CHAPTER IV

STATE AND ITS ADMINISTRATIVE FUNCTIONS,
CHAPTER IV

STATE AND ITS ADMINISTRATIVE FUNCTIONS

The State in ancient India had various aims and ideals before it and for their successful accomplishment and fulfilment it had to undertake several functions. All these functions were not universal but some of them had remained important through the ages. Even the East and West agree on those functions. Wilson offers a division of the functions of Government and Ministrant functions. Basic constitutional functions are those which relate to the very existence of the State and constitute the basis of civic life and organisation of the society. They have to be performed by all governments. The Ministrant functions are those which have reference to the general welfare of the people in the society. They are undertaken for the multi-dimensional advancement and general interest of the society. Like the directive principles of our constitution they are optional and depend upon the State resources, social expendiency or convenience of the State. They assist but do not constitute social organisation.¹

¹ Sinha H.N. Outlines of Political Science, Ch. VIII. p. 97.
1. CLASSIFICATION OF STATE FUNCTIONS

Normally the constituent functions of the State comprise of the maintaining law of and order and providing for the protection of the people and their property from internal disorder, robbery and external dangers, determining social relations among different members of a family, the administration of justice in civil and criminal cases and political relationship with others states. The social welfare functions of the state were multidimensional and included regulation of trade, commerce, industry and labour and means of production, distribution and exchange, proper maintenance of communications and public utilities, sanitation and public health, education, care of poor and other incapable persons and numerous measures to foster and general welfare of the people and to maintain them. The people expected that the state should take up these welfare functions in several ways. The option of performing these functions remained with the state and depended, to a considerable extent, on its resources and cultural level. Any change in social or political conditions also resulted in consequent change of welfare function of the state. These functions enjoin that care of the individuals should be properly taken by the State and, though they are not
technically compulsory, yet in a modern state, with a socialistic pattern, they are considered as essential functions of the state.

The above classification, though modern in its theoretical outlook, equally applies to normal general functions of the state in ancient India. We find that in ancient India they were divided into three categories. 1. Prajārakṣaṇa (Protection of the people); 2. Prajāpālana (Maintenance of the people) and 3. Prajāranjana (Recreation of the people). Of these Prajārakṣaṇa is an obligatory function of the State and the remaining two fall under the category of welfare functions which the state was supposed to provide for the people but like the directive principles of the modern Indian constitution they were not considered obligatory or compulsory.

PRAJĀRAKṢAṆA

Among the normal functions of the State, the protection of the people was considered of great and paramount importance. The most important ground on which the State and its existence depended was protec-
tions of the people and so it was the basic primary duty of the State. In order to elucidate it may be noted that it has been this regarded to be of supreme importance even in modern times. In this respect the ancient State anticipated, in some measure, an aspect the ancient State anticipated, in some measure, an aspect the modern state which acts 'as a great establishment of social assurance'; assures the whole society of the maximum good of the people and maintains the social privacy individuality and privileges of the subjects who comprise it.

Protection of the people in ancient times, as in our own time, meant guarding the country and protecting the people against foreign invasion and internal disorder or, in other words, maintaining law and order. Here the general emphasis is on the people and not on the on the political or geographical entity or the state. For protection of the people against foreign invasion the possession of an standing army as a collective force

was necessary whereas for internal peace, maintenance of law and order and prevention of crimes, the necessity was of police which has been regarded as a lesser force. For punishing the criminals and giving justice to the people civil codes and jurisprudence and law courts were required. To summarise we can say that the function of protection depended on the military, administrative and judicial organisations.

Since the protection of the people was a necessity for the very existence of the state itself, the role of state in its exigencies has received the attention of several ancient thinkers and writers on political institutions. Šukra, while defining the word 'Kṣatriya' says that the man who can protect persons, who is valourous, restrained and powerful, and who is the punisher of the wicked, is called Kṣatriya. The Raghuvamśa also tells that 'Kṣatriya' means 'the protector from harm'. The Mahābhārata states that the word 'Kṣatriya' comprised of the word 'Kṣata' and the root 'träi' meaning one who protects from wounds and injury. Since the kings were

5. Šukra, I. 81-82.
6. Raghuvamśa, Ill. 53.
usually the 'Kṣatriya', the word became a synonym for the king representing State and the significance of protection in the State functions is clear in the very word.

2. PROTECTION AS THE HIGHEST DUTY

The Mahābhārata states that all the seven expounders of polity named by its protection, regard it as the highest dharma of the king. This view is supported by Manu Smṛiti (VII.144), the Raghuvamsa (14.67), Rāmāyana (II.100.48) and Agni Purāṇa (Ch. 222). Nārada states 'His (king's) duty is to protect the subjects, to (hono(u)r) or listen to the aged and the wise, to look into the disputes of the people and to be energetic in his functions as king.' Manu states that the king protecting his subjects according to śāstra and giving out punishment to those who deserve it, performs everyday sacrifices. Yajnavalkya (I.335) also held the same view.

Gautam maintains that the special responsibility of the king is to protect all being. Atri tells that sacrifices declared in the case of kings are to punish the

8. Mahābhārata, Śāntiparva, 68, 1-4; Cf. Ibid., 57.774, 791.
10. Manu, IX. 306.
wicked, to honour the nobles, to increase the treasury in a fair way, to dispense impartial justice in litigations and to protect the kingdom. 12 The Viṣṇudharmottara also supports this view. 13 Śukra tells that king should always protect the people. 14 The Harivamsa Purusa calls a kingdom deserving salutation where the king remains ready to protect the people. 15 In the Mahābhārata we find a great anxiety being shown by Nṛrada, who asks the king Yudhishthira if the people in his kingdom were well protected. 16 The same degree of anxiety also appears in the Rāmāyaṇa. 17

On the other hand, any kind of negligence or inability in performing the primary function of protection on the part of state has also not escaped the attention of ancient Indian thinkers and the writers on polity. The Raghuvamsa compares the kingdom with a trust of an unoffending cow worthy of protection. 18 The Agni

14. Śukra., IV. 40.
16. Mahābhārata, Sabhāparva, 5.58, 75.
17. Rāmāyaṇa. II. 100.49.
18. Raghuvamsa. II. 3.
Purāṇa asks as to what is the use of sacrifice for a king who does not protect the people and tells that whose people are protected has the heaven in his home and, whose people are not protected, has the hell in his home. The Panchatantra states that the king, whose people are not protected and recreated, is worthless as a mammary gland under the neck of a goat. Vyāsa cautions that a king who does not protect the people is remembered as a coward. The Nītivākyamṛta questions whether a king who does not protect the people can be called a king. The Mahābhārata quotes a fable from Bṛhaspati: "As a snake swallows mice lying in holes, so the earth swallows these two: a king who does not fight (an invader) and a brāhmaṇa who does not go on a journey for requiring knowledge from famous teachers." It further states that one should abandon following persons like a leaking boat in the ocean.

19. Agni Purāṇa. 223. 9-10.
20. Panchatantra. III. 249.
teacher who does not explain, a priest who does not study the Veda, a king who does not protect his people. Sukra says that the gods destroy a king who does not protect his people, a Brāhmaṇa, who does not perform austerities, a wealthy man who makes no gifts.

PROTECTION AS A MERITORIOUS ATTAINMENT

Yājnavalkya says that a king who protects his people according to śāstras receives the sixth part of the merit of the subject. The view of Yājnavalkya gets endorsements from the Mahābhārata (Udyogaparva 132.12; Santiparva 24.12 and 67.27; Anusāsanaparva 61.34 and 36), Vasistha (I.44–46), Gautama (IX.11), Viṣṇudharmaśūtra (II.28), Agni Purāṇa (223.9–10) and Kāmandaka (II.10). The Mahābhārata tells that the merits gathered by a king by protecting the people yields him benefits for ten thousand years in the heaven.

24. Mahābhārata, Santiparva, 57. 44–45.
26. Mahābhārata, Santiparva, 71.29.
PROTECTION IN LIEU OF KING'S SHARE

The idea of merit accruing to king for protecting the people is in conjunction with the theory that he should protect the people since he gets one-sixth or one-fourth of their produce. We find an injunction in the Rāmāyaṇa that the king had to protect even forest hermits who paid no taxes he would get share in their merit. 28 Baudhāyana states that the king being hired for the sixth part, that he takes as tax, should protect the subjects. 29 Yājñavalkya opines that the king shares half of that evil which the subjects do when not protected by the king, since he takes taxes from the people. 30 Šukra maintains that the God theśas made the king, though master in form, the servant of the people, getting his wages (sustenance) by way of taxes for the purpose of continuous protection of the people and their growth. 31 He expresses an identical view at another place in his

29. Yājñavalkya, I. 337.
30. Šukra, I. 188.
31. Šukra, I. 375.
work telling that the ruler has been made by Brahma a servant of the people getting his remuneration; his sovereignty is only for protection. The Rāmāyaṇa tells that it would be an arch sin on the part of that king who takes a sixth part of the produce and does not protect the subjects as his children. The Panchatantra tells that the king gets the sixth part of the produce for the protection of the people and if he does not protect he incurs a sin. This idea is contained in the Mahābhārata (Adiparva 213.9) and Abhijñāna Sākuntala (II.13) also.

POPULARITY OF A PROTECTING KING

The king who efficiently protects the people is compared to the god Indra. In the Mahābhārata Nārada says to Yudhishṭhira that a king who protects the people of all the four varṇas becomes popular like Indra, the king of gods, in this world. Tumain Inscription of Kumāragupta and Ghatotkachagupta mentions that Sri Chandragupta's sons Kumāna who resembled the great Indra,

32. Ibid., 1.378.
34. Panchatantra, Suhrdbheda. 374.
35. Mahābhārata Sabhaparva, 5.
embraced and protected the whole earth like a virtuous wife, with his mighty hands. 36

The protection was not a sporadic affair. Vasiṣṭha states that the wise say that protection is a life-long session in which he (the king) has to give up fear and softness of heart. 37 The protection often required the crossing of swords and one could die in harness. Such a death was regarded in very high esteem. The Mahābhārata states that all soldiers, irrespective of caste and side, killed in battle become pure by the destruction of their sins in the same way as all those joining the bath of the king at the end of the Āśvamedha are relieved of all sins. 38 Rgveda contains a verse which, perhaps, indicates to state that the warriors losing life in battle get the merits of making a gift of one thousand cows in the sacrifice. 39 According to Mahāmāhāpādhyāya P.V.Kane Kautilya had, perhaps, the above mentioned passage of the Rgveda in mind when he

referred to Veda for inciting the soldiers to fight without regard to life.⁴⁰ Apastamb opines that a king who endeavours for recovery of the stolen wealth of brāhmaṇas and dies during his attempt is considered as the performer of a sacrifice in which his body is the sacrificial post and fees are incalculable.⁴¹

The Viṣṇudharmasūtra mentions that no duty is there for the king equal to losing one's life in battle. Those who meet death in protecting a cow, a brāhmaṇa, a king, a friend, their own wealth and wives enter heaven.⁴² The Mahābhārata states the great warrior Bhīma as telling that it is a sinful act for a Kṣatriya to die of some disease in his house; the noblest duty for him is to meet death from steel.⁴³ Manu puts forth the sinful consequences before a soldier fleeing from the battlefield.⁴⁴

The promise and assurance of heaven for those who die while fighting are given in several ancient Indian

⁴⁰ Kane, P.V. History of Dharmasastra, Ch.III, p.58.
⁴² Viṣṇudharmasūtra., III 44.46.
⁴³ Mahābhārata, Bhīmāparva, 17.11 Cf. Ibid Salya-parva, 5-32 and Śānti-parva, 97. 23,25.
⁴⁴ Manu. VII. 94-95.
literary works. Manu states that a king protecting his subjects against an invasion should not run away from the battlefield as he gets heaven in case of death while fighting in battle.\textsuperscript{45} Yājnavalkya also supports Manu by making the same promise.\textsuperscript{46} Parāśara tells that two men pierce the orb of the Sun and get the heaven; they are an ascetic endowed with Yoga and a soldier killed while fighting an enemy and that the warrior killed in fighting is received in heaven by the divine damsels.\textsuperscript{47} The Śrīmadbhagavatgītā has a long discourse in which Śrīkṛṣṇa says to Arjuna: "It is only the lucky among the Kṣetraiyas, who get such an unsolicited opportunity for war, which is an open door to heaven... slain in battle you will attain heaven, or gaining victory you will enjoy sovereignty of the earth.\textsuperscript{48}

3. THE WELFARE FUNCTIONS OF THE STATE

As I have already written that among the welfare functions of the state in ancient India there were two

\textsuperscript{45} Ibid. VII. 87-89.
\textsuperscript{46} Yājnavalkya, I. 324.
\textsuperscript{47} Parāśara, III. 37-38 quoted by Medhatithi on Manu VII 89 Cf. Mahābhārata, Udyogaparva, 33.61.
\textsuperscript{48} Śrīmadbhagavatgītā, II. 32-37.
categories of functions. They are: Prajāpālana and prajāranjana. Out of these two Prajāpālana was more important as none can enjoy any recreation with an empty stomach.

THE PRAJĀPĀLANA: A DUTY OF THE STATE

The Prajāpālana as a function of the State attracted the attention of several ancient Indian writers. The Rāmāyaṇa calls it a duty for the king. The Nītīvākyāṁṛta tells that the proper work for the king is to maintain his subjects, and the king, who maintains the people, he alone gets the one-sixth part of the merit of the people. Kāmandaka calls the king for ever maintaining the people in his country, and Śukra also advises the same. This view is subscribed also by the Panchatantra (Mitrabheda 240-41) and the Mahāvīracharita (Ch. IV). The Panchatantra advises that a king should maintain the people in the same way as one maintains the cow.

49. Rāmāyaṇa II. 2.44 Cf. Ibid., II. 108.76.
50. Nītīvākyāṁṛta. 5.4.
51. Ibid., 7.23.
52. Kāmandaka. IV. 79.
when she yields milk. The Padma Purāṇa states that the king should maintain the subject in the same way as Hari maintains the world. The Mahābhārata tells that the king, who maintained the people, has done everything. The Nītivākyāmṛta states that the sacrifice for a king is to maintain his people. Sukra advises the king for maintaining the people as one's own son. Abhijnāna Sakuntala contains a prophecy that the son of Sakuntalā will attain the appellation 'Bharata' because he will feed the world.

The maintenance of the people meant maintaining their soul and body by providing certain facilities in which people could earn the necessary means of life. So it implied the provision of economic means and initiating economic projects especially in the times of cala-

54. Panchatantra, 244.45.
55. Padmapurāṇa, Ch.20 vide Sabdakalpadrum, part IV, p. 120.
56. Mahābhārata Sāntiparva, 69. 72-73.
57. Nītivākyāmṛta, 26.68.
58. Sukra, 4. 1193.
59. Abhijnāna Sakuntala, Act VII. 33-34.
mities and emergency.

THE PRAJĀRANJAN

The Prajāranjan or Anuranjan was the term standing for all the means by which the people are recreated. It was not mere recreation by leisure but meant complete recreation. It was a comprehensive concept and it consisted of the provision for education and self-reformation, creation of an atmosphere congenial for the development of collective education and the provision of refined and cultured means of pleasure by means of art and education. Sometimes this was called Prajāradhanā or the worship of the people and employed the ideal and wish of the people in the function of the State. Virtually, almost all the public welfare activities of the State came under Prajāradhanā.

The word 'rajan', meaning the king, is a derivative from the root 'ranj' meaning to please, recreate or keep contented. This is the view of the Mahābhārata. The Rāghuvamśa also subscribes to this origin of the term.

60. Mahābhārata, Śāntiparva. 59. 125.
61. Rāghuvamśa. IV. 12.
Bṛhaspati, too, maintains the above view. So the very origin of the word throws ample light on the fact that the function of the state was to recreate the people.

Recreation of the people as a function of the state attracted the attention of a large number of authors who have thrown light upon the need of its performance by the state. The Rāmāyaṇa states, that Rāma recreated the people by his virtues. The Mahābhārata tells that the king recreates the people and further tells that it is the primary duty of the state to recreate the people. The Agni Purāṇa states that the king should behave in a way which recreates the people. The Matsya Purāṇa also maintains that the king should recreate all the people. The Agni Purāṇa tells that the king who recreates the people wins over their affection. Nitivākyamṛta also emphasises the need of State recreating the people. This view is further held in

63. Rāmāyaṇa., ll. 3.40.
64. Mahābhārata, Sāntiparva, 51.36.
65. Ibid., 51-72.
69. Nitivākyamṛta. ll.37.
the Raghuvamsa (IV.12, VI.21), Sukra (I.744, 751-52), and the Girnar Rock Inscription of Skandagupta.⁷⁰ The Harivamsa Purana impressed upon readiness of the king to recreate the people.⁷¹ Sukra tells that the king should participate in all those functions which the people celebrate from time to time,⁷² and should visit the capital on the back of an elephant in order to recreate the people.⁷³

The Panchatantra calls a king worthless and compares him with a mammary gland below the neck of a goat, who does not recreate his people.⁷⁴

---

⁷² Sukra. 4.523.
⁷³ Ibid. 1.369.
⁷⁴ Panchatantra. II. 249.
4. IMPORTANCE OF SOCIAL WELFARE FUNCTIONS

The necessity on the part of the state devoting to the welfare functions and their importance as a contributory element to the concept of an ideal state has been dealt with in several literary works. The state was expected to perform all the functions to see that the people were happy and enjoyed their life; they should have all the opportunities to provide the means of livelihood. The people left without provision of the means of maintaining their body and soul can never be expected to be careful about maintenance of the law and order.¹ In the absence of healthy recreation, which also includes education, good citizens can not be prepared. The State, where the people have no scope to develop their creative and constructive faculties and social and mental instincts, is ought to remain uncivilized and uncultured. In short it may be said that in a state which is indifferent to its welfare functions anarchy raises its ugly head and spreads chaotic conditions, with the eventual result that leads the state to disintegration. Thus the very existence of the state is

¹ SukranItisara, 4.617.
endangered, if it does not lead properly to the necessary welfare functions.

Acquainted with the importance of welfare functions and their role in the state I now give in brief the various items of state function which are regarded as welfare functions.

WORKS OF PUBLIC UTILITY

The works of public utility included the construction of wells, dams, lakes and other reservoirs of water and building roads and planting medicinal herbs, plants and trees. The Sudarsana lake, dug under Chandragupta Maurya and the long road leading to Pataliputra are two important evidence.² Kautilya advises the king to take up many items of public works which may be considered of public utility. He enjoins on the king that he should carry on mining operations and manufacture, exploit timber and elephant forests, offer facilities for cattle-breeding and commerce, construct road for traffic and explore water ways and set up market towns. He should also construct rese-

voirs, filled with water either perennial or drawn from other sources, he might provide with sites, roads, timber and other necessary things to those who construct reservoirs of their own accord and likewise in the construction of places of pilgrimage and of groves. Whosoever stays away from any kind of co-operative construction shall send his servant and bullocks to carry on his work, shall have a share in the expenditure, but shall have no claim to profit. 3

The evidences of construction of meeting-halls, free drinking water stalls for the travellers (prāpas), tanks, temples, rest-houses etc. abound so lavishly, diffused in innumerable literary works and epigraphs, that no citation of any specific example appears necessary.

Several works of public utility were also executed by 'śramadāna'. A panel of sculptures in the railing of the Stupa at Sanchi depicts ascetics engaged in physical labour, apparently in connection with some construction. Prof. K. D. Bajpai thinks that it was an instance of the idea and practice of 'śra-

3. Kautilya, Bk. II Ch. 1.
meedone' (voluntary free labour) in ancient India.

The state in ancient India had an important function of protecting and promoting the agriculture. Since food is the primary necessity of the people the state was careful to see that the agriculture is regulated in such a way as to yield the maximum produce.

RELIEF MEASURES AGAINST CALAMITIES

The state had a significant responsibility of functioning to cope up various unforeseen calamities. The king was to protect the land from natural calamities including providential visitations. They included fire, floods, draughts, epidemics, earth quakes, famines, menace of rats, wild animals, serpents and demons. In these cases king was considered to take precautionary remedies and measures and try to avert the visitation of such calamities. But if such untoward catastrophes happened, it was for the monarch to face them boldly with proper remedial measures. These measures included the propitiation of supernatural forces and performance of magical and religious rites. The belief was that such prayer would lead to minimise
the evil effects of such outbreaks. In the Mahābhārata we find Naṇada anxiously enquiring from Yudhiṣṭhīra if in his kingdom the people were guarded against the fear of fire, serpents, demons and pestilence. Medhātithi states that when a king supports his subjects in a famine by distributing food from his treasury, no question of his being in mourning would come in the way.

PROVISION OF IRRIGATION

Since the agricultural production depended very much on irrigation the state provided the necessary facilities of irrigation either by encouraging and subsidising the construction and maintenance of wells, tanks and canals undertaken by the people or the king himself built them and maintained them. The problems of farming and irrigation also included the fixation of land revenue for irrigated lands and the state control over means of irrigation.

4. Dikshitar V.R.V., The Mauryan Polity, p. 188.
5. Mahābhārata gathāparva, 5.112.
6. Medhātithi on Manu, V. 94.
THE STATE AND PUBLIC HEALTH FACILITIES

The State in ancient India was very careful about the health of its people as well as of domesticated animals. The steps and care that the state used to take regarding the health of the people is reflected in a discourse between Nārada and the king Yudhiṣṭhira in the Mahābhārata where the former inquires from the latter whether there were physicians well-versed in all the aspects of treatment in his kingdom who looked after the well-being of the bodies of the people.⁷ Samkhelikhita also enjoins on the state to provide medicines, accomodation, food, clothes etc.⁸ As the matter is important I propose to deal with the functions of the state in regard to the health and hygiene of the people in details.

5. THE STATE AND PATRONAGE TO EDUCATION AND LEARNING

The state and Governments in ancient India realised the importance of learning and education and considered

---

⁷ Mahābhārata, Sabha-parva, 5.80.
⁸ Samkhelikhita, quoted in Rajanītipraṇāsa, p.138.
it necessary to promote and extend patronage to the education and learning through the ages. The state strived in every possible way for giving education to the people by providing necessary facilities to the process of education and to those people who were engaged in it. It also supported the learned. This aspect of state functions receives confirmation from Gautama (X.9-12), Kautilya (Bk.II Ch.1), the Mahābhārata (Anuśāsana parva, 61-28-30, Sāntiparva 165.6-7), Visnuśūla (VII.79-80), Manu (VII. 82, 134), Yājnavalkya (I.315, 323 and III. 44), Matsyapurāṇa (215.58) and Atri (24).

PROTECTION OF OLD, CHILDREN, ORPHANS, WIDOWS, WOMEN AND COWS

The state in ancient India took proper care of various categories of incapable and helpless persons. Kautilya states that the king should provide the orphans, the aged and infirm, the afflicted and the helpless with maintenance. He should also provide subsistence to helpless women during their pregnancy and also to the infants when born. The Mathura Inscription of Huvishka records that the state maintained the hungry, the

9. Kautilya Bk. II., Ch. 1.
thirty and the destitute.\textsuperscript{10} The orphans were not only fed and clothed, but were also educated by the state.\textsuperscript{11} Organised relief to the needy and poor was deemed one of the functions of the state. The State undertook necessary measures to protect the aged, the starving and the disabled and the poor. It also helped otherwise poor people who deserved consideration at its hand like the ‘\textgreek{ereti}ras’ and the ascetics.\textsuperscript{12} The protection of the poor and disabled as a function of the state is favoured by the R\~{N}\={N}ya\={n}a (II.2.41, 100.61), the Mahabharata (\overset{\text{o}}{\text{s}}\text{antiparva} 86.24, 77.18; \text{Adiparva} 49.11, \text{Sabh\=aparva} 18.24, \text{Vir\=iparva} 18.24), Manu (8.312), \textit{Sukra} (V.579), \textit{Matsya Pur\=ana} (215.62, 77), \textit{Agni Pur\=ana} (222.19, 225.25), V\=ish\=u\={n}am\=arti (III.65) and the N\=Itiv\=a\={n}a\={r}ta (26.69). The Mah\=ab\=harata, while enumerating various categories of helpless persons enjoins that the state should maintain them considering itself as their father and brother or guardian.\textsuperscript{13} The N\=Itiv\=a\={n}a\={r}ta also emphasises the need on the part of state maintaining the

\begin{flushright}
13. Mah\=ab\=harata, \textit{Sabh\=aparva}, 5.113.
\end{flushright}
destitutes with a fraternal affection. 14 Kāmandaka, while prescribing the care of destitutes by the State, enjoins that the State should wipe their tears. 15 The Saṃkhalikhita advises the needy, the destitutes and those who are unable to maintain themselves in accordance with the fair means prescribed in Āstras. They should approach to the king for help. 16 Thus, we find that the State in ancient India was taking proper care of the helpless and aged people, the blind, the crippled, lunatics and mentally deranged widows, orphans, diseased, afflicted by calamities and pregnant women and newborn infants. The Rock Edict V of Aśoka testifies to these functions of the State. 17

6. STATE PATRONAGE OF ARTS AND CRAFTS

The State was well aware of the importance of arts and crafts in cultural life of the people. It, therefore, endeavored to encourage them. Śukra advises the king to train the officers appointed with

---

salaries in the cultivation of all the arts and to honour those people every year who exhibited high proficiency in the field of arts and crafts. The king should always take such steps as he may deem fit in order to promote the arts and crafts in the country. In the Mahābhārata Nārada asks king Yudhiṣṭhira whether the artisans in his kingdom are provided with money and articles necessary for their artistic performances. The Gupta rulers were great patrons of arts and crafts. The fact that the State patronised and encouraged arts and crafts is amply evident in innumerable temples, sculptures, terracottas, paintings, coins and other articles which fortunately survive even today and have come to light. Various eulogies praise the kings as patron of arts and crafts. We may safely conclude that the high watermark attained in the fields of arts and crafts had never been attained if the State had not encouraged them. Some of the magnificent temples with outstanding sculptures are definitely known to have been built by

18. Śukra, I. 366-69.
20. Gokhale, B.G. Samudragupta, p. 81-82.
the king and monarchs. We come across a vast literature prepared in ancient India dealing with arts and crafts.

