Shaping of Peasant Economy: Classification of Land and Agricultural Technology in Kashmir during Dogra’s 1885-1925 A.D.

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Abstract
The colonial critique of Dogra state’s control over rural landscape of Kashmir and ‘rural deprivation’ executed through a wide variety of modes, prepared the ground for colonial intervention especially in agrarian domain. The colonial intervention in the capacity of Wingate and Lawrence’s agrarian reforms could not save the system from its disease. The reforms did not altogether purify the evils in the agriculture; only the surface level changes were ensured. The Kashmiri peasant economy during the 2nd half of the 19th century provides us with a classic illustration of the elite in a backward society holding back the society’s progress lest the change undermines its position. The present work is an endeavour to study the peasant economy of Kashmir during the period of high colonial intervention. It is difficult, if not impossible to study the different aspects of peasant economy of Jammu & Kashmir state as a single entity, owing to its physical, geo-climatic, social and economic distinctions, so this study had tried capture the aspect of “Land classification and Agricultural Technology of given period. The study covers time period between 1885-1925 A.D. as this period has been labelled as Dawn of Modernism.

Keywords: Heterogeneous, Dogra, Kerewas, Cultivation, Agricultural Technology

1. Introduction
Since agriculture is largely influenced by a set of physical factors and since India is fragmented into a number of heterogeneous geo-physical regions, it is no wonder to find distinct variations in the agrarian economy between different parts of India especially during the pre-modern times. Therefore, any generalisation for the entire subcontinent may lead to wrong conclusions.

Broadly speaking India can be divided into four physiographic divisions; the northern mountains, the Great Plains, the peninsular uplands and the Indian coasts and islands. Since there has been no homogeneity in altitude, relative relief, degree of slope, climate, drainage conditions, availability of water, length of growing season and the transportation facilities between these physiographic divisions, agricultural typology and the levels of production on a pan-Indian scale present a variety of agrarian contexts.

Thus Kashmir valley, with longitudinal depression in the great north western complex of Himalayan ranges, wears a unique geographical personality and in this way throws up a peculiar crop economy not found in any other part of Indian plateau regions or its plains.

The state of Jammu and Kashmir lies on the northern fringes of the Indian sub-continent and exhibits a varied geography. The relief of the territories that form Jammu and Kashmir presents three distinct physiographic divisions: the province of Jammu with the Siwaliks and outer hills largely an extension of Punjab plains; the valley of Kashmir, a structural basin that lies between the Pir Panjal and the Himadri, defined by the river Jhelum that flows out of Baramullah, meanders the vale, enters the wular lake, leaves it near Sopore, and flows into a narrow gorge across the Pir Panjal to Muzaffarabad, where it turns sharply towards the south; and the region of the greater Himalayas beyond the Kashmir valley to the north and east where Ladakh and Gilgit form inhabitable areas at very high altitude.

The three main administrative entities within the princely state of Jammu and Kashmir roughly corresponded to these geographical divisions: the province of Jammu, which had been the hot land of Dogra control in the Punjab; the province of Kashmir purchased from the British in 1846 A.D.; and the provinces of Ladakh and Baltistan, the former conquered by the Dogras in 1834 and the latter in 1840. There were other distinct political entities at the British Indian frontier which as a result of their geographical location had to formulate some type of political relationship with the Princely State. Significant among these was the Gilgit Agency, which the British attached to Jammu and Kashmir for political convenience in 1889. Poonch, another important border area, came under the formal control of Jammu and Kashmir in 1936. The governor of Kashmir (Wazir-i-wazarat) was the executive head of Kashmir province as well as the Gilgit Agency, while as the governor of Jammu province as well as Ladakh and Baltistan.

I have focussed my research work mainly on Kashmir valley. The valley has a distinct climate located as it is among the Himalayas, 6000ft above sea level, with cold winters and precipitation in the form of snow,
rainy springs, and hot summer months. This climate has severely restricted the valley’s sowing season and crop yields, which have been considerably smaller than those of Jammu province.

