

CHAPTER -I

HISTORY OF AGRICULTURE

Introduction

Though, Haryana State emerged on the political map of India on 1st November, 1966, the region has been well known in history since the ancient times, as being the cradle of Indian culture and agriculture. The fate of Indian history has also been decided time and again on its soil. Since the Aryans inhabited this area in the second millennium B.C., the mainstay of its economy has always been agriculture and animal husbandry through the ages. Rigveda, the earliest recorded literature of the Aryans, was composed here. The Saraswati river, regarded as the life and the soul of the early Aryans, flowed through this region. Since the earliest times, the region has been playing a vital role in the economic growth of India and has contributed significantly in the agricultural development of this country. Though, archaeological evidences reveal that agriculture was being practised in this region earlier than the Harappan culture, the earliest literary reference is found in the Vaman-Purana.

Geographically, Haryana is bounded by the Shiwalik Hills in the North, the Aravali Hills in the South, Yamuna river in the East and the Thar-desert in the West. The modern state of Haryana, covering an area of 44,222 square kilometer is situated in the Northern region of India, adjoining Delhi between 27°3' to 31°9' North latitude and 70°5' to 77°6' East longitude. The plains cover almost the entire state. The land slope is from North to South. The average height of topography ranges from 700 to 950 feet above sea-level. There are two hill tracts, namely the Shiwalik and the Aravali hills in this region. Parts of Sirsa, Hisar, Bhiwani, Rewari and Mahendergarh districts of the state are a part of Thar desert. In ancient days, the region of Haryana had many forests. The *Vaman Puran* records¹ seven *Vanas* or forests, namely, *Kamyak-Vana*, *Aditya-vana*, *Vyas-Vana*, *Phalki-Vana*, *Surya-Vana*, *Madhu-Vana* and *Sita-Vana*. It also contains the list of seven rivers of this region viz. *Saraswati*, *Drisadawati*, *Vaitarini*, *Apaya*, *Amshumati*, *Kaushiki* and *Hirnnyawati*. But presently no big

river flows through Haryana except the Yamuna and some small streams. Rainfall varies from 35 to 100 centimetres.

The Imperial Gazetteer of India (Vol, XIII) records² that the word Haryana is probably derived from *Harialban* or the land of green forests and is reminiscent of the ancient time when this area was a rich and fertile tract. F. Wilson³ also subscribes to this view in 'Punjab Notes and Queries'.

Since the discovery of agriculture⁴ by man it has been the source of perpetual creation on which human civilization depends. The Neolithic man learned to control and use fire, obtained a foot-hold in the forests. He invented wheel, iron, axe, plough-share and animal power for agricultural development and environmental modifications which made it possible for him to live in selected areas, forming a society and growing a significant portion of his food nearby. He burnt and cut jungles and cultivated crops. During chalcolithic⁵ period, basic agricultural techniques were developed. The system of nomadic shifting cultivation gave way to cereal-fallow shifting cultivation. Irrigated farming was developed. Flood and rain waters were stored in reservoirs for irrigation purposes. Technological innovations which led to an increase in food production also resulted in an increase in population. With the domesticated animals and developing crops man learnt to supplement his own physical capacity, which enabled him to find a certain amount of leisure to create the initial ingredients of what is known as civilization.

Modern Indian Society is one of the oldest living civilizations of the world. It has a long history of about 5000 years, in which, the development of agriculture is also interwoven. It was during the second millennium B.C. that a large wave of iron using Aryans entered India from the North-West to East. From 1000 B.C. onwards the use of iron spread and by the sixth century B.C. Iron age was well established in India⁶. Iron plough-share and sickles were manufactured in substantial number. Emerging from a tribal society, the famous sixteen Mahajanpadas were also established as administrative units having their own Kingdoms and rulers. The Kuru Janapad of Haryana region was well known for its agricultural activities. Later on with the establishment of big states and empires, the kings had to knit the far-flung areas with the help and support of a large army and a bureaucracy. By that time, Indian society had also been divided into four Varnas. A large quantity of surplus food had to be produced to feed the non-agricultural communities, army, priests, royalty and officials. At this stage, it could only be done by bringing larger areas under the plough after cutting and cleanings jungles. The rise of towns, trade commerce and various branches of

knowledge of arts also flowed from the basic prosperity provided by agriculture. The kings like Chandragupta Maurya, Ashok, Chandra Gupta-I, Saamundragupta and Harshavardhan were great leaders who gave a new lead to the march of culture and agriculture together⁷. During ancient period in Haryana also, increased production of food and other agricultural commodities came about mainly by increasing the area under cultivation and by cutting jungles.

Haryana has a rich legacy of sustainable agricultural development, based on the strategic location of the region and the wisdom of its people, who faced time and again nature-made as well as man-made calamities such as droughts, famines and other difficulties. Based on the available archaeological and literary sources the present history of agriculture in Haryana gives glimpses only with wide gaps, which are yet to be filled in by the historians. The excavations and explorations conducted in the region by archaeologists have revealed that the village 'Siswal' in Hisar district, was the first to be occupied by agricultural communities as early as 2500 B.C.⁸ But with the advent of Harappan civilization, there started an important phase of culture and agriculture. The excavations and explorations of important sites in Haryana like Siswal, Mitathal, Rakhigarhi, Banawali and others have yielded the remains which indicate towards agricultural base of Harappan culture⁹. For a better understanding of the agricultural history in Haryana, it has been divided into the well known three periods of Indian history - The Ancient, The Medieval and The Modern.

