## History of Agriculture in Jammu, (Jammu & Kashmir)

## (By K K Sharma, Director Agriculture Production & Farmers Welfare, Jammu.)

**Background:** The practice of cultivating the soil in order to produce crops and domestication of animals and pastoral farming are known as agriculture. The agricultural processes of a region are directly controlled by the prevailing physical environmental condition (temperature, precipitation, terrain, soil etc.) and the socio-cultural milieu (land tenancy, size of holding, technology, workforce, family requirements, irrigation, power, roads, marketing, aspirations of the growers, etc.).

Availability of adequate water for assured irrigation all the year round plays a crucial role in development of agriculture. It provides the necessary leverage for venturing into the choicest diversification in farming systems. Irrigation helps in optimizing crop yields and farm incomes, besides contributing to economic and social prosperity of the population. About eighty 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 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 be 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. However, availability of adequate assured irrigation all the year round criterion under consideration, agriculture in about 74 percent of the net cultivated area of Jammu division is not placed in an advantageous position being totally rainfed and a significant part of it drought prone. The remaining 26 percent of the net cultivated area could get the benefit of irrigation infrastructure, only during the reign of Maharaja Ranbir Singh, Maharaja Pratap Singh and after, when irrigation received the attention of the state.

Construction of smaller channels and several irrigation canals was taken up in Jammu and Kashmir after the commencement of Land Settlement in 1888-89. A separate department of irrigation was established in the state in 1923. As on date, the net irrigated area of Jammu division is just about 1.10 lakh hectares out of the net cultivated area of about 4.00 lakh hectares.

**Medieval Period:** The plight of ordinary farmers of Jammu region under water scarcity conditions of the medevial period can be guessed from the immortal legend of Baba Jitto. Baba Jitto, originally Jit Mai, was an honest peasant by occupation and a firm devotee of the Goddess Vaishno Devi and Raja Mandalik. He is remembered by the peasants for his revolutionary act of

encounter with the landlord's domination and consequently laying down his life for justice. Dr Mandeep Azad and Dr Manmeet Motan (Daily Excelsior - 14/06/2014) say, "While the official histories written by the elite historian have remained silent about the exemplary and revolutionary character of Baba Jitto; a simple but honest farmer, it was left to the real conscience keepers of the society- the folk poets and bards to raise the unsung but fearless persona of Baba Jitto to the status of folk hero and later on as a folk deity." Jit Mal used to live in Aghar village near Katra, Vaishno Devi. Unwilling to put up any more with the hostile behaviour of his aunt Jojan, he decided to leave the village along with his daughter Bua Kori, and go to his friend, Iso Megh at Kahnachak. There he requested Mehta Bir Singh, a feudal lord of the Ambgrota, to provide a piece of land for tilling.

Mehta Bir Singh gave Jit Mal a piece of barren land after signing an agreement that he would give him one-fourth of his produce. Jit Mal's hard work transformed the barren which yielded a luxuriant crop. When Bir Singh got the news about the good yield, he arrived at the fields along with his men and asked them to lift three fourth of the crop and leave only a quarter with Jit Mal. Baba Jitto pleaded Mehta Bir Singh to follow the terms of the agreement, but the goons of Mehta forcibly took the lion share of the crop. Incensed by the injustice, helpless Jit Mal, while uttering last words 'sukki kanak nain khayaan mehtya, dinna ratt ralayi' (don't eat raw wheat, oh Mehta, let me mix my blood in it'), stabbed himself sitting on the heap of crop, leaving all grains drenched red with his blood. Bua Kori with help of their pet dog Kalu, located her father's dead body hidden in the Simbal tree (Bombax ceiba) trunk by the goons of Mehta. She then lit the pyre and burnt herself with her father. It is said that thereafter, a fierce rain storm raged the area; the blood stained grains were washed away and all those people, even the birds, who had partaken those grains later suffered from various afflictions, including diseases, untimely deaths, misfortunes and 'jatars'. To seek pardon from the wrath of the holy spirit, they not only asked for his forgiveness by worshiping him as a 'kul devta'-family deity, but also making it mandatory on their future generations to venerate Baba Jitto and pay annual homage at his shrine. The Samadhi of Baba Ji was stationed at Jhiri over 650 years back (i.e. around 1364 C.E.) on the occasion of Kartik Purnima and ever since the conventional fair named Jhiri Mela is being organized every year in the month of October- November and is visited by lots of devotees, particularly farmers, from North India to perform rituals. With his extreme sacrifice, the Baba Ji has sent the message of fighting injustice and discrimination as the real dharma.

