.\textsuperscript{10} These valleys possessed good alluvial soil.\textsuperscript{11} Seras were well cultivated, invariably double cropped.

\textsuperscript{5} Pant, \textit{The Social Economy of the Himalayans.}, p.75.


\textsuperscript{7} \textquote{Report on the Assessment of the Naini Tal District Hill Pattis} by Goudge, attached to his letter to Commr, Kumaun, 30-8-1901, file 1/1900-1901, box 69, COR, RA Naini Tal.( hereafter \textquote{Assessment of the Naini Tal Hill Pattis}),p.2.

\textsuperscript{8} \textit{SR of Almora and Naini Tal}, p.13.

\textsuperscript{9} Traill, \textquote{SSK'}, p.36; Goudge,\textquote{Assessment of Naini Tal Hill Pattis'}, p.5.

\textsuperscript{10} Traill,\textquote{SSK'}, p.36; \textit{SRG,1896}, p.21; Goudge,\textquote{Assessement of Naini Tal Hill Pattis'}, p.5.

\textsuperscript{11} Traill,\textquote{SSK'}, p.16.
Fine varieties of rice were sown in April in this area and reaped in September. This was followed by wheat in the rabi season. Some of the best seras were those of Bansuli near Ranikhet, Mendal in Bageshwar, and the Khasparja basin of Pithoragarh in Almora district, Gurdarsyun and Devalgarh in Garhwal district. Other irrigated lands (taloan) depended on intermittent streams fed by rain water for irrigation. Here the kharif crop was sown in June. Generally, these lands produced two crops annually. But in a drought year these irrigated lands suffered.

The upland fields which were not irrigated were known as upraon or Ukhar. The quality of upraon depended on soil quality, its moisture retention capacity, the slope gradient, its proximity to forests and distance from village sites. This type of land required constant supply of manure. The first class upraon had deep and good grained soil with little stones. The first class Upraon land like taloan was double cropped: wheat was followed by mandua where cultivation of rice was difficult. The crop rotation followed in this land was: wheat followed by mandua then fallow and finally rice. Land was also sown with various type of beans or pulses like urd, mung, gohat, bhatt etc. The second class

15. Ibid., p.18.
upraon were often distant from villages; thus were not well terraced and the soil contained stones. The well manured upraon was double cropped but barley and inferior millets like jhangora, kauni etc. were cultivated instead of wheat and mandua.\(^{17}\) Coarse grains, barley, mandua, jhangora etc. were sown on large areas because they gave good yield even on inferior land.

The remaining cultivated area which was unsettled and intermittently tilled was known as katil or khil or ijran.\(^{18}\) Katil land lies on the natural slope of hillside. The shrubs and bushes were burnt and land was broken with hoe. After every crop land was left fallow for number of years.\(^{19}\) The standard rotation was three crops in five years. Such cultivation was widely prevalent near kharaks (temporary cattle sheds) where manure was available. Such land after continuous cultivation for many years did improve and became fertile enough to be classed as upraon. Usually mandua was sown on katil land in June. Other crops were chua, jhangora, gahat etc.\(^{20}\) Haldi (turmeric) was profitably cultivated on this land. But the most recent addition was potato which was extensively cultivated in some regions on katil land.\(^{21}\) katil cultivation was considerable in Gangoli, Shov, Kali-

\(^{17}\) Goudge, 'Assessment of Naini Tal Hill Pattis', p.5.

\(^{18}\) SRG, 1896, pp.91-2. The ijran was terraced and the katil was unsettled land.

\(^{19}\) Ibid., p.17.


\(^{21}\) Goudge, 'Assessment of Naini Tal Hill Pattis', pp.5-6.
kumaun and Askot in Almora district, Dudatoli, Daijyuli and Choprakot in Garhwal.22

A rudimentary sort of agriculture was practised by Bhotiyas on high altitude zones, where cultivation was only a subsidiary occupation. Small patches were cultivated with hoe \((hackbau)\). Only one crop between the middle of May to the middle of October was produced. At higher elevations crops were sown in June when snow melted and harvested in September, to save them from early snow fall. Barley, mustard, amaranthus; wheat and vegetables were grown.23 In contrast to this profitable agriculture was carried on in some parts of the Tarai. Large areas were brought under cultivation in the Tarai by draining swamps and developing proper irrigation network in the second half of the 19th century.24 Rice was extensively grown, its yield being as high as 4625 lbs per acre in some instances.25

The 19th century was a period of arable expansion. The expansion took place in all the agro-ecological zones: the wet land farming areas of the river

22. SRG,1896 , P.17.


valleys; the dry lands of the hill tops and the Tarai-Bhabar. In the hills expansion occurred first in the river valleys where soil was fertile and irrigation possible. Rice and wheat grew well in this area: the former during the kharif season and the latter in the rabi. Rice and wheat were considered important by the people: apart from being the staple food these were marketable and profitable in comparison to other crops grown in the region. So these crops were also grown to pay land revenue in cash. It appears that by the middle of the 19th century most of the land around river valleys were occupied. Subsequently expansion took place mainly in the dryland farming areas.(see Table 6.1) The well terraced dry land with good quality deep soil was capable of giving two crops annually. Generally wheat and mandua were the main crops grown on this land.

The poor quality dry land which was generally unterraced and stony sustained an agriculture with low productivity and produced only one crop in a year and sometimes required long fallows.26 Coarse grains like Jhangora, kauni, chua, gahat etc., were grown on this land which was often far away from the village27 and in many instances lay around the kharaks. Arable expansion in the second half of the 19th century mostly took place on this land.(see Table 6.1) Due to this the area under coarse grain increased in comparison with rice and wheat. Expansion on this land was more marked in Garhwal than in Kumaun as arable expansion was more rapid in the former than in the latter. In Garhwal, at the

27. Ibid., p.19.
beginning of the 20th century, the total cropped area under wheat and rice was just 97,500 acres in comparison to 256,800 acres under other food grains which mostly consisted of coarse grain and pulses.\textsuperscript{28}

In the hills usually each village has some wet and some dry land. Perhaps villages were initially settled only on the river valleys around wet lands and afterwards cultivation expanded onto dry lands. However, in the Tarai-Bhabar most of the land brought under cultivation was irrigated. The expansion in the Tarai-Bhabar was largely a 19th century phenomena. A region known for its cattle grazing, the Tarai was considered unhygienic, and thus rarely cultivated.\textsuperscript{29} The development of canal system for irrigation by the colonial state led to a rapid expansion of cultivation in the Tarai-Bhabar, particularly during the second half of the 19th century. The state encouraged people to settle in this region. Rice and wheat came to be grown over a large area.\textsuperscript{30} By the end of the 19th century about 56,909 acres in the Bhabar and 140,267 acres in the Tarai were under cultivation.\textsuperscript{31}

\begin{itemize}
\item \textsuperscript{28} Agricultural Statistics of India, 1906-07.
\item \textsuperscript{29} Batten, \textquote{A Few Notes on the Subject of the Kumaun and Rohilkund Turase'}, dated 9-10-1844, in \textit{idem, Official Reports}, pp.161-86, esp. pp.182-3, reproduced from Journal of Asiatic Society, vol.XIII, no.CLV, part III(1844); \textit{idem, \textquoteright Report on the Bhabar'.}
\item \textsuperscript{30} \textit{Ibid}; \textquote{Administration of Tarai Pargana'}, in Selection, IIInd series, vol.II, pp.173-83; Meston to Joint Secy, Board of Revenue, NWP&O, dated 2-10-1898, February 1900 A progs 5-6, file 66/1900, Reve.& Agri (Land Rev.) NAI.
\item \textsuperscript{31} Nainital Gazetteer, 1903, p.59.
\end{itemize}
### Table 6.1

**Pattern of Cultivated Assessed Area**

<table>
<thead>
<tr>
<th></th>
<th>Kumaun</th>
<th>Garhwal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1872</td>
<td>1903</td>
</tr>
<tr>
<td>Irrigated</td>
<td>26464 (11.0)</td>
<td>27467 (9.1)</td>
</tr>
<tr>
<td>First Class dry</td>
<td>115063 (47.8)</td>
<td>134787 (44.5)</td>
</tr>
<tr>
<td>Second Class dry</td>
<td>56011 (23.3)</td>
<td>82016 (27.1)</td>
</tr>
<tr>
<td>Ijran/Katil</td>
<td>43370 (18.0)</td>
<td>58937 (19.4)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240908</strong></td>
<td><strong>303212</strong></td>
</tr>
</tbody>
</table>

**Note:** 1872 and 1863 figures are from Beckett's settlement. 1896 figures are from Pauw's settlement and 1903 figures are from Gaudge's settlement. Figure in parentheses are percentages of total cultivated assessed area.

**Source:** Garhwal SR 1896 (pp. 26A-27A) and Final Report on the Assessment of the Almora District and Hill Pattis of the Nainital District by J.E. Gaudge (Appendix I).

### Agrarian Structure

In an agrarian society, patterns of land holding, relationships of proprietors and tenants, and relations between the state and peasants are important. This section will discuss how these relations were transformed under
colonial rule and to what extent this transformation influenced the hill agrarian economy.

