

**LAND SYSTEM IN THE GANGA PLAINS
(c. 322 B.C.-650 A.D.)**

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PREFACE

India has always been a predominantly agricultural country. Land has been the backbone of Indian economy since ancient times. It was on the basis of agricultural surplus that the people of 'Harappa Culture' built their urban civilization. The Aryans came to India as semi-nomadic people with a mixed pastoral and agricultural economy. By the end of the Vedic period, agrarian economy became more stable. With the emergence of settled village economy based on agriculture, land became the main source of wealth and also of taxation.

The present study covers the period from the rise of the Mauryas to the death of Harsha. The period signifies the establishment of the Magadhan imperialism in India. With the formation of a unified State under the Mauryas, the basic features of the land system took a definite shape. In spite of various political changes that followed the decline of the Mauryas, the structure of land system remained, more or less, a continuous process till Harsha Vardhana. His death marks the beginning of an early medieval period, which witnessed the development of certain new tendencies that had already crept into the agrarian structure.

The focus is mainly on the Ganga plains. The presumed validity of treating the entire area as a unit of study

arises primarily from its continuity provided by the river itself. The Ganga plains were the prime *loci* of Indo-Aryan civilization and remained the centre of political activity during the entire period under study. But no monograph on the land system, as it operated in the Ganga plains, has appeared so far. U.N. Ghoshal's work, *The Agrarian System in Ancient India*, published in 1930, is a rapid survey of the evolution of agrarian system in northern India from the Vedic times to the end of the twelfth century A.D. The present study attempts to present a connected and comprehensive picture of the land system as it operated in the Ganga plains.

The chronology of most of the early Indian texts is a matter of controversy. The study is based on those sources which, on broad acceptance, have been attributed to our period. The vedic literature, though overwhelmingly religious and ritualistic, however, has been used in order to trace the origin and development of certain practices related to the land system. The Buddhist texts, especially the *Jātakas*, provide some useful information about the socio-economic conditions of early India. The *Dharmasūtras* also throw some useful light on the subject. The *Arthaśāstra* is the most valuable source of our information on the Maurya period. The *Smṛitis* are in the nature of legal precepts and describe different aspects of the land system as it stood in

theory. But they become a valuable source of information when corroborated by other contemporary sources. The commentaries on the law-books which belong to a very late period have been used cautiously to interpret some obscure passages. The Epics also provide useful information on the subject. The accounts of the foreigners, though not always reliable, also throw valuable light on certain aspects of the land system. The inscriptions are the most reliable source of historical information. The epigraphic records of our period have been thoroughly analysed. Some technical works like the *Aṣṭadhyāyī*, the *Mahābhāṣya*, the *Amarakoṣha* have also been utilized. The *Kāmasūtra* of Vatsyāyana, the literary works of Kālidāsa, the *Harshacharita* of Bāṇa, all provide valuable information on different aspects of the land system. All these sources have been tapped critically. The appended bibliography gives a fair idea of all the sources that have been consulted.

I take this opportunity to express my sincere gratitude to Dr. J.K. Sharma, Reader, Department of History, Panjab University, Chandigarh. I worked under his constant care and supervision for about three years, during which period he showed keen interest in my work. No words can express properly the extent to which I feel obliged to him. I am also indebted to Prof. Indu Banga, Chairperson, Department of History, Panjab University, for her valuable suggestions.

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ABBREVIATIONS

ABORI	:	Annals of the Bhandarkar Oriental Research Institute.
<i>Ait. Brah.</i>	:	<i>Aitareya Brāhmaṇa</i>
<i>Amara.</i>	:	<i>Amarakosha</i>
AHS	:	Ancient History Section
<i>Āpast.</i>	:	<i>Āpastamba Dharmasūtra</i>
<i>AS'</i>	:	<i>Arthaśāstra</i>
<i>Baud.</i>	:	<i>Baudhāyana Dharmasūtra</i>
<i>Brih.</i>	:	<i>Bṛihaspati Smṛiti</i>
CII.	:	<i>Corpus Inscriptionum Indicarum</i>
<i>Digh. Nik.</i>	:	<i>Dīgha Nikāya</i>
Diod.	:	Diodorus
<i>Ep. Ind.</i>	:	<i>Epigraphia Indica</i>
<i>Gaut.</i>	:	<i>Gautama Dharmasūtra</i>
GOS	:	Gaekwad Oriental Series
IESHR	:	Indian Economic and Social History Review
IHQ	:	Indian Historical Quarterly
IHR	:	Indian Historical Review
<i>Imp. Gaz.</i>	:	<i>Imperial Gazetteer</i>
<i>Ind. Ant.</i>	:	<i>Indian Antiquary</i>
JASB	:	Journal of the Asiatic Society of Bengal
<i>Jāt.</i>	:	<i>Jātaka</i>

JBORS	:	Journal of the Bihar & Orissa Research Society
JBRS	:	Journal of the Bihar Research Society
JESHO	:	Journal of the Economic & Social History of the Orient
JIH	:	Journal of Indian History
JRAS	:	Journal of the Royal Asiatic Society of Great Britain and Ireland
<i>Kāma.</i>	:	<i>Kāmasūtra</i>
<i>Kāt.</i>	:	<i>Kātyāyana Smṛiti</i>
<i>Kum.</i>	:	<i>Kumārasambhava</i>
LL.	:	Luders' List of Brahmi Inscriptions
Manu	:	<i>Manu Smṛiti</i>
<i>Mbh.</i>	:	<i>Mahābhārata</i>
MHS	:	Medieval History Section
<i>Nārada</i>	:	<i>Nārada Smṛiti</i>
NGJI	:	The National Geographical Journal of India
Proc. IHC.	:	Proceedings Indian History Congress
PTS	:	Pali Text Society
<i>Rām.</i>	:	<i>Rāmāyaṇa</i>
<i>Raghu.</i>	:	<i>Raghuvamśa</i>
<i>Sak.</i>	:	<i>Abhijñanaśākuntalam</i>
<i>Śat.Brāh.</i>	:	<i>Satpatha Brāhmaṇa</i>
SBB	:	Sacred Books of the Buddhists
SBE	:	Sacred Books of the East
SBH	:	Sacred Books of the Hindus

Sel.Inscr	:	Select Inscriptions bearing on Indian History and Civilisation
Vas	:	<i>Vasishṭha Dharmasūtra</i>
Vishnu	:	<i>Vishnu Smṛiti</i>
Yāj.	:	<i>Yājñavalkya Smṛiti</i>

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CHAPTER I

INTRODUCTION

The vast Ganga plains may be divided roughly into three regions, viz., the upper Ganga plain, the middle Ganga plain, and the lower Ganga plain. The upper Ganga plain - the region east of the *Sapta-Sindhava* of early Aryan settlers - covered the ancient Kuru-Pāñchāla country in the Yamuna-Ganga Doab. It had been a part of the *Madhyadesā* of the Epics - the *Rāmāyaṇa* and the *Mahābhārata*¹. The region differs markedly in physical features from the northern and the southern areas bordering it. The middle Ganga plain covers a part of the modern Uttar Pradesh and Bihar plains lying on either side of the Ganga and the Ghaghra. The eastern boundary of the upper Ganga plain marks the western limits of this region, while its eastern limit corresponds to the Bihar-Bengal boundary except the Kishanganj subdivision. It forms the central part of the Ganga plains as it imperceptively opens up in the west from the upper Ganga plain and so invisibly dies out into the lower Ganga plain in the east.² The lower Ganga plain includes a part of modern Bihar (the Kishanganj tehsil of the Purnea district) and almost the whole of Bengal (excluding the Purulia

1. R. L. Singh (ed.), *India, A Regional Geography*, Varanasi, 1971, p. 126.

2. See Baden Powell, *The Indian Village Community*, Delhi, 1972, p. 104 fn.

district and the mountaineous parts of Darjeeling). The region extends from the Himalayan foothills in the north to the Bay of Bengal in the south, and from the edge of the Chotanagpur Highlands in the west to the border of Bangladesh and Assam in the east.¹ It formed a small part of the ancient Vaṅga territory of the Vedic literature and constituted a part of the *Prachya* region (eastern region) of the *Aitareya Brāhmaṇa*.²

The climatic conditions of various parts of India - the foothills of the Himalayas, the Ganga plains, the Deccan plateau and the plains of Sindh and Rajputana - determined uneven stages of agricultural development in these areas. The fertile alluvial soil, abundant rainfall and considerable mineral deposits were some of the factors which helped an early and faster agrarian growth in the Ganga plains.³ The two main river systems, the Indus and the

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1. Though the whole of the lower Ganga plain is perceived as deltaic, the real delta constitutes about two-thirds of this plain, and 'is probably the largest delta in the world'. The deltaic setting, coupled with humid climate, was responsible for the crystallization of a way of life of the people distinct from the rest of the Great plains. See O.H.K. Spate and A.T.A. Learmonth, *India and Pakistan : A General and Regional Geography*, London, 1967, p. 571.
 2. *Ait. Brāh.*, VIII, 14.
 3. K.M. Panikkar rightly points out that these plains formed the core of India from every point of view. See *Geographical Factors in Indian History*, Bombay, 1955, p. 25.

Ganga with their numerous tributaries and sub-tributaries, have always played a significant role in the agricultural development of the land. But, in many respects, the Ganga surpasses the Indus. It has been rightly observed that 'there is not a river in the world which has influenced humanity or contributed to the growth of material civilization to such an extent as the Ganges'.¹ The Himalayas send torrents of water caused by the rains and the melting of its snow-caps and glaciers to the Ganga plains almost throughout the year. As such, these plains are watered by a network of some perennial rivers. According to the *Milinda Pañho*, there were, in all, five hundred rivers flowing down from the Himalayas, of which ten are stated to be important. They are the Ganga, the Yamuna, the Aeiravati, the Sarabhu, the Māhi, the Sindhu, the Sarasvati, the Vetravati, the Vitamsā and the Chandabhāgā.² According to the Greek accounts, the Ganga has nineteen tributaries and sub-tributaries.³ In Kālidāsa's literary works, we find references to the Yamuna⁴, Śarayu,⁵ Sona,⁶

 1. *Imp, Gaz.* Vol. I, p. 26.

2. *Milinda Pañho*, (Trenckner's ed.), p. 114 ; SBE. Vol. XXXV, p. 171.

3. J.W. McCrindle, *Ancient India as Described by Megasthenes and Arrian*, Calcutta, 1877, pp. 63-64.

4. *Raghu*, VI, 48, 49 ; XIII, 57.

5. *Ibid.*, VIII, 95 ; IX, 20 ; XIII, 63 ; XIX, 40.

6. *Ibid.*, VII, 36.

Mahākosi,¹ Mālinī,² Mandākīni,² Tamasā,⁴ Śipra⁵ and Kapisā,⁶ as tributaries of the Ganga. The network of these tributaries has made the Ganga plains the most fertile region.⁷ The contention of an economist that "the greater the fertility, the greater the incentive to skill" is amply borne out by the early economic history of the Ganga plains.⁸

Although the archeological discoveries of the pre-historic and proto-historic periods have not been quite substantial, yet it is probable that the Ganga plains were occupied by man during the remote ancient period. Its

1. *Kum.*, VI. 33.

2. *Śāk.*, III. p. 859.

3. *Raghu.*, XIII, 48 ; *Kum.*, I. 29.

4. *Ibid.*, p. IX. 20, 72.

5. *Ibid.*, VI. 35.

6. *Ibid.*, IV. 38.

7. The mighty river with its numerous tributaries and sub-tributaries 'has silently worked through the ages in an increasing process of regeneration of soil.... All the Gangetic basin is within the influence of the south-west monsoon rains, and the thick humid atmosphere of steamy effervescence, which is characteristic of lower Bengal and of those provinces to the south which are watered by the Mahānadi, makes all the land green with luxuriance of vegetation'. *Imp.Gaz.*, I. p. 22. Also see *Diod.*, II. 35-36.

8. A.M. Carr-Saunders, *The Population Problem*, p. 422. cited A.N. Bose, *Social and Rural Economy*, Vol. I, Calcutta, 1942, p. 9.

earliest occupants were perhaps the Negritos, followed by the Proto-Australoids such as the Dravidians, the Nishādas, and others referred to as Dāsas.¹ The location and geography of the area suggest a rich culture, at least not inferior, though it may be a little later in development, to the 'Harappa Culture'. Its population was by no means scanty, though it was probably localised and the settlements were separated by large stretches of uninhabited forests.² The early occupants lived in villages and carried rudimentary agriculture in forest clearings.³ By the time of the arrival of the Aryans, the region appears to have had developed an organised agricultural society which 'knew how to form well - ordered villages, how to make forts and buildings, and how to prepare reservoirs and tanks for irrigation'.⁴ Thus, unlike the decayed or decaying civilization of the Indus valley, the Aryans found the non-Aryans in full blaze of civilization in the Ganga plains, where they advanced as much by alliances and voluntary submission of the inhabitants as by conquest.⁵

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1. R.K. Mukherjee, *The Changing Face of Bengal*, Calcutta, 1938, pp. 233-34 & 239.
 2. Baden Powell, *The Indian Village Community*, p. 82.
 3. R.L. Singh (ed.), *India, A Regional Geography*, p. 126.
 4. Baden Powell, *The Indian Village Community*, p. 49. Also see Rhys Davids, *Buddhist India*, Calcutta, 1959, p. 23.
 5. R.L. Singh (ed.), *India, A Regional Geography*, p. 185. ;Romila Thapar, *The Past and Prejudice*, New Delhi, 1975, pp. 50-51.

The early Vedic hymns suggest that the Aryan settlements had not extended east of the Yamuna during the Rigvedic period. The effective eastward movement of the Aryans commenced later. In the *Rigveda*, there is only a casual reference to the region, only 'occasionally the Ganga and very rarely the Yamuna and the Sarayu (Ghaghara) are referred to, but not as being important. Neither the Kosala nor the Videha, so famous in the later Vedic literature, are mentioned in the *Rigveda*'.¹ The later Vedic period (c. 1000-600 B.C) witnessed the expansion of the Aryans from the plains of the Indus and its tributaries to the Ganga plains.² The sandy and loamy soil of the upper Ganga plain and its thin vegetation did not present serious problems of clearance and settlement. The *Satapatha Brāhmaṇa* states how Videgha Māthava went on burning the forests till he reached the river Sadānīrā in

 1. R.R. Diwakar (ed.), *Bihar Through the Ages*, Bombay, 1959, p. 94. The early Aryan settlers had to fight tribes that followed them, with the help of the indigenous population which they had themselves subjugated and partly absorbed. *Indra* - the wielder of the Thunderbolt, the destroyer of the walled towns - is not on the side of the invaders but on the side of the *Sudās* and his allies, who fought decisively the battle of ten kings involving the *Rigveda's Panchajana*, i.e., *Anus Druhus, Purus, Turvasas*, and *Yadus* and other five tribes, viz., *Alina, Bhalanas, Pakthas, Visanis* and *Sivis*. See K.M. Panikkar, *Geographical Factors in Indian History*, p. 92.

2. Cf. S.M. Ali, *The Geography of the Purāṇas*, New Delhi, 1966, p. 132.

North Bihar.¹ He cleared the jungle, reclaimed the marshes and established his kingdom.² Whatever the truth behind the Vedic narrative, it appears that Videgha Māthava was the leader of the first immigrants to spread Aryan culture in that part of the Ganga plains, and so it was after him that the territory was known as Videha.³ That would suggest that the Aryan settlement took place beyond the Sadānirā (Gandak) in Videha towards the end of the Vedic period, before the *Mahābhārata* war.⁴ The expansion of the Aryans was marked by Aryanisation and absorption of the indigenous people, and their strain became thinner and thinner with every advance further.⁵ In the case of the *Rigveda*, the geographical

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1. R.S. Sharma, *Perspectives in Social and Economic History of Early India*, Delhi, 1983, pp. 114-115.
 2. H.C. Raychaudhuri is of the opinion that this was the land referred to in the *Mahābhārata* as *Jalodbhava* (reclaimed from the swamp). See *Political History of Ancient India*, Calcutta, 1938, p. 55.
 3. M.A. Pandey, *The Historical Geography and Topography of Bihar*, Delhi, 1963, p. 87.
 4. R.R. Diwakar (ed.), *Bihar Through the Ages*, pp. 94-95.
 5. The *Aitreya Brāhmaṇa* which is the most significant supplement to the *Rigveda* was, as is generally accepted, the work of a man who was the son of an Aryan *Rishi* by an indigenous woman-an offspring whom he refused to instruct in sacred knowledge. Even more significant is the fact that the arrangements of the Vedas into *Samhitās* was the work of Badarayana whose mother was an aboriginal. These instances clearly suggest the synthesis between the Aryans and the indigenous people in the Ganga plains. See K.M. Panikkar, *Geographical Factors in Indian History*, pp. 74-75.

focus is that on the *Sapta-Sindhava*, roughly from the Kabul river to the Sarasvati river. Rigvedic society was essentially a pre-urban society having a copper technology.¹ But there was a gradual transformation from nomadic pastoralism dependent on cattle to an agrarian society with more settled communities. There was also a strong sense of tribal identity among the Aryans. The later Vedic literature depicts a recognizable change in material culture. Its geographical focus includes the Ganga plains in the main with a marginal familiarity with the Indus area, western and eastern India and the Vindhya. The society depicted in that literature is essentially agrarian, and there is considerable evidence of acquaintance with iron technology also. The tribal identity continues, but in many cases it is extended to the territorial identity.² The later Vedic texts refer to such names as the Kurus, the Pāñchālas, the Vatsas, Kashis, Kosalas, Videhas, etc., of the Ganga plains, who were no longer the roving tribes, but had settled down and had become territorial powers. The river Sadānīrā formed the boundary between the Kosalas and the Videhas.³

1. N.R. Banerjee, *The Iron Age in India*, Delhi, 1965, pp. 158 ff.

2. See Romila Thapar, 'Presidential Address', AHS, *Proc. IHC.*, Varanasi, 1969, p. 17 ; Also *Ancient Indian Social History : Some Interpretations*, Hyderabad, 1984, pp. 214-15.

3. R.R. Diwakar (ed.), *Bihar Through the Ages*, p. 95.

The first Aryan settlements were established along the rivers. Forests were set on fire, and the use of fire as an effective means of reclaiming forest land for cultivation gave rise to the cult of fire (Agni) worship. The expanding colonies grew into *Janapadas* or kingdoms. The Kuru and the Pāñchāla were two major kingdoms that covered the upper Ganga plain. The Kurus first settled in the hinterland of Indraprastha, west of the Yamuna. Later on, they extended their territory across the Yamuna up to the Ganga in the east. The limits of the Kuru territory, as mentioned in the *Purāṇas*, extended from the Ghaghara to the Ganga bounded on the north and the south by dense forest belts. Indraprastha on the Yamuna and Hastinapur on the Ganga were the two capital cities.¹ The Pāñchālas, rivals of the Kurus, extended their sway over modern Rohilkhand, the central part of the Yamuna-Ganga Doab and northern-half of Ganga-Ghaghara Doab. Its northern division had its capital at Ahichhatra (Ramnagar in Bareilly), and its southern part was controlled from Kampila (Kampilya) on the Ganga in the Farrukhabad district.² The Ganga quite naturally formed the dividing line between the two Pāñchālas.

The upper Ganga plain became the nucleus for the Aryan expansion to the east. The process of eastward expansion,

1. S.M. Ali, *The Geography of the Purāṇas*, p. 134.

2. *Ibid.*, p. 135.

however, was slow as the region was covered with thick forests. In the wake of Aryan colonization and cultural assimilation, the middle Ganga plain seems to have had developed a more advanced agrarian society, based mostly on the indigenous labour and technique.¹ The Vedic fire cult was adopted for clearing the forests. Marshes were reclaimed and irrigation works were constructed. The Aryan decimal - territorial system was also superimposed on the existing frame ; the society formed groups of ten, twenty, one hundred, and one thousand villages, which were looked after by *Dasgrāmi*, *Pimstipa*, *Satgrāmi* and *Ādhipati*, respectively.² The lower Ganga plain was Aryanised in the post-Vedic period as the *Vaṅga* state appears to be the extreme eastern territory known to the Vedic Aryans.³

As most parts of the Ganga plains were covered with natural forests, the agrarian expansion was not possible

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1. M.S. Pandey, *The Historical Geography and Topography of Bihar*, p. 10.
 2. The middle Ganga plain formed the meeting ground of two of the pre-historic peoples, viz., the Mediterranean-Armenoid and Munda-speaking peoples. The fusion of two different races with different culture traits brought about remarkable material and cultural changes, that gave rise to diverse systems of rice and wheat-dominant crop-patterns. R.L. Singh, 'Evolution of Settlements in the Middle Ganga Valley', *NGJI*, Vol. I, 2.1955, p. 73.
 3. D.P. Saxena, 'Regional Divisions of Vedic India', *NGJI*, Vol. VIII, 3 & 4, 1962, p. 231.

without the clearance of these forests.¹ It also needed permanent settlements, particularly in the middle Ganga alluvial plain which has a heavy rainfall, because, if left unattended, the land clearings would soon be covered with the growth of weeds.² The familiarity with iron (*krisnaayas*), the dark metal, at the beginning of the first millennium B.C. greatly helped in bringing large areas under cultivation.³ In the upper Ganga plain, the use of iron tools began around 1000 B.C.⁴ Its immediate impact was the rapid clearing of forests. With the passage of time, the extraction of iron increased in volume, which helped in the diversification and generalization of its use. The availability of iron tools marked the turning point in the development of the agrarian economy. 'Any peasant' as Gordon Childe says, 'could now afford an iron axe to clear fresh land for himself and iron ploughshare wherewith to break stony ground'.⁵ Iron tools assumed great importance -

1. Baud., 1.1 to 2.9 ; Vas., 1.8 ; *Mahābhāṣya*, VIII. 1.4 ; *Rām.*, *Uttra Kāṇḍa*, ch. 81 ; *Mbh.*, *Sabhā Parva*, 21.4 ; Also see G.Grierson, *Notes on Gaya District*, Calcutta, 1893, pp. 3-4.
2. The nature tended constantly to regain the upper hand even in the heart of agricultural regions.- Marc Bloch, *Feudal Society*, Vol. I, London, 1975, p. 61.
3. Romila Thapar, *The Past and Prejudice*, p. 27.
4. Dilip Chakraborti, 'The Beginning of Iron in India', *Antiquity*, Vol. 50, 1976, pp. 118-119.
5. Gordon Childe, *What Happened in History*, London, 1954, p. 183.

for clearing thick forests of the middle Ganga plain as also in reclaiming the marshy lands in the region. They were highly useful in felling the trees and removing their horizontal roots in order to make land fit for cultivation. The iron axe was of utmost use in this respect.¹ Similarly, while the wooden ploughshare could be successfully used in turning the light loamy soil of the upper Ganga plain, the heavy soil of the middle Ganga plain could be broken only with an iron ploughshare. It appears that the plentiful source of iron in south Bihar was known to the people of the middle Ganga plain, for some artifacts of the North Black Polished (NBP) phase (c 500-100 B.C) from Banaras contain the same impurities as noticed in the iron ores of Singhbhum and Mayurbhanj.² Improvement brought about in the quality of iron with the addition of carbon and the removal of slag has been referred to in some studies in the field of ancient Indian technology.³ The use of bellows helped in producing iron tools and implements in large quantities which, in turn, hastened the process of the clearance of forests in the Ganga plains. Our sources refer to the use of iron ploughshare in the area.⁴ Iron (lōha) in its various forms is mentioned more frequently, than copper (*tamra*) in the

1. See Romila Thapar, *The Past and Prejudice*, p. 51.

2. H.C. Bhardwaj, *Aspects of Ancient Indian Technology*, Delhi, 1979, pp. 158-159.

3. *Ibid.*, p. 159.

4. Pāṇini, IV. 1.42.

Arthaśāstra.¹ The *lōhādhyakṣa* seems to have been the officer in charge of iron workshops.²

Among the sixteen *Mahājanapadas* of northern India in Buddha's time, Kosala of Saket and Śrāvastī, Vatsa of Kaushāmbī, Magadha, and Āṅga were powerful kingdoms, while there were several confederacies such as the Vrijjians of eight clans, i.e., the Lichhavis, the Jnatrikas, the Videhas, the Vrijjis, etc., the Mallas of Pawa (Padrauna) and Kausinara (Kushinagar) in the eastern and the Śākiyas in the northern Saryupar.¹ In the course of time, Magadha emerged as the most powerful state in the Ganga plains.⁴

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1. Shāmasāstry, however, translated the word *lōha* as 'metals' and *lōhādhyakṣa* as the superintendent of metals. See *Arthaśāstra* (tr.) p. 86.
 2. U.N. Ghoshal, *Hindu Revenue System*, Calcutta, 1972, p. 141.
 3. R.R. Diwakar (ed.), *Bihar Through the Ages*, pp. 101-102. The *Anguttara-nikāya* enumerates sixteen *Mahājanapadas*, viz., Kasi, Kosala, Āṅga, Magadha, Vajji, Malla, Cedi, Vamsa, Kuru, Pāñchāla, Matsya, Surasena, Assaka, Avanti, Gandhāra, Kāṃboja - I, 213, IV, 252. Of the sixteen *Mahājanapadas*, twelve flourished in the Ganga plains. For detail see R.C. Majumdar (ed.), *The Age of Imperial Unity*, Bombay, 1951, pp. 1 ff.
 4. The success of Magadha was due, among other factors, to its being out of the pale of orthodox Brāhmaṇism. While the lands of earlier Aryan occupation, such as Kuru-Pāñchāla territory, seem to have had become priest-ridden squandering much of the national wealth in expensive sacrifices, this was not the case with Magadha, which was an early home of Buddhism and Jainism, which encouraged a somewhat more positive and realistic approach to life than did the sterile sacrificial Brāhmaṇism of the regions further west. For other factors responsible for the rise of Magadha

Pāṭaliputra, the Magadhan capital, became the political centre indicating the growing strength and confidence of Magadha and the growing importance of the Ganga, both for trade and politics.¹ Throughout this period, expanding agriculture formed the mainstay of both the people and the State. The Mauryas built up a highly organised administration and did much for agricultural development. Land was properly utilised, irrigation and other facilities were extended to the peasants and agriculture flourished. The expansion of the agrarian village economy, in turn, greatly helped in the establishment and consolidation of the Maurya State. The State had to be maintained through revenue and taxes which were easier to collect on a regular basis in the agrarian economy. With the decline of the Mauryas, political uncertainty prevailed for many centuries in the Ganga plains. After the interlude of the Śunga, Kanva and other weaker dynasties, the Kushānas established their power for some time in northern India and extended their rule to the middle Ganga plain.² But it was under

as a political power, see H.C. Raychaudhuri, *Political History of Ancient India*, Calcutta, 1953, pp. 187-90. But he does not mention the availability of iron, by far the greatest factor in the rise of Magadha. See D.D. Kosambi, *An Introduction to the Study of Indian History*, Bombay, 1990, p. 155.

1. M.S. Pandey, *The Historical Geography and Topography of Bihar*, p. 15.
2. See R.S. Sharma, 'Decay of Gangetic Towns in Gupta and Post-Gupta Times', *Proc.IHC.*, Muzaffarpur, 1972, p. 101. The archaeological excavations have brought to light a number of Kushāna sites in Bihar. They include

the Guptas that the area was once again politically unified in the fourth century A.D., and it was ruled from Pāṭaliputra for about two centuries.¹ The empire was divided into *bhuktis* and *desas* for administrative purposes.² With the downfall of the Imperial Guptas in the second half of the sixth century A.D., the struggle for power started among their feudatories. In the process, the Maukharis succeeded in establishing their supremacy that lasted to the end of the sixth century A.D. In the beginning of the seventh century A.D., political power passed into the hands of the Vardhanas and Harsha ruled over the area for about forty years. His kingdom, however, was not a closely connected empire of the Mauryan variety. Thereafter, the area was mostly appended either to the Bengal powers or remained divided into small warring powers till the advent of the Muslims on the political scene.

 Vaiśālī and Chirand in north Bihar, Kumrahar (Patna), Charittarvan (Buxar), Sonapur (Gaya district) and Saradkel (Ranchi district). See Kameshwar Prasad, 'The Kusāna Influence in Bihar : An Archaeological Study', *Proc. IHC.*, Jadavpur, 1974, pp. 44-45. In B.P. Sinha and S.R. Roy's opinion, Vaiśālī was conquered by the Kushānas in 80 B.C. See *Vaiśālī Excavations*, Patna, 1969, p. 1.

1. S.R. Goyal has tried to prove that the Guptas first established their political power in the eastern Uttar Pradesh with Prayaga as its centre. See *A History of the Imperial Guptas*, Allahabad, 1967, p. 53.
2. Notable among the *bhuktis* in the middle Ganga plain were the *Tirabhukti* (Tirhut) north of the Ganga, *Srinagar bhukti* (Patna, Shahabad and South Monghyr), and *Magadha-bhukti* (Rajgir and Gaya). See R.R. Diwakar (ed.), *Bihar Through the Ages*, p. 276.

CHAPTER II

CLASSIFICATION, SURVEY AND MEASUREMENT OF LAND

Land may be classified into different categories on the basis of its quality and socio-economic use. The various types of land mentioned in the *Arthasāstra* include *vāstu* (land covered by houses), *kr̥ṣṭa* (cultivated land), *akr̥ṣṭa* (uncultivated land), *sthāla* (high land), *kedāra* (wet land), *ārāma* (grove), *saṇḍa* (vegetable gardens), *mūla-vāpa* (fields used for growing ginger, turmeric, etc.), *vāṭa* (sugar plantation), *vana* (forests), *vivītā* (grazing grounds), etc.¹ Patañjali mentions four categories of land, i.e., *kedāra* (irrigated land),² *gochara* (pasture land),³ *halyā* or *sityā* (lands brought under cultivation),⁴ *ahalyā* or *ūsara* (barren land).⁵ In *Manusmṛiti*, we come across five categories of land, viz., tilled and untilled land (*kshetra*, *kedāra*, *kṛita* and *akṛita*),⁶ barren land,⁷ pasture land,⁸ land having dry -

1. *AS.*, II, 35.

2. *Mahābhāṣya*, III, 1.87.

3. *Ibid.*, III, 3.119.

4. *Ibid.*, IV, 4. 91, 97.

5. *Ibid.*, V, 2. 107.

6. *Manu*, IX, 33-40 ; IX, 137 ; IX, 114.

7. *Ibid.*, III, 142.

8. *Ibid.*, VIII, 237.

climate with little water (*jāngala*),¹ and desert (*dhanva*).² In the *Amarakoshā*, twelve types of land are mentioned, i.e., *urvarā* (fertile), *ūshara* (barren), *maru* (desert), *aprahata* (fallow), *śādvala* (grassy lands), *pankila* (muddy land), *jalaprayaṃanupaṃ* (watery or wet land), *kachchha* (moist low-lying land near a river), *śarkara* (land full of pebbles and pieces of limestone), *śarkāvati* (sandy), *nadīmātrika*, (land irrigated by river water), *devamātrika* (land watered by rain).³ From the economic point of view, S.K. Maity has classified land broadly into five categories, viz., habitable land, cultivable land, pasture land, waste land, garden and forest land.⁴

The term *vāstu* or *vatthu* generally means habitable land where houses were built.⁵ But it also refers to the places of worship (*chaitya*, *devagrīha*), irrigation works

1. *Ibid.*, VII, 69.

2. *Ibid.*, VII, 70.

3. *Amara.*, I, 5-6, pp. 70-71 ; I, 10-13, p. 72.

4. S.K. Maity, *Economic Life of Northern India*, Calcutta, 1957, p. 23.

5. Monier Williams, *A Sanskrit-English Dictionary*, p. 948. Even today, in Bengal, *Vāstu-pūja* is performed within the house on the last day of the month of *Pauṣa*. It is a sort of declaration that the land in question belongs to the observer of the rite. See S.R. Das, 'Types of Land in North-Eastern India', *Essays in Ancient Indian Economic History* (ed.), Brajadulal Chattopadhyaya, New Delhi, 1987, p. 64.

(*setubandhah*),¹ alms-houses (*sattra*),² places for free supply of drinking water (*prapā*),³ charitable buildings (*pūrvanuvṛtham dharmasetum*)⁴, places for pilgrimage (*punyasthāna*),⁵ and cremation grounds (*śmaśāna*), etc.⁶

The term *kshetra*, *khetta* or *khettiya* frequently occurs in the literary and epigraphic sources. Epigraphic records explicitly mention the donation of fields (*khetta*) for the maintenance of Buddhist monks residing in the nearby monasteries.⁷ The term evidently denotes fertile land.⁸ It included vast plains, wet land, land on the banks of rivers with enough moisture, land in the vicinity of wells, land watered by rains, etc.⁹ Basak and Pargiter have interpreted the term *kshetra* as a cultivable field.¹⁰ In the *Amarakosha*,

1. *AS.*, II, 10 ; II, 35.

2. *Ibid.*, II, 35.

3. *Ibid.*

4. *Ibid.*

5. *Ibid.*

6. *Ibid.*

7. LL. Nos. 1000, 1024, 1047, 1125, 1126, 1130, 1137, 1162, 1164. Also see *Ep.Ind.*, XV, p. 139 ; XVII, p. 347 ; XIX, p. 120.

8. *Āpast.*, 1. 11. 30 & 39 ; *Gaut.*, IX, 40 ; *AS.*, II, 35 ; *Manu*, IV, 46 ; *Vishṇu*, LX, 4.

9. *AS.*, II, 6 ; II, 24 ; II, 35.

10. *Ep.Ind.*, XVII, p. 348.

kshetra is mentioned as a special type of land capable of producing all kinds of crops.¹ The arable land was preferred to all other types of land as the very existence of the people depended on it.

The terms, like *khila*, *ūshara*, *akrishṭa*, *anurvarā*, etc., denoted uncultivated, fallow, barren, and salty lands.² In the *Amarakosha*, *khila* is mentioned as an untilled land.³ The terms *khila* and *khilya* refer to the same type of land.⁴ According to Nārada, the land which has remained uncultivated for one year is called *ardhakhila*, that which has not been under cultivation for three years is called *khila*, and the land which has not been cultivated for five years is not better than a forest and may be called *araṇya*.⁵ The *khila*, therefore, was a land which was not under cultivation for a certain period. It is, often, a common

1. *Amara.*, I, 5, p. 70.

2. *Baud.*, III, 2.2 ; *AS.*, II, 1 ; II, 24 ; II, 35, III, 10 ; VI, 1 ; *Mahābhāṣya*, III, 3. 119 ; V, 2. 107 ; *Mahāvastu*, II, 295 ; *Mbh. Śhānti Parva*, 29. 21 ; 69, 85 ; *Malinda Pañho*, p. 136 ; *Ep.Ind.*, XV, pp. 130, 136, 143 ; XXI, pp. 81-82 ; XX, p. 62.

3. *Amara.*, I, 6, p. 71. Oldenberg, however, is of the view that the small patches of land lying between the cultivators fields were called *khila* and *khilya*. See Macdonell and Keith, *Vedic Index*, Vol. I, p. 216.

4. *Ibid.*

5. Nārada, XI, 26, p. 160.

practice with the peasants to allow certain fields to remain fallow for some time to increase the fertility of the soil.¹ In the Dāmodarpur Copper-plate Inscription of Kumaragupta, another term *aprahata* is used along with *khila*.² According to Monier Williams, *aprahata* means untilled waste land.³ R.G. Basak holds that both *khila* and *aprahata* are synonymous terms meaning untilled land.⁴ But, as these terms occur together in the inscriptions, evidently they denote two different types of lands. In S.K. Maity's view, *khila* means the land which was previously cultivated whereas *aprahata* was the land which had never been cultivated.⁵ Saletore refers to another type of land called *aprada* which, according to him, was untilled land.⁶ The term is used along with three other types of land, viz., *aprahata-khila*, *kshetra*, and *khila*.⁷ R.G. Basak explains it as land not

1. In the *Ain-i-Akbari*, we find that the land which is cultivated for one or two years is called *parauti-bhūmi*; when such land is not cultivated for three or four years, it is called *chachar-bhūmi* and that which is left uncultivated for five years or more is called *banjar-bhūmi*. These types of land mentioned by Abul Fazl seem to be the same as the *khila-bhūmi* of the earlier days.
2. *Ep.Ind.*, XV, pp. 130, 143.
3. *A Sanskrit-English Dictionary*, p. 59.
4. *Ep.Ind.*, XV, p. 131.
5. S.K. Maity, *Economic Life of Northern India*, p. 35.
6. R.N. Saletore, *Life in the Gupta Age*, Bombay, 1945, p. 338.
7. *Ep.Ind.*, XV, pp. 130, 136, 139.

given to anyone before transaction was effected which means the unsettled land.¹ In S.K. Maity's view, the term *aprada* does not denote any type of land as it is often used along with the terms *dharma (aprada dharma)* and *akshayanīvi*, etc., which refer to land tenures.² The Gunaighar Copper-plate Inscription of Vainyagupta mentions another type of land - *hajjaka-khila-bhūmi*, which has been interpreted by D. C. Sircar as a marshy land.³

In the *Arthaśāstra*, the terms like *sthāla* and *pārvata* are used for uplands and high grounds.⁴ Houses were generally built on elevated spots to guard against floods.⁵ The *Sattigumba Jātaka* mentions a high land in the heart of the forest where silk trees were grown.⁶ Thus *sthāla* denoted both cultivable and habitable lands.

In the outskirts of the village there was a pasture land for the grazing of cattle.⁷ In the Khoh Copper-plate

1. *Ep.Ind.*, p. 140, fn. 2.

2. S.K. Maity, *Economic Life of Northern India*, p. 25.

3. *Sel.Inscr*, p. 345.

4. *AS.*, II, 35 ; IX, 1.

5. *Ibid.*, IV, 3.

6. *Jāt.*, I, No. 503 ; IV, 430 ; IV, 277.

7. *AS.*, III, 10 ; *Mahābhāṣya*, III, 3. 119 ; *Manu VIII*, 137.

Inscription of mahārāja Jayanatha, we come across the term *gōpatha-sarah*.¹ Fleet has interpreted it as a grassy land.² Nārada clearly refers to pasture land where the cowherds used to tend their village cattle.³ In the Maliya Copper-plate of Dharasena II, the term *śivaka-padraka* is mentioned which has been translated by Fleet as common land.⁴

Another type of land is called *vana*, *vanapoara*, *aranya* (forest or jungle land).⁵ In the *Arthaśāstra*, such uncultivated tracts are referred to under the title *bhūmichhidraavidhāman*.⁶ These lands were used as grazing grounds, hermitages for the brāhmaṇas, game forests, timber and elephant forests, etc.⁷ There are numerous references in

1. CII., III, No. 27, p. 123.

2. *Ibid.*, p. 125.

3. Nārada, XI, 40.

4. CII, III, No. 38, p. 170, fn. 3. D.C. Sircar, however, takes the term in the sense of a village or a part of it. The term *padraka* used in the Inscription seems to be a fuller form of *padra* which, according to Monier Williams, means 'a village, the entrance into a village, the earth, etc. See *A Sanskrit-English Dictionary*, p. 585. Buhler, however, explained it as 'the grazing place'. See *Ind.Ant.* vol. XV, p. 307. In H.H. Wilson's, *Glossary of Indian Terms*, the term *padra* is explained as the common land, the land adjacent to a village left uncultivated. See p. 285.

5. *AS.*, II, 35 ; V, 2 ; *Milinda Pañho*, p. 219 ; *Jāt.*, I, Nos. 514, 538, 540, 543, 544, 546, 547.

6. *Ibid.*, II, 2.

the sources to the reclamation of such lands for making them fit for cultivation and habitation.¹ The term *bhūmichhidra*, though literally meaning land having holes, was not an entirely uncultivable waste.

The terms like *vata*,² *vādaka* or *vatika*,³ *uyana* or *udyana*,⁴ *ārāma*,⁵ *vana*⁶ referred to gardens, pleasure parks and groves. In the Buddhist literature the term *vana* refers to a park or grove such as *Jetavana* at *Srāvasti*, *Añjanavana* at *Sāket*, etc.⁷ The term *pushpaphala-vāṭa* in the *Arthaśāstra* denotes flower and fruit gardens. Other types of land such as rocky,⁸ miry,⁹ uneven,¹⁰ desert,¹¹

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1. *Milinda Pañho*, p. 219 ; *Jāt.*, II, 358 ; V, 167 ff. ; *Strabo*, XV. 1. 41.
 2. *AS.*, II, 6 ; *Divyāvandāna*, 286. 15 ; 288. 15.
 3. Pillar Edict, No. VII. See R.K. Choudhary, *Inscriptions of Ancient India*, New Delhi, 1983, pp. 22 & 24.
 4. *Jāt.*, I, 120, 149 ; II, 104 ; IV, 213 ; V, 95 ; VI, 333 ; *IHQ*, XIV, pp. 472 ff.
 5. *AS.*, II, 1 ; LL. Nos. 82, 973, 974, 1336 ; *Jāt.*, IV, 359, Nos. 541-543-47.
 6. *Mahāvastu*, 1.4 ; III, 441 ff. LL. No. 731 ; *Jāt.*, I, 92 ff.
 7. *Jāt.*, I, 317 ; V, 103.
 8. *AS.*, VI, 1.
 9. *Ibid.*
 10. *Ibid.*
 11. *Ibid.*

full of pebbles¹, etc., were not fit for cultivation. Kauṭilya states that a good country should be free from all such types of land.²

II

The importance of cadastral survey in land revenue administration cannot be underestimated. It is essential to maintain proper records of boundaries of separate holdings to safeguard the interests of both the State as well as the peasants. In the *Rigveda*, reference is made to separate fields, i.e., *urvarā*, *urvarā sā*, *urvarā jīt*, *kṣētra sā*.³ We also come across the expression *urvarā-pati* 'lord of fields'.⁴ The rights of the individual peasants over their fields could only be protected if the land was properly surveyed and demarcated. Our sources refer to the state functionaries who were actually connected with the work of land survey and measurement. *Kurudhamma Jātaka* refers to an officer called *rajjugahāka-amacca*, who was entrusted with the work of land measurement.⁵ The *rajjukas* mentioned in --

1. *Ibid.*

2. *Ibid.*

3. *Rigveda*, I, 110.5

4. *Ibid.*, II, 21.1 ; IV, 38.1 ; VI, 20.1. Macdonell and Keith, *Vedic Index*, Vol. I, p. 99.

5. *Jāt.*, II, No. 276, p. 257 & 376. *Rajjugahāka-amacca* literally means the rope holding officer who measured the lands of the tax-paying cultivators. See Romila Thapar, *Asoka and the Decline of the Mauryas*, Delhi, 1973, p. 107.

the edicts of Ashoka were probably the settlement officers.¹ Strabo had perhaps *rajjukas* in mind when he referred to the magistrates superintending the rivers and measuring the land.² Pāṇini refers to an officer called *kṣētrakara*.³ The term has been interpreted to mean an officer who demarcated cultivable land into separate fields by actual survey and measurement.⁴ These references to the state officials suggest that land survey was carried out by the State for the purpose of assessing the land revenue.⁵

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1. Rock Edicts, III ; Also see Romila Thapar, *Asoka and the Decline of the Mauryas*, p. 107 ; M.H. Gopal, *Mauryan Public Finance*, p. 47 ; U.N Ghoshal, *Hindu Revenue System*, p. 231.
 2. Strabo, XV, 1.50 ; J.W. McCrindle, *Ancient India as Described by Megasthenes and Arrian*, p. 86. According to Strabo, the Mauryan officers measured the land as was done in Egypt. In Egypt, an exact and minute survey was necessitated by the constant disturbance of boundaries caused by floods in the river Nile. As a consequence, the land had to be remeasured repeatedly. Probably, the same conditions prevailed in the lower Ganga plain. It seems that the state officials under the Mauryas were conscious of the resurvey of lands for revenue purposes as the boundaries were frequently disturbed by the alluvial deposits.
 3. Pāṇini, III, 2.21.
 4. V.S. Agrawala, *India as Known to Pāṇini*, Lucknow, 1953, p. 197.
 5. See Richard Fick, *Social Organisation in North-East India in Buddha's Time* (tr.), S. Maitra, Calcutta, 1920, pp. 119, 149 ; U.N. Ghoshal, *The Agrarian System in Ancient India*, Calcutta, 1973, pp. 33, 41. Also see *Hindu Revenue System*, p. 67. In the *Jātakas*, an officer is described as measuring the field by holding one end of the rope tied to a stick, while the other end is held by the peasant. Seeing a crab-hole at the spot where he wanted to pitch the stick, he reflected that

Although measurement of arable land was known at an early period, yet the detailed survey and measurement of all types of land such as cultivated, uncultivated, wet, fruit gardens, forests, pasture lands, etc., was probably made for the first time under the Mauryas.

In the Maurya period, the records of the boundaries of village lands were maintained by the state officers, i.e., the *gopas* and the *sthānikas*.¹ Under instructions of the *samāharta*, the *gopa* ascertained the total area of the villages within his circle by means of the inspection of village boundaries, the total area of fields by numbering cultivated and uncultivated plots, the upland and lowland plots, the gardens, forests, the homestead land, the sacred sites, the shrines, the embanked reservoirs, the cremation grounds, the pasture lands, roads, etc. On the basis of the data collected, he prepared some registers (*nibandhas*) to keep the record of boundaries of village fields, of uncultivable lands, and of the transfer of land by gifts and sale. He also kept the record of loans advanced (*anugraha*)

if he placed the stick in front of the hole it would cause loss to the king's revenue, and if he placed it behind the hole it would harm the cultivator. See *Jāt.*, II, No. 276, p. 257. In Richard Fick's view, the above reference indicates frequent cheating on the part of the royal surveyors. See *Social Organisation in North-East India*, p. 151.