Promotion of Religion

The state in ancient India attached much importance to the religion. Śukra enjoins on the king that he should worship the gods. The Agni purāṇa also advises the king to worship the gods and to construct the temples. Śukra tells that the broken temples should not be allowed to remain in broken condition and the king should restore them. The fact that the state promoted and patronized religion comes to us in the shape of innumerable temples and architectural works. Various eulogies of the kings disclose them as patrons of religion and describe their exertion for the advancement of religion. The quantum of exertion that a king used to undergo for the propagation of religion may be seen in various edicts of Aśoka. The remark that in Mauryan period,

21. Śukra. IV. 409-10.
22. Agni Purāṇa. 222.91-93.
23. śukra. IV. 407-8, 521.
especially in the reign of Asoka the State took an active interest in religion, and although the amount spent on this item is not known, yet the various activities indicate that a considerable amount was probably spent on religion. 25 The vast literature of ancient India throws floods of light on the state help to religious practices in all possible ways including the liberal donations, grants, charities, the endowment of lands and villages and exemption and remission in state taxes.

The most significant and salient feature of the attitude of the State towards religion was secularism or religious toleration and co-existence. However, the approach of the ancient Indian state towards secularism was not negative. The ancient State was secular with the positive approach and it promoted the various religions and sects to grow amicably. The Rock Edict XII of Asoka states that he worshipped all the religions. 26 The Imperial Guptas allowed people complete liberty in the choice of faith and outward

form of worship, although the monarchs were staunch worshippers of Visnu in their personal beliefs and practices.27 The Allahabad Pillar Inscription of Samudragupta calls him 'Dharmaprachirabandha'.28 Chinese sources disclose that he had complied in response to a request of the Chinese emperor for permitting the construction of a vihāra and rest-house near Bodhi-tree and thus showed his solicitude for the comforts and welfare of the votaries of other faiths.29 It is because of this religious toleration on the part of State that others were attracted to Indian religious practices. We know from the Bana- nagar Pillar Inscription that Heliodorus, the ambassador of the Greek king of Taksilā in the court of the Sunga king Bhāgabhadra of Vidisa has adopted the Bhagavata cult.30

The State maintained a department for the preservation and supervision of the religious activities and establishments. Altekar has termed this department as the 'eclesiastical department.31

27. Indian Historical Quarterly, Vol. XV.
28. Pandey R.B., Historical and Literary Inscriptions, p. 73.
30. Pandey R.B., Historical and Lit. Inst., p. 44.
31. Altekar A.S., State and Govt. in Ancient India, Ch. IX, p. 204.
PROVISION OF CHARITIES

The charities were also considered as welfare functions of the state. Manu tells that Indra pours water on the people only for four months whereas the king does it for whole of the year. In the Mahābhārata we find Nārada asking Yudhīṣṭhira that in his kingdom the deserving persons were receiving the charities. The edict of Ashoka's second queen Kāruvēki, makes mention of donation made by her to a mango-grove pleasure-garden and charitable hostel. According to Smith, the hostel was a rest-house where doles of food and, in some cases, shelter for night were given free to travellers. The Mahābhārata states that the kings set up houses for the distribution of water from excavated tanks. Such practices and institutions of charity are mentioned in Jātakas also.

There are numerous references to gifts and charities to the Brāhmaṇas, Buddhist Hermits and even

32. Manu, IX. 304.
33. Mahābhārata, Sabha-parva., 5.88.
35. Mahābhārata Antyāparva. 43.7, 11.
36. Jātakas Nos. 4 and 96.
householders. According to Divyāvedāna Aśoka, on his visit to Lumbini, presented one hundred thousand suvarnas to the people. He is also said to have given a million pieces of gold at the stupa of Ananda at Srāvasti. 37 In the sacrifices, such as Ásvamedha, Vājapeya and Agnihotra and other ceremonies connected with the worship of gods and ancestors, birth of an heir to throne, rainfall etc., state distributed wealth on a large scale. We learn that in the great horse sacrifice of Pusyamitra Śunga, thousands of Brāhmanas were invited and were lavishly rewarded with gifts. Kaling king Kharavela in his tenth regnal year spent a hundred thousand coins to pay homage to the memory of the former king of Kalings. 38 The instance of king Harṣa making periodical charities to the extent that he himself was left only with the garment on his body as his possession, on the eve of the great fairs at Prayaga is wellknown. Aśoka, like his father and grandfather, is stated to have fed sixty thousand Brahmanas everyday. Nasika and Karle Inscriptions

of Usavedata, son-in-law of Nahapana, record that he used to feed throughout the year a hundred thousand of Brahmans. Strabo says that the houses and temples were established for the gruntanas who were provided maintenance by the state. The Agni purana (222.90) and Kautilya (Bk.XIII Ch.5) also pass the injunction king to give charities. The charities of the state find mention in numerous eulogies of the kings and are corroborated by the numerous copper-plate grants.

ENTERTAINMENT OF THE PEOPLE

The provision of entertainments to the people was also considered as one of the welfare functions of the state. We come across the terms 'utsava' and 'Samaja' for the festive celebrations. In the Ramayana these celebrations have been mentioned. Sukra calls for organising the festivity every year. The Rock Edict IV of Asoka refers to the display of processional chariots, elephants, illuminations and other spectacles.

40. Ancient India as described in the classical Lit., p.170.
   Cf. The Classical accounts of India, p. 427.
41. Ramayana, II. 2.41, 100.44.
42. Sukra, IV, 406, 520.
43. Gopal, M.H., Maurayan Public Finance, p. 175.
Kalinga king Kharavela provided amusement to the inhabitants of Kalinga by exhibiting combat dancing, singing and musical performances.\textsuperscript{44} Nasika Cave Inscription of Vasiṣṭhiputra Śrī Pulumāvi records that king Śrī śEtakarnī was very liberal on festive days.\textsuperscript{45} Bose furnishes elaborate description of the club life in ancient India.\textsuperscript{46} The mention of Samāja as a festive gathering has also been made by Pāṇini\textsuperscript{47} and Patañjali.\textsuperscript{48} Mehta considers 'Samāja' as a special place where children as well as old people including males and females both participated in various types of sports, dramas, dance, discussions, elephant fight, horse duel etc.\textsuperscript{49} The Mahābhārata refers to a 'Samāja' held by Pṛṇa.\textsuperscript{50} A sungan clay plaque discovered from Rajaghat depicts the scenes of a 'Samāja' such as the

\textsuperscript{44} Barua B.M., 1d Brahmi Ins. of Udayagiri and Khandagiri, p. 41.

\textsuperscript{45} Ep. Ind., Vol. VIII, pp. 61–62.


\textsuperscript{47} AstEdhyāyī, 3.3.99.

\textsuperscript{48} Mahābhārata, 2. 152.

\textsuperscript{49} Mehta, R.L., Pre-Buddhist India, p. 355.

\textsuperscript{50} Mahābhārata, Adiparva, 134.
cock-fight, bull-fight and wrestling, whereas another Sungan clay plaque depicts a pleasure trip on a cart. Besides, there were pleasure gardens which are mentioned in numerous literary works.

The State was regularly entertaining the people on many occasions such as on the eve of the coronation, the birth of a child in the royal family, the victory in war, the religious ceremonies, sacrifices and on suspicious days by organising festivities of various kinds. It is mainly due to state-interest in entertainment of the people that dance, music and drama flourished and developed in ancient India and we have a rich heritage in these fields.

WELFARE OF FOREIGNERS

Many foreigners visited India from several countries and, therefore, one of the important welfare functions of the State was to look at the welfare of

51. Bharata Kala Bhawan, Varanasi, No.4827.
52. Ibid., No.3491.
53. Vātsyāyana Kāmāsūtra, 1.4.40; Cf. Raghuvamśa 8.32.
foreigners. We came to know from the Greek sources that there was a committee especially entrusted with attending to the well being of the foreigners, in the council responsible for the administration of city during the Mauryan rule.\textsuperscript{54} The rich and warm hospitality that the foreigners received in ancient India is mentioned in their numerous accounts and works.

PHILANTHROPIC ACTIVITIES

The State regarded it as an important function to engage in various kinds of philanthropic activities. The Pillar Edict VII of Aśoka refers to provision of various humanitarian works like planting mango groves, constructing rest-houses and providing drinking water facilities.\textsuperscript{55} The Mahābhārata contains a discourse in which Narada inquires from Yudhishthira if there were chaityas and trees (for shades) for the welfare of the travellers and people.\textsuperscript{56} Manu prescribes punishment for those obstructing the work of water supply to the travellers.\textsuperscript{57}

\textsuperscript{54} Megasthenes, Frag. XXXIV.
\textsuperscript{55} Pandey, R.B., Historical and Lit. Ins., pp. 34–36.
\textsuperscript{56} Mahābhārata, Sabhaśāstra, 5.96.
\textsuperscript{57} Manu, VIII. 319–20.
Several other instances of philanthropic activities of the State are innumerable and they are recorded in a large number of literary works and epigraphic records.

The State also promoted harmonious relationship amongst the people and, therefore, laid emphasis on non-injury to all living beings. The state in ancient India considered it a function to promote non-injury and non-violence. The Ashokan inscriptions throw ample of light on this aspect, particularly Rock Edict I and Rock Edict XII. The Raghuvamsa also favours non-violence. The Agni Purana calls the violence a great sin. Sukra also forbids a king from the violence to the people. It has been said that the non-violence is the duty of all. References to the practice of non-violence by the State are also innumerable; however, quoting more of them will be only a clustering as the above mentioned citations suffice the purpose.

59. Raghuvamsa, XVII. 19.
60. Agni Purana, 222. 17.
61. Sukra, 4. 1173.
62.
7. MONARCHY: IT FUNCTIONS

As written earlier the monarchy in India has been one of the most respected institutions. The Vedas, the Smriti, the Brāhmaṇas, the epics and all treatises on social and legal institutions in ancient India refer to the monarchy as one of the most time-honoured institutions in our social and administrative set-up. Of all the works, the Śukranītisāra has given detailed account of this great institution.

In the Śukranītisāra we find that kingship was a hereditary institution. Succession to the royal throne was decided by the time-honoured law of primogeniture. If in the king's family, there were several male issues the eldest among them was to be the king and the other princes were to be his assistants and advisors. 1 Kautilya and other early writers also accept the law of primogeniture. 2 The exceptions to the law of primogeniture are clearly stated by scholars. If the eldest, however, is deaf, leprous, dumb, blind or eunuch, he will not be eligible for the throne. In

1. SNS., I. 684-85.
that case the king's brother or the son's son will be eligible or the king's second son or the son of king's brother will get the throne. In the absence of the seniors, the juniors are heirs to the throne in order of preference suggested by Šukrāchārya.

Manu in his Manusmṛiti also gives several grounds for the exclusions of the eldest son from succession to the throne. The Rājadharma Kaustubha lays down a few additional propositions. It is referred to therein that even if the eldest does not succeed owing to some mental and physical defects his son's right will remain intact. This text cites the words of the fisherman chief to Bhīṣma. Similar views are found in the Yājnavalkyasmṛiti and Rājānīti Prakāśa.

Sukra apprehends the possibilities of internecine war and strife if the sons and other legitimate members of the royal family are not properly treated and satisfied. Such situation may obviously lead to the divi-

4. Mahābhārata, Ādi-parva, 100. 192.
5. Yājnavalkya smṛiti, i. 309; Rājānīti Prakāśa, p.40.
sion in the family and consequently might lead to the partition of the kingdom, exposing it to enemies. He, therefore, stresses the need of the unity of opinion among the members of the royal family.

He reiterates that the differences among the members of the royal family are dangerous to both the state and the family. He, therefore, enjoins the king to arrange for them the same kind of treatment, comfort and enjoyments as for himself. But as a precautionary measure and safeguard to the kingdom the king should station them in various distant quarters paying them one fourth of the royal revenues or make them governors of distant provinces. He may also appoint them as the heads of cows, horses, elephants, camels, treasure or offer them distinguished assignments in the administration.

QUALIFICATIONS OF THE KING

Writers on Hindu polity have devoted much space to the detailed description of various qualifications of the king—intellectual as well as physical. Yajnavalkya states:

"King should have great energy, should be generous, mindful of past, possessed of a disciplined mind, endowed with an even temper, born of a noble family, truthful, pure in body and mind, prompt in action, of strong memory, non mean-minded, not harsh (in words or acts), observant of the rules of Dharma, free from vices, talented, brave, clever in concealing secrets, guarding the weak points of his state, well taught as regards logic, the science of government, the science of wealth and three Vedas. He should be forbearing towards Brāhmaṇas, straightforward towards his friends and subjects."

Manu also gives a similar list of the qualities of the king. Kautilya gives a long list of qualities called abhigamika gunas. Self-discipline is one of the most important qualities included in this list. Gautama requires that the king should do what is right according to Śāstras and speak or decide rightly; should be pure at heart and externally should control his senses etc. Mahābhārata³ states that the king

8. Mahābhārata, Shānti Parva, 11. 70.
should possess thirty six qualities. Kamandaka\textsuperscript{9} mentions nineteen qualities that lead to the well equipped personality of the king. The Manasollāsa\textsuperscript{10} first enumerates forty-four qualities such as truthfulness, spiritedness etc., and then states that the five most essential qualities in a king are truthfulness, valour, forbearance, liberality and capacity to appreciate the worth of others. The Agni Purāṇa enumerates twenty-one qualities such as noble family, character etc.\textsuperscript{11}

But of all these works on polity, the Sukranitiśāra devotes considerable space to the description of requisite qualifications for a king.

According to this treatise discipline is considered to be the fundamental quality of a ruler. Discipline comes through the dictates or precepts of the āśtras. This gives mastery over the senses. Sukra opines that the ruler should carefully check his mind because when mind is controlled, the senses are automatically conque-
red. "How can the man, who is unable to subdue one's mind, master the world extending to the sea? The king, whose heart is agitated by the enjoyable things, gets into a trap like the elephant." Sound, touch, sight, taste and smell—each of these five is sufficient to cause destruction. Using the similies of the dear, the elephant, the fly, the fist and the bee which are destroyed by attachment to one or the other types of pleasure, Sūkra exhorts the king to keep himself away from the five senses: These poison-like vīśayas are each capable of ruining men. Can not the five combined together cause destruction? 12

Sūkra does not seem to be totally puritan while prescribing the moral norms to be followed by a king. He rather holds more practical view than the early thinkers, codifiers and writers. He cautions the ruler of the disastrous results of indulgence in gambling, women and drinking. He cites the examples of Nala, Dharme and other kings who were ruined through honest gambling, because gambling with dishonesty is only productive of much wealth to those who know it.

He further cites the examples of princes like Indra, Nahusa, Rāvana and others who were ruined through attachment to women. His views on drinking are also completely traditional: "Wine, according to some measure, increases the talent, clears the intelligence, augments patience and makes the mind steadfast; but otherwise it is ruinous."13

Sensuousness (kāma), anger (krodha) and greed (lobha), which are ordinarily supposed to be the greatest enemies of moral nature, have their own parts to play in the career of a king and they are not absolutely unalloyed vices, they are painted to be. "Sensuousness and anger are," observes Śukra, "like wine and should be duly used—the former in the maintenance of the family, the latter against enemies. Cupidity should be indulged in by a king who wants victory in the name of the army." However, prince should not indulge in sensuousness with regard to other's wives, greed in other's wealth and anger in punishing their own subjects.14

He further says: "Hunting, dice-playing and drinking are condemnable in kings. Dangers from these are illustrated in the cases of Pându, Naisadha, and Vîraṇî respectively. Sensuousness, anger, ignorance, cupidity, vanity and passion—one should give up these six. These being given up, the king becomes happy. King Dândakya went to the dogs by taking to one of the six enemies "viz., sensuousness, Janamejaya, through anger, Rājarṣī Aila through cupidity, Aśura Vātāpi through folly, Rāksasa Paulastya through vanity, and king Lomahodbhava through passion. But the powerful Jamadagnya and the fortunate Ambaraśa ruled the world for a long time by giving up these six enemies." 15

According to Sukra, "As kindness is a great virtue among men, so the king should rule the poor people with kindness." 16 He further says that there is no such art of subjugation in the three worlds as mercy, friendship, charity and sweet words. 17 "Practise, strength, intelligence, and valour—these are great qualifications. The king, who has other qualities but not these, though he

15. SNS., I, 293-94.
17. Ibid., 341-42.
is wealthy, can not enjoy even a small region, but is soon thrown down from his kingdom. Superior to the very wealthy king is the monarch who, though small in territory, has his commands unobstructed and is powerful. He can be such with the qualifications mentioned above. 18

Keeping in view the three kinds of penance, Sukra has classified the kings into three categories—Saṭṭvika, Rājasika, and Tāmasika on the basis of the personal qualities of the kings. The king who is conscious to his own duties and is the protector of his subjects; who performs all the sacrifices and conquers his enemies and who is charitable, forbearing and valorous; has no attachment to the things of enjoyment and is dispassionate is called Saṭṭvika and attains salvation at death. The king, who has the opposite characteristics is, Tāmasa and gets hell at death. The miserable king who is not compassionate and is mad through passion, who is envious and untruthful, who has vanity, stupidity, attachment for enjoyable things; who practices deceit and vallainy; who is not the same or uniform in thought, speech and action; who is fond of picking up quarrels

18. Ibid., 351-55.
and associates himself with the lower classes, who is independent of and does not obey niți and who is of an intriguing disposition, is called Râjasa and gets the condition of lower animals or immovable things after death. 19

EDUCATION OF THE KING

Śukra devotes considerable space to the education of the king. Association with the guru is for the acquisition of śāstras. The śāstras are the source of knowledge. The king, who is trained in the branches of learning is respected by the good and does not incline to wrong deeds even if impelled by evil motives. 20 The Manusmṛiti, 21 The Mahābhārata, 22 Kautilya, 23 Yājnavalkya, 24 Kamandaka 25 and Agni Purāṇa 26 recommend four branches of knowledge for the king. They are śāṅvikaśī, 27 the trayațț 28

19. SNS., I, 59-68.
20. Ibid., 295-300.
21. Manusmṛiti, VII. 43.
22. Shānti Parva, 59.33.
24. Yājnavalkya Smṛiti, 1. 311.
27. Ibid., 238. 9-10.
trayī (three Vedas), the vārtā (economics), and the dāndāniti (science of government). The studies of these four branches of knowledge are vital to the king because all the castes of men and the stages of human life, which are protected by the king, are based upon these branches of knowledge. The science of discussion and Vedānta are founded on ānvikṣikī, virtue and vice as well as interest and injuries of men are based on trayī, wealth on vārtā and good and bad government on dāndāniti.

THE KING AND HIS DIVINE STATUS

Almost all writers on polity and social scientists of ancient India have attached divinity to the king.

28. The six šāstras, the four Vedas, mīmāṃsā (a system of philosophy) nīṣa (a system of philosophy, drāmāstra as well as the purāṇas— all these constitute the trayī. Normally the first three Vedas are meant by trayī. Śukra gives a special meaning to this term. SNS., I. 310.

29. In vārtā, are treated interest, agriculture, commerce, and preservation of cows. SNS., I. 311-12.

30. The nīti that regulates punishment constitutes dāndāniti, so called, because it governs and guides. SNS., I. 313-14.

31. SNS., I, 303-09.
But ŠukranItisāra has elaborated this point. Šukra postulates the functional resemblance between the king and some of the deities. He states "the king is made out of the permanent elements of Indra, Vēyu, Yama, Sūrya, Agni, Varuna, Chandrasmā and Kubera and is the supreme lord of both immovable and movable worlds. Like Indra the king protects the wealth and worldly possessions. As Vēyu is the spreader (and diffuser) of scents, so the king is the generator and source of good and evil actions. As the sun is the dispeller of darkness and the creator of light, so the king is the founder of religion and destroyer of irreligion. As Yama is the god who punishes human beings after death so also the monarch is the punisher of offences in this world. Like Agni, the prince is the purifier and enjoyer of all gifts. As Varuna, the god of water, he sustains everything by supplying moisture, so also the king maintains every body by his wealth. As the Moon pleases human beings, by its rays so also the king satisfies every body by his virtues and activities. As the god of wealth protects the jewels of the universe, so the king protects treasure and possessions of the state. As the moon does not shine well if deprived of one of its parts, so the king does not flourish, unless
he has all the parts described above. 32

As told earlier there were several early writers and codifiers who had similar views regarding the qualities and abilities of the king. Several centuries earlier Manu had expressed identical views. According to Manu also the king should possess the majesty of eight deities and should imitate in his actions these deities. 33 The Agni Purāṇa also underlines the functional resemblance between the king and the nine deities. They are: the Sun, the Moon, Vāyu, Yama, Agni, Kubera, Varuṇa, Prthvi and Viṣṇu. 34

The above analysis reveals that the king resembles the deities only in the performance of his regal duties and functions. If Sūkra compares the king to some of the deities, he also compares him to the father, the mother, the preceptor, the brother, and friends: 35

"As father provides his off-springs with attributes, so the king endows his subjects with good qualities.

32. SNS., I. 72-76.
33. Manu, VI. 4-5, IX. 303-11.
34. Agni Purāṇa, 226. 17.20.
35. SNS., I. 77.
The mother pardons offences and nourishes the children so also the king. The guru is an adviser to the disciple and teaches him good lessons so also the king. The brother takes out his own legal share from the ancestral property so also the king receives his own share of the people's wealth and produce. The friend is the confidant and keeper or protector of one's self, wife, wealth and secrets so also the king.  

Sukra emphatically points out at one place that kingship is due to the merits of previous life (prāk-karma). Several other works also echo this idea. We read in the Āntiparva that kings and all others born in high families have become what they are only in consequence of their penance. In the Mahābhārata, we are told of a region in the heaven where gods bestow kingdom and riches upon men, endowed by their good deeds, and take them away when men fall away from virtue. The Agni Purāṇa declares that repeating the Gāyatri mantra ten million times in this life confers sovereignty.

36. ibid., I, 78-80.
37. ibid., I. 20.
38. Mahābhārata, Śānti., 246.19, 271.16.
and they by bathing for a year in the Panchamrita and by making a gift of a cow to a brāhmaṇa a man becomes a king in the next birth." 39

The king is considered to be a part of the gods (devaṇa) by his virtues and not by any divine ordination. 6ukra observes that the king who is restrained, valaorous, and skilled in the use of arms and weapons; who is destroyer of foes and not independent of nīti, who is a man of parts and has acquired the knowledge of the arts and sciences; who is not an associate of lower classes, who has noble views, who respects old men and follows the nīti and who is respected by meritorious men is known to be a part of gods. 40 The king, who is otherwise is a part of demon and gets hell. 41

6ukra neither invests the king with infallibility nor enjoins absolute obedience to him if he is a wicked or worthless ruler as was expressed by Nārada in the earlier period. 42 The Nārada smṛti says that in the

40. Sār., 1. 70.
41. ibid., 1. 86.
42. Nārada, X. VIII. 31.
form of the king it is really Indra himself who moves about on the earth; that a king, even when devoid of qualities, deserves honour from the people.\textsuperscript{43} On the other hand, Sukra regards the bad, vicious and wicked king as a demon incarnate. He further calls that king a dacoit if he forsakes his duties; disobeys the high ideals of kingship and oppresses the subjects.\textsuperscript{44} In view of Sukra, such a king, in no case, commands the obedience of his subjects.