In the pre-colonial period the final ownership of the land in Garhwal and Kumaun was vested on the King. All cultivators, whose fore fathers had brought land under the plough and were cultivating land from time immemorial were direct tenants (khaikars) of the King. The King could have granted land to anyone for bravery, erudition etc. The grantee was known as thatwan. The cultivators on the granted land, who were direct khaikars of the King, became khaikars of the grantee. Thatwans could make one-third of the land of the granted village his khudkast land. khaikars of the thatwan were to give land revenue now to the thatwan instead of to the officials of the king. Whether the thatwan was to keep the revenue or hand over to the offi-

32. Traill, 'SSK', p.31; SRG,1896, p.36.
33. Tehri Garhwal Rajya Ke Bhumi Sambandhi Niyam (Dehradun, 1941); BGG, 1910, p.80; SRG,1896, p.33. Traill argues that alienation of land was allowed though it rarely changed hands in the interior. ('SSK') Pauw questions this assumption of Traill on two grounds: first, people widely believed that British introduced the right to alienate land; secondly, in Tehri kingdom where the descendent of the old raja were ruling and old customs were largely preserved no one, including grantee, had right to alienate land. This right was prerogative of the king. (SRG,1896, p.33) Pauw appears to be correct. As most of the land was under various types of grants any move to transfer land might have preceded by resumption of grant.
34. Traill, 'SSK', pp.31-2.
35. Ibid.
cials of the king, depended on the nature of the grant. In most of the cases they kept the revenue.\textsuperscript{37} Thatwans also received various other customary dues.\textsuperscript{38}

While a thatwan could not eject his khaikars, he could re-settle other khaikars in case the original khaikars fled. These new khaikars had an inferior status and they were required to do various services for the thatwan.\textsuperscript{39} The king also gave grants to his officials in lieu of salary. Such grants gave the grantee a right to appropriate an amount of revenue equivalent to his salary.\textsuperscript{40}

The British made two important changes: alienation of the land was made possible; grants at the cost of the existing rights was discontinued. All occupant cultivators whose land was not under any grant at the British occupation were made proprietors. They were co-sharers in the village property and were called hissedars.\textsuperscript{41} Many of those who had received grants from Gurkhas and those who had wrongly got themselves recorded as thatwan in the early years of British rule

\begin{verbatim}
37. SRG, 1896, para 37.
40. SRG, 1896, para 33.
41. Ibid, pp.34-5.
\end{verbatim}
also became *hissedars*. The majority of holdings were held under this tenure (see Table 6.2).

All *khaikars* of *thatwans* remained *khaikars*. They were defined as occupancy tenants who could not be removed from their land until they paid land revenue. Their holdings were hereditary. *Khaikars* were to pay *malikana* and other customary dues to *hissedars*. The number of holdings under this tenure is given in Table 6.2. There were two types of *khaikars of thatwans*. There were those who had cultivated land for many generations before it was granted. And there were those who were brought into the village by *thatwans* to cultivate land. The latter were called *kaini* or *kurnior khurni*. They had inferior status and were expected to do various services to *thatwans*. In case a *khurni* died childless his possession passed on to the proprietor. The distinction between two types of *khaikars* in

42. Stowell, *op. cit.*, p. 31.

43. Traill says that 3/4th of the land in the Kumaun province was under this category. (SSK') At the time of Batten 3/5th of the land was under this category. (SRG,1842', pp.129-30) The Deputy Commissioner, Garhwal, wrote that in the district there were mostly petty *hissedars* who cultivated their own land. See his letter to Secy Reve Deptt, UP, 25-6-1929, file 4/1928-29, Deptt I, Basta 1907-34, ERR Coll. Pauri.

44. Goudge argues that calling *khaikars* occupancy tenants was wrong as they did not pay any rent of the land but only the government revenue and the *malikana* which was a small percentage of the revenue. He suggested that they be called sub-proprietors. *Report on the Assessment of the Shore Pargana, Almora District*, by J.E.Goudge, in December 1899 B progs 41-2, file 414/1899, Reve & Agri. (Land Reve), NAI, p 5.

45. SRG,1842', pp.130;32; SRG,1896, p.33.

later under the British became meaningless. Batten observed in Garhwal that *khurni* or *kaini* or *kurni* merged with *khai* *kars* as proprietors were compelled to give most favourable terms to cultivators due to shortage of tenants.\(^\text{47}\)

There were two types of *khaikari* villages: *pakka khaikari* and *kachcha khaikari*. *Pakka khaikari* villages were those in which only *khaikars* lived and there was no *khudkast hissedar*. The common lands in such villages belonged to *panch khaikars* and not to *hissedars*. In such villages when a *khaikar* died without issue and without any close descendent to inherit the land, the *panch khaikars* took over the holding.\(^\text{48}\) *Kachcha khaikari* villages were those in which *hissedars* were *khudkast* and lived with *khaikars*. These were called mixed villages. *Hissedars* had a dominant and privileged position in such villages. They had special rights on the common land.\(^\text{49}\) In such villages if a *khaikar* died without leaving behind any one to inherit his property the land passed on to the hissedar.\(^\text{50}\)

Due to this significant distinction there was enormous confusion and a lot of litigation over classification of holdings. Many people manoeuvred to get themselves registered as *hissedars* in *pakka khaikari* villages during settlement thereby in-

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47. `SRG,1842`, pp.131-32. See also *SRG,1896*, pp.33-4.


49. Ramsay later held that in a kachcha khaikari village if a khaikar starts cultivating entirely new piece of land as nayabad hissedar can not claim rent on that. Ramsay quoted in *SRG,1896*, p.47. This opened up possibilities for khaikars to get nayabad grants in kachcha khaikari villages.

stantly converting *pakka khaikar* into *kachcha khaikar* villages. Many influential non-resident *hissedars* got themselves registered *khudkast* in *kachcha khaikari* village. In many instances the reverse also happened when *khudkast* land of a *hissedar* was snatched away by a *khaikar* in *kachcha khaikari* villages thereby converting the village into *pakka khaikari*. There were many litigations on this issue in the courts. Tenancy legislations were brought in the legislative council but no law could stop the process.51 Gairola, an expert lawyer on tenurial issues suggested that *khaikars* in *pakka khaikari* villages be called under proprietors (*malik adna*) not occupancy tenants.52

*Sirtans* were tenant at will, usually of low caste (*Doms*), without any right of occupancy and inheritance. They could have been removed from land any time. They paid one-third of the produce of the land to the person whose land they cultivated.53 When *sirtans* were brought from other villages they were called *paikast*.54 During the British rule when a *sirtan* extended his cultivation into adjoining the land he was cultivating he was recorded as *sirtan* but if he cultivated entirely a new piece of land away from his existing cultivation he was recorded as


52. Ibid.,


khaikar. In the latter case he could not have been removed from the land.\textsuperscript{55} In the beginning of British rule due to sparse population and availability of vast tracts of culturable land, sirtans had a strong bargaining position.\textsuperscript{56}

Frequent settlements provided influential people the opportunity to get themselves registered as hissedars. khaikars often asserted their right to be recorded as hissedars.\textsuperscript{57} Recording of non-resident hissedars as khudkast in kachcha khaikari villages led to a lot of controversies and litigations.\textsuperscript{58} Khaikars were frequently found to be more well to do than hissedars. Anyway there was little difference between them except that khaikars had to pay additional revenue as

\textsuperscript{55} SRG, 1896, p. 49; Gairola, op. cit., pp. 22-3. When nayabad rules for Kumaun were being amended in consultations with the KFGC, Mukandi Lal, a member of the KFGC, suggested that sirtans, and all those living in a village for 12 years and more be entitled to nayabad grants 'like hissedars and khaikars. See the Note by Mukandi Lal in Reve Deptt file 202/1928, box 470, UPSA Lucknow.

\textsuperscript{56} 'SSK', pp. 52-3; 'SRG, 1842', pp. 131-32; SRG, 1896, p. 35.

\textsuperscript{57} 'SRG, 1842', p. 132.

\textsuperscript{58} Gairola, op. cit., pp. 215-22. Litigations were due to the nature of tenurial system and incorrect land records. People invested a large sums of money on litigations. According to one study litigations were responsible for 17.3 per cent of the total debt in Garhwal. See S.D. Pant, 'Report on an Economic Enquiry in village Hatnur and Pati Gaon, District Garhwal', in Report of the United Provinces Banking Enquiry Committee, 1929-30, vol. II, Evidences (Allahabad, 1930), p. 349. Traill wrote that there were very few suits in the court in the hills but most of them were land disputes. ('SSK', p. 50) Batten wrote that there was not a single estate left in Kumaun which had not been subject to litigations due to a large number of absentee Brahmin landholders. ('SRG, 1842', p. 129)
However, collecting malikana and other haq-dastur became difficult after the mid 19th century. Earlier malikana was 10 per cent of the land revenue and some haq-dastur. Beckett made it 20 per cent by merging haq-dastur in it.

The tenurial system of the Tarai-Bhabar was different from that of the hills. A large area was the government estate. In the government estate all cultivators were tenants paying rent to the government. This system was known as the kham systems.

Some systematic changes were introduced in the pattern of collecting taxes. In the first revenue settlement the British farmed out revenue collection to kamins and sayanas. From the second settlement onward (1816) padhans were made responsible for collecting revenue. Kamins, sayanas and thokdars who were by and large the same, slowly became irrelevant. They earlier had police duties and the task of supervising revenue collection. These duties were slowly transferred to patwaris. In 1856 there was a proposal to discontinue their

60. Ibid., p.318; SRG,1842', pp.129;132.
62. Batten, `Report on the Bhabar', p.201; Plowden, `Administration of Tarai Pargana '; Chief Secy, Govt NWP & O to Secy GOI, 6-11-1899, March 1900 A progs 1-3, file 391/1899, Reve & Agri. (Land Reve), NAI.
63. Traill, `SSK', p.50; .
64. `SRG,1896, p.34.
Table 6.2

Tenurial Pattern in Garhwal

(Area in acres)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hissedar No</th>
<th>Hissedar Area</th>
<th>Khaikar No</th>
<th>Khaikar Area</th>
<th>Sirtan No</th>
<th>Sirtan Area</th>
<th>Total No</th>
<th>Total Area</th>
</tr>
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<tbody>
<tr>
<td>1864</td>
<td>25567</td>
<td>94064.4</td>
<td>14679</td>
<td>26613.8</td>
<td>10052</td>
<td>7813.2</td>
<td>50298</td>
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<td></td>
<td>(50.8)</td>
<td>(73.2)</td>
<td>(29.2)</td>
<td>(20.7)</td>
<td>(20.0)</td>
<td>(6.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1896</td>
<td>35096</td>
<td>203144.5</td>
<td>15163</td>
<td>53987.3</td>
<td>11799</td>
<td>26122.4</td>
<td>62058</td>
<td>283254.2</td>
</tr>
<tr>
<td></td>
<td>(56.5)</td>
<td>(71.7)</td>
<td>(24.4)</td>
<td>(19.1)</td>
<td>(19.0)</td>
<td>(9.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 1864 figures are of Beckett's settlement and 1896 figure are of Pauw's settlement based on cadastral survey. Figure in parentheses are of percentage.

