
Management of Agrarian Sector : Insights from The Arthashastra**Dr. Nagendra Sharma****Department of History****P.G.D.A.V College (Eve.)****University of Delhi**

The *Arthashastra* was composed at a juncture of Indian History when the early pastoral economy of Pre-Mauryan times was changing to a village based agricultural economy. As the process of forest clearance was leading to large scale cultivation with help of cattle power, forest communities were transforming themselves into agrarian communities in the middle Ganga valley. These human settlements were more sedentary than earlier nomadic settlements of Vedic period. The sedentary occupation led to development of craft, trade, town, coinage and different components of urban economy. River Ganga and its tributaries became convenient communication route for the urbanization processes.

However, the agrarian base remained the most important area of resource mobilization for political power. The cultivator assumed the most important place in the economic life of the society. Although his social status was not supreme, his economic status could not be ignored by anyone. Greek historians have noted the importance of peasantry in their accounts and placed them only in the second rank among the seven-fold division of Indian Society.¹ Farmers were the largest class in the society who were devoted to agriculture. Their work was considered so important that even warring armies tended to avoid harassing them near battlefields. However, it may have been a normative situation which, in practice, might not have been followed. The farmers were expected to pay one-fourth of their produce in tax. Moreover, they paid some kind of tribute to the king assessed on the basis of possession of their land. Another Greek historian Strabo quotes Megasthenes that the cultivators reserved one-quarter of the produce for the king.² Although Arraian does not mention the amount of tax paid by farmers, he notes that the herdsmen cultivated the field and paid their share of tribute to the kings as well as the cities.³

It is important to note that the farmers were not allowed to hold arms and were expected to completely focus on the cultivation of the land, but practically, whenever critical

situations arose in the battle fields, the king did employ whatever man power was available in the form of local peasants. Some villages received tax concessions too, on account of providing soldiers to the administration.⁴ It is noteworthy that the figures of the hundred and fifty thousand people deported from Kalinga, and figure of the dead and wounded in the Kalinga war, even if they were exaggerated, might have referred to enslaved farmers other than army casualties.⁵ These captured people might have been peasants who were probably made to clear forested regions and to cultivate virgin lands around Magadh. The army must have augmented its supplies from local peasants by using its force.

Scholars have tried to place the descriptions of Megasthenes in the caste framework of Indian society and suggested that the cultivators must have been Shudras.⁶ The new village settlements were established by the deported Shudras from over populated areas as well as from the conquered lands. They were kept unarmed and under state control. The existence of Shudras under strict state control made large scale slavery unnecessary for food production in India. The *Arthashastra* proposes the creation of such villages by encouraging foreigners to immigrate or forcing immigration of people from the densely populated areas to the newly settled villages.⁷ People of other occupations like craftsmen and traders, needed for the establishment of a village, were also encouraged to settle in the new areas. The difference lies in Shudras being ordered to move and the people of other professions being promoted to go voluntarily for their improved economic prospects. The economy of the Mauryan village accentuated the collective efforts of each village.⁸ The villages inclined to develop into a self-sufficient agrarian unit. However, the state played the role of the economic integrator of the village into larger administrative units, which was supervised by the officials of the state.

On the question of land ownership, Megasthenes reports that land was owned by the king. But it is open to discussion and many scholars absolutely reject this proposition since the king has been depicted as the protector of the land and not the owner.⁹ The territory of the Mauryan empire was so diverse with each region being at dissimilar stages of development that it could not have been possible to perpetuate one particular type of land ownership pattern in all of the empire. If we restrict our focus to the middle Ganga plains, and especially to Magadha region, we find five possibilities of land ownership in contemporary society: the state, the king, the community, the cultivator, and the big landowners. We do not find much

reference to land ownership of small cultivators and probably Shudras' ownership of land was a much later development after the Mauryan period.¹⁰

Jataka texts often mentions officials like *gamabhojaks* and *gahapatis* who controlled perhaps a large area of land.¹¹ They may have employed hired labourers to cultivate the land. The living conditions of these labourers were poor but little better than the *dasa* slaves of those days. The functional role of the *gahapati*s still uncertain in this period. However, Fick proposes that there may be two possibilities. Either this referred to the large landowners or it may have been a reference to the wealthy urban families. However, it leaves a sharp question in hand. If this term was used for the land owning gentry, then why did they not create a political space to exhort their position? Moreover, we do not find any social segment of Indian society in this period that confirms this kind of landed gentry. Hence, it is possible that the *gahapati*s may have been a section of entrepreneurs who participated in the development of rural economy in the new areas, and played the role of moneylenders, both to the farmers and to traders.