Ancient period

According to available ancient literary sources and the researches conducted by the modern historians, a new era was ushered in the history of the Haryana region with the advent of Aryans during the second millennium B.C. The earliest known history and culture of this region is depicted in the Rigveda which was composed here. The Bharatas, one of the most powerful people of Rigvedic times, are associated with the holy rivers like the Saraswati and the Drisadawati. They defeated the ten powerful tribes including the Purus living in this region at that time. Later on the Purus merged with the Bharatas. Then the Kurus a section of Puru-Bharatas became powerful and launched an ambitious plan to reclaim the vast region comprising the Saraswati-valley up to the Yamuna river, for developing agriculture and to strengthen their economic position¹⁰.

In Rigveda also which was composed in Haryana, we find references related to agriculture in different forms. It refers to hundreds of cows, horses sheep and goats. The famous cow Sukta¹¹ (R.V. 6.28) indicates that the cow had already become the very basis of rural economy. The Vedic Aryans appears to

have had large forests at their disposal for securing timber, plants and herbs. At that time, the farmers vocation was held in high esteem. Agriculture mainly depended upon the favours of Prijaiya, the god of rains. There are references also to the expert skills in raising crops¹².

The earliest reference to land management and reforms is found in the Vedas in which it is mentioned that land was laid out into regular fields, ploughed and sown; the crops were reaped and stored. Here the system implies individual ownership, "in which wide fields, vast treasures, specious pastures, has Indra bestowed on his friends". Measure-rods presumably of standard lengths were used for measuring fields at that time. But up to 6th century B.C. there were no landlords. The king had a right to a tax on the raw-produce on yearly basis and thus he could be considered the ultimate owner of the land. The amount levied seems to have varied from 1/6 to 1/12, according to the decision of the ruler. The land holdings called *Khetta* were redistributed and re-divided among the family members as one generation succeeded another. All the land was the property of the Crown. The land-tax was collected by an official known as *Agronomoi* who measured the land and supervised the irrigation¹³.

In ancient literature the Saraswati river has been called a beautiful and powerful goddess and the river of riches and food. The villages situated on its banks were surrounded by green fields of rice, barley, beans and sesame. Weaving was done by women in their spare time. Carpenters made ploughs, chariots, carts and boats on its banks. Smiths made implements of agriculture, Goldsmiths prepared ornaments. Potters manufactured earthen pots on the wheels. A Mantra in Rigveda (v, 61,14) mentions the Saraswati, as the inspirer of truthful words and the guide of the right minded people¹⁴.

The Kurus launched¹⁵ on an ambitious plan to reclaim the vast region of the Saraswati Valley for agricultural purposes in order to strengthen their economic and political power. Accordingly, King Kuru, the founder of the powerful Kuru dynasty of the Mahabharata fame, decided to make an area of five Yajanas square, called Samantapanchaka, on the bank of Sarasvati River, fit for cultivation. King Kuru, himself is said to have started ploughing the field with a golden plough, yoked to the bull of Shiva and buffalo of Yama. Being asked by Lord Vishnu as to what he was doing, he replied that he was cultivating the eight virtues- truthfulness (Satya), avsterity (Tapas), forgiveness (Kshama), compassion (Daya), purity (Shuddha), charity (Dana), composure (Yoga) and continence (Brahamcharya) and their seed was in his body¹⁶. Thus agricultural prosperity was founded on spirituality in Haryana.

. The Haryana region, the land of the Kurus reached the pinnacle of glory during the Mahabharata times as agriculture was given much importance. It was then known as the land of plentiful grains and immense riches (Bahudhanya). In the course of Nakula's western expedition, mention is made of Rohitaka (Rohtak) as full of horses, cattle wealth and crops, blessed by war-god Kartikaya and inhabited by the valiant people¹⁷.

The Kurus by introducing agriculture based on spirituality in the valley of the Saraswati river, laid the code of conduct based on the high moral principles, for its cultural and economic growth. It was this combination of manual labour and moral rectitude, physical exertion and spiritual-elevation that became the essence of the culture of this region and the whole of India. This synthesis of material and spiritual values has been evolved in the Bhagavadgita by Lord Krishna for the whole of humanity. It immensely facilitated the development of agriculture also with the introduction of iron and led to the growth of flourishing villages and settlements all over this land. The region of Haryana become the centre of agriculture, industry, rural development and political power during the Mahabharata times¹⁸.

The Kuru Kingdom became the centre of political greatness and economic ascendancy that led to the Great War of Mahabharata on the soil of Haryana. The Mahabharata epic, depicts it at the pinnacle of glory and prosperity. At the same time the pace of social development necessitated a change in outlook and brought to surface the contradiction between tradition and progress and struggle for power between the Kauravas and Pandavas. Whereas the social system consisted of families, clans and tribes, having limited loyalties and parochial affiliations, material advancement headed towards vocational categories and professional classifications determined by the individual tastes and skills of their members and based on broader interests overriding tribal or territorial associations. The opposition of these two approaches crystallised in the debate between Arjuna and Krishna in the battle field of Mahabharata at Kurukshetra¹⁹.