1. *AS.*, II, 35.

and revenue remissions (*parihāra*). In the same manner, the *sthānika* who was incharge of a larger area prepared similar registers on the basis of the records compiled by various *gopas*. To make sure that the records entered in the registers were correct, spies disguised as householders were sent to the villages by the *samāharta*.¹

As far as the compilation of registers is concerned, a striking parallel may be traced between the Indian and Egyptian practices. During the Maurya period, the village register was prepared, first of all, by the *gopa* after making an elaborate survey of the village lands. It was checked by the *sthānika* and the reports were ultimately sent to the *samāharta* for the preparation of the Grand Register of the villages under specified heads.² The Ptolemics inherited from their predecessors the practice of preparing annual registers based on the survey and measurement of land. The land registers were compiled by the village chiefs under the supervision of the high officials 'the royal scribes'. The village surveys were tabulated by the *toparchs* (officers of the sub-division of the *nome*) and were sent to the *nomarchs* (officers responsible for the cultivation of the crown land). The reports of the whole

1. *Ibid.*

2. U.N. Ghoshal, *A History of Indian Public Life*, Bombay, 1966, p. 279.

nome were finally sent by the *nomarchs* to Alexandria for the preparation of the general revenue roll.¹ As compared with the Egyptian village registers, those of the *gopas* were more thorough since they recorded detailed particulars of village lands and the amount of the government dues and their remissions and also were supplemented by the census of houses and families in the villages. Kauṭilya does not suggest the preparation of such registers annually, perhaps because the boundaries unlike those in Egypt did not tend to change from year to year. Such conditions, however, existed in the lower Ganga plain due to the frequent alluvium and diluvium caused by the river and its tributaries.²

The practice of land survey and measurement continued in the post-Maurya period as well. Under the Gupta rulers, all lands -cultivated and uncultivated - were surveyed and measured by officers referred to in the inscriptions as *sīmākaras*.³ They were also called *sīmāpradātā*.⁴ In some inscriptions, an officer who surveyed and measured lands is called as *pramāṭr*⁵ and settler of boundary disputes as

1. *Ibid.*, p. 278.

2. F.J. Monahan, *The Early History of Bengal*, Varanasi, 1974, p. 162.

3. *CII*, III, No. 46, p. 216 ; *Ind. Ant.*, V, 53 ; *Ep.Ind.*, XV, 130 ; XVII, 53.

4. *Ep.Ind.*, XII, 75.

5. *Ibid.*, XVII, p. 325.

nyāyakaraṇika.¹ Another officer who performed the same functions is referred to as *pustāpāla* in many inscriptions.² These officers carefully marked, measured and recorded the boundaries of different villages and of individual plots and kept the records of all land transactions.

To avoid land disputes arising out of desire for more land in a settled agricultural economy, boundaries of separate fields and of different villages were clearly demarcated. The law-givers divided the boundary marks into two categories, viz., visible and invisible. Manu³ states that boundaries can be marked by *nyagrodhas*, *asvatthas*, *kimsukas śālas*, palmyra palms and trees with milky juice. Moreover, shrubs, bamboos of different kinds, sami-trees, creepers, reeds, the thickets of *kubgaka* were also considered for boundary demarcation. Temples, tanks, wells, cisterns, fountains, *sthalam* (mounds), *setu* (embankments), *chaitya* (heaps of stones) were also preferred as boundary marks. A similar list of visible boundary marks is given by Bṛihaspati⁴ and Nārada.⁵ Referring to invisible marks, Manu states that stones, bones, cow's hair, chaff, ashes,

1. *Ibid.*, XII, p. 79.

2. *Sel.Inscr.*, pp. 292-93, 256-57 ; *Ep.Ind.*, XV, p. 138 ; XX, pp. 61 ff.

3. Manu, VIII, 246-48.

4. *Brih.*, XIX, 7-9.

5. Nārada, XI, 4-5.

potsherds, dry cow-dung, bricks, cinders, pebbles and other things of similar nature which are not corroded by the earth for a long time should be buried beneath the soil where the boundaries meet.¹ To safeguard such invisible marks from being corroded, Brihaspati recommends that these objects should be placed in a vessel before their being buried underneath the soil. He further lays down that the elders should inform their children about these boundary marks who, when they grow old, should inform their own children about them. By the information thus passed from generation to generation, the doubts regarding boundaries may be obviated.² Manu says, "By these signs, by long continued possession, and by constantly flowing channels of water, the king shall ascertain the boundary (of the land) of two disputing parties".³ Land grants which were an important feature of land system implied that all such lands should have been clearly demarcated.

In some inscriptions, the boundary marks are given in minute details.⁴ The boundaries of individual plots were always carefully marked out and measured by the record keepers in the presence of the important men of the

1. Manu, VIII, 249-51.

2. Brih., XIX, 6-7.

3. Manu, VIII, 252.

4. *Sel.Inscr.*, pp. 340-45.

locality.¹ But, in the case of villages, such details were not always required, as their boundaries were more or less fixed by natural and artificial barriers. The Khoh Copper-plate Inscription of *mahārāja* Hastin mentions the gift of the village Vasuntarasandika which was demarcated by trenches (*samantād garttā*) on all sides.²

The boundaries were held very sacred and any violation of them was severely dealt with. The *Mahābhārata* prescribes suitable punishment for any act of transgressing and removal of boundary marks.³ Kauṭilya also enjoins a fine of twenty - four *paṇas* for similar offences.⁴ The law-givers suggest severe punishments in such matters. According to Manu, the person who destroys boundary marks should be punished by mutilation.⁵ We further learn from the *Vishṇu-smṛiti* that anyone destroying the land marks should be compelled to pay a heavy fine and asked to mark the boundary again with similar land marks.⁶ Yājñavalkya also lays down severe penalty for the removal of the boundary marks.⁷

1. *Ep.Ind.*, XX, p. 59 ; XXI, p. 82.

2. *CII.*, III, No. 21, p. 96.

3. *Mbh. Śānti Parva*, pp. 59, 62-63, 72-73.

4. *AS.*, III, 9.

5. Manu, VIII, 291.

6. *Vishṇu*, V, 172.

7. *Yāj.*, II, 158.

In spite of boundary marks and penalties prescribed for violation of them, boundary disputes among villagers were quite common. Manu and other law-givers refer to such disputes as *simāvivada*. The land disputes were resolved by the neighbours, the village elders, the members of the same community and the outsiders having full acquaintance with the place.¹ Yājñavalkya says that in disputes relating to boundaries of land under cultivation, persons residing in surrounding villages, aged men and other competent persons, cowherds, persons cultivating adjoining lands and persons living on forest produce, should solve the disputes on the basis of boundary-marks such as the elevated lands, charcoal, chaff, huge trees, bridges, ant-hills, ditches, bones, and piles of stones, etc.² Similarly, Nārada says, "In all quarrels regarding landed property or boundaries, the decision rests with the neighbours, the inhabitants of the same town or village, the (other) members of the same community, and the senior inhabitants of the area and also with those living on the outskirts of the village and who live by the tillage of fields situated in those parts and with herdsmen, bird-catchers, hunters, etc. These men shall determine the boundary in accordance with the (old) landmarks, (such as) chaff of grain, coal, potshreds,

1. Vas., XVI, 13-15 ; II, 9 ; Manu, VIII, 258, 262-63 ; Brih., XIX, 26-31.

2. Yāj., 153-54, p. 90.

wells, sanctuaries, trees".¹ The witnesses were to determine the boundaries truthfully and those who gave false evidence were punished.² Nārada lays down that the boundaries should not be fixed by one man single-handed, though he may be a reliable person. The task should be entrusted to several persons, because it is an affair of great importance.³ But Bṛihaspati is more liberal in his views regarding the fixing of boundaries. He states that even a single man agreeable to both parties, wearing a red cloak and garland of flowers, putting earth on his forehead, adhering to truth and having kept a fast, might fix the boundaries.⁴ In case the disputes regarding the boundaries could not be settled on the basis of land marks, they were settled by the king himself.⁵

Kauṭilya lays down that before any transaction of land, the accurate boundaries of fields, gardens, lakes and tanks had to be declared in the presence of the elders of the neighbourhood.⁶ It could have been possible only if proper

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1. Nārada, XI, 2-4, pp. 155-56.
 2. Āpast., II, 11. 29 ; Gaut., XIII, 16 ; Baud., 1, 10, 19 ; Manu, VIII, 99, 257 ; Also see Yāj., 11. 153 ff.
 3. Nārada, XI, 9.
 4. Brih., XIX, 33-34.
 5. Aś., III, 9 ; Manu, VIII, 245, 258, 265 ; Yāj., II, 156.
 6. Aś., III, 9.

measurement of a piece of land in question had been made. He specifically mentions a number of linear measures for the purpose.¹ These include *kamsa*, *aṅgula*, *pāda*, *danda*, *rajju*, *aratni*, *dhanus*, *gōruta* and also *bāhu vitasti*, *paridēśa*, *chhāyāpausuṣa*, *yōjana*, etc. Some land measures like *kulyavāpa* and *naḷa* that we come across in the inscriptions belonging to subsequent period may also be traced to Kauṭilya.²

III

During the Maurya period, perhaps some standard measures were used by the royal officers as well as by the peasants. Such measures were manufactured in the state manufactory and were duly stamped with the royal seal.³ According to Strabo, the fourth group of city magistrates regularly checked the measures of all kinds.⁴ Manu enjoins that the measures should be duly marked and re-examined at least twice a year.⁵ The other law-givers prescribe

1. *Ibid.*, II, 20. The Atharvaveda mentions two units of measurements, the *abhisu* (lit. rein), evidently a short measure and *vyama*, the space between the tips of the fingers when the arms are extended - VI, 137.2. In the *Jātakas*, reference is made to *kārisa* measure. In the *Suvannakakketa Jātaka*, reference is made to a farm near Magadhā measuring a thousand *kārisas*. See *Jāt.*, III, No. 389, p. 184 ; IV, No. 484, p. 175.

2. *AS.*, II, 24.

3. *Ibid.*, II, 19.

4. Strabo, XV, 1. 51.

5. Manu, VIII, 403.

punishment for counterfeiting or forging the standard measures.¹ But the possibility of the local land measures used by the peasants cannot be ruled out. Even when the Mughal emperor Akbar tried to introduce a standard land measure, the local customary measures continued to be used by the peasants.²

In the inscriptions of the Gupta period, we come across various land measures, but their precise length is not very clear. The area covered by the same measure differed from place to place. In lower Ganga plain, land was measured according to the length of the hand of the ruling prince or some state functionary.³ In such cases, the land measures were bound to vary from time to time, giving rise to disputes between the peasants and the beneficiaries. There was also a tendency on the part of the peasants to use larger measures to keep more land under their possession and that of using smaller ones on the part of the donees in order to deprive the former of a part of their land.⁴ W.C. Neale rightly points out that a beginner in the study of Indian agrarian matters is confused by the wide variations

1. Vas., XIX, 13 ; Vishnu, V. 122 ; Yaj., II, 243.

2. W.H. Moreland, *From Akbar to Aurangzeb*, London, 1923, p. 337.

3. R.S. Sharma, 'Rajaśāsana : Meaning, Scope and Application', *Proc.IHC.*, Calicut, 1976, pp. 82-83.

4. *Ibid.*, p. 83.

among the measures of land.¹ A critical study of commonly used land measures, however, gives some idea of the area covered by them.

An important and basic unit of linear measurement was *aṅgula*. Its length, as given in the *Arthaśāstra*, was equal to the middle joint of the middle finger of an adult man of at least six feet in height.² Nārada also mentions the same length of *aṅgula* which is approximately 3/4 of an inch.³ The length of *dhanurgraha* and *dhanurmushti* units was equal to four or eight *aṅgulas*, respectively.⁴

Another commonly used land measure was *rajju*. According to Kauṭilya, it is equal to ten *daṇḍas*, each *daṇḍa* having a length of ninety-six *aṅgulas*.⁵ It means, the length of the rope used for cadastral survey was equal to twenty yards.⁶ The length of two *rajjus* was equal to one *paridēśa* (square measure) or twenty *daṇḍas*.⁷ According to

1. W.C. Neale, 'Land is to Rule', *Land Control and Social Structure in Indian History* (ed.), R.E. Frykenberg, New Delhi, 1979, p. 5.

2. *AS'*, II, 20.

3. Nārada, I, 285, 286, 287.

4. *AS'*, II, 20.

5. *Ibid.* ; Cf. K. Rangachar, *IHQ*, vol. III, 1927, p. 818. He considers one *rajju* equal to eight *daṇḍas*.

6. One *aṅgula* being equal to 3/4 inches, the length of one *rajju* is equal to $96 \times 10 \times \frac{3}{4} \times \frac{1}{12} \times \frac{1}{3} = 20$ Yards.

7. *AS'*, II, 20.

Shamasāstry, the length of one rajju was equal to one hundred and twenty feet or forty yards.¹

The goruta or krosa measure, according to Kauṭilya, was equal to one thousand dhanus or one-fourth of the length of a yojana.² Bhattasvāmin, the commentator, takes goruta and krośā (goratum-krośam) as equal to two thousand dhanus or one-fourth of a yojana.³ In the Arthaśāstra, the length of a yojana is given as four thousand dhanus, one dhanus being equal to ninety-six aṅgulas.⁴ It means, one yojana was

1. See Shāmasāstry (tr.), AS., p. 118 :

1 aṅgula = 3/4 inches
1 daṇḍa = 192 aṅgulas
1 rajju = 10 daṇḍa

or = $192 \times \frac{3}{4} \times 10 \times \frac{1}{12} = 120$ feet or 40 yards.

The same length is given by M.H. Gopal :

1 daṇḍa = 192 aṅgulas
10 daṇḍa = 1 rajju
2 rajju = 1 pardēśa (square measure)
3 rajju = 1 nivartana (square measure).

See *Mauryan Public Finance*, p. 47.

But R. K. Mookerjee calculated its length to 135 feet :

1 rajju = 10 daṇḍas = 40 hands
1 hand = 54 aṅgulas.

Therefore, 1 rajju = $54 \times 40 \times \frac{3}{4} \times \frac{1}{12} = 135$ feet.

See *Chandragupta Maurya and His Times*, Madras, 1943, p. 124.

2. AS., II, 20.

3. On AS., II, 20. Rhys Davids and R.C. Childers take gavuta as a linear measure equal to a quarter of a yojana. See *Pali-English Dictionary*, London, 1959, p. 79 ; *Dictionary of Pali Language*, p. 145.

4. AS., II, 20.

equal to approximately four-and-a-half miles.¹ From Bhattasvāmin's interpretation it will be double the distance, i.e., approximately nine miles.² According to Barnett, two types of *yojana* were used, viz., the long *yojana* being equal to nine miles and the short one of exactly its half length'.³ F.J. Fleet refers to these measures as *General yojana* and *Magadha yojana*, respectively.⁴ On the basis of Yuan Chwang's observations, Fleet points out a third type of *yojana* having a length of about twelve miles.⁵ But normally, the length of a *yojana* varied four-and-a-half miles to nine miles.⁶ *Yojana* as land measure was perhaps used for measuring long distances rather than for calculating the area of landholdings. As the *yojana* was equal to four *krosas* of either 1,000 or 2,000 *dhanus*, it means *krosa* or *goruta* was also of two types,

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1. . An *añgula* being equal to 3/4 inch, the equation will be : $96 \times \frac{3}{4} \times 4000 \times \frac{1}{12} \times \frac{1}{3} \times \frac{1}{1760} = 4.55$ miles approximately.
 2. Rhys Davids takes the distance of *yojana* as equal to about 7 miles. See *Pali-English Dictionary*, p. 191 ; whereas to Childers, it is twelve miles. See *Dictionary of Pali Language*, p. 604.
 3. L.D. Barnett, *Antiquities of India*, London, 1913, p. 218.
 4. *JRAS*, 1906, p. 10-11.
 5. See Rhys Davids & S.W. Bushell (ed.) *On Yuan Chwang's Travels in India*, London, 1904-1905.
 6. *Sel.Inscr.*, p. 68 fn. 1. According to D.C. Sircar, one *yojana* was considered a day's march of an army in ancient India. Also see D.D. Kosambi, *An Introduction to the Study of History*, p. 191.

i.e., 1.14 and 2.28 miles, respectively.¹ In the *Lalitavistara*, the *Magadha krośa* is given as equal to 4,000 *hastas* or 1,000 *dhanus*, i.e., 1.14 miles.² Strabo states that 'they (agronomoi) construct roads and set up pillars at every ten stadia'.³ It seems that these pillars were erected at a distance of one smaller *krośa* from each other.⁴

In the *Śatapatha Brāhmaṇa*, the term *bhūmi* is referred to but its precise nature as land measure is not clear.⁵ It is not mentioned by Kauṭilya in the list of land measures given by him. Probably, it corresponded to the *pāda*, *śala* or *śama* of the *Arthaśāstra* which is equal to fourteen *aṅgulas*.⁶ The term also occurs in some of the Gupta inscriptions. In the Chammak Copper-plate Inscription of the Vākāṭaka ruler Pravarasena II, it has been mentioned how the village Charmāṅka measured eight-thousand *bhūmis* according to the royal measure.⁷ But the precise dimensions

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1. $1000 \times 96 \times \frac{3}{4} \times \frac{1}{12} \times \frac{1}{3} \times \frac{1}{1760} = 1.14$ miles.
 2. See *Lalitavistara* (tr.), R.L. Mitra (*Memoirs of the Early Life of Śākya Buddha*), Calcutta, 1877.
 3. Strabo, XV, 1.50.
 4. According to Rhys Davids, 10 stadia is equal to 2022 $\frac{1}{2}$ yards. See *Buddhist India*, Calcutta, 1959, p. 265.
 5. *Śat.Brāh.*, XIII, 5.4. 24 ; 6.2.18. Also see Macdonell and Keith, *Vedic Index*, Vol. II, p. 108.
 6. *AS.*, II, 20.
 7. *CII*, III, No. 55, p. 241.

of the royal measure are not stated. In the same inscription, it is referred to as *rāja-mānika-bhūmi*¹ which indicates either a plot of land or the standard land measure. Fleet, however, is of the opinion that it was certainly a land measure the length of which is not known.²

From the inscriptions of the Gupta period, it seems that *hasta* as land measure was widely used in the lower Ganga plain. Three Copper-plate inscriptions of Dharmaditya and Gopachandra mention that the land was measured by 'hasta' of virtuous Śivachandra.³ Similar reference is made in the Pāharpur Copper-plate Inscription to the 'hasta' of Darvikarma.⁴ But the precise area covered by this land measure is not clear. It does not seem practicable that the forearm of a particular person was used as standard land measure. Śivachandra and Darvikarma seem to be the keepers of the standard land measures and responsible for all official land measurement in the area.⁵ In the Nandapur Copper-plate Inscription (488 A.D.), the term 'Darvikarma-hastena' is used.⁶ It might have been the technical

1. *Ibid.*, pp. 236 ff. ; *Ind.Ant.*, vol. XII, pp. 239 ff.

2. *Ibid.*, p. 241, fn. 9.

3. *Ind.Ant.*, vol. XXXIX, pp. 195 ff. ; *Sel.Inscr.*, pp. 363-72.

4. *Ep.Ind.*, XXI, p. 82 ; *Sel.Inscr.*, pp. 356 ff.

5. S.K. Maity, *Economic Life of Northern India*, p. 36.

6. *Ep.Ind.*, XXIII, pp. 52 ff. ; *Sel.Inscr.*, pp. 382-83.

designation of a person who measured the land.¹ In the *Arthasāstra*, we come across the term *hasta*- a land measure of three different types.² The first was the *prajāpatya hasta*, equal to one *aratni*³ or two *vitastis* or twenty-four *āṅgulas*, i.e., eighteen inches, and was probably used for measuring cultivable land.⁴ The second type of *hasta* was equal to twenty-four *āṅgulas* plus one *dhanurgraha*. One *dhanurgraha* is equal to four *āṅgulas*. That means, the length of the second type of *hasta* was equal to twenty-eight *āṅgulas* or twenty-one inches, and was used for measuring pasture lands. The length of the third type of *hasta* was equal to fifty-four *āṅgulas*, i.e., forty-and-a-half inches and was used for measuring forest lands. Thus, we have three types of *hastas* having the length of twenty-four, twenty-eight and fifty-four *āṅgulas*, respectively. The *Ilahi Gaz* of the Mughal times was also of three types and was used for different measurements.⁵ There is a

1. H.Chakravorti, *India As Revealed in the Inscriptions of the Gupta Period*, p. 58.

2. *AS.*, II, 20.

3. *Aratni* seems to be the same as '*ratna*' of the Buddhist literature. However, its length was equal to 12 *āṅgulas*. See Rhys Davids, *Pali-English Dictionary*, p. 21.

4. Kielhorn renders *hasta* as cubit. See *Ep.Ind.*, VIII, p. 45.

5. Abul Fazl, *Ain-i-Akbari*, (tr.), Blochman and Jarrett, Vol. II, pp. 58-59. The long *gaz* was used for measuring cultivated lands, the second was employed to measure buildings, etc. and the third short *gaz* was used for measuring cloth, chairs, carts and so forth.

possibility that the *hasta* as land measure in its literal sense may have been used by the peasants for local measurements.¹

The *dhanus* or *daṇḍa* was equal to 4 *hasta* or 96 *aṅgulas*, i.e., approximately six feet.² Bühler also suggests the same length.³ In the Buddhist sources,⁴ we come across a term *yaṭṭhi* or *yāsti* in the sense of rod, the length of which was equal to seven *hastas*.⁵ The *daṇḍa* used for measuring the lands granted to the brāhmaṇas was of 192 *aṅgulas*, i.e., double the usual length of the *daṇḍa*.⁶ Thus, there were three measures of *daṇḍa*, equal to the length of four, seven and eight *hastas*, respectively. The smaller *daṇḍa* measure was probably used in survey and measurement of land for revenue purposes whereas the other two *daṇḍas* were used in measuring lands which were granted to brāhmaṇas and other beneficiaries. According to Nārada, the length of *dhanus* varied from 105 to 107 *aṅgulas*.⁷ In S.K. Maity's opinion, the *daṇḍa* and *dhanus* were the same as

1. N.N. Kher, 'Land Measurement in Ancient India', *Proc.IHC*, Allahabad, 1965, p. 121.

2. *AS.*, II, 20.

3. *Ep.Ind.*, II, p. 286 fn.

4. *Jāt.*, IV, 21 ; *Mahāvastu*, III, 441 ff.

5. See *Dictionary of Pali Language*, pp. 402, 599.

6. *AS.*, II, 30.

7. Nārada, I, 307.

the *naḷa* of the Gupta inscriptions, though this is by no means certain.¹

In the Buddhist and Brāhmanical literature, we come across the term *vitasti* or *vidaṭṭhi*.² Kauṭilya gives its length as equal to 12 *āṅgulas* or one *chhāyāpaurusha*.³ R.C. Childers⁴ and Rhys Davids⁵ also take it as of the same length. *Vatasti* covered the length between the thumb and the little finger of a stretched hand or the distance between the wrist and the tip of the middle finger, which is about 12 *angulas* or 9 inches. Patañjali mentions a linear measure called *prādeśa* having the same length as *vitasti*.⁶ Baudhāyana, the law-giver, gives its length as equal to 12 *āṅgulas*.⁷ *Prādeśa* is not referred to in the *Arthaśāstra*. Probably, *prādeśa*, *vitasti* and *chhāyāpaurusha* were measures of equal length, i.e., of 12 *āṅgulas* each. Another unit of linear measure was *kishku* or *kamsa*. Its length was equal to two *vitastis* plus one *dhanurmushti*, which means 32 *āṅgulas*.⁸

1. S.K. Maity, *Economic Life of Northern India*, p. 36.
2. *Jāt.*, I, 337 ; III, 318 ; VI, 341 ; *Milinda Pañho*, 85 ; *Dhammapada Commentary*, III, 172 ; IV, 220 ; *Vinaya*, III, 149 ; IV, 279 ; *Mahābhāṣya*, V, 2.37, p. 378.
3. *AS.*, II, 20.
4. See *Dictionary of Pali Language*, p. 568.
5. See *Pali-English Dictionary*, p. 79.
6. *Mahābhāṣya*, V, 2.37, p. 378.
7. Cited L.D. Barnett, *Antiquities of India*, p. 218.
8. *AS.*, II, 20.

Patañjali refers to a measure called *akśa*.¹ According to B.N. Puri, it was equal to 104 *aṅgulas*² and, as such, it covered the area a little more than the *dhanus* or *daṇḍa*.

Another land measure *bāhu* was equal to 3 *rajjus* plus 2 *daṇḍas*.³ In the *Arthaśāstra* are also mentioned *pāda*, *śama*, *śala*, *pariraya* as units of measurements having length of 14 *aṅgulas* each, i.e., approximately 10 inches.⁴ Etymologically, *pāda* means a foot and as such the area covered by the unit is the distance from the outer side of the heel to the tip of the first digit of the toe. But as this distance can vary from person to person, the length of *pāda* may be between 9 to 12 inches. It seems that the length of 12 *aṅgulas* for *pāda* was considered the standard length for measurement.

In the inscriptions belonging to the western provinces of the Gupta empire, we come across a unit of land measurement called *pādāvarta*. Its origin may be traced to the *pāda* mentioned by Kauṭilya. Fleet suggests that 100 *pādāvarta* and 10 *pādāvarta* of land mentioned in the inscriptions implied an area measuring an equal number of

1. *Mahābhāṣya*, I, 2.45, p. 220.

2. B.N. Puri, *India in the Time of Patañjali*, p. 138.

3. Though apparently, *bahu* means an arm, but as given by Kauṭilya, its length was : $32 \times 96 \times \frac{3}{4} \times \frac{1}{12} \times \frac{1}{3} = 64$ yards, where 1 *rajju* is equal to 10 *daṇḍas* and one *daṇḍa* being equal to 96 *aṅgulas*. See *AS.*, II, 20.

4. *Ibid.*

pādas in each way.¹ It would mean 10 pādāvarta were equal to eight feet and four inches, an area hardly worth granting to a worthy recipient. It shows that the pādāvarta was certainly larger than a foot. If we interpret it etymologically 'as a turning of foot', it would be equal to approximately nine square feet.²

In the inscriptions, we often come across a unit of measurement called *naḷa*, the standard rod of 8 x 9 reeds (*aṣṭaka-navaka-naḷābhyām-apaviñchchhya*, i.e., having been measured by reed of eight and nine).³ In the list of linear measures given by Kauṭilya, we find the term *nālika* which is equal to four *aratnis*.⁴ As one *artani* was equal to two *vitastis* or 24 *aṅgulas*, one *nālika* was equal to 96 *aṅgulas* or 72 inches. The meaning of 8 x 9 reeds is not clear, but if we suppose that the area covered by such reeds was in inches, then the length of *nālika* mentioned by Kauṭilya and the *naḷa* of the inscriptions would be identical. There is every probability that *naḷa* was an abbreviated form of the *nālika* because a number of linear measures mentioned by Kauṭilya like *hasta*, *pāda*, *nivartana*,

1. CIL, III, No. 38, p. 170.

2. S.K. Maity, *Economic Life of Northern India*, p. 42.

3. *Ep. Ind.*, XV, p. 136 ; XVII, p. 347 ; XXI, p. 82 ; XXIII, p. 56.

4. AS., II, 20.

etc., continued to be in use in later periods. The *naḷa* as land measure referred to in the Dāmodarpur Copper-plate Inscription indicates an area measuring 8 x 9 reeds.¹ A similar reference is found in the Nandapur Copper-plate Inscription dated 488-89 A.D.² The term *naḷa* is also referred to in the *Pañchatantra* as a reed.³

The precise meaning of the expression '*aṣṭaka-navakanalābhyām-apaviñchchhya*' is not very clear. Dikshit, on the basis of the practice in Bengal of measuring land by *naḷas* or reeds of a particular length of cubits, suggests that the terms *aṣṭaka* and *navaka* compounded with the term *naḷa* imply rods of eight and nine cubits, respectively.⁴ A similar view is expressed by D.C. Sircar.⁵ Pargiter, on the other hand, suggests that the length of *naḷa* varied from five cubits to sixteen cubits, and the expression '*aṣṭaka-navakanalābhyām*' denotes the land measured by eight reeds in breadth and nine reeds in length.⁶ R.G. Basak states that the expression means a rectangular plot of land, eight *naḷas*

1. *Pratyavēkṣāṣṭaka-navaknavakanaḷa bhyamavinchchhya*. See *Ep.Ind.*, XV, No. 7, p. 137.

2. *Ibid.*, XXIII, No. 8, p. 55.

3. *Pañchatantra*, I, p. 96.

4. *Ep.Ind.*, XX, p. 63, fn. 2.

5. *Sel.Inscr.*, p. 334, fn. 2.

6. *Ind.Ant.*, vol. XXXIX, 1910, p. 215.

in breadth and nine *naḷas* in length, measured by the same rod.¹ According to B.C. Sen, "two *naḷas* were used for the measurement of length and breadth, respectively, one measuring nine cubits and the other eight. The element 'aṣṭaka' as well as 'navaka' in the compound can well be taken as representing the size of the *naḷa* employed in each case, and the custom of measuring by *hasta* standard having been shown in some inscriptions to have been current, it is evident that, whether the compound is preceded by *hasta* or not, the same practice must have been followed throughout. Taking the average measurement of the *hasta* to be 19 inches, the unit represented by the *aṣṭaka-navaka-naḷas* will correspond to oblong area of $19 \times 8 \times 19 \times 9 = 25,992$ square inches or $180 \frac{1}{2}$ square feet".² It is not a satisfactory interpretation of the expression. To employ two rods, one for measuring breadth and the other for length, is quite a confusing procedure. The practice of measuring land by rods is still prevalent in many villages but normally, only one rod is used for measurement. Moreover, measuring land by rectangular units is most inconvenient, especially when a large area is to be measured.

1. See *Asutosh Mukherjee Silver Jubilee Volume*, III, pt. 2, p. 494.

2. *Sel.Inscr.*, p. 325.

In the literary and epigraphic sources, *nivartana*, as a land measure, is frequently mentioned.¹ But the area covered by it is a matter of controversy among the scholars. Kautilya gives the following relationship of *nivartana* with other linear measures² :

192 <i>aṅgulas</i>	=	1 <i>daṇḍa</i>
10 <i>daṇḍa</i>	=	1 <i>rajju</i>
3 <i>rajju</i>	=	1 <i>nivartana</i>

Taking roughly an *aṅgula* as equal to 3/4 inch, one *nivartana* comes to be equal to 2.975 acres, i.e., about 3 acres. But P.V. Kane suggests that *nivartana* was probably so called because it was used to denote a plot of land that could be ploughed in a day by eight or six oxen.³ Another scholar, assuming one *rajju* as equal to 20 yards has calculated the area covered by one *nivartana* as 3600 yards which is less than one acre.⁴ Bṛihaspati holds that one *daṇḍa* is equal to 10 cubits and so *nivartana* is roughly equal to about 5 acres.⁵ Vijñāneshvara while commenting on Yājñavalkya quotes Bṛihaspati, '*sapta-hastena daṇḍena-triṃśaddaṇḍam nivartanam*', to show that one *nivartana* is equal to 210 x

1. Baud., III, 2.2 ; LL. Nos. 1125, 1126, 1200, 1327.
2. AS., II, 20.
3. P.V. Kane, *History of Dharmasastra*, Vol. III, p. 145 fn. He has based his opinion on the basis of the root *Vrt* with prefix *ni*.
4. N.N. Kher, *Agrarian and Fiscal Economy*, Delhi, 1973, p. 57.
5. Brih., V. 8.

210 cubits, i.e., about 2 1/4 acres.¹ Buhler takes it to be a measure of 4000 square *hastas*, which is equivalent to a modern *bighā*.² In Pran Nath's opinion, the *brahmadeya nivartana* was an area of land granted to a *brāhmaṇa* and it was equal to an English acre. It appears probable, he says, that the *nivartana* was used in the sense of *vritti* or 'allowance' or 'livelihood' ; so an area of land sufficient to support one man from its produce was called *nivartana*.³ It seems that the area of one *nivartana* varied from one acre to five acres. As it was not a standard land measure, the difference may be due to local variations. Another such measure *vaṭika* or *vali* was equal to five *vartanakas* each *vartanakas* being of 128 *dhanus* or *daṇḍas*.⁴

1. On *Yāj.*, 1. 210.

2. *Ep.Ind.*, XIV, 111 fn.

3. Pran Nath, *A Study in the Economic Condition of Ancient India*, p. 83. A.S. Altekar holds that one *nivartana* covered the area of land equal to five acres. See *Indian Culture*, vol. II, p. 429. In R.S. Sharma's opinion it was equal to one-and-a-half acre. See *JBR*, vol. 44, 1958, p. 227 ; *Perspectives in Social and Economic History of Early India*, p. 139-40. According to Monier Williams, one *nivartana* was equal to 20 rods or 200 cubits. - See *Sanskrit-English Dictionary*, p. 560. That one *nivartana* was equal to 20 rods is traced to a commentary on the *Mahābhārata*. See *Ep.Ind.*, XI, p. 280. It is sometimes assumed that the *nivartana* was the same as *nētana* land measure used in Bihar as late as the 19th century. The *nētana* was equal to nine *bighās* and one *bighā* was equal to 2670 yards. Thus, *nētana* was equal to 24,030 square yards or 4.964 acres. See *Ep.Ind.*, X, pp. 102-106 ; XI, p. 280 fn. Also see XXVIII, pp. 235 ff. for further discussion on the *nivartana* measure.

4. *Ep.Ind.*, XV, p. 55.

In the land charters belonging to the lower Ganga plain, we come across land measures like *ādhavāpa*, *dronāvāpa*, and *kulyavāpa*.¹ In D.C. Sircar's view, they indicate the area of land that was required to sow seed-grains weighing one *ādhaka*, *drona* and *kulya*, respectively.² He gives the mutual relationship of these measures of weight as follows :

1 <i>ādhaka</i>	=	256 handfuls or <i>muṣṭis</i> of grain.
1 <i>drona</i>	=	4 <i>ādhakas</i>
1 <i>kulya</i>	=	8 <i>dronas</i> ³

On the basis of Kālidāsa's *Raghuvamśa* which refers to the practice of transplanting the seedlings,⁴ D.C. Sircar assumes that the area covered by *kulyavāpa* was equal to the land required to transplant the seedlings produced from one *kulya* of seed which, according to his calculation, comes to 128 to 160 *bighās* of land.⁵

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1. *Ibid.*, XV, p. 113 ; XX, pp. 59 ff ; XXI, p. 78.
 2. S.K. Maity, *Economic Life of Northern India*, p. 56. Kauṭilya mentions the word *kulyavāpa* with reference to the areas where water channels were used for irrigation (*haimanyānām ca kulyavāpanām ca kālataḥ*). See *AS.*, II, 24.
 3. Kullūka, the commentator, uses the same equation while explaining the term '*dhānyadrona*' in *Manusmṛiti* - On Manu, VII, 126. Monier Williams also holds that one *kulya* of seed contained 8 *dronas* or bucketfulls.
 4. Kālidāsa, *Raghuvamśa*, IV, 36-37. Kālidāsa, while describing Raghu's conquest of the *Vaṅgas*, used the simile that Raghu uprooted and replanted them (*utkhata pratirōpita*) like rice plants.
 5. D.C. Sircar, *Bhārata Kaumudi*, Vol. II, pp. 943 ff.

If we take into consideration the literal meaning of its root *vāp* 'to sow', it would also suggest that one *kulyavāpa* was equal to the land required to sow seeds weighing one *kulya*.¹ According to Pāṇini, the area of a field was determined by the quantity of seeds required for its sowing, viz., *tasya-vāpah*.² If one *prāsthā* measure of seed was sown in a field it was called *prāsthika*, and likewise, if one *droṇa* or one *khaṛi* measure of seed were sown in a field it was called *droṇika* or *khaṛika*, respectively.³ Similarly, if a field required one *kulya* of seed, it could well have been called a *kulyavāpah*. R.G. Basak, on the basis of the reference in Pāṇini -*upyate 'smin iti vāpah kṣētram*,⁴ suggests that *vāpa* may mean the place where seeds are grown, viz., a field, and *kulyavāpa* the area of land on which one *kulya* of seed can be grown.⁵ S.K. Maity has also expressed the same view that during the Gupta period, land measurement was based on the area of seed sown

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1. D.C. Sircar, *Indian Epigraphy*, p. 414. The land required to sow one *kulya* of seeds is approximately equal to 38 to 48 *bighās*. According to U.N. Ghoshal, *kulyavāpa* is related to the seed capacities of fields. See *Agrarian System in Ancient India*, p. 52.
 2. Pāṇini, V, 1. 45.
 3. *Ibid.*, II, 3. 87 ; V, 2.73.
 4. *Ibid.*, V, 1. 44.
 5. *Ep.Ind.*, XV, p. 132 fn. 2.

and not on the area of seedlings transplanted.¹ As both the practices, i.e., of sowing seeds directly and transplanting of seedlings were prevalent, nothing could be said with certainty. While explaining the terms *aṣṭaka-navakanalābhyam* mentioned in the Fāridpur Copper-plate, Pargiter states that one *kulyavāpa* of land covered the area nine rods in length and eight rods in breadth, and, on the basis of his own surmise that *naḷa* is equal to sixteen cubits or nineteen inches, he concludes that one *kulyavāpa* was equal to slightly more than an acre and a *kulya* of seed was sufficient for that much area.² Pargiter's conclusion is based on several conjectures and cannot be accepted as such. If we follow the explanation given by him, then the expression *ṣaṭka-nalai-r-apaviñchchhya* used in connection with the measurement of a *kulyavāpa* of land in the Pāharpur Copper-plate Inscription would mean an area only of six by six rods, i.e., equal to slightly more than half of an acre.

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1. S.K. Maity, *Economic Life of Northern India*, p. 40. In an Inscription belonging to the Gupta period, it is mentioned that cultivable lands were sold in Bengal at the rate of four *dināras* for an acre that could be sown with a *kulya* of seed. See *Ind.Ant.*, vol. XXXIX, pp. 197, 202, 205.
 2. *Ind.Ant.*, vol. XXXIX, pp. 215-216 ; *Ep.Ind.*, XV, pp. 130-143. In the land charters of Gurjara rulers of Gujarat, the area of the gifted fields is mentioned according to their seed capacity. See *Ind.Ant.*, vol. XIII, p. 28. A.S. Altekar, probably following Pargiter, also states that one *kulyavāpa* was slightly larger than one acre. See *The Vākātāka - Gupta Age*, Benaras, 1954, p. 332.

Moreover, the expression *aṣṭaka-navaka-nalābhyam apaviñchchya* occurs along with other land measures like *pravarttavāpa*, *dronavāpa* and *ādhavapa*, and as such *kulyavāpa* alone cannot be explained as equal to 9 x 8 *naḷas*.¹ Again, the Dāmodarpur Copper-plate records that one *kulyvāpas* of land was purchased to the north of Pañchakulyavāpaka which was apparently a settlement comprising five *kulyavāpa* of land.² If we take into consideration Pargiter's calculations that one *kulyavāpa* was a little more than an acre, it would mean that the area of above-mentioned settlement, including its arable lands, was equal to about five acres which seems highly improbable.

According to Kullūka Bhaṭṭa, *kulya* or *kula* is as much of land as can be cultivated by two ploughs.³ In Pran Nath's opinion, *kulyavāpa* was perhaps equal to 'one plough' of land, i.e., an area of about five or six acres which was thought sufficient for one *kula*.⁴ As each family kept their seeds separately, it seems that, gradually, *kulya* came to mean the seed sufficient for one 'plough' of land. The introduction of the land measure called *bighā* together with

1. *Ep.Ind.*, XX, p. 62.

2. *Ibid.*, XV, p. 143.

3. On Manu, VII, 119.

4. Pran Nath, *A Study in the Economic Condition of Ancient India*, pp. 84-85. According to R.S. Sharma, one *kula* of land was equal to one hundred acres. See *Aspects of Political Ideas and Institutions in Ancient India*, p. 231.

its sub-divisions during the medieval times gradually replaced the land measures earlier used in the lower Ganga plain.¹ But in many parts of Bengal, the *kulavāy*, *doṇ* and *āriha* land measures remained in use till recent times.² As the area covered by these measures differed from locality to locality, their precise relationship with *kulyavāpa*, *drōṇavāpa* and *ādhavāpa* cannot be established with certainty. The *drōṇavāpa* was another unit of measurement mentioned in the inscriptions. In the Pāharpur Copper-plate Inscription dated 479-80 A.D., it is stated that the *kṣetra* measuring four and two-and-a-half *drōṇavāpas* of land and *vastu* (homestead land) measuring one and a half *drōṇavāpas* were gifted.³ In the same inscription, reference is made to *ādhavapa* land measure.⁴

During the Gupta period, a land measure called *pātaka* was also used in Bengal region. In the Gunaigarh Inscription of Vainyagupta dated 507-08 A.D., five plots of -----

1. D.C. Sircar, *Bhārata Kaumudi*, Vol. II, pp. 943 ff.
2. S.K. Maity, *Economic Life of Northern India*, pp. 38-39.
3. *Ep.Ind.*, XX, p. 63. If one *kulya* was equal to eight *drōṇas* and if, according to Pargiter's calculation, the area required for one *kulya* of seed to be sown was a little larger than an acre, it would mean that one *drōṇa* contained seeds adequate to cultivate area of land equal to one-eighth of an acre, i.e., 605 sq. yards. (one acre being equal to 4840 yards). As such the plots mentioned in the Pāharpur Inscription measured 2420, 1512.5 and 907.5 yards, respectively.
4. *Ibid.*, XX, p. 62. (*drōṇavāpa* - *dvayam* - *ādhavapa* - *dvayam* - *ādhikam*)

land measuring 11 *pāṭakas* are referred to as having been donated in the same village.¹ The separate area of land of each plot is mentioned in five copper-plates as under :

Plate	1	7 <i>pāṭakas</i> and 9 <i>drōṇavāpas</i>
Plate	2	28 <i>drōṇavāpas</i>
Plate	3	23 <i>drōṇavāpas</i>
Plate	4	30 <i>drōṇavāpas</i>
Plate	5	1 3/4 <i>pāṭaka</i>

The total area, therefore, is equal to 8 3/4 *pāṭakas* and 90 *drōṇavāpas*. But in the grant, the total area donated is referred to as 11 *pāṭakas* of land. It means, 90 *drōṇavāpas* of land covered the area equal to 2 1/4 *pāṭaka*. Thus, 1 *pāṭaka* was equal to $90 \times \frac{4}{9} = 40$ *drōṇavāpas* or 5 *kulyavāpas*. If we take into consideration D.C. Sircar's estimate of the area covered by one *kulyavāpa* on the basis of the plantation of seedlings, the area covered by one *pāṭaka* would be equal to 640 to 800 *bighās*. It would mean that the land donated in a single village, as referred to in the Gunaigarh Inscription, was between 7040 and 8800 *bighās*, which is highly inconceivable. On the other hand, if we take Sircar's second view that the area covered by *kulyavāpa* was equal to the area in which one *kulya* of seed is sown, then *pāṭaka* would be equal to 190 to 240 *bighās* and as such

1. *IHQ.*, vol. VI, 1930, pp. 45-60.

land donated would come to 2090 to 2640 *bighās*, which again is a very large area of land. Thus, if the area of *kulyavāpa* is considered on the basis of the seed sown, then we arrive at the following equation :

1	<i>pāṭaka</i>	=	192 to 240 <i>bighās</i>
2	<i>kulyavāpa</i>	=	38.4 - 48 <i>bighās</i>
3	<i>drōṇavāpa</i>	=	4.8 - 6 <i>bighās</i>
4	<i>ādhavapa</i>	=	1.2 - 1.5 <i>bighās</i>

In the Fāridpur Inscription of Dharmāditya dated 567 A.D., we come across another land measure, the *pravarttavāpa*.¹ The inscription refers to the purchase of waste land measured by *kulyavāpa* and *pravarttavāpa*, for which only two *dīnāras* were paid. Pargiter suggests that as the normal price of land in Bengal was four *dīnāras* a *kulyavāpa*, the area covered by one *pravarttavāpa* must have been less than half of a *kulyavāpa*.² However, while making this calculation, Pargiter seems to have ignored the fact that the land referred to was waste land which ought to be cheaper in comparison with cultivable land.

In the literary and epigraphic sources, the term *hala* is used in the sense of a land measure. Manu refers to

1. *Ind.Ant.*, vol. XXXIX, 1910, p. 201.

2. *Ibid.*, p. 202 fn. 17.

various types of ploughs.¹ Kullūka, while commenting on Manu, alludes to the expression 'śāḍgavam madhyamaṃ halam', etc.² From Kullūka's explanations, we learn that the plough drawn by eight bullocks was called the lawful plough, the *dharma-hala*. Similarly, the ploughs drawn by six, four, and three bullocks were called the *madhyama-hala*, *gr̥hasta-hala*, *brahma-hala*, respectively.³ Pāṇini also refers to the *halya* measure.⁴ He explained this type of land measure as *halasya karsāḥ*, i.e., an area of land cultivated by one plough, and the multiples of the one *halya* land were denoted as *dvi-halya* and *tri-halya*. If *halya* measure was used in the actual measurement of land, it must have been a large yardstick known as the *parama-halya* to which he also refers.⁵ The exact area that could be cultivated with one plough is difficult to ascertain.⁶ In Pran Nath's opinion, one 'plough' of land was thought sufficient to provide food and provisions for one *kula* (family), and one *hala* covered an

1. Manu, VII, 119.

2. On Manu, VII, 119.

3. *Ibid.*

4. Pāṇini, IV, 4. 97.

5. *Ibid.*, I ; 1. 72, 186.

6. It has been observed that one plough cultivates five acres in Dinajpur and six acres in Orissa. See B.P. Majumdar, 'Measurement of Land in Northern India', *Proc.IHC.*, Aligarh, 1960, p. 9.

area about five or six acres.¹ Brihaspati lays down that a *hala* should be eight *aṅgulas* long and four *aṅgulas* broad.² But according to these dimensions, it would mean a very small land measure being approximately six inches in length and three inches in breadth. From the Prākṛit inscriptions found at Nāgārjunakoṇḍa belonging to the 3rd and 4th centuries A.D., we learn that 'hundreds of thousands of ploughs of land' were granted.³ This apparently shows that a small type of plough measure was used to denote the area covered by such grants. In some other inscriptions, we come across another term *bhikku-hala* or *bhiksuhala*, but its meaning is not clear.⁴ In an inscription belonging to Harsha reference is made to *vṛiddhahala*, which probably denoted a larger area than an ordinary *hala*.⁵ During Harshavardhana's time, *hala* seems to be a popular land measure. Bāṇa has recorded that Harsha 'bestowed upon the

 1. Pran Nath, *A Study in the Economic Condition of Ancient India*, p. 83. According to Pran Nath, even in the recent past, that much of land was considered sufficient for a single family in the middle Ganga plain. He cites C.J. Stevenson - Moore who, while referring to Gaya district writes, "Taking the cost of living of a family in this tract at Rs. 95, six acres, apart from any supplementary sources of income, can support a family in complete comfort".

2. Brih., X, 28, p. 318.

3. *Ep.Ind.*, XX, p. 20 ; XXI, p. 62.