It is possible that they did exercise some semi-official status in collections of taxes and dues. Many of the wealthy merchants may have owned a large chunk of land, but it was not so big to form an independent source of income for them. The Pali texts have numerous references to the *gamabhojaka*. Some scholars see them as a landlord, either through acquisition of territory or conferred by the king as reward for a service to the throne.¹² It should be underlined that the emphasis lies on the mechanism of collection of revenue from the land rather than on the ownership of the land.

The question may be answered by examining the terms prevalent in other Indian texts. In the primitive times the king was not the owner of the land. The story of King Visvakarman Bhauvanais a case in point where he was rebuked by the mother earth that the land is not his private property to donate it to others.¹³ But gradually the situation transformed. Post-Mauryan law texts mention to the private ownership of land by the king. Law giver Katyayana observes that the king is the lord of the earth and he may claim one sixth of its produce.¹⁴ It has been noted that brahmanical law differentiates between the enjoyment of land and ownership of land denoted by the words *svam* and *bhoga*. The king may donate his personal land but not the state lands, whose tax he received as the ruler of the territory. All donations of land to religious sects were made from the lands he owned in his personal possession.

Kautilya's *Arthashastra* distinctly mentions to the crown land.¹⁵ The crown-lands were owned by the king, and its income went directly to meet the expenses of the royal family. The rest of the land was considered as the possession of the state. However, when the king was seen as the state itself, it became very difficult to differentiate between the king-in-person and the king-as-state. However, the *Arthashastra*, describing the works of the superintendent of agriculture, presents the management of the land as if it was private property of the king which actually he owned only as the head of the state. It seems that the idea of the state was still undeveloped in this phase, and therefore, a distinction in the power and person of the king was not articulated. The idea of king being the sole owner of land developed in the works of later lawgivers.¹⁶ Arrian also maintains that the states received similar payments from the cultivators, both in the monarchies and the republics. This highlights that in the monarchies, the king as the representative of the state was regarded as the owner of the land.

The *Arthashastra* also mentions the sale of land and buildings in those times.¹⁷ But the land was not an absolute property of any individual. The concept of property in ancient India was based on the just and fair use of a thing, which was very different from the European idea of property which believed in an absolute ownership of a thing.¹⁸ The *Arthashastra* makes the land as subsidiary to the buildings made on it. Despite state ownership of land, individuals were allowed to own small plots of agricultural land which they could cultivate themselves with family labour.

Diodorus differentiates between the tribute and the tax paid to the state. It is possible that tribute may have been a kind of rent for the land which was different from the tax levied on produce.¹⁹ This indicates a heavy burden of taxation on the common people. However, except Diodorus, no one else mentions it. There may have been some misperception regarding the source of information. It is also likely that in some regions, the tax of one fourth was levied only to certain crops and the land tribute was considered the basic revenue for the state. It has been pointed by U.N. Ghoshal that in the later period, two kinds of revenue were collected from the farmers, namely *bhoga* and *hiranya*. The idea of *bhoga* developed out of the early Vedic tribute or *bali*, and the *hiranya*, which was a type of cash revenue on some special category of crops.²⁰ Hence, it is possible that both types of revenue were appropriated in some areas.

Although Arrain does not mention the rate of tax, other Greek writers quote Megasthenes that it was one-fourth of the produce.²¹ Strabo writes that the farmers retain one

fourth of the produce as their share, the rest goes to the king. This inconsistency may have been due to an erroneous reading of the source by Strabo, and instead of saying that the farmers paid one-fourth produce to the king, he said that farmers retained the same amount. However, alternatively it is possible that he might have been referring to those cultivators who worked as labourers on the crown lands. The *Arthashastra* does mention such a revenue payment system.²² The tax dues at the rate of one-fourth of the produce was either a general estimate or was applied only in highly fertile regions of Magadh on which Megasthenes might have focused. However, the exact quantum of tax must have varied according to local conditions. The variation in revenue dues reflected in the *Arthashastra*, depends on the nature of irrigation available for that patch of land and it ranges from one-fifth to one-third of the produce.²³ Similar variations in land tax might have depended on fertility and other factors of production. The rate of one-fourth was fairly common, but most Indian texts suggest a rate of one-sixth of the produce as standard norm for revenue dues.²⁴ Sometimes we find the rate of one-eighth, one-tenth or even one-twelfth too. The *Arthashastra* proposes that in a time of crisis, the rate of tax may be raised to one-fourth or even one-third of produce. It also insists that double cropping system should be adopted in fertile regions irrigated by rain water to enhance the production and taxation.²⁵ Ancient Indian historians believe that the rate of one-fourth was a high rate of tax which could have been a heavy burden on the common people²⁶ here is no doubt that submitting one-fourth of the produce as a regular tax was a fairly high rate of tax at that level of productivity, but unfortunately, in later times it became worse when one-third became the common rate of agricultural taxation.

