

The Agriculture of Jammu and Kashmir (1951-1960)

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Abstract

Objectives: To explore land utilization, crops, and how much area was under cultivation, fertility, yield of the land and pressure of the people on the land in Jammu and Kashmir during 1951-1960.

Methods/Statistical analysis: Data has been collected from both primary and secondary sources like data available from State and National Archives, Indian Agriculture research and Research libraries, Bulletin on Food Statistics, Digest of Statistics etc.

Findings: We find that during our reference period, about 50% of the Net State Domestic product was contributed by Agriculture sector, whereas the secondary and tertiary sectors contributed 19% and 31% respectively. The total area of the state of Jammu and Kashmir, according to the latest figures provided by the survey of India, Dehra Dun, was 138992 square kilo meters, out of this area 138,686.7 square km were rural and 305.4 km, urban. The total area calculated of urban in the province of Kashmir was 189.3km and 115.1 km in Jammu.

Application: The study stresses the role of modern techniques and innovations in agriculture sector so as to increase the production and production of major crops of the period under study. Very little have been written on the said period by the scholars and didn't devote their attention on the statistical data and classification of workers. It is in this context in the present paper I have tried to fill this gap.

Keywords: Crops, Agriculture, Cultivating owners, Tenant cultivators and Agriculture labors.

1. Introduction

About ninety percent of village populace in the state of Jammu and Kashmir depended on Agriculture for their living which endowed with a large state employment in the rural area. The common living mainly depended on the rate of output which was fairly less in the state. Agriculture organism the key sector had a main role to play in the financial system of the state. In fact, the Kashmiries were providential in having plentiful manure for their fields. Agriculture in the valley predominantly depended on irrigation. This was straightforward and in regular years abundant, if normal snows fell in the winter and the great mountains were well covered, the water supply was adequate. The Agricultural implements were primitive and plain. The agricultural operations were cautiously timed so as to fall within the certain period. In June and July barley and wheat were cut and threshed. Owing to its system of rivers, Kashmir proper infatuated a large area of alluvial soil, which might be divided into two classes, the new alluvial originated in the bays of deltas of the peak rivers, and the old alluvial, lying above the banks of Jhelum and broadening as far as the Karewa. The first was of enormous vastness and every year was transformed and developed by buildup from the stack streams [1].

2. Methodology

The present study is based upon the source material encompassed primary and secondary. The material make up of officials credentials presented at the State Archives, National Archives of India, Indian Agriculture research and Research libraries not only this, much of the numerical data have been drained from Annual Administrative Reports of various department, census reports, Bulletin on Food Statistics, Digest of Statistics and analytical review of the sources.

3. Objectives

The objective of the study is to explore land utilization, crops, and how much area was under cultivation, fertility, yield of the land and pressure of the people on the land during the period under study.

Results and discussion

4.1 Land utilization and crops

The Kashmir was above all a crop growing province. In other expressions, crop growing was its principal industry. Agriculture production supplied food grains like rice, maize, wheat, barley, pulses, oilseeds, fruits, saffron, Kutha(costus) cash crops and dairy products. According to Nilmata Purna, the Kashmir valley was in the commencement a good-looking lagoon filled of fantastic water. As per fable, it came into being because of the endeavor of goddess Uma, the companion of Lord Siva. Thus it was stated that on her own body, which took the forms of boat, ground formation took place. And on that hallowed ground a lagoon came into being and turned out to be well-known as Satisdesa. It was there upon utilized as the enjoyment soil by the gods and goddesses. As the mythology set out further, in the seventh Manvantara. The water of the lagoon was exhausted off through the outlet completed by the god Ananta with his plough at the request of Lord Vishnu. It was affirmed that Lord Vishnu approached there alongwith other gods and goddesses to execute the demon Jalvodhavan, whose domicile was

