



Agricultural Traditions in Ancient India

Rajesh Chander*

Assistant Professor in History, Panjab University Constituent College, Sikhwala, Sri Muktsar Sahib

The Indian economy has been an economy of primary sector in relation to production and distribution since long times. By the survey of literature we do not find any major industrial or secondary pursuits of the people. The agrarian sector and related occupations remained a major concern. Even the Vedic and non-Brahmanical sources have so many references to agrarian production and operations in them. The earlier settlements of chalcolithic and post-chalcolithic periods have shown considerable advancement in the production and distribution over an ever growing area. The Harappa civilization too had a apparent development of the agrarian structure to a considerable extent. In the Vedic literature we find numerous terms related to the agrarian structure and practices of the Aryan speaking people in the North-Western India. They conquered, traversed and colonized the area and started a settled agrarian life after a period of pastoralist culture. These new settlers can be gauged from their intensity of agrarian production and animal husbandry. Many prayers are offered to gods for the advancement and protection of agriculture and beasts. 'The fertile land yielding abundance'¹. 'Land rich with milk and wet with ghee'². 'The Sindhu is rich in horses, chariots, cloths, gold ornaments, rich food,

wool and rich in silame(rope to tie plough parts)³'.

The agrarian professions and terms have been referred to by various names in different sources such as *Varta*⁴, *Krshi* etc. which broadly meant the concerns in agriculture, trade & commerce and cattle breeding. In other sources also it seems to denote agriculture, cattle breeding and trade⁵ but in the Mahabharata it includes money lending in it⁶. However, till late in Mauryan India, a large part of the Indian subcontinent was occupied by the forest people (*atavi*). They also find mention in the Aśoka's Rock Edict XIII as frequently defying the royal decrees. It implies that agricultural operations were not only practiced in fertile plains but the tribal people were well versed in it. Even to this day they remain in partial seclusion this and their practice of agriculture goes back to earlier centuries. Patanjali⁷ also refers to the term *krshi* as largely defining not only sowing and ploughing but even the supply of seeds, implements and labour both in human and animal. So we may infer the idea of agriculture in a broader sense in the early Indian economy. Even the Kautilya's Arthaśāstra testifies the appointment of *Sitadhyaksas*, the superintendents of

¹ *Rg Veda*-I,18,5,5

² *Yajur Veda*- 189,20

³ *RV*-X6,7,8

⁴ *Arthasastra*, I, IV

⁵ *Manu Smriti* (X.80) ; *Milinda Panho* (IV-.3.26)

⁶ *Mahabharata* (Shanti Parva 5,79)

⁷ *Mahabhashya* (III,I,26;II,33)

agriculture who ropes in and oversees the services of human and cattle labour for the agricultural purposes. The *Varta* was equally held an esteem element of state at par with the Vedas. We find numerous examples of tillage, trade, harvesting and money lending as four honest professions in the *Jatakas*⁸. In Mahabharata we find 'So long as the king cherishes *Varta*, everything goes on well'⁹. Thereafter in the first empires we find agriculture as a chief source of income to sustain the larger populace, bureaucracy and the army. The Kautilya's *Arthashastra* devotes larger part to the agrarian sources, production and distribution.

Some Marxist ideologues¹⁰ also expressed their concerns in the mid-20th century over the early Indian society and economy. Later D. D. Kosambi¹¹ and R.S. Sharma¹² also discussed the agrarian economy in their writings. Labour and production are also the important aspects to study the ancient Indian agriculture economy. The first was that which controlled the land system and secondly the labour as an important components of agrarian society. The *brahmins* and *ksatriyas* as we know were the largest recipients and controllers of land grants and gifts and the *sudra-vaisya varna* became the labouring classes in the agrarian operations

and distribution to distant lands¹³. In other terms there emerged two classes in the rural arena, the landed intermediaries and the dependent and impoverished peasantry in early medieval India¹⁴. But a large part of slaves formed the agriculture labor captured in war or by other means. The idea of *Aśoka* enslaving 150,000 people from the Kalinga war can't be denied or overlooked¹⁵. Moreover the ideas of lawgivers (Manu, Narada, Katayana, Yajnavalkya etc.) in their writings also gave impetus to the non-performing upper *varnas* over the *Śudra-Vaisya*, the performing *varnas*. In the process most of the lower *varnas* were transformed into the agricultural labourers or slaves. Even up to the early medieval years in India, these very two classes undertook the agrarian operations in north and south India as well¹⁶. Such differentiations within the peasants and non-agrarian classes gave drastic rise to steep social hierarchies. We find such huge social gaps in the rural society from the various inscriptions and documentary evidences from early Bengal, Rajasthan and south Kannada¹⁷. The post-Gupta period witnessed