Sukra openly encourages the subjects to intrigue and conspire against a wicked ruler and even to attempt to dethrone him with the help of neighbouring or feudatory kings and to offer the crown to a virtuous prince or to any other capable member of the royal family.\textsuperscript{45} When the king is addicted to immoral ways people should terrify him by taking the help of virtuous and powerful enemies.\textsuperscript{46} Sukra further observes that a king, though of a noble pedigree, should be dethrone, if he violates dharma; hates good qualities in others; and if his conduct is liable to the destruction of the kingdom and

\begin{itemize}
\item \textsuperscript{43} Ibid., 11.20-33.
\item \textsuperscript{44} ibid., II. 257.
\item \textsuperscript{45} SNS., I. 113.
\item \textsuperscript{46} Ibid., IV. I. 225-26.
\end{itemize}
of the family; the priest with the consent of the principal officers of state should place on the throne another member of the royal family who is possessed of the requisite virtues.

Manu also holds that the king, who harasses his subjects; loses his life, family and kingdom. Several stories of kings, who were killed for their tyranny, are found in the ancient literature. Vena was killed by the Brahmans for his tyranny. The Anusāsana Parva clearly authorises the killing of a king in certain circumstances:

"The people should gird themselves up and kill a cruel king who does not protect his subjects; who extracts taxes and simply robs them of their wealth. Such a king is Kali-incarnate. That king who, after declaring, 'I shall protect you!', does not protect his subjects, should be killed, by the people after forming a confederacy, like a dog that is afflicted with madness."

47. Ibid., II, 274–75.
49. Śānti Parva, 59, 93–95; Bhāgavata Purāṇa, IV, 14.
50. Mahābhārata, Anusāsana Parva, 61, 32–33.
Śukra has emphasised another important notion of the earlier writers about the king with remarkable touch of originality. As early Dharmasūtra writer describes the king as a servant of the people receiving sixteen per cent tax as his wages. Kautilya also places the king on the same footing as his soldiers since both receive wages and are entitled to share the assets of the nation. Narada also regards taxation as the king's pay for the protection of his people. No one ever make a payment, says, Aparārka, without expecting a return. The revenue and taxes, therefore, are paid by the people only as a return for the protection expected from the king. Śukra observes that since the people pay him the proper wages, the king must serve them as a servant, may, even as a slave. Elsewhere, he makes a more realistic statement when he describes the king both as a master and a servant of the people.

51. Baudhāyana Dharmasūtra, i. 10.6.
52. Arthasastra, X. 3.
54. Yājñavalkya Smṛiti, 1.366.
55. RV., IV. 2.130.
56. Ibid., IV. 2.137.
DAILY ROUTINE OF THE KING

Sukra has devoted considerable space to the description of the daily routine of the king. Having got up in the last yama, he should for two muhurtas study the following points. First, how much is the fixed income and how much the certain expenditure? Second, how much has been used out of the things and materials in the treasury? Third, what is the remainder after the transactions from the fixed income and expenditure? Then ascertaining from the record as well as by personal knowledge as to the amount expected to be spent today, he should bring the articles out of the treasury. Then for one muhurta, the clearing of bowels and bathing are prescribed. He should take two muhurtas in prayers, study and charity and one muhurta at dawn in exercise over elephant, horses, and carriage. He should pass one muhurta in giving away prizes. He should spend four muhurtas over writing orders together with estimate of income and expenditure about grains, clothes, gold, jewels and soldiers.

He should peacefully take his meal with his kith and kins for one muhurta. He should observe old and new things for one muhurta. Then he should spend two
muhurtas over matters explained by the chief justice and officers and the same period in hunting and gambling. He should spend one muhurta over the military exercises of the regiments, then one muhurta in evening prayers, one muhurta in dinner, two muhurtas in hearing information given by the secret spies and eight muhurtas in sleep. Happiness increases to the king who works in this way. Dividing the day and night thus into thirty muhurtas, he should pass the time but never waste it in enjoying women and drinking. The work done at the time appointed for it is certain to produce good results. Thus it rains in time; give rise to plenty but otherwise are highly injurious. 57

Several authors and smriti writers have given details regarding the daily routine of the king. According to Kautilya the day and the night are equally divided into eight equal periods of equal length of one and half hours each. The king is advised to devote four and half hours to sleep, three hours to bath, meals and private studies. Recreation in another hour and a half. Kautilya advised to devote an hour and a half.

57. SW., I, 550-74.
half to religious studies. The remaining nine
periods of one and half hours each are devoted to the
business of the state.

The king should start his early deliberations on
defence and finance followed by an examination of
popular complaints. A review of the revenue department
and appointment to officers of the state lead to corres-
pondence with ministers and scrutiny of the reports of
the secret intelligence department. Next the king is
advised to attend to military duties. In Kautilya's
scheme of the time-table the day closes with the even-
ing prayer. 58

Both Kautilya and Ārukra give first priority to
the study of budget in the king's daily routine.
According to Manu, on the other hand, the king should
first of all wait upon śhnamas after rising from his
bed. 59 In this respect Ārukra seems to hold an indepen-
dent view. He advises the king first of all to look
into the budget of the state after rising from the bed.

53. Arthaśāstra, 1.19.
59. Manu, VI. 37.
8. THE KING AND STATE FUNCTIONS

The detailed daily routine of the king given by Kautilya and Sukra clearly indicates that the king had to perform a wide range of duties and functions. At one place Sukra enumerates eight functions of the king. They are: punishment of the wicked, charity and protection of the subjects, performance of Śrīja-
śūya sacrifice and other sacrifices, equitable realisation of revenues, conversion of princes into tributary chiefs, quelling the enemies and extracting of wealth from land. 60

Sukra further makes a broader classification of the functions of the king into two types. 1. protection of the subjects and 2. punishment of offenders.

The protection of the subjects is considered the first and the foremost duty of the king in all works on ancient Indian polity. The Mahābhārata tells that the seven expounders of polity cover protection as the highest duty of the king. 61 Manu states that

60. SNS., I. 23-24.
61. Shanti Parva, 68. 1-4.
the protection of the subjects is the highest dharma. Nārada states that: "His duty is to protect the subjects, to honour or listen to the aged and the wise, to look into the disputes of the people and to be energetic in his functions as king." In the same way Śukra says that the highest dharma of the king is to protect the subjects and to put down the wicked. The duty to protect involves the maintenance of the social order based on the Varpāsvamāvasāsthā. Kautilya lays great emphasis on the duties to maintain the varnas and the Āśramas in their order. He says: "Therefore the king should not allow the people to deviate from their social duties. He, who keeps dharma intact without breach, enjoys bliss in this world and the next." Gautama also advises the king to protect the varnas and The Āśramas according to the rules of The Āśtras and to bring them round to the path of proper duties when they swerve from it.

62. Manusmṛti, VII. 144.
63. Nārada Smriti, Prak. 33.
64. SNS., I. 14.
Sukra considers the proper preservation and maintenance of the established social order as one of the important aspects of the regal functions. To maintain the social order the king is invoked to see that everybody follows his social obligations and charma prescribed by the rules of the varṇa vyavasthā. Hence, if necessary, the king is required to use his coercive power for this purpose. The person, who practises his own social duties, can become powerful and influential in this world. Without strict adherence to one's own social duties and obligations in life there can be no happiness in this life. Practicing one's own duty is the paramount penance.

As the duty to protect his subjects involves fighting the enemies and sometimes it may lead to death, the Dharmaśastras and Sārīti texts, therefore, describe that fighting and death on the battle field is the highest ideal of the Kṣatriyas. Manu tells the king that while protecting his subjects against invasion he should not run away from battle field and thereby promises heaven as rewards for kings who die fighting in battle.67

67. Manusmṛiti, 87-89.
The whole text of the Bhagvatgītā is devoted to this very theme of the duty of a Kṣatriya. To him the highest goal of life is to attain victory in the battle or attain Mokṣa after death on the battlefield. He should fight as a duty without caring for gain or loss, victory or defeat. The Mahābhārata invokes: To die fighting for the protection of cows and Brāhmaṇas is specially commended.68 The Viṣṇudharmaśūtra prescribes: "there is no duty for kings equal to losing one's life in battle; those who meet death in protecting a cow, a brahman, a king, a friend, their own wealth, and their wives enter heaven as also those who meet death in preventing confusion of vēnas caused by adultery etc."69 On the eve of battle the great warrior Bhīṣma says: "it is a sinful act for a Kṣatriya to die in his house from some diseases; the ancient code of conduct for him is that he should meet death from steel."70

These and other similar views of the earlier writers on the duty of Kṣatriya has been remarkably amplified by Śukra in his Sūkraṇītisāra. In his view

68. Śānti Parva, 21. 198; 77. 28-30.
69. Viṣṇudharmaśūtra, III. 44-46.
70. Mahābhārata, Bhīṣma Parva, 17. 11.
war is at once penance, virtue and eternal religion. The man who does not flee from a battle does, at once, perform the duties of all the śvetas. 71 The author holds that "the great position that is attained by the sages after long and tedious penance is immediately deserved by warriors who meet death in warfare." 72 The man who is killed in battle is purged and delivered of all sins and attains heaven. 73 Sukra prescribes war even for śūbhāyānas if there have been aggression on women, priests or there has been killing of cows. 74

Sukra considers war as the ultimate duty of the Kṣatriyas, the class to which a king normally belongs. "The earth swallows the king who does not fight and the Brahmāṇas who does not go abroad just as the snake swallows the animals living in the holes." 75 Heaven is granted for those kings who valorously fight and kill each other in battles. 76 The death of a Kṣatriya in

71. SNS., IV, 7. 626-27.
72. Ibid., 624-25.
73. Ibid., 620-21.
74. Ibid., 599.
75. Ibid., 604-05.
76. Ibid., 616-17.
the bed is considered to be a sin. The Kṣatriya who retreats with a bleeding body after sustaining defeat in battle and is encircled by family members deserves death.

To punish the transgressors of law is an important aspect of the royal function. Manu and Nārada prescribe forcefully the necessity of punishment, the only means of keeping men on the proper path of duty.

Śukra also enjoins the king to punish the wicked by administering justice. He observes that the subjects who follow the orders of the king are always under his authority. The wicked man, on the other hand, is the destroyer of the good. He is the enemy of the state and the propagator of vices.

The king cannot protect the people and the kingdom unless he himself is well protected. The Nṛtivakyāñārita states that if the king is protected, everything is protected and so the king is to be always protected against his own people and the enemies. He is, therefore, advised not to be careless about his own protection.

77. Ibid., 608.
78. Ibid., 614–15.
Sukra also advises the king to examine his food through monkey and cocks for fear of poison. He further says that the king should not live for ever at the same place and never have implicit faith in anybody. He should always be careful but should not think of death.

The royal function includes certain economic responsibilities. In the Agni Purāṇa, the king is required to earn wealth through just means to increase it, to protect it and so spend it is righteous manner. He is further instructed to maintain and protect agriculture, trade routes, forts, bridges and canals, mines and minerals. He is advised to pay attention to capturing the elephants, recruiting the soldiers, and inhabiting the towns in uninhabited regions.

Sukra also prescribes various measures to ensure the economic prosperity of the kingdom. He advises the king to encourage various arts, crafts and industries. He also enjoins the king to keep watch over the state functions and standard of weights and measurements.

79. SNS., I. 653-59.
80. Ibid., 771-72.
81. SNS., II. 397-400.
currency and coinage.

The royal functions as given by Sukra indicates the exalted position of the king in the Sukranītiśāra. The author says if the king is not a perfect guide, his subjects will get into trouble as a boat without a navigator sinks in a sea. Without the governor the subjects don't keep to their own sphere. The office of the king, therefore, is considered as indispensable. The subjects, however vicious must not be without a king. Just as Indrāni is never a widow so also the subjects. The king is considered as the major source for maintaining the social customs and usages. Hence he is rightly called the cause or maker of the time.

9.

THE STATE AND HEALTH AND HYGIENE

The State derives its strength mainly from its people. It is, therefore, an important function of the state to see that the people are not only healthy, strong and free from diseases. This fact never escaped the

82. Ibid., 590–92.
83. Ibid., I. 140–44. Rājā Kālasya Karanaa.
attention of political thinkers and social scientists. We find that the ancient Indians had developed a comprehensive system of medicine which is unique in certain aspects.

Reference to medical practices are traceable from the age of Indus civilization and the age. The Indus people developed an advance system of medicine. They were the first people to utilise the properties of Neem plant along with other medicines. During the age of Rigveda we find professional healers. There are references to the use of an artificial iron leg as a substitute for the limb lost in the battle.¹ In the later Vedic period, codification of the science of healing was completed in the form of Ayurveda or the science of life, forming a separate section in the Atharvaveda. Afterwards innumerable references are found in the classical Sanskrit, Pali and Prakrit literature to the theoretical knowledge as also to the application of the science of healing and surgery in ancient India.

¹ Rigveda, I. 1.15.
PROPITIATORY TREATMENT

The system of medicine and treatment was well developed and besides medical treatment, propitiatory practices were also prevalent in ancient India. In the Rigveda a number of hymns invoke the Sun for curing of the heart-disease and jaundice.\textsuperscript{2} Aevini Kumars, the divine physician twins were famous for curing the patients with medicinal herbs\textsuperscript{3} and for bestowing medicines.\textsuperscript{4}

But the basis of health services, that the State rendered, was in medical organisation which included the training and appointment of the physicians, surgeons and various specialists, construction and maintenance of hospitals, arrangements for the availability of medicines and rules regulating all these establishments as well as for proper sanitation and general hygienic conditions.

\begin{itemize}
  \item \textsuperscript{2} Rigveda, I. 50.11.
  \item \textsuperscript{3} Ibid., VIII. 22.10.
  \item \textsuperscript{4} Ibid., I. 34.6.
\end{itemize}
STATE AND GENERAL MEDICAL EDUCATION

Facilities for medical education and regular training of medical practitioners were available in many universities in ancient India. Kasi and Taxila were two of such universities where all sciences including science of medicines were taught by professors of worldwide renown. During the age of the Buddha the leading professor of medicine at Taxila was Atreya who flourished during 6th century B.C.\(^5\) Jivaka was another famous physician who was contemporary to the Buddha, who studied medicine under Atreya at Taxila.\(^6\) He personally treated Buddha, Ajītesārū and other contemporary dignitaries in those times.

DISCIPLINE DURING EDUCATION

A medical student in ancient India had to observe high standard of discipline ever since the period of training. The well-known Indian Surgeon Susruta prescribes strict conditions for those who seek admission

---

6. Rockhill's Life of Buddha, p. 65
in medical sciences. He says: "He is to keep purity of body and mind. He is to treat patients as if they were his kith and kin, holy men, friends, neighbours, the widow and the orphan, the poor and the travellers." Charaka emphasises that the medical student should help patients as if his own life is at stake. He is never to entertain evil thoughts regarding the wife and goods of his patients; he is to devote himself in words, thoughts and deeds to the healing of his charge, not to report outside the affairs of the house and to be careful to say nothing to a patient likely to retard recovery."  

7. Charaka साहित्य विमानस्थिन, 3, 6-8  
Cf. Ibid., II. 8, 7.
the Sun for destruction of diseases and similarly by king of a wellknown person well-versed in the learning for uprooting disease and signs of the people. Kautilya, while dealing with arrangements for medical attendance, states that the state appointed medical officers. This fact is further corroborated by Rock Edict II of Asoka, where physicians as well as veterinary surgeons are stated to have been appointed by the state.

**SALARY, LAND-GRANT, AND ACCOMMODATION TO PHYSICIANS**

A reference to salary of a physician is made in the Arthasastra where Kautilya recommends two thousand panae per annum to be his salary. In addition to this, he and the veterinary surgeon have been included in a list of those officers who were to be endowed with lands, which they had no right to alienate by sale or mortgage. Matsya Purana states that free accommodation to various types of medical practitioners should be provided within the premises of fortified cities.

---

8. Yajurveda Samhita, Ch.XI, vide Satapatha Brah., 6.5.15.1.
9. Kautilya, Bk. V., Ch.3.
11. Kautilya, Bk. V., Ch.3.
12. Ibid., Bk. II. Ch.1.
13. Matsya Purana., Ch. 217.25.
FUNCTIONS OF PHYSICIANS

The physician discharged his function, and duties in the best interest of the village performing following functions: Firstly, he looked after every villager's health as well as his disease. Secondly, he was responsible for sanitation of the entire village. Thirdly, he imparted general training in personal hygiene and village sanitation. Fourthly, he made use of all medicinal plants available in his village and prepared drugs himself, thus contributing to medical economy providing medicines at the lowest cost. Fifthly, he helped the state in the regular plantation of medicinal and herbs plants which were not grown in his village and which were often needed in preparation of various drugs. Sixthly, the superintendent of agriculture sought his advice in plantation of medicinal herbs. Thus he was instrumental in maintaining the well being of people as a physician, a sanitary officer, a Pandit and a well-wisher.

14. Kautilya, Bk. II. Ch. 24.
CLASSIFICATION OF MEDICAL PRACTITIONERS

Medical practitioners in ancient India mainly formed the following classes according to their ability and specialisation:

(i) Ordinary physicians (Bhisaj or Chikitsaka).
(ii) Specialists in treatment of the cases of poisoning (Jangalivid).
(iii) Specialists in Gynecology (Garbha Vyadhishansthāḥ) and Obstetrics (Ṣūtikā-Chikitsakāḥ).
(iv) Military Surgeons.
(v) Veterinary Surgeons.\(^\text{15}\)

Besides, there were certain other experts. Buddhist Traditions refer to the famous physician Jivaka who was also an expert in Paediatrics. Megasthenese remarks that there existed a class of travelling physicians who visited small villages and hamlets going from one place to another dispensing medical aid and preaching medicine and religion as well. They resemble the Periadeutēs or the travelling physicians or ambulant physicians of ancient Greece.

Arrian informs about some experts in Snake-bite treatment telling that Alexander had in his camp several proficient Greek Physicians; they confessed their inability to deal with the snake-bite case in Punjab. Alexander was obliged to consult the Indian Vaidya. Alexander was struck with the skill of Indian Physician and according to Nearchos he employed some good Vaidyas and ordered his followers to consult them in case of snake-bite and other dangerous ailments. Greeks noticed how some of these had specialised in medicine and practised as physicians, but preferring to cure diseases by diet rather than drugs. They invented valuable ointment and plasters. They also cured diseases by mantras and amulets. They specialised in physiology, pharmacy and astronomy. They abstained from wine and women. 16

There were also some medical experts who could detect poison as a measure of precautions taken for the health of the king.

In Matsya Purana the physicians of cows, horses

16. Law N.N., Studies in Ancient Indian Polity, p. 74 ff.
and elephants have been mentioned. 17

Kautilya mentions veterinary surgeons in charge of horses and elephants and other animals. 18 These evidences indicate existence of an elaborate system of medical relief for both men and animals. 19

THE ROYAL PHYSICIAN

Personal care and treatment of the king was most important in ancient India and proper care was taken to get the best physicians for his care and health. The royal physician or medical adviser of the king was picked up after very careful consideration. Visnudharmottara Purana mentions the royal physician as 'Pranacharya' and elaborate on his qualifications. 20 Susruta uses the term 'Pranapati' for royal physician whereas Matsya Purana 21 follows Visnudharmottara in terming royal physician as 'Pranacharya'. At some places he has been called 'Bhisak'. 22 About the special signifi-

17. Matsya Purana, 217.25.
20. Visnudharmottara, II. 24. 33-34.
cance of the royal physician as compared to other experts Nizami-i-Arudi, a court poet of Samarkand, remarks, in his Persian work 'Chahar Maqala', that the role of a royal physician was of a greater importance in maintaining proper order in the constitution of king's body. King was able to perform all sorts of activities for the wellbeing of the people only if he was quite fit and physically healthy. Kalidasa also testifies to this fact and tells that body is the source of all Dharma.23 A healthy body of king could be secured only by constant services of an able and trustworthy physician because the king was living in perpetual fear of being poisoned and his busy life made continuous inroads on his personal health. He had, therefore, great need to entrust his physical health and everyday life to the regulation and supervision of a well-reputed and skilled physician. A royal physician had to supervise two aspects of the life of a king. First, the maintenance of good health and long life and secondly the ability to combat disease.

23. Kumārasambhavaṃ. V. 33.
Among the royal physicians of ancient India Jīvaka, the physician of Śāśūnāga king Bimbisāra and Ajātasatru of Rājagraha, who was contemporary to the Buddha, and Charaka the physician of Kusāna king Kaniska are noteworthy examples. Jīvaka, besides his services in the empire of Magadha he also treated other dignitaries. He had not only cured chronic jaundice of King Chanda Pradyota of Avanti but had also successfully removed, by surgical operation, a tumor from the body of the Buddha. The treatise composed by Charaka 'Charakasaṃhitā' is the Bible of medical practitioners of indigenous system of medicine in India even till this day. He had also successfully cured a chronic disease of the queen. In one occasion his services were placed at the disposal of Vatsarāja Udayan of Kausāmbi.

THE STATE AND ORGANISATION OF HOSPITALS

Hospitals have played an important role in treatment and proper maintenance of health through the ages and they were properly organised in ancient India. The early medical and surgical works like Suśruta Samhīta have plenty of references regarding hospitals in
ancient India, usually known as Punyasala or Arogyasala. Megasthenes remarks that there were hospitals where the diseased, the aged and the helpless persons were treated free of cost. The maternity homes for women and children were also maintained by the State. Charaka mentions of a nursing home and suggests that the king should provide the orphan, the aged, the infirm, the afflicted and the helpless with maintenance; provide free treatment to women when they are pregnant and also to new-born children. These examples fully testify to existence of maternity and child welfare homes in addition to general hospitals or separate wards for this purpose in hospitals. Inscriptions of Asoka indicate that there were veterinary hospitals and general hospitals.

The Chinese pilgrim Fa-hien, who visited India during the years from 405 AD to 411 AD, describes the charitable dispensaries at Pataliputra. He records:

24. Charaka;
"The nobles and house holders of this country have founded hospitals within the city to which the poor of all countries, the destitute, the crippled and diseased may repair. They received every kind of requisite help gratuitously; physicians inspect their disease and according to their cases order them food and drink and medicines or directions; every thing, in fact, that may contribute to their case. When cured they depart at their conveniences."

Even Vincent Smith admitted the superiority of India in establishing such welfare institutions. He remarks:

"It may be doubted if any equally efficient foundation was to be seen elsewhere in the world at that date; and its existence, anticipating the deeds of modern Christian charity, speaks well both for the character of the citizens who endowed it and for the genius of the Great Asoka, whose teaching still bore such

25. Fa-hien, Travels, p. 79.
wholesome fruit many centuries after his
decease.”

The earliest hospital in Europe, the Maison Dieu
of Paris, is said to have been opened in the seventh
century. Another Chinese pilgrim Huen Tsang states
in his accounts that Haresa built hospitals provided
with food and drink and there stationed physicians
with medicines for travellers and poor persons. He
mentions that charitable institutions called ‘Punyasala’
were common in India and especially describes one of
them founded by the benevolent King. Such a house, he
states to have been in Multan. It provided food and
drink and medicines for the poor and the sick affording
succour and sustenance.

Mahavamsa throws much light on the existence of
hospitals in ancient India. It is said that King
Dappula I (827 AD) built a hospital for the city of
Pulatthi and another at Pandaviya. King Kassappi
(929 AD) built a house for the sick on western side of
the city. King Gana (955 AD) furnished all hospitals

with medicines and beds and King Parakkama Bahu built a large hall that could contain many hundreds of sick persons.

The inscription of Vira Rajendra Deva Chola, issued in 1067 AD speaks of 'Sri Vira Cholesvra' a hospital, containing fifteen beds. Excavations at Kumarhara near Patna have brought to light an inscribed urn bearing the words 'Arogya Vihara' which indicates the existence of a monastic hospital at the site and also that the utensils used in hospitals were specially prepared and labelled.