unbeatable because of being in that holy lagoon. The purana further enlightens us that after the death of Jalvodbhava, the pisacas and the human beings were settled there by sage kasyapa to breathe in the company of the Nagas, who occupied the lagoon right from the day it was formed. The Rajtarangni too makes mention of this myth. According to it the land now known as Kashmir was since the commencement of the Kalpa(a period of four thousand, three hundred and twenty millions of years of mortals, measuring the duration of the period.) filled with water throughout the period of the first six Manus and was called satisarar. The other portion of the fableen closed in the Rajtarangni was merely the replication of that which is found in the Nilmata purana. Accordingly he articulates that its water was sapped, when at the behest of Rsi Kasyapa inhabited the land which was previously taken by the lagoon. Thus became famous as Kashmir[2]. Agriculture of all cultures agricultures was the best as without it the vital requirement of human existence could not be met. Cultivation, in the state engaged 558,864 earners and 192521 working dependents making a total of 751385 workers. In 1921 the number of workers was 9672368 females in the figures of females were to be added to the 1931 total the figures of earners and working dependents would exceeds those of 1921. It would be illogical to think of so many women’s defaulting from the profession in a single decade and all that can be said was that the difference in classification have labeled the 1921 female workers in agriculture as working dependents in domestic services.

Table 1. Non cultivating proprietors, cultivating owners, tenant cultivators and agriculture labours.

Class	Total strength of Earners	Strength of Actual Workers	% of Earnerss under Cultivation
Non cultivating proprietors	29099	29466	5
Cultivating owners	324051	932040	58
Tenant cultivators	193257		34
Agricultural Labourers	11847	3862	2

Source. Census of India, 1931, volume xxiv, Jammu and Kashmir State part i-Report, Jammu: Superintendent The Ranbir Govt.Press 1933.

The figures of earners under non cultivating proprietors compared favourable with those of 1921.If we add the working dependent of this group the figures would be in excess of those in 1921 by 14571, i.e. nearly 50 percent increase would be demonstrated, the non –cultivating proprietors comprised only 5% of the total earners under cultivation which points to be the fact that the holdings of land were generally small and could not support a big lethargical class. The cultivating owners were the most numerous members of the profession which argues well for the politico-economic stability of the state and its people as peasant proprietorship was a solid foundation of social structure. A peasant proprietor evinced a keen interest in his work and was alive to the need of the cultivator whose main interest was to get maximum yield from the land with maximum outlay or the non-cultivating proprietor who merely acted like a sanction pump drawing the highest rest possible. The tenant cultivators form 34% percent of the total earners of this class while agricultural labours were only 2%. The preponderance of tenant cultivators was prejudicial to agriculture improvement and it was fortunate that the proportion was not over whelming. The lowest figures for agriculture labour were probably due to errors of enumeration which had led to an inflation of these figures under general labour [3, 4]. The basic character of the economy of Jammu and Kashmir was agrarian. About 50% of the Net State Domestic product was contributed by this sector, where as the secondary and tertiary sectors contributed 19% and 31% respectively. Feudalism and its related institutions had made the peasants miserable victims of serfdom. This 90% population, which forms the backbone of the agrarian economy of the state, was reduced to acute object pauperism due to fiscal policy of the Government. After independence, a new way of understanding bowled over the minds of the people, tickling their higher aspirations and expectation of economic prosperity and social welfare. As a result, a planning commission was set up in1950 by the state with the objective to set off a process of development to move up the standard of living and open out new opportunities for a richer and more speckled life. So planning was visualized as the means of giving economic substance to political freedom [5]. However, the crucial question before the farmers of the constitution was how to, develop the economic position of the state through agriculture which contributed large share to it. The farmers of the constitution of the state, understanding the need and importance of agriculture for the development of state economy and speedy improvement in the standard of living, put a responsibility upon the government through part iv of the constitution in one of its Articles’ which states that the state shall endeavor to organize and develop agriculture and animal husbandry by bringing to the aid of cultivator the benefits of modern and scientific research and techniques so as to ensure a speedy improvement in the standard of living and also the prosperity of rural areas. Agriculture in its wide wisdom was the most significant industry of the inhabitants of the territories of Jammu and Kashmir; even those engaged in other industries depend on agriculture for food and raw material. The entire territories of Jammu and Kashmir were included in the western Himalayan region as suggested by M.S. Randhawa in his book, Agriculture and Animal Husbandry in the India (1958). Like all under developed regions of India, the state of Jammu and Kashmir needs a careful study of agriculture and horticulture on the bases of crop – combination regions to attain its plan targets in soil improvement, selection of better seeds, healthy live stock and

increase in the yield of crops. The total area of the state of Jammu and Kashmir, according to the latest figures provided by the survey of India, Dehra Dun, was 53664.9 square miles 138992 square kms, out of this area 138,686.7 square km were rural and 305.4 km, urban. The total area calculated of urban in the province of Kashmir was 189.3km and 115.1 km in Jammu. This signifies that the entire state of Jammu and Kashmir was rural with 6569 villages according to the census of India 1961[6].