The decline of the Kurus brought in many other tribes into the Saraswati Valley. Among them the Abhiras, Youdheyas and the Arjunayanas may be particularly mentioned. The meeting and mixing of all these tribes of varied origins and complexes made the people of Haryana sturdy agriculturists and cattle-breeders and strong fighters and conquerors. The genesis of the rural and agrarian orientation of the people of this region can be traced to that period²⁰.

The people of Haryana region went on sowing and reaping crops while imperial movements swelled from the east and invasions from the North-West.

The empire of the Mauryan dynasty of Magadha touched the Ganga Yamuna fertile plains, and the storm of Persian and Macedonian invasions rocked Haryana and Punjab regions. When Alexander the Great reached the Beas river he heard of the material soundness and military vigour of the people of this region. The Greek historian Arrian writes, 'It was reported that the country beyond the Hyphasis (Beas) was exceedingly fertile, and that the inhabitants were good agriculturists, brave in war, and living under the excellent system of government, for the multitude was governed by the aristocracy who exercised their authority with justice and moderation. It was also reported that the people there had a greater number of elephants than the other Indians and that those were of superior size and courage²¹.

This account shows that the people of this region were equally devoted to agriculture and military pursuits and led a disciplined life under a competent and just administration. They were well known for their political stability, economic prosperity and military proficiency.

The Mauryas, later on managed to submerge the people of Haryana and rule over this region as is evident from the discovery of Northern Black Polished Ware, terracotta pieces from Sugh near Jagadheri, the Mauryan stupas at Chaneti and Thanesar and Ashoka's pillars at Hisar and Topra. After the breakdown of the Mauryan empire, the inroads of foreign peoples like the Bactrian, Greeks, Parthians, Scythians and Kushanas, spread confusion in Haryana along with the rest of North India. But they brought in money-economy also which gave a big boost to agricultural development, and created new social orientations. Soon the people emerged with renewed vigour as the champions of their freedom. As a result, this region began to throb with the rising of the republics against the Shaka-Kushana regime. Among them the most prominent republics were those of the Yaudheyas, Arjunayanas, Agreyes, Audumbaras and Kuindas²².

The legend 'Yaudhayanam bahudhanyaka²³' appearing on the coins of the Yaudheyas, shows that they kept their republican character intact. The secret of their power was their military acumen and agricultural proficiency, the symbols of which are elephants and bull appear on their coins. By the end of the fourth century A.D. the Yaudheyas, became the paramount and dominant power in Haryana. The Gupta dynasty during the fourth-fifth century gave administrative unity to the North India, which brought in agricultural development and prosperity in the region.

After the downfall of the Gupta dynasty the Pushyabhutti dynasty of Thanesar emerged as the most powerful in Northern India. Prabhakarvarthan, the

fourth ruler of this dynasty, carried the region of Haryana to the imperial greatness. His capital, Thanesar, became the centre of North India's political power and economic activities. His decisive victory over the Huna's, made him the most powerful ruler. But it was during the reign of his younger son, Harshwardhan that Haryana region known as, Shrikantha Janapada, at that time, saw one of its glorious ages²⁴. It became the centre of economic prosperity, the seat of culture, arts learning and of the imperial forces. The court poet of Harshavasdhava Banabhatta and the Chinese traveler, Huan Tsang, have given a graphic description of its variegated life and agricultural development. The court poet records in his work 'Harshacharita'²⁵, that the whole area hummed with the ploughing of land. Wells and wheels supplied water to the crops. The fields were full of high heaps of harvest, rippling wheat, paddy, mung, mash and sugarcane. The orchards and gardens greeted the eyes and the shady fruit trees lined the highways. The herd of Cattle were numerous. People were gay and good natured, dutiful and hospitable and knew no disease, epidemic or premature death. The capital, Thanesar, was an ideal resort of all sections of people, sages, merchants, warriors, students, artists and scientists. Its bazars were well-equipped with goods. It had elegant temples, splendid palaces, artist's studies, sculptor's workshops, colleges and schools. Social gatherings, religions congresses and musical concerts characterised the composition of the city of Thanesar'.

The Chinese traveller Huan Tsang²⁷ who toured through Haryana region in the seventh century has mentioned agriculture in this region, in his work Si-Yu-Ki. He states that 'the soil was rich and fertile and the crops were abundant, the climate was warm, the manner and customs of the people were liberal. The rich families vied with each other in extravagance. The people were greatly devoted to magical arts. The majority pursued trade, and few were given to farming (The traveller's experience seems to have confined to the city only). Rarities from other lands were collected in this country. There were three Buddhist monasteries with above 700 professed Buddhists, all Hinayanists. There were also above 100 Deva temples and non-Budhists were very numerous'.

Harshavardhan's reign (606-647 A.D.) is considered a significant epoch in the agricultural history of Haryana. After his death the political condition of Haryana became unstable and uncertain. The people like Hunas and Turks started hovering over this region after the rule of the Gurjara Pratiharas during 8th and 9th century²⁷.