We have literary evidences that king Janaka of Videha had constructed an ophthalmological clinic specially for the treatment of all sorts of ophthalmological diseases and this gives us an idea about the specialization achieved in ancient India in the field of medical practices. 29

STATE HOSPITAL: THEIR STAFF AND FINANCES

In hospitals there were certain other workers

other than physicians. The hall built by Prakkama Bahu allowed to every patient one male and one female attendant. Sri Vira Cholesvara hospital had a physician, a surgeon, two male and two female nurses, one servant, one gate-keeper, a washerman and a potter. Running of these hospitals required enough amount of money. Their expenses were being met either by royal treasury or by public charities and donations. The Malakapur stone Pillar inscription of 1262 records the donation of several villages by Kakatiya Queen Hudramma and her father Canapati. If the income accruing from these one third was for a maternity home and another one third for a hospital. Vira Râjendra Deva's inscription incorporates the provisions for running of Sri Vira Cholesvara hospital. 31

Construction of hospital in ancient India was an act of great merits and they were constructed by the State and rich people, benevolent individuals or the society. The construction of a hospital was carried


out according to certain plan and specifications.

Kautilya, while prescribing planning of a town, tells that to north-west should be shops and hospitals. In centre of the city apartment of gods, such as Aparajita, Apratiratha, Jayanta Siva, Vaisravana, Asvins and the abode of goddess shall be situated.

Charaka also tells about hospital buildings. It must be strong and auspicious, well-ventilated, surrounding scenery being pleasing but free from droughts and smoke and dust and should not exposed to glare and sun. There must be additional ground for privy, bathroom and kitchen.32

Susruta directs specially built rooms for surgical patient operated upon for diseases like inflammatory swelling, wounds etc. which should be situated in healthy locality free from droughts and the Sun; the bed should be soft, spacious and well-arranged and properly furnished and comfortable.33

32. Charaka Samhitā, I. XV & XI. V. 45.
33. Susruta, I. XIX.
MEDICINES AND MEDICINAL RESEARCH

The importance of effective medicines in proper maintenance of health hardly needs any emphasis. In ancient India medicines were in use even from the earliest times. During the Indus Civilization we come across several examples of indigenous medicines. The people of those time had discovered several medicines including sīlajit, bones, horns and plants. They were perhaps first to know the medicinal value of neem tree. We learn about them from a number of references in the Rgveda. A hymn in Rgveda pertains to cure of tuberculosis by medicine. Another hymn refers to collection of medicines. Asvins are invoked to cure patient with medicinal herbs. Soma, the favourite drink of the period, is described to be a medicine for the patients. In later age we find references of medicines in the Rāmayana. The Matsya Purāṇa and various other sanskrit, Pali and Prakrit works.

34. Rgveda., X. 97.21.11.
35. Rgveda., X. 97.6.
36. Rgveda., VII. 61.17.
37. Rāmayana, II. 100. 42.
38. Matsya Purāṇa Ch. 229. 39.
The gift of medicine was considered an act of great merits. Hemadri, 39 Samvarta 40 and Agastya 41 tell that one who gives medicine as a gift lives long, happy and without disease. About the distribution of medicines we find an example of Harsa for whom Yuan Chwang says, "Every year there assembled the sramanas from all countries and on the third and the seventh days he bestowed on them in charity four things of alms: food, drink, medicine and clothing."

Several methods of preparing medicines are given in a number of works on Ayurveda. Rules for preparing various kinds of medicines as well as medical and surgical operations are prescribed in the vinayaka text. 42 For these, medicinal herbs were the essential requirements. Several steps were taken for plantation and growth of these medicinal plants and herbs. Some portions of fields, cultivated directly under the government supervision, were set apart and used for

39. A noted Physician and author.
40. A noted Physician and author.
this purpose. These herbs were also grown in pots in the huts and houses. The State took such active interest in this direction that whenever there were no herbs, that were beneficial to men and cattle, they were imported and planted. Medicinal plants were also grown in marshy ground. There must have been horticulturists, too to look after botanical gardens for the growth of medicinal plants. We learn from the edicts of Mauryan emperor Ashok. About botanical gardens for the culture of medicinal plants indigenous and foreign, including herbs, roots and fruits.

PRESERVATION OF MEDICINAL PLANTS AND HERBS

Preservation of these medicinal plants constituted a responsibility of the State and suitable rules were framed from time to time to secure their growth. It is mentioned by Kautilya that those who destroyed trees, useful plants and herbs were liable for severe

43. Law, N.H., Studies in Ancient Indian Polity, p. 82 Cf. Strabo XV.1.21.
45. Gopal, M.J., Mauryan Public Finance, Ch.XIII,p.17.
punishment. 47 Manu prescribes that one who unnecessarily cuts medicinal herbs planted in cultivated soil or grown wild should, in order to absolve himself of the sin, follow a cow and subsist on milk alone for one day. 48

COLLECTION OF MEDICINES AND MEDICINAL PLANTS

Yuan-Chwang narrates how the father of Bhikkhu Srutavimsatikoli had made arrangements for getting the supply of fresh medicines. He says: "From his house to the snowy mountains he has established a succession of rest-houses from which his servants continually went from one place to the other. Whatever valuable medicines were wanted they communicated the same to each other in order to procure them without loss of time."

Matsya Purana has got a separate chapter which deals with the collection of medicines (Gadhyadisana-chayam). 49

47. Kautilya Bk. III. Ch. 19.
48. Manu. 11. 145.
49. Matsya Purana, Ch. 217. 34 Cf. Sukra IV. 145.
STORAGE OF MEDICINES

In order to ensure adequate and timely supply, proper storage of medicines in necessary. It is said that in the royal households all kinds of medicines, useful in midwifery, were kept. Hospitals were equipped with store-rooms containing medicines in such large quantities as could not be exhausted by years of use. 50

Kautilya mentions that a store of medicines adequate for the requirements of many years should be secured, and old stocks should be replenished by fresh ones. 51 Thus it is evident that ancient Indians were aware of the fact that after sometimes the medicines begin to lose their properties. The fact that the towns had medical stores is confirmed by the testimony of Kautilya. 52

STATE CONTROL AND REGULATION FOR MEDICAL PRACTICES

Medical practice, given a free hand, can play with the lives on account of carelessness, laxity.

50. Law, J.W., Studies in Ancient Indian Polity, p. 74 ff.
51. Kautilya, Bk. II. Ch. 4.
52. Ibid., Bk. II. Ch. 4.
malice, prejudices and various other reasons and thereby create havoc in the society. Therefore, the State controlled and regulated medical practice in the land and framed such rules that could avoid the misuse of privileges.

The first step in this direction was concerned with the welfare of the people from fake medical practitioners and the state used to take stern measures by enactment of special laws forbidding these quacks to practice and cheat the innocent people. Manu states that such pretending physicians are liable for serious punishment. 53 Sukra recommends ex-communication of a quack from the state. 54

The state had framed rules under which physicians had to report to government the cases of dangerous diseases. They were fined in case of deaths from such unreported diseases. Kautilya clearly states that any physician who undertakes to treat in secret a patient suffering from ulcer or excess of unwholesome food or


54. Sukra. Ch. IV. 97.
drink as well as master of the house (wherein such treatment is attempted) shall be innocent only when they (the physician and master of the house) make a report of the same to either Gopa or Sthanika, otherwise both of them shall be equally guilty with the sufferer. 55

It was also the duty of the state to see that treatment was done properly. Manu tells that all physicians who treat their patients wrongly shall pay a fine, in case of animals the first or the lowest and in case of human beings the middlemost amercement. 56 Narada adds to this statement of Manu, "But this refers to cases when death is not the result of wrong treatment, for if that is the case, the punishment is greater." Kautilya also observes that error of treatment causing death was more heavily punished. A surgeon was to lose the limb when he caused a patient to lose his life by his mistake in operation. 57 Special laws were enacted to ensure that medical practitioners excercise due precaution in their treatment of patients

55. Kautilya., II. 36.
56. Manu., IX. 284.
and physicians were cautioned in their treatment of patients and physicians were cautioned against gathering experience at the cost of lives of hundreds of patients. There was also a provision for penalty the proved case of carelessness on the part of physician causing the death of patient and aggravation of disease owing to his negligence or indifference. It was treated alike a case of assault or deliberate violence. 58 All these references unambiguously establish that the State strictly controlled and regulated not only medical profession but also the veterinary practice. Besides these measures one of the committees of municipal administration, besides census, used to record the cause of death and made a probe in the event of something unusual coming to its notice. 59 This way, the State made comprehensive arrangements for upkeep of the health of the people. Other salient features of the medical care included the following:

First, psycho-therapy offered to mental patients;
Secondly, friends and near relatives were permitted

58. Ibid., IV. 1 Visnu V. 175-177. Yajnavalkya.
to soothe the patients by story-telling and lively conversation, which were more helpful in the treatment. Third, no caste distinction was under consideration during treatment were treated equally in hospital. Fourth, hospitals were primarily run for the benefit of the poor people who were unable to afford treatment of private physicians at home as sometimes it was the costly treatment.

Fifth, hospitals were well-equipped. Physicians with progressive outlook, spirit and selfless devotion to alleviating the miseries of suffering mankind were engaged. Wells of the hospitals were, probably, labelled with instructions relating to such mottos and welfare of mankind.

Sixth, the work of construction of hospital was considered bestowing great merit to the donor and construction was carried out under the guidance and supervision of royal architects, well-versed in the science of hospital architecture.

61. Kautilya. Bk. II. Ch. IV.
ARMY MEDICAL CORPS AND AMBULANCE SERVICES

The above mentioned health organisation was mainly concerned with the civilians. Military personnel also required medical attendance and in a way, they needed more than civilians. While on the battlefield there were innumerable cases of injuries. We have already noted, while dealing with the types of medical practitioners and their functions, as stated by Kautilya, that there existed well organised Army Medical Corps along with the Ambulance facilities. 62

He records that army surgeons and experts with surgical instruments and appliances, remedial oils, bandages and nurses with appropriate food and beverages accompanied by army and their presence encouraged the soldiers. 63 "Kautilya's explicit mention of physicians with surgical instrument, medicinal oils and cloth and of women with food and beverages in the earliest reference we find in Indian history, and perhaps it is the first in the world, of a Red Cross organisation during military action." 64

62. Ibid., Bk. X, Ch. III. 369.
63. Kautilya, Bk. XI. 3.
64. Saleatore, B.A., Ancient Indian Political Thought and Institutions, p. 313.
PROVISION OF MEDICAL AID TO FOREIGNERS

In ancient India there were regular visitors from foreign countries. They were visiting this great land as pilgrims and sometimes to learn ancient wisdom. State, in addition to their various interests, had also to look after their health. Regarding medical care and related arrangements Megasthenese observes: "should any of them (foreigners) lose his health, they send physicians to attend him, and take care of him otherwise, and if he dies, they bury him and deliver over such property as he leaves, to his relatives." Diodorus and Strabo also confirm these observations of Megasthenese. This indicates that the State realised that proper care and treatment of the sick foreigners formed one of the duties of the state and government and shows that physicians, with medicine and appliance, were being kept in readiness to meet the emergencies. In view of these observations we find it a befitting remark that it is improbable that in a state where foreigners were so readily attended to, the local people had no

65. Megasthenes. Frag. XXXIV.
66. Diodorus. II. 42.
67. Strabo. XV. 1.50.
medical aid from the state. 68

REMEDIES AGAINST OUTBREAK OF EPIDEMICS

At the time of an outbreak of epidemics and pestilence, the responsibility of State increased enormously in the field of health services and it had to come to the task of fighting the menace of these calamities with aggravated interest and initiative. Kautilya tells that special measures were adopted against epidemic outbreaks. Physicians were sent about the towns distributing medicines while saints and ascetics were at work on the employment of religious remedies. 69 The same measures were adopted in the case of cattle plague. 70 The Asvalayana and other Ghyasutras refer to a sacrifice 'Sulagava' performed for averting plague in cattle. Banerjea supports the contention and identifies this sacrifice depicted in Yaudheya Coins bearing the post with a recurved top, the lower part of which is put inside a railing and a bull appearing before it. 71

68. Copal, M.H., Mauryan Public Finance, Ch. XIII, p. 177.
Cf. Megasthenes Frag. XXXIV, Strabo XV. 1.50.
69. Kautilya, Bk. IV. Ch. 3.
70. Ibid., Bk. IV. Ch. 3.
71. Banerjea, J.N., 'Interpretation of a few symbols in some Tribal Coins of Ancient India' in Altekar Commemorative Volume 1962.
Another measure of importance during the epidemics was taming of such birds which had a gift from the nature to foresee the arrival of epidemics. Their activities warned in time and the state prepared to face the menace. For this purpose, persons understanding their signs were also kept alert.  

MEDICAL CONFERENCES

We come across the evidences which disclose that in ancient India, there used to be also the medical conference where all kinds of diseases and their cure by medicine and surgery were thoroughly dealt with. Taxila had been one of the centres of such conferences where physicians from various countries assembled. Decisions of all medical associations there were recorded by Charaka.

THE STATE AND PUBLIC HYGIENE

Ancient Indians believed that prevention was always better than cure and thus we find that they observed the principles of public hygiene in their

---

72. Kautilya. 3k. I. Ch. 19.

73. Law, N.N., Studies in Ancient Indian Polity, p.94.
daily life as well as while undergoing medical treatment. It was the responsibility of the State to see that better hygienic conditions were maintained in the land and the diseases did not get an easy access into the society. For this the State resorted to contain strict measures intended for prevention of adulteration and sanitation, both being detrimental to public health.

THE STATE AND THE PREVENTION OF ADULTERATION

We learn from literary texts that in ancient India there were strict measures adopted to prevent all kinds of adulteration of grains, oils, alkalies, salts, scents and medicines. Anyone doing so was severely punished. 74

The medicines served to the king were in the first instance proved as to their purity and then tested by the physician. 75 In order to check any possibility of adulteration and poison these birds were domesticated who were known for their sensitiveness to poison. 76

74. Kautilya, Bk. IV. Ch. 2. Cf. Manu. IX. 291.
75. Kautilya, Bk. I. Ch. 20.
76. Ibid. Bk. I. Ch. 19.
THE STATE AND SANITARY MEASURES

The health of the people in cities or crowded habitations was secured by observing strict sanitary regulations. Throwing dirt or causing mud or water to collect on the ordinary roads or in the king's highway was a punishable crime. In case of such obstructions on the king's highway, the fine was doubled. Committing nuisance at places, held sacred, reservoirs, temples and royal buildings was punished except in cases where such pollution was forced by medicine, disease or fear. 77 Throwing carcasses of human corpse, small or big, inside the city was also a punishable offence. Carrying dead bodies through city gates or along paths which were not prescribed for that purpose, as well as, the entering or cremation of dead bodies beyond the limits of prescribed burial places and crematoriums, was also a violation of the sanitary regulations and was punishable. Corpse had to be carried through the prescribed routes and had to be burnt at prescribed places. 78 Owners and occupants


78. Kautilya, Bk. II. Ch. 36.
of houses were bound to keep their gutters clean for free passage of waters.\textsuperscript{79}

SAFEGUARDS AGAINST INFECTION AND INSECTICIDES

The danger from rats as carriers of infection was wellknown and suitable measures were taken for the destruction of rats. Cats and mongooses were let loose in order to kill those rats, with penalty to those people who would catch them. Poisoned food for rats was also widely distributed at rat-holes. Where the epidemics spread in virulent form, a Rat Cess was imposed on citizens who were to trap a fixed number of rats per day.\textsuperscript{80}

Also there were measures against flies, mosquitoes and other insects which were killed with the help of insecticides.\textsuperscript{81} The Matsya Purana records that the king should accumulate those medicines in town which may destroy the insects which are harmful.\textsuperscript{82}

\textsuperscript{79} Ibid., Bk. III, Ch. 8.
\textsuperscript{80} Ibid., Bk. IV, Ch. 3.
\textsuperscript{81} Ibid., Bk. IV, Ch. 3.
\textsuperscript{82} Matsya Purana, Ch. 217. 82–83.
STATE ADMINISTRATION OF HEALTH SERVICES

The wide network and organisation of health services required a constant supervision and vigilance for its smooth functioning. We know from the edicts of Asoka that Dharma-mahamatras, who constituted a separate class of officers under the state department, were looking after this work connected with the organisation of measures for the relief measures for removing the suffering of both human beings and beast. They seem to have been responsible for various works of public utility, hospitals, supply of medical men, medicines, drinking water and rest-houses for travellers, etc. 83

ACTIVE INTEREST OF THE STATE FOR SOCIAL WORK

All these measures were intended for the welfare of the people and contributed greatly to general social progress and thereby led to mental and moral progress of the society which helped the people considerably in the nation building activities.

But the State was not content with these appreciable arrangements only. The head of State usually took personal interest to see that the machinery set up by the state for health services was working efficiently. How much conscious the State was in the direction may be well imagined from a story in Mahavamsa which after describing the facilitating arrangement made in connection with a hall for the treatment of patients by king Parakkrama Bahu further tells that he took personal care to attend to different requirements of the sick people, and engaged the physicians to look after them round the clock. On certain days he used to put off his royal robes and after that he used to observe the precepts in order to purify himself and put on a clean garment, then he used to visit that hall with his ministers. Being endowed with a heart full of kindness and compassion he would look at the sick with an eyeful of pity, and being eminent in wisdom and skilled in the art of healing, he would call before him the physicians that were employed there and enquire fully the method of their treatment and if he felt that the treatment that they had pursued was wrong, the king, who was best of the teachers, would point out wherein they had erred, and giving reasons therefore would, make clear them the
course that they should have pursued according to the science of medicine. To some sick persons he would himself give medicines. In this manner, indeed, this merciful king, free from diseases, would himself cure the sick of their diverse diseases from year to year. 84

We can safely conclude that it was the royal patronage and active interest of the State and the ruler which kept the Indian system of medicine alive through the ages despite fierce rivalries of other medical systems and it is still flourishing serving the masses upholding the eternal message which was the highest ideal for any welfare State. It may be summed up in the words of Rantideva: "Neither I desire the kingdom, nor heaven, nor rebirth. All that I desire is the end of sufferings, sorrows and sighs of the suffering beings."

10. THE STATE AND ITS ADMINISTRATIVE SET-UP

I have tried to discuss matters relating to the functions of the king, his responsibilities and obligations towards the people and various other relevant

---

84. Mahavamsa. Part II. Ch.LXII, pp. 194-95.
topics in foregoing paragraphs. Now I propose to take up other important functions of the state administration.

The king is personally required to accomplish several tasks every day. He could discharge his numerous functions and duties with the assistance, help and advice of a well-organised administrative machinery at the centre and the territorial levels. Several authors on polity and administration have thrown enough light on administrative set-up at the central headquarters and territorial sub-headquarters. But Sukra has devoted enough space to this aspect. He gives us an insight into the actual functioning of the administrative organisation of the state. His views on the role of the crown prince, the ministers and the high officers in charge of the various departments of the central secretariat deserve our attention.

THE CROWN PRINCE: HIS ROLE IN ADMINISTRATION

In the appointment of the crown prince the king is advised to be very careful because the office of the crown prince is supposed to be indispensable to the
kingdom as hands to the human body. ¹ According to Sukra, two main factors should be taken into consideration while selecting the crown-prince. They are birth and personal merits. The offspring of the legally married wife should be selected as crown-prince if he could perform the tasks of the state business without idleness. ²

It appears that the king's own son was not the only claimant to the office of the crown-prince. Sukra lists eight persons as probable candidates to this office. In the first instance an uncle, who is younger than the reigning monarch, should be appointed to fill this post. In his absence king's own younger brother or his own elder brother's son are to be considered. When these three categories have failed the claims of his own sons come up for consideration. The claims of an adopted child or daughter's son or sister's son have been listed successively after the claims of the king's own son. ³

---

¹ SNS., II. 23.
² Ibid., II. 26-27.
³ Ibid., II. 31 ff.
Sukra has described in detail the duties of the crown-prince. After attaining status of the crown-prince one should not get demoralised, should not insult or oppress one’s mother, father, preceptor, brother and sister or the favourites and near and dear ones of the reigning monarch or the common men. He should abide by his father’s command; he should not display his greatness to all his brothers. He should know the inward feelings of the subjects. Every morning he should bow down to his father, mother and preceptor. He should then narrate to the king the work accomplished by him day after day. Thus living in the house and maintaining the unity of the family, the crown-prince should satisfy the subjects well by his learning, actions and character. He should also be self-sacrificing and vigorous and thus bring within his sway all around him.

11. THE COUNCIL OF MINISTERS

The council of ministers played an important role in the administrative machinery. It had its origin in very early times. Several terms indicative of the existence of the institution are abundant in early
Sanskrit literature. Among them Sabha, Samiti, Samgati, Vidatha and Parishad are quite notable.

Kautilya says that state administration depends on collective efforts. As one wheel cannot run the chariot the state cannot function with one person. Therefore, the king should appoint ministers and he should listen to their opinions. Similar are the views of Manu.

Sukra regards the council of ministers as an indispensable instrument or organ of the administration, next in importance only to the king. He says: "It is difficult for a person single-handed to accomplish even an easy task; how then can a kingdom, which entails heavy responsibility, be managed by an individual without the aid of assistants?" The king is, therefore, advised not to act without the advice of his ministers though he may be well versed in all the sciences and a pastmaster in statecraft. If he acts

1. Arthashastra, I. 7.
2. Manusmriti, VII. 55.
3. SNS., II. 1.
4. Ibid., II. 2.
according to his own will, he would have to face calamities. He would get estranged from his kingdom and alienated from his people.  

He observes that there are diversities of human conduct and character as well as grades of excellence according to their personal traits and temperament. It is not mentally possible for a single individual to know all the differences in buddhi-vaiabhava of the varieties of intellectual gift as well as varieties of vyavahāra or human conduct. It is, therefore, necessary for the development of the state that the ruler should appoint assistants and advisors.

They should be high by birth, attainments and character, valorous, devoted to duty and sweet tongued; who could advise well and bear pain; who have virtuous habits, and who, by the strength of their character and wisdom, can advise a king who has gone astray. They should be pure and have no envy, passions, anger, greed and bad temper. If the king becomes an enemy of virtue,

5. Ibid., II. 4.
6. Ibid., II. 5.
7. SNS., II. 5.
8. Ibid., II. 14-18.
morality and strength, people should desert him because he will ruin the kingdom.\(^9\) For the proper functioning of the state, the priest, with the consent of the ministers should install one as the king who belongs to his family and is fully qualified for the position.\(^10\)

Sukra considers ministers as effective and powerful checks on the king. The ministers should not be merely king's men working according to the sweet will of their master, but they should have an individuality and independence of character by which they can control the whims and wilful conduct of the monarch and systematically govern the course of the state's administrative machinery.

In his opinion good ministers are those whose control on administration is felt and feared by the king.\(^11\) He asks most pertinently: "Can there be prosperity of the kingdom if there be ministers whom the ruler does not fear?"\(^12\) In his opinion an autocratic ruler, who does not listen to the honest counsels of

---

9. Ibid., 549-50.
10. Ibid., 551-52.
11. SNS., I, 166.
12. Ibid., II, 164-65.
his ministers, is a thief in the form of a ruler and a veritable exploiter of the people’s wealth.\textsuperscript{13} Offering honest, bold and good counsel is the prime duty of a minister who masters the king by the force of his mantra just as a snake charmer subdues snakes.\textsuperscript{14} The king always suffers through bad advice as the patient through a bad physician, the subjects through bad kings, the family through bad children and the soul through bad motives.\textsuperscript{15}

THE MINISTERS: THEIR QUALIFICATIONS

Almost all writers on polity desire that the minister should belong to a good and well-to-do family. He should have studied the niti-śatra; must possess character and personality; should be distinguished by his modesty in behaviour, courage in action, and sweetness in speech. Sukra states that while selecting a minister, undue importance should not be attached to the caste and family.\textsuperscript{16} Somadeva says ministers must be

\begin{itemize}
\item \textsuperscript{13} Ibid., 515-16.
\item \textsuperscript{14} SNS., III, 561-62.
\item \textsuperscript{15} Ibid., 580-81.
\item \textsuperscript{16} SNS., 54-55.
\end{itemize}
endowed with the real personal character. Lack of principles vitiates all the personal merits and qualities. They must be well-born since an ill-bred person is proof against all shame and is capable of committing misdeeds. They must be free from all kinds of passion. They must be resourceful and courageous for there is no use of a minister who is not of help in adversity.  

Early smritis have laid down that only Brāhmaṇas should be appointed to the post of ministers. This principle of the caste factors held by the early writers on polity was probably not acceptable to Śukra. In fact Śukra expressly observed that the ministerial appointments should not be made on the basis of caste considerations. It is only on the occasion of marriage and dinner that one should enquire about the caste. Somadeva recommends that the king should select ministers only from among the three superior castes namely Brāhmaṇa, Kṣatriya and Vaiśya.  