4. *Ibid.*, VII, p. 64 ; VII, 65 ; *Sel.Inscr.*, p. 208 fn. 4.

5. *Ibid.*, II, p. 125.

brāhmaṇas a hundred villages delimited by a thousand ploughs.¹ According to D. Devahuti, *hala* covered the area that could be turned over with a plough pulled by a given number of oxen, and the land tax was fixed on each plough measure.² *Bāṇa* refers to another land unit called *sira*.³ In Devahuti's view, *sira* of Harsha's time was equal to the *kulya-vāpa* of Gupta days.⁴ The custom of measuring land by means of *hala* measure continued even after Harshavardhana, for, in an inscription dated 970 A.D., it is mentioned how various types of land were measured by 'a big plough of land'.⁵

The foregoing discussion leads us to the conclusion that the State was alive to the importance of measurement and classification of land for the purpose of revenue assessment. Land records were properly maintained by the royal officials. While different land measures were in

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1. *Bāṇa, Harshacharita* (tr.), Thomas and Cowell, London, 1877, p. 199.
 2. D. Devahuti, *Harsha, A Political Study*, Oxford, 1970, p. 203. According to Y.B. Singh, as a kind of *visṭi* the peasants were required to bring their plough teams to till the crown land for certain days, and they were allotted a fixed area of land for such tillage. The term *hali* may have gradually come to signify a fixed measure of land from this practice. See 'Hālika-kara : Crystallization of a Practice into a Tax', *Essays in Ancient Indian Economic History* (ed.), Brajadulal Chattopadhyaya, New Delhi, 1987, p. 90.
 3. *Bāṇa, Harshacharita* (tr.), p. 199.
 4. D. Devahuti, *Harsha, A Political Study*, p. 203.
 5. *Ep.Ind.*, II, p. 130.

vogue during the period under review, preference for their use differed from area to area. It seems that the peasants in different parts of the Ganga plains mostly used locally popular land measures. The state functionaries probably relied on some standard land measures for survey and measurement of land.

CHAPTER III

LAND REVENUE

Ancient Indian economy was primarily based on agriculture, and the land revenue formed a major source of the State's income. The terms like *ṣaḍbhāga* or *ṣaḍbhāgam* or *ṣaḍbhagin* mentioned in the ancient texts denote the regular share of the king collected from the peasants in kind.¹ The territorial State could not develop the extensive bureaucratic and military apparatus it needed to consolidate its power until it had some regular source of income. The rise of the Magadhan Empire which formed the beginning of the empire building tradition in India, was largely based upon the taxes collected from the peasants. The Mauryas seem to have taken extensively from their predecessors. The rapid consolidation of the Mauryan Empire owed a great deal to the land taxes that became the substantial and permanent source of income for the exchequer and helped in the economic security of the State.²

1. Baud., 1.10.18 ; AS., II, 15 ; Vishnu, III, 22 ; Mbh., *Sānti Parva*, 24.12, 69. 25, 139. 100-01. The origin of the word *bhāga* can be traced to the Greek root *phagos* meaning 'to eat' or 'to enjoy'. See *Webster's Seventh New Collegiate Dictionary*, Calcutta, 1971 (reprint), p. 632.

2. Romila Thapar, *Asoka and the Decline of the Mauryas*, Delhi, 1973, p. 56.



The revenue of the King in the early Vedic period consisted mainly of the voluntary contributions made by his subjects, and the compulsory tributes collected from the conquered tribes.¹ In the *Śatapatha Brāhmaṇa* the king is described as 'devourer of the people' (*vishamatta*) because he lived on the taxes collected from them.² The terms *bali*, *bhāga* and *sulka* mentioned in the Vedic literature were taxes of various kinds paid by the people to their overlords. But none of them was collected at a specified time or at regular intervals. There is no mention in early sources of any specific occupational groups who paid such taxes and the designated persons who made the collections. Moreover, we have no evidence to suggest the rates at which these taxes were levied. It was in the post-Vedic period that provisions and obligations in respect of these taxes were worked out.

With the coming of the Mauryas on the political scene, the ancient Indian economy underwent radical changes. It is in the *Arthaśāstra* that we find for the first time a meticulously worked out plan for the administration of land revenue.³ In its broad outlines it was followed in the subsequent periods as well. The Eran Stone Inscription of -----

1. *Rigveda*, II, 27.12 ; IX, 173. 6.

2. *Śat.Brāh.*, I, 8.2.17; V, 3.3.12.

3. *AS.*, II, 15 & 24.



Samudragupta mentions that the wealth of the king consisted of 'an abundance of elephants and horses, and money and grain'.¹ The reference to grain obviously indicates the income from land taxes. The land charters belonging to the lower Ganga plain refer to the various land taxes from which the donees were exempted.²

The primary duty of the king was to provide protection to his subjects. In the *Rigveda*, the king is referred to as 'the protector of the people'. The subjects paid a share of their produce to the king in lieu of the protection provided by him.³ The early law-givers specifically mention that the king was entitled to the land tax in return for the protection provided to his subjects.⁴ Manu even justifies the collection of more than the legal dues by the king if he

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1. *CII.*, III, 2. p. 20. To meet expenses - the cost of military campaigns, the salaries of government employees, the upkeep of the palace, the gifts to deserving institutions and individuals and so forth - the Gupta rulers depended primarily on the land tax. See Charles Drekmeir, *Kingship and Community in Early India*, Bombay, 1967, p. 185.
 2. See *Ep. Ind.*, XV, No. 7 ; XVII, No. 23.
 3. *Rigveda*, III, 43.5. Men, in a state of defencelessness and social disorder, appealed to the gods to appoint a king in their own image, who would protect them and maintain law and order and, in return, he would take a share of the produce. *Ibid.*, VIII, 35.
 4. *Gaut.*, X, 24-29 ; *Vas.*, I, 42 ; *Baud.*, 1.10.18 ; *AS.*, I, 13 ; *Manu*, X, 118-119.

protects his subjects to the best of his capability.¹ The same view is repeated in the *Mahābhārata* also where it is stated that the people look for a strong person who could give them protection, in return for which they promise to pay him a share of their produce.² In the *Rāmāyaṇa*, the king who takes a part of the produce from the people but

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1. Manu states that usually one-sixth part of the produce is king's due, but he does not become guilty by charging one-fourth part in time of distress provided he does his duty well. He further adds that the king who receives the taxes but fails to protect the people makes his way to hell. - VII, 144 ; VIII, 307-308 ; IX, 254. Similarly, the king's right to land revenue in lieu of protection has been emphasised by other law-givers. See Vishnu, III, 1 ; Nārada, XVIII, 48 ; Yāj., I, 334-337 & 341-343. For a similar view, also see *Raghuvamśa*, II, 16 ; V, 8 ; XVII, 65.
 2. The *Mahābhārata* says, "with the sixth part upon a fair calculation, after the yield of the soil, as his tribute --- in return for protection --- a king should fill his treasury. *Mbh.*, *Śānti Parva*, 71, 10-13. We find the same reciprocal relationship between taxation and protection in Adam Smith who clearly states that the subjects of every country ought to contribute towards the support of the government in lieu of protection provided by it. See *The Wealth of Nations*, Vol. II, London, 1950, p. 310. According to D.N. Jha, 'it sounds unrealistic to think that the king who was the supreme lord of land received taxes from the subjects as wages. Nor does the notion of taxes as wages in return for protection seem to have been applicable to actual working of the revenue system, for history does not provide a single instance of a king who did not claim taxes from his subjects if he failed to protect and govern them successfully'. See *Revenue System in Post-Maurya and Gupta Times*, Calcutta, 1967, p. 20. But the conception of king as the servant of the State was one of the basic principles of the political thought in ancient India. See P.N. Banerjee, *Public Administration in Ancient India*, London, 1916, pp. 72-73.

does not protect them, is condemned in severe terms.¹

The law-givers enjoin that the taxes should not be arbitrary. The uncertainty of any kind about the levy of taxes could be troublesome both to the State and the peasants. The amount of taxes and the time and manner of their payment ought to be clear to the tax-payer as well as to the tax-collector.² To safeguard against the evils of over-taxation by the state functionaries, the ancient law-givers fixed the share of the produce which the peasants were required to pay. Kauṭilya states that 'whosoever doubles the revenue, eats into the vitality of the country ; if he brings in double the amount to the king, he should, if the offence is light, be warned not to repeat the same ; but if the offence is grave, he should accordingly be punished'.³

As income from taxes depends upon the production of wealth by individuals, the rules of taxation as embodied in the *Arthaśāstra*, the *Manusmṛiti* and the *Mahābhārata*

1. *Rām.*, *Aranya Kāṇḍa*, 74, p. 324.

2. *Manu*, VII, 80 ; *Mbh.*, XII, 38.12. The principle of certainty has also been advocated by Adam Smith. According to him, 'the tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the quantity to be paid ought all to be clear and plain to the contributor and to every other person'. See *The wealth of Nations*, Vol. II, p. 310 ff.

3. *AS'*, II, 9. By double revenue Kauṭilya means over-collection.

emphasize the duty of the king to reconcile the needs of the State with the interests of the subjects.¹ The point has been stressed by means of various similes and metaphors taken from nature.² The essence of these similes and metaphors is that the taxation should not sap the source of production. Manu says that the king by destroying his own substance causes suffering to himself as well as to others.³ In our sources, it is explicitly stated that if the king collects moderate and equitable taxes, his treasury will grow a thousandfold and he himself will get recognition and fame. He is repeatedly warned against making the burden of taxation unbearable and is advised to punish those state functionaries who indulge in extortions.⁴ The inscriptions

 1. *Ibid.*, II, 1 ; Manu, VII, 128, 139, 170 ; *Mbh.*, Śānti Parva, 87. 17 f.

2. For instance, the king should resemble a leech which sucks the blood but gently without causing pain to the victim ; the bee which does not suck all the honey of the flower at a time ; the florist who plucks flowers but leaves enough of them in the garden for future supply ; a cow-herd who does not pierce the udder of the cow with the hope of getting more milk ; the mouse which nibbles at the heels of a sleeping man with his sharp teeth so lightly, that the wound is imperceptible, etc., etc. See *Mbh.*, Śānti Parva, 71, 16 ff. ; 87. 20 ff. ; 88. 4 ff. ; Manu, VII, 128 f. Kauṭilya says that 'just as fruits are gathered from a garden as often as they become ripe, so revenue should be collected as often as it becomes ripe. Collection of revenue and of fruits when unripe should never be carried on, lest their source may be injured causing immense trouble : Pakvampakvamivārāmāt phalaṃ rajyadevāpnuyāt, Āmachchēdabhayādāmam varjayet kōpakārakam, AS., V, 2.

3. Manu, VII, 139.

4. AS., II, 1 & 9 ; V, 2 ; Manu, VII, 128 f, 139 ; *Mbh.*, Śānti Parva, 71, 87, 88.

suggest that the rulers normally followed these precepts of the law-givers quite faithfully.¹

Land tax was mostly collected in kind. The very term *bhāga* indicates it. The Greek accounts mention that 'besides the land-tribute they (husbandmen) pay into the royal treasury one-fourth part of the produce of the soil.'² It was not a fixed amount but a fixed proportion of the produce. It may be reasonably inferred, considering how the wealth of the Vedic Aryans consisted of flocks and herds of cattle and of the produce of their fields, that the payments by the subjects were made in kind from very early times. In the *Jātakas* and the Epics, there is direct evidence of the payment of land revenue in kind. For instance, in the *Mahābhārata* the king is enjoined to enrich his treasury by swollen corn.³ Fa-hsien also mentions that during the reign of Chandragupta II, 'only those who cultivate the royal land have to pay (a portion of) grain from it'.⁴ In the inscriptions belonging to the Gupta period, there are scattered references which suggest that land revenue was paid in kind as well as in cash. The inscription of *mahārāja* Lakshmana, a feudatory of the Gupta

1. *CII.*, III, No. 14, pp. 58 ff ; No. 17, pp. 74 ff.

2. *Diod.*, II. 40 ; *Strabo*, XV, 1. 40.

3. *Mbh.*, *Śānti Parva*, 119. 17.

4. James Legge (tr), *A Record of Buddhist Kingdoms*, New Delhi, 1982, pp. 42.43.

ruler, in the region of ancient Kausambi, refers to the usual payment of land revenue both in kind called *meya* and in cash called *hiraṇya*.¹ However, it seems that land revenue was normally collected in kind.

Land revenue appears to have been normally assessed on individual holdings.² The state functionaries maintained the record of individual fields for the purpose.³ In the *Kuru-dhamma Jātaka*, the pious hesitation of the surveyor that the king or the peasant should not suffer the loss if the stick of the measuring rope is pitched on this or that side of a crab-hole situated just at the boundary of a field, suggests that the land revenue was assessed on individual holdings.⁴ The practice of assessment on individual holdings is corroborated by land charters as well.⁵

It is not clear whether the expenses incurred by the peasants in production were taken into consideration before collecting the land revenue or not. Some scholars are of the view that the king's share of the produce was collected

1. *Ep. Ind.*, II, 30 ; V, App. Kielhorn's List of the Inscriptions of Northern India, No. 452.
2. Romila Thapar, *Asoka and the Decline of the Mauryas*, p. 67.
3. *AS'*, II, 35.
4. *Jāt.*, II, p. 376.
5. *Ep. Ind.*, XV, No. 16; *CII.*, III, No. 29, p. 132 ; *LL.* Nos. 1162, 1163, 1164, 1166, 1167.

in kind on the threshing-floor by the revenue officers.¹ But in the *Arthaśāstra* and the *Smritis*, there is no reference to the practice of sharing crop at the threshing-floor. Manu lays down that the royal share is to be collected after deducting the expenditure incurred by the cultivators.² In the *Mahābhārata* also, it is stated that the taxes should not be levied on the gross produce.³ The *Arthaśāstra* lays down rules for the systematic survey of land to be carried out by the State before the assessment of land tax. This fact has been corroborated by Strabo.⁴ According to A.N. Bose, the periodical survey of land suggests that the State took into consideration the cost of production before collecting its share of the produce.⁵ There may have existed a broad

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1. Baden Powell, *Administration of Land Revenue and Tenure in British India*, New Delhi, 1978, p. 35 ; M.H., Gopal, *Mauryan Public Finance*, London, 1935, pp. 65-66. According to Gopal, 'this method of land revenue collection had many advantages. There was no complication regarding the cost of production or about the relative value of land --- The calculations were simple and easy, both to the State and to the cultivator. Both knew that one was to get and the other was to give a certain part of the produce. Whatever the land produced lay on the threshing floor and the revenue officers took away the share of the State'.
 2. Manu, VII, 130.
 3. *Mbh.*, *Śānti Parva*, XII, 120.9.
 4. Strabo, XV, 1. 50.
 5. A.N. Bose, *Social and Rural Economy*, Calcutta, 1942, p. 121. To substantiate his view, Bose says that while in British India, the rate of 7 to 10 percent was assessed on gross produce, the old average rate of 16.6 percent was most probably levied on profit. See p. 119.

recognition of the fact that taxes should fall on the profit and not on the gross produce. But how far this principle was observed in relation to land revenue is largely a matter of speculation.

II

Of the various taxes on land, by far the most important was the *bhāga*. The term *bhāga* as the state share of the produce first occurs in the *Arthaśāstra*.¹ At one place, it is mentioned as such along with *bali*, *kara*, etc., under the heading *rāshṭra* ; at another place, it is referred to as *ṣaḍbhāga* along with the same taxes.² The *bhāga*, therefore, means the king's customary share of the produce collected from the peasants.

As land revenue formed the main source of income to the State, there was a considerable scope for different views in regard to the amount to be collected. In our sources, it varies from one-twelfth, one-tenth, one-eighth and one-sixth in normal times to as much as one-fourth or even one-third of the produce in times of emergency. Gautama lays down that the cultivators should pay to the king the tax amounting to one-tenth, one-eighth, or one-sixth share of

1. AS', II, 6.

2. *Ibid.*, II, 15.

the produce.¹ Manu and Bṛihaspati also suggest the same rates of land revenue.² Vasishṭha does not mention any rates of land revenue, but he warns the king against the improper use of his subjects' property.³ Vishṇu is more explicit in this matter when he states that the king should take from his subjects a sixth part of the grain every year.⁴ Yājñavalkya, Nārada, Kātyāyana, all prescribe the same rates of land revenue.⁵ In the *Rāmāyaṇa*, it is mentioned as one-fourth,⁶ and the *Mahābhārata* suggests one-tenth part of the produce as the lower rate of taxation.⁷ In the inscriptions of the period, we find that normally the land revenue was fixed at one-sixth of the produce.⁸ The same rate is mentioned in the works of Kālidāsa also.⁹ The commentators Haradatta and Kullūka state that the rate of land revenue should be determined according to the fertility of the soil and the labour necessary to cultivate it.¹⁰

1. Gaut., X, 24.

2. Manu, VII, 130 ; Bṛih., I, 43

3. Vas., X, 96.

4. Vishṇu, III, 29-30.

5. Yāj., I, 335-337 ; Nārada, XVIII, 48 ; Kāt., 16-17.

6. Rām., III, 16. 14.

7. Mbh., Śānti Parva, 67. 23.

8. Ep. Ind., XX, p. 63 ; XXI, p. 81.

9. Raghu., II, 66.

10. On Gaut., X, 24 ; On Manu, VII, 130.

In the *Arthaśāstra*, we come across the expression *dhanyaśadbhāgam*, i.e., one-sixth of the grains grown as being taken by the king.¹ This, however, does not mean that Kauṭilya recognises the uniform rate of one-sixth in all cases. He states that the upland (*sthāla*) and the lowland (*kedāra*) are to be entered separately in the land registers prepared by the *gopa*.² He further lays down that the land tax is to be assessed as one-third or one-fourth of the crop of rich soils that are irrigated artificially and prescribes lower rates for soils of intermediate and inferior qualities.³ Normally, the land tax was charged at the rate of one-sixth of the produce. So consistent is the association of this rate with land tax that sometimes king is referred to as the *śadbhāgin*, i.e., one whose share is one-sixth.⁴ The variations in the rate of assessment, however, depend on the fertility and productivity of the soil. It also varied according to the exigencies of times and situations.

Apart from *bhāga*, we come across in our sources, various other fiscal terms related with land revenue. It is generally held that the concept of revenue evolved gradually

1. *AS.*, I, 13.

2. *Ibid.*, II, 35.

3. *Ibid.*, V, 2.

4. *Vas.*, 1. 42 ; *Baud.*, 1.10.18 ; *AS.*, II, 15 ; *Vishṇu*, III, 22.

out of voluntary contributions made by the people to their king.¹ But how far these contributions were voluntary is not very clear. The Vedic period was not politically developed. The king derived his sustenance and economic support either from his own subjects or from the newly conquered territories. In the *Rigveda*, the term *bali* is used in both senses, i.e., the tax levied on the subjects and the tribute collected from the conquered territories.² Originating as a voluntary offering of wealth, *bali* might have retained its basic link with wealth ; and when wealth came to be associated with land, it assumed the form of a tax on land and became a compulsory payment.³ With the growth of territorial power, especially under the Mauryas, many new taxes came to be levied on land. With the gradual development of revenue nomenclature, the term *bali* became all the more intriguing in its connotation. In the *Arthaśāstra*, it is mentioned in the sense of a petty cess

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1. 'In all primitive societies voluntary offerings constitute the first item of contribution and every man feels the necessity of upholding the political and military organisation by his own personal efforts'. See Seligman, *Essays in Taxation*, New York, 1923, p. 2.
 2. Macdonell and Keith, *Vedic Index*, Vol. II, p. 62. In the Rigvedic period the leader of the tribe protected the people and defeated the enemies, so the people paid him of their own accord offerings (*bali*). The leader was, therefore, called *balihr̥t*, See *Rigveda*, VI, 5 ; X, 176 ; X, 173, 6 ; VII, 6.5.
 3. *Ait.Brāh.*, VII, 29 ; U.N.Ghoshal, *Hindu Revenue System*, Calcutta, 1973, p. 8. Macdonell and Keith, however, suggest that *bali*, from the very beginning, was a sort of tax not depending on the free will of the subjects. See *Vedic Index*, Vol. II, p. 62.

over and above the king's normal share of the produce.¹ Bhattasvāmin explains *bali* as a local tax of one-tenth or one-twentieth part of the produce charged over and above the regular levy of one-sixth share.² According to Megasthenes, husbandmen also paid, in addition to the share of grain (*bhāga*), a land tribute, which in D.C. Sircar's opinion, corresponded to *bali*.³ A.N. Bose, largely relying on the Buddhist sources and on the statements of Diodorus and Strabo, defines *bali* as an irregular tax which was charged at the rate of one-fourth part of the produce.⁴ In the *Amarakosha*, *bali* is identified with *bhāga* and *kara*.⁵ In the law-books, *bali* is fixed at the uniform rate of one-sixth which corresponds more to *bhāga* than to any other levy.⁶ But in the *Arthaśāstra*,⁷ the Rummidei Pillar Inscription of

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1. AS', II, 15 ; Also see Romila Thapar, *From Lineage to State*, Bombay, 1984, p. 124.
 2. On AS', II, 15.
 3. D.C. Sircar, *Indian Epigraphy*, Delhi, 1965, p. 389 fn.
 4. A.N. Bose, *Social and Rural Economy*, Vol. I, p. 162.
 5. *Amarakosha.*, II, 8.28.
 6. Vas., I. 42 ; Vishṇu, III, 11. 22-23. Gautama appears to suggest different rates of *bhāga* depending upon the nature of the soil and its produce when he states that the husbandmen should submit one-sixth, one-eighth or one-tenth share to the king as *bali* - X, 24.
 7. AS', II, 6 & 15.

Ashoka,¹ and the Junagarh Rock Inscription,² *bali* is mentioned separately as distinguished from other taxes. In the *Buddhacharita*, the term *bali* is used in the sense of a regular tax.³ In the *Mahāvamsa*, the levy of *bali* is said to be very essential, thereby conveying that it was perhaps the basic land tax.⁴ In the *Jātakas*, *bali* is used in the sense of an additional and oppressive cess.⁵ In the *Milinda Pañho*, *bali* is referred to as an emergency tax.⁶ S.K.

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1. R.K. Chaudhary, *Inscriptions of Ancient India*, Meerut, 1983, p. 25 ; *CII*, I, p. 164. The Rummindei Pillar Inscription of Ashoka records that the Emperor reduced the regular tax from one-sixth to one-eighth part of the produce, and remitted *bali* from the village Lumbini, the birthplace of Lord Buddha. (*Luminigāme ubalikekaṭe aṭhabhagiye ca.*)
 2. *Ep.Ind.*, XIII, No. 6 ; *Sel.Inscr.*, p. 179 ; LL. No. 965.
 3. Asvaghosa, *Buddhacharita*, II 44.
 4. *Mahāvamsa*, XXVIII, 4.
 5. *Jāt.*, I, pp. 199, 339 ; II, p. 240 ; III, p. 9 ; V, p. 98.
 6. *Milinda Pañho*, p. 146 ; *SBE*, XXXV, p. 208. In the Junagarh Rock Inscription of Rudradaman, the term *bali* suggests an ordinary tax levied on the peasants. In D.N. Jha's view, *bali* as an emergency tax mentioned in the *Milinda Pañho* cannot be due to local variations because the area of the composition of the text and Junagarh, where the inscription is found, are not far-away from each other. See D.N. Jha, 'Land Revenue in Post-Maurya and Gupta Period'; *Land Revenue in India, Historical Study*, (ed.), R.S. Sharma, Delhi, 1971, p. 8.

Maity, on the basis of epigraphic sources, has interpreted *bali* as a religious cess.¹ He refers to the inscriptions where the term *bali* is used along with *charu* and *sattra*.² But the inscriptions clearly state that the right to collect revenues is granted to the donees with the express object of maintaining *bali*, *charu*, *sattra*, etc. Had *bali* been a religious cess, in the land charters it would have been mentioned as one of the donees' rights to collect *bali* rather than that the donees are given the right to enjoy royal revenues like *bhāga*, *kara*, etc., for the maintenance of *bali*, *charu* and *sattra*. Therefore, *bali*, mentioned in the inscriptions along with *charu* and *sattra*, etc., can not be identified with *bali* as tax. There is, of course, an analogy between the *bali* as offerings to gods and the tribute paid to the king, particularly as the king is often thought of as a god.³ As the State could not increase the rate of regular land tax (*bhāga*) off and on, it seems that *bali* was kept alive, along with other taxes, to derive more income from land. It continued to be charged throughout the period under review, though its connotation changed over time.

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1. S.K. Maity, *Economic Life of Northern India*, p. 61.
 2. *CII.*, III, No. 25, p. 116 fn. 3; No. 27 p. 124; No. 29, pp. 129, 134; No. 39, p. 170.
 3. The term *bali* etymologically means both offerings to the gods and voluntary contributions. At one place in the *Mahābhārata*, *bali* is mentioned as a customary present to be given to the king at the time of his coronation. See *Sabhā Parva*, LVII, 48.

Kara is another fiscal term which is frequently mentioned in the literary and epigraphic sources.¹ Shāmaśāstry interprets it at one place as 'taxes paid in money'² and, at another place, as 'taxes or subsidies that are paid by the vassals and others'.³ As for the first interpretation, the revenue from merchants and road cess as well as *piṇḍakara* and *utsaṅga* were realised in cash and, as such, the term *kara* may carry the same meaning. In the expression "*gṛihāṇāñcha karadākarada saṅkhyānēna*, etc.", in the *Arthaśāstra*, *kara* seems to refer to taxes in money.⁴ But if it were a tax paid in money, it ought to have been mentioned under the revenue head, forts (*durga*), where a number of taxes in money are referred to.⁵ On the other hand, the term *kara* is generally mentioned along with other taxes which were paid in kind. The second interpretation of Shāmaśāstry is corroborated by the Allahabad Pillar Inscription of Samudragupta where the term *sarva-kara-dāna* refers to the duties of the defeated kings to pay all taxes.⁶ Bhattasvāmin explains the term *kara* as such taxes

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1. Vas., XIX, 23, 26 ff ; AS', II, 6 & 15 ; Manu, VII, 137 ; Ep.Ind., VII, p. 61 ; VIII, pp. 42 ff ; CII., III, No. 1.
 2. JBORS, vol. XI, pt. III, pp. 83-84.
 3. Ibid., p. 109.
 4. AS', II, 35.
 5. Ibid., II, 6.
 6. CII., III, No. I.

as are collected every year during the month of *Vāsanta* or *Bhādrapada* under the names of *Vānsantika* and *Bhādrapadika*.¹ At one place, Kauṭilya uses the term *kara* in the specific sense of an emergency tax levied upon dealers, artisans and the like.² The difficulty in the interpretation of the term, to a certain extent, is due to Kauṭilya's use of the term in various contexts. He mentions it as a distinct source of revenue coming from country parts (*rāshṭra*), along with *sītā* (income from crown lands), *bhāga* and other taxes, which suggest that *kara* was probably the income from countryside alone.³ But in the expression *karadēbhyah kṛitakshētra-nyāikapurushikāṇi prayachchēt*, the *karades* referred to appear to be the crown tenants, and *kara*, therefore, may denote the income from crown lands (*sītā*).⁴ Elsewhere in the chapter dealing with the alienation of lands, we come across the expression *karadāḥ karadesh-vādhānam vikrayam vā kuryuḥ brahmadēyikā brahmadēyikeshu*, etc.⁵ Here the term *kara* appears to refer to all lands

 1. On *AS'*, II, 15. In the translation of *Arthaśāstra* in German, Meyer translates the term as annual tax (*Jahressteuer*) or the ground tax (*Bodensteuer*). See U.N. Ghoshal, *The Beginning of Historiography and Other Essays*, Calcutta, 1944, p. 174.

2. *AS'*, V. 2.

3. *Ibid.*, II, 6.

4. *Ibid.*, II, 1.

5. *Ibid.*, III, 10.

other than the crown lands.¹ In that case, *kara* obviously indicates *bhāga*, though it is probable that the term also included other taxes because of the reference to tax-free villages and to the *brahmadeya* lands which were exempt from all taxes. Another use of the term *kara* by Kauṭilya is found where the king is advised to protect agriculture from *daṇḍavishtīkarā-bādhaiḥ*.² This protection obviously extended to all lands. The term *kara*, in that case, included *sītā* as well as *bhāga*. But its use in the *Arthaśāstra* as a particular tax clearly suggests that the term *kara* did not denote *bhāga* or *sītā*, as these taxes are separately enumerated.³

In the commentaries on *Manusmṛiti*, we find different interpretations of the term *kara*.⁴ According to Medhātithi, *kara* denotes gifts of commodities (*dravyadānam*), whereas Sarvajñanārāyaṇa explains it as fixed land tax paid in gold (*bhūminiyataṁ deyaṁ hiraṇyam*). Rāmachandra interprets it as contribution in the form of grass, wood, etc. (*gulmadāyādikam*). According to Rāghavānanda, *kara* is a monthly payment by villagers (*grāmasibhyaḥ pratimāsikam*).

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1. If the crown lands were included, it would imply that even the tenant - cultivators possessed the right of alienation.
 2. *AS.*, II, 1.
 3. *Ibid.*, II, 6 & 15. D.C. Sircar is of the opinion that it was a tax paid over and above the king's normal grain share. See *Sel.Inscr.*, p. 392 fn. 9.
 4. On Manu, VIII, 307.

Kullūka also interprets it as the contribution made by both the villagers and the townsmen in *Bhādrapada* and *Pauṣa* months (*grāmapuravāsibhyaḥ pratimāsikam . va bhādrapauṣa niyamena grāhyam*). These interpretations, however, are not corroborated by Manu's own explanation of the term where he says that the king should make the common inhabitants of the realm pay annually some tax called *kara*.¹ Since the commentators belong to a much later period, there is every probability that the term underwent various changes in its meaning over the time.

In the inscriptions, we frequently come across the term *kara* as referring to some kind of tax. The term *karavana* or *karapaṇa* in the Hathigumpha Cave Inscription of Kharavela, has been interpreted by K.P.Jayaswal as 'all government taxes or literally tax money' that was remitted by the king.² The Kārle Buddhist Cave Inscription of the time of Vāsiṣṭhiputra Pulumavi from western India mentions that the granted land was exempted from *sakarukaro*, i.e., all taxes.³ The spurious Gaya Copper-plate of Samudragupta records that the tax -paying cultivators and artisans (*karada-kuṭumbi-kārukādahaḥ*) should not be allowed to settle in any gifted

1. Manu, VII, 137.

2. JBORS, vol. IV, 1918, p. 367.

3. *Ep.Ind.*, VII, p. 61 ; *Sel.Inscr.*, p. 202 ; LL. No. 1100 ; R.K. Choudhary, *Inscription of Ancient India*, p. 35.

village (*agrahāra*).¹ This indicates that *kara* was a general tax paid both by the cultivators and the artisans. In some land charters, we come across such expressions as *sarvākara-parihāraih*, *sarva-kara-sametaḥ*, etc., which may simply imply that the term *kara* denoted all taxes.² But in some inscriptions, *kara* is mentioned along with *sulka*, *bhāga*, *bhoga* and *hiranya*.³ In the Junagarh Rock Inscription of Rudradaman, *kara* is referred to along with *praṇaya* and *viṣṭi* in the sense of an emergency contribution. The inscription records that the king did not oppress his subjects with the levy of *kara*, *viṣṭi* and *praṇaya* and met all the expenses in the repair of the dam of Sudarsana lake out of his own treasury.⁴ This suggests that *kara* was considered an oppressive tax like that of *viṣṭi* and *praṇaya*. Although the term *kara* implies some kind of tax yet its precise nature can not be determined. It appears that the term acquired different meanings at different times.

Another revenue term *hiranya* also occurs both in the literary and epigraphic sources. In the *Śatapatha Brāhmaṇa*, we have the expression *rājatam hiraṇyan* implying

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1. CII., III, No. 60, p. 254 ; *Sel.Inscr.*, p. 274.
 2. *Ep.Ind.*, XXIII, No. 18 ; XXIV, No. 9 ; XXV, p. 286 ff.
 3. CII., III, No. 26 ; *Ep.Ind.*, VII, No. 22.
 4. *Ep.Ind.*, VIII, pp. 42 ff.

some sort of contribution made to the king.¹ It is explained mostly in its literal meaning as payment in gold.² Sometimes, it is interpreted as the tax in money or in cash.³ In the *Arthaśāstra*, *hiraṇya* is referred to as a tax on the peasants.⁴ But the peasants could not be expected to pay tax in gold or gold coins. The gold currency does not seem to have been in circulation among the peasantry.⁵ Kauṭilya lays down that the *samāharta* (collector - general) should prepare a written record (*nibandha*) specifying the contributions payable by the villagers, severally and collectively, under the heads of grain, domestic animals, *hiraṇya*, forced labour, and so forth.⁶ But the term *hiraṇya* is not included in the list of regular taxes which suggests that in the Maurya period it was an irregular levy.⁷ The *Arthaśāstra*, however, clearly states the rate of its

1. *Sat.Brāh.*, XII, 4.4.7 ; J. Allen, *Catalogue of the Coins of Ancient India*, Introduction, LXXIV.
2. Buhler, *Ep.Ind.*, II, p. 227 ; Jolly, VII, p. 16 ; Shāmaśāstry (tr.), *Arthaśāstra*, p. 158 ; *CII.*, III, No. 60, p. 257 ; R.D. Banerjee, *Ep.Ind.*, XIV, No. 23 ; XV, No. 18 ; D.R. Bhandarkar, VII, p. 46.
3. Senart, *Ep.Ind.*, VII, pp. 61-62 ; Kielhorn, VII, p. 160. Beni Prasad interprets it as the right of the State to gold and other mines. See *The State in Ancient India*, p. 302.
4. *AS.*, II, 35.
5. See S.K. Maity, *Economic Life of Northern India*, pp. 62-63.
6. *AS.*, II, 35.
7. *Ibid.*, II, 6.

collection as one-tenth.¹ But in the law-books of the post-Maurya period, *hiraṇya* appears to be a regular item of king's income, and one - fiftieth is prescribed as its standard rate of collection.² U.N. Ghoshal interprets *hiraṇya* as a tax in cash which was levied on certain special kinds of crops as distinguished from the tax in kind which was charged on the ordinary crops.³ This view of Ghoshal is corroborated by the epigraphic evidence also.⁴ In an inscription dated 592 A.D., it is mentioned that the tax on sugarcane plantation within a specified area was thirty-two silver coins, and if the field belonged to a religious donee, it was only two and-a-half silver coins. And the tax for *allavāṭa* was half of the amount prescribed for sugarcane plantation.⁵ It, therefore, implies that *hiraṇya* was a tax on commercial crops. Even during the medieval period, before the fiscal reforms of Todar Mal, while land tax was paid in kind, certain crops were always assessed in cash on the ground that it was difficult to divide them in shares or

1. *Ibid.*, I, 13.

2. *Manu*, VII, 130 ; *Vishṇu*, III, 24. Also see *Mbh.*, *Śānti Parva*, 67, 23.

3. U.N Ghoshal, *Hindu Revenue System*, pp. 74-75 ; *IHQ*, vol. V, 1929, p. 275.

4. *Ep.Ind.*, XXX, No. 30.

5. As *alla* is the Prākṛit form of Sanskrit word *ardraka*, *allavāṭa* may possibly mean the ginger plantation.

preserve them for long.¹ In the land charters, *hiraṇya* occurs along with other revenue terms like *bhāgabhogakara*, *dhānya*, etc.² In the *Divyāvandāna* and in the *Jātakas*, the terms *hiraṇya* and *suvarṇa* occur side by side.³ In the *Dīgha-Nikāya*, we find how Mahasudarśana made arrangements for providing the needy among other things, with *hiraṇya* and *suvarṇa*, showing thereby that *hiraṇya* meant tax in cash.⁴ In some inscriptions also, the term is used in the sense of cash payment.⁵ D.C. Sircar suggests that in all probability, the cash payment was made in lieu of payment in kind, the peasants being given, at least in some cases, free choice between the two.⁶ Sarvajñanārayaṇa, the commentator

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1. Baden Powell, *Land Systems in British India*, Vol. I, pp. 273-74 ; *Ain-i-Akbari*, (tr), Blochmann and Jarrett p. 65.
 2. *Bhāgabhōgakaṛahiraṇyādi*, See *Ep.Ind.*, I, No. 11 ; *bhāgabhōgapasuhiraṇyakarasulkādi*, see Vol. XVI, No. 2. Also see I, Nos. 10 & 13 ; II, No. 23 ; III, No. 7 ; IV, Nos. 8 & 29 ; VI, No. 28 ; VII, No. 22 ; XIV, No. 13. (*dhānya-hiraṇya-deya*).
 3. *Divyāvandāna*, 258, 26 ; 291. 9 ; 323. 13 ; 430. 14 ; 565. 18 ; *Jāt.*, I, 34 ; VI, 69.
 4. *Dīgh.Nik.*, II, 4. 10. 14.
 5. *Ep.Ind.*, XXVII, pp. 182 ff. ; XXXIII, pp. 315 ff. In some of the Pala inscriptions, the term *piṇḍaka* has been used in place of *hiraṇya*. See *Ind.Ant.*, vol. XV, p. 306. *Piṇḍaka* appears to be the same as the term *piṇḍakara* referred to in the *Arthasāstra*, which has been explained by Bhattasvāmin as taxes levied upon the whole villages. See *AS.*, II, 15.
 6. D.C. Sircar, *Indian Epigraphy*, p. 129.

of Manu, explains *hiraṇya* as a tax on land to be paid in cash.¹ L. Gopal suggests that the term *hiraṇya* refers to lump assessment in cash upon villages as distinguished from the king's grain-share collected from individual cultivators.² The list of royal officers given in the Mallasarul (Burdwan) grant includes *hiraṇya-sāmudāyika*.³ According to D.C. Sircar, the parallel case of an officer known as *āgrahārika* who supervised *agrahara* villages would suggest that *hiraṇya-sāmudāyika* was the officer who collected the lump revenue in cash from villages so assessed.⁴

In the *Arthaśāstra*, the terms *rajju* and *chōrarajju* are referred to as sources of revenue from country-parts (*ṛāshṭra*).⁵ The exact nature of these taxes is again a matter of conjecture. The term *rajju* is sometimes mentioned along with both *sītā* and *bhāga*. *Rajju* literally means rope and, in its technical sense, it apparently refers to a unit of land measure employed for the purpose of cadastral survey. It is, therefore, probable that *rajju* as fiscal term implied the charges for the land survey and measurement

1. On Manu, VIII, 307.

2. L Gopal, *Economic History of Ancient India*, Delhi, 1989, p. 39.

3. *Ep.Ind.*, XXIII, p. 159 ff.

4. *Sel.Inscr.*, p. 373, fn. 9.

5. *AS.*, II, 6.

realised from the peasants.¹ The *chōrarajju*, which literally means 'ropes to bind thieves', was probably the police cess charged from the villages, but it had no direct link with the land revenue as such.²

The term *kḷipta* (*klṛiptam*) is explained in the *Arthaśāstra* as a tax levied on 'villages situated on sea shores and on the banks of rivers and lakes'.³ Shāmaśāstry interprets *kḷipta* as a fixed tax and one of the sources of king's revenue.⁴ U.N. Ghoshal and D.C. Sircar also hold the same view.⁵ According to Mirashi, *kḷipta* may be taken to mean land tax and *upakḷipta* to mean some petty taxes in kind.⁶ S.K. Maity tries to prove that the terms do not refer to the taxes but to some royal right over the land.⁷ This explanation can not be accepted on the ground that *kḷipta* has been explicitly described as a source of state revenue.

Viṣṭi appears to be another source of income to the State. It is mentioned along with other contributions made

1. A.N. Bose, *Social and Rural Economy*, pp. 132-33.
2. See M.H. Gopal, *Mauryan Public Finance*, p. 48.
3. *AS.*, II, 28.
4. Shāmaśāstry (tr.), *AS.*, p. 58.
5. U.N. Ghoshal, *Hindu Revenue System*, p. 293 ; *Sel.Inscr.*, p. 438 fn. 3.
6. *Ep.Ind.*, XXII, p. 175 fn. 8.
7. S.K. Maity, *Economic Life of Northern India*, p. 67.

to the State such as *hiranya*, *sulka*, *kara*, etc.¹ It was a compulsory contribution of labour rendered by the people. Kaṭilya lays down that the villages are to be grouped according to different sources of revenue and exemptions from taxation, etc. Some of the villages supplied *visṭi*.² The state officials were required to maintain a proper record of *visṭi* contributed by each household and also by individual workers.³ Bhattasvāmin explains that forced labour was demanded in lieu of the payment of taxes due from the villages.⁴ The State generally employed such labour in the projects of public utility, in warfare and in its other establishments. It was also demanded for the construction of irrigation works by the State.⁵ But it was not to be exacted at the cost of any loss to agricultural pursuits, for Kaṭilya enjoins upon the king to protect agriculture from any oppression like fines, taxes, and *visṭi*.⁶

Visṭi does not appear to have been a paid labour as it was essentially a contribution in lieu of taxes to the State. *Visṭi* and *karmakaras* (ordinary labourers) are

1. AS', II, 35 ; Ep.Ind., VIII, 45 ff.

2. Ibid.

3. Ibid., II, 7, 15, 35.

4. On AS', II, 35.

5. Ep.Ind., VIII, No. 6.

6. AS', II, 1.

separately mentioned by Kauṭilya.¹ Those performing *visṭi* might have been provided with food provisions but we have no specific evidence to substantiate it. Hiuen-Tsang observes that "individuals are not subjected to forced labour contribution --- taxation being light and forced services being sparingly used".² The land charters of Harsha point out that the cultivators were required to provide '(object of) enjoyment, taxes, gold and so forth, and --- service'.³ *Visṭi* was an oppressive levy. The Junagarh Rock Inscription of Rudradaman records that the considerate king did not burden the people with *visṭi*, *kara*, and *praṇaya* and constructed the Sudarsana lake out of his own treasury.⁴ The element of oppression might have been rendered stronger from the Gupta period onwards when the king's right to demand forced labour was transferred to the recipients of land grants.

The *Arthaśāstra* and the *Smṛitis* lay down provisions for the collection of emergency tax in case of grave financial difficulties. In the *Arthaśāstra*, such a tax is called *praṇaya*.⁵ Kielhorn explains it as a contribution by the

1. *Ibid.*, II, 35 ; II, 24.

2. J. Watters, *On Yuan Chwang's Travels in India*, London, 1904, p. 176.

3. *Ep. Ind.*, I, p. 73 ; IX, p. 211.

4. *Ibid.*, VIII, pp. 36 ff.

5. *AS'*, V, 2.

people, mainly voluntary but which they were made to pay.¹ The purely temporary nature of it is proved by the fact that it was imposed only once and not regularly.² Chandragupta Maurya once in dire need of wealth asked his people to give him money as a 'token of affection (*praṇaya*)'.³ The Junagarh Rock Inscription of Rudradaman clearly refers to *praṇaya* as an emergency and oppressive tax.⁴

Piṇḍakara, another fiscal term related with land revenue, is mentioned by Kauṭilya.⁵ It is explained by Bhattasvāmin as a tax levied on the whole village. The land revenue was normally assessed on individual holdings, but as the term *piṇḍakara* suggests, sometimes, perhaps, it was assessed upon the whole village as well. In the post-Maurya period, however, we do not come across *piṇḍakara* or any other term of similar import. Probably, the practice of collective assessment of any tax upon the whole village was dropped altogether. Another possibility may be that the term *piṇḍakara* stood for an additional tax which was replaced in the post-Maurya period by some new taxes.

1. *Ep.Ind.*, VIII, p. 6.

2. See U.N. Ghoshal, *Agrarian System in Ancient India*, Calcutta, 1930, pp. 20-21.

3. K.P. Jayaswal, *Hindu Polity*, Bangalore, 1955, p. 319.

4. *Ep.Ind.*, VIII, pp. 36 ff.

5. *AS.*, II, 15.

In the *Arthaśāstra*, we come across an important revenue term, the *udakabhaga*, which is not mentioned in any post-Maurya source.¹ It was an irrigation cess charged from the peasants along with land tax in the form of a share of the produce.² Its absence in the post-Maurya period may be due to the fact that the State generally ceased to bear the main responsibility of providing irrigation facilities and, as such, it could not claim any such tax from the peasants.³ That the construction of irrigation works had become mainly an individual and local concern in the post-Maurya period, is clearly borne out by our sources.⁴

III

In the post-Maurya period, we come across certain new terms related to the land revenue. The inscriptions of the Gupta period recording grants of land to brāhmaṇas frequently refer to the donee's exemption from *bhāgabhogakara* among other taxes.⁵ As a revenue term it is not mentioned in the *Arthaśāstra* and the *Smṛitis*.⁶ U.N.

1. *AS.*, II, 24.

2. For details, see Chapter on Irrigation.

3. See D.N. Jha, *Revenue System in Post-Maurya and Gupta Times*, Calcutta, 1967, p. 51.

4. *Manu*, VIII, 264 ; XI, 62, *Nārada*, IX, 20 ; *Bṛih.*, XVII, 11-12.

5. *CII.*, III, Nos. 26, 27, 28, pp. 118, 122, 126, 129.

6. U.N. Ghoshal, 'On Some Fiscal Terms Occuring in Ancient Indian Land Grants', *IHQ*, vol. V p. 277.

Ghoshal takes it as a single expression and identifies it with the usual grain share of the king, called *bhāga* in the *Arthaśāstra* and *bali* in the *Smṛitis*.¹ A.S. Altekar splits the expression into two parts: *bhāgakara* being the land tax and *bhogakara* representing petty taxes in kind to be paid daily to the king but in practice assigned to the local officers.² But more often, *bhāgabhogakara* has been taken as consisting of three distinct terms ; *bhāga*, *bhoga* and *kara*, and is translated as such.³ Fleet explains the term *bhāgabhoga* as one expression meaning 'enjoyment of shares'.⁴ Sometimes, in the inscriptions, we find this expression in a reverse order as *bhogabhaga*.⁵ If we translate it in the same way as Fleet translates *bhāgabhoga*, it would mean 'share of the enjoyment'. But this term is a compound formed by two distinct words *bhoga* and *bhāga*, and therefore, indicates two separate taxes. D.C. Sircar explains '*bhāga*' as 'king's share of the produce' and '*bhoga*' as 'periodical supplies of fruits, firewood and flowers, etc', which the

 1. U.N.Ghoshal, *Hindu Revenue System*, p. 281.

2. A.S.Altekar, *Rashtrakutas and Their Times*, Poona, 1934, pp. 214-16.

3. *Ep. Ind.*, XV, Nos. 18 & 23; J. Vogal, *Antiquities of Chamba State*, Calcutta, 1911, pp. 167-69.