But Haryana region remained prosperous and famous due to agricultural development up to the 10th century A.D. Somdev Suri wrote in his Yashashilak

champu²⁸ that the region of the Yaudheyas was an ornament on the earth. Its villages were full of cattle wealth-cows, buffaloes, goats, sheeps, camels and horses. Abundance of irrigation works rendered its people free from vagaries of rains. Well irrigated fields of black-soil were green with harvests and gardens. They yielded such bouncing harvests that farmers were unable to thresh and stock them properly'.

During the course of his invasions on India, Mahmud Gazanavi attacked Haryana in 1011 A.D. and plundered the city of Thanesar. His son and successor Masud attacked Hansi and captured it and reached Sonapat and defeated its chief. As a result of his campaign Haryana passed on under the rule of the Gazanavis with Hansi as their chief citadel. While the Gazanavis were inflicting blows on Haryana, the Kashmir king Kailash (1063-89 A.D.) also fished in the troubled water. He launched an expedition for Kurukshetra and reached up to Yamuna River, as we learn from the *Vikramankadeva-charita*²⁹. Towards the end of eleventh century and beginning of twelfth century the Tomar rulers probably have ruled here independently³⁰. Arnoraja (1132-1151 A.D.) the Chauhan ruler of Shakambhry also conquered Haryana as is known from the Ajmer-Museum-Inscription³¹.

Prithviraj Chauhan the ruler of Delhi, attacked the Tomars and captured Hansi and appointed his maternal uncle Kilhan as its Governor who defeated the Panchpura king and succeeded in safeguarding this region from the Muslim attacks as we know from the Hansi-Stone-inscription. But Prithviraj Chauhan had to face a formidable Muslim invader Mohammad Ghori who defeated him in the Second Battle of Taraori in 1192 A.D.³² Haryana came under the rule of the Muslims with the defeat of Prithviraj Chauhan. Due to foreign aggressions, political instability, socio-religious disturbances, the agricultural development in Haryana was affected adversely during the 11th and 12th century A.D.

Medieval period

Medieval period is an interesting and indispensable link between the ancient and the modern period of Indian history. Haryana region witnessed a period of political upheavals, foreign aggressions and internal disturbances. During this period, mostly, Muslims were the rulers. While the Muslim population was mainly confined to towns and cities, the villages were inhabited by the Hindu land-holders. Whenever there was a broad-minded ruler with sympathy and keen interest in the tillers of the soil and in the development of agriculture, the economy improved. People became happy, prosperous and peaceful³³. The land

revenue increased and the royal treasure became richer, which further led to the promotion and patronage of social, cultural and artistic activities and thereby improving living conditions. During this period there were many Muslim rulers who contributed in their own way to the development of agriculture in Haryana also. Among them the three most important rulers are Firojshah Tughlaq, Shershah Suri and Akbar, belonging to three different dynasties.

Firojshah Tughlaq, who ruled India from 1351 to 1388 A.D. though lacked in qualities of a military leader, occupies a distinguished place in the annals of the history of agricultural development which heralded a new era in the agricultural prosperity of Haryana.

Though, all his reforms, schemes and projects were meant for whole of his empire and for the development of agriculture and to improve the lot of the agriculturists, Haryana region, being very close to Delhi, the capital, got his special attention. His patronage and keen interest in the development of agriculture led to many innovations like land and revenue reforms, new irrigation schemes and agricultural research projects, which made a lasting impact on the rural masses of this region. He was perhaps the first Muslim ruler sovereign who made an attempt to link up the prosperity of the peasant with the interest of the State. For this, he wrote off Taqavi loans and abolished the practice of confiscating land by the State. He fixed the land revenue on permanent basis and classified the agricultural land in different categories and also abolished as many as 26 undesirable taxes including the much-hated grazing and house-taxes. Seed multiplication farms were started and arrangements were made for the seed storage also. He was the first Sultan who took pains in finding out the methods for reclamation of the desert for agricultural production in his empire especially in the region of the modern Hisar. For this, he started the schemes of artificial irrigation and got excavated five canals. For minor irrigation schemes, wells, tanks and reservoirs and dams were built. Special arrangements were made for the utilization of rain water also³⁴.

All-round development of agriculture under Firojshah Tughlaq brought considerable income to the state. The enhanced revenues were due to the improved quality of cultivation, superior crops, water taxes and gardens. He laid out about 1200 fruit gardens in the neighbourhood of Delhi³⁵ i.e. in Haryana region. Shams-i-Siraja³⁶ sums up the effects of his efforts in agricultural development thus, "The People grew rich and were satisfied their homes were replete with grain, prosperity, horses and furniture. Everyone had plenty of gold and silver. No woman was without her ornaments. Wealth abounded and comforts

were general. The whole realm of Delhi was blessed with the bounties of the Almighty.

Firoj Shah Tughlaq was a great builder also. Owing to agricultural development and increased revenue, he was able to build cities, mosques, hospitals, public baths, bridges and dams. He founded the city of Hisar after his own name as Hisar-i-Firoja in 1352 and got it built within a short span of two years. For watering this city he got excavated the west-Yamuna canal. It is still the lifeline of this city. For his beloved Gujarati girl he built here *The Gujarati Mahal* which is situated in the heart of Hisar city. He also founded the city of Fatehabad, near Hisar.