⁸ *Jatakas* (IV422); *Vinaya Pitaka* (IV.6)

⁹ *Mahanharaata*, (Vana Parva, 67.35 ; Shanti Parva 68.20-1,35; Shanti Parva 58.33)

¹⁰ Bose, AN., *Social and Rural Economy of Northern India*, C. 600 BC-200AD, 1 vols. Calcutta 1942-

45,- Dutt, B.N., *Studies in Indian Social Polity*, Calcutta 1944.

¹¹ *An Introduction to the Study of Indian History*, rpt., Bombay, 1990.

¹² *Light on Early Indian Society and Economy*, Bombay 1966.

¹³ Sharma, R.S., 'Problems of Peasant Protest In Early Medieval India', in *Social Scientist*, No.184, Sept.1984, p.4

¹⁴ Yadava, B.N.S., 'Problem between the Socio-economic Classes in the early Medieval Complex, *Indian*

Historical Review, III, no.1, 1976, pp.43-58.

¹⁵ Chanana, D.R., *Slavery in Ancient India*, Delhi, 1960.

¹⁶ op.cit., Sastri, K.A.N.. *A History of South India*, Chandra.S.. *Medieval India*. Har Anand Publications, New Delhi, 1998.

¹⁷ Chattopadhyaya, B.D., *Aspects of Rural Settlements an Rural Society in Early Medieval India*, Calcutta, 1990.



Available at <http://internationaljournalofresearch.org>

much a flourishing peasantry known as *mahattaras pradhanas* and *mahamattras*.¹⁸ A well maintained peasantry is found in south India with such names as *vaals* and *gavudas*.¹⁹ But in the later centuries the condition of the agriculture workforce and tenants became much stereotyped and these communities were much saturated in rural areas as more and more land holdings passed into the non-agricultural hands in the form of *brahmdeya* and similar grants. The lack of irrigation facilities during this period made the agriculture almost fully rain fed. Nearchus testifies the dependence of agriculture of India's plains on rains in summer and with less rain in the winter season²⁰.

On the geographical distribution of the area as found in the Vedic literature, we find very important classifications such as tracts or *ghats* in the hill sides, pen plains, stone-strewn land, slopes and undulating areas, plains with green pastures, lower fertile plains, cultivated country with homesteads and cows²¹. There are many references to the soil and its fertility such as in the hymn in the Yajur such is 'May *yagna* give me clayey soils, stony soils, hilly and

mountains slopes, and yielding both cultivated crops and wild produce²².

We find many references of high praise for the agriculture in various texts as it has sustained life of the men and beasts. It had brought in happiness and new lands for cultivation under it when it is stated in a text 'May your wealth be nourished by agriculture'²³. 'Like lords of wealth of corn'²⁴ and a similar hymn is addressed to the gods, 'Grant us son, the owner of cultivated lands, the possessor of thousands'²⁵. A reference is found admiring the fields, 'Wide fields, vast treasures, spacious pastures, has Indra bestowed upon his friends'²⁶. In a similar tone the writer suggests the reader, 'Play not with dice, pursue agriculture, delight in wealth so acquired, there the gambler, are cows, there is a wife'²⁷. Thus it can be surmised that in the different Vedic texts, great praise is showered on agrarian practices. It was a profession recently adopted succeeding a few Vedic centuries.

However, there are found references where the actual tiller of the soil began to be looked with contempt by the landholding community called *Brahmins*. As a matter, great condescension began to be developed for the field workers and labourers. These may be taken as the beginning of the social differentiations of economy and ritual status to be passed on professions. An example may be found in a late hymn of the *Rg Veda*, 'They are neither *Brahmins* nor offers of libations, devoid of wisdom attaining much

¹⁸ Behra, Sanjeeb, K., 'Evolution of the Structure of Polity in Orissa AD 350-1100', A Ph.D. thesis

submitted to the Jawaharlal Nehru University, New Delhi, 1996, ch. 7.