We don't have many inscriptional sources to tell us precisely about the rate of taxes during the Mauryan Period. However, the Rummindei inscription of Ashoka refers to the rate of tax prevalent during those times. Lumbini, the birth place of Lord Buddha, was exempted from all taxes by the king, except the payment of an eighth share of the produce. The term *udbalike* is used in this context which generally means freeing a territory from *bali* or tribute. It is possible that it referred to the land tribute which must have been paid by every village. The concept of *atthabhagiya* or eighth share, must have referred to the share of produce of the soil.²⁷ We do not know whether it was a reduction from the normal amount paid or it referred to the continuance of the usual amount of one-eighth. If it was the usual one, the king may not have been obliged to mention it as a tax. Probably the villages were gradually exempted from the land tribute and the tax was reduced by a small amount if not by half. The prevalent

rate of tax in these areas might have been one-sixth of the produce. This indicates that the rate of taxation was lesser in the area of Rummindei as compared to the tax of one-fourth in the areas of Magadh. Possibly, this difference in rate of taxations was due to lower fertility in the northern region like Rummindeithan the Ganga plains. These variations in tax rate may have increased with spread of the settlements away from the fertile Ganga plains. Megasthenes' observation on the one-fourth produce as revenue rate may have been true for the Magadhan capital and he generalised it for the whole kingdom.

The Rummindei inscription gives an interesting perspective on how the king dealt directly with the question of exemption from land tribute. In the presence of any landed intermediary, it could have been difficult for the king to grant such exemptions. Megasthenes also observes that military officers were paid in cash.²⁸ This removed the requirement of providing them land grants for upkeep of the army. Land grants given to religious sects did not have the power to transfer the ownership of land, but only the gift of the revenue in reality to support the daily needs of the members of that sect. The transfer of land must have required the transfer of ownership which was known in the later period as *brahmadeya*.²⁹ Some of the rights of the king mentioned in the *Arthashastra* indicates that the king's ownership of the land was silently accepted without articulating it in words.³⁰ The primacy of the king is also reflected in the practice of demanding a compulsory second crop in time of crisis.

During Mauryan rule, the revenue officials made a direct assessment of the agricultural land under cultivation.³¹ Each farmer was assessed individually and not collectively for the village as a whole. The process of assessment started with categorization of the village lands according to its fertility such as high, middle, and low quality. The village was also classified under diverse heads. Some villages were absolutely exempted from revenue dues (*Pariharka*) and some received concession for supply of soldiers (*Ayudhiya*). Some paid their dues in the form of kind or gold (*Hairyana*) or raw material (*Kapya*), and some supplied free labour (*Visiti*) in lieu of taxes. It is remarkable that the Mauryan rule gave so much attention to the local features in the course of revenue assessment.

Megasthenes praised India by saying that famines are unheard of there³², but that is mere exaggeration since Indian sources do mention their occurrence. Jaina tradition describes a massive famine in the reign of Chandragupta, the founder of Mauryan dynasty.³³ The

Sohgaura and Mahasthan inscriptions also indicate such conditions, which refer to various measures to amend the famine conditions in the Ganga plains.³⁴ Megasthenes might be praising India to portray it as a land of plenty which never suffered from famines, or maybe he never encountered famine condition during his stay in India.

During the rule of Ashoka, there might have been emphasis on the centralization of administration and the state control over the economy. The administrative system was adapted accordingly and geared towards control of even minute details of the economic administration. As a result, the power of the king as co-ordinator of a complex system increased several fold. Ordinary farmers interacted with officials who signified state for them. The king was now an even more distant entity than earlier times.

The third agrarian community described by Megasthenes is shepherds and herdsmen.³⁵ They may have been nomads and hunters who were permitted to hunt animals. They were perhaps deployed in an area after its forest clearance to eliminate residual wild animals in that area. Most Indian texts do not describe them as significant population. However, Abhira or Ahir occupy such a place in some of the later texts. This hints at their existence in smaller groups as a sub-caste. Megasthenes mentions that they paid tribute in terms of cattle. It has been postulated that they might have been the remnants of the pastoral Aryans who were still nomads, wandering in the forest lands, and had not yet followed sedentary occupation.