Table 2. District wise population of Jammu and Kashmir 1921 to 1961

Population figures in thousands					
Districts	1921	1931	1941	New classification of District on the side of C.F.Line	1961
Jammu District	338	375	431	Jammu District	517
Kathua	154	161	178	Kathua	207
Udhampur	245	274	294	Udhampur	254
Reasi	224	235	258	Doda	326
Mirpur	317	245	387	Jagirs	269
Jagirs	362	398	434	Jammu Province	-
Jammu Province	1640	1788	1982	Kashmir Province	1573
Baramulla	502	560	612	Baramulla	605
Anantnag	689	772	852	Anantnag	654
Muzafar	216	237	265	Srinagar	640
Kashmir province	1407	1569	1729	Kashmir Province	1899
Frontier District	273	289	311	Frontier Province	89
Jammu and Kashmir state	3320	3646	4022	Jammu and Kashmir State	3561

Source. Census Report 1961, volume vi, Jammu and Kashmir, part i-c, Subsidiary Tables, Superintendent of Census operation, Jammu and Kashmir 1966

The total geographical area being 138,922.1 square km, Agriculture Statistics are available only for about 24281.14 square km, the rest of the area was under forests and mountains.

Table 3. Land utilization statistics for the year 1954-1960. (Figures in thousand acres)

Year/District	Total area according to the village paper	Forest-s	Land put to non- <u>Agricultural use</u>	Barren and uncultivable Land	Total
1	2	3	4	5	6
Jammu and Kashmir	-	-	-	-	-
1954-55	5924	1400	882	990	1872
1955-56	5923	1398	979	826	1805
1956-57	5923	1398	908	826	1770
1957-58	5940	1395	984	821	1805
1958-59	5926	1397	997	832	1892
1959-60	-	-	-	-	-
Jammu	802	44	115	218	333
Udhampur	1060	380	287	113	400
Kathu	654	172	55	146	201
Doda	1044	558	102	147	249
Poonch	861	236	228	45	273
Total Jammu Province	4421	1390	787	669	1456
Baramulla	518	3	117	117
Anantnag	544	1	38	72	110
Srinagar	305	3	37	33	70
Total Kashmir Province	1367	7	192	105	297
Ladakh District	137	14	57	71
Total Jammu and Kashmir State	5925	1397	993	831	1824

Source: -Annual Administration Reports of the Jammu and Kashmir, State for the years indicated above.

The total area according to village papers as well as those areas which were incorporated in settlement operations and for which proper records were maintained by the revenue Department did not maintain figures for the areas which were not fit for habitation or were of no economic usage. Similarly area according to the village

papers did not comprise the forest area under the management of forest department. Some of the terms used in the table 4 are explained here. Land set to non agricultural uses, included all lands occupied by buildings, roads, rivers, canals and other lands put to uses other than agriculture. Barren and uncultivable land, included all barrens and uncultivable land like mountain, deserts etc land which could not be brought under cultivation except at an exorbitant cost was also included under this item. Permanent pastures and other grazing land included all grazing lands whether they were permanent pastures and meadows or not. Land under miscellaneous tree crops etc. included cultivable land which were not intended in net areas sown but were not put to some agriculture use. Land under thatching grasses, bamboo bushes and other groves for fuel etc. It included under this column. Cultural wastes, it included waste land available for cultivation whether or not taken up for cultivation in the past. Land once cultivated but not cultivated for five years in succession was also included under cultural wastes. Fallow lands other than fallows, this included all lands which were taken up for cultivation but were temporarily out of cultivation for a period of not less than one year and not more than five years [7]. It was made clear here that cultural waste and fallow lands other than current fallows could be taken up for cultivation only if they were available in economical patches and would also give back positive net returns on the investment made in cash or kind. Current fallows represent areas which were kept fallow during the year of reporting. Net Area Sown represents net area sown with crops and orchards, the area sown more than once during the year being counted one only. Generally speaking, 30% area was used for non agricultural purposes, it being uncultivable. Out of the cultivable uncultivated land, more than 10% was still fallow and with increasing facilities of irrigation this area would add to the existing acreage of cultivation. An examination of the agricultural statistics for the entire state of Jammu and Kashmir reveals that of the total fallow lands nearly nine-tenths were in province of Jammu and Kashmir and the rest in the province of Kashmir. In the province of Jammu more than 78% area of cultivated land was sown twice. It being a double cropped area, as against 21 percent in the province of Kashmir. A careful analysis of the net area sown district wise shows that double cropping was common in the district of Jammu province. The method of suitable crop rotation to enable lands to be cultivated more than once would indeed add to the agricultural yield [8, 9].