¹⁹ Kesavan Veluthat, 'The Structure of Land Rights and Social Stratification in Early

Medieval South India' in Thakur V.K., and Aounshuman, A. (eds.), *Peasants in Indian*

History, vol. 1 pp. 312-30.

²⁰ Nearchus (Strabo XV 1-18)

²¹ *YV* 227-29 and 245.

²² *ibid.* 245.

²³ *YV*-118.1 u *Rv.*-V.4.2

²⁴ *RV.*-V.4.2

²⁵ *ibid.*-VI.2.5.1

²⁶ *ibid.*-III.3.1.15

²⁷ *ibid.*-VI.3-5.13



having sin-producing speech, becoming ploughman, they pursue agriculture²⁸.

We come across a number of crop varieties in the similar texts which are an addition of our knowledge in the pattern and geographical areas also. A number of hymns have been devoted to the crops alone, grown in different environs and soils. The frequent mention is found to those of barley and wheat. The production and mention of barley is very frequent in the Vedic literature. We find numerous instances such as 'As a husbandman repeatedly ploughs the earth for barley²⁹', 'Causing the barley to be sown in fields properly prepared by the plough³⁰'. "As barley is harvested by heading, separating the ear heads from the stalks³¹', 'This barley grain heap will nurture and the store increase, O barley grain, may you increase even more; may you be inexhaustible like the sea³² mowing it as men winnow barley with sieve³³'. "The assembled cattle feed on barley³⁴'. 'We have prepared the parched grains and curds for thee and the fried barley for thee, also cakes and butter³⁵'. 'Grains of parched barley in ghee³⁶, Vegetables cake or fried meal, do through the substantial, wholesome and invigorating, and body do through grow fat with boiled milk and boiled barley³⁷'. 'As a granary is filled with barley.³⁸ The term for wheat and barley seems to *yava*, a fine grain. Thus from these references we can conclude

²⁸ *ibid.*-X.6.3.9

²⁹ *ibid.*-I.5.6.15

³⁰ *ibid.*-17.2.21

³¹ *YV.*-109.2; 122.1

³² *AV.*-315.152

³³ *RV.*-X.6.3.2

³⁴ *ibid.*-X.2.11.8

³⁵ *RV.*-4.14.5

³⁶ *ibid.*-4.5-2

³⁷ *ibid.*-1.24.8.8 and 9

³⁸ *ibid.*-II 2.3.111

that the frequent use of the terms for barley and wheat tells how these crops were important diets of the people.

Another important crop of the people was the rice. But the *Rg Vedic* people do not seem to have known much about it as it came to be frequently mentioned in the later period as found in the *Aharvaveda*. In the *Rg Veda* the only chief component of the agrarian produce seems to have been the barley as noted above. In the *Atharvaveda* it seems to be the cultivation of the rice which has become an important diet of the people. There are many hymns in it like the one, 'I seek barley and rice, do you eat barley and rice, and you swallow the rice as a python swallows the sheep.'³⁹ Similarly in another hymn 'You eat the rice, then barley, then the black gram and then gingelli.'⁴⁰ '*Prana* and *Apana* are the rice and barley; *Prana* resides in the barley and *Apana* resides in the rice'⁴¹. It meant that different varieties of crops or grains were substituted for one another because of the rich nutrients having found in them.

We have seen above that there are many references to barley and rice in the Vedic texts, we find many other varieties therein. A hymn in the *Yajur Veda* runs as thus 'Through *yajna*, may I secure happiness, riches love, affection.....diligence in ploughing.....success against enemies, food, milk, truth, agriculture, rain, gold, wealth, rice, barley and other grains-black gram, green gram, wheat, Bangal gram, *navana*, *shamai*, *sirumani*, rice and orchard crops⁴²'. Here we find a clear reference to wheat. "O Agni, who consumeth flash, the black goat

³⁹ *AV.* 717.15-7

⁴⁰ *AV.*-313.2

⁴¹ *AV.* 467.13

⁴² *YV.*-244.