4. *CII.*, III, p. 120 fn. 1 & p. 254 fn 4.

5. *Ibid.*, III, Nos. 39-41, pp. 173ff; *Ep. Ind.*, XXXI, p. 264; Vol. XXXIV, p. 114.

villagers had to furnish to the king.¹ R.S. Tripathi says that the term *bhoga* referred to the rights that the landlord enjoyed when the land was left fallow or when the cultivators had removed the crops from the fields.² It seems that the suggestion given by Buhler and Sircar that *bhoga* means the periodical supplies of fruits, flowers, firewood, etc., which the villagers had to furnish to the the king, explains the term better.³ This explanation is corroborated by Manu also.⁴

From the Gupta period onwards two fiscal terms, i.e., *uparikara* and *udraṅga* are frequently mentioned in the inscriptions.⁵ They do not occur in any pre-Gupta sources. The spurious Gaya Copper plate Inscription records how

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1. D.C.Sircar, *Indian Epigraphy*, p. 394; *Sel. Inscr.*, p. 392 fn. 7.
 2. See *IHQ*, vol., IX, 1933 p.128. South Indian inscriptions often mention the villages and lands granted as accompanied by the *aṣṭabhogas*, i.e., *nidhi* (treasure-trove), *niksepa* (under-ground deposits), *jala* (water reservoirs), *pāṣāṇa* (stones, mines, quarries), *akṣiṇī* (actual privileges or present profit), *āgāmi* (future profits), *siddha* or *siddhāya* (land already brought under cultivation), and *sādhyā* (waste land that may in future be brought under cultivation). See *Ep. Ind.*, III, pp. 123, 245; XIII, p. 34 fn. 1; XV, p. 22; XXXII, p. 42.
 3. *Ep.Ind.*, I, p. 75 fn.
 4. Those (articles) which the villagers ought to furnish daily to the king, such as food, drink, and fuel, the lord of one village shall obtain. See Manu, VII, 118.
 5. *CII.*, III, No. 21, p. 96 ; No. 22, p. 103 ; No. 23, p. 107 ; No. 26, p. 118 ; No. 31, p. 118 ; No. 38, p. 166.

Samudragupta gave away the village of Revaṭika in the Gaya viṣaya as an agrahara to the brahmana Gopasvāmin with the assignment of the uparikara.¹ But in most of the inscriptions the term uparikara occurs along with udraṅga. U.N. Ghoshal believes that these two revenue terms have been used antithetically. He, therefore, interprets uparikara as the tax on temporary cultivators, and udraṅga as the tax levied on permanent tenants.² He associates uparikara with the Marathi word upri, which means a cultivator not belonging originally to the same village, but residing and occupying land in it, either on a lease for a stipulated period of time or at the pleasure of the proprietor.³ According to J.F. Fleet, the word uparikara is derived from upari or upri and means 'a tax charged from the cultivators who had no proprietary rights in the soil'.⁴ S.K. Maity rightly suggests that it is difficult to accept the views of Ghoshal and Fleet because the words of Marathi language came into usage long after the records that refer to uparikara and udraṅga.⁵ But, in most land charters, we find these two terms mentioned together, and if uparikara and udraṅga mean

 1. *Ibid.*, III, No. 60, p. 257.

2. U.N. Ghoshal, *Hindu Revenue System*, p. 276.

3. H.H. Wilson, *Glossary of Judicial and Revenue Terms*, s.v. upri.

4. *CII.*, III, No. 21, p. 98 fn. I.

5. S.K. Maity, *Economic Life of Northern India*, p. 61.

taxes on temporary and permanent tenants respectively, it would imply that a certain piece of granted land was cultivated both by permanent and temporary tenants simultaneously which obviously seems improbable. In cases where the whole village was granted, the possibility of both types of tenants cannot altogether be discarded,¹ but in the case of the grants of pieces of land with the assignment of both *uparikara* and *udraṅga*, it could not have been possible.² There seems to be no reason why the land charters should make any distinction between the tax paid by the permanent tenants and the temporary ones. Barnett on the other hand, suggests that the *uparikara* is something like the Tamil expression *mēl-vāraṃ*, i.e., crown's share of the produce.³ According to A.S. Altekar, *uparikara* is identical with *bhoga* which consisted of contributions in the shape of articles of provisions.⁴ Ghoshal, while contradicting these views, states that in the land grants distinct terms are used to signify 'the crown's share of the produce', the most common of them being *bhāga-bhoga-kara* and *hiraṇya* which are referred to along with the *uparikara* and the *udraṅga* among the privileges assigned to the donees.

 1. CII., Nos. 21, 22, 23, 26, etc.

2. *Ibid.*, III, No. 38, pp. 165 ff.

3. *JRAS*, 1931, p. 165.

4. A.S. Altekar, *Rashtrakutas and Their Times*, p. 216.

He further adds that in some land grants of a later period belonging to Assam, the royal functionaries in charge of collecting the *uparikara* are mentioned in the list of oppressors who were forbidden to enter the donated land. Therefore, he contends that "the *uparikara* was not a regular item of revenue like the 'crown's share of the produce', but was an irregular tax which bore harshly on the cultivators".¹ It is, however, unlikely that the revenue practice that prevailed in the tenth and eleventh centuries A.D. in Assam necessarily prevailed in Gupta times or was the one which had descended from those days. There is no evidence to prove such a contention.² In Sanskrit, Hindi and Bengali languages, the term '*upari*' or '*upri*', means 'upon' or 'extra'.³ This has led D.C. Sircar to interpret the term *uparikara* as an 'extra-cess'.⁴ R.N. Saletore agrees with Fleet's interpretation of *uparikara* as a tax levied on cultivators who have no proprietary rights in the soil.⁵ The interpretation of *uparikara* is based mainly on speculation, particularly because of the conspicuous absence of any literary evidence in this context.

1. U.N. Ghoshal, *IHQ*, vol. V, pp. 384-385.

2. R.N. Saletore, *Life in the Gupta Age*, Bombay, 1945, p. 348.

3. Monier Williams, *A Sanskrit-English Dictionary*, p. 205.

4. *Sel.Inscr.*, p. 266 fn. Also see S.K. Maity, *Economic Life of Northern India*, p. 62.

5. R.N. Saletore, *Life in the Gupta Age*, p. 348.

The term *udraṅga* is used along with *uparikara* in the land grants. In Buhler's opinion, *udraṅga* is equivalent to the words *uddhara* and *udgrantha*.¹ Following him, J.F. Fleet takes *udraṅga* to mean the share of the produce collected by the State.² But this interpretation of the term can not be accepted because in many inscriptions *bhāga* and *udraṅga* are mentioned simultaneously as two different taxes. As we have already seen, U.N. Ghoshal explains *udraṅga* as a tax levied on permanent tenants.³ Almost similar view is held by D.C. Sircar. To substantiate the argument, he refers to the Marathi term *udhārajamābandi* which is an assessment of the total revenue of the village on the chief proprietor who distributes it proportionately among the cultivators.⁴ S.K. Maity gives two alternative explanations. First, he says that *udraṅga* may have been a distorted derivative of the Sanskrit word *udaka* and thus may have meant something like a water tax.⁵ But we have no clear evidence to prove the prevalence of water cess as a separate tax in the Gupta

 1. *Ind.Ant.*, vol. XII, p. 189 fn. 39. Also see H.H. Wilson, *Glossary of Judicial and Revenue Terms*, s.v. *udhar*.

2. *CII*, III, No. 21, pp. 97-98 fn. 6. A.S. Altekar is also of the same view that *udraṅga* meant *bhāga*. See *Raṣṭrakutas And Their Times*, p. 216.

3. U.N. Ghoshal, *Hindu Revenue System*, p. 276.

4. *Sel, Inscr.*, p. 391 fn. 5.

5. S.K. Maity, *Economic Life of Northern India*, p. 62.

period. According to another explanation given by Maity, *udraṅga* may be something as *draṅga* which is referred to in the *Rājatarāṅgiṇi*, a later work, as a watch-station, and the term as such may have stood for the police tax levied for the maintenance of local police station.¹ This view is more or less endorsed by Puspa Niyogi.² However, these interpretations of *udraṅga* based merely on the similarity in sound of the words are not quite sound.

Udraṅga could not have been an oppressive tax because no Gupta inscription mentions its remission ; rather it is referred to as an assignment. For instance, in the Khoh Coper-plate Inscription of mahārāja Hastin dated 475-76 A.D., it is assigned along with *uparikara* and other taxes, to some brāhmaṇas in the grant of the village *Vasaṅtaraṣandika*.³ L. Gopal suggests that *udraṅga* and *uparikara* may be equated with *kḷipta* and *upakḷipta*.⁴ It seems that the terms *udraṅga* and *uparikara*, *bhāga* and *bhoga*, *dhānya* and *hiraṇya* were overlapping in their import and referred to the land taxes from a slightly different standpoint.

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1. *Ibid.* ; M.A. Stein (tr.), *Rājatarāṅgiṇi*, Vol. II, pp. 291-92.
 2. Puspa Niyogi, *Contributions to the Economic History of Northern India*, Calcutta, 1962, p. 187.
 3. *CII.*, III, No. 21, p. 97.
 4. L. Gopal, *Economic History of Ancient India*, p. 41.

The land grants of the Gupta period also contain several other terms connected with land revenue. The terms *hālikakara*,¹, *ditya*,² *meya*³ or *tulyameya*⁴, *dhānya*⁵, etc., are not mentioned in any early source. The term *hālikakara* has been variously interpreted by the modern scholars. U.N. Ghoshal suggests that *hālikakara* may mean a tax on ploughs, but he does not elaborate the term further.⁶ According to S.K. Maity, the term may connote an extra cess imposed upon the area that could be cultivated with one plough.⁷ During the Mughal period, the taxes were sometimes assessed on the basis of an area cultivated with one plough.⁸ But in D.N. Jha's view, this can not be taken to suggest conclusively that the term *hālikakara* stood for the taxes on ploughs in the Gupta period.⁹ Y.B. Singh has tried

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1. *CII.*, III, No. 30, p. 134 ; *Ep.Ind.*, XIX, No. 21.
 2. *Ep.Ind.*, X, No. 13.
 3. *CII.*, III, No. 60, p. 257 ; *Ep.Ind.*, II, No. 30.
 4. *Ep.Ind.*, VII, No. 22.
 5. *CII.*, III, No. 38, p. 166.
 6. U.N. Ghoshal, *Hindu Revenue System*, p. 280.
 7. S.K. Maity, *Economic Life of Northern India*, p. 63.
 8. Richard Burn (ed.), *The Cambridge History of India*, Vol. IV, p. 454 ; Irfan Habib, *The Agrarian System of Mughal India*, Bombay, 1963, p. 198.
 9. D.N. Jha, *Revenue System in Post-Maurya and Gupta Times*, Calcutta, 1967, pp. 56-57.

to prove *hālikakara* as a sort of *visṭi* levied on the peasants.¹ Etymologically, the terms *hāli* and *hālika* refer to a large plough and the ploughman respectively.² The *hāli*, according to him, may be equated with one of the types of *visṭi* tax and treated as an equivalent of the *hari* system. The *hari* denotes the employment of all bullock teams in the field of a landlord for cultivating his *sir* lands without any payment. To substantiate his argument, Y.B. Singh refers to the expression *halika-kara-sametaḥ* in an inscription which indicates the donee's right to exact such customary employment of plough teams of the village for the cultivation of his lands.³ He further refers to the *Arthaśāstra* where Kauṭilya recommends the employment of slaves and prisoners for the cultivation of crown lands, and says that for want of ploughs the peasants would have been asked to work on such lands for some days. Y.B. Singh's argument appears plausible but nothing could be said with certainty about the exact nature of *hālikakara* during the period of our study.

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1. Y.B. Singh, 'Hālika-kara : Crystallization of Practice into a tax', *Essays in Ancient Indian Economic History* (ed.), Brajadulal Chattopadhyaya, New Delhi, 1987, pp. 88-90.
 2. Monier Williams, *A Sanskrit-English Dictionary*, p. 1293.
 3. *Ep.Ind.*, XIX, p. 127.

In the inscriptions, the term *meya* is normally followed by the term *hiranya*.¹ But in the Madhuban Copper-plate Inscription of Harsha, we come across the expression *yathāsamucita-tulyameya-bhāga-bhoga-kara*.² *Tulyameya* is, perhaps, used here as a supplement to *bhāgabhogakara* and the expression may thus mean the king's normal share of the produce that can be weighed and measured. But in the Gupta inscriptions, *meya* or *tulyameya* does not occur along with *bhāgabhogakara*. Thus, in D.N. Jha's opinion, it is likely that *meya* was a substitute for general land tax.³ The term *dhānya* also seems to have denoted the general land tax because most inscriptions mention *dhānyabhogakara* in place of *bhāgabhogakara*. However, in some land charters, *dhānya* occurs along with *bhoga* and *bhāga*, implying thereby that it was a distinct revenue term.⁴ U.N. Ghoshal suggests that *dhānya* was probably a fixed contribution in kind.⁵

IV

The crown lands were another source of income to the State. In the *Arthaśāstra*, we come across the term *sītā*

1. *IHQ*, vol. XIX, 1953.
2. *Ep.Ind*, VII, No. 22.
3. D.N. Jha, *Revenue System in Post-Maurya and Gupta Times*, p. 57. Also see U.N. Ghoshal, *Agrarian System in Ancient India*, p. 48.
4. *Ep.Ind.*, XXI, No. 35.
5. U.N. Ghoshal, *Hindu Revenue System*, p. 286.

meaning the produce from the royal farms.¹ Under the Mauryas vast stretches of unreclaimed waste land were brought under cultivation by the State. These lands were cultivated either directly by the State under the supervision of *sītādhyaksha* or leased to the tenants.² Conflicting statements of Diodorus and Strabo over the revenue charged by the State from crown lands has led to a controversy among modern scholars over their interpretation. According to Diodorus, "They (husbandmen) pay a land tribute to the king, because all India is the property of the crown, and no private person is permitted to own land. Besides the land tribute, they pay into the royal treasury a fourth part of the produce of the soil". On the other hand, Strabo has observed that "the whole of the land is the property of the king, and the husbandmen till it on a condition of receiving one-fourth of the produce".³ Bernard

1. AS., II, 15.

2. *Ibid.*, II, 24. The crown lands were cultivated by slaves (*dāsa*), hired labourers (*karamkāras*) and convicts (*daṇḍapratikarta*) under the direct supervision of the *sītādhyaksha*. But as the crown lands were large in proportion to labour supply, the fields were leased to tenants on attractive terms. This method of farming has its parallel in the practice of the *zāmindārs* of Bengal and elsewhere who cultivated their lands called *nij-jote*, *khāmār*, *zirat*, etc., either by employing their own labour or else by giving it to tenants (*bargādars*) on the basis of share-cropping. See U.N. Ghoshal, *Agrarian System in Ancient India*, p. 15.

3. J.W. McCrindle, *Ancient India as Described by Megasthenes and Arrian*, Calcutta, 1926, pp. 39, 40, 84, 216 ; J. Monahan, *The Early History of Bengal*, pp. 142 ff.

Breloer has suggested that the phrase 'besides the land tribute' used by Diodorus should be substituted by 'in the absence of special arrangements'.¹ On the basis of Breloer's suggestion, U.N. Ghoshal thinks that the tax paid by the cultivators on crown lands amounted to one-fourth of the produce in the absence of special arrangements made by the State.² Special arrangements seems to mean facilities like bullocks, agricultural implements, seeds, manures, etc. Thus, one possible inference could be that when the tenants on crown lands employed their own capital in agriculture they paid only one-fourth of their produce to the State. M.H. Gopal's contention that the statement of Diodorus refers to lands other than the crown lands, and that the cultivators paid, besides the land tribute, one-fourth of their produce as an irrigation cess,³ does not sound convincing because it is generally held that the Greek accounts refer mainly to the crown lands.⁴ Similarly, the statement of A.N. Bose that Diodorus refers to two separate taxes, i.e., *bhāga* and *bali*, is rendered doubtful because

1. See U.N. Ghoshal, *Hindu Revenue System*, p. 226.

2. *Ibid.*

3. M.H. Gopal, *Mauryan Public Finance*, pp. 55, 56, 68. According to Gopal, 'one-fourth appears to have been the most common rate as it was levied on water-lifts, worked by bullocks and on water raised from rivers, lakes, tanks and wells. It is very probably to this that Megasthenes refers as a payment of a fourth part of the produce in addition to the land tribute'.

4. See Chapter on Land Grants.

most of the scholars believe that *bhāga* and *bali* were levied on non-crown lands.¹ According to Bhattasvāmin, the rate of *bali* was one-tenth or one-twentieth part of the produce.²

We can not rule out the possibility of approaching the problem from a different angle. The statement of Strabo that the husbandmen received one-fourth of the produce, and the view expressed by Diodorus that they paid into the royal treasury a fourth part of the produce of the soil can be reconciled if we take into consideration the fact that while Diodorus has not mentioned the rate of land tribute, Kauṭilya makes it explicit that the tenants who employed their own capital were required to pay one half of the produce.³ That would lead us to the conclusion that both Diodorus and Strabo seem to indicate that tenants on crown lands were left with one-fourth of their produce. We can not rule out the possibility that in actual practice the rates varied according to the fertility of the soil. In the fertile middle Ganga plain, the share-croppers were probably required to pay an additional cess. Similarly, the State might have levied an additional cess on some specific crops.

The term *pārihīṇika* in the *Arthaśāstra* denotes a compensation levied in the shape of grains for any damage

1. A.N. Bose, *Social and Rural Economy*, Vol. I, p. 160.

2. On *AS.*, II, 15.

3. *AS.*, II, 24.

done by cattle to crops growing on cultivated tracts.¹ As the waste and uncultivated lands belonged to the State, it appears that the *pārihīṇika* was also a source of income from crown lands.

The crown lands continued to exist in post-Maurya period as well. Fa-hsien's observation that "only those who cultivate the royal land have to pay (a portion of) the grain from it" clearly indicates the existence of such lands.² The land charters of the Gupta period also refer to the sale of crown lands to individuals.

V

It is the fundamental right of the State to compel all its subjects to contribute to the exchequer. But there have always been certain persons and institutions who were exempted from the payment of one or more taxes. These exemptions and remissions of land revenue and other taxes were granted to the *brāhmaṇas*, temples, courtiers, villages, and even to individual cultivators. In the *Arthasāstra*, we find that the state functionaries were required to prepare a revenue roll of the kingdom recording clearly the revenue free lands (*pārihāraka*).³ Kauṭilya lays down that no land

1. *Ibid.*, II, 15.

2. James Legge (tr.), *A Record of Buddhist Kingdoms*, pp. 42-43.

3. *AS'*, II, 35.

tax is to be levied on the peasants who bring the barren land under cultivation until they earn from that piece of land double the amount they had invested in cultivating it.¹ Rummindei Pillar Inscription records that the village of Lumbini, being the birthplace of lord Buddha, was exempted by Ashoka from the payment of *bali*.² The villages which supplied troops (*āyudhīya*) were exempted from taxes.³ Sometimes, the state functionaries were also granted tax-free lands.⁴ Certain references in the *Śatapatha Brāhmaṇa* indicate that from early times the brāhmaṇas were not taxed.⁵ Vasishṭha says that the king who rules in accordance with the sacred law may take a sixth part of the wealth (of his subjects) except from the brāhmaṇas.⁶ Manu enjoins that even if the king is dying of want he should not levy a tax on the *śrōtriya*.⁷ The early law-givers recommend the grant of revenue free lands to *śrōtriyas* or those learned brāhmaṇas who performed sacrifices and studied the Vedas.⁸ The Greek accounts mention that only the

1. *Ibid.*, III, 9.

2. R.K.Choudhary, *Inscriptions of Ancient India*, p. 25.

3. *AS.*, II, 35.

4. See Chapter on Land Grants.

5. *Śat.Brāh.*, XIII, 6. 2. 18.

6. *Vas.*, I, 42-43.

7. *Manu*, VII, 133.

8. *Āpast.*, II, 10. 26.

philosophers who gave sound advice were exempted from taxes.¹ In this context, R.S. Sharma has pointed out that since only a few brāhmaṇas might have been unacquainted with the Vedic literature, such fiscal privileges must have benefited the entire brāhmaṇa class.² Manu states that a brāhmaṇa, learned or unlearned, is a great divinity just as consecrated or unconsecrated fire is a great divinity.³ Revenue-free lands were granted to the temples and monasteries also.⁴ As a consequent of the revenue exemptions, the State appears to have suffered a considerable loss of income. Kauṭilya forbade the transfer of revenue yielding lands as revenue-free grants to check the loss of land revenue to the State.⁵ From the Gupta period onwards, there was a constant increase in the number of beneficiaries who held revenue-free lands. But as we do not know precisely the total number of such beneficiaries, it is difficult to determine the actual loss of revenue to the State.

While several land taxes of the Maurya period like *bhāga*, *bali*, *kara*, *hiraṇya*, *visṭi*, *praṇaya*, etc., continued

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1. Strabo, XV, 1. 32.
 2. R.S. Sharma, *Some Economic Aspects of the Caste System in Ancient India*, Patna, 1952, p. 6.
 3. Manu, IX, 317.
 4. For details, see Chapter on Land Grants.
 5. AS', III, 10.

to be levied in subsequent periods also, some of them like *udakabhaga* and *piṇḍakara* are not mentioned in the post-Maurya sources. Instead, some new taxes such as *bhāgabhogakara*, *uparikara*, *udraṅga*, *hālikakara* are frequently mentioned in the Gupta inscriptions. *Ditya*, *meya* or *tulyameya*, *dhānya* are some other taxes referred to in the inscriptions. In the land charters, the list of taxes from which the beneficiaries were exempted is usually followed by the word *ādi* or *itādi*, which indicates the existence of some minor cesses also. It seems that the burden of taxation went on rising in the Gupta and post-Gupta periods. That was probably due to the decentralisation of power, and the practice of revenue-free land grants, which had reduced the area of land under direct control of the State. Moreover, with the downfall of the Roman Empire, beginning in the fourth century A.D., India's foreign trade had suffered a great setback which, in turn, had meant much loss of revenue to the State. Under the circumstances, maintenance of the imperial facade could have been possible only through increased taxation on land.

CHAPTER IV

IRRIGATION

Artificial irrigation is of fundamental importance in the economy of a predominantly agricultural country like India.¹ Primitive man had known water-deficient areas since time immemorial. But so long as he was mainly a food gatherer, he had little need for planned water-supply for irrigation. Pastoral nomads frequently supplemented their economy by agriculture, but as they had to move their herds, from place to place, they paid only casual attention to whatever crops they grew near their camping-sites.² Their migratory way of life prevented them from constructing permanent irrigation works, which form the basis of settled agricultural economy. It was only when man became an intentional food-producer that he began to appreciate the agricultural possibilities of dry areas that contained sources of water-supply other than on-the-spot rainfall.

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1. Sir Charles Traversyan rightly points out that 'irrigation is every thing in India. Water is more valuable in India than land, because when water is applied to land it increases its productivity at least six-fold and generally a great deal more ; and it renders great extent of land productive'. See *Indian Rural Economy*, p. 165. Also see M.H. Gopal, *Mauryan Public Finance*, p. 185.
 2. Karl A. Wittfogal, *Oriental Despotism*, New Haven, 1957, p. 204.

In India, the prehistoric food-gatherer had turned an 'intentional food producer' at an early stage.¹

The rulers of the Nile and the Tigris valleys encouraged artificial irrigation.² Agriculture on those lands was practically based on artificial irrigation, though the engineering skill was not of a high order.³ The Indus economy like the Egyptian and the Babylonian also rested on irrigation farming.⁴ The people of the 'Harappa Culture', who by their technical skill developed the system of town-

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1. V.D. Krishnaswamy, 'Neolithic Pattern of India', Presidential Address, *Indian Science Congress*, Delhi, 1959, p. 1. Mortimer Wheeler states that the change from parasitic to productive life can be definitely seen much earlier in western Asia. In lower Mesopotamia, the great achievements of the Ubaid period (4400 B.C. - 3950 B.C.) were the creation of rural economy, the maintenance of canals, rational utilization of land and water. See *Early India and Pakistan*, London, 1959, p. 108.
 2. Gordon Childe, *New Light on the Most Ancient East*, London, 1952, p. 176.
 3. See N.K.Kumar, 'Hydraulic Agriculture in Peninsular India', *Proc. IHC*, Waltair, 1979, p. 212. Traces of the artificial means of irrigation pertaining to the neolithic age (6th millennium B.C. or earlier) are found at Jericho, said to be the oldest town in the world in the Jordan valley. See Kathleen Kenyon, *Digging up Jericho*, London, 1957, pp. 74-75. Forced labour was, from the early times, the chief means of maintaining the Egyptian irrigation canals. See S.K. Maity, 'Forced Labour in Ancient India', *Proc. IHC*, Hyderabad, 1978 ; U.N. Ghoshal, *A History of Indian Public Life*, Vol. II, Bombay, 1966, p. 278.
 4. N.K.Kumar, 'Hydraulic Agriculture in Peninsular India', *Proc. IHC*, Waltair, 1979, p. 212.

planning along with underground drainage schemes as early as the third millennium B.C., must have had a thorough knowledge of artificial means of irrigation. Recent excavations at Lothal (Gujarat) have brought to light traces of a canal.¹ But we have no clear evidence to prove that the canal water was used for irrigation purposes. It seems that the agrarian economy of these people was sustained by various minor irrigation works.² Besides the use of wells and periodic floodings, the construction of short-length canals in order to increase the flooded area that could serve small land-holdings appears to have been the usual mode of irrigation.³ This is suggested by the discovery of dams at Amri and in the Las Bela region.⁴

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1. The channel and a dockyard with embankment walls built out of burnt bricks have been discovered at Lothal. See S.R. Rao, *New Light on Indus Valley Civilization*, p. 302. cited H. Chakravortī, 'History of Irrigation in Ancient India', *Proc.IHC*, Jabalpur, 1970, p. 150.
 2. V.K. Thakur, 'First Urbanisation in India : Origin, Character, Decline and Survivals', *JBRIS*, vols. LXIII - LXIV, pp. 51-54.
 3. D.D. Kosambi calls it 'flood irrigation'. See *The Culture and Civilisation of Ancient India*, London, 1965, p. 62.
 4. V.K. Thakur, 'Problem of Defining Peasantry', *Proc.IHC*, Annamalainagar, 1984, p. 133. The Indus people with the aid of irrigation grew food crops and cotton. At Lothal, charred rice found from a storage jar kept in mudbrick house point to the cultivation of rice. See Mortimer Wheeler, *Early India and Pakistan*, London, 1959, pp.72, 102, 108.

In the fertile plains of Ganga, only artificial irrigation could secure good crops.¹ There are numerous references in our sources which prove that artificial means of irrigation were employed by the early settlers in the Ganga plains.² We have evidence to the fact that the Dravidians of northern India were acquainted with the construction of 'tanks' for irrigation.³

The importance of rains to agriculture was fully realised during the *Rigvedic* period.⁴ The hymns in the *Rigveda* dilate less on the human struggle with nature than on prayers directed to Indra, the rain-god.⁵ In the *Mahābhārata* also, we have references to the importance of

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1. 'The government of ancient Egypt and Indostan', states Adam Smith, 'were particularly attentive to the interests of agriculture. The works constructed by the ancient sovereigns of Egypt for the proper distribution of waters of the Nile were famous in antiquity, and the ruined remains of some of them are still the admiration of travellers. Those of the same kind, which were constructed by the ancient sovereigns of Indostan for the proper distribution of waters of the Ganges --- though they have been less celebrated, seem to have been equally great'. See *The Wealth of Nations*, Vol. II, London, 1950, p. 179.
 2. L. Gopal, 'Irrigation-Tax in Ancient India', *IHQ*, vol. 38, Calcutta, 1962, pp. 65-71.
 3. Baden Powell, *The Indian Village Community*, Delhi, 1972, p. 83.
 4. *Rigveda*, V, 83 ; VII, 102.2.
 5. *Ibid.*, III, 8 ; VIII, 118.55 ; X, 42.

rains to agriculture.¹ The monsoon regions are particularly liable to famines, since the prosperity of agriculture depends upon a short season of abundant rainfall in summer. When the rain is scanty or delayed, famine conditions develop.² There are numerous references to famine in the Buddhist literature.³ "Sakka, for the space of three years, stopped rain from falling in the kingdom of Kasi, and the country became as it were scorched up and no crop came to perfection ---"⁴ There was a drought in the land of Kosala and the crops withered.⁵ In the *Rāmāyaṇa*, we read of a famine in the kingdom of Aṅga.⁶ Similarly, in the *Mahābhārata*, there is reference to drought that occurred due to the failure of monsoons.⁷ Diodorus, relying on the account of Megasthenes, states that "famine has never visited India and that there has never been a general

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1. 'Without rains, however, O son of Kunti, it never yieldeth crops'. Indeed, in the absence of rains, people speak of an artificial irrigation --- but even then --- the water, artificially let in, is dried up in consequence of a providential drought. See *UdyogaParva*, 78.
 2. In the *itayah* of the *Mahābhārata* and the *daivapīḍanams* (providential calamities) of the *Arthaśāstra*, flood by excessive rains also figures as the forerunner of famine. *Mbh.*, V, 60.17 ; *AS.*, VIII, 4.
 3. *Mahāvagga*, VI, 23.10 ff ; *Jāt.*, V, 193 f ; I, 331 ; II, 149 ; VI, 487.
 4. *Jāt.*, V, 526.
 5. *Ibid.*, I, 75.
 6. *Rām.*, I, 8.
 7. *Mbh.*, *Śānti Parva*, 141.

scarcity of nourishing food".¹ This sweeping statement, however, does not fit in well with the available evidence.² There is a clear mention of famines in the *Arthaśāstra*.³ The Jain tradition also refers to a famine during the reign of Chandragupta Maurya.⁴ The most severe impact of the famine was felt in the Ganga plains.⁵ This fact is borne out by two Mauryan inscriptions at Mahāsthān and Sōhgaura, which refer to the measures adopted to ameliorate famine conditions in the Ganga valley.⁶ In the *Jātakas*, we find reference to a famine caused by drought in the Kalinga country.⁷ Kauṭilya has listed detailed measures for famine-relief.⁸

The climatic conditions in the Ganga plains --- uneven rainfall, violent overflow of rivers during the period of monsoons, abrupt changes in temperature --- all called

1. Diod., II, 36 ; J.W. McCrindle, *Ancient India As Described by Megasthenes and Arrian*, Calcutta, 1877, p. 32.
2. *Vinaya*, I, 211, 213 ; III, 220 fn. 1 ; *Jāt.*, I, 329 ; II, 135, 149, 367 ; V, 193 ; VI, 487.
3. *AS.*, IV, 3.
4. *Parisistaparvan*, LXXI, VIII, pp. 415 ff. cited M.H. Gopal, *Mauryan Public Finance*, London, 1935, p. 181.
5. For details, see M.D.N. Sahi, 'Famine in the Ganga Valley ---'. *Proc.IHC*, Jabalpur, 1970.
6. *Sel.Inscr.*, pp. 79, 82.
7. *Jāt.*, II, 276 ; VI, 547.
8. *AS.*, IV, III.

for artificial irrigation. Words like 'kulyā' meaning canal, 'khanitrima' produced by digging', in the *Rigveda* refer to artificial channels used for irrigation.¹ Similarly, in the *Yajurveda*, words like 'sarasi' and 'kulyā' are referred to as meaning dam or reservoir and canal, respectively.² The *Atharvaveda*, while describing the digging of canal from river, allegorises the former as a calf and the latter as a cow.³ In the *Rigveda*, reference is also made to the wells.⁴ On the basis of these references, Romila Thapar inferred that artificial means of irrigation were used in the watershed area and the upper Ganga plain during the Rigvedic period.⁵ In the Epic, Rama praises the land of Kosala as *adevamātrkaḥ*, i.e., relying on irrigation and not on rainfall.⁶ In the *Mahābhārata*, Narada's anxiety to know from Yudhishtira whether irrigation works are built at proper distance, without leaving agriculture at the mercy of rains, indicates the importance attached to artificial irrigation.⁷ In the same context, he adds that to provide

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1. *Rigveda*, III, 45.3 ; VII, 49.2 ; X, 43.7 ; Macdonell and Keith, *Vedic Index*, Delhi, 1967, Vol. I, p. 173.
 2. Macdonell and Keith, *Vedic Index*, Vol. I, p. 17.
 3. *Ibid.*, p. 214.
 4. *Rigveda*, X, 101, 6 ; I, 105. 17.
 5. Romila Thapar, *From Lineage to State*, Bombay, 1984, p. 29.
 6. *Rām.*, II, 100. 45.
 7. *Mbh.*, *Sabhā Parva*, 5.77

irrigation facilities to cultivators should be the duty of a righteous king.¹

The Buddhist sources refer to the builders of canals and the measures for regulating the inlet of water to fields after sowing.² In his commentary on *Saṃyutta-Nikāya*, Buddha_ghosha mentions that the fields in Magadha were divided into plots of a regular shape and were irrigated.³ The *Milinda Pañho* refers to wells and artificial lakes which served the purpose of irrigation.⁴ Due attention was paid to irrigation works in the monarchies and in the republics. Buddhaghosha, in his commentary on *Dīgha-Nikāya*, mentions a dam on the river Honini built by the Koliyas and the Sakyas for irrigation purposes.⁵ Although irrigation works are reported far back in remote antiquity, yet they became widespread under the Mauryas when the State began to take active interest in agriculture.⁶

In the Ganga plains, early cultivation was probably confined to the immediate vicinity of rivers, where the

1. *Ibid.*, *Suānti Parva*, 43. 7 ; 86. 15.

2. *Dhammapada*, 80, 145 (*udakaṃ hi nayanti nettikē*) ; *Cūllavagga*, V, 17. 2 ; VII, 1.2.

3. On *Saṃyutta Nikāya*, I, 1127. Also see *Vinaya*, I, 287.

4. *Milinda Pañho*, *SBE*, vol. XXXV, p. 102.

5. *Digh.Nik.*, XX, 1. 1. ; *Jāt.*, I, p. 19.

6. See Bongard Levin, *Mauryan India*, New Delhi, 1985, p. 122.

soil was moist, and where wells, if used at all for irrigation, would have been mere pits in the soft soil.¹ When people learnt to cut canals inland from the rivers or to sink deeper wells and lift water by some mechanical devices, cultivation spread to wider areas. Though most of the Painted Grey Ware (PGW) settlements were situated closer to the river banks, yet there is an evidence of some similar settlements located away from the perennial source of water-supply. Subsistence of these settlements could not have been possible unless the artificial sources of water were tapped, not only for the daily needs of the people but also for irrigation of land.²

With the clearance of forests and increase in population, famine became a major agrarian problem and both the rulers and the ruled turned to mechanical devices against flood and drought. Irrigation works were undertaken and also encouraged by the State.³ Megasthenes refers to an extensive system of irrigation in the Ganga plains ; 'The greater part of the soil is under irrigation and consequently bears two crops in the course of a year'.⁴

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1. Baden Powell, *The Indian Village Community*, p. 51.
 2. M.D.N. Sahi, 'Agricultural Production ---', *Proc.IHC*, Kurukshetra, 1982, p. 98.
 3. See M. H. Gopal, *Mauryan Public Finance*, p. 185.
 4. Diod., II, 35 ; Strabo, XV, 1.20.

Large areas in the Ganga plains were watered by the river and its tributaries.¹

The general pattern of artificial irrigation in the Ganga plains seems to have been by wells and tanks. The water from the rivers and canals also served the purposes of irrigation. The Buddhist texts often refer to the ponds which were formed by rain water, and were used for irrigating the gardens and fields close to them.² Kauṭilya says that irrigation works (setubandha) having perennial supply of water are better than those fed by water drawn from other sources.³ Manu enjoins that the boundary between two villages should be determined by tanks, ponds, channels and other reservoirs of water.⁴ Obviously, these water-works not only served as boundary marks but also supplied water for irrigating the adjacent fields.

A.L. Basham, while describing the general pattern of irrigation works in ancient India, states, 'In the flat plains, the land was cut by canals running from the great rivers and dotted with artificial reservoirs which were made

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1. Diod., II, 36-37 ; Strabo, XV, 1. 17 ; Dhamapada Commentary III, 254 ; Mahābhāṣya, III, 316 ; Milinda Pañho, p. 382 ; Ind.Ant, 1908, p. 233. The land irrigated by river water was called *nadimatrika*.
 2. Milinda Pañho, pp. 259, 296, 330, 351, 382 ; Vinaya, II, 154 ff.
 3. AS., VII, 12.
 4. Manu, VIII, 248-52 (*satatamudakasyāgamena*).

by damming smaller streams or enlarging lakes by stopping their outlets'.¹ Strabo refers to the embanked canals from which the water was distributed to channels so that wider areas could be irrigated for cultivation.² He had evidently in view the perennial canals, which ensured water supply all the year round. The construction of a canal is beyond the means of an individual, and as such, a canal could be dug either by the co-operative efforts of the village community or by the State. Once the canal water was made available, larger areas could be irrigated with less labour.

A canal of the Maurya times has been discovered at Kumrahar, a village about three miles east of Patna railway station. It was linked with the river Son and through it, with the Ganga and was used for bringing monolithic pillars from the Chunar quarries.³ Whether it served the purposes of irrigation or not remains a matter of conjecture due to the lack of evidence on the point. D.R. Bhandarkar discovered traces of another canal at Besnagar in Madhya Pradesh. At the excavated site, it was seven feet broad and its walls were five feet six inches high. In Bhandarkar's opinion, the canal might have been Maurya or possibly pre-Maurya in origin and that it served the purpose

1. A.L. Basham, *The Wonder That Was India*, p. 192.

2. Strabo, XV, 1. 50.

3. *Indian Archaeology*, 1954-55, p. 19 ; A.S. Altekar and V. Mishra. *Kumrahar Excavations, Patna, 1959*, pp. 24 ft.

of irrigation.¹ Patañjali refers to canals used for irrigating rice-fields during the Sunga period.² The Hathigumpha Cave Inscription (c. 1st Century B.C.) records that king Kharavela of Kalinga repaired and extended an old canal which was originally dug by the Nanda king three hundred years earlier.³ Obviously this canal greatly helped irrigation.⁴ The canals perhaps also helped in controlling inundation by rivers, for these are referred to as *jalanirgamaḥ* (drains) in the *Amarakosha*.⁵

Tanks, wells and reservoirs seem to have received greater attention in early India than the major irrigation works. From the *Rāmāyaṇa*, we learn that the region of Ayodhya abounded in tanks and reservoirs.⁶ Similarly, wells are mentioned in the waterless places in the Kosala region.⁷ The Buddhist works frequently refer to the construction of tanks, wells and reservoirs by the rulers and the ruled in

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1. *Archaeological Survey Report (ASR)*, 1914-15, pp. 69 ff.
 2. *Mahābhāṣya*, 1.1.24. (*śāyartham kulyāḥ praṇīyante*).
 3. *Ep. Ind.*, XX, pp. 72 ff ; *Sel. Inscr.*, pp. 213 ff ; *IHQ*, vol. XIV, pp. 262 ff.
 4. B.M. Barua, *Old Brahmi Inscriptions*, pp. 43, 290.
 5. *Amara.*, 9, 7. p. 62 ; 9. 36. p. 67.
 6. *Rām.*, *Ayodhya Kaṇḍa*, 50, 100.
 7. *Ibid.*, 80.

many parts of the Ganga valley.¹ There are references to wells used for irrigation in early law-books.² Kauṭilya says that tanks and wells should be built in barren and less fertile parts of the country.³ In the newly established villages, the king was expected to construct reservoirs with perennial water - supply.⁴ The construction of irrigation works was considered an important form of charity.⁵ The inscriptions of Ashoka refer to the construction of wells.⁶ The tanks belonging to pre-Kushana and Kushana period have been excavated at Thanesar, Ahicchatra (near Bareilly), Kausambi, and Bhita near Allahabad.⁷ About half a dozen such tanks have been found in the Hastinapur area alone.⁸

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1. *Jāt.*, I, 99 ; II, 70 ; III, 216, 270 ; V, 106.
 2. *Baud.*, II, 6. 11. 25 ; II, 3.5.6 ; II 3.6.27 ; *Gaut.*, IX, 10.
 3. *AS'*, II, 34.
 4. *Ibid.*, II, 1, (sahōdakamaharyōdakam vā sētum bandhayēt)
 5. *Baud.*, II, 3-6 ; *Vas.*, XVII, 8. The digging of tank was considered to be one of the seven great meritorious acts a man was expected to perform during his lifetime, the other acts being the procreation of a son, the marriage of a girl, the hoarding of treasure, the composition of a poem, the planting of grove, and the consecration of a temple. See *Ep.Ind.*, III, pp. 88 ff.
 6. Pillar Edict No VII ; Rock Edict No II. See R.G. Basak, *Asokan Inscriptions*, Calcutta, 1959, p. 111.
 7. See *Ancient India*, No. 4, p. 125 ; Nos. 10 & 11, pp. 18, 19 ; *IHQ*, vol. 31 ; pp. 307-308.
 8. *Ancient India*, Nos. 10 & 11, p. 16.

The ring-wells first appeared under the Mauryas in the Ganga plains. Some ring-wells and numerous *kaccā*-wells are found in small plots of land in the Patna and Muzaffarpur areas.¹ Similar discoveries have also been made at New Delhi, Mathura and Ujjain.² In the post-Maurya period irrigation by means of wells had become more common.³ At Sringaverpur in the upper Ganga plain, a large tank ascribable to around the first century A.D. has been excavated.⁴ Tanks and wells are frequently mentioned in the inscriptions of Śaka-Kushana period.⁵ The Mathura Stone Inscription mentions that a brāhmaṇa treasurer of Śoḍāsa (C. 10-25 A.D.) donated a tank, a reservoir and a plot of land which shows the desire of the donor to supply water both for irrigation and drinking purposes.⁶ The Ara Inscription of Kanishka II belonging to 1st half of the second century A.D., refers to the sinking

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1. See R.S. Sharma, *Perspectives in Social and Economic History of Early India*, Delhi, 1983, p. 134.
 2. *Indian Archaeology*, 1954-55, pp. 14-19.
 3. R.S. Sharma, 'A Survey of Land System in India', *JBORS*, vol. XLIV, 1958, p. 228.
 4. R.S. Sharma, *Perspectives in Social and Economic History of Early India*, pp. 161-62.
 5. See H. Chakravorti, *Early Brahmi Records of India*, Calcutta, 1974, p. 62.
 6. LL. No. 82 ; H. Chakravorti, *Early Brahmi Records of India*, p. 50 ; *Sel.Inscr.*, p. 119 ; *Ep.Ind.*, IX, p. 141 ff.

of wells by some persons known as *dasavharas*.¹ In the later part of the second century A.D., Rudrabhūti, the general of Rudrasimha the Śaka ruler of Ujjain, caused a tank to be dug in a village of Rasopadra near Kathaiwad for the welfare and comfort of all living beings.² The Sanchi Inscription, belonging to the third century A.D., records the digging of a well by a Śaka chief for the perennial supply of water for all.³ The Mandara Hill Rock Inscription of Adityasena, assignable to the seventh century A.D., records the construction of a tank in Bhagalpur area by Konadevi, wife of Adityasena.⁴ In some Gupta inscriptions, we come across the term *vāpī* meaning water tanks which were used both for irrigation and drinking purposes in central India and Gujarat.⁵ The tanks and wells were dug by individuals to increase religious merit.⁶

The State in early India took initiative, though on a limited scale, to provide irrigation facilities to the

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1. *Ep. Ind.*, XIV, p. 143.
 2. *Ibid.*, XVI, pp. 16 & 232; *Sel. Inscr.*, pp. 154-55.
 3. A.N.Bose, *Social and Rural Economy*, p. 103.
 4. *CII.*, III, No. 44, pp. 211-12.
 5. *Ibid.*, III, pp. 75, 166, 199; *Ep. Ind.*, XI, pp. 107, 111, 113.
 6. See A. L. Basham, *The Wonder That Was India*, p. 194; Lallanji Gopal, *The Economic Life of Northern India*, p. 87.

peasants.¹ In addition to canals, wells and tanks were also dug by the State for irrigation purposes. The Junagarh Rock Inscription of Rudradaman dated C. 150 A.D. furnishes an evidence of the concern which the Mauryan rulers showed towards the construction of irrigation works in the most distant regions of their empire.² Pushyagupta, the provincial governor of Ujjain, thought that by constructing a dam on a small stream, a reservoir of great value for irrigation could be provided. Accordingly, he developed a lake, but could not complete the necessary supplementary channels for irrigation purposes. These were completed in the reign of Ashoka.³ From this evidence, we can infer that many more such works must have been undertaken by the State in the Ganga plains which formed the core area of the Mauryan empire.

In addition to the State constructing and repairing both major and minor irrigation works, individuals were also

1. See M.H.Gopal, *Mauryan Public Finance*, pp. 184-87.
2. *Ep. Ind.*, VIII. 6; D.C. Sircar, *Inscriptions of Asoka*, p. 27. The Sudarsana lake in Saurashtra marks the beginning of the recorded history of tank and bund irrigation. See Irfan Habib, 'The Peasant in History', *Proc IHC.*, Kurukshetra, 1982, p. 47.
3. The beneficial work undertaken by the Maurya ruler lasted for about four hundred years. In c.150 A.D., the dam bursted due to heavy rains, but was repaired by Rudradaman, the Saka ruler. See *Ep. Ind.*, VIII, 6. It again bursted during the reign of Skandagupta and was repaired by the State. See *CII.*, III, No. 14, p. 56 ff.

encouraged to build and restore the same. People constructing new irrigation works and repairing the old ones were provided with many facilities by the State. The sites, roads, timber and other necessary materials for construction were made available to them.¹ In such undertakings people from the neighbouring areas were required to co-operate and send bullocks to carry on the work.² The State remitted taxes for some years on those who constructed and repaired wells, tanks, and reservoirs.³ By the first and second centuries A.D., many towns had developed in the Ganga plains.⁴ As foodgrains could not be easily brought from long distances, intensive cultivation became necessary in the countryside surrounding the towns. It could have been possible only if irrigation facilities were made available to the cultivators. That individual initiative played a considerable role in the construction of irrigation works in such areas is borne out by a number of inscriptions

 1. *AS.*, II, 1. (*anyēsham vā bondhataṃ bhūmi margavṛik shōpa karaaṇānugrahaṃ kuryāt*)

2. *Ibid.*, II, 1.