Source: SRG, 1896, pp. 13-14 and 29 A.

...privileges and abolish their offices, but 1857 revolt came to their rescue: it was suddenly found that they came from old and influential families and friendly relation with them was necessary to contain the influence of 'swarajyawadis'. They continued for some more time, although Pauw in 1896 settlement removed many names from the list of individual who could claim haq-dastur. Hereditary succession helped in their survival. On the other hand the position of padhan continu...
ously improved. Only hissedars could have been padhans receiving revenue free land. Traditionally a padhan was elected by hissedars but later the office became hereditary. Non hereditary succession was rare and warranted interference of the district officer. In purely khaikari villages there were `ghar padhans' who were representative of hissedars in the village. Their position remained disputable and only in the 20th century the independence of their office was recognised.

The initial settlements in the region mainly revised the rates of revenue. Initially no attempt was made to measure land. In the pre-colonial period there was no concept of land measurement, revenue was collected on the basis of the amount of seed sown. Based on this Traill worked out his measurement. Of these early settlements only the 1823 settlement was significant because customary village boundaries were roughly drawn and marked in this settlement. These boundaries were known as `san or sal assi' boundaries (since 1823 correspond to samvat 1880) and became a point of authentic reference in the settlement of disputed

68. `SRG,1842', pp.118-22; 130; Gairola, op. cit., pp. 227-8.
70. There were seven settlements between 1815-1833 under Traill (1815, 1816, 1817, 1820, 1823, 1828 and 1833). Batten in the 1840s and Beckett in the 1860s made long term settlements of 20 years. Pauw settled Garhwal in the late 1890s and Goudge Kumaun in the early years of the 20th century. Ibbotson also settled Garhwal in late 1920s. In the Tarai-Bhabar and Dehradun there were separate settlements. In Garhwal land revenue increased from Rs. 37056 in 1815 to Rs. 165727 in 1896. See various SRs.
71. Traill, `SSK', p.25.
72. 16 muthis = 1 nali; 20 nali = 1 bisi = 4800 sq. yards. See Traill, `SSK',p.34; `SRG,1842', p.127.
village boundaries and in determining rights of the people on the common land. 73

With the purpose of introducing real measurement, J.H. Batten, who had a good experience of settlement in the plains, was sent to the hills in late 1830s. But after some experiments he decided that real measurement would be very expensive and time consuming, therefore, relied on the old system of nazr-andaz (guess based on observation). 74 Thus Beckett was the first to introduce some sort of measurement in the 1860s. Later more 'scientific' cadastral surveys were introduced by Pauw in Garhwal. 75 However, Pauw's settlement ran into trouble when the area under cultivation was found to be increasing manifold, and villagers opposed it. Not only peasants but local officials (amins) who assisted in measurement also boycotted the settlement. Only after assurance from Pauw that the issue would be carefully considered could it be carried on. 76

The easy grant of hissedari and khaikari rights during settlements and

73. Batten writes that boundaries determined by Traill were 'false records created by native officials' without the consent of local people and padhans. Batten claimed that he had properly settled village boundaries and created chuknamah (sketch) on which the village padhan and the padhans of surrounding villages had signed. 'SRG, 1842', p.124. This shows that customary village boundaries which Traill claimed to have formalised were not very clearly defined (geographical features like a river, hill or valley perhaps served as boundary) and vast tracts of pastures and forests were included within the boundary. Efforts of Traill, Batten and Beckett made boundaries clearer but as these gained importance with passing of time disputes over them multiplied.

74. 'SRG, 1842', pp.126-27.


76. SRG, 1896, p. 77.
non-collection of revenue on newly broken land for cultivation in the period between settlements led to a considerable expansion of cultivation in the 19th century.

Thus various changes were introduced in the agrarian structure during the colonial period. The pre-colonial system of making grants at the cost of the existing rights was discontinued. This eliminated the possibility of the real cultivators being reduced to be the status of tenants of the grantee. A large number of cultivators got recorded as proprietors whose rights in the land could not be terminated. Later collecting malikana from occupancy tenants became difficult when they strengthened their position. These developments facilitated arable expansion.

State and the Commons

The commons, the common property of villages, provided peasants with a possibility of supplementing peasant resources and agriculture activities. Commons provided fodder and space for grazing which sustained livestock and saved the land for crop cultivation. In the hill economy the common land provides space on which cultivation can be expanded. The commons together with forests provide fruits, tubers, vegetables, fuel, water for irrigation, slates, silt which augment the resources of the peasants. N.S. Jodha, in fact, argues that crops, livestock, tree/bushes which are 'constituents of an integrated production strategy' particularly in the dry land farming system, are responsible for the 'stability and viability'
of the entire system.\textsuperscript{77}

The attitude of the people as well as the colonial state towards commons changed over time. In this section we attempt to examine the factors which led to this change.

In the initial years of the British rule, as is evident from the descriptions of G.W. Traill and J.H. Batten,\textsuperscript{78} population of the U.P. hills was sparse\textsuperscript{79} and land was abundant: uncultivated land, pastures and forests spread over miles. Villages were settled far from each other with large common land spreading between them. These commons merged with vast tract of forests.\textsuperscript{80} Atkinson wrote, 'Under the village tenure which we found obtaining when we took possession of the hills, 

\textsuperscript{77} N.S. Jodha, 'Common Property Resources and Rural Poor in Dry Regions of India', in Ramachandra Guha (ed.), Social Ecology, Delhi, 1994, reproduced from Economic and Political Weekly, July 5, 1986. Jodha shows how common property resources augment income, provide employment and reduce inequality caused by private property.

The commons are now at centre of the development discourse. Garrett Hardin's 'The Tragedy of Commons' (Science, 162, 1968, pp.1243-48.) opened a debate for the management of the commons in which the human ecologists, the development experts and the global resource managers have actively participated. For a critical review of the literature on the commons see Michael Goldman, "Customs in Commons" :The epistemic world of the commons scholars', Theory and Society, 26, 1 (1997), pp.1-37.

\textsuperscript{78} Traill, 'SSK'; Batten, 'SRG, 1842'.

\textsuperscript{79} According to Traill there were 27.25 persons per sq. mile. But these figures can only be approximately correct as neither population was enumerated nor area was measured. Traill, 'SSK', pp. 12-3. Even in the late 1970s only 16.8 per cent of the geographical area was under cultivation in the U.P. hills. See Gupta, The Living Himalayas, vol.I, p. 18.

\textsuperscript{80} Traill, 'SSK', pp.1-2; Batten, 'Settlement Report of Garhwal', (hereafter 'SRG, 1842') attached to his letter to Commr, Kumaun, 10-8-1842, in idem, Official Report, p.124.
each village had a certain defined boundary, extending in many instances for miles and miles into dense jungles and to the tops of ridges. Traill formalized these village boundaries and demarcated them in his 1823 settlement (these village boundaries are known as *sal assi* boundaries as 1823 corresponds to Samvat 1880). These were subsequently regarded officially important for quite sometimes.

Who owned the common land? Guha has argued that these were owned and managed by the village community. P.C. Baumann and Chetan Singh disagree with Guha. Baumann suggests that in the UP hills there were scattered hamlets with no village community; any notion of unstratified community managing commons is 'populist' with no historical base. Singh shows in case of Himachal that in the pre-colonial period the rajas had absolute right over uncultivated land and made grants of land which in some cases included 'grass, grazing and pasture-land, with fallow land large and small, with fruit trees and water, with ingress and egress together with gardens and resting places...'. These grants made no reference to 'village community' and its control over the 'common property'. Thus, he concludes, it is 'simplistic' to talk of village community and its control over the

commons. 85

There is no doubt that rulers often claimed sovereign right over the uncultivated land but it generally co-existed with certain rights of use by peasantry. As Singh himself has accepted that cultivators always had 'rights of use' and 'initially (in the early British period) it seemed to have mattered very little whether the wastelands were owned or simply used by the peasantry' 86. In the UP hills although the state claimed sovereign right over commons, villagers also considered those areas as their own. Atkinson wrote: 'the people adhere tenaciously to these (the) old boundaries, and look upon any attempt to abridge them as an interference with their rights, and on any one who steps in as an enemy and interloper' 87. There is evidence that villagers resisted the right of the state to make grants to outsiders on common land.

We have no clear evidence to judge whether the village community managed commons or not. 88 The sovereign right of the ruler over the commons did

85. Ibid.
86. Ibid., p.100.
88. We lack clearly written evidence for the colonial period. However, Marcus Moench discusses some customary restraints prevalent in 1984 in Garhwal. Moench, "Turf" and Forest Management in a Garhwal Village (India)', in Louise Fortmann and John W.Bruce (eds), Whose Trees? : Proprietary Dimensions of Forestry (Boulder, London, 1988), pp.127-36. When van panchayats were formed in the 1930s in the UP hills village communities successfully managed them. For their formation however not only permission of the government was required but they were to be managed within the broader outlines issued by the government. See Kartar Singh, Managing Common Pool Resources: Principles and Case Studies,
not preclude the possibility of village communities managing them. The vertical
migrations, the summer movements to the high pastures and the winter shift to the
Tarai-Bhabar indicate village management of commons. But we do not know how
the community controlled these practices.89

Batten writes that there was no state intervention in the use of common
land by the people90. Although the government theoretically claimed the sover-
eign right over the commons, but in practice it had hardly any control over it91.
These vast tracts of land which helped people supplement their income were seen
initially as `waste' by the colonial state. The state encouraged cultivation of the
`waste', encouraging the expansion of arable without restrictions.92 The primary
purpose of the colonial state in the early years, it seems, was to increase area under
cultivation so that revenue could increase93. Increased revenue and arable expan-

...Continued...