17. Nītivākyāṃṛta, X. 111.  
18. Ibid., Chap. 25.
THE MINISTRY: ITS CONSTITUTION

The texts on ancient Indian polity and administration differ considerably about the strength of the council of ministers. The Mahābhārata favours a council consisting of eight ministers. For Manu, a council consisting of seven or eight members, is acceptable. The Arthasastra reveals an acute divergence of opinion amongst various schools of political thought existing before its composition. We learn that Mānava, Barhaspatya and the Aṣṭādhyāyī schools were in favour of a council of twelve, sixteen and twenty members respectively but Kautilya himself favours a small ministry consisting of three or four members.

Somadeva in his Nītīśākyāṁrita opines that there should be three, seven, or eight ministers. He, however, does not appear to be particularly dogmatic about the strength of the council of ministers. In ultimate analysis he feels that if one minister possess all the qualifications necessary for the proper

1. Mahābhārata, XII. 85.
2. Manu, VII. 54.
3. Arthasastra, I. 15.
4. Nītīśākyāṁrita, Ch. 10.
administration of the kingdom, more ministers should not be appointed.

This obviously proves that Somadeva was in favour of a very small ministry. 5 7 Sukra, however, recommends a ministry of about ten ministers but refers to another view recommending a ministry of eight only. 6 Manasollasa refers to a ministry of seven or eight as recommended by Manu. 7

It appears that these divergent views regarding the strength of the ministry or number of ministers exhibit the varying degree of needs of the state in ancient India at different periods according to the size and need of the kingdoms. It seems that the bigger states had more than one minister for supervising a single department and sometimes one minister controlled more than one department.

It has been pointed above that the council of ministers consisting of seven or eight members has been considered as a model by a long tradition. When

5. Ibid., Ch. 10.
6. SNS., II. 70-71.
7. Manasollasa, I. 57.
Shivaji, a Maratha hero, wanted to revive the old Hindu administrative system, he also formed a council of ministers consisting of eight members popularly known as 'aṣṭapradhāna'.

It appears from the Śukranītisāra that the council of ministers covered the entire field of state administration. Its duty was to maintain law and order, to promote prosperity, and every disasters, to ensure proper administration of justice, to supervise the collection of revenue and sanction the necessary expenditure. These activities embraced the wide range or scope of the administration of the kingdom.

Almost all the works on ancient Indian polity and administration including the early smṛtis and Dharmaśāstras do not throw much light upon the actual procedure or functioning of the council of ministers and exact procedure or modalities for the distribution of work to the ministers. The epigraphic records are also of no avail. In this field the Śukranītisāra appears to be a unique polity text that throw considerable light on this aspect of public administration. According to Śukra ministry consisted of Purohita,
Pratinidhi, Pradhana, Sachiva, Mantri, Prādvivāka, pandita, Sumantra, Amātya and Dūta. This shows the distribution portfolio to the ministers according to their position.

Śukra has established a hierarchy to indicate the relative position of these ten members of the council in order of warrant. According to him "the priest is superior to all others. He is the mainstay of the king and the kingdom. The Pratinidhi or the Viceroy comes next. Then comes the Premier; then the Sachiva, then the minister, then the judge, then the Scholar, then comes Sumantra, then the Amātya and lastly, the spy or the dūta.

THE PURCHITA: HIS DUTIES AND ASSIGNMENTS

The Purushita or the state priest was prominently included in the council of ministers in early times. In the age of the later saṁhitas he was given an important position in the council of Ratnīna. It appears that The early practice and tradition continued

8. SNS., I. 150-55.
uninterruptedly while including the name of the Purohita in the council of ministers. However, it is not beyond doubt that the Purohita continued as a member of the council in the medieval period.

It has been rightly pointed out that the records of Chedis, the Senas and the Grahadas, separate him from Mantrians or ministers in the list of royal officers. Probably this indicates differences in matters relating to the state administration. Some of the governments might not have included him in the ministry due to their traditional practices and preferences.

Besides, the knowledge of sacrificial rites and ceremonies, the Purohita was expected to be well grounded in the different branches of learning—the three Vedas, the six Vedangas, the Dharmaśāstra and the Nītiśāstra. He should be skilled in the art of warfare and should be the master of the science of morals. He is supposed to know religious interests. He is also expected to be master of military implements

and tactics. The priest is also the acharya and is competent both to curse and bless.

Sukra considers Purohita as a person setting the example of lofty moral ideals and working as effective checks and balances. He is described as "one fearing whose anger even the king takes to virtuous way of life."

**PRATINIDHI : HIS PLACE IN THE ADMINISTRATION**

The Pratinidhi or the vice-regent was the next important member of the ministry. He was expected to know what is to be done and what is not to be done. He should always advise the king as to when a thing is to be done immediately and when refrain from doing a thing though it is good; to make them act up to his advice; and if they do not abide by him, he should go on explaining the importance of his advice.

However, Pratinidhi does not figure in any of the records of the medieval dynasties. A scholar has tried

11. Ibid., 161.
13. Ibid., 176-78.
to explain this phenomenon by the fact that this official was appointed only when the king was ill or absent. It has been pointed out that at a much later stage Shivaji's ministry of eight did not include a Pratinidhi, but later on when Raja Ram had to leave Maharashtra and take refuge in the fort a Pratinidhi was appointed.

PRADHANA: HIS DUTIES AND ASSIGNMENTS

The Pradhana is described as sarvadarshi or the general supervisor over the entire state administration. This officer appears in the inscription of the Chedis styled as Mahapradhana or Mantritilak, Mantrindra, Mahamantri, Mahapradhana in the inscriptions of the Paramaras and as Mantrimukhya in the inscriptions of the Chalukyas. It may be pointed out that in Shivaji's ministry, the prime minister was known as Pradhana. In the states of Jodhpur and Jaipur, the same title was given to this dignitary till the integration of these states in the Indian Republic.

14. SNS., II. 168-73.
SACHIVA: HIS ROLE IN THE ADMINISTRATION

In the Śukranītisāra, Sachiva takes his place as war minister. It is important to note that Somadeva does not include him in the list of the ministers. It appears from the inscriptions both from the North and the South that he was actually included in the council of ministers during the medieval period. According to Śukra, it was his duty to keep all the branches of army well equipped and to see whether all the forts were properly provisioned. In Shivaji's ministry, sachiva was like the chief secretary according to one view but according to another authority the term denoted the war minister.

According to the Śukranītisāra the Sachiva has to study the elephants, horses, chariots, footsoldiers, camels, oxen, bandsmen, ensign bearers, men who practice battle arrays, bearers of royal emblems, arms and weapons, and the various classes of ammunitions; he has to carefully study various aspects and arrangements of the army and communicate the result of his studies to the

15. Ibid., II. 168-73.
16. SNS., II. 91-95.
king.\textsuperscript{17}

\textbf{MANTRI}

According to Sukra, the Mantri must be skilled in diplomacy.\textsuperscript{18} He should study when, how and for whom the policies of peace, perseverance, penalty and division have to be adopted and the various efforts of each such steps to be taken.\textsuperscript{19}

According to Laksamādhara, the Mantri should be adept in all aspects of the six-fold policy, a judge of proper opportunity and a pastmaster in diplomacy.\textsuperscript{20} In the inscriptions of the medieval period this functionary is called sāndhi-vigrahika or Mahāsāndhi-vigrahaka or the chief officer in charge of war and peace.

In the scheme of Sukra, the Defence Minister must have very heavy and exacting duties and responsibilities since the state in those times was expected to have a large number of feudatories and had to deal with the neighbouring kingdoms ruled by friends and foes.

\begin{flushleft}
\textsuperscript{17} Ibid., 181-90.
\textsuperscript{18} Ibid., 168-73.
\textsuperscript{19} Ibid., 191-93.
\textsuperscript{20} Kṛtyakalpataru (Rājadharmakānda), IV. 26.
\end{flushleft}
From a number of inscriptions it appears quite probable that the Śāndhivigrahika drafted the copper plate charters, granting lands and villages to brāhmaṇas and temples. \(^{21}\) It is interesting to note that Yājñavalkya also states that the drafter of a copper plate charter should be the defence minister. He should draft the charter at the dictates of the king himself. \(^{22}\)

** Praudvivaka **

The minister is charge of the judicial department is called prādvivāka in the Šukranītiśāra. Prādvivāka is an ancient word. It occurs in Gautama Dharma Sūtra and Nārada Smrīti. \(^{24}\) According to Sukra he was to be well versed in the traditional and smrīti law and an expert in evaluating and judging an evidence. \(^{25}\)

---

21. I.A., v. 277; iv, 63-65; xii, 190-95.  
E.I., ix, 63-65; xii, 50.  
22. Yaj., i. 319-20.  
23. Gautama Dharma Sūtra, xiii, 26-7 and 31.  
24. Nārada Smrīti, i. 35.  
25. SNS., ii. 97-98.
PANDITA

According to Śukra Pandita was one who should study religion and morals. He should also examine the rules of moral life and code of conduct in society in ancient and contemporary times which have been mentioned in the ethical codes; which might have become obsolete and other customs of the people and advise the king to adopt the suitable new codes and values in transitional period. 26

This functionary is not mentioned in any of the earlier smritis or nīti works. In Shivaji's ministry one minister was styled Panditrao, a title almost identical with that of Śukra. This officer came into prominence probably because society was changing and old laws were gradually becoming inoperative. The Dharma mahāmāttras under the Ashoka, the Sramana mahāmāttras under the Sātavāhanas, Vinayasthitisthāpakanas under the Guptas and the Dharmaṅkusas under the Rastrakūtas, discharged similar duties but somewhat restricted functions in the earlier periods.

26. SNS., II. 168-73, 200-03.
SUMANTRA

According to Śukra Sumantra should supervise the state funds and the treasury. He should communicate to the king the amount of commodities, the amount of debts etc., the amount spent and the amount of surplus or balance in both movables and immovables during the course of the year. 27

The Saṅgrahītā who figures in the list of the Ratnins of the Vedic periods and the officers called Samāhartā in the Arthaśāstra were probably discharging functions similar to those of Sumantra. The Bhāndāgārika also seems to refer to this minister. The term Sumantra was used to denote the foreign minister and not the treasurer in the ministry of Shivaji.

AMATYA

According to Śukra Amatya should keep a correct account of the income received from the forests, mines, villages, towns and the country and should keep correct records of the land under cultivation and the land lying

27. Ibid., 204-06.
uncultivated.\textsuperscript{28} Thus he seems to be the revenue minister. He does not figure in the records of the dynasties of the medieval India. The minister bearing this title in Shivaji’s ministry performed identical duties.

\textbf{SPY (DUTA)}

As we find that the government these days very much depend on the intelligence services and they attach very great importance to the agencies relating to secret services. Similar was the position in ancient times. Kautilya has devoted much space to the functions of the secret services and intelligence agencies. All other writers on state-craft have emphasised the importance of this spying machinery. \textit{Shukra} includes the spy in the list ten ministers.\textsuperscript{29} At another place he says that the spy, who is well trained in the art of reading emotions and gestures, is a servant of the eight departments of administration.\textsuperscript{30}

\textsuperscript{28} SNS., II. 207-14.

\textsuperscript{29} Ibid., I. 141-43.

\textsuperscript{30} Ibid., 149.
FUNCTIONING OF THE MINISTRY

Early writers on ancient Indian polity do not supply us sufficient information about the actual and procedural functioning of the ministry. It appears, however, that the king usually presided over the deliberations of the council of ministers. While doing so he is advised not to lose his temper in the council's meeting.\(^1\) Manu enjoins the king to consult the ministers first individually and then collectively and finally he should take a decision according to his own judgement.\(^2\) Kautilya also recommends joint consultation with three or four ministers, whose departments may be connected with the matter under discussion.\(^3\) This can be compared with the modern committee on political affairs.

\(^1\) Sukra, however, states that it is very likely that the ministers might hesitate in giving their free, fearless, frank and independent views in the presence of the king in the council. He, therefore, asks the ministers to send their independent opinions

1. Bārhaspatya, II. 53.
3. Arthaśāstra, I, Ch. 15.
in separate notes explaining fully the grounds for their views. 4 Somesvara also is in favour of separate and individual consultations with the ministers. 5 The Rājatarāgini shows that the Kashmiri kings followed all these alternatives before final decisions were taken. 6

It is significant to note that not a single author on ancient Indian political thoughts and legal institutions, except Sukra, has discussed the actual procedural functioning of the ministry in detail. We learn from the Sukranitiśāra that the ministers should be assisted by two or more secretaries according to the requirement, pressure and magnitude of the work of the particular department. 7 When the work was not exacting, the minister was expected to do it alone. 8 A secretary was often promoted to the office of minister in course of time if he proved worthy by virtue of his ability and

4. SNS., I, 363-64.
6. Rājatarāgini, VII, 1043, 1042; VIII, 3082-83.
7. SNS., II, 220-29.
8. Ibid., 116.
capacity, by his accomplishments and achievements. Sukra recommends a regular procedure and system of promotion to successively higher posts leading ultimately to the status of ministership.9

In order to bring multi-disciplinary ability and to exercise effective control over his ministers, Sukra works out the system of transfer of a minister from one department to another.10 He further provides that the king should not allow his officers to become more powerful than himself and the ten Prakritis should be entrusted with equal power.11 The king should never assign any office or official position to anybody for ever.12

The epigraphic records of the Pratihāras, the Chandellas and the Senas also refer to certain cases of interchange of departments or transfer from one department to another department.

9. Ibid., 290.
10. Ibid., 217.
11. Ibid., 218-19.
12. Ibid., 228.
The early codifiers like Manu and Kautilya recommend that the consultation with the ministers should be held secretly. Somadeva advises the king not to hold council meetings in places which echo human voices.

Sukra recommends that the proper agenda should be prepared and the minutes of the meeting should be properly and methodically recorded. He says that the written documents are the best guide, because the oral orders are liable to be misinterpreted, misunderstood or forgotten. The minister, therefore, should not do anything without a written order nor the king should issue any oral command on any matter.

In view of Sukra it is the office of the king that is important and not the physical personality of the ruler. Brahaspati is also in favour of the state business being conducted in writing. According to him a king or an officer, who performs the state business

15. Manasollasa, II. 705.
16. Ibid., II. 290.
17. Ibid., 292.
by oral orders, practises fraud on the state and the people. 18

In the administrative scheme of Sukra each minister was expected to manage the affairs of his own department with the help of his ministerial assistants. He was also required to written reports of his office work to the king either daily or monthly or yearly according to the circumstances. 19 The king used to read these reports and if approved he should put his signature on it. If, however, due to heavy work or otherwise he could not see these reports personally, then it was assigned to the crown prince to examine them and put his signature thereon on behalf of the king. 20 Thereafter the report was sent to the department concerned to give effect to that final order.

Sukra has offered us interesting details as to how different ministers approved the orders using different expressions. The Mantri, the Pradviwsa, the Pandita, and the Duta were to give their consent

19. CWS., II, 295.
20. CWS., II, 368.
by the expression "svaviruddham" (not opposed to our views). The remarks or expressions of approval to be used by the Amātya, the Sumantra, the Pradhāna, the pratinidhi, the Yuvaraja and the Purohita were 'sadhu-likhitam' (well written), 'samvagvichāritaṁ' (well considered), satyam ratharthamiti (true), angikritam (it is approved), angikartavyamiti (it should be accepted) and lekhyam, svabhimatam (opinion be acceptable) respectively. The order was lastly sent to the king and he had to express his approval by the expression dastam (seen). 21 This expression occurs in several Vakataka records in the margin of their plates. 22

It appears from the above details that any new policy or programme or new order was to be approved by the ministers. But Īśukra is silent about the method or procedure of consultation with the minister who could not attend the meeting of the council of ministers. Kautilya, however, suggests that the views of such ministers, who could not attend the meeting, should be obtained in writing by the king. 23

22. E.I., VI, 38.
It may be observed that "Sukra does not make any provision for any kind of popular assembly. The ministers were, therefore, directly accountable or were responsible to the king alone and their importance mainly depended upon personal ability and character and not upon the constitutional support or lobbying of a popular assembly.

It appears from the aforesaid study that the ministers possessed considerable administrative power and influence in the actual functioning of the government in spite of the autocratic nature and character of the institution of monarchy. These administrative powers were very much enhanced when the king happened to be a minor or a weak ruler. There are instances of the powerful ministers playing the role of king makers in the inscriptions of medieval India. 24

But on the other hand the powers of ministers were indeed very much minimised if a powerful and strong willed ruler was on the throne. The Prabandha-chintāmanī offers us an interesting example of minis-

24. E.I., II, 3-4; V. 8.
A minister was quite independent and free to extend his honest advice but if he failed in his duty and tendered wrong advise or an advice that may harm the interest of the state or administration, the king was empowered to rebuke him and finally he could dismiss him.

This resulted in establishing the proper trust, goodwill and cooperation. In the balanced view of political affairs the relationship between the ruler and the ministers might have been cordial. Sūkra normally assigns significant and important role to the ministers in matters of the state. Therefore, it was their duty to prevent the king from following a wrong path and to oppose measures that may go against the interest of the state and the people. He cautioned that the kingdom is bound to perish if the king did not follow the just advice of his ministers. Kāman-daka also holds similar views when he emphatically tells that only these ministers were the real friends.

26. SNs., II. 273.
27. Ibid., 81.
of the king who might prevent him from following a wrong or dangerous path. 28

12. MAIN CENTRAL GOVERNMENT DEPARTMENTS

For proper functioning and smooth administration it was necessary to distribute the administrative work according to procedural convenience. This, of course, resulted in creation of departments. Several ancient writers have thrown light on this topic of great administrative importance but Kautilya was the first writer on polity and administration who worked out an elaborate plan for distribution of work to various heads at the central level and similar steps were taken to divide the work at territorial and provincial levels. This was followed by other later writers with slight modifications and adjustments. But Sukra was the writer, whose views appear more convincing in the matter of administrative convenience and their suitability to the state and the people.

While recommending tours for inspection and on the spot inquiry Sukra observes that the king or the

29. SNS., II, 294-95.
high officers should inspect the villages and towns in order to have a first hand information about the real conditions of the people and their real feelings towards the administration. 30

The epigraphical evidence also offers examples of such inspection tours in order to maintain efficient administration. The Pratapgarh inscription of Pratihara ruler of Mahendrapāla I refers to a touring officer named Mādhava, designated as Tantrapala, 31 who is stated to have been instructed to conduct a tour to Ujjayini to investigate certain matters as it was desired by the king. The inspecting officers are referred to in the epigraphic records of the Vakatakas, Guptas and Cholas. 32

CENTRAL DEPARTMENTS: THEIR FUNCTIONS

It may be pointed out that several writers on ancient Indian polity hold divergent views regarding the number of departments at the central secretariat level. The epics 33 and the Arthasastra usually refer

30. Ibid., I, 374.
32. Ibid., 182-3.
33. Rāmāyana, II, 100.36; Mahābhārata, V. 36.
to eighteen departments. The latter, however, shows that their number was often increased by five or six, if found necessary. 34

According to Suśra there should be twenty departments in the central secretariat, 35 supervised by the Heads of these Departments. They included: The Departments of elephants, horses, chariots, infantry, cattle, camels, deer, birds, gold, jewels, silver, clothes, parks, buildings and palaces, necessaries and contingencies, religious establishments, charities, treasure, grains and cooking. 36

Now I propose to take up some of the Departments for elaboration. They are taken up in order of preference.

34. Arthaśāstra, I. Chap. 8.
35. SNS., II, 117.
36. Ibid., 237-41.
ROYAL HOUSEHOLD DEPARTMENT

The royal palaces and buildings were in charge of an officer called 'Saudhagehadihipa' by Sukra. The officer who used to take the visitors to the royal presence was known as Mahāpratihāra. His assistants were known as Pratihāras. The position of Mahāpratihāra can be compared with that of aide-de-camp of modern times.

The internal management of the royal palace was looked after by several other officers. Sambharapā was one of them. His duty was to keep proper stock of the things necessary for the maintenance of the royal household. Under him worked the superintendent of the royal kitchen. He had to take particular precautions to see that no attempt could be made to poison the king. According to Sukra, the superintendent of kitchen must be able to distinguish the washed from non-washed food substances. He should be skilled in culinary arts and should know the attributes of

1. SNS., II. 119.
2. Ibid., 273.
3. Ibid., 162.
4. Ibid., 157.
edible substances.\textsuperscript{5}

The royal harem was put in charge of an officer designated by Sukra as Antahpurayogaypurusa.\textsuperscript{6} Lakah-midhara calls him Antahpurächyaksha.\textsuperscript{7} He was to be sexless, truthfull and sweet tongued. This was the general practice through the ages. They included important persons, eunuchs, hunched-back, dwarfs etc.

\textbf{MILITARY DEPARTMENT}

Sukra gives a detailed account of the military qualities of commanders and soldiers. He did not pay attention to the caste factors in the armed forces. He simply wanted that the armed forces should be well versed in nitiśāstra, the use of arms and ammunitions, manipulations of battle-arrays, military manoeuvres and art of management and discipline. They should be brave, self-controlled, able-bodied, always mindful of their own duties and must be devoted to their masters.

\textsuperscript{5} Ibid., 315-16.
\textsuperscript{6} Ibid., 185.
\textsuperscript{7} Kṛtyakalpataru, Rajadharamakanda, Chap.IV, 29.
They should not be too young nor old, but they should be middle age.8

Sukra makes references to various ranks of the infantry. Pattipala was the head of five or six foot-soldiers. The next higher officer was called Gaulmika who was incharge of thirty foot soldiers.9 Gaulmika also appears in the Pela and Sena records. R.C. Majumdar suggests that he was like an officer in charge of a military contingent called Gulma consisting of nine elephants, nine chariots, twenty seven horses and forty five foot soldiers.10 Dr. U.N. Ghoshal identifies Gaulmika with a custom officer since the term Gulmadeya is used in the Arthasastra in the sense of dues paid at the military or the police stations. He further argues that in the Pela records Saulkika is immediately followed by Gaulmika and hence he must be an officer connected with revenue department.11 R.C. Majumdar, however, does not agree with his views. He argues that in the Sena records Gaulmika immediately

8. SNS., II. 276-80.
9. Ibid., 281-85.
follows the military officers and hence he must be an officer of armed forces. Majumdar's views are in conformity with Sukra who definitely states that he was an army officer.

The next higher army officer mentioned by Sukra was Satānika. He was in charge of one hundred foot soldiers. He was expected to know the art of warfare as well as the characteristics of battle fields. His primary duty was to train the soldiers in the morning and the evening in the military parades. The Anuṣṭātika assisted Satānika.

The next higher army officers who have been referred to by Sukra were Sahasrika and Ayutika in charge of a thousand and ten thousand foot soldiers respectively.

The superintendent of Cavalry was called Aśvapati by Sukra. The man who could know the feeling of

12. SNS., II. 281-85.
13. Ibid., 286-87.
15. Ibid., 281-85.
16. Ibid., 260-63.
horses and could discover and distinguish their qualities by studying their species, colour and movements; who knew how to guide, train and treat them; and was aware of their mettle, spirit and diseases; who knew what was good and bad nourishment for them; who knew their weight, their capacity for bearing weights, their teeth and their age; who was valorous, adept in military parade and was wise. Such a person was to be appointed to the post of superintendentship of the horses. 17 Those persons were to be made grooms of horses who were brave, well-versed in military parade and battle arrays and knew the movement of horses; who were intelligent and knew the art of warfare with arms and weapons. 18

The superintendant of the elephant corps was called Gajapati in the Śukranītisāra. He should have been able to differentiate three kinds of elephants, to nourish them properly, and to make adequate arrangement to treat them for any kind of illness. 19 This

17. SNS., II. 260-63.
18. Ibid., 268-69.
19. Ibid., 256-58.
officer seems to have been designated by the term Mahapilupati in the Sena records and by the term Pilupati in the Pala records. The officer, called Nāyaka, was in charge of twenty elephants. He worked under Gajapati.

The superintendent of chariots (Rathaśādyaka) was expected to be skilled in moving, turning and controlling the chariots. He was also expected to know how to manufacture strong and durable chariots. The superintendent of chariots does not appear in the records of any dynasties of Northern India in the medieval period. It might be so because the chariot corps had lost its importance as a part of the fighting force.

The officer-in-charge who maintained all desired facts and figures about the military department was called Lekhaka. He was expected to know the number of soldiers in the army and the amount of salary received by them. He was also expected to know the

20. E.I., XXI, 217; IV. 298.
21. SNS., II. 295.
22. Ibid., 131-32.
whereabouts of the old soldiers. This indicates that during the times of national emergency he might have been asked to arrange to mobilise them to meet the challenge. Even these days such a practice is found all over the world.