is your share, lead is said to be your wealth and ground black gram said to be your offering'.⁴³ The only oil seed recited in the *Atharva Veda* in the manner, 'Taste the ghee and the oil of the gingelli'⁴⁴. 'I offer you dried sugarcane, white gingelli, reeds and bamboos.'⁴⁵ The crop of sugarcane was especially used to prepare the jaggery or *gurh*. Similarly honey and sweetening ingredient along with jaggery was used by Indra for fuel. Thus dried sugarcane, mentioned was the left over hard part of sugarcane after pressed for the juices. A hymn occurs thus 'I have tied you round with the sugarcane stems in order to avoid dislike.'⁴⁶ It is referred to as a thin grass like variety among the numerous different varieties which came up when sugarcane seeds are sown. Along with the variety of crops the people took much interest in growing and relishing vegetables. 'Plants, which yields flowers, fruits, edible roots, gladden them with your produce'⁴⁷. Similarly *Rudra*, nourished by the vegetables, which are bestowed by thee, may I live a hundred winters'⁴⁸. 'May the waters, crops plants and creepers favour us'⁴⁹. 'Give us the medicinal herbs suitable for cows, horses, men, sheep and goats'⁵⁰. We find words for certain vegetables like 'May I be liberated from the death like the *Urvaruka* (cucumber) fruit from its stalk'⁵¹. 'He is like an empty little gourd (devoid of sustenance or brains)⁵² Another fruit

expressed in the textual references is the grape. The agriculturists were well versed in the art of pruning the plants and vines and fermenting wine from the grapes. 'Cut off the foe, like an old primer cuts off the protruding branches of a creeper'⁵³. 'The potatoes of Soma contained in thy interior like the ebriety caused by wine'⁵⁴. Studies have shown that the North Western India was a greater producer of grapes.⁵⁵ Similarly H.H. Wilson' in his comments says that 'The preparation of the fermented liquors was therefore familiar to the Hindus and probably amongst them was wine, the North West of the Punjab, no doubt their earliest site being the country of grapes'. Thus the repeated references to the *soma* plant in the texts testifies to the existence and use of the plant for its fermentation like that of grapes.

Thereafter another important facet of the agriculture is the techniques involved in it. It largely depends upon the physical and climatic factors of the regions under study. The vast stretch of area under cultivation also required some good techniques in irrigating the fields. Generally, in absence of much advanced ones, there remained canal, well and rain fed water harvesting in most of the regions. Many a time it was state sponsored and there came to be laid certain cess found in the *Arthashastra* of Kautilya and the *smriti* literature.

In the Vedic literature we also find a number of terms related to the irrigation techniques and fields. Most of the referred are the wells such as 'unfailing and full of

⁴³ AV.475.53

⁴⁴ ibid. 8.2

⁴⁵ ibid.475.53.54

⁴⁶ ibid. 34

⁴⁷ YV.-177.12

⁴⁸ RV. II-4.1.2

⁴⁹ YV. 87.4

⁵⁰ Ibid. 112.1

⁵¹ RV.CVI-4.5.12

⁵² AV. 720, 1-4

⁵³ RV. VIII-5,10.6

⁵⁴ RV.VIII 1.2.12

⁵⁵ Op.cit., De Candlle, Alphonso, *Origin of the Cultivated Plants*, 2nd edn. 1886, reprinted Hafner

Publishing Co., London, 1959



water⁵⁶. In another text we have examples of extracting water from wells by means of a wheel, a strap and water bowls attached to a up-down moving strap.⁵⁷ Another technique prevalent was pole and bucket method from the deep and shallow ponds. In the *Jatakas*, we find many examples of well irrigation⁵⁸. In the epic Mahabharata we notice when Narada asks Yudhishtira that state should provide well dug wells so that the land may not be the sole dependent on rainfall⁵⁹. In the *Arthasastra* an instruction is passed to the king that he should get dug the canals from the perennial or other sources to well maintain the irrigation.⁶⁰ We find a type of cooperative effort on the part of the people to construct such reservoirs and which are provided with the well connected roads, timber and other facilities. In the Smriti literature we find another example when Narada, a *Smritikara* says that 'Without water, no one can grow grain but excessive water is harmful for the grains. Therefore the flood like situation is as bad as draught⁶¹. Another *Smriti* writer Bhraspati says ' The person enjoying the food and produce who sows land, with many holes and is wet, capable of irrigation, surrounded by fields on all sides and cultivated in due season⁶². A number of dikes are mentioned in the literature. One is *kheya* which serves the purpose of irrigation. It is dug in the field. The other is *bandhya* which prevents excessive water into the fields⁶³. Even a dike made between two fields is not harmful and