(Delhi, 1994), chapter 11.

89. There are instances of communities framing rules and evolving
mechanism to manage commons. For such examples see Elinor
Ostrom, Governing the Commons: The Evolution of Institutions for
Collective Actions (Cambridge, 1990)

90. `SRG,1842',p.124.

91. Ibid.

92. SAC, Garhwal, to Commr, Kumaun, 31-8-1842, in vol.9, RLI, PMR
Coll. Pauri, RA Dehradun. This was applicable only to the expan-
sion adjacent to the existing cultivation.

93. Traill expressed concern over deserted and incompletely
cultivated villages.(p.42) He even claimed rapid expansion after
the British occupation.(p.56.) Traill, `SSK'. Similarly Batten
also expressed concern over deserted villages. `SRG, 1842', pp.114-
5.
sion was equated with prosperity. 94

Agriculture expansion had begun to gain momentum by the 1830s. At this time, with the increasing problem of Chinese tea supply, tea production in India acquired significance for the colonial state. The possibility of planting tea on the large tracts of common lands in Kumaun was explored after 1827. When Lord William Bentinck visited Saharanpur in 1831 J.F.Royle, the Superintendent of Saharanpur Botanical Garden, suggested the idea of tea plantation. 95 N. Wallich presented papers before the House of Commons on the introduction of tea in Garhwal, Kumaun and Sirmur (Himachal Pradesh). 96 Falconer, the successor of Royle, chose Garhwal for experiments. 97

Little success was achieved in persuading 'natives' to cultivate tea but a large number of Europeans had shown interest in tea plantation. Rules were made for land grants to European settlers. When the 1830 rules could not attract enough

94. Almost all settlement reports expressed such views. Encouraging cultivation of 'waste' was a part of a broader colonial enterprise which was influenced by the discourse of modernism that developed in Europe during the period of enlightenment. In this discourse 'waste' was given different and broader meanings, it was 'socially constructed' and was given 'ascriptive quality'. For this aspect of 'waste' see V.K.Gidwani, 'Waste' and Permanent Settlement in Bengal', EPW, January 25, 1992, pp. PE39-46.


96. Ibid.

97. Ibid.
settlers the terms were made more attractive after 1837-38. A large number of Europeans now applied for land grants to cultivate tea.

European settlers came to the Doon valley in such a large number that the local people feared that they would be `hemmed in all sides by European grants'. The Government itself started tea plantations, on the recommendation of J.H. Batten, the Commissioner of Kumaun. For these plantations extensive areas of common land were taken over from adjoining villages, and large tracts were given to European planters as `fee simple grants'.

This policy directly brought planters in conflict with villagers. Villagers who saw common land as their common property resisted the intrusion of outsiders. Large tracts of uncultivated lands were available above 6,500 feet of elevation.

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98. Ibid.

99. For purchase of common land by European settlers in Garhwal district see file no'3, Deptt IV-a basta, 1891-95, ERR Coll. Pauri. Various volumes of RLI of PMR Coll. Pauri at RA Dehradun give list of purchasers. See also SRK,1873, pp.22-3 and appendix 10 (for list of `fee simple grants') and appendix 11 (for suitable sites for plantations). It gives 13,742 bisis (13,827 acres) as `fee simple grants' in Kumaun. (p.23) In Dehradun there were 23 tea estates in 1885, of these 18 belonged to Europeans. See SR Dehradun, 1886, p.43. Other settlement reports also give similar lists.


101. Gairola,op.cit.,p 212. See also Batten,`Final Settlement Report of Kumaun District',(hereafter SRK,1846), in idem, Offi­cial Reports, p. 271. `Fee simple grants' were those for which payment was made at lumpsum and no revenue was paid. In case of waste land grants lumpsum as well as revenue was paid. See SRG,1896, pp. 38-9.

102. SRG,1896, p.37.
tion but tea planters were not attracted by such distant places. They wanted land which was easily accessible and close to markets. But such areas lay next to densely populated and intensely cultivated tracts. Not all officials were in favour of a take over of such areas. Henry Ramsay emphasized that people in these areas continuously expand cultivation and they cannot be stopped from doing that merely to facilitate colonization by European settlers.\(^\text{103}\)

The possibility of tea plantation changed British attitude towards the commons. J.H. Batten, the settlement officer, wrote in 1842: "the rights of governments to all the forests and wasteland not included in assessable area of the villages remain utterly unaffected by the inclusion of certain tracts within the boundaries of mauzahs..." \(^\text{104}\). W.C. Watson wrote to the Commissioner that he can grant any amount of land to the planters:

There is abundance of waste land in almost every purgunna in Kumaon or Garhwal and the Board Orders of 1853 by declaring such lands available for naiabad leases remove all difficulties that could be urged(?,sic) by the neighbouring zamindars who from having been long accustomed to imaginary boundaries considered such lands their own. The last settlement clearly defines the right of Govt on this point and I cannot see any difficulty whatever in supplying any applicant with as much forest land as he could wish, provided he selects a waste tracts & does not insist upon taking

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103. \textit{SRK,1873,} vol. I, pp.22-7. Settlement was conducted by Beckett but later he left for England due to bad health. Thus introduction and a large part of the Report was written by Ramsay.

104. "\textit{SRG,1842}'\textit{,} p. 125. The Senior Assistant Commissioner, Garhwal, suggested that there should be explicit boundaries of 'waste land' although it would abridge rights of people in forests. See his letter to Commr, Kumaun, 31-8-1842, vol.9, RLI, PMR, Coll. Pauri, RA Dehradun.
cultivated or fallow land which has been reckoned at the settlement within the assessable area of a village.\textsuperscript{105}

The government clearly sought to establish control over common lands.

However the wild dreams of expansion were soon shattered. In the Doon valley alone it was initially estimated that 1,00,000 acres would be brought under tea plantation, but by 1885 there were only 4972 acres under tea plantations.\textsuperscript{106} Subsequently the area did not expand. According to the another source the area under tea plantations in Dehradun declined from 5,496 to 5,110 acres between 1884 and 1901.\textsuperscript{107} Similarly it was estimated that there would be 1,80,000 acres in the western Garhwal, 35,00,000 acres in Kumaun and 10,000 acres in Jaunsar-Bawur under tea and production was estimated at the rate of 100 lbs per acre.\textsuperscript{108} The real area under tea was much lower than these estimates.\textsuperscript{109} In Garhwal

\textsuperscript{105} Watson to Batten, n.d., vol. 12, RLI, pp.190-91, PMR Coll. Pauri, RA Dehradun.

\textsuperscript{106} SR Dehradun, 1886, p.43.

\textsuperscript{107} Moreland, Director, Land Record and Agriculture, NWP, to Commr, Meerut, 20-8-1901, in February 1902 A progs 17-8, file 418/1901, Reve & Agri. (Land Revel) NAI. Moreland accepted that there were some variations for 1884 figures in different sources. Nevertheless, the fact is clear that the high expectations had totally failed.


where tea production was estimated to be 18 million lbs it was just 69,000 lbs in 1897 which fell to 52,000 lbs in 1907. Various reasons were given for this failure. One reason was the inability to open the Central Asian market for tea, another was the inexperience of tea planters.

This experiment in tea plantation failed. But the attitude of the state towards common land changed, clearly reflected in the Kumaun settlement of 1863-73. Henry Ramsay wrote in the introduction of this settlement report:

"...the former policy of non-interference in the wastelands or leaving the rights of the estate and the people commingled and undivided throughout the greater part of the mountain tracts had to be abandoned owing to the tea plantation question."

The issue of tea plantation threw up the question of ownership of the common land. Villagers collectively opposed, either through petition to the government or litigation in the court, giving any grant to outsiders in general and planters in particular. This brought the issue of village boundaries in sharp focus and united villagers against encroachment of outsiders. On the other hand the state asserted its claim over the commons and emphasized its right to grant land to anyone. Thus village commons became a disputed space.

The most significant shift in state policy took place when forests emerged


111. SR Dehradun, 1886, pp.43-4.

112. SRK, 1873, p.25.
as a source of revenue. Many forests were reserved by the late nineteenth century. Since many reserves were carved out of the forests within the village boundary it led to constriction of commons. However the village commons were most affected when all `unassessed lands' were constituted as the DPF in 1893 and were placed under the Deputy Commissioner. As discussed earlier rules were issued to regulate rights in them. Thus all unassessed land within the village boundary came to be regulated. In 1903-04 control was further strengthen over the DPF. Between 1911-17 about one-third of the DPF was reserved.

The old village boundaries now largely became redundant. The forest settlements redefined and reallocated rights. In some instances rights were assigned in distant places and within the boundary of another village, and this gave rise to disputes. While all previous settlements recognised san assi boundaries, the revenue settlements of Garhwal in the mid 1890s by E.K.Pauw and Kumaun in 1903 by J.E.Goudge disregarded these boundaries.113

Arable expansion was of great significance to the hill economy. Arable expansion took place on the common land. Extension of cultivation adjacent to existing arable did not require any permission. Only cultivation on new land, distant from existing arable, required permission through nayabagd grant114. But these were usually granted without any problem till the late nineteenth century. Whenever new land was broken up for cultivation, `the proprietary right', writes Traill,

114. SRG,1896, pp.36-7.
is always granted to the reclaimer, in consideration of the expense incurred by him in the enterprise. ¹¹⁵ However since 1887 permission was made essential for all expansion to prevent reckless destruction of forests. ¹¹⁶ Since 1894 no extension of cultivation was allowed which involved cutting of trees without the permission of the Deputy Commissioner. ¹¹⁷ Thus arable expansion without state permission became difficult.