Shershah Suri³⁸ founded the Sur dynasty and ruled India from 1540 to 1545 A.D. His grandfather was the Jagirdar of Hisar and Narnaul. He is known in the history of agriculture development for his revenue administrative reforms and for the system of land-revenue assessment based on the measurement of land. He utilized all the experiences for agricultural development which he had acquired while he was the manager of his Jagir at Sahasram in Bihar. He had a genuine concern for the welfare of the peasantry and the safety of their crops. He tried to improve the economic and social position of the cultivators. He fixed the land-revenue as one-third of production payable in cash or kind. When there was a drought or other natural calamity, advances in the form of cash or material were made to the cultivators to give them relief in distress. His army or officials were not to cause any injury to crops and if the crops were damaged or destroyed by them out of necessity or by chance, the cultivators were to be given compensation. During the reign of Shershah Suri, agriculture got a big boost and the economic condition of the state improved. He was able to implement his social welfare programmes in a big way and built roads, schools, rest houses, hospitals, wells and planted trees. He got built Grand Trunk Road across his empire, which is now known as Shershahsuri Marg or National Highway number one and passes through Haryana

Akbar, the great³⁹, who was the grandson of Babur and the son of Humayun is regarded as greatest among the emperors of Mughal dynasty. He ruled India from 1556 to 1605 A.D. and appointed Raja Todarmal as his finance and revenue minister. Raja Todarmal had gained valuable experience earlier in the management of land-revenue under Shershah Suri. Akbar utilised his services for land reforms. For the correct measurement of land, he adopted the standardised-unit zareeb of bamboo rods joined with iron rings. To ascertain the amount of produce of each Bigha of land he categorised the land and fixed the land revenue according to the productive capacity of the land. Akbar instructed his officials to

give seed and money in advance to the cultivators. Whenever it was necessary the arrears of revenue were remitted in the cases of small land holdings. Special helps were rendered to the farmers at the time of natural calamities like hail, flood or drought. The revenue collectors were ordered to issue receipts to the farmers of the revenue payments. Moreover, there was to be kept an accurate and minute record of each farmer's holdings and liabilities also⁴⁰.

During medieval period in Haryana, along with other parts of empire, in spite of agricultural development in the form of land reforms irrigation works and the establishment of a pyramidal structure in agrarian relations, the farming methods remained almost the same as there was hardly any progress in science and technology related to agriculture. But new crops like cashew, pineapple, potato, guava, custard-apple, tobacco and papaya were introduced. Haryana region started tobacco growing. The importance of animal husbandry to the agrarian economy of the country was also fully realized. It benefited the Haryana as here the land for cattle grazing was available in plenty. Tax free cattle grazing was allowed for four bullocks, two cows and one buffalo per plough. Owing to the increased agricultural production, industrial goods and different types of trade also flourished which further opened avenues for different types of employment⁴¹.

A number of crafts and small-scale industries, mainly based on agricultural products and requirements flourished in the villages. The agricultural labourers and the landless people adopted these crafts and small scale industries. Labour became hereditary. Though the tools and methods of work were crude and yield was meager, but the quality of work was excellent due to the availability of skilled hereditary labour⁴².

Weaving and spinning of cotton, making of unrefined sugar, pottery, different kind of scents, oils and spirits, shoe-making became popular cottage industries. The blacksmiths had a fairly busy time by making different kind of agricultural implements. Goldsmiths and silversmiths and brass workers had attained great skill in their work. Same was the case with drum-makers, who were musicians also. Most of the Artisans came from the bulk of landless agricultural labourers and lower-castes. As the Hindus formed the vast majority of the society they held most of the land. The Khutts, the Chandharis and the Muggaddams were all Hindus. They were the hereditary revenue officials in local areas, without whose co-operation, the revenue administration could not be carried out. There were no fixed size holdings. Almost all rural people were engaged in agriculture except those who were engaged in domestic labour and crafts, a number of crafts

and small scale industries, mainly based on agricultural products and requirements, flourished in the villages.

On the other hand, all was not well with the peasantry in spite of all the help and reforms rendered by some rulers of this period. A major portion of the produce of the cultivator went to the state in the form of land revenue and other taxes. Only a meager amount was left to him. An average peasant was overburdened with debts taken from the local money lenders. On the whole, the lot of a peasant or a cultivator was really miserable in Haryana region also. He practically lived in the state of starvation. Differences between the lives of cultivators and those of the upper classes were almost antipodal. Even the condition of the artisans and labourers was better than the cultivators. In medieval times, an aphorism in the early days was that troops and the peasants are the two arms of the King. The farmers and the revenue officials, who held land for the maintenance of the troops under their command came into existence and became powerful. Thus, the Jagirdari system came into existence, which exploited the cultivators. It was during this period that the terms for officials use related to agriculture, like Mukkaddam, Chaudhary, Talukdar, Zamindar, Malguzari, Patwari, Kanungo, Isara, Muzzaira, Pattedar etc. came into use and are still prevalent. The landscape of the country was dotted with gardens, orchards, shikarjahas, forts, palaces and waterways⁴³.