The army had a practice of putting proper uniform through the ages. We have elaborate accounts of these uniforms. The attention was mainly on the dress to protect the body against attacks in man-to-man fights. Due care was taken to ensure the protection of the head, chest and neck against the attacks by swords, spears and maces. Besides, the dress was so prepared that proper steps could be taken for offensive and defensive positions on the battlefield. Due care was taken to make uniform so clear that the soldiers could be properly recognised on the battle field particularly when enemies penetrated in the battle arrays. Sukra has prescribed separate uniforms for officers and soldiers.

23. SNS., II. 293-94.
24. Ibid., 296.
TREASURY DEPARTMENT

According to Šukra the officer-in-charge of the treasury department was called Koṣādhyakṣa. He writes that the person to occupy this position should be self-controlled, possess wealth, know the arts of politics, should know riches and valuables for life and should be very miserly. Such a person should be appointed the royal treasurer. The Paramāra records call this officer Kośadhiṅtrī.

The work of this department involved onerous duties and responsibilities. It had to look after the finances of the government, balance in kinds and cash and how to keep it in safe custody. It, therefore, engaged a large number of officers of different categories. Among them the superintendent of the royal granary, who is called Dhanyādhyakṣa by Śukra, was the most important one. He was expected to know the species, weights and measures, value, natural essential characteristics of the grains as well as the methods of collecting, cleansing and preserving them very carefully.

25 Arthasāstra, XI, Ch. 34.
26 SNS., II. 305-06.
27 Ibid., II. 313-14.
The incharge of clothing (vastrādhīpa) was expected to be able to distinguish the values of the different categories the woolen and silken cloths by studying the places of their origin, the nature and skill of men who had woven them, the fineness and roughness of the texture, as well as the durability or otherwise of the fabric.  

There were also several superintendents of tents and furniture who were expected to know the methods of dyeing tents, laying out beds, making camps and arrangement of clothes for this purpose.

10. THE DEPARTMENT FOR RELIGIOUS ESTABLISHMENTS

In ancient times religion was the dominant factor in the life of an individual. The people made enormous donations, endowments and charities for religious purposes. Therefore, the state supervision over these religious departments and establishments was considered necessary. We find these departments in existence through the ages. Even these days several state

28. Ibid., 307-08.
governments have departments for looking after temples, temple land, charities, endowments and other properties attached to religious establishments.

The head of these Department was a person known for honesty, integrity and religious outlook. In Sukra's time this Department was supervised by the Pundita. Among other officers of this department there were the superintendents of the religious establishments and institutions. They were expected to be mindful of their own duties and responsibilities in life, and they should be devoted to the religious practices. The superintendent of Charities should be kind and gentle in words. He must the proper object of charity and merits of others. He should not disappoint the beggar and must not amass wealth. The head of the hostels and inns looked after accommodation for travellers and visitors.

PROTOCOL OF PUBLIC OFFICERS

we know that there had been proper order of protocol and order of warrants through the ages. The king,

29. SNS., II. 327-28.
30. Ibid., 329-32.
31. Ibid., 337-38.
the chief Queen, the Queen mother and the Purushita were highly placed persons in the state. Then were the Prime Minister, the Chief of Armed Forces and a few others at central and state level administration. Sukra prescribes several minute rules regarding the official hierarchy and protocol. The monarch, the queen and princes were always to be respected by amátyas and other ministers. Below them in respectability comes the order of nine ministers. 32 The Commander of the Infantry with the strength of ten thousand soldiers was to be respected like the ministers, the commander of one thousand soldiers was slightly lower. 33 The relations of the king as well as his friends were also to be duly respected. 34

Sukra has also paid much attention to the norms and etiquettes of the royal behaviour towards the state officials. In receiving the priest and ministers the king was expected get up cheerfully from his seat, come before them, offer them suitable seats and enquire about their welfare and health. 35 In case of the

32. Ibid., 532-33.
33. Ibid., 534.
34. Ibid., 536.
35. SNS., II. 562-64.
officers, he should sit gracefully during their visit to the royal palace.\textsuperscript{36}

To people below the class of Brāhmaṇas, the king should not behave with leniency. Otherwise these people of lower classes would overpower him just as the elephant catchers master elephants.\textsuperscript{37} Sukra advises the king not to include in any kind of personal jokes or sports with the servants.

It was feared that the people of lower classes approached the king separately for their selfish motives. They frustrated disregarded and contradicted the king's instructions; ate the royal food, did not stay at their own functions. They divulged official secrets and made public his weak points and bad actions; put on the dress of the king and always deceived him. They decorated their wives and laughed when the king was angry, behaved shamelessly and disregarded the king in a moment. They disobeyed government orders and did not fear to do misdeeds. These were the results due to jokes and sports indulged in by the

\textsuperscript{36} Ibid., 564.
\textsuperscript{37} Ibid., 568–69.
king with men of lower classes of the society. 38

Sukra also lays down norms and etiquette for officers and describes the behaviour of an officer in the presence of the king. After having bowed down to the king, one should take down his seat either on the side of the royal throne or in the front according to king's instructions. 39 He should smile gracefully and should not indulge in loud laughter or coughing; should desist from spitting, abusing, yawning, stretching the limbs as well as relieving the joints of the body. 40 He should sit with pleasure at the place where he has been instructed by the king, and give up vanity though he be old and wise. 41 He should not imitate the language and dress of the king. 42

Such detailed precautions and prescriptions about the customs, manners and etiquette of officers are not found in any other texts on ancient India polity. It was Sukra alone who prescribe these manners and norms for the first time.

38. Ibid., 570-81.
39. Ibid., II. 440.
40. Ibid., 441-42.
41. Ibid., 444-45.
42. Ibid., 470.
INSIGNIAS

The king is advised to gratify his officers by the grant of privileges, ornaments and uniforms, umbrellas, chāmara etc. ⁴³ He should decorate his state officers by the proper insignia of their respective ranks and place them on steel, copper, bronze, silver, gold and jewels. ⁴⁴ For distinguishing from distance he should distinguish the officers by clothes, crowns, and musical instruments. ⁴⁵ The king should not give to anybody the uniform that is particularly his own. ⁴⁶ Every officer was strictly advised to put on the official clothes, uniforms and emblems granted by the king. ⁴⁷

---

⁴³. Ibid., 846-48.
⁴⁴. Ibid., 853-55.
⁴⁵. Ibid., 856-57.
⁴⁶. Ibid., 858.
⁴⁷. Ibid., 480-91.
PAY SCALES AND EMOLUMENTS

In order to keep state officials happy good pay scales and emoluments were provided through the ages. Almost all the writers on ancient Indian political and social institutions provided the pay structure according their official cadres, grades, ability and experience. Manu, Kautilya and Kāmandaka have thrown enough light on this aspect. Śukra advises the king to follow the solar time in making regular payment of wages.¹

He says that remuneration might be paid to them according to time, work or according to both.² One should neither stop nor postpone the payment of the salary. Moderate remunerative scale is said to be that which could provide desired food and clothing. Good wages are judged by which food and clothing are adequately provided to government servants. Low wages are those by which only one person could be given food and clothing.³ Śukra was very considerate and he cautions the king regarding the bad effects of low-

---

¹ SNS., II. 789-90.
² Ibid., 791-92.
³ Ibid., 799-802.
wages. He observes:

"Those servants, who get low wages (hīnabhṛtika) are enemies by nature. They are auxiliaries to others and seekers of opportunities and they plunder the state treasure and exploit the people."\textsuperscript{4}

LEAVE AND PROMOTION

Perhaps śukraṇītisāra is the only text on polity which make provisions for leave rules for the state officials and domestic servants. For discharging their domestic duties, the servants should be granted leave for one yama during the day time and three yama during the night. The servant, who has been appointed for a day, should be allowed leave for half yama.\textsuperscript{5} The king is advised to engage the servants to work except on occasions of important festivals. But on these occasions also if the duty was indispensable no one could be spared except the days of śrāddha.\textsuperscript{6}

The government is advised to pay one fourth less than the usual remuneration to the diseased servant;

\begin{itemize}
\item \textsuperscript{4} Ibid., 807-08.
\item \textsuperscript{5} SNS., II., 815-16.
\item \textsuperscript{6} Ibid., 817-18.
\end{itemize}
pay three months' wages as special pay or bonus to the servants who have served the state for five years; six months' wages to the servant who has been ill for long time. No portion of the salary should be deducted from the full remuneration of a servant who has been ill for half a fortnight. A substitute should be taken for one who has lived for even one year and if the deceased servant is highly qualified, he should be paid half the wages.

Sukra advises the king to grant fifteen days' leave each year to regular servants, and to grant half the wages without work to the man who has completed forty years in his service. He also prescribes to reward a good servant by the grant of one eighth of the salary every year. If an employee dies for the work of the king, his son should be paid the salary of his father till he is a minor. Sukra also makes provision for provident fund. The king is advised to k

7. Ibid., 819-21.
8. Ibid., 822-24.
9. Ibid., 825. This can be compared to earned leave.
10. Ibid., 826-27. This can be compared to pension.
11. Ibid., 830-31. This can be special pay or bonus.
12. Ibid., 832-33.
keep with him one sixth or one fourth of the servants' wages as deposit and should pay half of that accumulated amount or the whole amount in two or three years. Sukra observes that the employer or master should avoid abusive words, low wages, severe punishments and insult. These inculcate in the mind of the servant the attributes of the enemy whereas those, who are satisfied with generous wages and are honoured by distinctions conferred upon and pacified by soft words, never desert their master.

Sukra also makes clear provisions for promotion while in service. When somebody is found unworthy of the assignment entrusted to him, he should be removed and others should be appointed in his place. In such a case the claims of those, who follow in his heels (tatpadanugata) or subordinate and apprentices should be considered.

There was also an adequate provision for promotions. Sukra provides that when an officer becomes

13. SNs., II. 834-35.
15. Ibid., 228-31.
qualified for the higher and higher posts he should be promoted. At the end he should be made a Prakriti, one of the ten advisers. Thus it becomes clear that Sukra provides a regular system of regular promotions through merit, qualifications and aptitude for successively higher posts leading ultimately to the post of the counsellor of the King. The officer had to begin with the lowest cadre of the administrative ladder; but by proving his ability in the lower grades he may be promoted to the post of highest responsibility in the state service.

All these rules regarding the recruitment, training, tenure of service, organisation of the office, filling up of vacancies, rotation and gradual promotion are obviously the outcome of a highly developed political and administrative machinery that might have been required to govern a vast country like India.

CASTE FACTOR IN ADMINISTRATIVE SERVICES

Caste factor has been very important in Indian administrative services through the ages. Manu,

16. Ibid., 232-33.
Kautülya, Kämändaka and all other writers and codifiers prefer Brähmanas and other higher castes for state administrative services. As the Brähmanas were highly qualified they got all higher jobs. Others went to Ksatriyas and Vaiśyas. But no Šūdra could enjoy any higher office. Even in middle ages this remained the pattern. British government also followed the same basis for recruitment to higher offices. Almost all the members of the Indian Civil services were of the higher classes. Only a few exceptions were made and they were made for political considerations.

Śukra Itisāra elaborates this point that all the ten ministers should be of Brähmana caste. In the absence of suitable Brähmanas, Ksatriyas should be appointed. Vaiśyas should be accepted in the absence of the Ksatriya candidates. But the Šūdras are never to be appointed even if they be qualified. 17 The village head should be a Brähmana. The clerk and the tax collector should be Kāyastha and Ksatriya respect-

17. SNS., II. 859-61.
tively. The lord of Sahasa should also be a Kṣatriya.\textsuperscript{18} The Collector of duties should belong to the Vaiśya caste. The low grade servants can be from Sudra caste.\textsuperscript{19} A Kṣatriya should be the army commander. In his absence a Brāhmaṇa can be appointed as the army commander. Neither a Vaiśya, nor a Sudra nor a coward was entitled to this post in the armed forces.\textsuperscript{20}

14. ADMINISTRATIVE DIVISIONS

A vast country like India could not be governed from the central capital. For administrative convenience the country was divided into small administrative units and the village was the lowest unit for all the administrative purposes. It was this pattern that made it convenient to govern this country.

Sukra advises the king that he should appoint the following six officers in each village and town. They are: lord of Sahasa, the headman of the village, the

\textsuperscript{18} Ibid., 862-63.
\textsuperscript{19} Ibid., 864.
\textsuperscript{20} Ibid., 867.
collector of land revenues, the clerk, the collector of taxes (tolls and duties), and the news bearer.¹

The most important duty of the village headman was to maintain the law and order in the village. Like the father and the mother he was expected to protect all the people from aggressors and thieves.² It appears probable that for protection of the village people, the village headman got the help from the local militia. The rebellion of feudatories and the rivalry of the adjoining villages frequently exposed the village life to dangers and lawlessness. On such occasions, the headman had to discharge the duties of a military captain. A number of Kṣtrākūṭa inscriptions record how the village headman acted with all efforts and precautions.³

When the Government wanted to make any change or to make any extra demands from the villagers, it was the duty of the village headman to carry on negotiations on behalf of the villagers. According to Sukra,

---

1. SN⁵, II. 242–45.
2. Ibid., 343–44.
3. Ibid.
he was to protect the interest of the village against the government officers. This makes it clear that it was his primary duty to resist unfair demands from the government.  

As the job required these officers to undertake tours some provisions were also made to provide facilities for tours. The master in-charge of ten villages and the commander of one hundred troops was entitled to travel on horseback with an attendant, the master of one village was also entitled to have a horse for travel. The commander of one thousand troops and the officer-in-charge of one hundred villages was entitled to have a vehicle or a chariot and a horse and ten armed attendants were to travel with him on horses. The rulers of one thousand villages were always to travel in vehicles carried by men or two horses. The commander of ten thousand troops was allowed to travel with twenty attendants on an elephant. The ruler of ten thousand villages could use two vehicles and four

4. Ibid.
5. Ibid., V. 162-63.
6. Ibid., 140.
7. Ibid., 166-67.
horses. The commander of fifty thousand could travel with as many attendents, as he desired. 8

VILLAGE ACCOUNTANT

Sukra refers to a village accountant and calls him lekhaka. He was to be well skilled in maintaining accounts 9 The contemporary South Indian records show that under the Cholas the accountant was an important officer of the village administration whose duty was to keep an account of the land and other taxes noting the amount paid by each villager. 10

In addition to the village headman and the village accountant there were also some other officers who are referred to by Sukra. One of them was Saha-sadhipati whose officials position appears to be that of the modern magistrate. Other officers were Bhagahara or the revenue collector, Sulkagraha or the toll collector and Pratihara or the gate keeper. It is

8. Ibid., 168-69.
10. By his duties it appears that he resembled a Patwari of modern times.
quite probable that these separate posts were created in the big villages or towns. In smaller village the headman alone might have taken up the responsibility to discharge the functions of all these officers stated above.

Both the literary and epigraphical evidences show that the settlement of village disputes was one of the most important functions of the village council. Somadeva informs us that king’s court did not entertain any dispute at first instance. It was the village council that first used to try them. In case both the parties felt dissatisfied with the verdict of the village council they has option to file an appeal to the king’s court.\textsuperscript{11} Sukra also expresses the same view.\textsuperscript{12} The inscriptions of medieval India also provide the same account. Several land grants assigned to the donees entitled the latter to receive the land revenue. They also received the fines and other sums due from the villagers in connection with their disputes and crimes. In case the cases were tried directly by the

\textsuperscript{11} N\textsuperscript{1}tiv\textsuperscript{1}\textsuperscript{1}\textsuperscript{V\textsuperscript{1}}\textsuperscript{2}y\textsuperscript{1}m\textsuperscript{1}r\textsuperscript{1}ta, XXVII, 22.

\textsuperscript{12} SNS., IV. 5.74.
king's court or at the headquarters of the district, the donees of copper plate grants residing in distant villages, could hardly found it convenient to collect the fines imposed by the royal courts in towns and cities. The ordinary criminal cases were normally tried at the village level and the assignment of allocation of fines to the donees or grantees of village grants was found practicable.

This was the basis of smooth administration at the village level. The litigations appear to be rare and almost all small or ordinary cases were settled at the village level itself and the village council of elder village men was quite competent to tackle local problems.

15. THE STATE AND AGRICULTURE

AGRICULTURE

The greatest achievement in the long and chequered history of human Civilization is the knowledge and gradual growth of agriculture. Before this knowledge primitive man lived in hunting and pastoral stages leading the life of a normal and wanderer. With the advent growth of agriculture be began to make
permanent habitation and started settled life and ushered in an era of civilization. Since then he has been constantly making progress in various facets of civilization. Yet, the agriculture which he started in remote past, continued to be his primary concern and still remains the basic occupation of the majority of people throughout the world. This we find considerably significant and, more than anywhere else, in India, nearly seventy-five per cent of the total population depends on agriculture.

ANTIQUITY OF AGRICULTURE IN INDIA

The history of agriculture in India is traceable from the earliest known period of our history. The Indus Valley people were familiar with agriculture and it is amply evident from the findings of the excavated remains. Of a number of articles used in agricultural operations in those times as well as the large granary which could have been filled only with a good crop. There were several agricultural products which have continued till today. In the Rigveda, we get the picture of a society which was an agricultural society par excellence. Thereafter the country underwent
various social and political upheavals throughout the long course of its history, but the predominance of agriculture in its economic set up was never disturbed.

AGRICULTURE AS MAIN SOURCE OF STATE-INCOME

Agriculture was the main source of State-income in those times and it continued so till the beginning of the 20th century. The bulk of population in the country was engaged in the occupation of agriculture and paid a fixed share of the income to the State. This share in the past was normally one-sixth of the total produce. It is due to this share that the king was called 'Śaddhāgṛhāt'. Any increase in the State-income from this share was possible only with an increase in agricultural produce. It was, therefore, quite natural that the State considered the promotion of agriculture quite essential.

Importance of agriculture as a source of State-income is de facto implied when Kautilya lays down:

"Land prepared for cultivation shall be given to tax-payers (Karada) only for life (ekapurusikani). Unprepared land shall not be taken away from those
who are preparing it for cultivation. Land may be confiscated from those who do not cultivate it and will be given to others; or it may be cultivated by village labourers (Gramabhṛtaka). Those owners who do not properly cultivate it might compensate the less to the government. 1

If cultivators pay their tax regularly, they may be favourably supplied with grains, cattle, and money. The king shall bestow on cultivator only such favour and remission (anugrahaparihara) as will tend to swell the treasury, and shall avoid such as that will deplete it. A king with depleted treasury will eat into the very vitality of both citizens and country people. 2

AN IMPORTANT ITEM OF 'VARTA' AND KING'S OBLIGATION FOR IT.

In ancient India agriculture formed an item of 'Varta' which was the branch of learning connected with

1. Shamasāstrya in his translation of 'Kautālīya's' Arthasastra comments that those who do not cultivate well shall pay the less. p.46 Fn. 2.
2. Kautālīya, Bk. II Ch. 1.
material welfare. It was necessary for a king to master all matters coming under the purview of this branch; with this object in view, the curriculum for the education of royal prince was so oriented as to provide him a thorough knowledge of the subject and its application in the best way throughout his life. On assuming the office as the king, he made use of his skill in this field for maximum benefit of his people.

Several instances, dealing with this aspect of obligation for king, are found in ancient Indian literature. A discourse in the Mahābhārata reveals Nārada asking Yudhiṣṭhira whether he pondered over 'Artha' along with 'Dharma' and listened to the advices of old people, proficient in science of Artha; whether he was attentive to the improvement of cultivation by tanks and agriculture-loans; whether large tanks were dug in the kingdom so that the agriculture had not to depend upon rain entirely; whether the king advanced agriculturists a loan of seed grains, taking only a fourth part of every hundred in return; whether the merchants were well treated in the realm and could engage in their occupation without any fear and officers of the state collected from them only such dues as were
justly to be paid by them; whether the king extended his protection to the artisans and regularly paid them their wages; whether the royal expenses were met by a half, third or fourth part of the income and whether the different items of Vārtha were carried in the kingdom by really honest men, as upon them depend the happiness of the subject. 3

The extent of efficiency, a king should possess pertaining to practice of Vārtha, is repeatedly mentioned in the Rāmāyana wherein it has been told that Rama who enjoyed different aspect of life, was equally expert in everything relating to wealth and spending it according to injunctions of the sastras. 4 He also knew to enable others to acquire wealth.

Vārtha also occupied a prominent position in the realm of sciences of learning and was looked upon with the same reverence as the study of the Vedas. It was a combination of economics and polity and was imparted to princes the art of acquiring and maintai-

4. Rāmāyana, II. 1.28 ff & X. 45. 25-27.
ning the earth. Kautilya rightly describes the merits of Varta when he says, "It is most useful in that, it brings in grains, cattle, gold, forest produce and free labour. It is by means of treasury and army obtained solely through Varta that the king can hold under his control both his and his enemy's party."  

In the Ramayana and the Mahabharata we find exposition of many sound economic principles, which also apply with undiminished efficacy to modern conditions of life.

A king well-versed in Varta could in no way afford to undermine agriculture which always formed the mainstream of income to State exchequer. So, agriculture received a very careful attention from the state.  

The importance of agriculture is well reflected in the preceptor's pronouncement as rendered in Aitareya Brâhmaṇa in connection with the coronation ceremony of

5. Kautilya. Bk. I. Ch. 3.
the king. It says: "to thee, this state is given for agriculture, for the common weal, for prosperity and for progress." 7

STATE PATRONAGE TO AGRICULTURE

Manu and Kāmandaka advise the king for selection of the land as his territory on the basis certain considerations. These conditions are apparently, based on its suitability for agriculture. 8

Bhīṣma advises the king to see that agriculturists in his country (kingdom) might not suffer oppression. 9

For agricultural operations, the state was required to distribute the land to the population in a manner which might facilitate the availability of manpower for the lands and vice-versa. R.K. Mookerji interprets... "it was specially the state's business to organise and extend the agricultural productivity of the country by schemes of colonisation, encouraging the surplus population to settle new or abandoned tracts,

and also by assisting the emigration of foreigners to settle in the country.\textsuperscript{10}

Kautilya mentions a government officer, called superintendent of agriculture, who looked after the matters relating to the agriculture on behalf of the state.\textsuperscript{11} Further he maintains that the king should help the agriculturists by providing them grains, seeds, bullocks and money which the agriculturists should repay conveniently on harvesting the crops. The king should keep on giving the agriculturists limited amounts of money for their good health and cure of diseases so that they may augment the royal exchequer by increasing the grains and the wealth.\textsuperscript{12}

Agriculturists in ancient India enjoyed a respectable social status in the society and were held in high esteem.\textsuperscript{13} From Greek sources we learn that the farmers were of very mild and gentle disposition.\textsuperscript{14} They were regarded as public benefactors

\textsuperscript{10} Kautilya Bk. II Ch. 1 Cf. Mookerji, R.K., Chandragupta Maurya and His Times, p. 197.
\textsuperscript{11} Kautilya Bk. II Ch. 24.
\textsuperscript{12} Kautilya Bk. II Ch. 1.
\textsuperscript{13} McCrindle, P. 32.
\textsuperscript{14} Megasthene's Indica, Frag. XXXII Cf. Strabo XV.
by the people. They constituted a class of people known as "The tillers of the soil". They were devoid of arms and were exempted from compulsory military duty. They paid tributes to the king, and even in times of war, the soldiers did not disturb them, so that their crops might not be damaged as it might result in famine, poverty and hunger. They were regarded as a class that was sacred and inviolable. It is said, "Men may be seen drawn up in array of battle, and fighting at risk of their lives, while other men close at hand are ploughing and digging in perfect security having these soldiers to protect them." Thus, we are in a position to conclude that in ancient India battles and wars did not effect agriculture or the people engaged with it. This vindicates the fact that economic interest of the people was accorded prime consideration.

15. Ibid., Frag. XXXII.
17. Ibid., Frag. XXXII, Cf. Strabo XV 1.40.
19. Purli, B.N., India As Described by Early Greek Writers, p. 78.
PROTECTION TO AGRICULTURE

The farmers in ancient India were dependent, to some extent, on the help of shepherds and hunters as they freed the farms from the pests, wild beasts and birds which devoured the seeds. 20 They were also dependent on the artisans who fashioned the implements for agriculture. 21 According to Megasthene these artisans were not only exempted from paying any taxes, but they also received maintenance from the kings. 22

The king tried to improve the condition of agriculturists by convening Great Assemblies at the beginning of every year and experts gave sound advices for improving crops and cattle. They were exempted from paying any taxes or contribution, except the normal share. 23

Kautilya also holds that the king should protect agriculture from the hurdles of fines, forced and free

21. Ibid., Frag. XXXIII.
22. Ibid., Frag. XXXIII.
labour and taxes. Likewise, he tells that the animals of the agriculturists should be protected from thieves, violent animals, poison and other distresses. 24

Thus state created an amicable atmosphere which enabled the agriculturists to engage whole heartedly in their profession and devote whole of their time in farming activities.