Commons contracted on the one hand due to the appropriation by the state, and on the other due to the increasing demand for arable land as population grew. ¹¹⁸ Consequently there was intense competition for control over commons, resulting in inter and intra village disputes. Since the aggrieved party usually went to the court for justice, court rulings became important in resolving common land disputes.

As pressure on commons increased villagers made all out efforts to protect their commons. Whenever, grants were made on the common land to outsiders, the entire village opposed it. In the changed circumstances outsiders were not the planters but the residents of other villages seeking to expand cultivation. Thus the

¹¹⁵. Traill, 'SSK', p.53.
¹¹⁶. SRG, 1896, p.37.
¹¹⁷. Ibid. See also 'Draft Rules for Protected Forests of Kumaun', May 1994 A progs 5-8, RAC (For.) NAI.
¹¹⁸. For a similar argument in the case of Punjab see Minoti Chakrabarty-Kaul, Common Lands and Customary Law: Institutional Change in North India over the Past Two Centuries (Delhi, 1996)
commons which lay between villages became the most intensely disputed spaces. When village land was granted to an outsider, villagers collectively opposed the grant. They often bought such land at 10 times the price\(^{119}\) even though they were not able to cultivate it.

In the changed situation issues relating to pasture land, expansion of cultivation and nayabad grants became disputable and frequently resulted in litigations.\(^{120}\) There were many disputes on village boundaries when two or more villages shared common pastures and forests. Residents of village Juyalgaon had users’ rights within the boundary of village Khandakhani. When residents of Khandkhani enclosed a part of the common land in 1931, 44 residents of Juyalgaon objected, arguing that this interfered with their rights of grazing and grass cutting. In the legal dispute that followed the Deputy Commissioner of Garhwal ruled that common land could not be enclosed by depriving the rights of the residents of Juyalgaon.\(^{121}\) Similarly in another instance, two adjacent villages Satti and Lachar (a lagga (extension) village of the former) shared commons. When residents of Lachar applied for nayabad grants in 1933, 20 out of 30 hissedars of village Satti objected. The Assistant Commissioner rejected the objections and


120. There are many files of such disputes mainly of the 20th century in the Revenue Record Room of Collectorate Pauri Garhwal. Gairola has compiled some of the important revenue decisions of Kumaun. See Gairola, *op.cit.*

made the grants. Subsequently L. Owen, the Deputy Commissioner in charge
Kumaun Division, dismissed the grant and upheld the objections of the *hissedars*
of Satti village. 122 In a similar but complex case Maharagaon Talla had three *lagga*
villages with no clear boundaries. When villagers of Maharagaon Malla (a *lagga*
village) applied for a nayabad grant in 1933 one-third of the villagers of Bhikhu
(another *lagga* village) objected by filing a suit arguing that it was within their
boundary. Owen ruled that where a village and its *laggas* have a common bound-
dary, the waste land of those villages is common to all the villages and no one vil-
lage should be given a nayabad grant in such common waste so as to materially
affect the user rights of other villages. 123 Some times applicants to nayabad sought
grant in another village where they had no rights. Harikrishan Doval and Raij Ram
of village Kandala Idwalsyun in Garhwal district applied for a nayabad grant but
the land in question was within the boundary of village Kanghera where applicants
had no rights. Villagers of Kanghera objected to it thus the application was reject-
ed. 124

There was a considerable debate on the question of rights of one village

122. Daya Shankar, Ram Pancholiya and others of Lachar versus Ram
Datt Joshi and others of Satti, Miscellaneous Revenue Appeal no

123. Gamal Singh, Udai Singh and others of Maharagaon Malla versus
Kutu and others of Bhikhu, Miscellaneous Revenue Appeal no 130 of
1932-33, in Gairola, *op.c.t.*, pp.52-3.

124. Miscellaneous nayabad no 64/87, in the Court of Additional
Deputy Commr, 20-10-1927, Mauza Kandala Idwalsyun, Mauzawar
Basta, RRR Coll. Pauri.
within the boundary of another village. Some villages had grazing, grass and firewood rights within the boundary of the neighbouring village. But in the late nineteenth century the tendency was not to allow the exercise these rights to outside rightholders within the village boundary. One way of doing this was to seek nayabad grant on the disputed land and the official policy of giving priority to internal rights of cultivation over external rights of gauchar encouraged this practice. Wyndham, the Commissioner of Kumaun in his judgment in 1918 laid down the principle that even if one village has rights of use within the sal assi boundary of another village, the former cannot restrain the latter from applying for nayabad grants, or making genuine extensions on such land. However, in 1933-34, the Deputy Commissioner in-charge of Kumaun division held that this principle of giving priority to the expansion of cultivation over other rights could not be applied in view of changed agricultural conditions in which enormous areas of

125. SAC in his letter dated 7-9-1889 to Commr, Kumaun, wrote that people of one patti can use forests and pastures of other pattis and that villagers can not be confined to their village boundaries. See file 97/1889-90, box 56, COR, RA Naini Tal.


127. Deba Nand, Govind Ram, Hari Ram and others of Ratura versus Mukand Ram and 12 others of Chulakot, Miscellaneous Revenue Appeal no 33 of 1917-18, in Gairola, op.cit., pp.32-3. See also ruling of Wyndham dated July 19, 1923, on Miscellaneous Revenue Appeal no 5 of 1922-23, (pp.34-6) and N.C.Stiffe August 6, 1727, on Miscellaneous Revenue Appeal no 28 of 1926-27 (pp.37-8) in ibid. Similarly when hissedars of Agora village got nayabad grant residents of village Dang opposed it on the ground that it was an encroachment on their gauchar. The court upheld the grant. See Keshar Singh, Jeet Singh and others of Dang versus Ahur Singh, Gabar Singh and 10 others of Agora, Basta no 64, Mauza no 252, in Mauzabar Basta, RRR Coll. Pauri.
land have come under cultivation and the saving of pasturage for the people has become a pressing problem'.

J.M. Clay wrote in August 1934 that in many parts of Almora village boundaries (sal assi boundaries) had become subject of bitter disputes and if the settlement officer neglects it further it might lead to 'a condition approaching civil war between adjacent villages'. Contrary to this Batten wrote in 1842 about Garhwal that in a large number of villages there was no boundary dispute and during the survey, boundaries of the 3/4th of villages were settled without the intervention of authorities.

There were not only inter but intra village disputes as well. As pressure on commons increased, residents fought over pastures and nayabad grants. Due to increasing population the demand for nayabad was growing. But as pastures were shrinking there was growing opposition to the new nayabad grants. Most of the nayabad grants led to litigation. When Rabi Datt of village Simri, Garhwal district, got a nayabad grant in 1916, Chandra Mani of the same village opposed it and filed a suit. Chandra Mani objected to the grant on the ground that the land was a part of the pasture and that the path which led through it was used by the cattle to...


go to the river. The court took different positions at different levels depending on the priority assigned to expansion of cultivation and preservation of the dwindling pastures. The Assistant Collector ruled that the objections were wrong because the villagers still had extensive pastures and they also enjoyed grazing rights in the reserved forests. On appeal against the judgment the Deputy Commissioner found that there were strong objections in the village to encroachment on the pasture. He thus quashed the grant. The Commissioner of Kumaun, however, reversed the judgment of the Deputy Commissioner. But the Board of Revenue disagreed with the Commissioner and finally ruled that land in dispute be retained as pasture.131 Similarly a nayabad grant to Fateh Singh, Amar Singh and others of village Cham in Garhwal district was questioned through a suit by some villagers of the same village. The grant was finally cancelled.132

Thus we see that unlike in the nineteenth century when arable expansion was easy and nayabad grants were generally not opposed, in the twentieth century the situation changed and competitive claims were made over the commons. Almost all attempts to claim the commons caused litigations. The courts played a significant role as adjudicator.

From the above discussion it is clear that the meaning of common land as a


category for the state changed over time. From being a 'useless' tract of land it came to be seen as useful for tea cultivation, and finally it was designated as land to be 'conserved' along with forests. In the process the state appropriated the commons which along with arable expansion led to their constriction. Contraction of commons led to competing claims and disputes and had a bearing on the nature of arable expansion. The contraction also led to overuse of commons and resulted in the deterioration of its quality.

Arable Expansion

The 19th century was a period of rapid population growth and arable expansion in the U P hills. The growth of population continued in the first half of the 20th century but the area under cultivation stagnated. This section will explore the nature of this arable expansion in the 19th century and the causes and consequences of its stagnation in the first half of the 20th century.

Beginning of Expansion: In the beginning of the 19th century the hills of Uttar Pradesh were sparsely populated. According to an estimate by Traill the population of British Garhwal and Kumaun was 125000 and 164000 respectively.\textsuperscript{133} In

\textsuperscript{133} These figures were not the result of enumeration of the population. Instead of this, Traill got houses counted, and calculated the population by assuming an average of 6.5 persons per house. Hence, these figures can be only approximately correct. Figures are rounded. It exclude small population of towns and camps as these figures are not separately available for Garhwal and Kumaun. Traill, 'SSK', pp.12-3; Statement A (p.iii).
Garhwal there were only 22 persons per square mile in 1822-23 and in Kumaun 31.7 persons per square miles in the 1840s. Vast tracts of land were covered with snow and forests and a significantly large area was uncultivated. Highlands above the elevation of 7000 feet and Tarai-Bhabar belts were largely uninhabited.

Colonial administrators frequently talked about deserted villages. They argued that under Gorkha rule, due to the oppressive nature of their administration, many people fled the hills. But, they argued, due to improved law and order condition and consistent encouragement under the British, large areas had been resettled and population increased. This contrast may be overstated. Deserted villages may not have been characteristic. But there is no doubt that the British encouraged cultivation to increase their revenue. Sayanas and Padhans were given large estates to cultivate. They were made proprietors and sometimes given revenue free land. Due to this they made all out efforts to bring cultivators to till these lands.

134. Figures calculated assuming the area of the district to be 5629 sq. miles (given in BGG, 1910). Different sources give contradictory figures for area. Area of the district also varied from time to time due to change in boundaries.