The *Arthashastra* gives little attention to these pastoralists. It merely says that the king should create facilities for pasture lands on barren tracts.³⁶ Animal husbandry was not limited to any particular caste in ancient India. Megasthenes presented them as a separate caste due to his obsession with finding out economic divisions of Indian society. And even if they were a caste, they must have been classified among Shudras despite the chances of their Aryan origin. Most people involved in animal husbandry were probably classified among the cultivators. Hunters of all origin who were leading a nomadic life were looked down upon by sedentary population now.

Among the animals domesticated and reared by these people were goat, sheep, cattle, and camel.³⁷ Horses and elephants were regarded as different class of animals who had their own officials to look after due to their military significance.³⁸ Draught oxen are mentioned in the texts³⁹, which implies that ox drawn plough must have been very common by this time.

The cow must have been the most important of domestic animals. However, we still do not find much reference to their being a sacred animal. The cow was considered significant due to their economic value such as commodities related to dairy and hide. Some references in the *Arthashastra* hint at a provision that if someone rears a herd of someone else's cows then he should pay the owner an agreed amount of *ghee* (clarified butter) and branded hide every year.⁴⁰ It is evident that the cow was not killed for its meat, nevertheless cow's flesh were eaten by certain communities. There are passages to suggest cattle-keepers sold the flesh after the death of their cattle. Similarly, there is injunction that, "Cattle such as a calf, a bull or a milch cow shall not be slaughtered".⁴¹ Since these animals helped them in agricultural works and gave dairy produce, they were considered important.

However, the *Arthashastra* has a different take from Megasthenes' remark regarding the tribute paid in terms of cattle by herdsmen. It says that the tribute should be paid not in terms of cattle but as dairy produce. Moreover, a certain share of the produce should be given either to the owner of the herd or the superintendent of cows.⁴² These references to the owner of the herd indicates that there might have been a practice of keeping huge cattle herds for private income by wealthy people. Such herds might have been maintained not only by the state but also by wealthy individuals. The superintendent of cow might have included the collection of taxes, upkeep of the animal health, and the welfare of the herdsmen.

Ashoka's edicts order that all animals should be treated with kindness and care. He is said to have made arrangements for the veterinary hospitals in his own kingdom and neighbouring areas.⁴³ He got trees planted along the roads and made provisions of wells for the comfort of travellers and their draft animals. One of his edicts records the ban on animal killing on certain days of the month and weeks. He restricted the number of animals culled in the royal kitchen to two peacocks and just one deer per day. He stopped the traditional practice of the royal hunts for entertainment.⁴⁴ He might have promoted this policy both as genuine regard for animal welfare and to stop indiscriminate killing of kingdoms' live-stocks. He particularly criticised the ritual of animal sacrifice and a harmful custom to select best animal of the herd for the god. Perhaps non-violence was not the only concern of Ashoka, otherwise he would not have allowed some animals for royal kitchen every day.

The Fifth Pillar inscription of Ashoka provides a list of animals that are prohibited to be killed under any condition, along with another list of animals that were considered inviolable on certain days.⁴⁵ However, the arbitrary nature of the first list has been debated as

to why geese, queen-ants, and iguanas were declared inviolable. Ashoka orders that all quadruped which are neither useful nor edible should not be killed. This was an attempt to impose a ban on unnecessary killing of animals.

If this list of animals given in inscription is compared with the list of animals mentioned in Book XIV of the *Arthashastra*, some other inferences may be drawn. This part of *Arthashastra* is concerned with casting magical spells and poisons by mixing various parts of the bodies of different creatures. For example, lizard have been frequently mentioned. It seems that since the iguana is also a kind of lizard, some scholars have proposed that some of these creatures were declared inviolable due to their use in the making of poisons and magic potions. Ashoka's condemnation of sacrifices is evident from a number of his edicts.⁴⁶ His opposition to the use of certain animals in magical rituals may have resulted in such sanction edicts. Possibly it was also an attempt to reduce the influence of sorcerers and magicians on the common population.

The *Arthashastra* has a chapter dealing with the superintendent of the slaughterhouse. This chapter provides a list of animals and birds that are to be protected from indiscriminate killings.⁴⁷ Animals like monkeys and birds like swans, geese, parrots, and *mainas*, are part of prohibited list in the edict. Animals symbolising auspicious beliefs are also part of this edict list. However, the *Arthashastra* does not elaborate any reason as to why these animals should be protected. The ban on fishing certain varieties of fish may be explained on the basis of their being inedible. The edict strictly prohibits that she-goats, ewes, and sows with their young ones under six months should be protected. This shows the concern for animal wealth of rural settlements.