3. When irrigation works were newly constructed by individuals, taxes on their lands below such works were remitted for five years; when ruined and neglected works were repaired, the taxes were remitted for four years; and for improving and restoring the irrigation works overgrown with weeds, taxes were remitted for two years. See *AS.*, III, 9.

4. R.S.Sharma, *Perspectives in Social and Economic History of Early India*, p. 168.

belonging to the Śaka-Kushāna period.¹ Dion Chrysostom (C.A.D. 50-17) also states that in order to carry water from large and small rivers to their fields, the local inhabitants made many channels.² The Ara Inscription of Kanishka II alludes to a well dug by an individual for the welfare of all beings.³

Manu lays down that seizure of houses, tanks, orchards and fields by others is a crime of great magnitude.⁴ The reference to tanks in the list shows that these were constructed and owned by individuals for irrigation purposes. At another place, amongst other things, selling one's tank, garden, wife or child is declared a sin to be expiated by penance.⁵ Nārada states that when a man repaired a dyke without the permission of its owner, he would not be entitled to any profit out of it.⁶ Thus, the law-books suggest some kind of individual ownership of irrigation works. Moreover, in the absence of much evidence about large irrigation works undertaken by the State, it seems that irrigation was mostly an individual enterprise

1. *CII.*, II, pt. I, pp. 55, 63, 65, 155, 179.

2. J.W. McCrindle, *Ancient India as Described in Classical Literature*, p. 175.

3. See A.N. Bose, *Social and Rural Economy*, p. 102.

4. Manu, VIII, 264.

5. *Ibid.*, XI, 62.

6. Nārada, XI, 20; Also Yāj., II, 157.

during the post-Maurya period.

The ideal of religious toleration and co-operation has always been a living force in India. Buddhism with its principles of liberty and equality gave a powerful impetus to this ideal in the Ganga plains at a very early stage, and it was reflected in the sphere of irrigation as well.¹ We have references in our sources where all members of the village community co-operated in constructing irrigation works. The *Jātakas* refer to villagers digging water reservoirs and making dykes.² In the *Jātakas*, there is also reference to fields which were separated from one another by channels dug for co-operative irrigation.³ Kauṭilya lays down that in case a peasant could not participate in the construction of co-operative irrigation works, he should bear his share of the expenses.⁴ Manu lays down that if a

1. According to D.A.L. Stede, 'irrigation is one of the strongest agencies in promoting civilization, for it encourages providence and care, and by teaching people to live in peace and submit to the will of the majority, fosters communal existence and co-operation without which progress is impossible'. See 'The Importance of the physical features of India for the understanding of her History', *Indian Culture*, vol. II, Calcutta, July 1935, p. 7.

2. *Jāt.*, I, 99, 336.

3. *Ibid.*, I, 336; IV, 167; V, 412. The cultivated fields of Magadha, which were thus divided by channels rectangular and curvilinear, bore the appearance of the patched robe of a member of the Buddhist *Saṃga*. Rhys Davids, *Buddhist India*, p. 24.

4. *AS.*, II, 1.

villager does not co-operate with others in case of breach in the embankment of watercourses, the king should expel him from the village.¹ Bṛihaspati says that the various guilds should look after the irrigation dams.² All this shows that the irrigation works were mostly constructed and repaired by the collective endeavour of the villagers.³ Moreover, as the land grants, which became a common feature of the land system from the Gupta period onwards, led to the rise of local units of production, it seems that to provide irrigation facilities had become a local responsibility in such areas.⁴

Various methods were employed for lifting water from wells, rivers and reservoirs for irrigating the fields. In the *Rigveda*, mention is made of wells from which water was drawn by means of strong ropes, and it flowed through channels into the fields.⁵ In the *Cūllavaga Jātaka*, the

1. Manu, IX, 272 & 274.

2. Bṛih., XVII, 11-12.

3. The small irrigation works like wells, tanks and river channels all required local co-operation rather than State organisation. See Romila Thapar, *The Past and Prejudice*, p. 59.

4. See R.S.Sharma, *Perspectives in Social and Economic History of Early India*, p.152; Romila Thapar, *The Past and Prejudice*, p. 61.

5. *Rigveda*, VIII, 9. 12. X, 101. 6; Also see S.P. Raychaudhuri et al. (ed.), *Agriculture in Ancient India*, New Delhi, 1964, pp. 353-54. The water was raised from the wells by a wheel of stone (*chakra*) to which was fastened a strap (*varatra*) with a bucket (*kosha*) attached to it. See *Rigveda*, X, 101. 5-7.

lever (*tulum*), bullocks (*karakataka*, *karakatanka*, *karakadaka*), the wheel and axle (*cakkavattaḥam*), are referred to as the means of drawing water from irrigation sources.¹ Pāṇini mentions a leather basket for lifting water (*udañcana*) and the yoke (*yugavaratra*) put on oxen for drawing up the leather basket.² Kauṭilya describes different methods used for lifting water from water reservoirs.³ These included drawing water by manual labour (*hastaprāvartiman*), by the water - lifts worked by bullocks and by means of wind power (*vātaprāvartima*), etc. The term 'hastaprāvartiman' is not very clear. Perhaps, it implied the system of irrigation in which two persons standing on opposite sides and holding the ropes attached to a leather basket throw water from a low level to a higher level.⁴ In the Nāsik Buddhist Cave Inscription of the time of Raja Maṭharīputra Īshvarasena, the Abhīra ruler (c. 248 A.D.), there occurs the term 'odayantrikas', which has been explained by Senart as a guild of workers manufacturing some kind of hydraulic engines.⁵ It can not be said with certainty whether these engines were used for lifting water for irrigation purposes or not. R.S. Sharma, however,

1. *Cullavagga*, V, 16. 2.

2. V.S.Agrawala, *India As Known to Panini*, p. 204.

3. *AS'*, II, 24; III, 9.

4. See N.N.Kher, *Agrarian and Fiscal Economy*, p. 176.

5. *Ep. Ind.*, VIII, p. 89; LL. No. 1137.

suggests that these engines had some connection with raising water from different sources for irrigation.¹ But we have no evidence of the use of such mechanical devices in the Ganga plains.

The term *araghaṭṭa* is mentioned in a number of inscriptions.² It was a technique used for lifting water from wells and other water reservoirs by working at spokes. A series of earthen pots tied to the periphery of a wheel were driven by the water current in a stream. The pots were so inclined to the axis that they dipped and filled while in water, and emptied while passing a trough placed above the shaft. It was also called as *ghaṭi-yantra*, *ghaṭa-chakra* and *udghāṭana*.³ Bāṇa was perhaps referring to the same method of lifting water when he said that the farms were "watered by the pots of the Persian wheel".⁴

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1. See *Perspectives in Social and Economic History of Early India*, p. 169
 2. D.C.Sircar, *Indian Epigraphical Glossary*, Delhi, 1966, p. 26.
 3. The device *udghāṭana* consisted of a drum-shaped wheel turning in a vertical plane over water, round which went a pair of endless ropes with earthen pots tied to them at equal distances. The wheel had spokes at one end and worked like a capstan. See H. Chakravorti, 'History of Irrigation in Ancient India', *Proc. IHC.*, Jabalpur, 1970, p. 153.
 4. Bāṇa, *Harshacharita*, (tr.) p. 79; R.C.Majumdar (ed.), *The Classical Age, History and Culture of Indian People*, V. III, Bombay, 1954, p. 586.

The water requirement of a crop is not consistent throughout its growing period; some crops need more water at early stages than in the later period, while the reverse is the case with some other crops. Only controlled water supply can prove most beneficial to the cultivators. The irrigation operations, therefore, were designed to regulate the inflow of water into the fields.¹ The irrigation works were controlled by specialists who regulated the supply and distribution of water in a planned way so that every peasant had his share.² Under the Mauryas, there was an official agency for supervising the proper distribution of canal water among the peasants, which was controlled through sluice-gates. Megasthenes observed, "some superintend the rivers -- and inspect the sluices, by which water is let out from the main channels into their branches --- to see that there is an equal supply of water to the people".³ Megasthenes makes it clear that the government was the distributing agent of irrigation water, but he does not provide organisational details. Strabo refers to a class

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1. *Cullavagga*, VII, 1-2. (*udakamatinetabbam---atinetva ninnetabbam*).
 2. *Dhammapada Comm.*, 80, 145. (*udakam hi nayanti nettikā*). 'The *nettikās*, to judge from the commentary and from the general purport of the verse, are not simply water-carriers but builders of canals and aqueducts who force the water to go where it would not go by itself' --Max Muller's note on *Dhammapada*, SBE series.
 3. Strabo, XV, I, 50-52.

of royal officers who supervised the canals.¹ It seems that these functions were, to some extent, performed by the official called *nadīpāla*.² But Kauṭilya states that the *sītādhyaksha* had the general control over state - owned irrigation works. His duties, among other things, consisted of letting in water to the fields from *nadi* (river), *taṭāka* (tank or reservoirs), *kūpa* (wells), and *saras* (lakes) by regulating the sluice-gates.³ Romila Thapar holds the view that irrigation was controlled by the office of the *rājūkas* or *agronomoi* of Megasthenes.⁴

The State considered it a duty to safeguard the rights of the cultivators to the use of irrigation works even if these lay in others' fields. When Devendravarman, the Ganga king, granted a *hala* of land including the watercourse and the house site, the *brāhmaṇa* donee was clearly instructed to share the water during summer (*grīshmodaka*) 'equally with the (other) families'.⁵ The use of the irrigation works constructed by the State required the prior permission of the State authority. The *brāhmaṇa* donee of a plot of land in the village of Siddārthaka had to procure from the donor,

1. *Ibid.*

2. *AS.*, II, 6.

3. *Ibid.*, II, 24.

4. Romila Thapar, *Asoka and the Decline of the Mauryas*, p. 118. Also see F.J. Monahan, *The Early History of Bengal*, p. 157.

5. *Ep.Ind.*, XIII, pp. 212 ff.

Indravarman II, the specific permission for using water from the nearby *rājataṭaka* for irrigation purposes.¹

In view of the importance of artificial irrigation, the State paid due attention to the protection of the irrigation works. Rules were framed by the law-givers for their protection. Heavy fines and severe punishments were imposed on those who caused damage to irrigation works.² Kauṭilya says, 'persons who cultivate the lands below tanks, etc., of others at a stipulated price (*prakraya*), or for annual rent (*avakraya*), or against some share of the crops grown (*bhāga*), or persons who are permitted to enjoy such land free of rent of any kind, shall keep the tanks, etc., in good repair ; otherwise, they shall be punished with a fine of double the loss.'³ Moreover, the water of irrigation works could be let out only through the sluice-gates (*apare*) and any one attempting to hinder the flow of water from these outlets was punished with a fine.⁴

The damage to irrigation works was considered a heinous crime comparable to the destruction of a child in the womb and the culprit was liable to be punished by drowning with

1. *Ibid.*, III, pp. 127 ff.

2. *AS.*, II, 1.

3. *Ibid.*, III, 9.

4. *Ibid.*

a stone tied to his neck.¹ Kauṭilya suggests similar punishments depending upon the nature of the crime committed.² The law-givers also prescribe very stringent penalties for those who cause any damage to water reservoirs. Manu ordains that one who destroys the embankment of a reservoir shall be either drowned in water or put to death by beheading.³ He further lays down that if someone makes an unauthorised use of a tank or destroys a channel of water by raising embankments, he shall be punished with the heaviest fine.⁴ Vishṇu prescribes death penalty to those who destroy embankments.⁵ Brihaspati lays down that he who causes any damage to irrigation works shall be fined hundred paṇas or more depending upon the nature of the offence.⁶ For the purpose of maintaining the existing irrigational facilities, the Arthaśāstra enjoins collective

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1. V.R.R. Dikshitar, 'A History of Irrigation in South India', *Indian Culture*, vol. XII, 1945-46, p. 77.
 2. According to Kauṭilya, when a person causes any damage to a tank full of water, he shall be drowned in the same tank. If a person causes any damage to a dry tank or to a tank which is in ruins owing to neglect, the culprit should be punished with a heavy fine or some punishment according to the crime committed. See *AS.*, IV, 11.
 3. Manu, IX, 279.
 4. *Ibid.*, IX, 281.
 5. Vishṇu, V, 15.
 6. Brih., XXIII, 5.

responsibility.¹ The villagers themselves were also aware of the need of protecting the irrigation works. There are instances of agreements among villagers to the effect that they would not cause any damage to the irrigation works, any breach of the agreement being punishable with the confiscation of a portion of the land of the offender to the village temple.² Sometimes, the village community engaged some persons to look after the communal water reservoirs.³

There is a difference of opinion among the scholars regarding the imposition of irrigation tax by the State. Irrigation being so vital to agriculture, any tax on water by the State would mean its great control over the peasants. Bhattasvāmin, in the course of his commentary on a passage in the *Arthaśāstra*, observes that those well-versed in the *Śāstras* declared the king as the lord of both land and water.⁴ Kauṭilya distinctly mentions *udakabhaga*, which along with land revenue, was charged from the peasants in

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1. *AS.*, II, 1 ; IV, 10. Pāṇini refers to the cleaners of the village wells - VI, 3.60. As every member of the village community got his share of the water supply from the irrigation works, they were required to contribute towards the upkeep of these works.
 2. V.R.R. Dikshitar, 'A History of Irrigation in South India', *Indian Culture*, p. 77.
 3. Bongard Levin, *Mauryan India*, p. 157.
 4. *AS.*, II, 24. *Rājā bhūmeh-patiḥ-dṛstah śāstrajñair-udakasya cha tabhyām anyattu yaddravyām tatra svāmyam kutumbinām.*

the form of a share of the produce.¹ He further lays down different rates of irrigation cess depending upon the methods employed in irrigating lands.² Medhātithi, in his commentary on Manu, observes that the king could stop water supply to those villages that did not contribute something in return to the State.³ It implies that in return for the use of water for irrigation, the villages were expected to pay some tax to the State in one form or the other.

On the basis of the statements of Kauṭilya and Megasthenes, M.H. Gopal has arrived at the conclusion that an irrigation tax was charged by the State from the peasants.⁴ The same view has been expressed by A.N. Bose.⁵ Lallanji Gopal, on the other hand, not agreeing with their views, concludes that the State in ancient India never

1. *Ibid.*, II, 24.

2. Those who irrigate their lands by manual labour (*hastaprāvartimam*) shall pay one-fifth of the produce as irrigation cess ; those who carry water on their shoulders for irrigation (*skandhaprāvartimam*), shall pay one-fourth of the produce ; and those who employ some mechanical devices, shall pay one-third of the produce. Kauṭilya refers to general irrigation tax when he lays down that those who irrigated by raising water from the rivers, lakes, tanks and wells, shall pay one-fourth of the produce. See *AS.*, II, 24.

3. On Manu, 1. 21.

4. M.H. Gopal, *Mauryan Public Finance*, pp. 71 ff. Megasthenes states, 'besides the land tribute, they (the husbandmen) pay into the royal treasury a fourth part of the produce'.

5. A.N. Bose, *Social and Rural Economy*, p. 102.

derived any profit from irrigational works.¹ But irrigation cess cannot be called profit. It could be a means of recovering the cost of construction as well as the maintenance and supervision of such irrigation works. Lallanji Gopal suggests that the irrigation tax was levied only on the crown lands, as it has been mentioned by Kauṭilya while dealing with crown lands.² If this tax, he argues, was applicable even to non-crown lands, it would have been one of the chief sources of the State's income deserving mention in other contexts as well. But its conspicuous absence in the two lists, one mentioning the taxes collected by *samāhartā* among other revenues from *ṛāshṭra* and the other dealing with the charges collected by the Superintendent of the Storehouse from several departments, shows that it was a minor tax and a negligible source of income and hence, it has been referred to by Kauṭilya in the chapter dealing with crown lands.³

According to M.H. Gopal, the irrigation tax is mentioned by Kauṭilya while referring to crown lands and

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1. Lallanji Gopal, 'Irrigation Tax in Ancient India', *IHQ*, vol. 38, 1962, pp. 66 ff.
 2. *AS.*, II, 24. In Lallanji's view, no such tax was charged from the peasant proprietors in ancient India, and the practice of levying irrigation tax started only in the medieval period. See *History of Agriculture in Ancient India*, pp. 179-83.
 3. For the two revenue lists mentioned in the *Arthaśāstra*, see *AS.*, II, 6 & 50. For L. Gopal's arguments, see 'Irrigation-Tax in Ancient India', *IHQ*, pp. 66 ff.

their cultivation, not because the tax applied to crown lands alone, but because it was very natural to enumerate it while treating agriculture and perhaps also because the cess might have been regulated by the Superintendent of Agriculture who was a royal officer.¹ On the basis of Megasthenes' statement, he further states that the peasants paid the land revenue and also another tax, amounting to a fourth part of the produce, which proportion was about the average and more commonly paid amount of water cess.² Kauṭilya's injunction that when waterworks are constructed by the people themselves, nothing should be charged from them until they realise profit twice the expenditure, shows that the irrigation tax was charged even when the land was irrigated from privately owned waterworks.³

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1. To substantiate his view that irrigation tax was levied on non-crown lands as well, M.H. Gopal argues that as the tenants working on crown lands received one-half of the produce when they employed their own capital, and one-fourth or one-fifth of the produce when the State supplied the implements and other necessaries (AS, II, 24), and if, in addition to this, they paid the water charges, i.e., one-third, one-fourth or one-fifth part of the produce as the case was, then practically nothing would be left to them. See *Mauryan Public Finance*, p. 71.
 2. As the statement of Megasthenes has been variously interpreted by Diodorus, Strabo and Arrian, the inference which M.H. Gopal has drawn does not seem to be very sound. For different interpretations of Megasthenes' statement, see F.J. Monahan, *Early History of Bengal*, pp. 142, 144, 149.
 3. According to U.N Ghoshal, irrigation cess was charged at three distinct rates for lands irrigated by the State - owned irrigation works, and a uniform rate of one-fourth part of the produce for lands irrigated by rivers, lakes, tanks and wells. See *Hindu Revenue System*, p. 43.

It appears that under the Mauryas, the State charged irrigation tax from all the cultivators who benefitted from irrigation facilities. But in the post-Maurya, period we do not come across any direct reference to *udakabhaga* as a separate tax levied by the State on cultivators. It does not occur in the long list of taxes mentioned in the land charters from which the beneficiaries were exempted. Perhaps, the State had relaxed its strict control over agriculture and took a limited initiative in the sphere of irrigation. That left the responsibility for providing irrigation facilities mainly to individual and co-operative hands, and, as such, there remained perhaps no justification for regular irrigation levy. It might be possible that the land revenue included the irrigation tax also as we have seen that the rates of land revenue differed depending upon the nature of land which covered the irrigation facilities as well. Karl Wittfogal, while referring to irrigation, states that the Muslim masters of India exhibited less hydraulic concern than their Hindu predecessors, and that they never fully restored the grandiose hydraulic economy that appears to have flourished in the Mauryan empire.¹ Irfan Habib, refuting the statement in totality, has expressed his opinion that India never possessed hydraulic agriculture on any scale. He also adds that the Muslim rulers of medieval India did not exhibit less hydraulic

1. Karl. A. Wittfogal, *Oriental Despotism*, p. 170.

concern than their predecessors but, in fact, showed the same indifference to it.¹ R.S. Sharma, however, is of the view that in most parts of India, irrigation was neither badly needed nor always provided by the State.² But most parts of India, because of climatic conditions, did need artificial irrigation. It is altogether a different matter how much initiative the State took in this respect. At least, the Maurya rulers were not indifferent to this vital aspect of agriculture. In the *Arthasāstra*, we find that one of the duties of the Superintendent of Agriculture was to look after irrigation. In the post-Maurya period, though we have instances where the rulers constructed irrigation works, the initiative seems to have been left mostly in private hands.

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1. Ifran Habib, 'An Examination of Wittfogal's Theory of Oriental Despotism', *Studies in Asian History* (ed.), K.S. Lal, Delhi, 1969, pp. 378 ff. Some Muslim rulers of medieval India, on the contrary, showed a considerable interest in the construction and maintenance of irrigation works. See B.N. Datta, *Dialectics of Land Economics of India*, Calcutta, 1952 ; Elliot and Dawson, *History of India*, Vol. VII, p. 56.
 2. R.S. Sharma, 'Stages in Evolution of Early Indian Society', *The Man and the Scientist* (ed.), G.P. Sinha, Delhi, 1979, p. 205.

CHAPTER V

LAND RIGHTS

Land rights operating in ancient India pose a baffling problem for the historians. While almost all monographs on the social and economic history of the period touch the subject, none of them has dealt with it in a proper perspective taking into consideration its various aspects. Literary sources have generally been interpreted according to pre-conceived notions. The proprietary rights in land have been mostly ascribed to one exclusive category, either communal,¹ or royal,² or individual,³ which is simply

1. H.S. Maine, *Village Communities in the East and West*, London, 1890, pp. 91-94 ; G. Campbell, *Modern India*, London, 1852, p. 92 ; M. Elphinstone, *History of India*, London, 1841, p. 25 ; R.C. Majumdar, *The Corporate Life in Ancient India*, Calcutta, 1933, pp. 186-193.
2. James Mill, *The History of British India*, Vol. I, London, 1824, p. 180 ; V.A. Smith, *The Early History of India*, Oxford, 1904, p. 123 ; E.W. Hopkins, *India Old and New*, New York, 1901, p. 218 ; J.N. Samaddar, *Economic Conditions of Ancient India*, Calcutta, 1922, p. 168 ; S.K. Maity, *The Economic Life of Northern India*, Calcutta, 1957, pp. 22 ff ; R.K. Choudhary, 'Ownership of Land in Ancient India', *JBORS*, vol. 53, 1967, pp. 27-53.
3. P.N. Banerjee, *Public Administration in Ancient India*, London, 1916, p. 179 ; K.P. Jayaswal, *Hindu Polity*, Bangalore, 1955, pp. 327-38. ; A.S. Altekar, *A History of Village Communities in Western India*, Bombay, 1927, pp. 80-87 ; P.V. Kane, *History of Dharmasastra*, Vol. II, Poona, 1941, p. 866 ; U.N. Goshal, *The Agrarian System in Ancient India*, Calcutta, 1930, pp. 98-99 ; Lallanji Gopal, 'Ownership of Agricultural Land in Ancient India', *JBORS*, vol. 46, 1960, pp. 27-45.

misleading. The possibility of the existence of comparative rights of various categories of claimants to land has not been systematically explored. While the political and economic developments over the time brought about substantial changes in the nature of land rights of these categories, no attention has been paid to such changes. The practice of land grants, which became fairly common during the Gupta period, not only created new rights in land, but also seriously undermined some of the existing ones. The subject, therefore, requires fresh investigation.

In the law-books, each village is regarded as a distinct and separate unit having well-defined limits. Permanent boundary marks were constructed to demarcate the limits of different villages.¹ There are references in the *Smritis* to disputes occurring between two or more villages over matters related to land.² The well-defined boundaries of separate villages have been construed as an indication of communal rights in land.³ According to Henry Maine, 'the oldest discoverable forms of property in land were forms of

1. Manu, VIII, 246 ff ; Brih., XIX, 20-22.

2. See Manu, VIII, 245 ; Yāj., II ; Nārada, XIX.

3. B.C. Sen, *Economics in Kautilya*, Calcutta, 1967, p. 130 ; Bongard Levin, *Mauryan India*, New Delhi, 1985, pp. 152-153.

collective property'.¹ While the peasants held separate well-marked plots of land, in Rhys Davids' view, they enjoyed no proprietary rights against the community as such.² At another place, Rhys Davids states that the rights of the individual householders as against those of community varied from place to place.³

On the basis of a land charter from Bengal, Pargiter has tried to prove community rights in land during the Gupta period. The charter states that land could be purchased only after the unanimous approval of the leading men of the village community as well as the common folk (*prakṛtayaḥ*).⁴ R.G. Basak also argues that if we assume that the lands belonged to the State then why could it not be alienated without the consent and approval of the people's representatives --- and sometimes even the common folk ? One way of answering these questions, he says, may be that -

1. Henry Maine, *Village Communities in the East and West*, pp. 61, 76, 77. E.W. Hopkins defines collective property as 'the ownership of land in which the villagers have got no notion of a divided or undivided right, all corporate in tilling, in cultivating and improving the village fields, raising the crops and storing it at a common granary from which each is to take according to his needs and none has any share in village lands, which he can call his own'. See *India Old and New*, p. 229.
2. Rhys Davids, *Buddhist India*, Calcutta, 1959, p. 46.
3. *Ibid.* The jungles and rivers of the vast Ganga plains probably fostered independent developments of peasant communities. See E.J. Rapson (ed.), *The Cambridge History of India*, Vol. I, Delhi, 1955, p. 179.
4. *Ind. Ant.*, XXXIX, p. 195.

these lands belonged not to the State but to the whole village or village assemblies, and hence its transfer could not take place without the consent or approval of the latter.¹ This argument of Basak is supported by R.C. Majumdar also.² The rules regarding settlement of boundary disputes and land transactions gave the village community a strong voice in such matters. The alienation of land to outsiders was evidently a matter that concerned the whole village and the consent of the villagers through their leading men was considered important.³

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1. See Asutosh Mukerjee Silver Jubilee Volume, III, pt. II, pp. 486-487.
 2. R.C. Majumdar, *Corporate Life in Ancient India*, p. 186. Also see R.S. Sharma, *Indian Feudalism*, New Delhi, 1980, p. 219.
 3. U.N.Goshal, 'Land Revenue Administration in Bengal', *IHQ*, vol. V, 1929, p. 111 ; D.N. Jha, *Revenue System in Post-Maurya and Gupta Times*, Calcutta, 1967, p. 10. The village elders also served as witnesses in case there was any dispute about land rights. See *AS*, III, 9. In Laveleye's opinion, the village communities of all countries were averse to the alienation of land to the strangers. "No one", he says, "could sell the property to a stranger without the consent of his associates, who always had a right of pre-emption". See *Primitive Property*, p. 118. The members of the village community are so conscious of their community rights that they always think in terms of 'ours'. - J.H. Nelson, *Perspective of the Scientific Study of Hindu Law*, London, 1881, p. 189. Moreover, the Indian village community protected small farming against the invasion of capitalistic interests, and it did so by maintaining for the villages the right to entail, pre-emption and preoccupation. When in the fourth century B.C. in China, free transfer of land was allowed, merchants accumulated substantial landed property, the government had to take strong fiscal measures to reduce their wealth, and by an edict in 119 B.C., they were forbidden to own land. See Karl. A. Wittfogal, *Oriental Despotism*, New Haven, 1957, pp. 273, 280, 290.

In the early village settlements, the title to land was based upon the labour expended in clearing the land and making it fit for cultivation.¹ In the Ganga plains the climatic conditions are such that the fields once laboriously cleared must be kept clear, otherwise the work would be undone within a very short time. This necessitated separate demarcation of fields which, in turn, developed not only a strong claim to land which had been cleared, but also produced naturally a union of separate families in villages for mutual co-operation. The 'bad spirits' had to be propitiated collectively.² In some respects the inhabitants of each village formed a single unit in the eyes of law. They were required to pay certain taxes collectively.³ If a stolen property could be traced in a village, all its inhabitants bore joint responsibility for it.⁴ In the *Jātakas*, there are references to the kings levying taxes and imposing fines on the village as a whole.⁵ But in the Vedic texts and the *Smṛitis*, there is no reference to the *grāmas* -

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1. Baden Powell, *The Indian Village Community*, Delhi, 1972, p. 76.
 2. *Ibid.*, pp. 50-51.
 3. *AS.*, II, 15, 'Pindakara'.
 4. *Vaś.*, III, 4 ; L.D. Barnett, *Antiquities of India*, London, 1913, p. 105.
 5. *Jāt.*, I. 234, 239 ; III, 9.

as the proprietors of all cultivable land.¹ Nearchus, while sailing down the Indus in 325 B.C., observed that families cultivated the land in common.² The families mentioned by Nearchus evidently mean joint families that formed separate units of a larger group -- the village community.³ The village community, in its social and economic aspects, was an organised society of joint families. The proprietary rights lay not in the village community but in the joint families.⁴ Even as early as the Vedic age, it is the joint family that formed the basic unit of the Aryan society.⁵

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1. According to Macdonell and Keith, 'there is no trace in the Vedic literature of communal property in the sense of ownership by the community of any sort, nor is there any mention of communal cultivation'. See *Vedic Index*, Delhi, 1967, Vol. I, pp. 100, 245, 246.
 2. Strabo, XV, I. 66.
 3. See Rhys Davids, *Buddhist India*, pp. 45-47.
 4. Romila Thapar, *From Lineage to State*, Bombay, 1984, p. 37 ; R. Mookerjee, *History and Incidents of Occupancy Rights*, Delhi, 1984, pp. 16-17. Baden Powell explains the growth of proprietary rights in land in some detail. According to him, each household laboriously works to clear and make fit for cultivation a certain unoccupied area of forest clad but fertile plain, over which the family claims its right by virtue of the labour and skill expended on it. Such rights are mutually recognised by other members of the clan on the same basis of labour expended on their respective plots. Eventually, the idea of clan-right to territory as a whole including the cultivable and waste land as distinguished from the territories of other clans becomes definite. The right to landholding cleared by the family, however, remains superior to the clan territorial claim. See *The Indian Village Community*, p. 400. Also see Karl.A. Wittfogal, *Oriental Despotism*, p. 230.
 5. See R. Mookerjee, *History and Incidents of Occupancy Rights*, p. 17.

The hereditary occupation of landed property was generally the prevailing practice in the settled and organised villages.¹

The ancient law-givers hold that the earth is a common property, and a right to a particular portion of it can be acquired by reclamation of unoccupied land. This is clearly stated in the often quoted verse of Manu where he says that the land becomes the property of a man who first clears the jungle for the purpose of cultivation.² Jaiminī, in the *Mīmāṃsā-sūtra*, distinctly lays down that the earth is not the king's but is common to all beings enjoying the fruit of their own labour. "It belongs", he says, "to all alike".³ According to Śavarasvāmin, the commentator, 'Men are the lords of their own fields'.⁴ *Milinda Pañho* illustrates how acquisition of land by clearance of forests created proprietary rights in it. "It is as when a man clears away

1. U.N.Ghoshal, *The Agrarian System in Ancient India*, Calcutta, 1930, p.98.
2. Manu, IX, 44. The passage has been explained by the commentator Kullūka as 'the field is spoken of as the property of a man who removes the fixtures (jungles) and thereby converts the jungle into a field. (*sthānucchedasya kedāraṃāhuh śālyavato mṛgaṃ* - a field belongs to the man who has cleared the forest and a deer to him who first killed it).
3. *Na bhūmiḥ syātsarvānpratyaviśeṣṭtvāt* - Jaiminī, VI, 7. 2-3. In the Roman law, land not brought under cultivation or not taken possession of with the object of approximating it, was without owner (rex-nullius), and, as such, it was the common property of all men just as air and water (rex-communes).
4. On Jaiminī, VI, 7, 2.

the jungle and sets free a piece of land, and the people say - 'that is his land'. Not that the land is made by him. It is because he has brought the land under use that he is called the owner of the land".¹ Similar instances of reclamation of forest land and its appropriation is referred to in the *Jātakas* and the *Epics*.² Thus, theoretically, the investment of physical labour in a piece of unclaimed land was supposed to confer on the individual the title to that land at the early stages in the development of agrarian economy.³ The element of proprietary rights in land, therefore, emerged relatively early.⁴

The early law-books do not sanction the partition of land within the joint families. Gautama enjoins that what is considered livelihood (*yogakshema*) cannot be divided.⁵

 1. *Milinda Pañho*, IV, 4. 15, (*bhūmisāmiko*).

2. *Jāt.*, II, 99 ; IV, 167 ; *Rām.*, II, 32. 30 ; *Mbh.*, XII, 296. 3.

3. For John Locke, private ownership was a law of nature. The private property arose out of the common possession of the earth by all because man had 'mixed his labour with and joined to it something that is his own and thereby makes it his property'. See *Two Treatises of Government*, London, 1824, p. 146. It was labour, Locke insisted, that put value on land. He was stressing the right of the individual against the State. With the growth of state system, however, the king came to be recognised as the owner of all waste and uncultivated lands in ancient India.

4. Karl.A. Wittfogal, *Oriental Despotism*, p. 230

5. *Gaut.*, XXVIII, 46.

This obviously includes cultivable land which cannot be partitioned among the members of the family. As such, the landed property constantly remains undivided for several generations under the occupation of joint or extended patriarchal families. It is only from the Gupta period onwards that the law-books refer to the provision of the partition of land. Bṛihaspati, the law-giver of the Gupta period, clearly states that in partition land can not be given to a śūdra son of a higher caste father.¹ Similarly, Kātyāyana declares that when land is partitioned, the eldest son should get his share either on the southern or the western side.² All this seems to suggest that in the middle or towards the end of the Gupta period, large joint families, owning vast stretches of land, began to break up into smaller units. Once the principle of partition of land was recognised, the increasing density of population in the Ganga plains was bound to accelerate the pace of fragmentation of cultivable land.³ Consequently, individual families came to enjoy proprietary rights in land.

While proprietary rights in cultivable land in a village lay in the joint and individual families, there were

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1. *Dharmakośa*, Vol. I, p. 1251 ; Bṛih., XXVI, 10, 28, 43, 53, 54 ; Nārada, XIII, 38.
 2. *Ibid.*, p. 1201.
 3. In lower Ganga plain, in one case, even one and a half *kulyavāpa* of land had to be purchased in smaller plots at four different places. See *Ep.Ind.*, XX, No. 5.

other village lands where the entire community enjoyed common rights. For instance, the grazing lands were the common property of the entire village and none of the residents had the right to appropriate any part of it for purposes of cultivation. In the Vedic period, such lands were called *khila* or *khilya*.¹ Under the Mauryas, while the State extended its rights over all waste and unclaimed lands, the people were allowed to enjoy the traditional rights of grazing their cattle on such lands.² In the *Jātakas*, we find references to meadow lands and uncleared waste and wood lands around the *gāmakhetta*, which were used by the villagers in common.³ The law-givers also enjoin the king to make provision for the common pasturage and lay down that such lands, being common property of the village community, can not be divided.⁴ Even in the adjoining forest tracts, the entire village enjoyed similar rights. Besides, there were the water-courses, the village temple, etc., which were the common property of the whole village.

 1. *Rigveda*, X, 19. 3-4.

2. *AS.*, II. 2.

3. *Jāt.*, I. 194, 317, ; II. 358 ; III. 130 ff., 149 ; IV. 359 ; V. 103 ; Rhys Davids, *Bhuddist India*, p. 23 ff. 45.

4. *Manu*, VIII, 237 ; IX, 219 ; *Vishṇu*, XVIII, 44 ; *Yāj.*, II, 167. According to H.H. Wilson, *padar* or *padr* is a common land adjacent to the village left uncultivated. See *Glossary of Judicial and Revenue Terms*, New Delhi, 1968, p. 286.

II

In the *Rigveda*, the king has been described as devouring the people.¹ A similar idea is found in *Śatapatha Brāhmaṇa* and *Aitareya Brāhmaṇa*.² According to Gautama, the king is the master of all except the brāhmaṇas.³ Manu states that the king obtains one half of the ancient hoards and metals because he is the lord of all soil.⁴ Bṛihaspati explains that the king becomes the owner of the property left without heir because he is the 'owner of all'.⁵ The Epics state that all the wealth belongs to the kshatriyas and to no one else.⁶ These statements from the Vedic literature and the *Smṛitis* have been interpreted almost as a proof of the king's absolute proprietary rights in all land.⁷

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1. *Rigveda*, I. 65.4 ; *Atharvaveda*, IX, 22.7.
 2. *Śat.Brāh.*, I. 8.2.17 ; IV. 2.1.3.17 ; V. 3.3.12 ; X 6.2.1 ; *Ait.Brah.*, VII, 29.3.
 3. *Gaut.*, XI. I.
 4. *Manu*, VIII. 39, (*bhūmer adhipati hi saḥ*).
 5. *Brih.*, XXVI, 119 ; See also *Nārada*, XI. 42.
 6. *Rām*, 4.1.86 ; *Mbh.*, *Śānti Parva*, 136.3. In the *Mahābhārata*, we have a reference from *Rāmāyaṇa* where Dasaratha claims before Kaikeyi that all property in his kingdom except that of the brāhmaṇas belongs to him, and that he can confiscate anybody's wealth. See *Vana Parva*, 275.23.
 7. Being more convenient and paying, the theory of the state ownership of land was adopted by the British administrators in their policy and legislation. See P.V. Kane, *History of the Dharmasastra*, Poona, 1941, Vol. II, p. 866.

James Mill holds that according to ancient law-givers, the king had the absolute proprietary rights in the soil.¹ He draws his conclusions on the basis of the verses of Manu where the king is called 'the lord paramount of the soil' and where the occupier of land is held responsible to the king if he fails to sow it'.² Vincent.A. Smith, while dealing with land revenue during the reign of Chandragupta Maurya, expresses the same view that 'the native law of India has always recognised land as being crown property'.³ To substantiate his statement, he cites a passage from the commentary on the *Arthaśāstra* which runs thus : those who are well versed in the *Śāstras* admit that the king is the owner of both land and water, and that the people can exercise their rights of ownership over all things except these two.⁴ E.W. Hopkins says, "It is unquestioned that the king is the master of all. The king is not only the overlord, he is the owner and one of his old titles is 'the one owning all'. The king in the earliest period is expressly said to be 'the devourer of his people'. This is no isolated phrase nor are the people other than his own (*vaiśyas*)".⁵ He further adds, "It is nonsense to suppose a

1. James Mill, *History of British India*, Vol. I, p. 180.

2. Manu, VIII, 39 ; 243.

3. V.A. Smith, *The Early History of India*, p. 123 ; Also see *Asoka*, Oxford, 1924, p. 76.

4. Bhattasvāmin on *AS.*, II, 24.

5. E.W. Hopkins, *India Old and New*, p. 218.

peasant proprietor openly described as fit only to be robbed by the king, could have any secure hold on his landed property. The king's ownership extended to all property except a priest's, which is especially described as the only land in his realm outside the king's district".¹

But the verses of Manu, on which both Mill and Hopkins rely, are not conclusive. The verse justifying the king's right over hoards and metals in the earth had nothing whatsoever to do with the proprietary rights in the soil.² The second verse is simply intended for the protection of the king's share of the produce to which he was entitled on

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1. *Ibid.*, pp. 221 ff. He refers to a passage in the *Aitareya Brāhmaṇa*, according to which the vaiśya's peculiar function is to be devoured by the priest and the king - VII. 29.3. While discrediting Baden Powell's view of undiluted private ownership, Hopkins says, 'The general Hindu theory of impartible real estate is a distinct blow to the sweeping generalisation made by Baden Powell when he stated that the early Aryans in India recognised only private ownership in land'.
 2. Buhler translated the verse as 'the king obtains one-half of ancient hoards and metals found in the ground by reason of his giving protection and because he is the lord of the soil'. In the foot-note he says, "I take the last clause which might be translated 'and because he is the lord of the earth' as a distinct recognition of the principle that the ownership of all land is vested in the king". But Manu clearly states that the land belonged to him who first cleared it. - IX. 44. Buhler, referring to this statement says, 'the ultimate sense of the expression is that the land in question is made over to the donee with the same full rights of ownership which the first cultivator would have possessed who cleared it". See *Ep.Ind.*, I, p. 74 fn. Therefore, to draw any conclusion that the king had absolute rights in land on the basis of Manu's verses seems too far-fetched.

account of his rights.¹ Mill's very approach to the subject seems vague when he says that 'the property of the soil resided in the sovereign ; for if it did not reside in him, it will be impossible to show to whom it belonged'.² Kauṭilya, whose devotion to the task of empire building led him to exalt the position and dignity of Chandragupta Maurya, never claimed for him the ownership of the soil in his empire.³ The passage referred to by Vincent.A. Smith makes only a general reference to the Śāstras without mentioning any particular texts.⁴ Macdonell and Keith have rightly pointed out that the evidence is inadequate to prove what is sought, that the evidence adduced from the Vedic literature, the *Smṛitis* and the Epics does not prove the theory of the original kingly ownership and his absolute rights in landed property.⁵ These references imply more a growth of royal authority than the actual proprietary rights.⁶ When the Buddhist texts ascribe to Bimbisara an overlordship of eighty thousand villages, they do not expressly mention that he possessed absolute proprietary

 1. Manu, VIII, 243.

2. James Mill, *History of British India*, Vol. I, p. 265.

3. R.S. Sharma, *Indian Feudalism*, p. 115.

4. *AS.*, II, 24.

5. Macdonell and Keith, *Vedic Index*, Vol. II, pp. 214-215.

6. N.N. Kher, *Agrarian and Fiscal Economy*, Delhi, 1973, p. 37.

rights over all such lands.¹

The Greek writers are inconsistent and their statements on the subject are not trustworthy. Diodorus remarks 'They (husbandmen) pay a land tribute to the king, because all India is the property of the crown'.² Strabo states, 'The whole of the country is of royal ownership and the farmers cultivate it for a rental in addition to paying a fourth part of the produce'.³ Arrian, who also largely draws from the *Indica* of Megasthenes, however, says nothing about land rights save that the cultivators used to pay tribute to the king.⁴ M. Rostovtzeoff, while commenting on the observations of the Greeks, writes that they had the Hellenistic eyes and thought that in India, as in Ptolemaic Egypt, the king was the absolute owner of the soil, the

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1. *Vinaya Piṭaka*, I. p. 179 ; *Mahāvagga*, 5. 1. Also see D.D. Kosambi, *An Introduction to the Study of History*, Bombay, 1990, p. 158.
 2. J.W. McCrindle, *Ancient India As Described by Megasthenes and Arrian*, Calcutta, 1926, p. 84 ; Diod., II. 40.5.
 3. Strabo, XV. I. 39-41, 46-49.
 4. Arrian, *Indica*, XI. From these references S.K. Maity concludes that from Mauryan period onwards the authority of the crown had extended over all lands. See *Economic Life of Northern India*, p. 16. Also see R.K. Choudhary, 'Ownership of land in Ancient India', *IHQ*, vol. 53, 1967, for similar views.

peasant being his tenants.¹ It seems that the rights of the Mauryan rulers were so broadly interpreted by the Greek observers that they were tempted to find a parallel with Egypt where the Pharaoh owned all the land. In fact, from the time of Herodotus, the Europeans have accepted the image of an Asian government as despotic. An integral feature of that despotism, as understood by them, was the ownership of all land by the sovereign. Charles Drekmeier, a modern scholar, has also fallen into the same error when he says that the Mauryan king had the right of eminent domain over all the land in his kingdom.² But Anquetil Duperson, who translated the *Upanishads* into Latin, has questioned the idea of all land being owned by the sovereign. He has pointed out that the whole concept of despotism, as the westerners understood it, was false, and that in India there were written codes which were obeyed by the rulers as well as their subjects.³ In this context, it would be relevant to note the observation of Romila Thapar that the rules of

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1. M. Rostovtzeoff, *The Social and Economic History of the Hellenistic World*, Vol. I. Oxford, 1941, p. 269. According to Rostovtzeoff, "Absolute rule meant, alike from the Egyptian and from the Macedonian point of view, the ownership of the State, of its soil and subsoil. The State was the house (*oikos*) of the king and its territory his estate".
 2. Charles Drekmeier, *Kingship and Community In Early India*, Bombay, 1967, p. 171.
 3. See A.T. Embree, 'Land Holding in India and British Institutions', *Land Control and Social Structure in Indian History*, (ed.) R.C. Frykenberg, New Delhi, 1979, p. 43.

property changed significantly over the centuries and it 'disapproves the basic premise of the argument in support of the theory of Oriental Despotism as applied to India'.¹ It seems that Megasthenes, during his stay at Pāṭaliputra, had seen only crown lands which covered quite a large area and hence he made such a categorical statement.

Kātyāyana, the law-giver of the late Gupta period, declares the king to be 'the owner of the earth (*bhusvāmin*), and, as such, claimant to a share of the produce'. But he dilutes his theory of royal ownership by that of the ownership by inhabitants when he says that because they dwell on the land, human beings are declared to be the owners of it.²

To prove the king's proprietary rights in the cultivable land, it is sometimes argued that the taxes which the peasants paid to the king were a sort of rent for the lands used.³ The Chinese pilgrim Fa-hsien, while describing the general conditions of the *Madhyadesha* observed, 'only those who cultivate the royal land have to pay a portion of the grain from it'.⁴ This statement has been interpreted to

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1. Romila Thapar, *Ancient Indian Social History*, Hyderabad, 1984, p. 19.
 2. *Kāt.*, 16, p. 121.
 3. S.K. Maity, *The Economic Life of Northern India*, p. 25 ; Also see Bongard Levin, *Mauryan India*, p. 179.
 4. J. Legge (tr.), *A Record of Buddhist Kingdoms*, Oxford, 1886, pp. 42-43.

mean that revenue was mainly derived from the rents on land.¹ Hiuen-Tsang also states that the peasants as tenants of the sovereign paid one-sixth part of the produce as rent.² The theory that the taxes were paid as rent to the king, however, is not based on sound foundations. One fundamental duty of the State was to protect the people and their property and to maintain law and order. This was the justification, in the main, for the payment of taxes to the State or to the king who symbolised the State.³ Śavarasvāmin, commenting on Jaiminī, says that the king is entitled only to a share of the produce by virtue of his

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1. V.A. Smith, *Early History of India*, p. 340 ; Beni Prasad, *The State in Ancient India*, p. 285.
 2. T. Watters (tr.), *On Yuan Chwang's Travels in India*, Vol. I, New Delhi, 1961, p. 176. Hiuen-Tsang, perhaps misunderstood the ordinary revenue paying lands as similar to the public lands of his own country and, as such, to him the peasants were king's tenants and paid the share of the produce as rent. The fundamental feature of Chinese public economy in ancient times was the system of public distribution of land known as *tsing tien*, which continued in a modified form till 780. A.D. See Chen Huan-Chang, *The Economic Principles of Confucius and His School*, Vol. II, New York, 1911, pp. 497 ff.
 3. Romila Thapar, *The Past and Prejudice*, pp. 53, 55. The Buddhist texts explain that there was a time in the past when everyone was virtuous and there was perfection and harmony in society. But this condition gradually changed into that of evil. Differences of sex became apparent. People began stealing each other's stock of rice. Ultimately, they fought for possession over women and over the rice -fields resulting in a situation of lawlessness. Finally, the people gathered together and elected one from amongst themselves to maintain an orderly society, and for his services, they decided to pay him a share of the produce. See *Digh. Nik.*, III, pp. 61-77.

affording protection to his subjects.¹ We have abundant evidence in the *Dharmasūtras* as to the king's right to a share of the produce in lieu of protection.² The later law-givers are also unanimous on the point.³ Manu lays down that the king, not protecting his subjects but receiving his share as tax, has taken upon himself all the impurities of the people.⁴ Similar views are found in the *Arthaśāstra* and the *Mahābhārata*. Kālidāsa frequently refers to the king's claim to land tax as one in lieu of protection afforded to the people.⁶ It was only in case of crown lands, over which the State had absolute proprietary rights, that the land tax paid by the tenants was actually identical with rent.⁷

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1. On Jaiminī, VI. 7. 3.
 2. Gaut., X. 24-29 ; Baud., I. 10. 18 ; Vaś., I. 42.
 3. Manu, VII, 130 ; Nārada, XVIII. 48 ; Vishṇu III. 22.
 4. Manu, VIII. 307-308.
 5. *Mbh. Śānti Parva*, LXIX ; AS., II. I.
 6. (*raksā - sadrsameva bhuh*). See B.S. Upadhyaya, *India in Kalidasa*, p. 155. Also see Bongard Levin, *Mauryan India*, p. 147.
 7. Karl Marx states that the tax and rent coincide if the State is the proprietor of land. See *Das Capital*, Vol. III. Moscow, 1966, p. 315. K.Z. Ashrafyan, a Russian scholar, says that tax as such does not make land the property of the recipient of the tax. See Bongard Levin, *Mauryan India*, p. 179. Romila Thapar also states that the payment of land tax does not presuppose state ownership of land. See *From Lineage to State*, Bombay, 1984, p. 124.