So, wheat must have been a major crop of the region and the others being maize, bajra, millets, pulses (rajmash, mash, lentil, kulth or horse gram), oilseeds, and other rainfed crops besides local fruits (mango, ber, and traditional vegetables (pumpkin), etc.

**Pre-Independence:** The economy of Jammu & Kashmir during the nineteenth century and first half of twentieth century was dominated by agriculture. More than 75% population of State was engaged in this sector and it constituted the main source of income. Thus the agrarian economy has been a matter of great importance affecting all sections of society of the state in a variety of ways. This period is also very significant in the history of Kashmir so far as the agrarian reforms are concerned. The main purpose of the Dogra Maharaja's agrarian policy was to fill the coffers of Government Treasury and changes were made time to time keeping this in mind. The British influence right from the reign of Gulab Singh was also a significant force pressing the Dogras to reform the agrarian system of Kashmir at different times.

With the advent of Dogra rule in 1846 and its expansion and consolidation later, Maharaja Gulab Singh started taking some initiatives to improve the land system. He was able to improve the conditions of peasants by regulating various processes of assessment and revenue collection. Some relaxations were made in respect of the newly-broken land (Nau-tor) for large areas were laying waste which the ruler wanted speedily to be reclaimed. A number of grass-rakhs were reserved for cultivation. Maharaja Gulab Singh had directly or indirectly a complete monopoly of all the chief products of the state, such as saffron, wheat, shawl and iron manufactures and even walnuts.

In A.D 1852 the Dogra kingdom was divided into several provinces, including Jammu, Kashmir and Ladakh, and Frontier regions. The two provinces of Jammu and Kashmir were placed under the control of Wazir or ministers whose position was analogous to that of provincial governors. These two provinces were divided into several parganas (district). Gulab Singh frequently toured the parganas, and dividing the latter part of his reign displayed special interest in the production of cotton, silk, saffron, chestnuts, tobacco and opium, but few concrete measures were taken to promote or expand these industries.

There were wide ranging reforms in the Dogra state after the appointment of a British Resident Commissioner Mr. Wingate in the Dogra Durbar in Kashmir. These included the lighter assessment of revenue to be collected preferably in cash; the abolition of system of revenue farming.

In 1887, the State Government carried out the first land settlement. The land settlement gave much needed security to the cultivators and became responsible for their increasing prosperity. Walter Lawrence succeeded Wingate as settlement Commissioner in 1889. Lawrence found the existing system of assessing a group of villages at the same rates defective as there were hundreds of tenants in an assessed group of village. Lawrence divided the entire area into assessment circles. In each assessment, estimate of average produce were obtained by conducting crop cutting experiments for different crops. The rights of the agriculturists were clearly' defined.

The important step to introduce in the new settlement of Walter Lawrence was grant of assami or the permanent occupancy rights to cultivators. The land Settlement of 1883 not only settled the problems like collection of revenue, fixation of term and allotment of land but it also worked for the increase of the area of land from non-cultivable to uncultivated and then to cultivable by making its allotments to the landless agriculturists. By 1912 practically every tehsil and district was settled either for the first time or in revision.

State Policy towards Agricultural Development: A model Pratap Agricultural Farm was set up at Srinagar around 1912 for the spread of knowledge about the scientific methods of cultivation. Establishment of the Department of Agriculture and the introduction of Cooperative Societies were the other measures taken up to further improve the lot of the cultivators.