AGRICULTURAL METHODS AND TECHNIQUES

Regarding the methods and techniques of cultivation the ancient Indian literature divulges a vast treasure of technical 'know-how', based on long experience and methods tried repeatedly with success.

Indian cultivators possessed a fair knowledge of climatology ascribed to Parasara. It gives elaborately the influence of rainfall on the plants etc. on monthly and yearly indications and predictions regarding rainfall on the basis of wind direction etc. 25

This continued till the times of Ghaana and Bhaddhari,

24. Kautilya Bk. II Ch.1 Cf. Ibid., Bk.I. Ch. 19.
the famous climatologists of our times.

Regarding classification and selection of soil, we get valuable details in Arthasastra. Kautilya also describes the methods of reclamation of barren lands for the purpose of agriculture.²⁶

The system of seasonal cultivation and rotation of crops as well as Plant Physiology were known in ancient India. We learn about them even in the Rgveda.²⁷ Kautilya speaks of three crops: Rainy crops (Kedara), winter crops (Haimana), and Summer crops (grainsmika), grown according to the availability of labour and water facilities.²⁸

Several techniques of seasoning the seeds and use of different types of manure are dealt in Kautilya,²⁹ Brhatsamhita³⁰ and Agni Purana.³¹ In this connection, the remarks of R.Ganguli, deserves quoting. He says, "Indeed, one will be filled with astonishment and admiration if he cares to look only into the elaborate

---

²⁶. Kautilya Bk. II Ch. 2.
²⁷. Rgveda VIII. 91. 5-6.
²⁸. Kautilya, Bk. II Ch. 24.
²⁹. Kautilya.
³⁰. Brhatsamhita Ch. 55. 17-20.
³¹. Agni Purana, 282.
injunctions as are found in Arthasastra, Brhat samhita
and the Agnipurana regarding selection and treatment
of seeds and the use as fertilisers of animal excreta,
flesh and bones, beef and fishwashing, minute fishes
and various kinds of mixtures and decorations will bear
out the truth of this statement. 32

Various steps for protection of various kinds
of plants are referred to in the Jataka, 33 Manu, 34
Yajnavalkya, 35 Kautilya, 36 Gautama 38 and Visnusmrti. 39
Attempts were also made to protect the crops from fire.
The Matsya Purana states that causing fire in the
villages and damaging the crops is punishable equal to
that of the offence of the adultery with the queen and
made one liable for death sentence. 40

33. Jataka No. 11.
34. Manusmrti Ch. VII. 241.
35. Yajnavalkya Ch. II. 161.
36. Kautilya Bk. III. Ch. 19.
37. Narada Ch. XI. 29.
38. Gautama Ch. XII.
39. Visnusmrti Ch. V. 146.
40. Matsyapurana. 227, 201.
Horticulture

The science of horticulture in India finds it important place in the Vedic period. A reference to the construction of a garden and its dedication for public use, is referred to in the Rgveda. \(^{41}\)

Kamandaka and Sukra elaborately refers to the public parks and pleasure gardens... maintained by the government. The horticulture played a vital role in public administration in later days. It led to the birth of a special class of artisans, who constructed parks and pleasure gardens. These parks, contemplated for health and recreation, constituted an expanding department of the government. \(^{42}\) The gardens and parks thus maintained by the state, were in charge of the Garden Superintendent. \(^{43}\) He was to look after the plantation, growth and development of plants, flowers and fruits. \(^{44}\) He was aware of the method of grafting and curing the trees by the prompt administration of the proper soil manure and water duly nourished the

---

41. Rgveda. III. 8.11.
42. JAHRS. Vol. XXVII, p. 55 ff.
43. Sukraniti. II. 200.
44. Ibid., II. 317.
plants with care. 45

From Kalidasa we learn of two types of gardens. The 'Pramavadana' was the term applied for royal place garden whereas the other type was of public gardens. 46 We also learn that the cultivation of flower gardens and orchards had already undergone an evolution of their own specific type of cultivation.

The public gardens were not at all in meagre numbers. They were generally situated on the outskirts of the towns and at time along the picturesque riversides. During the time of Kalidasa, public gardens invariably constituted as important part of the civic life as we can infer from the following remark.

"He is verily, the king whose abode is provided with spacious gardens containing large tanks and pools adorned with beautiful lotus blossom over which humming bees fly, that may be regarded as consumption of all...

45. Ibid., II. 345-46.
46. Raghuvamsa. XIX. 23.
happiness on the part of men, that gives intense pleasure to minds of sportive and pleasure seeking ladies puffed with the pride of beauty." 47

IRRIGATION

Ancient Indians made a very significant progress in the fields of agriculture and horticulture. The most vital among factors contributing to this progress was irrigation. It played prominent role in the development of agriculture.

ANTIQUITY AND HISTORICITY OF IRRIGATION

The history of irrigation is almost as old as the history of civilization itself. Long before taking up cultivation man discovered the secret of speedy and healthy growth of plants as a result of normal rainfall and he realised miraculous nourishing properties of water for them. His tirclosely traversed the earth in search of grass-lands and eagerly looked at the sky for the dark clouds that may bring rains necessary for the growth of crops and plants.

47. Upadhyaya, B.S., India in Kalidasa, p.217 Fn.10.
PRAYERS FOR RAINFALL

When man was born on this planet he found water very essential for his existence but water proved all the more important for getting a fine crop. In the Vedic period, we get lively descriptions of people besetting themselves to the task of bringing water to their lands. Man considered the rainfall as a reverent wonder and his mind conceived the existence of the water god, god of clouds and in addition clouds themselves were deified. This way Varuna, Indra and parjanya emerged as important whose benevolence resulted into regular rainfall for which people endeavoured to accrue the pleasures of these gods by propitiating invoking and offering oblations. The gods were worshipped and consequently the 'sacrifices' became popular rituals and cercuronies. People believed that sacrifice, apart from pleasing gods, smoke out and which resulted in clustered in form of clouds and poured rainfall. This view also receives confirmation in the Srimadbhagavadgita48 and Meghaduta.49

Notwithstanding all these efforts and rituals, man did not succeed in getting the rainfall at the desired time in required quantity. Therefore, an absolute dependence on clouds and gods could not provide for desired results and he abandoned an overall dependence on the mercy of the nature and embarked upon watering the plants by getting water from lakes, ponds and rivers. Thus the beginning was made for irrigation.

**Desirability of Independence from Rain**

Ancient Indian literature contains several references which could caution against sole dependability on natural rainfall, with all its severity. Land depending on rainfall are termed 'Devamatrka' and the irrigated land is called 'Nadimatrka'. 50 It is said in the Ramayana that the king of Ayodhya made attempt to make the land free from dependability from rain only. 51 In Mahabharata Narada asks Rudhisthirsa if he had large tanks in his kingdom at proper dis-


51. Ramayana II. 100.45.
tance so the agriculturists had not to depend entirely on rain. 52 Kautilya considers it as one of the good features of the state that agriculture does not depend on rains alone. 53 He states that irrigational works (setubandha) are the source of crops; and that the results of a good shower of rain are ever attained in the case of crops below the irrigational works. 54 Kamandaka also holds a similar view. 55 It was the policy of the government to make cultivation independent of rains. 56

**MAIN MEANS OF IRRIGATION**

There were several means of irrigation for the land other than 'Devamatraka'. People were at work irrigating their plants and nourishing their hopes with

52. Mahabharata, Sabhaparva 5.67.
53. Kautilya, Bk. VI Ch. 1.
54. Ibid., Bk. VII Ch. 14.
55. Kamandaka, Ch. IV. 52.
man-made methods for irrigation. We get a vivid picture as these means and method find in the hymns of The Rigveda:

"In bygone dawns and autumns he killed Vratra, The demon preventing rains and freed the seas. Indra detached the circumscribed it and held up current and released it for flowing on the earth."\textsuperscript{57}

'Prepare leather bucket, keep the role. We will irrigate with water from irrigating beautiful grand well having inexhaustible water. I irrigate from the well.'\textsuperscript{58}

'Quench the horses, win the benefit, make the chariot a vehicle of suspiciousness. O man! irrigate with bucket having a wooden plank get the water from well.'\textsuperscript{59}

These references, quoted above, make it clear that people in the Rigvedic period employed different means for irrigation. These methods have been classified by Kautilya as under:

\textsuperscript{57} Rigveda., IV. 19.8.
\textsuperscript{58} Ibid., X.11.5.
\textsuperscript{59} Ibid., X-11.6.
Firstly, irrigation by hand or manual labour;
Secondly, irrigation by water carried on shoulders or water lifts carried by bullocks;
Thirdly, irrigation by mechanical devices and
Fourthly, irrigation by directly getting water from streams, lakes or wells through sluices or canals.  

Regarding artificial use of all these means, we come across a large number of references in ancient Indian Literature. Those alluding use of mechanical devices need some elaboration. In the Chullavagga, Vrhatkalpabhasya, Lankavatara Sutra, Siksamuchchaya, Panchatantra, Amarakosa, and Harsa Charitra, a mechanical device called 'Araghatta' is mentioned in vogue, was used for irrigation. The Malavikagnimitra, tells of a 'Variyantra' which was, probably, a revolving sprayer and represented the proto-type of modern pump.

60. Kautilya Bk. II Ch. 24, Shamaasastry uses the word 'waterlift' in interpretation of the terms used by Bhattaswami in his commentary on 'Arthasastra'.
61. Chullavagga. V. 16.2.
62. Vrhatkalpabhasya. 1. 826.
64. Siksamuchchaya, p. 223.
65. Panchatantra. IV p. 231, 244.
66. Amarakosa. III. 10.27.
68. Malavikagnimitra. II. 12.
The Nasika Cave Inscription, refers to an 'Odyantra' which was, apparently, some kind of hydraulic device used for irrigation. The Kadambari compares some courtesans to mechanical water dolls bathing the king with water-jets issuing from the inter-spaces between fingers. Kautilya also mentions to mechanical device for irrigational purposes.

Gardens were irrigated by means of narrow drains full of running water fountains as their source. Water wheels threw cool water keeping garden beds constantly full of water. Circular ditches were also sunk around trees for storing water. Regular watering of plants was done with jars and pitchers.

CONSTRUCTION OF WATER WORKS FOR IRRIGATION

Other means of irrigation in ancient India were so common and frequent that they hardly call for reference. All these means needed regular availability of

69. Luders No. 1137.
70. Kadambari.
71. Kautilya Sk. III. Ch. 9.
72. Raghuvamsa. XII. 3.
73. Malavikagnimitra. II. 12.
water. In the beginning natural courses such rivers and lakes served the purpose but very soon man began digging wells, constructing reservoirs, dams and canals. The state took keen interest in construction of the wells, reservoirs, dams and canals and it either constructed them itself or encouraged people for doing so. 74 Kautilya holds that the king should provide with sites, timber and other necessary items for those who would construct reservoirs of their own accord. 75 He enjoins that there shall be a well for irrigation for every tract of land ploughed by twenty ploughs (dasakulivatam). 76 It was repeatedly emphasised and those who constructed them they got great merit. Conventional eulogies of kings in ancient India invariably pointed out to kings who constructed these means for irrigation.

Remission in government taxes, to the tune of five years for construction, four years for enlargement and three years for repairs of a water-works, was also allowed. 77

74. Kautilya. bk. II. Ch. 1.
75. Ibid. bk. II. Ch. 1.
76. Kautilya Bk. II. Ch. 4 (Vachaspati Gairola in his Hindi translation of Kautilya interprets the words 'dasakulivatam' to mean as land which can be ploughed by twenty bullocks (p.113). Shamasasty interprets it 'ten bouse' (p.55).
77. Kautilya Bk. III. Ch. 9.
STANDARD SPECIFICATIONS OF WATER-WORKS

Although the wells, tanks and reservoirs abounded since the earliest period of history, yet prescriptions to standardise their specifications of the size and shape are hardly available. Convenience of builders as well as users of these water-works and availability of resources for their construction appear to have been the determining factor in this respect. A reference to their dimensions, depth and furnishing has, however, been made by Sukra who lays down that wells, canals, tanks and ponds should be made accessible by stair-case, should have width twice or thrice the depth and footpaths round them. 78 Kautilya 79 and Manu 80 advise their construction on the boundary lines.

MAINTENANCE AND PROTECTION OF WATER-WORKS

Like construction equal importance was attached to maintenance of these water system. The State had to protect them from those who engaged in subversive activities from within the State and also from the

78. Sukra, lv. 125.
79. Kautilya Bk. III. Ch. 36.
80. Manu VIII. 248.
invaders. Serious punishment including ex-communication was prescribed for those who caused breach or any kind of damage to these utilities. Kautilya recommends a fine to culprit, double to the tune of damage so caused whereas Manu prescribed the Capital punishment by sinking him in water or some other way and the highest amount of fine of one thousand panas even in case he repairs the damage.

GUARD AND PATROL ON WATER-WORKS

Proper guard and patrol in the areas of water-works might have been a necessity. Kautilya prescribes for daily inspection of the reservoirs of water by City Water Superintendent. Necessity becomes more pressing for the guard and patrol when Manu says: "A king, who wishes to conquer his enemy, should first of all destroy the dams in his territory. Kautilya also advises that during the war the tracts of land of

82. Manu VIII. 248 Cf. Kautilya Bk. II. Ch. 1.
83. Kautilya Bk. III. Ch. 9.
84. Manu IX. 279.
85. Kautilya Bk. II. Ch. 36.
86. Manu VII. 196.
enemy should be flooded with water by breaking lakes
dams and embankments. 87

REPAIRS OF WATER-WORKS

These waterworks required regular timely repairs
and the state was either to undertake the work itself
or get it done by the people. Kautilya recommends
remission in taxes for those who carried out such
repairs. 88 Visnu Purana tells that a person doing so
gets merit. Brhaspati maintains that repairs of dams
is a pious work and its burden should fall on the
shoulders of the richmen of land.

The repairs to Sudarsana lake, carried out on
account of a breach due to excessive rains, records
the extent of king's tendency to such works of public
importance. Mahakshatrapa Rudradaman implemented the
ambitious programme of extensive repairs spending a
colossal amount from his personal purse as his minis-
ters could not sanction the amount from government

87. Kautilya Bk. XI. Ch. 4.
88. Ibid., Bk. III. Ch. 9.
treasury in view of anticipated large expenditure. The Junagadha Rock Inscription which records that the king neither employed any forced labour nor levied any tax for the purpose. Later on the Gupta king Skandagupta also effected the repairs to the same lake which we learn from Junagadha Inscription of Skandagupta.

STATE SEIZURE OF PRIVATE WATER-WS RK IN DISUSE

Kautharya prescribes that any privately managed water-work, not in use for five years, was to be taken over by the State and get them repaired on account of contingencies.

CONTROL AND REGULATION OF IRRIGATION

Apart from providing the land with water reservoirs, it was also very necessary for the State to regulate their use in order to dispense maximum benefit to the cultivators. Megasthanese speaks of necessary provisions for equitable distribution of water.

90. Ibid., p. 98.
91. Kautharya
92. Megasthanese Frag. XXXIV.
Kautilya prescribes the punishment to persons obstructing the course of water meant for irrigation or letting through unfair means; Manu agrees with him. Kautilya advises a fine of six panas to one who obtains the water before his turn or checks its course to others while availing his own turn. Regulation were there to prohibit depletion of a tank and hindrance to flow of water from a higher tank to a lower one unless the latter was in disuse for three consecutive years.

STATE WATER CESS

The State levied water cess on irrigated lands. Kautilya prescribes that if irrigation was done by an agriculturist from the tank constructed by himself through manual labour, one-fifth of the produce was to be paid to the State as water share (udakabhagam). The rate rose to one-fourth on irrigation by water carried on shoulders or bullocks in water-lifts or through other mechanical devices and to one-third on irrigation from canals.

---

93. Kautilya Bk. III. Ch. 10.
94. Manu, IX. 281.
95. Kautilya Bk. III. Ch. 9.
96. Kautilya Bk. III. Ch. 9.
97. Ibid., Bk. II. Ch. 24.
A HISTORICAL SURVEY OF THE WORKS OF IRRIGATION

On the basis of historical records we understand that the state in ancient India evinced great interest in providing irrigation facilities to agriculture.

In the Rgveda, we find the term 'avata' used at various places which signified a well.⁹⁸ There is also a reference to a (dried up) reservoir in which a bucket was lying.⁹⁹ A passage in the same work refers to 'Kulya' which was an artificial river or canal approaching a lake.¹⁰⁰ In the Yajurveda the term 'Sarasi' is used in addition to 'Kulya' which indicated a dam. The Atharvaveda describes digging of canals from rivers and compares the river with a cow and canal with a calf.¹⁰¹

The Kausika Sutra while giving the description of inaugural ceremony of a canal says, "A gold plate was laid at the mouth of a canal on which a frog tied with blue and red threads was made to sit. The frog

⁹⁸. Rgveda VII. 193.2.
⁹⁹. Ibid., I. 85.10, 116.9; IV. 17.167.
¹⁰⁰. Ibid., V. 83.8.
¹⁰¹. Atharvaveda, III. 3.63.
was then covered with moss and water was let to.\textsuperscript{102}

During the epic period, irrigation had become quite a familiar system. The Vālmiki Rāmāyana recaptu-
lates the legendary episode of Bhagiratha bringing the Ganga on earth which, in all its earnest, was probably a gigantic accomplishment of engineering skill in diverting the currents of the river from the high alti-
tudes of the Himalayas towards down plains. This fact was pointedly mentioned by Sardar Vallabha Bhai Patel, in one of his speeches.\textsuperscript{103} The efforts and strains, that Bhagiratha undertook, has become a well-known idiom in common use and is popular even today, symbolic of culmination of the efforts.

The Harivansha Purāṇa records an episode of Balarama diverting the course of Yamuna through Vrindā-
yana which, according to Ganguli, was apparently for agricultural purposes as Balarama is characteristically represented as a wielder of plough and pestle.\textsuperscript{104}

\textsuperscript{102} Kausika Sutra, XI, 3-6.

\textsuperscript{103} Leaflet No.7 Central Board of Irrigation, Govt. of India.

\textsuperscript{104} ABORI. Vol.XV, pp. 181-82 (1933-34).
In Buddhist period, we come across a description of a war, over the water of a dam narrated in Kunala Jataka, between two republican tribes, namely the Koliyas and the Sakiyas.\textsuperscript{105} Besides, numerous other references are there pertaining to irrigation.\textsuperscript{106}

The Hathigumpha Inscription of Kalinga King Kharavela records of a canal built by the Nanda king, apparently of Magadha. This had gone into disuse and had Kharavela had repaired and reopened it.\textsuperscript{107}

The Mauryan age witnessed an intense network of canals and dams used for irrigation. The observation of Megasthene which he records: "there grows throughout India much millet, which is kept well watered by the profusion of rivers and streams almost all the plains in the country have a moisture."\textsuperscript{108}

The exhaustive treatment of measures of irrigation by Kautilya, corroborate to this statement. The Junagadh Rock Inscription of Rudradaman records that the Sudan-

\textsuperscript{105} Gupta, K.M., Land system in South India, p. 215.
\textsuperscript{107} Pandey, R.B., Hist. & Lit. Ins. p. 46.
\textsuperscript{108} Megasthene Frag. XXXIII.
sana lake which he repaired in A.D. 150 was constructed by Pusyagupta, the viceroy of Chandragupta Maurya and enlarged by Tussafa, the Greek Viceroy of Asoka. 109

Cholamandala Satakam refers to construction of a great dam of bricks and stones. This solid work of masonry was known as 'Kal Anai'. In 1st Century A.D. king Karikala Chola got constructed a dam on the river Kaveri 110 regarding which V.H.R. Dikshitar writes:

"It was indeed a singular achievement of a monarch who had the long vision of brightening the rural life of his kingdom and consequently increasing the popularity of his state. So the king came to be known as Karikala Peruvalattan." 111 He had also dug a number of canals, tanks and bunds, in some of which he obtained help from other kings. It is said that with the dam on river Kaveri, other methods of irrigation like pecottah and palm leaf basket no longer remained necessary."

During earlier half of the 6th Century A.D. Kadamba king Kakusthavarman built a tank at Talagunde

110. Silappadikaram. p. 35.
in the present Shimoga district of the Mysore state. 112 Mahendravadi in the north Arcot district has a fine tank, the date of construction of which is not known. The tank must originally have been larger than that of Kavaripakkam and served lands some seven or eight miles away. The bund is enormously high and might be restored to its original height in which case a great extent of land could be brought under irrigation. On the bank of this tank a monolithic cave, dedicated to Visnu, was constructed in the early seventh Century by Mahendra Varma I, from which the tank drew its nomenclature 'Mahendra-Tataka. 113 In the village Kuram of Chingleput district. The construction of a tank, nine miles north and north-west to Conjeevaram, was made by Paramesvaraveraman, the great grand-son of Mahendra Varma I. This tank known as Paramesvara Tataka was provided with a feeder canal from the river Palar. 114

The Kasakudi copper plate grant of Nandivarman Pallava Malla refers to the construction of a big lake about ten miles east of modern Conjeevaram and it was

113. I.C. Vol. XII, p. 74.
enjoined with river canals and irrigation links could be dug from it for irrigation purpose.\textsuperscript{115} This lake named 'Tirsiyaneri' was evidently built by a Pallava king named 'Tirsiyan' whose period is not yet precisely ascertained. Mr. Sewell wrote in 1882 that some stones in the tank-bund bear inscriptions, one of which, in Tamil, records that one Tattacharyar dug the tank.\textsuperscript{116} King Nandivarman is known to be the opponent of Chalukya king Vikramaditya II, who reigned in fourth and fifth decades of the 8th Century A.D., and the date of construction of this reservoir might be fairly assumed round about that period.

Kaveripakkam is a tank which has a bund about four miles long stretching from north to south at the place of the same name in Walaja Taluk. It was constructed in the eighth Century by the Pallava king Nandivarman III, though the district Manual of North Arcot assigns a fabulous origin to it. It was the desire of a certain recluse to construct a reservoir at the spot.\textsuperscript{117}

\textsuperscript{115} Ibid., Vol. II, Part-III. p. 360.
\textsuperscript{116} List of the Antiquarian Remains in the Presidency of Madras, Vol.I, p. 188.
Yajirmegha tataka at Uttiramerur of Chingleput district was considered constructed during the time of Pallava king. None of the numerous inscriptions found at the spot, however, bear any record regarding its construction. It appears to have been built in the eighth century. Its nomenclature, no doubt, gives a clue that either the name or the epithet of king, who built this reservoir, was Yajirmegha. After the construction was completed its management and repairs appeared to have been entrusted to local administrator or the private individuals. There were many endowments in favour of this tank, appearing in a number of records. During the ninth year of the reign of Pallava king Pantippotarasar, an individual was entrusted with the work of removing silt from it. An inscription of the time of Pantinga, the ruler of Kanchi in early ninth Century, stated about the acquisition of holdings of certain people of a village for the benefit of this tank on their failure to pay the dues on their holdings, which were paid by the village assembly and were repayable in three years. In the event of failure in repayment, the holdings were to be sold out for the benefit of the

118. Epigraphical report No.74 of 1898.
tank. An interesting feature was the provision that anyone opposing such a course had not only to get his holdings sold but was to be considered a village pest and an arbitrator objecting to the provisions was to be banished. Many records mention the endowments of land, grain or cash which were meant for the removal of silt and repairs to the bund from their proceeds.

The king Avantivarman of Kashmir (A.D. 856-83) is reported to have placed necessary funds from his personal purse at the disposal of an engineer who "made the streams of Indus and Jhelam flow according to his will to connect the Mahapadma lake with the river Vitasta which he skillfully executed." 119

An inscription of Dantiduga refers to Gudimallam tank in North Arcot district in connection with the registration of a land endowment, the income from which was to be utilised in removal of silt from another tank in the village. 120 Those who looked after the endowment were assured of getting the merit of performance of a horse-sacrifice.