Under the Mauryas, the imperial authority was keenly felt in the Ganga plains. In post-Maurya times, the institution of kingship came to be divinised. Manu states that the king is vested with the respective attributes of eight gods.¹ Thus, not only did the Kushana rulers adopt the title of *devaputra*, but also the law-givers helped in divinisation of kingship.² This, in turn, further helped in consolidating the territorial authority of the rulers. The Imperial Guptas continuously ruled for about two hundred years in the Ganga valley. The region, from Thanesar to Magadha, was under the direct control of Harsha Vardhana.³ The authority of the rulers manifested itself in levying numerous taxes on the peasants. These taxes which the king levied by virtue of his sovereign power came to be looked upon as a sort of rent in return for tenancy. According to P.V. Kane, the State was deemed to be the owner of all lands as a general proposition, but individuals and groups that had cultivated lands in their possession were regarded practically as owners of those lands subject to the liability of paying land tax.⁴ Since the king's rights in

1. Manu, VII, 7. In the *Mahābhārata* also, the king is described as the descendant of God. See *Sānti Parva*, 59.

2. Baskar Chattopadhyay, *Kushan State and Indian Society*, Calcutta, 1975, p. 123.

3. See R.C. Majumdar, 'The Extent of Harshavardhana's Empire', *IHQ*, vol. V, 1929, p. 229.

4. P.V. Kane, *History of Dharmasastra*, Vol. III, p. 495.

the share of the produce were so regularly asserted through the collection of taxes, it is easy to see why the ruler was regarded as the owner of all land.¹

III

With the growth of royal machinery and the establishment of unified empire under the Mauryas, large tracts of unclaimed land came under the direct control of the king. The royal or crown lands are distinctly referred to in the *Arthaśāstra* as *svābhūmi*.² Vast areas were reclaimed by establishing new settlements.³ The large scale clearing of land by the State led to an unprecedented growth in agriculture, especially in the Ganga plains which formed the core area of the Mauryan Empire. Such lands were cultivated either directly by the State under the supervision of *sītādhyaksa* (Superintendent of Agriculture), who employed *dāśas*, *karmakāras* (labourers), and *daṇḍapratikaritri* (prisoners) for the purpose,⁴ or were

1. Ainslie, T. Embree, 'Land Holding in India and British Institutions', *Land Control and Social Structure in Indian History*, (ed.), R. C. Frykenberg, p. 46.

2. *AS.*, II. 24. The term '*svabhūmi*' has been rendered by Shāmaśāstry as 'crown lands'. See *JRAS*, 1929, p. 90-91.

3. *Ibid.*, II.1. One of the principles of the state policy under the Mauryas was to put to use all arable land.

4. *Ibid.*, II. 24.

leased out to tenant - cultivators on payment of half -share of the produce (*ardhasītikās*) and they were required to employ their own capital.¹ When the seeds and implements were supplied by the State, the cultivators received only one-fourth or one-fifth share of the produce (*chaturtha-pañchabhagikam*).² Kauṭilya further lays down that these lands should be given over to tax-payers (*karada*) for cultivation only for a lifetime (*ekapurushikāni*), and the unprepared lands (*akṛtani*) were not to be taken away from those preparing them for cultivation.³ Lands could be confiscated from those who did not cultivate them and given to others.⁴ Thus, it may safely be inferred that there were some specific lands which were unquestionably the state property. Such lands could be leased out for the lifetime of a cultivator in return for a fixed share of the produce. In case of negligence on the part of the cultivator, lands could be resumed and given to other cultivators. Moreover, the State exercised the right of ownership with regard to the ownerless property of all except the brāhmaṇas.⁵ In the

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1. *Ibid.*, II, 24. The *ardhasītikās* enjoyed the temporary rights in land. See B.C. Sen, *Economics in Kautilya*, pp. 22-23.
 2. *Ibid.* Such cultivators were called *svavīryo-pajivin*. Also see M.H. Gopal, *Mauryan Public Finance*, p. 58.
 3. *Ibid.*, II. I.
 4. *Ibid.*
 5. *Āpast.*, II. 6. 14 ; *Gaut.*, XXVIII. 42 ; *Baud.*, I. 5.11 ; *Vas.*, XVII, 83 ; *AS.*, III, 9 ; *Manu*, IX. 189.

absence of any male heir, the property lapsed to the State.¹ In case a dispute over fields between two villages did not result in agreement, such fields also became the state property.² As such, the State enjoyed proprietary rights over isolated fields in the villages as well. It had its monopoly over mines, minerals and treasure - trove (*nidhi*) also.

In the post-Maurya period, however, we do not come across in our sources any reference to the state lands cultivated by the tenants on a half-share of the produce. It seems that the share-croppers of the Maurya times had acquired some permanent rights in such lands.³ Moreover, those who brought the waste land under cultivation in later times, were perhaps given proprietary rights over such lands as the State was basically interested in the land revenue. During the Mughal times, the State recognised the proprietary rights of the pioneer cultivators on the waste

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1. B.S. Upadhaya, *India In Kalidasa*, Delhi, 1968, p. 154.
 2. Bongard Levin, *Mauryan India*, p. 146. Normally, such cases were rare as the village communities kept the boundary marks of the village lands in proper order.
 3. U.N. Ghoshal, *Hindu Revenue System*, p. 68 ; M.A. Buch, *Economic Life in Ancient India*, Vol. I. pp. 349-50. In some of the states of Rajputana in later times, permanent possessors (*biswādārs*) existed in the royal demesne side by side with the tenants having proprietary rights. See Baden Powell, *Land Systems of British India*, Vol. II, p. 327.

lands appropriated by them.¹ In case such lands were left uncultivated for a long time by the possessors, they were transferred to new ryots on the usual conditions.²

IV

The *Dharmaśāstras* clearly indicate the growth of rights in land in terms of possession and legal title. According to Vishnu, in case of land acquired by the father in legitimate possession or by the grandfather, the son's right to it after his father's death can not be contested for it has become his own by force of possession.³ He recognised possession to such an extent that he dispensed with a written title after three generations. "If possession", he observed, "has been held of an estate by three successive generations in due course, the fourth shall keep it as its property even without a written title".⁴ The proprietary

1. I.H. Qureshi, 'The Ownership of Agricultural Land During the Muslim Rule in India', *JIH*, Trivandrum, 1942, pp. 230-232.

2. *Ibid.*, pp. 232-236. The State claimed a share of the produce of land rather than the title to its proprietorship. See Baden Powell, 'Is the State the Owner of all Land in India', *Asiatic Quarterly Review*, vol. VIII, Nos. 15 & 16, 1894, pp. 4-8. In fact, the Mughal emperors freely bestowed *zamindari* rights to those who brought forest and waste land under cultivation. See S. Nurul Hasan, 'Zamindars Under the Mughals', *Land Control and Social Structure in Indian History* (ed.), R.C. Frykenberg, p. 27.

3. Vishnu, V, 186.

4. *Ibid.*, 187.

rights were also created through legal title such as by purchase, donation, etc. Vishṇu makes a specific reference to land in this connection when he says that in case of dispute regarding a field, possession with a valid title was irrevocable.¹ He maintained that for the information of the future rulers, the land grants made by the king should furnish a document, written on a piece of cotton cloth or a copper-plate, containing the names of his three immediate ancestors, the extent of land granted, and it should be under his own seal.² Yājñavalkya distinguishes between acquisition of property by means of purchase or gift and hereditary possession.³ He states that possession becomes valid when coupled with a legitimate title.⁴ In case a suit is brought against a person who has acquired a piece of property by purchase or gift, he will have to establish his right of acquisition by legal proof, but such a proof is not necessary in the case of his son or grandson, whose testimony of possession is stronger.⁵ As such, according to Yājñavalkya, possession through heredity was the first claim to proprietary rights in land. Almost similar views have

1. *Ibid.*, 184.

2. *Ibid.*, 82.

3. *Yāj.*, II, 27.

4. *Ibid.*, 29.

5. *Ibid.*, 28.

been expressed by other law-givers. According to Nārada, "where there is enjoyment but not title of any sort, there is a title required in order to establish proprietary right. Possession is not sufficient to create proprietary right in that case."¹ He further adds that a clear title having been produced, possession acquires validity. Mere possession without any proof of title amounted to theft as it was tantamount to illegal possession.² But hereditary possession of three generations, according to him, required no such title to establish proprietary rights in land.³ Manu lays down seven lawful means of acquiring property, i.e., inheritance, donation, purchase, conquest, lending at interest, the performance of work and the acceptance of gifts from virtuous men.⁴ According to Bṛihaspati, the different ways of acquiring immovable property are by learning, purchase, mortgage, valour, dowry, inheritance from an ancestor, and by succession to a childless kinsman.⁵ He further observes that in case of property acquired by one of these methods, possession coupled with a legitimate title

1. Nārada, I, 84.

2. *Ibid.*, 87.

3. *Ibid.*, 89.

4. Manu, X, 115.

5. Bṛih., IX, 2.

constitutes proprietary right.¹ But the hereditary possession extending over three generations became legitimate right and no title, as such, was required in that case.² These provisions made by the law-givers evidently suggest the existence of individual proprietary rights in land.

Kauṭilya states that 'if one does not till land that is inalienable, another may use it for five years and return it after receiving compensation for his exertions'.³ Similarly, Nārada says, 'If the proprietors of a field are unable to till it, have deceased or departed, then he who, upon permission of relatives or neighbours tills that field, may reap all the crop from it' ; 'if, however, in the meantime when the field is being tilled by others, the proprietor returns, let him take back his land after he pays to the men all the expenses incurred in tilling the land'.⁴

If a person can use his land holding without any restriction for the purpose of cultivation, can sell, transfer or alienate it permanently or for a fixed period, and can pass it on to his heirs, he has absolute proprietary

1. *Ibid.*, 3.

2. *Ibid.*, 26.

3. *AS.*, III, 10.

4. Nārada, XI, 23-24.

rights in that piece of land.¹ The proprietary rights involve more than a relation between a person and a thing. It involves a relation between the proprietor and other individuals who, through the former's prerogative, are excluded from disposing of the object in question.² Kauṭilya prescribes an order of priority in choosing buyers - kinsmen, neighbours and rich persons - when a piece of land is to be sold.³ In case of transaction of lands, auction without proprietary rights is considered a serious offence.⁴ Anyone selling land without having proprietary rights in it was considered a thief.⁵ If during such auction, the price of the plot of land is increased over its original price by the bidders, the amount so increased together with the toll on its value is to be deposited in the state treasury. Similarly, in case of land disputes, these are to be settled by the neighbours and elders of the village.⁶ Manu suggests that if there is a dispute between villages concerning the boundary, the king is to settle the limits in the month of *Gyaishtha* when the landmarks are most

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1. I.H. Qureshi, 'The Ownership of Agricultural Land During the Muslim Rule', *JIH*, Trivandrum, 1942, p. 225.
 2. Karl. A. Wittfogal, *Oriental Despotism*, p. 228.
 3. *AS.*, III, 9.
 4. *Ibid.*
 5. Manu, VIII, 197-198.
 6. *AS.*, III, 9.

clearly visible.¹ The king intervenes not to reappropriate the land but only to settle disputes.² If there is some doubt after the inspection of the landmarks, the dispute is to be settled by the testimony of the witnesses concerned.³ If the neighbours gave false evidence about the boundary marks they were liable to be fined.⁴ According to Kātyāyana, land intended for purchase should be carefully examined.⁵ He further lays down that tax-bearing land could be sold for the purpose of paying taxes, which implies that the peasant could be compelled to sell a part of his land for the clearance of his dues.⁶ We have only a few instances of the actual sale of land during our period of study, but the rules laid down in the texts regarding sale of land indicate proprietary rights of the peasants.⁷ If

 1. Manu, VIII, 245 ; Also see *AS.*, III, 9.

2. In case a dispute over land between two villages did not result in an agreement, such lands became the state property. In reality, however, the village communities vigorously protected their rights over village lands. See Bongard Levin, *Mauryan India*, p. 146, fn. 161.

3. Manu, VIII, 253.

4. *Ibid.* 99.

5. *Dharmakośa*, Vol. I, p. 896.

6. *Ibid.*, Vol. I, p. 898.

7. In R.S. Sharma's view, the lack of actual instances of the sale of land was probably on account of the lesser use of coins in the Gupta and post-Gupta period. See *Indian Feudalism*, p. 120. An early instance of the actual sale of land is recorded in a Buddhist cave inscription in western India. The land was purchased from a brāhmana to make gift of a field for providing food to the monks. *Ep.Ind.*, VIII, p. 78. For

all land had been the property of the State, there could hardly be any need for making such elaborate provisions regarding land transactions and the settlement of land disputes. The law-givers even suggest that a piece of land can be given as a form of pledge to the creditor. Bṛihaspati defines the use of a mortgaged house or the produce of a field as *bhogalābha* (interest by enjoyment).¹ Kātyāyana ordains that the boundaries of the house or land to be pledged and the villages or the countries in which they are situated must be defined.² Bṛihaspati states that when a field or other immovable property has been enjoyed and the principal amount and the interest have been actually collected from it by the creditor, the debtor receives back his pledge.³ Kātyāyana adds that the debtor can get back his field, etc., transferred for enjoyment as interest, from the creditor on paying back the amount he had taken.⁴ The use of a plot of land, as a pledge in case of debt, towards the payment of the principal amount and the interest again shows individual rights in land.

In the organisation of land economy, Yājñavalkya

instances of the sale of land in Ganga plains during the Gupta period, see *Ep.Ind.*, XX, p. 59 ; XXI, p. 78.

1. Bṛih., XI, 7-8.
2. Kāt., 522, p. 220.
3. Bṛih., XI, 23.
4. See R.S. Sharma, *Indian Feudalism*, p. 121.

suggests three stages, i.e., *mahipati* (king), *ksetrasvāmin* (proprietor), and *karṣaka* (cultivator).¹ This classification is almost corroborated by *Bṛihaspati* who considers *svāmin* as an intermediate category between the *rājā* and the actual tiller of the soil.² The *karṣakas* were further categorised into permanent and temporary tenants.³ The permanent tenants had more or less secure rights of occupancy, but the temporary tenants did not possess such rights.⁴ Most Gupta and post-Gupta law-givers stress the obligation of the tenants to cultivate the fields leased to them and to pay the fixed share to the owner even when they neglected cultivation.⁵ The owner's share known as *kṛsta-phala* varied from one-sixth, one-eighth to one-tenth part of the produce, depending upon the nature of the soil.⁶ Such tenants obviously employed their own implements, capital and labour, etc., in the fields. *Kātyāyana* further makes clear the legal position between the tiller of the field and its proprietor. If the proprietor could not repay through inability the expenses incurred by the tenant in bringing the fallow land under cultivation, the proprietor would be entitled to only

1. *Yāj.*, II, 157-58.

2. *Bṛih.*, XIX, 54-55.

3. U.N. Ghoshal, *Hindu Revenue System*, p. 276.

4. André Bétaille, *Studies in Agrarian Social Structure*, p. 120.

5. *Dharmakośa*, Vol. I, pp. 943, 954, 961.

6. *Ibid.*, p. 954.

one-eighth part of the produce. For eight years, the actual tiller who had incurred the expenditure in this manner, could benefit from the land in question, and thereafter, he would have to return it to the proprietor.¹ Yājñavalkya says that the owner of the field (*kṣetrasvāmin*) had the right to assign it to a cultivator of his choice.² Even Manu suggests that the claims of 'the owner of the field' have precedence over the actual tiller 'the owner of the seed'.³ In the inscriptions from the fourth century A.D. onwards, the choice to give land out on lease is implicit in the obligation placed on the donees, i.e., to cultivate the land or get it cultivated.⁴ I-tsing observed that the Buddhist monasteries usually leased out their lands to share-croppers.⁵ The *addhiyamanuṣṣas* were evidently hired cultivators employed for tilling the donated lands.⁶ The *mahipati* was entitled to land revenue by virtue of his political authority. So long as the *kshetrasavāmin* paid land tax to the State and the *karṣaka* gave rent to the *kshetrasvāmin*, their respective positions remained unchanged. It shows not only varying degrees of rights in

1. Kāt., 764, 767, p. 277.

2. Yāj., II, 158.

3. Manu, IX, 52.

4. *Ep.Ind.*, XV,

5. T. Takasuru (tr.), *A Record of the Buddhist Religion*, Oxford, 1896, pp. 61-62.

6. *Ep.Ind.*, XXXVII, p. 293.

land, but also clearly indicates individual proprietary rights.¹

Yājñavalkya lays down that if the cultivator does not cultivate after having taken the field, he shall be compelled to pay the owner's share. Surprisingly, nothing is said about the royal share.² But the position is made clear by Bṛihaspati³ and Vyāsa⁴ when they enjoin the tenant to pay the due share not only to the landowner (*svāmin*), but also an equivalent fine to the king. For the loss in revenue due to the neglect of cultivation, landowner should be held responsible and not the tenant. The superimposition of his rights show that the king enjoys some general authority over land.⁵ This authority seems to emanate from

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1. Romila Thapar, *Asoka and the Decline of the Mauryas*, p. 63 ; Bongard Levin, *Mauryan India*, pp. 153-154. During medieval times in England, land was conceived as being subject to great number of real rights differing among themselves and superimposed. The whole situation is described by Marc Bloch as : the tenant who from father to son, as a rule, ploughs the land and gathers in the crop ; his immediate lord to whom he pays dues and who in certain circumstances assumes possession of the land ; the lord of the lord, and so on --- how many persons are there who can say, each with as much justification as the other, 'This is my field'. See *Feudal Society*, p. 116.
 2. Yāj., II, 154.
 3. *Dharmakośa*, Vol. I. p. 954.
 4. *Ibid.*, p. 961.
 5. R.S. Sharma, *Indian Feudalism*, p. 116.

his sovereignty. But it clearly indicates that proprietary rights in land belong to someone other than the king to whom the tenant is required to pay the 'due share'.

The king normally charged one-sixth or one-fourth of the produce from the lands in possession of the peasants.¹ It may be fairly argued that he, who takes the remaining five-sixth or three-fourth part of the produce, must have had the greater interest of the two in the whole property.² It naturally indicates that the peasant enjoys superior proprietary rights over land which he cultivates. The fact that the land tax paid by the peasant does not stand on a higher footing than that, for example, of a merchant who pays taxes on the goods sold, also indicates that the superior rights on the taxable property lay with the tax payer and not with the king or the State. Moreover, if the king by taking advantage of his royal authority deprives a person of his land and gives it to another as a gift, such a gift is considered illegal.³

While referring to land rights in medieval India Francois Bernier, the French traveller observed, 'The Great Mogol is the proprietor of every acre of land in the

1. See Chapter on Land Revenue.

2. M. Elphinstone, *The History of India*, p. 26.

3. *Bṛih.*, XIX, 22.

kingdom'.¹ Irfan Habib, disagreeing with the statement of Bernier, says, 'there is documentary evidence to show that persons other than the king laid claim to a right upon land that in name was ownership'.² He further adds that the reason for the Europeans not realising this is likely that the Mughal *jāgirdārs* appeared to them to be the same as European landlords. Since the *jāgirs* were transferrable at the king's will, the Europeans concluded that there was no private property in India.³ Under the Mughals, though both in theory and practice, the State was the proprietor of all the unclaimed land, yet it did not possess any proprietary rights in an absolute sense over the vast cultivable lands already in hereditary possession of the various categories of *riaya*.⁴ In the chapter on 'Rowai Rozi', the *Ain-i-Akbari* categorically recognises the proprietary rights of the cultivators in land.⁵

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1. Archibald Constable (tr.), *Travels in the Mughal Empire*, London, 1914, p. 204 ff.
 2. Irfan Habib, *The Agrarian System of Mughal India*, Bombay, 1963, p. 112.
 3. *Ibid.*
 4. B.R. Grover, 'Nature of Land Right in Mughal India', *IESHR*, vol. I, Delhi, 1963, pp. 2-3.
 5. *Ibid.*, p. 3. William Erskine, while referring to the nature of land rights in medieval India, states, "The rights of landed property were considerably different from those that prevailed in the west. There are two separate and legal rights in the land, that of the ryot or cultivator, who held it by hereditary succession, and that of the government, which could justly claim a fixed share of the produce. Both of these are

The practice of land grants resulted in the growth of new rights in land. In the *Arthaśāstra*, the chapter *Bhūmichchhidra Vidhānam* deals mainly with tracts not meant for cultivation. These were used as pasture lands, as forests for soma plantation and for religious studies, as lands that were to be donated to the brāhmaṇas, etc.¹ U.N. Ghoshal is of the view that under the rule known as *bhūmichchhidranyāya*, land was granted with such proprietary rights as were acquired by a person who makes barren land cultivable for the first time.² Similar view is expressed by Buhler.³ On the other hand, according to Barnett, when land was granted under this rule, the king reserved the right to eject the grantee whose position was, therefore,

 permanent --- Though the musulman conquerors claimed in theory an absolute right in property in soil, the right was in practice restrained in conformity with the ancient law and usage to some fixed portion of the produce collected from villagers". See *A History of India under Babur and Humayun* (ed.), Vol. I, Delhi, 1954, p. 528. Moreland also states that in Mughal India, wherein two parties existed, the ruler and the subjects, the latter were required to pay a share of the produce of land to the former in return for the protection received. See *India at the Death of Akbar*, London, 1920, pp. 96-97.

1. *AS.*, II, 2.
2. U.N. Ghoshal, *Hindu Revenue System*, p. 212 fn. 4.
3. *Ep.Ind.*, I, p. 74 ; vol. XXIX, p. 5 fn. 3. Pushpa Niyogi states that the donees who brought the waste land under cultivation had no liability to pay the rent for it. See *Contribution to the Economic History of Northern India*, Calcutta, 1962, pp. 69-70.

that of a tenant-at-will and not a proprietor.¹ In the land charters, we come across the term *akshayanīvi*, which is a perpetual endowment for meeting the needs of the donees out of its interest without destroying the capital.² The land granted under this rule, therefore, implied the perpetual enjoyment of royal revenue by the donees without actual transfer of proprietary rights to their persons.³ Some land charters, however, clearly mention that the grant made is not a temporary one, terminable at the will of the donor, but a perpetual heritable grant. Even future rulers are asked to respect the rights thus transferred.⁴

In many inscriptions of the Gupta period, we find that the entire villages were donated by the rulers.⁵ In such cases, the donees were entitled only to the land taxes which

1. *JRAS*, 1931, p. 165 ff.

2. *Ep.Ind.*, VIII, pp. 67 ff ; *LL.*, No. 1124.

3. The donees had no right to transfer, sell and destroy the tenure which was vested in the State. See *AS.*, I. 19. For detailed discussion on these terms, see S.K. Maity, *Economic Life of Northern India*, p. 25-32.

4. *CII.*, III, No. 39, pp. 170 ff. As the grants were hereditary and exempt from taxes to the State, it amounted to proprietary rights. See R.S. Sharma, *Perspectives in Social and Economic History*, p. 224 ; S.K. Das, *The Economic History of Ancient India*, p. 180.

5. *Sel.Inscr.*, pp. 271-274, 321-324 ; *CII.*, III, Nos. 21, 28, 33, 40.

were previously collected by the State.¹ Some later inscriptions explicitly state that the taxes, which the villagers had earlier paid to the State, were now to be paid to the brāhmaṇa recipient of the grants.² Bongard Levin clearly points out that 'what is meant by donation is merely the transfer of the right to collect the tax from the village and not the right to the land as such.'³ The donee had no legal right to dispossess the peasants at will.⁴ When the State required any plot of cultivable land, it was not confiscated, rather it was purchased from the holder.⁵ When the proprietary rights were transferred to the donee,

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1. L. Gopal, 'Ownership of Agricultural Land in Ancient India', *JESHO*, vol. IV, pp. 151 ff ; R.C. Majumdar & A.S. Altekar, *The Vākātāka-Gupta Age*, Benaras, 1954, p. 333 ; L. Gopal, 'On Feudal Polity in Ancient India', *JIH*, vol. 41, 1963, p. 410.
 2. See A.N. Bose, *Social and Rural Economy*, Vol. I. p. 20.
 3. Bongard Levin, 'Some Problems of Social Structure in Ancient India', *History and Society : Essays in Honour of Prof. N.R. Ray* (ed.), D.P. Chattopadhyaya, Calcutta, 1978, pp. 216-217 ; Also see R.S. Sharma, *Aspects of Political Ideas and Institutions in Ancient India*, p. 139.
 4. S.K. Maity, *Economic Life of Northern India*, p. 16 ; *CII*, III, No. 26, p. 118 ; *Ep.Ind.*, II, p. 364. Also see Pushpa Niyogi, *Contribution to the Economic History of Northern India*, p. 75.
 5. *Ep.Ind.*, VIII, p. 78 ff ; LL. No. 1131 ; H. Chakravorti, *Early Brahmi Records of India*, p. 51 ; D.R. Das, *Economic History of Deccan*, p. 20 ; L. Gopal, 'Ownership of Agricultural Land in Ancient India', *JESHO*, p. 256.

it was usually in case of small plots which were either purchased by the king or these belonged to the State as crown property.¹ In case of the grant of land which was not the crown property, the rights of the peasants stood unchallenged.²

In due course of time, however, these grants of villages brought about substantial changes in the nature of land rights. Initially, only the State share of the produce from the village was transferred to the donee. But when the administrative and judicial rights were also transferred to the donees, they became quite powerful and started regarding themselves as the virtual owners of the whole place. The original land holders 'sunk more and more into an indistinguishable mass of non-proprietary cultivators'.³ As a result, a new class with superior proprietary rights in land emerged in the form of big landlords. The temples and monasteries also came to enjoy proprietary rights in lands granted to them by the rulers.⁴

1. A.S. Altekar, 'Economic Conditions of Western India During 200 B.C. to 500 A.D.', *Proc.IHC*, Jaipur, 1957, p. 27.

2. A.N. Bose, *Social and Rural Economy*, p. 20

3. Baden Powell, *Land Systems of British India*, Vol. I, pp. 132-134. The transfer to the beneficiaries of agrarian rights tended to erode peasant rights and created new property titles. R.S. Sharma, *Indian Feudalism*, p. 219.

4. See Chapter on Land Grants.

This tendency was related to the practice of paying the salaries of the high officials of the State through the grant of revenue from a particular area. Revenue rights soon came to be regarded as land rights, especially when the office became hereditary. Many brāhmaṇas were holding high offices in the State and by acquiring land rights they became all the more powerful.¹ The payment of salaries to high state officials through land grants and their offices becoming hereditary, undoubtedly introduced significant feudal elements in the land system.²

The rights in land evolved gradually. As long as cultivation was of a shifting character, the land was held in temporary possession. With the emergence of a settled agrarian economy, the continuous possession created permanent rights in land. In the Vedic period, arable land was held by the joint families and the pasture land was the common property of the whole village community. Later on, when the law of partition of landed property was recognised, the individual families came to enjoy proprietary rights in land. With the growth of royal power, some remarkable

1. Romila Thapar, *Ancient Indian Social History*, pp. 138-189.

2. The brāhmaṇa officials, who were granted land by the State in lieu of their salaries, can be compared to the feudal lords. R.S. Sharma, *Aspects of Political Ideas and Institutions*, p. 136. The land grants weakened the authority of the king. See Romila Thapar, *A History of India*, Vol. I, p. 146.

changes took place in the nature of land rights. The king started asserting his royal prerogative over the land. The State possessed absolute rights in all unclaimed waste and forest lands, but it did not possess any proprietary rights, in an absolute sense, over the vast cultivable lands under the hereditary possession of the peasants. Under the Mauryas, vast stretches of land were reclaimed, which were cultivated either directly by the State or given to sharecroppers. The State enjoyed absolute rights over all such lands. The king, by virtue of his sovereignty, exercised his supreme rights over the lands under the possession of peasant proprietors through the imposition of various taxes. The customary rights of the peasants were not disturbed so long as they paid the taxes regularly to the State. Rather, it was the duty of the State to protect their rights. The practice of granting land in perpetuity to the donees created new rights in land. In case of the grant of whole villages, the donees were initially given only the right to land revenue and other allied taxes. Later on, when their privileges were greatly increased, they began to assert superior rights in land. These socio-economic developments considerably affected the rights of the free peasants. All this suggests a multiple pattern of land rights.

CHAPTER VI

LAND GRANTS

Land grants formed an important feature of the land system. The practice helped in the expansion of the agrarian economy by bringing more and more of waste land under cultivation. Simultaneously, the authority of the State was also extended to wider areas. However, from about the fifth century A.D. onwards, the tendency towards increasing the privileges of the donees in the sphere of tax collection and maintenance of law and order set in motion a process of decentralisation of power. As land grants considerably affected the socio-economic structure of society, the subject needs a detailed study.

The gift of land has been eulogized as the most meritorious of all gifts from ancient times. *Bhūmidana* is considered one of the pious gifts that destroys all sins.¹ 'Whatever sin a man may commit when in straitened circumstances, he is purified therefrom by making gift of only as much land as is equal to a *gocharma*'.²

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1. Gaut., V. 19 ; XIX. 16 ; Āpast., II. 10.26 ; Baud., III. 10.14.
 2. Vaś., XXIX, 16-19 ; Mbh., Anuśāsna Parva, LXII. For meaning of the term *gocharma*, see Monier Williams, *A Sanskrit-English Dictionary*, Delhi, 1986, p. 364. Bṛihaspati defines *gocharma* as equal to ten *nivartanas* and a *nivartana* is defined by him as land measuring

The *Mahābhārata* devotes a whole chapter (*Bhūmidāna praśamsa*) to the significance of making gifts of land.¹ Bhishma advises Yudhishtira that there is no gift that is higher than the gift of land. The man who is of sinful behaviour, who is guilty of even the slaughter of a brāhmaṇa and of falsehood, is cleansed by a gift of earth.² At another place, the gift of land is described as an act of exemplary piety.³ It is further stated in the same Epic that the commands of a king, who makes gifts of land, can never be disobeyed anywhere.⁴ The *Agni-Purāṇa* states that the merit of making the gift of a plot of land grows more and more every day like a drop of oil poured on water, which expands

 thirty rods (square), a rod being equal to ten cubits. Vishnu defines the term differently as that much of land on which the crops raised will maintain one man for a year. See P.V. Kane, *History of Dharmasastra*, Vol. II, Poona, 1941, p. 859 n.

1. *Mbh.*, *Anuśāsna Parva*, 62.
2. *Ibid.*
3. *Ibid.*, *Vana Parva*, 93. p. 199. 'Having obtained a kingdom, a king should win all, some by gifts, others by force and yet others by sweet speech' - *Śhānti Parva*, 76. 31.
4. 'Of all kinds of gifts, the gift of earth has been said to be the first in point of merit'. 'Amongst all creatures, the giver of earth grows in prosperity for ever and ever'. - *Anuśāsna Parva*, 62. In the *Mahābhārata*, two categories of *dāna* are mentioned, i.e., the *iṣṭa* and the *pūrtā*. The *iṣṭa* is that which is offered into the *grhya* and *śrauta* ritual fires. *Purta*, on the other hand, is a large enterprise which consists of the donations of wells, tanks, gardens and lands. See P.V. Kane, *History of Dharmasastra*, Vol. II, p. 844.

itself in larger and larger eddies.¹ The *Matsya-Purāṇa* says that a person, who donates land goes to the land, of Śiva in a huge *vimāna*.² The benefits of making donations of land have been emphasized in many other texts as well.³

In spite of all the benefits enunciated in the religious texts, it is really difficult to find out the exact motive behind the making of land gifts.⁴ With the break-up of the tribal order, the king emerged more as the head of the territorial state than as the chief of the tribe.⁵ Perhaps, as a consequence, while he was apparently freed from the duty of the distribution of the spoils amongst fellow-tribesmen, the tribal ideal, which upheld him

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1. *Agni-Purāṇa*, CCXI, 35-36.
 2. *Matsya-Purāṇa*, CCLXXXIII, 11-19. The donor of a plot of land remains in the realm of Śiva for as many years as there are hair on the body of oxen or as many pores there are in the soil at the time of sowing seeds after ploughing the field. He is freed at once from all his sins.
 3. See P.V. Kane, *History of Dharmasastra*, Vol. II, pp. 858 ff.
 4. F.G. Bailey says, "In this field, as in many others, we cannot talk of motivations, for there is no means of knowing what are the real springs of human action." - 'Gifts and Poison', *The Politics of Reputation*, p. 22. cited Vijay Nath, *Dana : Gift System in Ancient India*, New Delhi, 1987.
 5. Romila Thapar, 'First Millennium B.C.', *Dissent, Protest and Reform in Indian Civilization* (ed.) S.C. Malik, Simla, 1977, p. 116.

as the distributor of gifts, clung to his mantle.¹ In S.K. Maity's view, as long as feelings of piety and benevolence have some influence on human mind, they must find expression in religious and charitable gifts.² But it certainly could not have been purely in terms of spiritual merit earned by the donors ; the desire for personal fame and glory could be equally strong incentives. Sometimes, the reward sought by the rulers in lieu of land donations was in the form of validation of their newly won political power. This is clearly evident as Kauṭilya states, "After acquisition of a new territory, he (king) should cover the enemy's faults with his own virtues. He should carry out what is agreeable and beneficial to the subjects by doing his own duty as laid down, (by) granting favours, giving exemptions, making gifts....."³ In the *Arthaśāstra*, it is also mentioned that while establishing villages either on new sites or on old ruins, the king should grant *brahmadeya* lands to pious *brāhmaṇas*.⁴ If vast areas remain unreclaimed it would mean a great loss of revenue. The cost of reclaiming such areas was, by no means, negligible. In order to avoid such expenditure, the unreclaimed land was granted to enterprising *brāhmaṇas*, who could induce others to settle in

1. Vijay Nath, *Dana : Gift System in Ancient India*, p. 43.

2. S.K. Maity, *Economic Life of Northern India*, Calcutta, 1957, p. 43.

3. *AS.*, XIII, 5.

4. *Ibid.*, II, 1.

their neighbourhood. In the course of time, there emerged settled villages around such grants. That, in turn, led to an increase in the revenues of the State. Lands were, sometimes, granted out of social and political necessity also. R.S. Sharma assumes that social upheavals indicated by the *Kali* age descriptions made regular tax -collection and its distribution among priests and others difficult. Hence, the priests were assigned lands free from the interference of the state functionaries. It was their direct responsibility to collect tax from the peasants so as to be able to procure their own sources of livelihood.¹ Sometimes, lands were granted to religious beneficiaries out of political necessity. The land grant, made by the Vākāṭaka ruler Pravarasena II, clearly records that the thousand brāhmaṇas, to whom the village was granted, could hold it only on the condition that they would not conspire against the king, commit theft and adultery, slay brāhmaṇas and poison kings, nor wage war and do anything wrong to other villages.² It implied that the brāhmaṇas enjoyed the land on the condition that they would not act in opposition to the established social and political order. That the brāhmaṇas had political ambitions is clearly evident from the *Arthaśāstra* where Kauṭilya prescribes capital punishment

 1. R.S.Sharma, 'The Kali Age : A Period of Social Crisis', *India : History and Thought* (Essays in Honour of A.L. Basham) (ed.) S.N. Mukherjee, pp. 186-203.

2. *CII.*, III, No. 55, p. 236 ; *Sel. Inscr.*, p. 442.

to the brāhmaṇas aiming at a kingdom.¹

In our sources, we come across various categories of beneficiaries, such as the brāhmaṇas, the Buddhist *Samghas*, temples and gods, members of the royal family, high functionaries of the State, and state officials associated with the work of public charities (*atithya*), etc. The donors were mostly the rulers, their feudatories, the high officials of the State, and the common people who were generally lay-worshippers (*upāsakas*).

The ancient law-givers enjoin the rulers to grant lands to the brāhmaṇas.² In the *Arthaśāstra*, Kauṭilya lays down that the lands are to be granted to those brāhmaṇas who performed sacrifices (*ritvik*), acted as spiritual guides and were learned in the Vedas.³ They are also to be provided with forest land for religious study.⁴ Kauṭilya further adds that the *brahmadeya* land grants should be exempted from taxes and fines (*adaṇḍkarāṇi*).⁵ The use of the terms *brahmadeya* and *brahmadeyika* by Kauṭilya suggests that the practice of making land grants to brāhmaṇas was established

1. AS., IV. 11.

2. Āpast., II. 10. 26 ; Vas., XII. 3 ; Baud., IV. 7. 9.

3. AS., II. 1.

4. *Ibid.*, II. 2.

5. *Ibid.*, II. 1 ; III. 10.

under the Mauryas. In the *Mahābhārata*, we find that hundreds upon hundreds of brāhmaṇas possessing wealth of kine lived on the lands that Yudhiṣṭhira had given them.¹

The Buddhist literature refers to donations of land to the *bhikkus* by lay-worshippers (*upāsakas*) as, for instance, the *Jetavana ārāma* by the merchant Anāthapiṇḍika at Śrāvasti,² the pleasure-garden by Jivaka, the physician, at Rājagriha, the *Ambavana* by the courtesan Ambapāli at Vaisali, and the *Mahāvana* by the Licchavi republic.³ These grants were made for the maintenance of monks and the repair of caves where they lived.⁴

The Satavahana and the Śāka rulers mostly donated lands to the Buddhist *śaṃghas* in western India. The Kushanas, their contemporaries in northern India, had reasons for granting lands to their followers and Buddhist monks in the conquered territories. The introduction of the *akṣayanīvi* system of land tenure is attributed to the Kushanas. But we have hardly any evidence of land grants made by them

1. *Mbh.*, Śānti Parva, 47. 5. In the pre-Maurya period, two villages namely, Khanumata and Opasada were donated to two brāhmaṇas named Kutadanta and Canki by Prasenajit and Bimbisara, the rulers of Kosala and Magadha, respectively. See *Digh. Nik.*, Vol. I (ed.) T.W. Rhys Davids and J.E. Carpenter, London, 1890-91, p. 235.

2. *Jāt.*, I, 92 ff.

3. *Mahāvastu*, I. 299, 300.

4. LL. Nos. 1000, 1024.

probably because those grants were recorded on some perishable material.¹ The Nāsik and Kārle Inscriptions of Gautamīputra Sātakarāṇi,² Vasishthīputra Pulumāvi,³ and Usavadāta,⁴ all belonging to the second century A.D., record the grant of lands to the members of Buddhist sects for their maintenance. The inscriptions mention that these lands were not to be entered by royal officers and police and the grantees were given the right to enjoy all kinds of immunities. But there is nothing to suggest that these lands were granted with full proprietary rights.

In the Gupta period also, land was granted to the brāhmaṇas and the Buddhist Saṅghas by the rulers and their feudatories. The Nalanda and Gaya Copper-plate Inscriptions of Samudragupta, the Bhitari and Bihar Stone Pillar Inscriptions of Skandagupta are some instances of royal

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1. R.S. Sharma, *Light on Early Indian Society and Economy*, Bombay, 1966, p. 73. Akṣayanīvi tenure was a grant in perpetuity without the right of alienation.
 2. *Ep. Ind.*, VII, No. 7, p. 65 ; *Sel. Inscr.*, 191-193 ; LL. No. 1105.
 3. *Ibid.*, VII, No. 7, p. 61 ; *Sel. Inscr.*, 196-200 ; LL. No. 1100.
 4. *Ibid.*, VIII, No. 10, p. 78-79 ; LL Nos. 1131, 1099. Ushavadata, Dinika's son, and son-in-law of King Nahapana granted sixteen villages to the gods and the brāhmaṇas.

donations made in the Ganga plains.¹ It is significant to note that in the core area of the Gupta Empire, which covered the Ganga plains, we hardly come across any grant of village or plots of land made by any feudatory chief without the royal consent. Most of the land grants made without the royal consent were confined to the outlying regions whose chiefs owed only nominal allegiance to the Imperial Guptas. The feudatories in the region of modern Bundelkhand and Baghelkhand freely made grants of land to the brāhmaṇas and to other persons for the repair and maintenance of temples.² It was only towards the end of the Gupta rule that some feudatories in the Ganga plains also started granting lands without the approval of the central authority. The *kumārāmātya-māhārāja* Nandana granted a village in the modern Gaya district without the royal consent.³ From the Bihar Stone Inscription of Skandagupta, we learn that the entire villages were granted by the Gupta rulers on the same terms as by their feudatories.⁴

Sometimes, individuals also donated lands to religious establishments. The *Dharmasūtras*, the *Arthaśāstra*, and the *Mahābhārata*, all encourage individuals to make donations of

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1. *Ibid.*, XXV, No. 9, p. 50 ; *CII.* III, pp. 47, 52, 254.
 2. *Ibid.*, VIII, No. 28, pp. 284-88 ; XIX, No. 21, pp. 129-30 ; XV, No. 16, pp. 286 ff.
 3. *Ibid.*, X, No. 12, p. 49 ff.
 4. *CII.*, III, No. 12, p. 47.

land in favour of the brāhmaṇas.¹ In such cases, lands were first purchased and then donated.² But the statistical analysis of the available data clearly shows that majority of the land grants were made by the rulers and their feudatories. When an individual made a gift of land, not only the interests of his near kinsmen had to be considered, but the approval of even his neighbours and other residents of the village, whose interests could be directly or indirectly affected, had also to be sought.³ Moreover, with the growing assertion of the State's fiscal authority, it became absolutely essential for the donor to secure the formal permission of the State as well.⁴ All this may have, therefore, considerably stalled the wider prevalence of the practice of land grants by individuals. The Gupta rulers, however, gave their willing consent to the grants made by individuals as can be inferred from the copper-plate inscriptions belonging to the lower Ganga plain.⁵ Since these grants involved sale and purchase of fields of varying sizes, they could be effected only with the approval of the local officials of the State. Although exemption from

 1. Āpast., I. 6. 18 ; Baud., III. 10. 14 ; AŚ., III, 16 ; Mbh., Anuśāsna Parva, 62.

2. Ep. Ind., XV, No. 7, pp. 135-36.

3. Ind. Ant., vol. XXXIX, p. 195.

4. R.S. Sharma, *Aspects of Political Ideas and Institutions in Ancient India*, Delhi, 1959, pp. 226-27.

5. Ep. Ind., XV, No. 7, pp. 113 ff ; XVII, No. 23.

various taxes is not mentioned in some of the land charters, it appears that the State was willing to forgo its share of the produce in favour of the donees in consideration of the spiritual merit, 'dharmaṣaḍbhāga,' that was supposed to accrue to it through such sacrifice of revenue. Moreover, when the State sold fallow land to individuals for the purpose of donation, it gained financially through the sale of such lands.

Although most of the land grants during the Gupta period were executed in favour of the brāhmaṇas, some of them were also made to the temples. In the second half of the sixth century A.D., a settled village in the middle Ganga plain 'possessed of great wealth and enjoyment' was granted to the goddess Bhavānī by the Maukhari chieftain Anantavarman.¹ In the lower Ganga plain, lands were granted to the temples of Gobindasvāmin, Śvētavarāhasvāmin, and Kōkāmukhasvāmin.² Similar endowments of land were made in central India to the temple of goddess Pishtapuri during the first half of the second century A.D.³ An important factor that contributed to the rise and growth of landowning temples was the grant of *agrahāras* by the kings for religious and educational purposes. The Bihar Stone

1. *CII.*, III., No. 50, p. 226.

2. *Sel. Inscr.*, pp. 338-39, 342 ff ; *Ep. Ind.*, XV, No. 7, pp. 139-40.

3. *CII.*, III, No. 25, p. 113.

Inscription of Skandagupta and the Bhitari Pillar Inscription are a few instances of such grants made by the Imperial Guptas.¹ The later Gupta ruler Dāmodaragupta (6th century A.D.), is credited with the establishment of one hundred *agrahāras*, which would mean hundred villages were granted to the *brāhmaṇas* for maintaining centres of religion and education out of the income derived from them.² In the *Harshacharita*, we find that one hundred villages with one thousand *halas* were granted to the *brāhmaṇas* in the middle Ganga plain by Harsha on the eve of his setting out on a military expedition.³ The grant of land, generally in recognition of learning, for rendering religious services, or possibly even for preparing a genealogy of the king provided, apart from innumerable privileges included in the grant, income and status to the *brāhmaṇas*. The temples became yet another source of income to them. Early Hindu temples were very small shrines in which the image of the deity was housed. But, in course of time, they developed into complex institutions built on an extensive and elaborate plan and richly endowed with the revenue of land from the villages, apart from the wealth collected in kind through offerings. In this way, land grants converted the

1. *Ibid.*, III, Nos. 12 & 13, pp. 47 & 52.

2. *Ibid.*, III, No. 42.