Maharaja Hari Singh set extraordinary attention to modernize the agriculture sector with decree of the Agriculturist's Relief Act that allowed a debtor to bring his creditors in a Court of Law for the settlement. Agriculturist's Relief Act freed the peasants and rural workers from the egocentricity of money lenders and creditors. Next in a line "The Land Alienation Act" has forbidden the transfer of agricultural land to the non agriculturists." The agriculturists also were granted with proprietary ownership rights and immunity from the taxes or levies of Nazrana and Malikana. State Government encouraged providing loans for the improvements agricultural lands, livestock and rural economy with easy procedures and installments. The rural population and peasantry without land encouraged and allowed to dwell the Khalsa land with ownership rights. "The Kahcharai Act" was also landmark step that removed the inequalities in circumstances applying of Kahcharai tax. It also granted exemption to the owners of livestock in respect of particular animals of a given number and age. For the improvement of livestock, a large number of bulls of Sindhi and Dhani breeds were distributed among certain peasants in some selected places. The period of the land settlement was extended to forty years. Begar or forced labour was completely abolished. The activities of the Agriculture Department, which were initially restrained to the Kashmir Province only, were progressively extended to the Jammu and other northern provinces.

Maharaja Hari Singh empowered village panchayats, which then were used to resolve community conflicts in village life. Department of Rural Development was established in 1937; the panchayats were also associated with the implementation of plans for rural Development. By 1929, the number of Cooperative Credit Societies in the state alone rose to about 1100 with a membership of 27,500.

**Diversification:** Besides, agriculture, sericulture, viticulture and horticulture were given great encouragement, and these made much progress going onto become flourishing state industries. A silk factory set up at Srinagar attained the distinction of being "the largest of its kind in the world". To feed it with the best quality of cocoons seeds were imported from Italy and France.

Felling of Mulberry, Walnut & Maple (Chinar) trees were banned as they were critical for sustenance of Kashmiri economy.

**Post Independence:** After independence, the higher aspirations and expectation of economic prosperity and social welfare resulted in establishment of a Planning Commission in 1950 by the then 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.

Crucial question before the framers of the Constitution was how to develop the economic position of the state through agriculture which contributed large share to it. The framers of the constitution, 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 one of its Articles of the Constitution 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.

After independence, for boosting growth in agriculture sector, a number of systematic efforts were initiated on basis of experiences learnt from the past. After the first planned attempt with the launching of Community Development Programme in 1952 followed by the National Extension Service in 1953 the public extension programs were able to educate the farming community to take up improved methods of farming across the country. The entire territories of Jammu and Kashmir were included in the Western Flimalayan region as suggested by M.S. Randhawa in his book, Agriculture and Animal Husbandry in the India (1958). Intensive Agricultural District Programme (IADP, 1960), Intensive Agriculture Area Programme (IAAP, 1964) and High Yielding Varieties Programme (HYVP, 1966) besides Farmers Training Centers (1967) were the other important Area-Based Special Programmes to train farmers on high yielding varieties and improved methods of farming.

In order to enable resource poor farmers to take benefit of improved farm technology, many client-based programs were introduced. The most important ones being i) Small Farmers Development Agency (SFDA, 1969), ii) Marginal Farmers and Agricultural Labourers Programme (MFAL, 1969), iii) Command Area Development Programme (1974), iv) District Rural Development Agency/Society (DRDA, 1976) v) Integrated Rural Development Programme (IRDP, 1978) and vi) Lab to Land Programme sponsored by ICAR (LLP, 1979).