But the famine and drought became common⁴⁴. During the famine of 1554-1556 in Haryana region, people died in thousands. Villages were deserted. In 1572-73, another famine took a heavy toll of life. In 1596, the drought sent the prices sky-high. During the year 1615-16, the drought led to the outbreak of plague which ravaged the empire. In the famine of 1646, people were reported to be selling their children to feed themselves. In 1650, there was a failure of rain in all parts of the empire and in 1658, a serious drought brought untold misery to the people. The recurrent drought and famine made the people restless and prone to rebellion.

Sometimes revenue taxes were too high and farmers were exploited on many fronts. Their economic condition became miserable. Too much resources were spent by the rulers on architecture, art, cultural affairs and luxurious living. The agriculture by most of the rulers of this period was left unattended, least cared, most exploited and without any new inputs and investment. After the reign of Akbar, agricultural development was almost stagnated. Agricultural communities became restless; they revolted time and again specially during the reign of Aurangzeb and his successors⁴⁵. The Satnami uprising in Narnaul of

Haryana region, led to many other rebellions in different parts of the Mughal empire resulting into its disintegration.

Modern Period

During the British Rule in India, agricultural development in Haryana like many other parts of the country was affected by the Agricultural and Industrial Revolutions of Europe. New agricultural implements, technology, seed varieties and some new crops were introduced. Agriculture was benefitted, to some extent, with the expansion of trade and commerce, improved irrigation facilities, transport and communication system. With the introduction of English as medium of education, a vast treasure of European science and technology also came within the reach of the educated Indians. But it was the agricultural land policy of the Britishers which affected adversely. In spite of agricultural development during the British rule in India, agriculturists were economically exploited and socially down-graded.

Important changes occurred in the administrative system and agriculture land settlement policy in India during the 1st half of the 19th as well as of the 20th century. The commercialization, which had been promoted by the trading elements and encouraged by the greater need for cash payment of the land revenue, was given further impetus by the spread of the rail-road network. Industrialization grew appreciably. The First and the Second World Wars also brought changes in Indian agriculture. Land reforms made by the Government during British rule helped in increasing agricultural production and variety of crops⁴⁶. But some of the noted famines, due to the failure of monsoon also occurred during the British rule in 1812-13, 1817, 1818, 1824-25, 1833-34, 1837-38, 1841-42, 1851-52 and 1858-59, 1905 and 1943. The people experienced horrible distress and great loss of human, animal and vegetation life⁴⁷.

By the middle of the 19th century, three basic land revenue systems had been introduced in the provinces of British India, the *Zamindari*, *Ryotwari* and *Mahalwari*, all serving the same ends namely to protect the British colonialists interests and the feudal exploitation of Indian peasantry. *Zamindari* system in U.P. and Bihar, *Ryotwari* system in the Presidency of Madras and South India and *Mahalwari* system in Punjab-Haryana and in some other parts of NWF regions, were introduced.⁴⁸

Haryana region became a part of British East India Company's territory on December 30, 1803 through the Treaty of Surji-Antangaon. In May 1811 A.D.C.T. Metcalfe became the Resident-Commissioner of Delhi. Due to its geographical proximity, region of Haryana was tagged with the Delhi Residency.

After the departure of Metcalfe from Delhi, frequent changes were made in its land policy during 1819-1833 A.D.⁴⁹

In 1820 there were land settlements here from three to twenty years. The assessment introduced by Robert M. Bird and J. Thomson under the Mahalwari-system were too much. The payment of revenue in kind was also replaced by cash⁵⁰. The British land settlements are said to have ruined the peasantry in Haryana. The poor farmers when could not afford to pay the revenue, had to go to jails. In the Pargana of Karnal⁵¹ to escape such oppression the inhabitants of some villages, nearly en mass had abandoned their lands and homes. The same painful picture of the people of Sonapat Pargana is seen when the villages of Pabuera, Pattibrahma, Chidi, Yusufpur, Chansnali, Ghyapur, Supura, Bagh and many others were deserted completely in 1842 A.D.⁵² In the district of Hisar⁵³ the revenue demand was so high that it ruined the cultivators. There was no regard or consideration for bad season. The poverty stricken masses when pressed hard to pay the revenue had to run away into the native-states in the neighbourhood. The over-assessment really ruined the economy of this region. As nothing was left with the peasants, whenever monsoon failed, they experienced a terrible famine and government did not help. The people experienced horrible distress and great loss of human and animal life. Some of the noted famines experienced in Haryana like many other regions of India were in years of 1812-13, 1817, 1818, 1824-25, 1833-34, 1837-38, 1841-42, 1851-52, 1858-59, 1868-69, from 1896 to 1905 A.D.⁵⁴

The drought famine of 1868-1869 brought a havoc in whole of India. But Haryana was the special victim and the district of Hisar became its main target. About 6 lakh deaths occurred from this famine. There was a heavy loss of cattle. About 58,000 cattle died in Rohtak and about 3 lakhs in the districts of Hisar and Sirsa. The people of this region especially of Hisar district were accustomed to occasional drought and migration to neighbouring districts for food and work in times of crop failure. But this was somewhat, too much even for the people of this drought proven area. But again as a result of scanty rainfall, the rabi crop of 1884 was very deficient in the districts of Karnal, Gurgaon, Hisar and Rohtak.⁵⁵ The people of this region were denied help by the Government on the ground that 'it would be cheaper as well as in keeping with the general custom and habit of the people of the area of to purchase cattle at the commencement of rains rather than keep them alive over the scarcity period.