136. This British opinion is expressed in all Settlement Reports, Gazetteers and other important documents. Obviously, it was done to underline the good aspects of British rule, which was always deliberately contrasted with the Gorkha rule. No doubt many people must have fled due to Gorkha invasion but there is no reason to believe that Gorkhas would not have liked people to return and to cultivate, thereby contributing to land revenue. However, many local people wrote about the oppressive nature of Gorkha rule. See B.D. Pandey, Kumaun ka Ithihas (Almora, 1937) pp.397-402.
These efforts together with increased population bore fruits. By the middle of the 19th century additional areas were brought under cultivation. In Garhwal, the area under cultivation increased from 53343 acres to 63259 acres between 1824 and 1840. It was a 19 per cent increase. In Kumaun the area under cultivation increased from 165895 acres to 189083 acres between Traill’s early settlement and Batten’s settlement. It was an increase of 14 per cent. In Kumaun new areas were mainly brought under cultivation in the Bhabar and Tarai.

The Bhabar is a narrow belt having a breadth from 5 to 15 miles, at the foot of the hills. It is fully covered with forests and is known particularly for its dryness: after entering the Bhabar all streams go underground. Due to this it was difficult to settle in this area and cultivate land. Nevertheless, in Kotah and Chhakhata areas of the Bhabar, along the foot of the hills, land was being cultivated by the hill men in 29 villages, at the beginning of British rule. People were encouraged by the colonial administrators to cultivate land in this area. Padhans were given special incentives to bring land under cultivation. They got two ploughs of land (one plough was the area which a pair of bullock could plough in a day) for this. Proprietary rights were given to anyone who cleared the waste. By 1837, 61 more villages were cultivating land. Furthermore, 12 villages were leased

137. See Table no. 6.4.
to tribal Bhuksas on the Tarai border. But by 1837 there was still only a little area under cultivation. In Chhakata there was some cultivation along the course of the guls but all attempts to dig wells and create good irrigation facilities failed. The Chaubhainsi area of the Bhabar was still by and large uncultivated. Batten in his settlement assessed 17600 acres of cultivated area, which excluded Chilkia which still belonged to the southern districts. The extension of cultivation was not always successful and there were frequent cases of abandonment. In Chaubhainsi revenue collections registered a decline between 1828 and the time of Batten's settlement. Many villages once given to proprietors were subsequently abandoned and were taken over as government estate. In Chaubhainsi there were 9 waste villages and only 6 newly cultivated in 1846. The attempts to extend cultivation in Bhabar was only partially successful till the 1840s.139

The Tarai region forms a narrow parallel belt immediately south of the Bhabar not much new cultivation took place in the first half of the 19th century. This 90 miles long and 12 miles broad area was unhygienic and malarious.140 Only after the 1850s when canals were developed and other improvements took place were new areas cultivated in this region.

The growth of population was significantly responsible for the arable expansion in the first half of the 19th century. In Garhwal the population increased from 125000 to 235788 between 1821 and 1853, and in Kumaun from 164000 to 360011 between 1821 and 1852. In Garhwal the increase was 88.6 per cent and in Kumaun it was 120 per cent. The annual growth rate in Kumaun was 2.66 and in Garhwal 2 percent. This growth rate appears very high.

These figures of population and cultivated area cannot be accepted unproblematically. The population figures for initial years are not based on the proper enumeration. The houses were counted and the population calculated after assuming 6.5 persons lived per house. Batten's figures are also not based on any systematic enumeration. If we accept Batten's figures for the early 1840s then there was hardly any population growth in about 20 years (Garhwal population grew by 6 per cent and Kumaun by 2 per cent during this period). However, the 1852 census shows high population figures for Garhwal and Kumaun. The 1852 census figures are based on the enumeration of the entire population in the North Western Provinces. Since this was the enumeration of the entire population and was carried out in a planned way its figures appear more reliable in comparison to earlier figures. If we compare 1852 figures with Batten's figures then the population doubled in just about a decade, which appears implausible. This shows

141. See Table no. 6.5.

that Batten's figures were an underestimation. Similarly, Traill's figures for 1821 might also be an underestimation. If we compare Traill's figures with 1852 figures the average annual population growth rate for Kumaun and Garhwal comes to be 2.66 and 2 per cent respectively. This rate appears high particularly because the average annual growth rate for Kumaun and Garhwal between 1852 and 1901 was just 1.1 and 1.26 per cent respectively. The low growth rate in the second half of the 19th century was possibly because of frequent of famines and scarcities, although their impact in the hills was not as devastating as in the plains. Thus we can safely assume that the population grew between 1821 and 1851 with an average annual growth rate ranging between 1.5 to 2 per cent. If we assume that the growth rate was 1.8 per cent then the population of Garhwal and Kumaun in 1821 would have been 135620 and 207078 respectively.

The reliability of the figures for cultivation is even less than the population figures. We have already discussed how the earlier figures were based on nazir-andaz. Land measurement was only introduced in the 1860s. If we compare the figures of this measurement with the nazir-andaz figures of the


144. BGG, 1910, pp.76-80.
1840s the expansion of cultivated area in the case of Garhwal is 133 per cent. This expansion does not appear possible within the short span of two decades. If we regard the measurement figures more reliable then obviously the earlier nazarmandaz figures were underestimations. Thus there is need for an upward adjustment of the earlier figures. A 50 per cent expansion in the cultivated area for the UP hills during the second quarter of the 19th century appears more plausible. This expansion also seems possible when we assume an average annual population growth rate 1.8 per cent. Thus if we go according to our adjusted figures for UP hills then between the early 1820s and the early 1850s the population increased by about 74 per cent and the cultivated area by about 50 per cent. This created a context for the further expansion in the second half of the 19th century.

**Period of Expansion:** Population grew continuously, although at a slower rate, in the second half of the 19th century. The population of Garhwal increased from 235778 in 1853 to 429900 in 1901, at the annual rate of 1.26 per cent. In Dehradun district, the population grew at the rate of 2.17 per cent, increasing from 56767 to 177620 between 1848 and 1901. The population of Kumaun increased from 360011 to 613697 between 1852 to 1901, at an annual rate of 1.1 per cent. As has already been mentioned, the earlier figures are unreliable. This


146. See Table no. 6.3.
specifically applies to Nainital district figures where the population was continuously on the move between the hills and the Bhabar. Figures varied according to the time of the census. Thus while the population of Bhabar was counted as 132360 in February 1881, in 1903 it was shown to be just 93445. The population of Tarai increased rapidly: it was 67187 in 1854 and 174054 by 1903 (This excludes figures of Kashipur, 55632, and Bhabar, 93445; many areas were added to the Tarai only after 1854 due to which there was a sharp increase). This makes exact comparison in the case of Kumaun difficult. The Tarai and Bhabar region was settled mostly during the colonial period. The settlement process intensified particularly after the 1850s which I will discuss below. The Bhabar area was mainly settled by the hill people but the Tarai area was settled together by the people of hills and the plains. Since we do not know the ratio of the people of hills and the plains in the Tarai it is difficult to know how many hills people exactly went to settle down in the Tarai. This makes comparison of early and later figures of population and cultivated area in the case of Kumaun difficult. Moreover, the Tarai was parcelled out among many districts and areas were fre-

147. Goudge wrote that it was very difficult to arrive at satisfactory statistics of population for Naini Tal district. See 'Report on the Assessment of Naini Tal Hill Pattis', p.5.


149. *Nainital Gazetteer*, 1903, Appendix.

150. *HDNWP*, Vol III, Part II, p. 704. Figure excludes population of Kashipur.

quently exchanged among them. Many parts of the Tarai were added to the Kumaun district only after the 1850s and 60s. To overcome these limitations and for broader comparisons during this phase (1850 to 1900) I have taken the population and cultivated area figures for the Kumaun hills and the Bhabar together and left out the Tarai figures.

In Garhwal, during Batten's settlement, Malguzari area under cultivation was shown as 63259 acres. By 1896 Pauw found 262484 acres under cultivation. Thus the area increased 315 percent between 1837-40 to 1895-96. In Dehradun district the area under cultivation increased from 34327 acres to 97229 acres between 1848 to 1901, an increase of about 183 per cent. The Area under cultivation in Kumaun increased from 189083 acres in 1845 to 402456 in 1902-03 during Goudge's settlement, an increase of 113 per cent between 1845 (Batten's settlement) to 1903. However the arable expansion mainly took place in the Tarai-Bhabar.

Lack of irrigation was the greatest hindrance in expanding cultivation in the Bhabar. Henry Ramsay, the Commissioner of Kumaun, is credited with making efforts to develop the irrigation system in the area. He was initially

152. See Table no. 6.4.

153. See G.R.C. Williams, Historical and Statistical Memoirs of Dehradun (Allahabad, 1874); Dehradun Gazetteer, 1910; District Census Handbook, Dehradun, 1951 (Allahabad, 1955); SR of Dehradun, 1886. For figures of Dehradun proper see also Moreland to Commr Meerut, 20-8-1901, February 1902 A progs 17-8, file 418/1901, Reve. & Agri. (Land Reve.), NAI.

154. See Table no. 6.4.
given Rs 10000 by the government which was soon raised to Rs 20000 in 1853 to develop irrigation and improve other conditions. A large area was brought under the direct management of the government in which cultivators were tenants and paid rent to the government. This system was known as the *Kham* system and was different from the system of settled villages in which proprietors held land. Efforts of Ramsay soon bore fruits; between 1869 and 1879 the income from Bhabar increased by 42.42 per cent. In the Bhabar, the settlement was revised frequently to raise revenue and rent. By 1903 the revenue from settled villages had increased to Rs 56592 from Rs 1185 in 1815 and Rs 8599 in 1850. The rent from the government estate (constituted by Ramsay in 1850s) in 1903 became Rs 185478. In the settled village, the average area under cultivation between 1898 and 1903 was 56280 acres while at Batten's time the area under cultivation was just 17600 acres (the figure excluded cultivated area of chilkia, which was then part of other districts).