Table 4. Area and its classification (Figures in Thousands Acres)

Year/District	Other uncultivated land excluding current fallows.					Fallow lands		
	Permanent pastures and other grazing lands	Land under Misc. Tree crops and groves not included in the net area sown	Cultivable wastes	Total	Fallow lands other than current fallow	Current fallows.	Total	Net area Sown
1	2	3	4	5	6	7	8	9
1954-55	311	103	296	710	151	166	317	1625
1955-56	326	80	294	700	221	282	503	1517
1956-57	352	52	375	779	177	190	367	1594
1957-58	350	45	375	370	146	186	332	1598
Jammu	11	5	64	80	6	71	77	268
Udhampur	46	11	48	105	4	36	40	135
Kathua	22	1	89	112	3	3	6	163
Doda	9	...	31	40	52	9	61	136
Poonch	119	...	66	185	10	15	25	142
Total Jammu Province	207	17	298	522	75	134	209	844
Baramulla	65	3	34	102	3	24	27	269
Srinagar	27	5	6	38	5	4	9	185
Anantnag	61	14	12	87	13	18	31	315
Total Kashmir Province	153	22	52	227	21	46	67	769
Ladakh Distt.	...	4	12	16	11	..	11	39
Total Jammu and Kashmir State	360	43	362	765	107	180	287	1652

Source: Digest of Statistics, Jammu and Kashmir 1960-61, State Statistics Bureau, Printed at the Govt. Press, Srinagar.

Land under miscellaneous tree crops etc :-Includes cultivable lands which were not included in net sown but were put to some agriculture use. Land under thatching grasses, bamboo bushes and other groves [group of trees planted close together] for fuel, etc. is included under the column.

Cultivable wastes:-It includes waste land available for cultivation whether or not taken up for cultivation in the past. Land once cultivated but not cultivated for five years in succession is also included under cultivable wastes.

3.2. Agriculture Produce

3.2.1. Cereals

Rice is largely a crop of Asia, 95% of the world's area being determined in south-eastern Asia expanding from West Pakistan to Japan. India has the biggest area- 79 million acres-in the world under rice cultivation. It is supposed that the cultivation of rice in India dates back to ancient periods even earlier than 3000 B.C. (42). Carbonized paddy grains were originated in the excavations at Hastinapura in northeastern India at a site which has been dated as circa 1000-750 B.C. (15). The crop is usually classified into two categories: the 'wet' or lowland rice and 'dry' or upland rice. During the last few years great interest has been aroused in India in the so-called Japanese method of rice cultivation. This merely combines improved cultural practices with careful manuring and plant protection measures. The increased acre-yields obtained by this method have naturally led to its fame, the results of breeding for high yield have also been very adequate, and many improved varieties have been evolved which give an enhanced yield of 10 to 15%. Some of the new varieties are highly resistant to the blast disease (*Piricularia oryzae*) and also possess enviable agronomic characters. Among the agricultural products paddy was cultivated extensively from an early period as it was the staple crop of the Kashmir's. *Danya* (rice) of different varieties like Sali Kalam and anu has been frequently mentioned in the Nilmat Purana as the most prized food of the people which was also offered at the time of workshop to the gods and goddesses. The importance of rice can be judged from the fact that whosoever paddy was denied due to natural tragedy. People used to be unable to find all hopes for their further endurance. It classified that rice craft is a very old institution of the valley temperate 28c, irrigation is accessible to every acre planted rice, the crop was free from pests that plague the tropical and sub tropical rice culture and soils under rice were by and large, responsive to human efforts and other imports, much higher productivity could be expected and achieved in the zone. Thus justifies a detailed analysis to find out factors responsible for low productivity. The valley temperate a region has two distinct zones for rice cultivation [10,11]. Valley clement a towering prolific zones about 120.70 km long and 32.187km broad with an altitude of 1524.0-1674.4 m an m. s. 1. Adjacent mountainous regions of low productive zone enlarging to an altitude of 2286 m a. m.s 1. In higher belts low temperature during germination and early growth results in low establishment of crops. The growing period is condensed by unrelenting rains in April- May and unexpected fall of temperature in September affecting the mellowness of the crops. The rice production in the state for the last ten years has lingered between 38.40 and 63.71 lakh maunds, except in 1957-58, when production was as low as 41.46 lakh maunds. The flux in the yield in the said period is accredited to variation in the weather during the growing season in valley temperate zone [12].