The period of 10 years from 1896 to 1905 was a long spell of misfortune for the whole country. In Hayana region with the increasing problems of the land

settlements, revenue-system, famine and droughts was that of the heavy rural indebtedness of the poor peasantry.⁵⁶ Very little help in cash or kind was given to the suffering poor people at the time of need by the British administration. The agricultural communities were being suppressed and exploited by the local officials also. The suffering people of Haryana regarded the British as no better than the plunders, which further enraged the administration. There were increasing skirmishes of the agricultural communities with the local officials, who continued to adopt more and more oppressive methods to suppress them.

On May 10, 1857, the Great Uprising known as the War of Independence in the History of India, was started. It spread throughout India. The patriot people of Haryana participated in it bravely under the leadership of Rao Tularam and Gopaldev of Rewari. Sadruddin, a peasant leader from Mewat, Raja Nahar Singh of Ballabgarh, Mohammad Azim from Hisar. The Meos, the Jats the Gujjars, the Ranghrs and the Ahirs along with other communities fought a brave battle at many places. At Ambala, Rewari, Palwal, Gurgaon, Farukhanagar, Jhajjar, Dadri, Narnaul, Hisar, Hansi and Rohtak people fought and lost. The British Government became more oppressive. The region of Haryana, became an eyesore for the Britishers. All progress was rendered impossible and the region was deprived of new projects like irrigation system, roads, educational institutions, industry, trade, which were being set up in other parts of British India. Agriculture, the backbone of the economy of Haryana was neglected. Famines and epidemics occurred in the region more frequently, especially in Hisar, Hansi and Sirsa areas during the last decades of 19th and first decades of 20th century. In 1901, 1905, 1912, the epidemics took a heavy toll of human lives. The poor and starving peasantry of Haryana was left with no choice except joining the British army.⁵⁷

Right from the beginning of 19th century, there have been many socio-religious reform movements in India. Haryana remained almost unaffected by them. But Arya Samaj took this area into its fold. Swami Dayanand (1824-1885) established the Arya Samaj on April 10, 1875 at Bombay and found a fertile land for spreading his ideology in Haryana region.

The Arya Samaj made an untiring efforts to raise the socio-religious status of the agricultural communities, spread of education, removal of untouchability and raising the social status of the women. It also launched a crusade against the social evils like infant-marriage and girl-infanticide. In fact, with the beginning of the twentieth century, the Arya Samaj emerged as a vital force in Haryana⁵⁸ for agricultural development. The agricultural communities of this region were made aware of their needs and requirements.

The First World War broke out in 1914 A.D. The Recruiting Centres were opened by the British Government in Haryana, specially at Jhajjar, Rewri and Bhiwani. To provide more recruitment, coercive methods were also used and attempts were made to encourage loyalty also. Though the people of Haryana had helped the British Government during the war by getting recruited in the army, yet it paid no attention towards their hardships and development of the region. The War further upset the already weakened economic situation of the region. There was unemployment, poverty, rising of prices, increase of taxation which angered the people of Haryana. They became more active in the struggle for independence under the leadership of Gandhiji. They actively participated in Satyagarh-movements, attended the protest meetings, opposed the black-laws and went to jails. The use of *Swadeshi* goods became the popular slogan, *Khadi*, *Charkha* and *Tiranga* became the sources of power and symbols of patriotism for the people of Haryana.⁵⁹

Under the Government of India Act of 1935, general elections were held in Punjab in 1937. The Unionist Party led by Sir Chhotu Ram won 99 seats out of 175 seats. Sir Sikander Hayat Khan formed the ministry in Punjab in which Sir Chhotu Ram was taken as a Minister and Ch. Tika Ram as Parliamentary Secretary. This ministry worked for the Unionist Party Programme of agrarian reforms launched by Sir Chhotu Ram. He remained a minister till his death in 1945. The all-round development of Modern Haryana that is taking place today, may mainly be attributed to his efforts who determined to a large extent the modulations which had brought change in rural Haryana. He was the seer and saviour of the suffering and down-trodden peasantry in pre-independent India and was one of the giants who strode the political and social scene in this region from 1925 to 1944. Sir Chhotu Ram became a symbol of Haryana resurgent peasantry. The whole politics centred around him during that period. There is no doubt that he was an able administrator, good statesman and effective politician, but above all, he was a good fighter for the upliftment and rights of the agriculturists. He was acutely conscious of his circumstances and showed an unflinching resolve to do whatever was possible to pull the peasantry out of its traditional backwardness. In fact, being himself from a poor agriculturist family, he was in a position to assess their requirements and helplessness.⁶⁰