Garhwal Bhabar was a small area. Colonel Garstin, the district officer, started making efforts to get this area cultivated in 1869-70. At that time there were 18 villages in the area with 331 acres(2069 bighas; in Bhabar 6.25 bigha was equal to a acre) under cultivation. By 1899 there were 62 villages with 4087 acres

155.*Nainital Gazetteer*, 1903, p. 58; 156; *HDNWP*, vol. II, part I, pp. 50-74; Chief Secy, Govt NWP & O to Secy, GOI, 6-11-1899, March 1900 A progs 1-3, file 391/1899, Reve. & Agri. (Land Reve.), NAI; Meston to Joint Secy, Board of Revenue, NWP & O, 2-10-1898, February 1900 A progs 5-6, file 66/1900, Reve. & Agri. (Land Reve.), NAI; Goudge, "Report on the Assessment of Naini Tal Hill Pattis". 

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of cultivated area. In 1907 cultivated area became 6010 acres. This was a rapid expansion.\textsuperscript{156}

In the Tarai region, J.C. Macdonald, the administrator of the region, made efforts to develop the canal system after the 1860s. The hill people cultivated the northern part of Tarai. Due to improvement in irrigation and other conditions, rapid expansion took place in the Tarai. By 1903, 82968 acres was brought under cultivation. This figure excludes the Kashipur pargana.\textsuperscript{157} Thus a considerable area was brought under cultivation in the Tarai.

In Kumaun the expansion mainly took place in the Tarai-Bhabar, while in Garhwal the expansion was within the hill areas. In Garhwal, the area under cultivation increased by 315 per cent between Batten's settlement and Pauw's settlement (1895-96). But we have already discussed earlier that Batten's figures might have been an underestimation. The Pauw's figures were based on cadastral survey, an advanced measurement technique. Due to this, cultivated area in Garhwal appears to have increased enormously. When people protested against this, Pauw moderated his figures. Inspite of this, the figures remained high.


\textsuperscript{157} Nainital Gazetteer, 1903, pp.59; 155-59; HDNWP, vol.III, part II, pp.697-712; Secy, Board of Revenue, to Chief Secy, United Provinces, 17-10-1903, December 1903 A prog 20-1, file 411/1903, and Meston to Joint Secy, Board of Revenue, NWP & O, 2-10-1898, February 1900 A progs 5-6, file 66/1900 both Reve. & Agri. (Land Reve.), NAI; Plowden, "Administration of the Tarai Pargana".
Thus this large increase can be explained in terms of the underestimation of the early figures and inflation of later figures due to better measurement techniques. However, if we compare the figures of Beckett's settlement (in the 1860s), which were based on the real measurement, with the figures of Pauw's settlement, the expansion appears to be 77 per cent. Now if we adjust Batten's figures upward

<table>
<thead>
<tr>
<th>Year</th>
<th>Kumaun Population</th>
<th>Garhwal Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821</td>
<td>164000</td>
<td>125000</td>
</tr>
<tr>
<td>1842</td>
<td>166755</td>
<td>131916</td>
</tr>
<tr>
<td>1852</td>
<td>360011</td>
<td>235778</td>
</tr>
<tr>
<td>1865</td>
<td>394922</td>
<td>248742</td>
</tr>
<tr>
<td>1872</td>
<td>432576</td>
<td>310282</td>
</tr>
<tr>
<td>1881</td>
<td>493641</td>
<td>345629</td>
</tr>
<tr>
<td>1891</td>
<td>-</td>
<td>407818</td>
</tr>
<tr>
<td>1901</td>
<td>613697</td>
<td>429900</td>
</tr>
</tbody>
</table>

Table 6.3

Population of the UP hills, 1821 to 1901

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Index</th>
<th>Population</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821</td>
<td>164000</td>
<td>100</td>
<td>125000</td>
<td>100</td>
</tr>
<tr>
<td>1842</td>
<td>166755</td>
<td>102</td>
<td>131916</td>
<td>106</td>
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<tr>
<td>1852</td>
<td>360011</td>
<td>220</td>
<td>235778</td>
<td>189</td>
</tr>
<tr>
<td>1865</td>
<td>394922</td>
<td>241</td>
<td>248742</td>
<td>199</td>
</tr>
<tr>
<td>1872</td>
<td>432576</td>
<td>264</td>
<td>310282</td>
<td>248</td>
</tr>
<tr>
<td>1881</td>
<td>493641</td>
<td>301</td>
<td>345629</td>
<td>268</td>
</tr>
<tr>
<td>1891</td>
<td>-</td>
<td>-</td>
<td>407818</td>
<td>326</td>
</tr>
<tr>
<td>1901</td>
<td>613697</td>
<td>374</td>
<td>429900</td>
<td>344</td>
</tr>
</tbody>
</table>

Note: 1. Figures are based on Batten's settlement. Batten's settlement carried on in Garhwal between 1837 to 40 and in Kumaun between 1842 to 45.
2. Kumaun figures are taken from Beckett's settlement (1863 to 73) and Garhwal from 1865 census.
3. Kumaun population is only that of the hills and the Bhabar. The Tarai population is not included.

Source: Traill, 'SSK', pp.12-3; iii (appendix Statement A); 'SRG, 1842', p.159; Batten, 'Final Settlement of Kumaun', 1846, p.259; SRK, 1874, vol I statement no 8; HDNWP, vol. III, part I, p. 266;420; various Census Reports of UP.
then most probably the expansion will be within the range of 200 to 250 per cent.

In Dehradun district where all figures are based on real measurement, and thus

Table 6.4

Cultivated Area in the UP hills, 1821 to 1903

<table>
<thead>
<tr>
<th>Year</th>
<th>Kumaun¹ Area acres</th>
<th>Year</th>
<th>Garhwal Area acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1824</td>
<td>165895²</td>
<td>1824</td>
<td>53343²</td>
</tr>
<tr>
<td>1845</td>
<td>189083²</td>
<td>1840</td>
<td>63459²</td>
</tr>
<tr>
<td>1873</td>
<td>196618</td>
<td>1860</td>
<td>148145</td>
</tr>
<tr>
<td>1903</td>
<td>402456</td>
<td>1896</td>
<td>262484</td>
</tr>
</tbody>
</table>

Note: 1. Figures for Kumaun don't include figures for the Tarai. The Bhabar figures have been added to the hills figures, except for 1873. The Bhabar figure for 1824 is calculated from Batten's figures for cultivation in the Bhabar. He gave 17600 acres cultivated area for 90 villages. Assuming that all villages were of equal cultivated area I calculated area for 29 villages, those which were being cultivated in 1824. This came to be 5671 acres.

2. Figures are only of cultivated malguari land and exclude small rentfree and muafi land.

3. Figures have been converted from bisi in to acre.
   1 bisi = 4800 sq. yards
   1 acre = 4840 sq. yards

Source: Traill, 'SSK', p.VIII (for 1824 figures); 'SRG,1842' (for 1842), p.109; Batten, 'Final Settlement of Kumaun', 1846 (for 1846), p.249; SRG, 1896, ( for 1860 and 1896); SR of Almora and Hill Pattis of Naini Tal ( for 1873 and 1903), p.1; appendix I.
more reliable, the cultivated area increased by 183 per cent between 1848 and 1901. As we have already discussed, the comparison between the early and later figures is most difficult in the case of Kumaun. Between Batten's settlement and Goudge's settlement (1903) the area under cultivation in Kumaun hills increased by 103 per cent. If we add the figures for cultivation in the Bhabar with the hill figures then the percentage increase comes to be around 113 per cent. Since the expansion also took place in the Tarai the percentage increase may well be around 150 per cent. The population of Garhwal increased by 82 per cent and Kumaun (including Bhabar) by 70.5 per cent between 1852 and 1901. Thus the cultivated area increased faster than the population in the second half of the 19th century. However, in Dehradun district the population increased faster (213 per cent) than the cultivated area (18.3 per cent) but perhaps due to large scale immigration and the large cantonment in the city. However, it has to be kept in mind that expansion mainly took place in the poor quality soil. In the hills good quality irrigated land around the river valleys had already been cultivated by the middle of the 19th century. After this expansion had to take place on low quality dry land. In other words cultivation expanded from the river valleys towards the hill tops. Expansion in the Bhabar was initially not

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profitable as land was of poor quality and without irrigation. Many people who initially started cultivation later abandoned it. However, the situation improved when irrigation became possible. Expansion in the Tarai was generally on good quality soil. Irrigation of the vast tracts of land was possible and therefore good crops were grown. As a whole except in the Tarai expansion was on poor quality soil whose productivity was quite low. Keeping in view the rapid population growth the significance of this expansion can not be exaggerated for the agrarian economy of the hills.

Thus as a whole in the second half of the 19th century arable land expanded rapidly in the UP hills.

**Phase of stagnation:** As we have seen above, throughout the 19th century arable land expanded rapidly. In Kumaun it kept pace with population growth. In Garhwal, arable land expanded faster than population growth. In the first half of the 20th century population kept on growing rapidly but the area under cultivation stagnated.

In Kumaun population grew at an annual rate of 0.71 per cent in the first half of the 20th century. In the Almora district of the Kumaun, the population grew at an annual rate of 1.07 per cent. In 1901 the population of Almora district was 453581 and it increased to 772896 in 1951. The population of the district increased by 70 per cent in this period. If we see the figures of land under cultivation we find that the average area under cultivation between 1901 to 1906 was 239684 acres which became 285137 between 1906 and 1911, and
afterward stagnated at 295000 acres till the end of the 1940s. Thus there was only a marginal increase of 23 per cent in arable area between 1901 and 1906 and 1911 and 1916 after which it stagnated, while population increased by 70 per cent in 50 years leading to an increased pressure on land and fragmentation of holdings. In the Nainital district, however, population grew slowly (figures are doubtful as people kept on moving between the hills and the Tarai-Bhabar) at the annual rate of 0.069 per cent between 1901 to 1951. There was a sharp decline of 14.4 per cent in population in the second decade. (figures are doubtful due to the wrong time of enumeration). Only after 1921 population began increasing slowly. The population of the district was 324019 in 1901 and became 335441 in 1951, an increase of 4 per cent. The arable area in the district averaged 203512 acres between 1901 to 1906, and reached 263655 acres between 1911 to 1916, but then a decline set in and it fell to 221624 acres between 1941 to 1946. The initial increase was because of expansion in the Tarai-Bhabar but after 1911-16 cultivated area declined sharply in the Tarai-Bhabar as well. In the plains of the Nainital district arable area was an average of 214655 acres between 1911 to 1916, but declined to 159402 acres between 1931 to 1936; thereafter it recovered only slightly.