All the above programmes were being implemented in J&K through the Research and Development wings of Agriculture Department under one

Directorate till 1983, but with the establishment of Sher-i-Kashmir University of Agricultural Sciences and Technology, J&K during the year 1982 the concerned research establishment and infrastructure was transferred to SKUAST - J&K. The development wing was also re-organized to fulfill the distinct requirements of Jammu and Kashmir divisions. Separate Directorates for Jammu and Kashmir Divisions were carved out from existing Directorate of Agriculture J&K vide Cabinet Decision No: 29 dated: 02.02.1982 and G.O.No.180 of 1982 dt.05-03-1982. The staff was provided either by adjustment /transfer /fresh creation. The purpose was optimum utilization of manpower.

Although, these measures were able to improve the socio-economic conditions of beneficiary farmers, they were isolated in the given time and implemented in a phased manner. By the middle of 1980s it was observed that the extension services were still suffering from a number of weaknesses including i) the dissipation of extension workers' energies on low priority tasks ii) lack of single as well as clear line of command and iii) low level of agricultural knowledge and skill among field level functionaries. Thus, as a means of reforming and strengthening the extension service, a reorganized agricultural extension system was introduced known as the "Training and Visit (T&V) system" under the National Agriculture Extension Project (NAEP) vide G.O. No: 607 Agri. of 1984 dated: 13.10.1984. T&V System in the 1990s was followed by a "Broad Based Agriculture Extension" approach though it couldn't hold the ground for long.

SKUAST - J&K was now further bifurcated along with assets, liabilities and areas of operation into SKUAST - J for Jammu and SKUAST - K for Kashmir & Ladakh regions during the year 2000.

In the year 2005-06, the Extension Reforms programme through Agriculture Technology Management Agency (ATMA) was introduced in J&K. Recently the National Mission for Agricultural Extension and Technology (NMAET) has been launched from 2015-16 in a convergence mode which has four sub-missions, namely; Sub-Mission on Seeds and Planting Material (SMSP), Sub Mission on Agricultural Mechanization (SMAM), Sub Mission on Plant Protection (SMPP) and the Sub Mission on Agricultural Extension (SAME). A number of other CSS schemes like National Mission for Sustainable Agriculture (NMSA), National Food Security Mission (NFSM), Pradhan Mantri Krishi Sinchaai Yojana (PMKSY), National Food Security Mission (NFSM), Pradhan Mantri Krishi Sinchaai Yojana (PMKSY), Revised Guidelines of PMKSY Per Drop More Crop (Micro Irrigation), Mission for Integrated Development of Horticulture (MIDH), Pradhan Mantri Fasal Bima Yojana(PMFBY), Kissan Credit Card (KCC) Scheme, PM Formalization of Micro Food Processing Enterprises Scheme (PMFME), PM Kisan Samman Nidhi (PM-KISAN), National Mission for Sustainable Agriculture (NMSA), Rashtriya Krishi Vikas Yojana (RKVY), Prime Minister Kisan Maan Dhan Yojana (PMKMY, a Pension Scheme), National Vegetable Initiative for Urban Clusters (NVIUC), Prime Minister's Development Package (PMDP) etc, aimed at diversified agriculture, value addition of farm produce and higher economic returns to farmers have been introduced in recent years. Schemes aimed at Market led production, Organic farming, farm mechanization, improving water use efficiency, value addition through post harvest management and formation of farmers organizations are being implemented and encouraged through transparent system of providing incentives and assistance to farmers.

The cumulative effect of these programs is being witnessed in terms of increased productivity which has made way for the sustained Green Revolution' in Indian agriculture. The frequently changing approaches in Public Extension per se have been necessitated on account of lessons learnt from the previous experiences and the needs of the time. Still, more thought and action shall be required to put in place an appropriate integrated mechanism for synergy and convergence in programmes implementation.

Consequently, agricultural production in the state of Jammu and Kashmir has undergone vast changes since 1947. Institutional, technological and infrastructural inputs have contributed significantly in removing stagnation and abysmal rural poverty. The ongoing changes in land relations, institutional financing, consolidation and extension of irrigation facilities, input subsidies and substantial public expenditure on agriculture development programmes are contributing to the process of transformation and growth. Pilot Projects and Crash Schemes for Dev in Agriculture have proved successful.