can be much productive⁶⁴. Thus it was considered a good source of water like ponds or reservoirs to have the fields cultivated well. The erection of the dike was also considered a good measure in the *Jatakas* such that 'men will go with the spade and basket to build dike in case of rain⁶⁵. In the Mauryan period, in addition to the *Arthasastra* we find in *Indika* of Megasthenes regarding irrigation. Megasthenes says that most of the Indian big mountains with fruit trees, beautiful plains with many rivers passing through of the area under cultivation is irrigated to have the crops twice a year⁶⁶. The *Sitadhyaksas* are mentioned in the *Arthasastra* who are a high ranking official appointed to supervise the agrarian operations in the different regions. He further lays different cesses on the irrigation facilities such as 1/5 of total produce for the water charges, 1/4 for carrying water on the shoulders, 1/3 for water lifting techniques and 1/3 to 1/4 for the supply of water through wells, tanks and lakes. Taxes were remitted to those cultivators who employed their own means of irrigation⁶⁷. The Sudarsana lake built by Pushyagupta, a Mauryan viceroy, and completed by Asoka, is an excellent example of state providing irrigation facilities to the common man to extend agrarian base. Similarly in the Pali canon we find many references to the irrigation. A term *achhibandham* is known as boundaries of arable plots (fields) and *palibandham* is in rows and by external ridges, *meriyabandham* and cross boundaries,

⁵⁶ RV.X 101.6

⁵⁷ RV.VIII.69. 12

⁵⁸ *Jatakas* 174&259

⁵⁹ *Mahabharata* CL.5

⁶⁰ *Arthasastra*, II-2

⁶¹ *Narada Smriti*. XI. 19

⁶² *Brahspati Smriti*

⁶³ *Narada Smriti* XI.18

⁶⁴ YV.II.156

⁶⁵ *Jatakas*-76; 1.188 and 190-191

⁶⁶ McCrindle, J.W., *Ancient India as Described by Megasthenese and Arrian*. Chatterjee & Co-Calcutta,

1926,pp. 29-30

⁶⁷ *Arthasastra*, II.24., III.7



Available at <http://internationaljournalofresearch.org>

singhatakbandham which resembled the patched robes of the *samgha*⁶⁸. We come to know that only the specialist contractors undertook water projects⁶⁹ such as *nettikas*. In another text we have terms as *Khettas*, (the irrigated fields) by water⁷⁰. In the epic *Ramayana* the hero Rama has the good cause to joy that the land of Kosala did not depend⁷¹ on the rainfall alone but had a network of irrigation facilities in it. Another example of a savior of crops as found in the *Mahabharata*, when a pupil lays himself before the mouth of an excessive water inlet to save the crops from damage.⁷² In order to safeguard the crops and population, the king was made responsible to safeguard the embankments of large rivers or reservoirs by stationing supervisors and adequate soldiers to deal with the situation⁷³

depended on expansion and development in the means of irrigation.

Thus from the above description it can be surmised that the ancient Indian agrarian system was not as backward as projected in most of the colonial writings. The cultivators were well adept and concious in developing new seeds and different varieties, irrigation techniques and adequate knowledge of the fertility of the soils and climatic factors as well. They have acquired a good amount of knowledge on the subject by the turn of the 1st millennium BCE. It has been written and now found in many maxims and proverbs relating to the agrarian operations in ancient India. Therefore we may presume from the available literary traditions that agrarian structure came to be taxed and solely

⁶⁸ *Mahavamsa*. VIII-12.1.2

⁶⁹ *Dhammapada*. 80,145; Therig. 19,877.

⁷⁰ *Challuvagga*, VII-1.2: V-1 7.2

⁷¹ *Ramayana*, II. 100.45

⁷² *Mahabharata* I.3

⁷³ *ibid.* XII.120.81