Fishing was normally restricted on certain days of the years. This may have been promoted to stop indiscriminate fishing during breeding seasons.⁴⁸ Fish were regarded as an important commodity in these times because it was an established practice to pay one-tenth of the catch of fish and birds to the officials. The *Arthashastra* pays close attention to the organization of fisheries as it was considered an important component of the food basket. Even the value of fish manure is discussed in the text. The *Arthashastra* prescribes the poisoning of fish in streams running into enemy territory which was one of the many means of undermining enemy strength.⁴⁹ It shows the importance of fishing as an economic activity and for agrarian administration.

There were perhaps a dedicated group of hunters and fishermen of the king mentioned in the Kandhar inscription. It reads as follows, "... And the king refrains from (eating) living beings, and indeed other men and whosoever (were) the king's huntsmen and fishermen have ceased from hunting."⁵⁰ It is known that Ashoka stopped the royal hunts. But since fish was an important component of diet, in these days it would have been impossible for the king to ban fishing. It looks impossible and impractical to stop the hunters and fishermen throughout the empire to give up their profession. Moreover, the wild forest areas must have needed the hunters to make the regions comparatively safe for travellers.

Agrarian sector of the Mauryan period was closely monitored and regulated by the royal officials. The state took deep interest in organising and increasing productivity in this sector of economy. Agriculture was a rich source of revenue generation and food supply necessary for the survival of urban population.

References

1. Diodorus, II, 40.
2. Arthashastra, XV, I, P. 40.
3. Indica, XI .
4. Arthashastra II, P.35.
5. R.E. XIII, Kalsi, Bloach, Les Inscriptions d' Asoka, P.125.
6. Kosambi,D.D., Introduction to the Study of Indian History, P. 185, 218.
7. Arthashastra II, I.
8. Davids,T.W.Rhys., Buddhist India , Pub.1903 , P. 49.
9. Jayaswal, K.P., Hindu Polity, Vol II, P. 173-88.
10. It was referred in a medieval work, JaiminiNwayama-Lavistara, P. 358.
11. Fick, R., The Social Organisation of North-East India in Buddha's Time ,1920 , P.253, 305.
12. Bose, A. , Social and Rural Economy of Northern India, Cir 600 B.C -200 A.D, Pub. Firma KL Mukhopadhyay, Calcutta 1961 , P.38.
13. Satapatha Brahman, XIII, P. 7, 15.
14. Kane, Katyayana SmritiSaroddhara, P 16-17.
15. Arthashastra, II, P. 9.

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16. Manu, Dharmasastra, VIII, P.39.
 17. Arthashastra, II P.9.
 18. Megasthenesen de IndischeMaatschappij, P 123.
 19. Diodorus, II, P 40.
 20. Ghoshal,U.N.,The Agrarian System in Ancient India, The Journal of the Royal Asiatic Society, 1931, P. 6.

 21. Indica, XI, Diodorus, II, 40, Strabo, XV, I, 40.
 22. Arthashastra, I, P.6.
 23. Ibid, II, P. 40.
 24. Ghoshal U.N., Contribution to the History of the Hindu Revenue System, P.58, Manu, Dharmasastra, VII, P. 130.
 25. Arthashastra, V.2.
 26. Raychaudhuri,H.C., Political History of Ancient India, University Of Calcutta, 1972, P. 363.
 27. Fleet, JRAS, 1908, P.479.
 28. Diodorus, II, P. 41.
 29. Bose. A., Social and Rural Economy of Northern India, P. 18.
 30. Arthashastra, V.2.
 31. Ibid. II, 35.
 32. Diodorus, II, P. 41.
 33. Parishistaparvan, P.I (XXI) VIII, P. 415.
 34. Sircar D.C., Select Inscriptions, P.82, 85.
 35. Diodorus, II, 40.
 36. Arthashastra, II, 2.
 37. Ibid. II, 29.
 38. Ibid. II. 30, 31.
 39. Ibid. II, 29.
 40. Ibid. II, 29.
 41. Ibid. II 26.
 42. Ibid. II 29.
 43. Ibid. II, R.E. Girnar, Bloach, Les Inscriptions d' Asoka, P. 94 .

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44. Ibid. I, IV, VIII, R.E. Girnar.
 45. VS, PE.
 46. IX, R.E. Girnar, Bloach, P. 113.
 47. Arthashastra, II, 26.
 48. Ibid.
 49. Arthashastra, II, I, 2; XIV, I.
 50. JRAS. Vol. CXLVI, P. 2-3