Owing to this mountainous character of the valley of Kashmir, the area of land under cultivation has been very small; the character of economy throughout the period of study has been agrarian. In Kashmir the main source of production has been the cultivable land. The fertility of the land, the ploughing animals, implements, agricultural conditions varying from region to region and tehsil to tehsil, have always had their share in determining the agricultural production and thereby the condition of agrarian life. Inevitably a detailed study of the following aspects in this connection is not only relevant but most imperative:

1) Categories of Land – classification and organisation
2) Agricultural operations
3) Implements or agricultural technology
4) Irrigation system

One important feature of Kashmir’s agrarian economy was that on account of the restrictions imposed by the physical environment only a small percentage of the total geographical area was under cultivation. The total area of land surveyed by the Land Revenue Settlement department towards the close of 19th century amounted to about 11,95,600 acres. However this survey excluded forests, mountain sides, hills and lakes. Yet, marshes, swamps, cultivable waste and fallow lands were included in that total area of land. Out of this total area of land, marshes and swamps alone constituted 4,12,069 acres and cultivable waste land was not less than 2,57,360. Thus out of total area of land, which excluded forests, mountain sides, hills and water bodies, not more than 51% was under cultivation.

On the altitudinal plane, Kashmir valley can be divided into three zones: the mountain slopes, the table lands (karewas) and the low lands. The mountain slopes and the table lands constituted a large chunk of the land which is inaccessible to the natural resources of irrigation. Thus these villages which were situated on table lands or mountain slopes couldn’t grow any crop other than those which could survive in arid and semi-arid conditions. Hence such crops as wheat, barley and millets were grown in such areas. A little percentage of this category of land was under saffron cultivation.

The valley of Kashmir, owing to its natural river system possessed a large area of alluvial land, which was of two kinds – the old alluvial or the land of high altitude above the banks of the river Jhelum which extended as far as the Karewas. It is less fertile but with good care and proper irrigation, it will yield excellent dry crops. The cultivation here is mostly dependent on monsoonal rain. And the other type of the new alluvial was found in the bays and deltas of mountain rivers. It is rich land of great fertility, renewed and enriched every year with alluvium of mountain streams. Lawrence observes, “up to the present in spite of the lax system of forest conservancy, the silt of the mountain streams is rich and of dark colour”.

2. Local Classification of Land

The Kashmiris, so far, have considered no crop worthy of attention save rice, for which they obtained an artificially prepared soil with irrigation and manuring. Generally, the types of land recognised by the cultivators were Gurtu, Bihil, Sekil and dazanlad land which received due consideration and required peculiar treatment for rice cultivation.

1. Gurtu Land: - It contained a large portion of clay and held water in the days of scanty rainfall, and was safest for rice cultivation. But with all its advantages, it suffered from the trouble of caking, due to heavy rain fall, as a result of which the yield of the rice was low.
   i. Surzamin – The dark black soil was the most fertile.
   ii. Red Gurtu Soil— This soil is deep and porous. It was dark brownish in colour like that found in the Indo-Gangetic plain. It was the next best.
   iii. The Yellow Buff Soil—This type of land was the worst of all.
2. Bihil Land: - The Bihil land or semi-alluvial soil was less porous but rich loamy with great natural strength. There was always danger of over manuring by which the soil grew strong and lead to the failure of crop that ran from root to the leaf and result in rai, a calamity.
3. Sekil Land:- It was a light loam with a sandy sub-soil which with sufficient irrigation yielded a good crop, otherwise it was best for dry crops.
4. Dazanlad Land: - Dazanlad land or burnt land was chiefly found in the low-lying areas and near the swamps and some times in the villages located on the slopes of the hills also. This land was hot and feverish as its name implies and didn’t require prolonged irrigation. The rapid growth of rich plant on this land was the greatest danger but a careful cultivation yield a heavy crop on it otherwise a cultivator had to harvest only grass. A peculiarity of this soil was that the irrigation water turned red in colour.