Table5. Production of selected cereals in Jammu and Kashmir State.

Sl.No.	Name of Crops	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61
1	2	3	4	5	6	7	8	9	10	11	12
2	Rice	38.4	47.93	46.31	52.14	54.91	54.53	41.46	58.97	56.61	63.71
3	Maize	20.4	23.63	42.74	18.89	36.72	35.53	27.92	51.69	47.11	54.29
4	Wheat	12.17	15.81	16.95	18.86	22.87	23.47	25.41	26.89	29.68	28.08
5	Barely	4.61	5.3	4.31	3.62	3.61	3.9	3.28	3.14	3.68	3.88
6	Total	75.58	92.67	110.31	93.51	118.11	117.43	98.07	140.69	137.08	149.96

Source: Area, Production, Average Yield per acre of principal crops in India 1951-52 to 1959-60 issued by Economic and Statistical Advisor to the Govt. of India, Ministry of Food and Agriculture.

3.2.2. Maize

Maize is said to have been introduced in this country from tropical America about the beginning of the seventeenth century. Maize is mainly grown as a "kharif" crop. Although it is grown throughout India, the chief attention is in the northeastern parts. Only in the northern parts it is also grown for fodder purposes. As the production of hybrid corn seed involves a long-range process, it was thought advisable to import readymade seed from the U.S.A., Australia, and Canada with a view to finding out if any of them would suit Indian conditions. Next in importance comes maize, the best soil is reclaimed swamp, and enormous crops are raised in good years from the black peaty land which lies under the banks of Jhelum. In the highest villages occupied by the Gujar graziers very fine crops of maize were grown, and the out turn was due to the heavy manuring given to the field by buffaloes and cattle. But with the exception maize received no manure, and the system of harvesting rendered it unnecessary. As the altitude increases from 8000 feet above sea level, the importance of maize cultivation and maize consumption added to the bodily heat in cooler conditions of temperature at high elevation. Maize was sown in May-July and the harvesting was done in August- November. In all hilly and submontance regions, maize continues to be the staple diet of people. In the winter months, maize was preferred to our food grains particularly its flint variety in which red grained type predominates [13].

3.2.3. Wheat

The wheat grains naked as a result of the Indus Valley excavations at Mohenjodaro designate that North-Western India was one of the ancestral 214 Economic Botany Lands of this cereal. The wheat growing area in India can be largely alienated into three main divisions, namely the Gangetic alluvium, the Indus Valley, and the black soil