In Garhwal district population grew at an annual rate of 0.8 per cent

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159. District Census Handbook (hereafter DCHB) Nainital, 1951, see introduction.

160. The above discussion is based on Table no. 6.5 and 6.6.
between 1901 to 1951. It was 429900 in 1901, became 639625 by 1951, registering an increase of 49 per cent. In the same period arable area stagnated at about 260000 acres.\textsuperscript{161}

Table 6.5

Average Cultivated Area 1901 to 1946

<table>
<thead>
<tr>
<th>Year</th>
<th>Garhwal</th>
<th>Almora</th>
<th>Naini Tal</th>
<th>Dehradun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901-06</td>
<td>262484</td>
<td>239684</td>
<td>203512</td>
<td>972229</td>
</tr>
<tr>
<td>1906-11</td>
<td>260497</td>
<td>285137</td>
<td>252558</td>
<td>99668</td>
</tr>
<tr>
<td>1911-16</td>
<td>260000</td>
<td>295000</td>
<td>263655</td>
<td>100973</td>
</tr>
<tr>
<td>1916-21</td>
<td>260000</td>
<td>295000</td>
<td>243339</td>
<td>94699</td>
</tr>
<tr>
<td>1921-26</td>
<td>260000</td>
<td>295000</td>
<td>228452</td>
<td>99400</td>
</tr>
<tr>
<td>1926-31</td>
<td>260000</td>
<td>295000</td>
<td>225949</td>
<td>100380</td>
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<tr>
<td>1931-36</td>
<td>260040</td>
<td>294992</td>
<td>233222</td>
<td>103003</td>
</tr>
<tr>
<td>1936-41</td>
<td>260000</td>
<td>295145</td>
<td>234659</td>
<td>105495</td>
</tr>
<tr>
<td>1941-46</td>
<td>259992</td>
<td>295135</td>
<td>221624</td>
<td>103128</td>
</tr>
</tbody>
</table>

Note: 1901-06 figure for NT district gives 171512 acres which exclude hill areas. The \textit{Nainital Gazetteer} gives the cultivated area in the hills as 32011 acres for 1901. We have added two figures to arrive on the figure for cultivated area in the district.

Source: \textit{Agricultural Statistics of India} of concerned years and \textit{District Census Handbooks}, 1951, of above districts.

\textsuperscript{161}Ibid.
In Dehradun district, arable area expanded slightly but the increase was very small in comparison to population growth. Population of the district grew fast at an annual rate of 1.43 per cent. It was 177620 in 1901 and reached 362005 in 1951, registering an increase of 104 per cent. The arable area averaged 97229 acres between 1901 and 1906, went up to 100973 acres between 1906 and 1911; and thereafter fluctuated around this figure before finally reaching 105495 acres on an average between 1936 and 1941. It was no more than 8.5 per cent higher than the initial figure.\textsuperscript{162}

Table 6.6

Population in the UP hills, 1901 to 51

<table>
<thead>
<tr>
<th>Year</th>
<th>Garhwal</th>
<th>Almora</th>
<th>Naini Tal</th>
<th>Dehradun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>429900</td>
<td>453581</td>
<td>324019</td>
<td>177620</td>
</tr>
<tr>
<td>1911</td>
<td>479641</td>
<td>525630</td>
<td>323519</td>
<td>204713</td>
</tr>
<tr>
<td>1921</td>
<td>485186</td>
<td>530338</td>
<td>276875</td>
<td>212062</td>
</tr>
<tr>
<td>1931</td>
<td>533885</td>
<td>583302</td>
<td>277286</td>
<td>230051</td>
</tr>
<tr>
<td>1941</td>
<td>602115</td>
<td>687286</td>
<td>291861</td>
<td>266018</td>
</tr>
<tr>
<td>1951</td>
<td>639625</td>
<td>772896</td>
<td>335441</td>
<td>362005</td>
</tr>
</tbody>
</table>

Source: District Census Handbooks, 1951 and Census Reports of UP for concerned years.

\textsuperscript{162} Ibid.
From the above discussion it follows that population grew fast while arable area stagnated resulting in increased pressure on land and fragmented holdings. It is not necessary for increased population to lead to arable expansion. But in that case either crops yield should increase fast with increased cropping intensity or other sectors of the economy like industry and services should provide alternative employment. Yields of all major crops declined in the 20th century and cropping intensity remained low in the UP hills. Other sectors of economy did not support the population either. As we will see shortly, with exception of Dehradun district the dependence of population on agriculture increased.

In Almora district the proportion of population dependent on agriculture increased from 91.1 per cent to 92.4 per cent between 1901 and 1921. The number of people dependent on agriculture increased by 42.7 per cent between 1921 and 1951. In Nainital district the proportion of population dependent on agriculture increased from 66.1 per cent to 72.3 per cent between 1901 and 1921. Between 1921 and 1951 the number of people dependent on agriculture increased by 9 per cent. In Garhwal district the proportion of the population dependent


165. DCHB, Nainital, 1951, p. viii.
on agriculture increased from 89.3 to 90.4 between 1901 and 1921. The number of people dependent on agriculture increased by 28.4 per cent between 1921 and 1951. In Dehradun district, the proportion of people dependent on agriculture decreased from 59.6 per cent in 1911 to 35.9 in 1951. The number of the people dependent on agriculture, nevertheless increased by 16.4 per cent between 1921 and 1951. Due to lack of employment opportunities the proportion of workers in population was decreasing. In 1921, the proportion of workers in the total population in Almora district was 67.7 per cent which declined to 56 per cent in 1951 leading to an increase in the proportion of non-earning dependents from 32.3 to 44 per cent. In Nainital district the proportion of workers declined from 62.6 to 51 per cent between 1921 and 1951 and those of dependent went up from 37.4 to 49 per cent. In Garhwal district the proportion of workers in the total population declined from 68.2 to 56.7 per cent between 1921 and 1951. In Dehradun the proportion of workers in the total population declined from 60.8 per cent in 1921 to 45.5 per cent in 1951. The resultant crisis led to large scale emigration from the region, a situation which continues to the present. This led to the

166. *DCHB*, Garhwal, 1951, p. vi.
money order economy.

To what extent could arable expansion solve problems? This question is difficult to answer. But in hill agriculture where possibilities of improvement were non-existent, arable expansion was the only way to offset population pressure. Why inspite of rapid population growth, did the arable area stagnate in the first half of the 20th century? The answer lies in the fact that people had no longer any control over the commons and forests. Their rights in common property were slowly eroded. We now briefly examine how this transformation took place.

As we have seen, colonial administration consistently encouraged arable expansion in the 19th century to generate revenue. Its attitude towards common land changed when the possibility of granting large tracts of common lands to Europeans for tea plantation arose. But experiments in tea plantation were not successful. Till about the middle of the 19th century forests were just seen as 'waste' and 'unproductive'. But forests began to generate large revenue when timber came to play a significant role in railway expansion. Initially only accessible forests were claimed and large tracts were reserved only by the 1880s. The process was slow in the UP hills because large forests were in the interior, in inaccessible areas. Thus the conflict between arable expansion and reservation of forests in this area surfaced only in the 1890s. Between the 1870s and the 1890s the situation remained ambiguous with different officers taking different stands on
the question of rights to expand cultivation.\textsuperscript{172} Due to this expansion continued till 1890s. The restrictions on expansion were not uniformly imposed in the entire region. Where forests were valuable rules were firmly implemented.

Expansion became difficult after October 1893 when all common lands not forming part of the measured land of villages or of the forests which had been earlier reserved, were now declared District Protected Forests. As discussed earlier rules were formulated to regulate the District Protected Forests. To strengthened control these were divided in 1903 into close civil forests and open civil forests. Finally a large part of the District Protected Forests were incorporated into the reserved forests in the forest settlements of 1911 and 1917. Due to the new settlement, Reserve forests extended closer to the cultivated area. S.D. Pant wrote

\ldots the reservation of great tracts of forests adjoining cultivation has greatly harassed the people. The villagers cannot cultivate their holdings successfully, because they are continually interfered with by the rangers and the patrols, and gradually lose interest in their cultivation, as happened in Kali Kumaun.\textsuperscript{173}

\textsuperscript{172}For a detailed discussion and opinions on the issue see November 1895 progs 1 to 5 in file 11/1894-95, Box 60. COR, RA Nainital. Though the file specifically deals with potato cultivation in Nainital, it discusses the right to an expansion of cultivation, nayabad grants etc. in details. It concludes that unrestricted expansion like earlier could not be allowed now particularly at the expense of trees. It specifically mentioned that the Forest Act of 1878 had empowered the government to regulate or prohibit all cultivation of waste and this represented a break from the past. (see. p.8). See also Box 10. file 7/1896-97, COR, RANT.

\textsuperscript{173}Pant, \textit{The Social Economy of the Himalayans}, p. 86.
Conclusion

Form the above discussion in this chapter we can say that cultivated area increased considerably in the 19th century and by and large kept pace with the population rise although it should be kept in mind that newly cultivated area had poor fertility. With the emergence of forests as a large source of revenue, the colonial state strengthened its control over the common lands and forests leading to stagnation in arable area. This stagnation at a time of population growth increased pressure on land led to agrarian crisis.