In addition to these categories, the Kashmiris also recognise some minor types of soil mentioned below:
i. **Nambal Land or Swamps**—It was found near the banks of the river Jhelum and in the vicinity of the Wular Lake. Owing to being peaty and rich, it yielded enormous crops of rape-seed and Maïze in the year of fair rains. This land is not suitable for rice cultivation and requires no manure.

ii. **Tend Land**—A land on the slopes of the mountains and reclaimed from the forests with an unfortunate feature that it last its pristine strength after six to ten years of cultivation.

iii. **Zabal Zamin**—This type of land used to come into existence after a particular land was injured by percolation from irrigated fields.

iv. **Khar Zamin**—It was a sour soil which sometimes occurred in the midst of most fertile areas and didn’t hold irrigation water.

v. **Lamb Land**—In this type of land generally springs were found and it was not fit for any kind of cultivation.

vi. **Fresh Land**—This division of land also didn’t hold irrigation water.

vii. **Ront Land**—It was a land with a stiff, bad clay which often caked.

viii. **Shath Land**—It constituted stony, pebbly and sandy soil by mountain rivers.

ix. **Tats Land**—This kind of land was rendered too warm by the presence of larger stones and always liable to ‘rai’.

x. **Karewa Land**—it was a curious plateau and formed so striking an object in Kashmir scenery. It was mostly found in the ‘gurtu land’. It varied in colour from a light yellowish to red soil and dark soil. It was not brought under irrigation and was easily distinguished from the plain of the river alluvial in the summer whish in most parts was densely covered with rice crops. It generally consisted of loamy clay or loam.

In short, as regards comparative fertility the alluvial land stood first, the mountain slopes and the reclaimed land on the edges of the swamps with rich organic matter was the second, the old alluvial land third, and the karewa land the fourth.

Based on the availability of irrigation and water, the land in Kashmir was divided into two groups. One type called **Kushki Land** (un-irrigated land) and second type called **Abi Land** (irrigated land). Two crops could be raised on Kushki land which comprised a sizable part of the total sown area but the crop cultivation on this land was total risky as it was exclusively dependant on rain. Besides, the yield of these rains fed crops was so small that its two crops could not even equate with the portion of paddy crops. What is important to note is that even on Kushki land only one crop was raised because, as Lawrence rightly puts it, “two years of barley or wheat would ruin any land and the Kashmiris have the sense to follow a supreme crop by an autumn crop. Regarding the kushki land, this comprised of the mountain slopes and the table lands (karewas). The mountain slopes and the table lands which constituted a large chunk of the land was inaccessible to the natural sources of irrigation, only a small fraction of this could be irrigated. Thus those villages which were situated on the table lands or mountain slopes could not grow any crop other than those which could survive arid and semi-arid conditions. Hence such crops as wheat, barley, millet were grown in such areas. A little percentage of this category of land was under saffron cultivation.

The Abi land or irrigated land was concentrated in low-lying areas of Kashmir valley. The rice cultivation occupied a major portion of the land of the valley which enjoyed assured and adequate irrigation facilities. The whole sale concentration of rice cultivation in the low lying areas, the main economic belts which really mattered in Kashmir, was not without involving serious risks. It may not be wrong to argue that this factor was one of the main causes of famines in Kashmir as in case of any failure of rice crop, there used to be no substitute food to live on.

Though Kashmir Valley figured among a very few hill areas of India having a good percentage of land under cultivation but it was at the same time beset with some unique problems. One among such problems was that owing to the climatic constraints the length of its growing season was then, as now, very short, making the region what is known as ‘Eq-fashi’ that is only one crop is raised in Kashmir. In the context of Kashmir there were some special reasons for this mono-crop economy. First, that immediately after the harvest of rice, the staple crop of Kashmir, winter sets in Kashmir lasting from November to March. The temperature goes down from -0.1 to -2.3°C and the recurrent snowfall covers the Valley for a considerable part of winter. The freezing temperature and snow covers the land and not only retards the growth but also kills the faster growing seedling. It is only very rarely that any Rabi crop (also called spring crops) or seedling survives under the freezing temperature of Kashmir winter.