3. Bāṇa, *Harshacharita* (tr.), E.B. Cowell and F.W. Thomas, London, 1897, p. 203.

temples into rich establishments.¹ The gradual accumulation of land into the hands of the brāhmaṇas and religious institutions led to the rise of a class of landed magnates who wielded considerable economic and political power in the rural areas.² It appears that income from the granted lands began to be invested in commercial enterprises which might also account for the subsequent affluence of the brāhmaṇas lasting through generations.³

Monasteries were initially established in the vicinity of towns and large villages since the monks were dependent for alms on the lay community. Later on, the rulers started making land grants to these monasteries.⁴ Grants of land to the Buddhist establishments were made by the Sātavāhana

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1. Romila Thapar, *The Past and Prejudice*, New Delhi, 1975, p. 41.
 2. H. Chakravorti, *India as Reflected in the Inscriptions of the Gupta Period*, New Delhi, 1978, pp. 68-69. Also see B.C. Law, *India as Described in the Early Texts of Buddhism and Jainism*, London, 1941, p. 162.
 3. Richard Fick, *Social Organisation in North-East India*, (tr.), S.K. Maitra, Delhi, 1972, p. 244. That the brāhmaṇas had started venturing in the field of commercial enterprise is well borne out by our sources. The *Jayddisa Jātaka* refers to a brāhmaṇa who at the head of a caravan, was journeying along the road with five hundred waggons. Vol. V, No. 513, p. 12. Similarly, the *Mahā-sutasoma Jātaka* refers to a certain wealthy brāhmaṇa who traded with five hundred waggons and paid a thousand pieces of money to the people for his safe journey through the forest. See Vol. V, No. 537, p. 256.
 4. The Sanchi Stone Inscription of Chandragupta II mentions that lands were permanently donated for feeding *bhikshus* and lighting lamps. See CII, III, No, 5. p. 29.

rulers in western India in the second century A.D. and the practice spread to other parts of the country and assumed gigantic proportions in early medieval times.¹ Large structures called *vihāras* and *mahāvihāras* sprang up independently of towns in the Gupta and the post-Gupta periods. Hiuen-Tsang observed that the Nalanda *vihāra* was maintained out of the revenues of about hundred villages granted to this institution.² In the time of I-tsing, this number seems to have risen to two hundred villages.³ Probably an equal number of villages might have been attached to the centre of education at Valabhi. With the endowment of land, the monasteries also became the centres of agrarian activity in areas newly opened up by the State. The large monasteries were so richly endowed that they had to employ labourers and share-croppers for the cultivation of these lands.⁴ Lavish endowments of land to monasteries resulted in a greater secularisation of the *Samgha*. There was a consequent decline in its concern for providing salvation to the lay community and an increase in its concern for acquiring wealth and maintaining authority.⁵ In

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1. R.S. Sharma, *Urban Decay*, New Delhi, 1987, p. 162.
 2. S.Beal, *The Life of Hiuen-Tsiang*, London, 1888, p. 112.
 3. J. Takasuru (tr.), *A Record of Buddhist Religion*, Oxford, 1896, p. 65.
 4. *Ibid.*, p. 61.
 5. In certain areas the *Samgha* acted as a banker and loaned money on interest. See Romila Thapar, *A History of India*, Vol. I, Penguin, 1977, p. 157.

course of time, these temples and monasteries developed into semi-independent entities, and were gradually converted into medieval *maṭhas* possessing enormous wealth.¹

The state functionaries also received grants of land. The units of revenue administration based on decimal system were first introduced by Kauṭilya who placed groups of five, ten, two hundred, four hundred, eight hundred villages under the officers called *pañchagrāmi*, *dashagrāmi*, *gopa*, *sthānika* and *samāhartā*, respectively.² In the newly established settlements, the *samāhartā* was paid in cash.³ But the *gopa* and *sthānika* were granted lands, which they could not sell or dispose of in any way.⁴ Some brāhmaṇas such as *ṛitvik*, *ācharya* and *purohita*, who are recommended forty-eight thousand *paṇas* as their salary, were also considered worthy of *brahmadeya* land in the new settlements.⁵ Other state functionaries like physicians, elephant and horse trainers were also granted lands in such areas.⁶ Manu retained the decimal system of Kauṭilya, but the state officials placed

Also *Ancient Indian Social History*, Hyderabad, 1984, p. 73.

1. See R.S. Sharma, *Indian Feudalism*, New Delhi, 1980, p. 73.
2. *AS.*, II, 1 & 35.
3. *Ibid.*, V, 3.
4. *Ibid.*, II, 1.
5. *Ibid.*, V, 3.
6. *Ibid.*, II, 1.

in charge of various groups of villages, whose duty was to maintain law and order and to collect royal dues (*rāja-pradeyāni*), were perhaps all paid through land grants.¹ No such provision, however, was made for the officials of the central administration who were probably paid in cash.² The lowest administrative unit was undoubtedly the village under the *grāmika*. He was not a paid servant of the crown.³ In the *Smṛitis*, *grāmika* is mentioned as lord of one village and the villagers were required to furnish him with his daily requirements of food, drink, fuel, etc.⁴ We have no clear idea about the mode of payment to the state functionaries under the Gupta rulers. *Bṛihaspati* refers to

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1. Manu, VII, 115-20 ; Also see *Mbh.*, XIII, 87. 3-8.
 Lord of ten villages --- 1 *kula*
 Lord of twenty villages --- 5 *kulas*
 Lord of hundred villages --- Revenue of one village
 Lord of thousand villages --- Revenue of one town.
Kula is presumably an area of land sufficient to maintain a family. Also see *Vishṇu*, III, 7-14.
 2. U.N. Ghoshal, *Agrarian System in Ancient India*, Calcutta, 1930, p.12.
 3. S.S. Nigam, *Economic Organisation in Ancient India*, New Delhi, 1975, p. 92.
 4. Manu, VII, 118-19. The difference between the *watan lands* (official land - holding of the village and *pargaṇā* officers) that came into vogue in the Mohammedan times and the lands granted to the local administrators mentioned in the *Arthaśāstra* was that the former were always regarded as hereditary and saleable whereas the latter were purely temporary possessions having no such rights. See Baden Powell, *Land Systems of British India*, Vol. I, Delhi, 1974, pp. 180 ff ; *AS.*, II, 1. The lands mentioned in the *Arthaśāstra* were without the right of sale and mortgage (*vikrayādhānavarjam*).

the grant of lands to state officials.¹ But there is no direct epigraphic evidence to corroborate this practice. Fa-hsien, in the course of the general description of the 'middle kingdom', refers that the king's body-guards and attendants, all have regular salaries.² But S.Beal has translated the same passage as 'the chief officers of the king have all allotted revenues'.³ The same passage has been interpreted by another scholar as "the king's attendants, guards, and retainers, all receive emoluments and pensions".⁴ It appears that the term 'emoluments' in a wider context included land grants as well. In the post-Gupta period, however, there emerges a somewhat clear picture of the mode of payment to the state officials. The high officials under Harsha were not paid in cash, as one-fourth of the royal revenue was assigned for the endowment of public servants.⁵ At one place Hiuen-Tsang explicitly states that the governors, ministers, magistrates and officials had each a portion of land assigned to them for

1. Brih., XIX, 44.

2. James Legge (tr.), *A Record of Buddhistic Kingdoms*, Oxford, 1886, p. 5.

3. S. Beal (tr.), *Travels of Fah-hian and Sung Yun*, London, 1869, p. 55.

4. Ho-Chang-Chun, 'Fa-hsien's Pilgrimage to Buddhist Countries', *Chinese Literature*, No. 5, 1956, p. 154. cited R.S. Sharma, *Indian Feudalism*, p. 9.

5. T. Watters, *On Yuan Chwang's Travels in India*, Vol. I, London, 1904-05, p. 176.

their personal support.¹ The statement confirms that the division of revenue was, in fact, a real division of land. These officials, according to inscriptions, included *daussādhasādhanika*, *pramātra*, *rājasthānīya*, *uparika* and *vishayapati*². Thus, under Harsha, revenues were granted not only to priests and scholars, but also to the officers of the State.³

The term *bhogagāma*, which often occurs in the *Jātakas*, apparently means a village given by a king to his favourites for enjoyment.⁴ It was a mark of favour bestowed by the king upon anybody with whom he was pleased, so much so that a barber was assigned *bhogagāma*.⁵ There is another

1. S. Beal (tr.), *The Life of Hiuen-Tsiang*, Vol. I, London, 1888, p. 68.

2. *Ep. Ind.*, II. No. 2, p. 359 ff.

3. *Bāna*, *Harshacharita* (ed.), p. 93. R.S. Sharma considers this change in payment due to the paucity of coins. So long as coins were in considerable use under the Kusānas, even religious needs were met through cash payments, but with their comparative disuse both religious and secular services had to be paid by land grants. See *Indian Feudalism*, p. 12. D.C. Sircar does not agree with Sharma's view that the payment for services through land instead of money developed in an economy characterised by the dearth of coins and absence of trade. See H. Chakaravorti, *India as Reflected in the Inscriptions of the Gupta Period*, p. 69.

4. *Jāt.*, I, p. 420 ; II, p. 429 ; III, p. 229.

5. *Ibid.*, I, p. 138. The King Makhadeva of Videha granted a village to the barber, which yielded a hundred thousand pieces of money. A fowler was granted twelve hamlets by the King yielding annually a hundred thousand pieces of money. *Jāt.*, V, p. 371.

reference where a king granted sixteen villages to his minister. The grant was made not for his services to the State but for his wise advice to the king.¹ The members of the royal family also enjoyed *bhogagāmas*. The *Arthaśāstra* refers to the grant of land to the queen and the princes for their support and maintenance.² However, there is hardly any evidence to show that *bhogagāmas* were granted to the officers of the State under the Mauryas. In the epigraphic records of the Gupta period, we come across such terms as *bhogika* and *bhogapatika*, which suggest that these officers were assigned land for enjoying revenues.³ Sometimes, it is suggested that the *bhogika* was connected with *bhukti*.⁴ In the inscriptions, the governors of

1. *Ibid.*, I, p. 354 ; III, p. 229. The King Brahamadatta of Banaras offered to the *Bodhisatta* a village whose revenue was a hundred thousand pieces. *Jat.*, III, p. 152. Also see E.J. Rapson (ed.), *Cambridge History of India*, Delhi, 1955, p. 177.

2. *AS.*, II, 7. The inscriptions of Ushavadata, the son-in-law of the famous Nahapana, referring the donation of land to various beneficiaries show that the members of the royal family were assigned lands with the right of disposal in western India. See *Ep. Ind.*, VIII, Nos. 10 & 30, pp. 78,85. The King of Kosala granted a village to his daughter as 'bath allowance' in her marriage to the King of Magadha. See U.N. Ghoshal, *Agrarian System in Ancient India*, pp. 35-36.

3. The idea that the territories were intended for the enjoyment of officers first appears in the Rupnath Minor Pillar Edict of Ashoka under whom the *janapada* seems to have been divided into *āhāras*, which literally meant food for its holders.

4. *CII.*, III, p. 100 fn 2. The term *bhukti* as territorial unit first appears in the Allahabad Stone Inscription of Samudragupta. Literally, the term *bhukti* means something for enjoyment. It is likely that *bhukti* may

bhukti are designated as *bhogika*, *bhoga-pati*, *uparikara-mahārajā*, etc.¹ They also held the office of *amātya* but whether they enjoyed the revenues in that capacity or not is not clear.² The *bhogapatika* has been compared to a *jāgirdar* of later times.³ Some of them even oppressed the villagers.⁴ Some inscriptions from Orissa, belonging to the times of Harshavardhana, mention another state functionary, the *mahābhogī*.⁵ In *Kādambarī*, a reference is made to their presence in hundreds at the doorway of the royal palace. They are described by V.S. Agrawala as 'people living on the bounties of the State'.⁶

The term *atithya*, which occurs in the *Arthaśāstra*, has been explained by Bhattasvāmin, the commentator of *Arthaśāstra*, as the lands given to the officials for public charities and pious acts.⁷ U.N. Ghoshal compares this class

 have been meant for the enjoyment of the officer under whose charge it was placed.

1. *Ibid.*, No. 14 ; *Ep. Ind.*, XV, no. 7.
2. *Ibid.*, Nos. 23 & 26, p. 109, 120.
3. *Sel. Inscr.*, p. 343 fn. 6.
4. Bāṇa, *Harshacharita* (tr.), E.B. Cowell and F.W. Thomas, London, 1897, p. 212.
5. See Binayak Misra, *Medieval Dynasties of Orissa*, Calcutta, 1934, pp. 24-25.
6. V.S. Agrawal (tr.) *Kādambarī*, Varanasi, 1958, p. 103. In R.S. Sharma's view, the terms *bhogika*, *bhogapatika*, etc. smack of feudal relations. See *Indian Feudalism*, p. 13.
7. *AS.*, II, 20.

of lands to *inām* or *muāfi* of the Mohammedan times.¹ The *muāfi* lands were generally hereditary and of permanent nature so long as the object of their endowment was observed.² Thus, *atithya* like *brahmadeya* were the lands enjoyed by the donees in perpetuity. The lands were, sometimes, granted as a mark of royal favour to the hunters, the fowlers, the crippled and the merchants.³

The *Arthaśāstra* refers to villages supplying soldiers (*āyudhīya*) and, thus, enjoying freedom from taxation.⁴ It may appear that such villages were like the *jāgir* lands of later times where the landholders, in return for the revenue they enjoyed, supplied the king with soldiers whenever the necessity arose.⁵ But a close scrutiny does not suggest any similarity between such villages and the *jāgir* lands. The army organisation, ~~during the~~ period of our study, was not based on land system. The State had its own standing army. Most likely, the expression *āyudhiya* refers to the villages from where a large number of soldiers were

1. U.N. Ghoshal, *Hindu Revenue System*, p. 55.

2. Baden Powell, *Land Systems of British India*, Vol. I, p. 190.

3. *Jāt.*, I. p. 138, 420 ; V. p. 44, 350, 371 ; VI. p. 344.

4. *AS.*, II, 35.

5. R.K. Choudhary is of the view that the elements of feudalism were slowly creeping into the state system as is evident from the villages supplying soldiers. See 'Ownership of Land in Ancient India' *JBR*, vol. 53, Patna, 1967, p. 35.

recruited, and therefore, entitled to certain concessions. In his account of the fifth caste consisting of warriors, Megasthenes states that the entire army--men-at-arms, war horses, war elephants and all--is maintained at the king's expenses.¹ The passage clearly indicates that the army was paid cash salaries under the Mauryas and that the practice of assigning lands to soldiers was then unknown. Moreover, Kauṭilya enjoins the king to provide for the maintenance of the widows and children of the soldiers killed in military campaigns.² Even in post-Maurya times, the brāhmaṇas and temples were granted land revenues though they did not render any military services to their patrons.³

The orders of land grants made by the rulers were generally followed by a deed of registration and arrangements for transfer of the grants to the donees. The immunities in such grants were specifically mentioned.⁴ Kauṭilya states that the donee's title to possess and to enjoy such lands should be entered in the state registers.⁵ A gift of land is of perennial value and cannot be consumed

1. F.J. Monahan, *Early History of Bengal*, pp. 143, 104, 150.

2. *AS'*, V. 3.

3. R.S. Sharma, *Indian Feudalism*, p. 214.

4. *AS'*, II, 10.

5. *Ibid.*, II, 7.

in one's lifetime. It, therefore, raises more complex issues of proprietary rights both for the donor and the donee not only for their own generation but for all times to come. In case land was granted in perpetuity, it had to be recorded for legal claims of the donee and his family before the future kings. It had to be a permanent, signed and sealed document referring to the lineage of the donor, the identity of the recipient, the extent and nature of the land donated, etc. Thus, in order to enable the grantee to enjoy the benefits from a land grant without interruption, the provision regarding the supremacy of the *rāja-sāsanas* was introduced into the *Smritis*. The law-givers also had to take into consideration a new category of land rights, which were being created through the execution of royal charters. Vishṇu lays down that the king should grant land to the brāhmaṇas, and for the information of the future kings, he should give the donees a charter written on a piece of (cotton) cloth or inscribed on a copper-plate, under his own seal and with the description of the boundaries of the land and the measurement of the area donated.¹ Yājñavalkya states that after granting land the lord of the soil should have a document prepared for the information of the future kings. He should then cause the preparation of a permanent charter written on cloth or inscribed on copper-plate, duly

 1. Vishṇu, III, 81-82.

dated and stamped, mentioning his ancestors and the boundaries of the gifted land.¹ Nārada suggests that in case of the charter being lost, effaced, torn or otherwise destroyed, the donee should get it replaced by the proper authority.² The epigraphic records show that these instructions of the law-givers were meticulously observed from the Gupta period onwards. The land charters were, sometimes, formally renewed and confirmed by the new rulers for the convenience of the donees.³ In the Nidhanpur grant of Bhaskaravarman, we find that an *agrahāra* had become liable to revenue due to the loss of land charter. Bhaskarvarman issued a fresh charter granting the land to the family of the same donee.⁴ It shows the importance of *rāja-śāsanas* and the resumption of lands for want of such documents.

Land grants were endowed with a deed engraved on a durable *tāmra-paṭṭa*, i.e., a plate or plates of copper. In the disputes arising out of land grants, the *rāja-śāsana* could be invoked by the parties concerned to their

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1. Yāj., I, 318-20 ; Bṛih., VIII, 12, 305-306. There is no explicit statement made by Yājñavalkya regarding the donee, though it may be supposed that the donee's name should also be written in the charter.
 2. Nārada, I, 146.
 3. *Ep. Ind.*, II, p. 485 ; VI, pp. 87-88 ; VIII, pp. 73 ff. ; *Sel. Inscr.*, p. 437 ; LL. No. 1124.
 4. *Ibid.*, XIX, pp. 118 ff. ; XVII, pp. 121, 245.

advantage. For, in all such cases, royal charters authorising grants would annul all other types of proofs produced in support of claims to the landed property, because *rāja-sāsana* was considered the best of all documents.¹ As the land charter could override all other kinds of proofs regarding the proprietary rights in land, there was always a possibility of its being forged on the part of the assignee. Therefore, Manu prescribes death penalty for fabricating royal charters.² Vishṇu has also expressed a similar view, when he says that the king should put to death the persons who prepare spurious charters.³ Even then, we come across instances of the donees actually indulging in such practices. The Nalanda and the Gaya copper-plate land charters are written in the script of the seventh century A.D., but they are attributed to Samudragupta.⁴ The Madhuban Copper-plate Inscription of Harshavardhana refers to a grant of a village free of taxes to two learned brāhmaṇas, which had been formerly enjoyed by others on the basis of a forged land charter.⁵

 1. *Dharmakośa*, I, pt. I, p. 373.

2. Manu, IX, 232.

3. *Vishṇu*, V, 9-10.

4. *CII*, III, No. 60, p. 256 ; *Ep. Ind.*, XXV, p. 50 ; *Sel. Inscr.*, pp. 271-274. Fleet refers to as many as fifty-nine cases of forgery in 'Spurious Land Records'. See *Ind. Ant.*, XXX, pp. 214-223.

5. *Ep. Ind.*, I, pp. 67 ff.

Fear of confiscation of the donated lands had to be guarded against while making land grants. Sometimes, religious sentiments were invoked to safeguard the rights of the beneficiaries. In the Sanchi Stone Inscription of Chandragupta II dated 412-13-A.D., it is specifically mentioned that whosoever interfered with its arrangements would become infested with the guilt of a slaughter of a cow or a brāhmaṇa and the guilt of five sins that entailed immediate retribution.¹ We find a similar warning in the Indore Copper-plate Inscription of Skandagupta dated 465-66 A.D.² In the Khoh Copper-plate Inscription of mahārāja Hastin dated 475-76 A.D., it is stated that no obstacle is to be caused by those born in the donor's family or by his feudatories. It was also added that while the donor of land enjoys happiness for sixty-thousand years, its confiscator would dwell for the same period in hell.³ Similar warnings are found in several other land charters also.⁴ For instance, in the Khoh Copper-plate Inscription of mahārāja Jayanatha dated 496-97 A.D., it is stated that, 'he who

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1. *CII.*, III, No. 5, p. 34. The five sins were patricide, matricide, killing of an arhat, shedding the blood of Buddha and causing division among the priesthood. (*Brahmaya-hatyā surāpānam steyam gurv-angana-gamah /mahānti pātakanyahuḥ saṃsargaśchāpitaiḥ saha*). See *Manu*, XI, 35. Also see *Mbh. Anuśāsna*, 130, 38.
 2. *Ibid.*, No. 16, pp. 71-72.
 3. *Ibid.*, No. 21, pp. 98-99.
 4. *Ibid.*, No. 22, p. 105 ; No. 25, p. 116 ; No. 129 ; No. 31, p. 138.

confiscates lands that have been granted becomes a worm in ordure and sinks into hell with his ancestors'.¹ In some other inscriptions, the consequences of such an action take more horrible form as, for example, those who confiscate a previous grant 'are born (again) as black serpents, inhabiting the dried-up hollows of trees in desert places destitute of water'.² Vishṇu clearly lays down that the rulers should not confiscate lands previously granted by others.³ The land charters specifically stress the concept of perpetuity by stating that the grants will endure as long as the moon and the sun shine. Some of the technical terms related to grants such as *nīvīdharama*, *apradādhama*, etc., show that lands were granted in perpetuity.⁴ Lands so granted could not be transferred but could only be enjoyed by the donees and their descendants. However, Kauṭilya states that *brahmadeya* lands, though granted in perpetuity, could be sold by the donees, but only to those who were endowed with such lands. But, if they sold the granted lands to others, they were liable to be fined.⁵ Their lands could also be confiscated. There is a specific mention of confiscation of granted lands in the *Arthaśāstra* and in the

1. *Ibid.*, No. 30, p. 134.

2. *Ibid.*, No. 31, p. 139.

3. Vishṇu, III. 83.

4. *Ep. Ind.*, XV, p. 144.

5. *AS.*, III, 10.

inscriptions.¹ Svāmidāsa warns a brāhmaṇa donee that he would be allowed to enjoy the grant 'so long he does not transgress the conditions of his *brahmadeya* grant'.² Pravarasena II, the Vākāṭaka ruler, granted land to the brāhmaṇas not only for the purpose of acquiring religious merit, but also to prevent them from acting in opposition, and it clearly states that the land was liable to confiscation if they tried to oppose the state interests.³ Normally, the lands once granted were not confiscated.⁴

The waste and uncultivated lands were granted to the brāhmaṇas with the aim of bringing such areas under cultivation. Such grants probably began in the pre-Maurya period when lands were granted to pioneering brāhmaṇas in

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1. *Ibid.*, II, 1 ; *CII.*, III, No. 5, p. 34 ; No. 16, pp. 71-72.
 2. *Ep. Ind.*, XV, pp. 286 ff.
 3. *CII.*, III, No. 55, p. 242. P.V. Kane has cited a number of instances from the inscriptions showing that in spite of severe imprecations, land donated by the rulers was sometimes confiscated by their successors. See *History of Dharmasastra*, Vol. II, p. 863. We have an early instance when Prasenajit, the ruler of Kosala, confiscated the village of Kasi which he had granted to his sister Kosala Devi, wife of Bimbisara. See Rhys Davids, *Buddhist India*, p. 2.
 4. Although, technically a king could terminate a grant, he was unlikely to do so very often, since offended brāhmaṇas or officers could well express their resentment through political opposition. Romila Thapar, *A History of India*, Vol. I, Penguin, 1977, p. 146.

the Ganga plains.¹ Under the Mauryas, it was the State policy to grant waste lands to the brāhmaṇas for establishing new settlements and bringing virgin land under cultivation.² The practice continued in subsequent times as well.³ From the Gupta period onwards, we have epigraphic records which indicate that deliberate attempts were made by the rulers to extend the area under cultivation, especially, in the lower Ganga plain, by means of land grants. It is clearly mentioned in the inscription of Samācāradeva from Bengal assignable to the second half of the sixth century A.D. that when a brāhmaṇa approached the elders of the locality for a piece of land, they decided to grant it on the ground that it was a waste land full of pits and infested with wild animals. They thought that if the land was rendered capable of being enjoyed by the beneficiary, it could bring both spiritual merit and economic gains to the king.⁴ The Tipperah Copper-plate Inscription of Lokanātha assigned to the seventh century A.D. provides another instance of the policy of reclaiming waste lands through land grants. Land was granted to more than one hundred brāhmaṇas in the forest region and they were given joint and individual shares. The boundaries of the land so

1. *Digh. Nik.*, I, 87, 111, 114, 127, 131, 224.

2. *AS.*, II, 1.

3. See R.S. Sharma, *Indian Feudalism*, p. 32.

4. *Ep. Ind.*, XVIII, No. 11, p. 75.

granted were not defined, apparently, because they had not been settled. The granted area having a thick growth of bushes and creepers was full of beasts and snakes.¹ Obviously, the brāhmaṇa community was brought there for the worship of god Bhagavan Ananta Nārāyaṇa installed in the maṭha by a brāhmaṇa feudatory. But the real purpose of the grant of land was to bring the forest area under cultivation. Agriculture in such areas was of primitive nature. A new expertise was brought by the brāhmaṇa beneficiaries who migrated from the middle Ganga plain or similar advanced areas. The tribals were beef-eaters and killed the cattle indiscriminately. The brāhmaṇas inculcated among them the idea of the preservation of cattle -wealth, which helped in the growth of the agrarian economy in tribal areas.² They also introduced the knowledge of calender which helped in knowing the various seasons suitable for the sowing of different types of crops.

In some copper-plate inscriptions of the Gupta period from the lower Ganga plain, we come across such terms as *khila* and *aprahata*. These terms have been interpreted as meaning waste and uncultivated lands.³ But, this interpretation does not fit in well with all such grants.

1. *Ibid.*, XV, No. 19, pp. 301-312.

2. R.S. Sharma, *Indian Feudalism*, p. 222-223.

3. In the Dāmodarpur Copper-plate Inscriptions of the time of Kumaragupta and Bhanugupta, there occur the terms

For instance, in the Baigram Copper-plate Inscription, the term *khila-kṣetra* can not be taken in the sense of waste land.¹ In the *Nāradaśmṛiti*, the term *khila* is defined as a tract of land which was not under cultivation for three years.² Moreover, in the above inscription the grant of *khila-kṣetra* is accompanied by some homestead land suggesting thereby that it was not entirely waste land. Again, in the Dāmodarpur Copper-plate Inscription dated 543 A.D., the terms *khila* and *aprahata* seem to have been used in a conventional sense. In this case five *kulyavāpas* of land had to be purchased at three different places.³ In another inscription, four *kulyavāpas* and seven *kulyavāpas* of land were purchased by a merchant for making gift to gods Kokāmukhasvāmin and Svētavarahasvāmin, respectively.⁴ These donations do not seem to be of waste lands.⁵ In central India, entire villages were granted by the feudatories of

samudāyabāhya, *aprahata*, *khila-kṣetra*. These terms have been translated by R.G. Basak as revenue free, untilled and fallow lands, respectively. See *Ep Ind.*, XV, No. 7, pp. 113 ff.

1. *Sel. Inscr.*, p. 356.
2. Nārada, XI, 26. According to Nārada, a tract of land which has not been under cultivation for a year is called *ardhakhila* (half-waste), and which has not been under cultivation for five years is no better than a forest.
3. *Sel. Inscr.*, pp. 347-348.
4. *Ep. Ind.*, XV, No. 7, pp. 137 ff.
5. R.S. Sharma, *Aspects of Political Ideas and Institutions in Ancient India*, p. 218.

the Guptas. The usual phraseology of the land charters that the grants were made together with *udraṅga* and *uparikara* and other dues and were not to be entered by *chaṭas* and *bhaṭas*, suggests that these were settled areas.¹ The long list of taxes and imposts from which the donees were granted exemption hardly allows us to presume that the grants were made of uncultivated and waste land. In some cases, the order regarding the grant of a village to a beneficiary was conveyed to the *brāhmaṇa* and other inhabitants of the village, which further suggests that the area was already a settled one.²

The land grants to the *brāhmaṇas* in the outlying, backward areas helped in spreading the Aryan culture in non-Aryan regions. The *brāhmaṇas* of the middle Ganga plain were invited to hold land grants in tribal areas of Bengal, Orissa and central India which were, thus, brought close to one another within the orbit of the same culture. In this context, it is important to note that by the time of the Guptas, the brahmanical system of education had undergone a significant transformation. It had become an institution with a precise physical location and the temple and *agrahāra* had become the nuclei of *brāhmaṇical* culture.³

1. *Ep. Ind.*, XVII, No. 23.

2. *CII*, III, No. 31, p. 138.

3. See Romila Thapar, *Ancient Indian Social History*, p. 141.

The brāhmaṇas who received plots of vacant land as grants during the Maurya period did not become absolute proprietors of such lands. They were merely exempted from the obligations normally imposed on temporary tenants. They were forbidden to mortgage their lands to members of other varṇas.¹ The term *akṣayanīvi*, which is used in many later inscriptions, signifies perpetual enjoyment without the right of alienation.² But the donees were entitled to bequeath their lands, and as such, these lands turned into hereditary property held in perpetuity. The practice of land grants to the brāhmaṇas led to a tendency on their part to neglect their priestly duties. In many cases, their religious duties began to be increasingly overshadowed by their secular pursuits. We have no means to determine the proportion of the brāhmaṇas engaged in agriculture, but their number might not have been inconsiderable, for the law-books of the period provide that the brāhmaṇas might legitimately take to cultivation.³

The land charters of early Gupta period from Bengal and central India confer on the grantee the right of enjoying the revenue from the land in perpetuity, but they do not

1. *AS.*, II, 1.

2. *Sel. Inscr.*, pp. 152 fn 10, 164, 166.

3. *Manu*, X, 81-82 ; *Yaj.*, III, 35 ; *Nārada*, I, 56. The *Parāśara Smṛiti*, a law-book of the seventh century A.D., also says that the brāhmaṇas can cultivate their lands themselves. See R.S. Sharma, *Urban Decay*, p. 171.

authorise him to alienate or lease such lands to others. Perhaps the earliest record of this type comes from Indore, in central India, where the grant made by *mahārāja* Svamīdāsa, a feudatory of the Imperial Guptas, authorises the grantee to enjoy the field, cultivate it or get it cultivated so long as he observed the conditions of the *brahmadeya* grant.¹ Thus, there was ample scope for creating tenants on the donated land and the grant provides perhaps the earliest epigraphic evidence of the sub-infeudation of the soil.² In the land charters belonging to the later period, we frequently come across the provision of getting the donated lands cultivated by others. According to I-tsing, the monasteries got their lands cultivated by temporary tenants. We get some idea about the nature of tenure on which the tenants were assigned lands when I-tsing states that the *Samgha* provided the bulls and fields, and normally received one sixth part of the produce.³ But he does not mention whether the cultivators were also provided with ploughs, seeds, manure, etc., or not. It seems that the tillers of the soil were not hired labourers receiving

 1. *Ep. Ind.*, XV, No. 16, pp. 289-290 ; *CII.*, III, No. 40, p. 193.

2. R.S. Sharma, *Indian Feudalism*, p. 5.

3. T. Takasuru (tr.), *A Record of the Buddhist Religion*, p. 61. Fa-hsien also states that the monasteries were given fields and gardens with husbandmen and cattle to cultivate them. See J. Legge (tr.), *A Record of Buddhistic Kingdoms*, Oxford 1886, p. 43.

wages but were temporary tenants paying rents to the proprietors.

Initially, the donation of land by the State meant merely the transfer of the right to collect taxes from the village and not the right to land as such.¹ Some inscriptions specifically state that the villagers were to pay to the brāhmaṇas, on whom the village had been bestowed, the taxes which they had previously paid to the State.² In this way, only the authority for whose benefit the tax was collected was changed, but neither the amount of the tax nor the status of the peasants was affected. The early Pali texts of the pre-Maurya period refer to the villages granted to the brāhmaṇas by the rulers of Kosala and Magadha, but they do not mention the abandonment of any administrative rights by the donors.³ Administrative rights were perhaps given up for the first time in the grants made to the Buddhist monks by the Sātavāhana ruler Gautmīputra Sātākaraṇi in the second century A.D. The land granted to them could not be entered by royal troops, disturbed by government

1. L.Gopal, 'Ownership of Land in Ancient India', *JESHO*, vol. IV. p. 253. The grantee was made absolute owner of the granted land in the early centuries of the Christian era. See S.K. Das, *The Economic History of Ancient India*, p. 180.

2. See L. Gopal, 'On Feudal Polity in Ancient India', *JIH*, vol. 41, Trivandrum, 1963, p. 410 ; R. Choudhary, 'Some Historical Aspects of Feudalism in Ancient India', *JIH*, vol. 37, Trivandrum, 1959, p. 387.

3. *Digh.Nik.*, p. 235.

officials or interfered with by the police ; in short, they enjoyed all kinds of immunities.¹ However, Buddhaghosha states that the grants mentioned in the early Pali canons carried with them administrative and judicial rights.² It may be true of the practice prevailing in the fifth century A.D. when the commentator flourished, but it certainly was not the case in the pre-Maurya period. While there are several instances of *brahmadeya* grants in Kosala and Magadha mentioned in the *Digha-Nikāya*, it is relevant to note that neither the word *akara* nor any other term indicating immunity of taxes is found in the string of objectives qualifying such land grants.³ It shows that the pre-Mauryan grants were of very limited nature and the grantees paid some sort of tribute to the ruler. The *brahmadeya* grants of the Maurya period did not carry the privileges which we find in the grants belonging to the later periods. It is likely that during the Maurya period, the *brahmadeya* grants were made out of crown lands and not out of the land held by the peasant proprietors.

It seems that in order to enlist the support of the priestly class, the rulers began to increase the privileges

1. *Ep. Ind.*, VIII, pp. 71 ff.

2. Buddhaghosha's explanation of the passage from *Digha-Nikāya* has been accepted by Rhys Davids who translates it as 'a royal gift with power over it as if he were the king'. See *Dialogues of the Buddha*, Vol. I, pp. 108 ff.

3. *Digh. Nik.*, I, 87 ; III, 114, 131, 224.

attached to the *brahmadeya* grants. From the fifth century A.D. onwards, two significant features of land grants became more frequent, i.e., the transfer of all sources of revenue and the surrender of police and administrative functions. Pravarasena II, the Vākāṭaka ruler, gave up his control over almost all sources of revenue including pasturage, hides, charcoal, salt mines, forced labour, and all hidden treasures and deposits.¹ The transfer of hidden treasures and deposits of the villages meant the transfer of royal rights over mines which was an important sign of the king's sovereignty. The Khoh Copper-plate Inscription of *mahārāja* Hastin mentions the village Vasuntarashaṇḍika which was granted to a brāhmaṇa "with *udraṅga* and *uparikara*, (and with the privilege that it is) not to be entered by the irregular and regular troops, (but) with the exception of (the right to fines imposed on) thieves".² The donor not only abandoned his revenues, but also the right to govern the inhabitants of the village that was given away as a grant. The Gupta period provides us with at least half a dozen instances of grants of apparently settled villages made to the brāhmaṇas by the feudatories in central India. In these grants, the cultivators and artisans are expressly asked by the donors not only to pay the customary taxes to the donees, but also to obey their commands. Further, the

1. *CII.*, III, No. 55, p. 242.

2. *Ibid.*, No. 21, pp. 97-98.

government officials and regular soldiers are asked not to cause any disturbance to the brāhmaṇas.¹ Nevertheless, the inscriptions of this period show that the rulers generally regained the right to punish thieves which was one of the attributes of royal authority. The process of decentralization was almost complete when, in later times, the king made over to the brāhmaṇas even the right to punish all offences against family, property, persons, etc.² All this provides clear evidence of the transfer of its administrative rights by the State to the beneficiaries of land grants.

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1. "It is not to be entered by the regular troops or by the umbrella-bearers ; it does not carry with it (the right to) cows and bulls in succession (of production), or to the abundance of flowers and milk, or to the pasturage, hides, and charcoal, or to the mines for the purchase of salt in a moist state ; it is entirely free from all (obligations of) forced labour ; it carries with it the hidden treasures and deposits, and the *kḷripta* and *upakḷripta* ; it is (to be enjoyed) for the same time with the moon and the sun ; (and) is to follow (the succession of) sons and sons' sons. The enjoyment of it should not be obstructed by any one. It should be protected and increased by all (possible) means. And whoever, disregarding Our Charter, shall give, or cause to be given, even slight vexation, he will inflict on him, or will cause to be inflicted, punishment, together with a fine, when he is denounced by the Brāhmaṇas". See *CII.*, III, No. 55, p. 237 ; No. 56, p. 246.
 2. A village named Mesika in the district of Monghyr was granted free from taxes and the entry of royal agents, together with the right to punish thieves by Devapala to a brāhmaṇa. In the Inscription the cultivators (*kṣetrakaras*) and not the inhabitants (*prativāsins*) were expressly ordered to obey the grantee. See *Ep. Ind.*, XVII, No. 30, pp. 304 ff.

In earlier times, land tax, which formed the primary source of income of the State, was directly collected by the functionaries of the State. For this purpose, Kautilya laid down that a census should be taken of all households, recording the number of their inmates and the landed property held by them.¹ But during the Gupta and the post-Gupta period, the State seems to have passed on at least a part of the burden of collecting taxes to the beneficiaries. That, in turn, rendered it unnecessary to maintain the record of householders. Fa-hsien, while describing the conditions in the middle Ganga plain which formed the core area of the Gupta Empire, observed, 'They (villagers) are not to register their households or attend to any magistrates...'². We have similar information from Hsien-Tsang about the state of affairs in the first half of the seventh century A.D. He observed, 'As the government is generous, official requirements are few. Families are not registered...'³. These observations of the Chinese pilgrims suggest that the State no longer bothered about the direct collection of taxes from the peasants, which function was taken over by the intermediaries between the peasants and

 1. AS., II, 35.

2. S. Beal (tr.), *Travels of Fah-hian and Sung Yun*, London, 1869, p. 37 ; T. Watters, *On Yuan Chawang's Travels in India*, Vol. I, London, 1904-05, p. 176.

3. T. Watters, *On Yuan Chawang's Travels in India*, Vol. I, p. 176.

the State. The land grants, thus, created a considerable class of landed magnates who were given not only the right to collect taxes, but also the right to maintain law and order in the areas granted to them. They performed administrative functions not under the authority of the royal officers but almost independently.¹ Thus, as a result of land grants, the centralised control which was the hallmark of the Maurya State, gave way to decentralisation.

By the time of Harsha, considerable area of land in the Ganga plains had come under the direct control of the donees.² Consequently, most of the state officials and collectors of taxes were replaced by the landed chiefs, temples and monasteries. In the process, economic ties between the central authority and the granted areas were broken. For the continuity and development of their economy, the donees were now dependent upon the cultivators and local artisans. Gradually, it led to the growth of a self-sufficient village economy.³ The use of seals by the villages in the middle Ganga plain, which glorified themselves as *janapadas*, indicates that they were emerging

1. See R. S. Sharma, *Aspects of Political Ideas and Institutions in Ancient India*, p. 136.

2. R.S. Sharma, *Indian Feudalism*, p. 36.

3. See R. Choudhary, 'Theory of Commendation and Sub-Infeudation', *Essays in Ancient Indian Economic History* (ed.) B. Chattopadhyaya, New Delhi, 1987, p. 82.

not only as politically independent, but also economically self-sufficient units.¹ In such a social set-up, the traders or the middlemen did not play any significant role. The artisans, instead of operating independently, sought shelter and patronage from landed brāhmaṇas, temples and monasteries. As these artisans were remunerated in grain at the harvest time, it left little scope for the operation of exchange money.

Land grants contributed to the systematic expansion of agrarian economy and might have solved the problems of administration and the collection of taxes in the remote and backward areas. But the practice of land grants, gradually, brought about significant changes both in the political and the socio-economic set-up. The hold of central authority was considerably weakened. The religious fabric of society was also affected as the brāhmaṇas and monks became more concerned with their worldly pursuits. The beneficiaries began to assert illegal rights in land at the cost of peasant proprietors and, in some cases, the latter were reduced to the position of mere tenants. All these developments apparently suggest a trend towards the feudalisation of society.

1. R.C. Majumdar & A.S. Altekar (ed.), *The Vākāṭaka-Gupta Age*, Banaras, 1954, p. 267.

CHAPTER VII

THE PEASANT

The study of peasantry in the context of socio-economic developments in ancient India has remained almost a neglected field so far. In agrarian societies, the key figure in the basic subsistence economy is always the peasant.¹ Surprisingly, no exclusive monograph on the peasant has appeared so far. There is a general denial on the part of the modern scholars to treat the peasants as an independent category. There is hardly any agreement even among sociologists and social anthropologists about the meaning attached to such terms as 'peasant society', 'peasant community', 'peasant culture', etc. At times, they recognise peasant society as a residual category, putting together all kinds of societies, which are neither manifestly 'tribal' nor explicitly 'industrial'.² Some have even equated the peasantry with the rural society itself.³ Raymond Firth seems to accept this broader concept by

1. Karl. A. Wittfogal, *Oriental Despotism*, New Haven, 1957, p. 275 ; Burton Stein, *Peasant State and Society in Medieval South India*, Delhi, 1980, p. 12.
2. See V.K. Thakur, 'Problem of Defining Peasantry : A Note on the Beginning of Peasant Stratification in Early India', *Proc. IHC*, Annamalainagar, 1984, p. 130.
3. See R.S. Sharma, 'Class Formation and its Material Basis in the Upper Gangetic Basin c. 1000-500 B.C.', *IHR*, vol. II, New Delhi, July 1975, p. 1 ff.

implying that the peasant category will include, in addition to the tillers of soil, all those who live by the various forms of labour which are associated with the community of tillers.¹ Eric Wolf defines peasants as rural cultivators whose surpluses are transferred to a dominant group of rulers that use the surplus both to maintain its own standard of living and to distribute the remainder among groups in society that do not farm but must be fed for their goods and special services in turn.² Robert Redfield places the peasants in relational opposition to 'an elite of the manor, town or city' implying their low status in social hierarchy.³ T. Shanin, who uses the terms 'peasantry', 'peasant community', and 'peasant society' loosely, too views the relationship between the peasants and non-peasants as one between 'villagers' and 'non-villagers'.⁴ For Redfield, the latter group is 'an elite of the manor, town or city' whereas for Shanin, they are the outsiders who subject the peasants to domination. In his analysis of Russian peasantry, V.I. Lenin stratified it into *kuluk*,

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1. See Burton Stein, *Peasant State and Society in Medieval South India*, pp. 11-12.
 2. Eric Wolf, *Peasants*, New Jersey, 1966, pp. 3-4.
 3. Robert Redfield, *Peasant Society and Culture : An Anthropological Approach to Civilization*, Chicago, 1956, p. 20.
 4. T. Shanin (ed.), *Peasant and Peasant Societies*, Penguin, 1971, p. 15.

stredniak and *bedniak*, i.e., rich, middle, and poor peasants, respectively.¹ This obvious cleavage within the peasantry undermines the idea of its being a homogeneous category and the peasants' subjection to domination by outsiders alone.

W.H. Moreland defines peasant as 'a man who, whatever the incidents of tenure may be, cultivates a holding entirely or mainly by his family labour'.² An almost similar definition is given by Irfan Habib when he states that peasant is 'a person who undertakes agriculture on his own, working with his own implements and using the labour of his family'.³ Both of them ignore the factor of land control while defining the peasant. In terms of the control and use of land, the peasantry may be differentiated into the non-cultivating landowners, peasant proprietors, sharecroppers and landless labourers.⁴ The social organisation of agricultural production reflects a particular pattern of property rights. Broadly speaking, three main patterns of

1. See Jacques Pouchepadass, 'Peasant Classes in Twentieth Century Agrarian Movement in India', *Peasants in History* (ed.), E.J. Hobsbawn, et al., Bombay, 1983, p. 136.

2. W.H. Moreland, *The Agrarian System of Moslem India*, Delhi, 1968, p. 3.

3. Irfan Habib, 'The Peasant in Indian History', Presidential Address, *Proc.IHC*, Kurukshetra, 1982, p. 4.

4. André Bételle, *Studies in Agrarian Social Structure*, London, 1977, p. 25.

productive organisation are found to exist. The first is based on hired labour, the second on family labour, and third on tenancy. But each category has many variants. For instance, the tenants and share-croppers are linked with the landowners by rights and obligations which create a wide range of variation.¹ As such, the different modes of productive organisation lead to stratification on the basis of the extent of hired labour and the 'material wealth' employed in cultivation.² The first category makes an extensive use of hired labour and has better agricultural implements. The second category uses mainly family labour but occasionally makes use of the hired labour, especially at the time of sowing and harvesting seasons. Outside help may also be used on the basis of exchange of mutual labour.³ The marginal peasants have not enough land even to absorb the whole of their family labour, and are, therefore, economically dependent on the sale of their labour to others to supplement their income from land.⁴ But they are not

1. *Ibid.*, p. 31.

2. Irfan Habib, 'The Peasant in Indian History', *Proc.IHC.*, 1982, p. 4.

3. André Bételle, *Studies in Agrarian Social Structure*, p. 31.

4. Harbans Mukhia, 'Was there Feudalism in Indian History', Presidential Address, MHS, *Proc.IHC.*, Waltair, 1979, p. 232.

wholly dependent peasants.¹ The last category is that of tenant cultivators who can further be differentiated into permanent and temporary tenants depending upon the nature of land tenure. Permanent tenants have more or less secure rights of occupancy whereas the temporary tenants do not possess such rights.²

In India, the cleavage within the peasantry had developed at an early stage in the growth of agrarian economy. The 'Indus Culture' not only gave India its first cities in Harappa and Mohanjodaro, but also its first peasantry.³ The Indus civilisation marks a distinct shift towards the development of agriculture as a major provider of food in contrast to the early stage of food gathering.⁴

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1. Sometimes, under conditions of impoverishment, the peasants mortgage their small holdings for temporary usage and unable to reimburse the necessary sum on the expiration of the time agreed, lose it permanently. Deprived of land and occasionally of even implements of production, they are forced to seek employment on royal or private estates, and are reduced to mere tenants and hired labourers. See C.V. Vaidya, *Epic India*, Bombay, 1907, p. 219. Bongard Levin calls them 'the reserve force of the exploited groups'. See *Mauryan India*, New Delhi, 1985 p. 162.
 2. André Bételle, *Studies in Agrarian Social Structure*, p. 120.
 3. Irfan Habib, 'The Peasant in Indian History', *Proc.IHC.*, 1982, p. 6.
 4. The stage at which peasants originate within the society must naturally arrive only after agriculture is established as a major provider of food.