He came in the forefront of the people. It was mainly through his untiring efforts that the Punjab Land Revenue (Amendment Act) was passed in 1938 in the teeth of opposition from the British government. It reduced the state share from 1/2 to 1/4 and also extended the duration of ensuring settlements to 40 years. At

the same time very small holdings were exempted from the payment of land-revenues. Thus, it was after a very long time that the benefits of the land reforms were made to reach the peasants of this region. The Punjab Registration of Moneylenders Act of 1938 and the Relief of Indebtedness Act XXI 1940 were also passed which gave a great relief to the peasants from the burden of debts of moneylenders.⁶¹

Ch. Ram Dhan, the scientist gave a new dimension to agriculture in Haryana and Punjab with new wheat varieties like C518 and C591 which were released in 1940s and 1950s. He further developed C228, C250 and C217 which brought revolutionary changes in wheat production in Haryana-Punjab.⁶²

But the Second World War and the famine of 1943 again gave a big setback to agricultural development in this area. Moreover, at that time the National Struggle for Freedom was also passing through a critical and deciding phase under the leadership of Mahatma Gandhi. Thus agriculture could not get its due attention. In spite of agricultural development in India during British Rule, the economic conditions of the peasantry in Haryana remained miserable and exploited.

After Independence, there has been considerable changes in almost all the parameters of agriculture in India. In order to meet the growing demand for food for the teeming millions, agriculture has been intensified on the one hand and on the other, attempts have been made to bring more and more areas under cultivation. From time to time, government has introduced new land reforms, new agricultural programmes and new agricultural policies for the development of agriculture. As a result, the net sown area, the irrigated area, and the agricultural productions has increased manifold. By and large, the monetary returns per hectare have also increased to a considerable extent. After independence, land reform measures were taken with the main objective of abolition of intermediary system between the state and the tiller; security of the tenure, confirmation of ownership to the cultivator of the land to the tiller, imposition of ceiling on agricultural land holdings and consolidation of land-holdings for the application of modern techniques in agriculture.⁶³ However, land-reform is basically a state subject and Government of India coordinates this national policy on land-reforms for achieving these national objectives.

It is a fact that even after Independence, the region of Haryana, as a part of the then Punjab State remained backward. It was not given its due share in the

development schemes, projects, services, agricultural, irrigation and other resources. After a long peaceful struggle of nearly two decades by the people of this region, the modern State of Haryana came into existence on November 1, 1966, as a result of bifurcation of the erstwhile Punjab State. The separate political identity of this region as Haryana State, has ushered in a new era of all-round development and prosperity of the region as a result of increased agricultural production.

Haryana, first as a part of Punjab and then after its inception in 1966 as a separate state has been passing and implementing legislative acts from time to time. A series of land-reform legislative acts like the Punjab Land Revenue Acts of 1954, 1956, 1958 and Punjab Commercial Crops Cess Act of 1963 were passed. The Haryana Ceiling on Land holdings Act of 1972 has been enacted to consolidate the law relating to ceilings on land holdings. The conception of a family unit has been introduced in the act in which a family consists of husband-wife and up to three children. The permissible area for a family has been fixed at 7.25 hectares irrigated and 10.19 hectares un-irrigated for farmland. The land tenure system in Haryana is peasant-proprietorship under which the cultivator is also the owner of land. **64**

The Green Revolution in India, which has brought in modern farm technology, increased agricultural production manifold, but has caused damage also. These include long term destruction of land-fertility, the large scale erosion of genetic diversity of plants, the increased threat from pests, and to environment by toxic pesticides.

After Independence, government policies and programmes in rural techno-infrastructure development such as roads, irrigation, electrification and other forms of energy supply, agricultural extension services and markets. Land reform, remunerative pricing policies, credit supply, and various other forms of support to small and marginal farmers became possible due to political will and foresight and administrative action.

Thus, the new agricultural technologies, services and public policies made it possible for farmers to make the country self-sufficient in food grains.

Haryana, from being a food deficit state in 1966, at the time of its inception, has now emerged as a major contributor to the national pool of foodgrains. The manifold increase in agricultural production in Haryana has been revolutionary in magnitude. In it, the dynamic political leadership of the state,

modern science and technology, agricultural institutions, land reforms, liberal assistance of the Central Government, strong infrastructure, the improved grain varieties, production technologies and the people of Haryana have made the commendable contribution.

As a result of agricultural development, since the inception of Haryana state, its society is also passing through the social and cultural transformation. Green revolution and agrarian changes are also showing their effects on the life and living of the people. With success in achieving economic growth, some contradictions are also emerging in Haryana society.

As compared to small subsistence farmers, large farmers of Haryana have better access to new information and technology and have greater financial capacity to use modern inputs. Profits resulting from adoption of new technology stimulate them to enlarge operational holding. They generally belong to the dominant castes, are better educated, well informed and have easy access to development agencies and political leaders offering benefits.

At the same time the growth of democratic institutions, education and linkages with political dynamics have further strengthened their hold and position. On the other hand, the weaker sections comprising of small and marginal farmers, agricultural labourers, women and rural artisans have poor economic status with little or no surplus income to introduce innovations. Therefore, number of small and marginal farmers agricultural labourers, educated women and unemployed youth are fast swelling as a consequence of population explosion, fragmentation of holdings, higher life-expectancy, education and other socio-economic factors, are becoming the source of social tension in Haryana society inspite of so much agricultural development.

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