3. **Agricultural Technology**

Improved agricultural technology constitutes one of the basic tools for cultivation of various crops on scientific lines besides seeds, fertilizers, plant protection etc. But the agricultural technology of Kashmir was ordinary and primitive and agriculture was practised on traditional lines. The Valley of Kashmir because of its
physical character remained by and large aloof from the rest of the world including India. This seclusion of the Valley accounted for the difference in the life style of Kashmir with that of other parts of the sub-continent. The system of land cultivation and the technology used in agriculture was somewhat different from those in use elsewhere. For Kharif crops (Autumn crops) generally the operation of ploughing started from April just from the day of Nauroz, (the Kashmiri’s new year) and for Rabi crops or Spring crops from October to November. The rice fields were ploughed thrice or four times; maize, barley and wheat were ploughed twice each. The Kashmiri cultivator believed and still believes that more ploughing gives more produce. The Kashmiri proverb ‘Ålan chuh phal, Nandan chuh Danih’ (ploughing gives harvest, weeding gives rice) best reflects the pulse of peasant mentality. The plough used was very primitive. Made of mulberry, apple, ‘posh’ and Walnut wood and the plough share tipped with iron. Ploughing was carried on with a pair of Oxen, which were tied with a piece of rope to the beam of the plough. It was most important instrument, used for preparing soil for sowing. The modern technological introductions such as Tractors, Tillers were not available and could not be used owing to the small fragmented lands of peasants and owing to the geological character of land. To quote Lambert “they (peasants) are very primitive in their habits. One often sees their wooden plough, being dragged by an ox and donkey. All their implements are of most inferior description.”

Quite a number of implements were used for preparing the soil from ploughing to sowing. Plough was the most important instrument used in the cultivation of land. But the plough share would leave small clay clods unbroken. The third stage arrived when the soil was re-ploughed. This time the plough share used was slightly smaller and its tip was of wood and not of iron. After this was done the fields were watered and when water has soaked the soil a little, it was supposed to be ready for the fourth or final stage of preparation of the soil for cultivation. At this stage a wooden log was used approximately six feet long and three feet in girth. This log was yoked to a pair of oxen and it worked verily as the roller for levelling the fields and breaking any clods that might have remained intact earlier.

A wicker basket for carrying manure to the fields during ploughing and sowing times was also used. In between the ploughing and harvesting time, use was iron implements like shovel; hoe and rake were also used. Shovel was used for digging the corners of fields which the plough had not reached and for embanking. Hoe was used for loosening the soil and for uprooting the weeds of the previous crops. Rake was used for drawing together straw and for smoothing the soil whenever necessary.

The use of sickle at the time of harvesting was essential. There was no special arrangement for crushing of paddy which could have saved great amount of labour. For crushing of paddy, bundles of rice straw were tied against a wooden log in the presence of Shiqdar, they supervisor of crop, in the crushing ground and then commenced the beating of sheaves of paddy on this wooden log.

For husking of paddy mortar and pestle were generally used but during the early years of Maharaja Pratap Singh’s reign we have evidence that for husking of paddy there were husking machines in some areas. Fanning was done by a rectangular cloth and the chaffing by a trapezoid winnower (Shup). The peasants had to get these implements locally from different craftsmen and in return paid in kind in the shape of grains or any kind of rural produce. They had not received any special training in the use of these implements; the technique came to him through observation from childhood.

In the later period some new implements were introduced by the agricultural department but they had not become popular among peasantry, as these were costly and the poor peasants of the valley were not able to purchase them. Throughout our period of study the agricultural was practised on traditional lines and peasants remained a bit orthodox in their approach. No doubt the period under study witnessed valley’s exposure to the outer world especially India, but there was no significant change in agricultural operation and technology used.

4. Conclusion

The present study while distancing from reductionist writings, looks into significant aspects of Kashmir peasant economy. It elaborates on geo-physical personality especially land types, technological aspect etc. The Valley’s seclusion from rest of the world owing to its geography produced differences in technology and technicalities used in agriculture. It was ‘primitive’ and ‘traditional’ and dependent on restricted exploitation of natural resources. The agriculture largely remained dependent on natural resources of irrigation, which were unevenly distributed. This affected the crop-pattern and crop economy in general and peasant economy in particular.

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