track of peninsular India. The first two areas, in northern India, have irrigation convenience while most of the area in peninsular India is unirrigated. A special feature of India wheat is the relatively short season in which it completes its life cycle. While the crops stands in the field for nearly nine to ten months as in some western countries. In India it was ready for harvest in four to six months after sowing. The scarcity was being made by heavy imports from other countries like Australia and the U.S.A. the Government of India has recently come into concord with U.S.A. for the import of wheat over a period of three years commencing from 1956. Their special character consist adoptability to certain regions, high yield, good grain quality, patience to tarnishes, and resistance to lose smut, . In India all the three tarnishes namely the black, brown and yellow, caused by *Puccinia triticina* and *Puccinia glumarum* are found to substantial damage in the major growing area in the North. Wheat received better treatment than barely, but two ploughings, with a third at seed time, were deemed satisfactory. The land was neither manured nor hoed, and as a rule no irrigation was known. Seed was sown in September and October and the crop ripened in June. The common variety was red wheat with a small hard grain, and the Punjab judged the flour to be very substandard. In the valley of Kashmir wheat was cultivated just like grass and a was a auxiliary plant, in the sense that it was grown-up on elevation where irrigation was not possible and there was a small period for crops to mature. The yield was very low, almost half of that of the rest of India, as very little was done by way of hoeing, manuring and ploughing of such lands. The valuable straw of wheat was used as fodder and mixed with mud to impart strength to the plaster with loathsome smell is still common in some areas where wheat is cultivated. The yield of wheat per acre was about 7 maunds in Kashmir. In Jammu the yield was on the increase but the highest yield of wheat has been reported from Ladakh [14].

3.2.4. Barley

It was a key rabi cereal of northern India. It was grown up clean crop. It was mainly significant in the hills. It was consumed in the form of chapattis. Substantial amount was also utilized for malting and brewing. There was a great multiplicity in the use of processed melt. It had winter and spring varieties, bloomed most excellent in cool weather. It had winter and spring varieties, bloomed most excellent in cool weather. The grain was produced in heads at the tops of plants that were about 30 inches tall [15] [16]. The individual kernels usually evaluated about 30 milligrams. Barley grown in nearly all temperate regions of the world as well as in hotter and drier areas, such as Asia Minor, North Africa and Mideterrain area. Barley was not esteemed as food even in Kashmir where it was grown along with wheat. A variety of this crop known as Tibetan barley was cultivated in the hilly areas where most of it was cut before ripening and used as fodder. The barley increased from 2.61 lakh maunds to 3.88 lakh maunds from 1951-61 [17][18]. The barely commonly grown in the valley was not of good quality and no pains were taken in its cultivation. One ploughing was given and when the seed was sown from October to December the land was again ploughed. The fields were neither weeded nor manured and probably had not their competition in the world for 58000 acres under barely out of which 51000 acres. Ladakh had an era of 2000 acres under barely in scattered patches [19-21].

4. Conclusion

Agriculture had been the key financial activity in India from ancient time. About 90% population was dependent upon agriculture and more than 50% of the country's national income was contributed by this sector. Although about 78% of the total gross cropped area in the State was under food crops, the major problem was still the increase of food production. While the population in 1941 showed an increase of 702 thousand over that in 1921, there was no noticeable change in the production of food grains during that period. The production of rice, which was the most important cereal consumed in State, went up from 38.40 lakh maunds in 1951-52 to 63.71 lakh maunds in 1960-61. Similar were the case of maize, wheat and barely increased from 20.40 lakh maunds in 1951-52 to 54.29 lakh maunds in 1960 -61, from 12.17 lakh maunds in 1951-52 to 58.08 lakh maunds in 1960-61, and from 4.61 lakh maunds in 1951-52 to 3.88 lakh maunds in 1960-61 respectively. The First Five Year Plan (1951- 56) accorded a place of conceit to agendas for agriculture and the public development. The cultivating owners were the most numerous members of the occupation which argued well for the politico-economic stability of the state. The tenant cultivators form 34% percent of the total earners of this class while agricultural laborers were only 2%. About 50% of the Net State Domestic product was contributed by this sector, where as the secondary and tertiary sectors contributed 19% and 31% respectively. The entire province of Jammu and Kashmir was integrated in the western Himalayan region. The total area of the state of Jammu and Kashmir, according to the latest figures provided by the survey of India, Dehra Dun, was 138992 square kms, out of this area 138,686.7 square km were rural and 305.4 km, urban. The total area calculated of urban in the province of Kashmir was 189.3km and 115.1 km in Jammu. This signifies that the entire state of Jammu and Kashmir was rural with 6569 villages according to the census of India 1961. Thus, 90% population which forms the backbone of the agrarian economy of the state was condensed to severe object pauperism due to economic policy of the Government. The total geographical area being 138,922.1 square km, Agriculture Statistics were available only for about 24281.14 square km, the rest of the area was under forests and mountains.

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