The urban civilisation was based on the appropriation of the surplus produced by the peasants.¹ This appropriation of the surplus production created conditions for the emergence of a differentiated society, but later developments in agriculture differentiated the peasantry itself.²

The use of iron in the upper Ganga plain, around 1000 B.C., caused rapid spread of the forest clearings. But in the freshly cleared ground, full of roots and hard soil, a very heavy plough was needed.³ The use of heavy ploughs implied masters working with the servile cultivators. The peasants were supplanted by men possessing wealth, particularly in the form of cattle or slaves, who came to control large stretches of land.⁴ A.B.Keith states that the peasants working in their own fields were being substituted by the big landlords cultivating their estates by means of

1. See A.L. Basham, *The Wonder That Was India*, London, 1954, pp. 18-19.
2. Romila Thapar, on the basis of the absence of the taxation system and the voluntary transferring of the surplus, refuses to admit the existence of a peasant formation during the Vedic period ; to her, the collection of taxes seems crucial to any peasant formation. See Presidential Address, AHS, *Proc.IHC*, Varanasi, 1969, p. 5.
3. This makes intelligible the reference in the later-Vedic period and *Brāhmaṇa* literature to ploughs drawn by six, eight or even twelve oxen. See *Atharvaveda*, VI, 91. 1 ; *Śat.Brah.*, VII, 2.2.6.
4. E.J. Rapson (ed.), *The Cambridge History of India*, Vol. I, Delhi, 1955, p. 176.

slaves.¹ The impression is corroborated by the testimony of the *Jātakas* where we frequently meet big brāhmaṇa landowners who had their fields cultivated by the slaves and day labourers.² We also come across the *gahapatis* in the early Pali texts-- the wealthy landowners who cultivated their farms with the help of slaves and hired labourers.³ The big landowners also carried on a money-lending business which must have helped in the perpetuation of their control over other segments of the peasantry, i.e., the *kassakas*.⁴ Thus, the common peasants increasingly came to be subjected to the authority of the local superior class itself, a situation which indicates the exploitation of the peasants from 'within'. Those who possessed 'material wealth' and slave power came to constitute the upper strata of the peasantry.

 1. *Ibid.*, pp. 114-115.

2. See Richard Fick, *The Social Organisation in North-East India* (tr.), S.K. Maitra, Calcutta, 1920, pp. 241 ff. ; *Jāt.*, III, 293 ; IV, 276.

3. Romila Thapar, Presidential Address, AHS, *Proc.IHC*, Varanasi, 1969, p. 6 ; R. Fick, *The Social Organisation in North-East India*, pp. 253, 305. During the time of Buddha, a major change in the agrarian structure was the emergence of large estates owned by individual kshatriya families. See Romila Thapar, *Ancient Indian Social History : Some Interpretations*, Hyderabad, 1984, p. 43. *Gahapatis* are often mentioned in the inscriptions. See LL Nos. 193, 201, 202, 449, 450, 725, 1127, 1206, 1209, 1211, 1216, 1221, 1222, 1244, 1247-48, 1252, 1254-55, 1260, 1277, 1281, 1302.

4. *Digh.Nik.*, I, 61 ; *Sam.Nik.*, I, 172 ; III, 155 ; IV, 314 ; *Angu.Nik.*, I, 229, 239, 241. Also see Romila Thapar, *Asoka and the Decline of the Mauryas*, Delhi, 1973, pp. 63-64 ; B. Chattopadhyaya, *Kushan State and Indian Society*, Calcutta, 1975, p. 206.

During the Maurya period, waste lands were brought under cultivation through the State's initiative by colonising new areas and settling it with śūdra cultivators.¹ It led to the creation of a new group of peasants. The Arthaśāstra refers to some independent śūdra peasants owning land, but they held it on a tenure which was not secure.² In these newly colonized areas, the State had its farms (sītā) which were cultivated either directly by the State under the supervision of the sītādhyaksha or leased to the tenant-cultivators. They were, again, of two categories, i.e., the share-croppers (ardhasītikas) who employed their own capital and shared half of the produce; and the land labourers who were provided with all facilities by the State and received one-fourth or one-fifth share of the produce.³ Kauṭilya enjoins the king to grant revenue free land to certain brāhmaṇas.⁴ They did not cultivate it with their own physical labour. This admittedly created another category of landholders having superior rights over land.

Yājñavalkya refers to four hierarchical stages in agrarian economy, i.e., mahīpati, kṣetrasvāmi, karṣaka, and the

1. AS., II, 1.

2. Ibid.

3. Ibid., II, 24.

4. Ibid., II, 2.

sub-tenant.¹ Bṛihaspati, however, introduced the term *svāmi* in place of the term *kṣetrasvāmi*, but makes it clear that the *svāmi* formed an intermediate stage between the *rājā* and the actual tiller of the soil.² It may be suggested that the *svāmi* owed his position to the practice of leasing out land to temporary cultivators. He lived on the rent collected from the peasants who were even liable to penalties if they neglected cultivation.³ Thus, there existed different layers of peasantry.⁴ In the Ganga plains, the bulk of the population comprised peasant proprietors who owned agricultural implements and cultivated their fields mostly with the help of family labour.⁵

 1. Yāj., II, 158.

2. Bṛih., XIX, 54-55.

3. Yāj., II, 157-58 ; Bṛih. XIX, 53, 55.

4. Danial Thorner has suggested a threefold division of Indian peasantry, i.e., *malik* (proprietor), *kisan* (working peasant) and *mazdur* (labourer). See *The Agrarian Prospects in India*, Delhi, 1956, pp. 4-6. Also D. Thorner, 'Peasantry', *International Encyclopaedia of Social Sciences* (ed.), D.L. Sils, Vol. II, London, 1968, pp. 503-511. See also André Bêteille, 'The Indian Village : Past and Present', *Peasants in History*, (ed.), E.J. Hobsbawn et al., Bombay, 1983, pp. 112-13 ; R.E. Frykenberg, *Land Control and Social Structure in Indian History*, New Delhi, 1979, Introduction XIV.

5. E.J. Rapson (ed.), *The Cambridge History of India*, Vol. I, p. 428. Also see Burton Stein, *Peasant State and Society in Medieval South India*, p. 12.

II

Ashoka was, probably, the first Indian ruler to appreciate the importance of rural population. The significance of the peasantry was realised by him owing to the fact that the economy had changed from a pastoral to a predominantly agrarian one.¹ Increasing dependence on land, as the largest single source of income to the State in the form of land revenue, placed the peasant in a new and important economic role. The reigning sovereigns began to show their concern for the security of the peasants. Baden Powell states that 'all the settled rulers had recognised that security to the cultivators means in the long run the best revenue.'² There are many instances where the rulers are advised to levy just taxes on the peasants.³ Kautilya lays down that the State should protect the peasants from the molestation of oppressive fines, free labour and taxes.⁴ Again, we find that the *Arthaśāstra* also

1. Romila Thapar, *Asoka and the Decline of the Mauryas*, p. 162.
2. Baden Powell, *The Indian Village Community*, London, 1896, p. 209 fn. "The peasant is the backbone of the state", Balban used to say, "while he should not be allowed to develop into a rich potential rebel, ruinous exaction on him would cause a falling off in agriculture and the consequent impoverishment of the state". See A. Rashid, 'Agricultural Tracts, Pastures and Woodlands in Medieval India', *JBRs*, vol. LIII, Patna, 1967, p. 161.
3. For details, see Chapter on Land Revenue.
4. *AS.*, II, 1.

enjoins remissions when the land is invaded by hostile force or by forest marauders or is afflicted with disease and famine.¹ The king is also advised to advance seeds and other provisions during the times of natural calamity.² In the *Mahābhārata*, there is a warning to the king to see that the peasants of the kingdom do not leave it because of oppressive taxation.³ Manu says that the king who oppresses his subjects is soon deprived of his kingdom.⁴ These statements of the law-givers seem to have been theoretical injunctions for the protection of the peasants from financial oppression. Such principles of taxation and advice to the rulers were not always faithfully followed by them and peasants were subjected to numerous taxes that severely undermined their condition. In the *Rājataranṅiṇi*, we find king Lalitāditya warning his successors not to leave with the cultivators of land more than what is necessary for their bare subsistence and the tillage of their fields. If they are allowed to keep more wealth, they would become strong enough to neglect the commands of the king.⁵

 1. *Ibid.*

2. *Ibid.*, IV, 3.

3. *Mbh.*, Śānti Parva, 126.9 ; 137.

4. Manu, VII, 111-12.

5. M.A. Stein (tr.), *Kalhaṇa's Rājataranṅiṇi*, Vol. II, Delhi, 1961, p. 304.

There is a passage in the *Aitareya Brāhmaṇa* which says that the vaishya is to be oppressed at will by the kshatriya.¹ The view expressed in the legal texts that the burden of taxation on the peasantry amounted normally to one-sixth of the produce had little reality behind it. In fact, the peasants were subjected to numerous taxes and obligations. The inscriptions clearly indicate that the fiscal burden on the peasants went on increasing from the Gupta period onwards.² It seems that in order to compensate the loss of revenue as a result of land grants, the State imposed new cesses on the peasants. The numerous privileges granted to the donees mentioned in the land charters reflect the burden of taxes and other obligations to which the peasants were subjected.

An important source of oppression seems to have been the billeting of royal officers and soldiers in the villages. In the *Jātakas*, we have instances of unjust and tyrannical exactions on the part of the king's officers.³ Some Sātavāhana land grants record donations of land, which were exempted from the entrance of royal officers.⁴

1. *Ait.Brāh.*, VI, 29.

2. For details, see Chapter on Land Revenue.

3. *Jāt.*, V. 98. "Oppressed with taxes, the inhabitants lived in the forest like beasts with their wives and children. In the day the king's people plundered, at night the thieves".

4. *Sel.Inscr.*, p. 192.

Similarly, several Vākāṭaka land grants mention the term *abhaṭachhatra-prāveśya*¹, which has been explained as 'not to be entered by regular soldiers and umbrella-bearers'.² The restrictions imposed on the *chāṭas* and *bhāṭas* in the land grants show that they were probably in the habit of realising illegal taxes from the peasants for their own benefit.³ Yājñavalkya mentions them together with thieves and record-keepers (*kāyasthas*).⁴ The cruelty and avarice of the *chāṭas* and *bhāṭas* perhaps account for the popular dislike for them.⁵ At one place, Bāṇa describes them as talking and laughing with the slaves and servants of the nobles after taking plenty of grain from the fields.⁶ At another place, he says that the poor grumbled at the cruelty and ill-treatment received at their hands.⁷ Similarly, in the play *Mricchakaṭika*, a friend of the hero remarks in Prākṛit that 'even the most daring and wicked, will not dare to go to a place where the *chāṭas*, courtiers, etc., reside.'⁸

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1. *Ep. Ind.*, XXII, No. 27, 1, 20; XXIII, No. 14, 11. 30-31; XXIV, No. 10, 1. 21; XXVI, No. 21, 1. 25; CII., III, No. 55, p. 238.
 2. *Ibid.*, XXII, p. 175.
 3. *Ibid.*, IX, No.45, p.296.
 4. *Yāj.*, I, 335.
 5. Pran Nath, *A Study in Economic Conditions in Ancient India*, London, 1929, p. 62.
 6. Bāṇa, *Harshacharita*, (tr.), E.B. Cowell and F.W. Thomas, London, 1929, p. 205.
 7. *Ibid.*, p. 211.
 8. Sūdraka, *Mricchakaṭika*, Vol. I, Act 5, p. 223.

It is, therefore, no wonder that the donees were protected from these people by a special clause of the land charters which sought to prohibit their entrance into the donated area.¹

The villagers had to pay forced contributions to the royal troops when they halted at or passed through the village.² The practice may be compared to the tax called *senābhakta* in the *Arthaśāstra*.³ The villagers also had to furnish cattle in relays for transport.⁴ Moreover, they were under obligation to supply boiled rice, curd, vegetables, milk, fruits, etc., to the royal officers on tour.⁵ The practice of realising contributions, which were consumed locally by royal troops and officers, tended to set them up as another class of intermediaries, which further reduced the peasantry to a servile position.

There were several other obligations which the peasants had to fulfil. The term *utsaṅga*, according to Bhattasvāmin, referred to the offerings which were given by the

1. It was a popular feeling among the Romans in the first century B.C. that the *publicans*, who were associated with tax-collection, were a nuisance and that it was the duty of every honest administrator to combat them. See Rostovtzeoff, *The Social and Economic History of the Hellenistic World*, Vol. II, Oxford, 1941, p. 965.

2. *CII.*, III, No. 21, p. 98 fn.2.

3. *AS.*, II, 15.

4. *Ep.Ind.*, XXVII, 16. 1. 29.

5. *Ibid.*

inhabitants of the city and countryside on the occasion of some festive event such as the birth of a prince.¹ Presents called *paññākara* were given to the king on the occasion of his coronation.² Strabo writes that during the hair washing ceremony of the king, people vied with one another in making him rich presents.³ The *Mahābhārata* speaks of voluntary contributions (*dakṣina*) made by the people to the king for performing sacrifices for public welfare.⁴ All these offerings, literally voluntary, were really the tribute paid out of fear or tips for the acquirement of specific favours and could hardly differ from the *bheṭ* or *nazrānā* exacted from poor peasants in later times.⁵ In a rock inscription⁶ belonging to modern Hazaribagh district in Bihar, we find how the inhabitants of a village, unable to furnish the king of Magadha with *avalagaka*, approached a merchant who supplied the king's requirements on their behalf.⁷

1. See U.N.Ghoshal, *Hindu Revenue System*, Calcutta, 1972, p. 48.
2. Richard Fick, *The Social Organisation in North-East India*, p. 115.
3. Strabo, XV, 1. 69.
4. *Mbh.*, XIII, 61. 24.
5. A. Bose, *Social and Rural Economy*, Vol. I, Calcutta, 1942, p. 132.
6. *Ep.Ind.*, II, No. 27; VII, No. 6.
7. The term *avalagaka* has been taken by Kielhorn to mean 'presents' or 'supplies'. See U.N. Ghoshal, *Hindu Revenue System*, p. 308.

The *Mahābhārata* authorises the needy and the distressed king to seize the wealth of persons other than ascetics and brāhmaṇas.¹ It is easy to imagine the serious consequences which would follow from a strict enforcement of this privilege. *Praṇaya* or benevolence, referred to in the Vākāṭaka records², is used in the Junagarh Rock Inscription as an emergency levy.³ Kielhorn explains it as a contribution mainly voluntary but which people felt constrained to make.⁴ Kauṭilya advises the king to beg benevolences when he finds himself in great financial trouble, and devotes a whole chapter to the manner in which emergency levy should be collected.⁵ Benevolence, he suggests, should be extracted from *karshakas* (cultivators) at the rate of one-third or one-fourth of the grain⁶, one-sixth of *vañya*⁷, cotton, wax, fabrics, barks of trees, hemp, wood, silk, medicinal herbs, sandalwood, flowers, fruits, vegetables, firewood, bamboos, fresh and dry

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1. See U.N. Ghoshal, *Agrarian System in Ancient India*, Calcutta, 1930, p.11.
 2. *Ep.Ind.*, XXVI, pp. 137 ff; *IHQ*, vol. XVII, pp. 110 ff.
 3. *CIL*, III, No. 14, pp. 58 ff.
 4. *Ep.Ind.*, VIII, p. 6; *Sel.Inscr.*, p. 308 ff.
 5. *AS'*, V, 2.
 6. Manu does not allow a king, even in distress, to exact more than one-fourth of the crop. - X, 118.
 7. According to Shāmaśāstry, *vañya* means 'forest produce' and according to Ganapati Sāstry, it means 'wild rice'.

flesh, and one half of ivory and skins. The 'praṇaya' was, beyond doubt, another handle given to oppression and avidity.¹

Another factor that undermined the position of the peasantry was the imposition of *visṭi*.² It was a potential source of oppression.³ The Junagarh Rock Inscription of Rudradaman mentions that the Sudarsana lake was repaired with resources from the king's own treasury without burdening the people, among other taxes, with *visṭi*.⁴ Similarly, in the *Mahāvamsa*, which is assigned to about the fifth century A.D., a king is stated to have declined to make use of unpaid labour. It clearly indicates that *visṭi* was considered a burden on the people. But such examples were not widely emulated by the rulers. What this objectionable form of exaction could have been in the hands of unscrupulous rulers may be easily understood by comparing it with the working of its later counterpart 'begar'. Kauṭilya, therefore, enjoins the king to protect agriculture from the molestation of oppressive *visṭi*.⁵ In the Epic period, no *varṇa* was exempted from the compulsory labour. Even the brāhmaṇas were made to work if they did not follow

1. A. Bose, *Social and Rural Economy*, Vol. I, p. 129.

2. *Visṭi* is all work or services which are exacted from any person who has not offered himself voluntarily.

3. A. Bose, *Social and Rural Economy*, Vol. I, p. 129.

4. *Ep. Ind.*, VIII, No. 6, 11, 15-16 ; *Sel. Inscr.* p. 180.

5. *AS.*, II, 1.

their own sacred profession.¹ In the Maurya period, it covered *dāśas* and *karmakaras* (hired labourers).² This labour was recruited by the supervisor (*vishtibandhaka*) and was paid.³ It is doubtful whether it was imposed on the free peasantry living in villages or not.⁴ But from the second century A.D., the practice seems to have been extended to all classes of subjects.⁵ Most of the law-givers of the period refer to forced labour imposed on the peasants.⁶

By the time of the Guptas, the practice of *vishti* had come to be firmly established.⁷ The land grants of the period show that the peasants had to render forced labour to the king.⁸ Forced labour assumed a wide magnitude in central India where it came to be known by the term *sarva-vishti*.⁹ The element of coercion and oppression must have

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1. C.V.Vaidya, *Epic India*, p. 215. Also see S.K.Maity, 'Forced Labour in Ancient India', *Proc. IHC*, Hyderabad, 1978, p. 148.
 2. *AS.*, II, 15.
 3. *Ibid.*, V, 3.
 4. D.N. Jha, 'Forced Labour in Post-Maurya and Gupta Times', *Proc. IHC.*, Mysore, 1966, p. 94.
 5. R.S.Sharma, *Indian Feudalism*, p. 218.
 6. *Manu*, VIII, 1, 415; *Vishnu*, XVIII, I, 44, 74; *Nārada*, V, II, 25-43, pp. 135-39.
 7. V.K. Thakur, 'Forced Labour in the Gupta Period', *Proc.IHC*, Bhubaneswar, 1977, p. 145.
 8. *CII.*, III, No. 26 ; *Ep.Ind.*, VIII, 45 ff.
 9. *Ep.Ind.*, XXIV, 10. 1. 23.

become stronger when the king's right to demand forced labour was transferred to the beneficiaries with almost undefined scope.¹ The recipients of these grants could claim only customary taxes (*samuchita*), but there was no such limitation on the levy of forced labour.² The beneficiaries would not fail to make wide and effective use of it, especially, in bringing barren land under cultivation.³

The Vedic period witnessed the appearance of an embryonic village overlord, who had 'creatures led by noses' and kept the folk dependent upon him.⁴ In the *Rigveda*, he is referred to as *grāmaṇi*⁵. In the later sources, he is known by a variety of terms, such as *grāmabhojaka*, *grāmika*, *grāmadhipa*,⁶. He has been referred to as *grāmadhipati* by Manu.⁷ Originally, perhaps, the *grāmaṇi* derived his right to the office through his descent from the founder of the

1. *Ibid.*, XI, pp.80, 85, 174.

2. V.K.Thakur, 'Forced Labour in the Gupta Period', *Proc. IHC.*, p. 149.

3. Lallanji Gopal, *Economic Life of Northern India*, Delhi, 1989, p.28.

4. *Taittirīya Saṃhita*, II, 1.1.2, 1. 2.3. .

5. See MacDonell and Keith, *Vedic Index*, s.v. 'grāmaṇi'.

6. A.N. Bose, *Social and Rural Economy*, Vol. I, p. 38.

7. Manu, VII, 115.

village.¹ But from the time of the later law-books, i.e., from the end of the first millennium B.C., his appointment is documented as the king's representative in the village.² He may have performed some sort of military function at a very early stage, but from the Maurya period onwards, his function was basically to help the State machinery in the collection of revenue from the village³. Considering the strong tendency in all offices to become hereditary, the office of headman had probably acquired the hereditary element at a very early stage, and he began to personify one of the lower units of State administration.⁴

We have clear evidence of the subjection of peasantry by the village headman in the Vedic period. With the increase in his powers, he began to assert his authority over the peasants more vigorously. In the *Arthasāstra*, he is

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1. Radharoman Mookerjee, *History and Incidents of Occupancy Rights*, Delhi, 1984, p. 30. Rhys Davids, however, is of the view that he was elected by the village council. See *Buddhist India*, pp. 25, 48. Also see *AS*, III, 10 ; K.P. Jayaswal, *Hindu Polity*, Bangalore, 1955, pp. 195, 197.
 2. *Manu*, VII, 115, *Vishṇu*, III, 7-11 ; John Matthai, *Village Government in British India*, London, 1915, p. 10.
 3. *Milinda Pañho*, p. 147.
 4. Richard Fick, *The Social Organisation in North-East India*, p. 161 ; Charles Drekmier, *Kingship and Community*, Bombay, 1967, p. 273 ; R. Mookerjee, *History and Incidents of Occupancy Rights*, p. 30. Also See Baskar Chattopadhyay, *Kushan State and Indian Society*, p. 120.

referred to as 'the master of the village'.¹ Manu says that 'what must be given to the king by the village residents every day--food, clothes, fuel, etc., -- let it be collected by the village headman.'² During the Gupta period, village headmen (*grām-ādhipati-ayuktakas*), while assuming semi-feudal character, were primarily concerned with their own gains by filling their own granaries.³ This must have increased the burden of taxation on the peasants. What is remarkable is that they could impose forced labour on peasant women to serve their own needs and comforts. Vātsyāyana says that the peasant women were compelled to do unpaid work of various kinds, such as filling up the granaries of the village headman, taking things in and out of his house, cleaning and decorating his residence, working in his fields, and spinning yarn of cotton, wool, flex, or hemp for his clothes.⁴ All this suggests that the peasants were being exploited by the village headman in every possible way.

The grants of villages to the donees affected the landed rights of the peasantry and increased the burden of taxation. The practice of land grants created a class of landed intermediaries between the king and the peasants.

1. *AS.*, IV, 13 ; III. 10.

2. Manu, VIII, 115-19.

3. Vātsyāyana, *Kāma.*, V. 5.5.

4. *Ibid.*

Being men on the spot, the donees could exploit the peasants more effectively.¹ Initially, the donees were granted the right to land revenue and allied taxes only. But later on, when administrative and judicial rights were also transferred to them, they started asserting their superior rights in land. The peasants, in some cases, were reduced to the position of tenants-at-will.² The artisans, who resided in these villages, held their plots of land and house-sites from the villagers in lieu of their services to them. But under the changed circumstances, they held their lands from the donees and rendered their services to them alone.³

The rights in communal lands were also transferred to the donees. As the boundaries of most of the donated villages were left undefined, donees could take advantage of it to increase the land under their personal possession. Similarly, the right to pastures, water -reservoirs, etc., enabled them to tax the peasants further. The increase in the volume of taxes without corresponding rise in productivity and the ever growing rights of the donees in land not only subjected the peasantry to utmost economic

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1. The donees benefitted most from a wide range of taxes which they levied on the peasants at will. See Romila Thapar, *The Past and Prejudice*, New Delhi, 1975, p. 27.
 2. Baden Powell, *Land Systems of British India*, Vol. I, Oxford, 1892, pp. 133-134.
 3. R. Mookerjee, *History and Incidents of Ouccupancy Rights*, p. 36.

misery, but also sharpened the antagonism between the peasants and their exploiters.

How did the peasants react to their forced impoverishment? Our sources, both literary and epigraphic, provide no answer to it. There could be two possible forms of reaction. One was to leave the country which could be possible only in small kingdoms or near the territorial borders where it was feasible to migrate rapidly into another area under a different political control.¹ We are told that, on one occasion, the people of south Pañchāla fled to north Pañchāla because of oppressive taxation.² They could move to virgin areas and multiply production by founding new villages. But as the economic conditions and political organisation were basically the same everywhere, migration to new places did not help them in escaping the oppression of the rulers and beneficiaries. Moreover, they could not leave villages which were granted along with the inhabitants, for the beneficiaries had the legal authority to restrain them.³ Another possible reaction to oppressive

1. Burton Stein, *Peasant State and Society in Medieval South India*, p. 19.
2. *Divyāvandāna*, pp. 435-37 ; *Mbh.*, *Vana Parva*, I, 92.
3. The two spurious Copper-plates of Samudragupta indicate the possibility of the villagers oppressed with taxes migrating into tax-free villages. See *CII.*, III, No. 60, pp. 256 ff. ; *Ep.Ind.*, XXV, No. 9.

conditions was to assert their land rights. The peasants were in actual possession of land, oxen and other agricultural implements. They could resist the increasing demands made by the beneficiaries. But we have no reference to such outbursts of peasant resistance during the period under review. The peasants in the donated areas were repeatedly asked to carry out the orders of the beneficiaries.¹ The fact, that they were not permitted to arm themselves even in an emergency, must have acted as a serious check on peasant revolts.² Probably, peasant discontent was contained by religious and ideological propaganda as well. Another significant factor which Eric Wolf points out is that the peasants did not possess the necessary base of material security to take the initiative to rebel.³ It seems that the peasants, pre-occupied with their struggle for existence, had become accustomed to accept uncomplainingly a subordinate position in society.⁴

In Vincent. A. Smith's view, the land revenue and other cesses imposed by the ancient as well as medieval rulers were in practice so heavy that they left the peasant

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1. R.S. Sharma, *Urban Decay*, New Delhi, 1987, p. 176.
 2. Manu, VIII, 348.
 3. Eric Wolf, *Peasant Wars of the Twentieth Century*, London, 1971, pp. 290-92.
 4. Thomas. R. Metcalf, 'Social Effects of British Land Policy in Oudh', *Land Control and Social Structure in Indian History* (ed.), R.E. Frykenberg, p. 146.

with a bare margin of his produce for his subsistence. "The government's share, it is true, was always limited theoretically, but, in practice, the State usually took all it could extort".¹ While refuting Smith's impression, U.N. Ghoshal says that in so far as the ancient period is concerned, there is little, if any, positive evidence in favour of this statement.² To substantiate his argument, he states that "the glimpses, which the observations of the foreign travellers furnished into the actual conditions of the people, generally indicate a happy and contented peasantry".³ But S.K. Maity has observed that as regards the material life of the common people, the Gupta period was not a golden age.⁴ D.N. Jha has also expressed the same view when he says that the taxes tended to increase in the Gupta period.⁵ Even during the subsequent periods, the peasants were far from happy and economically well-off.⁶

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1. Vincent.A.Smith, *Oxford History of India*, Oxford, 1958, pp. 90-91.
 2. U.N. Ghoshal, *Hindu Revenue System*, p. 368.
 3. U.N. Ghoshal, *The Agrarian System in Ancient India*, pp. 80, 101.
 4. S.K. Maity, *Economic Life of Northern India*, p. 69.
 5. D.N. Jha, *Revenue System in Post-Maurya and Gupta Times*, pp. 30-32 ; Presidential Address, AHS, Proc.IHC, Waltair, 1979, p. 27.
 6. See L. Gopal, *Economic Life of Northern India*, Delhi, 1965 ; Pushpa Niyogi, *Contributions to the Economic History of Northern India*, Calcutta, 1962.

III

In the villages, there lived various craftsmen who catered to the agricultural needs of the peasants. Pāṇini calls them *grāmatakṣa*.¹ They are also called by him as *grāmaśilpin*.² Patañjali has mentioned five categories of these craftsmen, namely, the potter, the blacksmith, the carpenter, the barber, and the weaver.³ The most important among them, from the point of village economy, was the blacksmith variously called as *kammāra*, *lohākāra* and *lohavaniya*.⁴ These 'professional individuals' were dependent on the free peasants, though they helped in maintaining the self - sufficient character of the villages.⁵ In a non-monetary rural set - up, they appear to have been bound to the peasants by *jajmāni* ties.⁶ It required them to attend to the requirements of the cultivators and they were paid in kind, generally around the harvest season.⁷ The peasants had also a lot of societal

1. Pāṇini, V, 4.95.

2. *Ibid.*, VI, 2.62.

3. B.N. Puri, *India in the Time of Patañjali*, pp. 108-09.

4. LL. Nos. 1032, 1055 ; *Ep.Ind.*, XXIV. p. 298.

5. P.V. Kane, *History of Dharmasastra*, Vol. III, p. 154.

6. Jaimal Rai, *Rural Urban Economy, Varanasi, 1974, pp. 346, 373*.

7. P.V. Kane, *History of Dharmasastra*, Vol. III, p. 154. The carpenter, for example, received two percent of each peasant's yield plus one to eight pounds of grain 'for seed', the blacksmith's share was about 1.75 percent plus one to three pounds of 'seed', and so on. See D.D. Kosambi, *An Introduction to the Study of History*, Bombay, 1990, pp. 337-338.

obligations towards the temples, priests, beggars, etc. They were required to contribute for religious ceremonies and festivities at the village level.¹ The payments to village craftsmen in grain and other social obligations, which the peasants had to fulfil, further diluted their already meagre income. Moreover, the peasants had to face natural calamities like inadequate rain or excessive rainfall causing famine conditions in the country.² Apart from famine, some other factors also occasionally aggravated scarcity and destroyed crops. Depredation of crops by pests called for serious attention.³ Rodents, moles, birds, and wild animals also damaged crops at the harvesting season.⁴ Fowlers and hunters rendered services to the peasants by the killing of birds and wild animals and, if the evidence

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1. K.G. Gurumurthy, *Indian Peasantry*, Delhi, 1982, p. 6.
 2. Our sources do mention the occurrence of famines in the Ganga plains. Jaina tradition refers to the famine in the reign of Chandragupta Maurya. See Romila Thapar, *Asoka and the Decline of the Mauryas*, p. 68. Evidence of such conditions may also be gathered from the two Mauryan inscriptions found at Sohagaura and Mahasthan which specifically refer to the measures taken to ameliorate famine conditions in the Ganga plains. See *Sel.Inscr.*, pp. 82, 85.
 3. The *Atharvaveda* mentions various methods for the extermination of vermin and insects - IV, 50, 52. Locust also destroyed crops. See *Rām.*, VII, 7. 3 ; *Mbh.*, VIII, 24. 22 ; A.N. Bose, *Social and Rural Economy*, p. 107.
 4. In the *Rigveda*, reference is made to the peasants uttering loud cries to keep the birds away from destroying the growing corn. - X, 68. 1. To kill the wild animals that destroyed their crops, the peasants dug pitfalls, set stone-traps and planted snares. See M.A. Buch, *Economic Life in Ancient India*, Vol. I, p. 100.

of Megasthenes is to be believed, they received in the Mauryan times a subsidy of grain from the king for their beneficial work.¹ A shadow figure made of straw was placed in the fields to frighten the birds causing destruction to crops.² Then, there was a danger of fire when the reaped crops were stored on the threshing-floor.³ All these factors increased the hardships faced by the peasants.

IV

As for the social condition of the peasants, some significant changes were taking place in the traditional social hierarchy. In the later half of the first millennium B.C., village communities constituted a considerable proportion of population, primarily of free peasants.⁴ In the Ganga plains, the village communities were the most

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1. J.W. McCrindle, *Ancient India as Described in Classical Literature*, p. 84.
 2. B.N. Puri, *India in the Time of Patanjali*, p. 123.
 3. We learn from the *Milinda Pañho* that the peasants kept pots of water with the object of putting out at once any spark of fire that might be kindled. See *SBE*, vol. XXXV, p. 67.
 4. The term 'free peasant' denotes the cultivator who earns his or his family's subsistence by his own labour (including his family's labour and material sources). Though it does not exempt him from the obligation to part with his surplus produce in the form of taxes to the State, yet he retains complete control over the process of production on his land through his and his family's labour. See Karl Marx, *Das Capital*, Vol. III, Moscow, 1971, pp. 804, 807.

widespread.¹ The free members of the village community belonged mainly to vaishya varṇa.² In the Maurya period, however, the śūdras, who were the common helots of the upper three varṇas, began to draw closer to the vaishyas. The residents of the grāmas, set-up by the Mauryan rulers in newly-populated areas, were for the most part śūdra agriculturists (śūdrakarṣaka), as the free peasants would not prefer to shift from the settled villages.³ These new settlers had the status of temporary peasants.⁴ They were engaged by the State for a fixed period to till uncultivated land. As a rule, the śūdras possessed no cultivable plots of their own and worked as hired labourers in the fields.⁵

 1. Bongard Levin, *Mauryan India*, p. 155.

2. *Mbh.*, Śānti Parva, 60, 24-26, 92.2 ; *Amarakosha*, Vaisya-Varga, II, 9.6 ;

3. *AS.*, II, 1. Kārshaka means 'one who ploughs'. See Monier Williams, *Sanskrit-English Dictionary*, p. 276.

4. R.S. Sharma, *Shudras in Ancient India*, Delhi, 1958, p. 147.

5. In the *Rigveda*, the cultivator is referred to as *kinasa*. See IV, 57.8. In the *Apastamba Dharmasutra*, *kīnāśa* is mentioned as a farm-worker who cultivated land plots. - II, 11. 28. 2. Asahāya, Nārada's commentator, interprets the term *kīnāśa* as śūdra. - On Nārada, I, 181. That his labour was used in agriculture is borne out by the fact that the sudra is referred to in the *Majjhima Nikāya* as he who 'works with the sickle and carries grain'. - II, 180. Romila Thapar has observed that śūdra was an all-embracing term which included the cultivator and the artisan and also the slave and hired labourer. See *The Past and Prejudice*, p. 56. But as cultivator, he may not own the land he cultivates and is, therefore, better

In the early centuries of the Christian era, the impact of Buddhism and Jainism and uncertain political conditions affected the established social order and led to the loosening of the strict subjection of the śūdras and to their transfer into share-croppers and dependent peasants.¹ Several law-books show that land was rented out to the śūdra cultivators for half of the crop.² This would suggest that the practice to lease land to the śūdras was becoming more common. In due course, they turned primary producers.³ B.N.S. Yadava presumes that the number of share-croppers must have exceeded that of free peasants in later period.⁴ In the absence of any statistical data, it is difficult to form an exact idea about the particular form of landholding predominating other forms at a given time and in a particular region due to uneven growth of land rights. But with the passage of time, the śūdra cultivators had certainly consolidated their social position by establishing

described as ploughman working for a wage and dependent on the owner. See B.N.S. Yadava, 'The Account of the Kali Age and Social Transition', *IHR*, vol. V, Nos. 1 & 2, New Delhi, 1978-79, pp. 37-38.

1. B.N.S. Yadava, 'Some Aspects of the Changing Order in India During the Śaka-Kuśāna Age', *Kuśāna Studies* (ed.), G.R. Sharma, Allahabad, 1968, pp. 75-97.
2. Manu, IV, 253 ; Vishṇu, LVII, 16, Yāj., 1. 166.
3. Romila Thapar, *The Past and Prejudice*, p. 56.
4. B.N.S. Yadava, 'Problem of the Interaction between Socio-Economic Classes in the Early Medieval Complex', *IHR*, vol. III, No. 1, July 1976, p. 48.

permanent possession over land.¹

The right of the śūdras to property is recognised both in the *Manusmṛiti* and the *Mahābhārata*.² Manu says that the śūdra might bequeath his property in equal shares among his sons.³ Bṛihaspati prescribes severe corporal punishment for the śūdra who acts as a leader in boundary disputes relating to fields,⁴ which indirectly suggests that such śūdras had acquired some rights in land. Hiuen-Tsang describes the śūdra (*shu-ti-lo*) as agriculturist.⁵ A land charter from the middle Ganga plain, belonging to the 6th century A.D., lays down that the grant should be protected from the hands of the śūdras, as can be inferred from the phrase-*śūdrakare(a)d - rakṣuanaḥ*.⁶ As usual, the donor instructs his descendants as well as others not to interfere with or disturb the beneficiary, but what is significant is that he also points out the necessity of protecting the grant from the śūdras.

The rise of the śūdras from the servile position to that of the agriculturists is a matter of great consequence.

1. R.S. Sharma, *Indian Feudalism*, New Delhi, 1980, p. 217.

2. *Mbh.*, XIII, 47. 56.

3. Manu, IX, 157.

4. Bṛih., XIX, 6.

5. T.Watters, *On Yuan Chwang's Travels in India*, New Delhi, 1961, I, p. 168.

6. *JASB*, V, 1909, p. 164.

As the distinction between the vaishya agriculturists and the śūdra agriculturists began to grow hazy, the well-to-do peasants turned to trade. J.D.M. Derrett seems to be quite right in his assumption that the original varṇa duty of agriculture was no longer associated with the vaishya who were now looked upon chiefly as traders.¹ It may be one of the reasons for the popularity of Jainism among the vaishyas.² On the other hand, it is equally important to note that general contempt for manual labour and the negative influence of Buddhism and Jainism, where the idea of non-violence had entered into all kinds of activities, sometimes to an absurd degree, must have had some effect in making the social position of the peasants very low.³ The communities that continued to depend upon agriculture were degraded from the vaishya to the śūdra status.⁴

The economy in the Ganga plains was primarily based on agriculture. But the peasants, who sustained that economy through direct labour, were not economically well-off. The

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1. J.D.M. Derrett, *Religion, Law and State in India*, London, 1968, p. 172.
 2. Suvira Jaiswal, 'Studies in Early Indian Social History', *Survey of Research in Economic and Social History of India* (ed.), R.S. Sharma, Delhi, 1986, p.70.
 3. G.L. Adhya, *Early Indian Economics*, Delhi, 1966, pp. 44-45.
 4. B.N.S. Yadava, 'Problem of Interaction between Socio-Economic Classes in Early Medieval Complex'. *IHR*, vol. III, No. 1, p. 47.

increasing burden of taxation, forced labour, extra demands of the state functionaries as well as the donees, various societal obligations, etc.,-- all these contributed to the affliction and impoverishment of the 'real producers of the material wealth'.

CHAPTER VIII

CONCLUSION

Land was a factor of vital importance in the predominantly agricultural economy of the Ganga plains. Ancient law-givers as well as the State attached due importance to the problems relating to land, such as the classification and measurement of land, assessment and collection of land revenue, artificial irrigation, land rights, etc. From time to time, the law-givers set forth ideals and elaborate rules for the exploitation of land for agricultural purposes. While the State and the society accepted those guidelines as sacrosanct, there was always the possibility of some discrepancy between the precept and the practice. The ideals had sometimes to be adjusted in the light of the circumstances prevailing at a particular time or under a given situation.

Land was broadly classified into five categories, i.e., habitable land, cultivable land, pasture land, waste land, and forest land. The Mauryan State undertook a fairly extensive cadastral survey of land. The work was entrusted to the state officials who prepared proper records of different categories of land. Boundaries separating different villages were defined, and individual landholdings were properly demarcated. The law-givers suggested suitable

boundary marks. In some inscriptions of the period, we find boundary marks mentioned in minute detail. Any violation of or tampering with the boundaries was considered a grave offence and the culprits were punished according to the gravity of such offences. Cases arising out of boundary disputes between individuals or villages were settled in the light of local evidence based on reliable facts.

The Mauryan State had adopted a standard land measure for the purpose of land measurement and revenue assessment. But various types of land measures were in vogue at different times and at different places. In all probability, while at a given time a standard land measure was used by the state officials for purpose of revenue assessment, different types of land measures seem to have been preferred by the peasants living in different parts of the Ganga plains for their local use. Thus, we can not entirely rule out the possibility that the State was either unable or unwilling to enforce the use of one standard land measure in all parts of its territory.

Land revenue formed a major source of income to the State. The rate of land revenue as laid down in the law-books varied from one-twelfth to one-sixth part of the produce. It was considered legitimate to increase the rate to one-fourth or even one-third of the produce in times of emergency. Normally, one-sixth part of the produce was

considered to be an ideal rate of land revenue. However, variations in the rate of land revenue were unavoidable due to the variations in the productivity of different kinds of land. Nothing can be said with certainty whether the land revenue was charged on the gross produce or some concession was made for the labour and capital expended on production. Land revenue was usually assessed on individual holdings, and the State was alive to the desirability of revenue remissions in case of natural calamities. While some of the taxes of the Maurya period were discontinued in later times, we come across new taxes on land in the Gupta and post-Gupta periods. With the shrinkage of revenue yielding lands due to the liberal practice of making land grants in the Gupta and post-Gupta times, and with a sharp decline in foreign trade consequent upon the downfall of the Roman Empire which had virtually dried up an important source of revenue to the State, increased burden of taxation on land had become almost unavoidable.

Importance of artificial irrigation in agriculture was duly recognised and available archeological evidence points to the existence of irrigation works in the Ganga plains. Wells, tanks, and reservoirs were the chief sources of artificial irrigation. While it is possible that canals might have served as waterways for the transportation of goods, it can not be entirely ruled out that they served the

irrigation purposes also. Irrigation works were the outcome of state initiative as well as the corporate effort of the people. The State ensured the safety of irrigation works and the supply of water to the peasants was supervised and controlled by its officials. Any damage done to the irrigation works was considered a criminal offence which entailed punishment according to the nature of the crime. In the post-Maurya period, we ~~do not come~~ across any direct reference to *udakabhaga* as a separate tax charged by the State. While the Mauryan State seems to have provided the lead in the construction of irrigation works, state undertaking was perhaps reduced to a bare minimum in subsequent times. Local enterprise and private ownership of small irrigation works was encouraged. The State provided requisite facilities and encouragement for such undertakings. People were also fairly conversant with a number of water-lifting devices.

It was a popular notion that land belonged to all alike, and that a particular piece of land became the property of one who first brought it under cultivation after clearing the forest. Since the clearing of forest land in order to make it fit for cultivation required the collective labour of an entire family, the first proprietary rights in land seem to have been claimed by the joint family. Patches of cultivated land belonging to different families were clearly demarcated. Recognition of the joint

family as the basic social unit, and the possibility of bringing more and more unclaimed forest land under cultivation discouraged the fragmentation of joint family land on the one hand and, on the other, it led to the reclamation of vast areas of land for purposes of cultivation. Early law-givers also discouraged fragmentation of land. However, the unmanageable size of the large joint and extended patriarchal families made it necessary to adopt the practice of the division of land among the individual families. Therefore, the law-givers of the Gupta period found it desirable to lay down rules for the partitioning of joint family land and also for the recognition of individual claims. The *Dharmaśāstras* refer to the individual rights in land in terms of possession and legal title. Normally, claim to land held in continuous possession by three successive generations was considered legitimate. Rules were also laid down for the recognition of legitimate claim to land acquired through inheritance, purchase, mortgage, gift, etc.

Theoretically, the State was recognised as owner of all land within its jurisdiction. In token of its sovereignty as also in lieu of protection provided to the subjects, the State was entitled to a share of the produce in the form of land revenue. However, the fact that the State levied a land tax did not necessarily mean that it deprived the

individual landholder of his proprietary rights in land. Confusion in this respect has been caused mostly by the Indologists. While royal absolutism was openly recognised, the king's proprietary rights in land were confined only to the crown lands. There can be no denying the fact that the position of the cultivators on the crown lands was no better than that of the tenants.

The origin of land grants can be traced to economic and political considerations as also to the desire to earn religious merit. The donors were usually the rulers, feudatory chiefs, and the high officials of the State. There are also instances of individuals making donations of land. Among the donees were included the brāhmaṇas, temples, the Buddhist *Samṅha*, members of the royal family and, sometimes, individuals with whom the king might be pleased on some personal grounds. Some state functionaries also received grants of land in lieu of their salaries. Economic considerations prompted the Mauryan State to make *brahmadeya* grants out of waste land to enterprising brāhmaṇas who were willing to bring such lands under cultivation. Sometimes, such grants were also made to ensure the loyalty of some turbulent and politically ambitious brāhmaṇas. The practice of making *brahmadeya* and *agrahāra* grants became quite common in the post-Maurya times.

To begin with, only the revenue rights of the State were transferred to the donees. The land assignments made to the state officials also involved only the revenues from those lands in lieu of their salaries. These land grants and land assignments were revocable if the donees were found guilty of treason. The practice of land assignments to the state officials, which began in the Maurya period on a limited scale, assumed vast proportions in the Gupta and post-Gupta times. Under Harsha, one-fourth of land revenue due to the State was assigned to the state officials in lieu of their salaries. It seems probable that continued possession, due either to official indifference or disturbed political conditions, tended to make the grants hereditary. Moreover, in the post-Maurya period, particularly during the Gupta and post-Gupta times, there was a discernible trend towards making land grants in perpetuity. The privileges of the donees were usually written on a piece of cloth or inscribed on copper-plates. Lands thus received could not be alienated except to those who themselves were the recipients of similar land grants. In case of an individual making a donation of land, formal consent of the near relatives and neighbours, and permission from the State were necessary. Land grants helped in the expansion of agriculture by bringing more and more of waste land under cultivation. They were also helpful in spreading the Aryan culture to the remote parts of the Ganga plains. But the

surplus income from the lands granted to the priestly class often tempted it to take to secular pursuits which led to the neglect of its religious duties. Moreover, with the land grants becoming hereditary and with the process of administrative decentralisation, the existing proprietary rights in land were adversely affected and most of the peasant proprietors were reduced to mere tenants.

Peasants were directly involved in the cultivation of land. In a predominantly agricultural economy, they formed an important segment of society. But in the social hierarchy, they were assigned a low status just above the śūdras. With the passage of time, as more and more land was brought under cultivation, the śūdras also began to take to agriculture. As a consequence, social distinctions between the vaishya peasants and the śūdra peasants were greatly blurred, particularly after the law-givers had recognised the rights of the śūdras to own and inherit agricultural land. Among the peasants themselves, there were three distinct categories. Those in possession of vast stretches of land either employed hired labour or leased out their lands to others for cultivation. An average landholder cultivated his land employing his own capital and labour. In such cases, usually the entire family was involved in cultivation. Landless peasants generally held land on lease or worked as hired labourers on the fields of others. The peasants had to work long hours on their fields

and their crops were always exposed to the vagaries of nature. Wild animals, rodents and insects also posed a constant threat to their standing crops. They were required to pay a number of taxes to the State. They had also to expend their labour in the construction and maintenance of public works in their vicinity. Besides giving away a part of their produce to the village craftsmen for services rendered in various forms, the peasants were also exposed to illegal exactions of the local officials. Therefore, it would not be inappropriate to assume that a vast majority of the peasants led a life of perpetual degradation and poverty.

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