120. Epigraphical report No.226 of 1903.
Another inscription of some unidentified Pallava king refers to the construction of a canal from a tank at Tandalam in the ninth Century.\textsuperscript{121}

During the reign of Pallava king Kampavarman, a donation of paddy was made for a tank at Ukkal in Arcot district\textsuperscript{122} which was entrusted to the annual supervision committee of the village. In the fourth regnal year of the reign of Rajendra Chola I (1015 A.D.) the committee sold some land to the tank. Hultzsch maintains that income from the land was to be utilised for the maintenance of boats meant for crossing the tank.\textsuperscript{123} However, it seems more probable that the boats were maintained primarily for removing the silt. A tank also seems to have been built at Solapuram in Vellore district during the reign of Kampavarman.\textsuperscript{124}

Two of the Chola inscriptions throw light on the 'Chitramegha tataka' coming into existence during the age of the Pallavas and being so named after the title of a king.\textsuperscript{125} whereas another inscription refers to the

\textsuperscript{123} Ibid., p. 15.
endowment of a field by Chola king Parantaka I in favour of 'Cholavaridhi' in North Arcot district.\textsuperscript{126} The Udayendiram grant of the fifteenth regnal year of the reign of this king records about a feeding canal from Vinamangalam tank. Two more inscriptions of the same king\textsuperscript{127} mention two tanks at Sodiyambhakam and Takkolam. This king built a tank eight miles west of Gangaikondacholapuram, which is still irrigating a large area in Chidambaram taluka.

Nangavaram tank in Trichinopoly district, built in the tenth century A.D., is mentioned in two inscriptions.\textsuperscript{128} One of these inscriptions records a sale of land during the reign of Chola Rajakeshrivarman by the village assembly to a private individual in order to meet the expenses for removing the silt from the tank. A tank at Chikkallapur of Kolar district is mentioned to have been built in the year 977-78 A.D.

Chola ruler Rajaraja I (985-1013 A.D.) constructed the Uyyakondan or Myyakondan canal which originated from the river Kaveri and it covered a large part of Trichinopoly.

\textsuperscript{126} Ep. Ind., Vol.IV, pp. 221-225.
\textsuperscript{128} SpI. Report Nos. 342 & 343 of 1903.
poly taluk, and the town itself and eventually connected to large tank at Valavandankottai, about ten miles east to the town. At the head sluice of this captivating ancient irrigation channel. There are two inscriptions, of which one records the repairs by Chola Kolottung III in his 28th year (1205-6 A.D.) after a breach in the system. An inscription of Rajaraja I mentions of villagers having agreed to contribute to meet the expenses of a big tank at Bahur near Pondicherry.\textsuperscript{129} The Committee supervising the tank levied the contribution, and if any inhabitant of the locality refused to pay, the reigning ruler was authorised to impose penalty to be credited to the tank-fund. Another inscription of the same ruler dated 1010-11 A.D. refers to breaches in tank near the village Arikasari Mangalam. The repairs were said to have been made by an officer of the king apparently at the expense of temple to which the tank was assigned.

Tiruvalangadu plates refer to the excavation of a big tank by Rajendra Chola (1012-1044 A.D.) at his capital Gangaikondacholapuram in order to commemorate his

\textsuperscript{129} Epigraphical report No.178 of 1902.
victories in the north. The tank was consecrated with the water of Ganges as the record says, "His Lordship constructed a tank in his own dominions as a pillar of victory known by repute as Cholangangam which was filled with the water of the Ganges." This tank captures the eyes even now with its embankments about sixteen miles in length having canals for irrigating a large area.

Copper plate grants, registering the endowment of land, issued sometime in the eleventh Century A.D., mention the consecration of a tank, perhaps, near Almanka in Vizagapatam district. 130

The Achyutapuram copper plate grant registering the endowment of a village to a Brahmin by Indravarman in the year 87 (Circa 11th Century A.D.) mentions that the villages was situated near the Rajatataka or the 'King's Tank', the water of which the donee was permitted to utilise. 131 The grant was made on the occasion of the consecration of a tank.

During the reign of Chola king Kulottunga in the year 1106-7 A.D., a tank along with canal was built at

Sindhuvali in Mysore district. 132

The several miles long and wide Kundam (Kunarana) tank of Jabalpur district of Madhya Pradesh, which is still in use for irrigation, appears to be an ancient one. The proximity of Rupanatha, where a Minor Rock Edict of Asoka is still exists and Tigwa, where one of the earliest Gupta temples still stands among the ruins, perhaps, indicates that making allowance for the renovations at later dates, it must have been originally constructed during either the Mauryan or the Gupta period. Another tank, used for irrigation, at Bilahari in the same district, is known to have been constructed by the Kalachuri king Karnadeva. The Balasagara, a huge tank on the south-west outskirts of modern Jabalpur town and adjacent to Tewar village, which is the site of ancient Kalachuri capital Tripuri, is another reservoir built by a king of this dynasty. There are several other tanks in and around Jabalpur dug during the reign of Gond rulers.

Khajuraho, which is identified with the ancient capital of Chandellas, presents a series of tanks built by rulers of the Chandella dynasty. Of these Laksmana-
sagara, which is now called 'Khajuraho-Sagara' or 'Minoratala' is important due to its vast dimensions. The rulers of this dynasty had built tanks at Mahoba and Chanderi.

All these tanks referred to above are only a few of the examples of innumerable reservoirs built in ancient India. However, a tank which deserves a special mention was the Bhojapur lake which still survives in its miniature from near Bhopal, the capital of Madhya Pradesh. It was built by the Parmara King Bhoja of Dhara in the early eleventh Century. Originally it was stretched in an area of two hundred and fifty square miles with three hundred and sixty five streams pouring their waters into it. It was the largest artificial lake in whole of India and a saying in traditions about it is still quoted very often that "if there be a tank it is Bhopal tank, all others are ponds."¹³³ Later on in fifteenth century Hosang Sah, a Sultan of Malwa dried up for reclamation of lands for cultivation and the mighty lake, now remains reduced to a length of nearly twenty miles and width even less than a mile at some

¹³³ Tal to Bhopal tal aur sab Talaiya.
places. The dried up area is still known as Tal pargana.

In view of study of irrigation made above, one has to agree to remark of Crole wherein he observes about the works of irrigation like "Now abandoned or in ruins evince the solicitude of those ancient monarchs for the extension of cultivation even in tracts not favoured by natural position or quality of the soil... large and more expensive projects were not neglected. Even some of them bear witness to the enlightenment of those Hindu kings while the absence of scientific instruments in those remote times complete the astonishment of the beholder." 134

16. MEANS OF COMMUNICATIONS

The state depends for its smooth and proper functioning, to a large extent, on efficient modes of communications. Although, none of the ancient Indian writers on polity included them in the constituents of the State in the theories propounded by them, yet the role of communications has always been a significant

134. Gazetteer of Chingleput District.
one. An advanced and well-governed State, without elaborate means of communications could not have been conceived. In fact the line of communications are like the veins which interconnect the various limbs of the state and keep them working by supplying their requisites. In the absence of necessary communications each of the different constituents of the state would have been thrown into isolation and the State would have ceased to exist. It is, therefore, necessary for the State to have adequate means of communications and maintain them properly. Communications are also very important for general administration of the State and without them proper contact with the people and places are impossible. No state proclamation of any kind of administrative order can be circulated and no officials can succeed for their quick implementation and prompt execution. The law and order problem also can not be solved without communications. To crown all, the means of communications are of the supreme importance for the defence of the country and it is through them that the necessary armed forces and war supplies can be rushed to places where they are needed.
THE ANTIQUITY OF COMMUNICATIONS

The factors which unambiguously prove that means communications are essential for the State and Government had, no doubt, been realised even at the earliest phase of the very formation of the State. The existence of the means communications can be traced back to an early period in the remote past. Technically it may be said to have started building the means of communication during the period when man had appeared on the surface of this earth. When he was in the hunting stage, he usually chased the animals by running after them. At times he required to cross streams and rivers. Some tracts of land, repeatedly trodden under his feet, emerged, in due course, distinguished in appearance from the other part of land. These were the earliest paths. Similarly, rivers, streams, lakes or ponds which he had to swim across formed the earliest waterways of man.

Later on he cultivated friendship with some animals and began using some of them for riding. These were the earliest means of communications. In this field he found the horse to be most useful. In the waters he sometimes found wood pieces floating on the
surface which proved much helpful in swimming. These pieces were the trees standing on the banks, fallen in the water on account of soil-erosion due to floods or earthquakes etc. From these man might have got an idea leading to the development of navigation.

In the pastoral age, the situation as regards the means of communications did not improve much. However the use of animals for riding had increased as people used to move about to cover long distances along with his domesticated animals. He felt a pressing need of some animal who could take him from place to place quickly and did not exhaust stamina even after covering a long distance. Obviously, horse by now had become a time tested friend of man, who possessed all these quiet qualities. Throughout the pastoral age, horse played the main role in means of communications.

The next stage of evolution in human history was the age of farming and agriculture. It arrived with tremendous opportunities and possibilities and transformed the human life altogether. The man found new horizons of progress before him. He was required to wait for quite sometime for sowing and harvesting the crops. This resulted into emergence of permanent inha-
itations. As man had to go to the fields and farms every now and then, he felt that the strip of land which he trekked so often might he freed from hurdles, and if it was improved, would have become comfortable. He readily translated his idea into action and thus the first road on this earth had its birth.

After becoming an agriculturist man found that he required implements for agricultural operations and also the markets to sell his produce, all of which he could not consume himself. This resulted into beginning of various other traders and occupations auxiliary to agriculture and the early markets came into existence.

In these changed circumstances with manifold economic activities, which emerged in the process of agriculture and trade, it pressed for the need for the means of communications. For transporting the produce to the market not only roads leading to market-places were necessary but it was also felt equally necessary to have the means of transport which could carry loads. Initially man carried load himself or on animals whom he had domesticated. But this could not meet his need fully and the man invested the wheel and the cart which
could accommodate enough load and when pulled by bullocks moved forward. This was the first great discovery which revolutionised the economic and social life of the people.

This invention of the wheel was the first greatest revolution in the history of mankind. It was the wheel of progress and it has gone on rolling, as it does still roll, and with its movement the man has advanced to one after another mile-stone of social and economic development.

But the ways and means of communication were not confined to land alone. The rivers and streams often obstructed the way of man who could not swim and across them with heaps of load. He had already observed that the dried wood floated on the surface of water and did not sink. Noticing this characteristic quality of dried wood, he used it for making a vessel. This was man's earliest attempt of making boat.

With the gradual march of time, these means of communications gradually underwent constant innovations and improvement. Roads were now somewhat better than earlier ones with new methods and techniques of construction. The back of animals later began to carry the
saddle. Elephants and Chariots were added to the family of means of communications and became favourite royal modes conveyances distinguished from ordinary means of communications in popular use. The need for crossing sandy tracts and deserts made camel an important means of communications.

COMMUNICATIONS DURING THE INDUS CIVILIZATION

By the time of Indus Civilization communications had already travelled a long way of development. Well-planned and properly constructed roads became a regular feature at almost all urban sites of that great Civilization where extensive network of roads and lanes with drainages on sides along with the series of houses are objects of admiration to modern town planners and builders. The presence of a beautiful terracotta cart in the unearthed remains throws further light on means of communications in those remote times.

During Indus Valley period means of communications had reached a stage that the era not only witnessed internal links of trade and commerce but commercial contacts with other countries were also established. Archa-
ological excavations at number of sites in other countries testify to this fact. In the valley of Euphrates and Tigris, Indian teak has been dug out from an ancient site.¹ In Egypt, some mummies in old mausoleums have been found wrapped in Indian clothes. Indian sandal had also reached there during the reign of queen Hat-Sep-Situ.² These findings indicate that communication links had connected India even with the countries situated far away. However, it is not definitely known whether traffic was through land routes of water-ways or on both types of routes. Some scholars believe that only land routes were in use; but it seems more probable that both types of routes served the purpose³ as we know that the Indus Valley people were getting supply of fishes from the Persian gulf.⁴ It could be possible only when vessels sailed in the sea and they appear to have evidently been developed navigation. The fact that the Indus Valley people were

4. Ibid., p. 16.
well aware of navigation is further confirmed by a Mohenjodoro terracotta depicting a boat. The excavations at Lothal have brought to light a developed dockyard which is much superior and advanced in its construction equipment and facilities in comparison to any other dockyard of the contemporary world.

VEDIC PERIOD

The Vedic period witnessed an intensive maritime activity. Aryans were much fond of travelling in water. Rgveda has plenty of references which refer to long voyages in the seas. These included the voyages for procuring precious jewels from the seas. One of the references describes sage Tunga deputing his son Bhuja on a sea voyage for combating the enemies. During the course of this voyage his ship met with an accident and began to sink. Bhuja invoked Asvini Kumâras who sent a big rescue ship in response to his call. At one place the sea voyage of sage Vasistha has been narrated.

7. Rgveda, VII 6.7, V. 56.6, I. 48.3.
8. Rgveda, I, 116. 3-5.
9. Ibid., VII. 88. 3-5.
whereas, at another place a sage propitiates his family god for taking him beyond the seas. 10

The contention of some scholars that the Vedic people were ignorant of voyages and that the term 'Sindhu' occurring in Rgveda only denotes the lower stream of the river Indus, 11 does not seem to be plausible. The Rgveda tells about 'Panis' who sent their ships to the countries far away, 12 and they moved over the entire sea. 13 It is further stated that Varuna, the god of water had the thorough knowledge of the sea routes on which the ships plied and his guards patrolled the sea all round. 14 The later commentators have also interpreted the term 'Sindhu' to mean the sea. 15

In the later Vedic period even the Greeks had come to know about India! The Eastern Ethiopians mentioned by the Greek poet Homer in his 'Odyssey' which was composed about a millennium B.C., were the Indians. 16

10. Ibid., I. 97-98.
12. Rgveda, II.48.3.
13. Ibid., I. 56.2.
16. Odyssey, 1.23.
The Greek historian Herodotus has also used the term 'Ethiopians' for Indians. Rawlinson holds that during the time of Homer, there would have been exchange of commodities between India and Europe, some of which are mentioned in the ancient European literature.

EXPANSION OF COMMUNICATIONS

The period that followed the Vedic age witnessed an intensification of trade and commerce and overall increase in communications. During this period which precedes the rise of Magadhan Empire, many prosperous expanding commercial centres grew up. We learn from Buddhist texts, the Astadhyayi of Panini, the Ramayana and the Mahabharata that Sravasti, Rajagaha, Vaisali, Kusinagara, Pataliputra, Nalanda, Varanasi, Saketa, Kausambi, Mathura, Taksila, Purusapura, Vidisa, Mahishmati, Avantika, Pratisthana etc., were the prosperous cities of ancient India having multifarious trades and industries whereas, Dantapura (Kalinga), Bharukachchha (Bharonch), Supparaka (Sopara), Roruka (Sauvira) and in

17. Herodotus, 7.70.
extreme south Kalambika Pattana and Kaveripattana were
the most prosperous harbours. In fact, the term
'pattana' itself signified a harbour or port. During
this period, the manufacture of different types of
chariots, carts and big ships became an established
profession. Mahavamsa, Samyukta Nikaya and Anguttara
Nikaya contain references to ship building activities.
The Samuddvanija Jataka mentions a ship which could
carry one thousand passengers and the Janaka Jataka
speaks of one which carried seven hundred passengers.

This period is marked for an intensive network
of trade routes in the country. Some of them are given
below:

1. From north to south-west connecting Sravasti with
   Pratisthana. The main cities on it were Mahismati,
   Avantika, Kausambi and Saketa.

2. From north to south-east connecting Sravasti with
   Rajagrha. The important cities on this road were
   Kapilvastu, Kusinagara, Pava, Vaisali, Pataliputra
   and Nalanda.

3. From east to west running alongside the main river
   system of the north.

4. Uttarapatha - This road connected Tamralipti in the east with Purusapura on the north-west boundary of the country. On it were situated many big cities like Kapisa, Puskalavati, Taksila, Sakala, Hastinapura, Mathura, Kannauj, Prayaga, Kasi and Pataliputra. Beyond Purusapura it ran farther and connected Europe with India via Caspian Sea. This international route finds mention in the Astadhyayi\(^{20}\) an account of Greek historians Strabo and Pliny.\(^{21}\)

In this age long commercial journeys and voyages were a regular feature. People undertook the journeys which took even months to reach the destination. Convoys of carts and caravans of camels became very popular. The fleets of ships moved on the vast seas and oceans.

The succeeding era was an age of imperial unity which streamlined communications along with other units of the State and thereafter, the communications kept on widening their area facilitating the increasing trade and commerce right up to the end of the ancient period.

A survey of all these activities is not possible within the limited scope of this post-doctoral work and only this may be said in a nutshell that during the ancient

\(^{20}\) Panini, 5.1.77.

\(^{21}\) Tarn, W.W., Greeks in Bactria and India, pp. 488-89.
period country enjoyed intensely extensive internal trade, besides a multidimensional international trade and commerce with countries up to Rome in the west and China in the east including all the countries of the Far East. Numerous new routes as well as ship building and repairing yards were opened which let to multiplication and consolidation of commercial relations with countries in the Far East and it had reached a level which, virtually led to economic colonisation of these countries by India. In contemporary commercial world, India indubitably held an important position.

The expansion of trade and commerce and establishment of communication links eventually led to economic growth. This was not spontaneous. The State played a major role in it and it was included in the functions of the king to look after these items and make necessary attempts to regulate the markets.

CONSTRUCTION OF ROADS

The construction of roads was considered as a pious work and it was considered that it brought merits to the builders. Sukra recommends the construction of roads with the labour of the criminals and prisoners.22

22. Sukra, I. 268.
We learn from Megasthenes that Mauryas had built a road from Purumapura to Pataliputra. Since we get a reference to the same road in Panini, it appears more probable that the road sight have been rebuilt in Mauryan period. It was the biggest road in the country and perhaps the longest in the world in those times measuring nearly 3100 kilometer and had the stones fixed indicating distance every half a Kosa (near a mile). Kalidasa has also referred to this road calling it the great road (Mahapatha). 23

The Harivamsa Purana also refers to the construction of roads in the cities. 24 Sukraniti mentions the method of building a road. He suggests to build a concrete road by using lime and murrum. 25 The work states fixing the standard of a good road that it should have a surface strong like the back of a tortoise and should have necessary bridges and drainages along sides for the clearance of water. 26 Kautilya prescribes the construction of various types of roads and their situation. 27

23. Kalidasa, Kumarasambhavan, VI. 3.
24. Harivamsapurana, Visnuparva. Ch. 34 & 38.
26. Ibid. I. 265.
27. Kautilya, Bk. II. Ch. 3 & 4.
Sukra opines that roads should be constructed from east to west and north to south passing from the middle of the village and should be many in number according to size of the inhabitation. Kautilya states that the site selected for town planning should be according to direction of architects and it should have three highways on each side from east to west and north to south. There should be twelve gates in all the four directions having land, water and runnel routes.

VARIOUS TYPES OF ROADS

In accordance with prescription and in view of the purposes, roads varied in their specifications. The roads and passages existing during those days have been classified as under:

1. Rajamarga (National highway)
2. Rathya (Broad route for chariots)
3. Rathapatha (Narrow route for chariots)
4. Pasupatha (Road for cattles in general)

29. Kautilya Bk. II. Ch. 4.
5. Mahapasupatha (Road for big animals)
6. Kaudrapasupatha (Road for small animals)
7. Kharosthapatha (Road for asses and camels)
8. Chakrapatha (Road for wheeled traffic)
9. Padapathana (Route for pedestrians)
10. Manusyapatha (Route for pedestrians)
11. Amsapatha (Narrow Lanes)
12. Vanikpatha (Route for traders and their entourages)
13. Hastipatha (Road for elephants).

The roads as referred to above, derive their nomenclature from their users. There were other certain type of road which are named after their destinations. They were:

1. Rastrapatha (Road leading to district headquarters)
2. Vivitapatha (Roads leading to pasture grounds)
3. Dronamukhapatha (Road leading to headquarters of a territory with four hundred villages)
4. Sthaniyapatha (Road leading to headquarters of a territorial unit of eight hundred villages)
5. Samyaniyapatha (Road leading to markets or cultivated fields)
6. Vyuhapatha (Road leading to garrisons)
7. Samasanapatha (Road leading to cemeteries)
8. Gramapatha (Road leading to and through villages)
9. Vanapatha (Road leading to forests)
10. Ksetrapatha (Road leading to fields)
11. Setupatha (Road leading to dams).

Kautilya lays down the standard width in regard to some of these roads. He opines that Rathya should be twenty-four feet broad in the town, Rajamarga, Dronamukha, Sthaniya, Srastra, Vivita, Samyaniya, Vyuha, Smasana and Gramapatha forty-eight broad, Setu and Vanapatha twenty-four feet and Hasti and Ksetrapatha twelve feet, Rathapatha should be seven and a half feet wide whereas Pasuptha six feet and Manusya and Ksudrapasupatha only three feet.\(^{30}\)

Katyayana mentions four types of routes which are as under:

1. Kantarapatha (Route in dense forests)
2. Jangalapatha (Route in ordinary forests)
3. Sthalapatha (Route in the plains)
4. Varipatha (Waterways).

---

\(^{30}\) Kautilya. Bk. II. Ch. 4.
In the commentary on Buddhist work 'Mahaniddesa' the roads of five types are mentioned. They are Ajapatha, Bannupatha, Musikapatha, Verapatha and Maranapatha. Ajapatha was a narrow route. Verapatha was a route of enemy and Maranapatha was a road free from danger.\(^{31}\) It is not ascertained what type of route the terms 'Bannupatha' and Musikapatha denoted.\(^{32}\)

Harivamsa refers to three types of roads which are 'Rathyā', 'Vithi' and 'Naramarga' meaning road for vehicular traffic, avenue and men's route respectively.\(^{33}\) Sukra in addition to Rajamarga also use the term 'Padya' which denoted a footpath.\(^{34}\) He prescribes that National (Rajapatha) highway should be constructed in all the four directions of the royal palace and maintains that the highway of forty-five feet width is the best, of thirty feet the fair and that of twenty-two and a half feet the worst and holds that similar specifications are also applicable in regard to trade routes in cities,

\(^{31}\) Banerjee, N.C., Economic Life and Progress in Ancient India, p. 227.

\(^{32}\) Bajpai, K.D., Bharatiya Vyapara Ka Itihaasa, p. 39.

\(^{33}\) Harivamsa, (Visnuparva), Ch. 34 & 38.

\(^{34}\) Sukra, Ch. I. 261.
towns and villages. Regarding footpath he states that it should be four and half feet wise and roads in villages and towns should be fifteen feet wide. 35 The Brahmanda Purana mentions Desamarga, Gramamarga, Simamarga and Rajapatha. 36 These are the self explanatory terms and need no elaboration. It also refers to Sakharathya which was a link road and Upakhya which denoted lanes. 37 The Devi purana describes two specific types of routes.

Besides, we find in Kautilya some routes peculiar to forts. Of these 'Pratoli' was a broad passage between two towers, 'Devapatha' was a tunnel of secret route about three feet wide at the entrance and twelve feet at the exit and 'Charya' was an approach to the tope of the rampart. 38

There were also some minor paths. 'Skandha' was a passage which was so narrow that only a single man could walk. 'Upadhya' was a small passage in and through

35. Ibid., Ch. I. 259-261.
36. Brahmanda Purana, Ch. 8. 227.
37. Ibid., Ch. 8, 235.
38. Kautilya. Bk. II. Ch. 3.
fields and 'Visikha' was a street in that part of the city where workshops of the State-goldsmiths situated.

Considering the types of roads enumerated above, one would be inclined to believe that there were roads distinctively ear-marked for the particular modes of conveyances, animals and men which obviated possibilities of traffic jam, whereas roads distinctively leading to particular places saved time and unnecessarily long journey.

The roads had usually to cross waters of a river or the stream and for this purpose bridges were required. We get the term 'Setubandha' for bridges. In addition to regular bridges there used to be the temporary bridges also. They were mainly of two types which were of fleets of boats linking one with another and of elephants standing in a row respectively.

THE CARRIAGES

The traffic on the roads included chariots and carts of various types besides men and animals. Chariots were usually of the following types:
1. Devaratha (Chariot for idols),
2. Pusparatha (Chariot for processions during festivals),
3. Sangramika (War chariot),
4. Pariyanika (Common chariot),
5. Parapurabhiyanika (Chariot for expeditions in the country of enemy and for war with enemy chariots and Vainayika (Chariot in use for training).

Among the carts used for conveyance 'Sakata' was big cart, Golingam' of medium size drawn by bulls and 'Laghuyanam' was a small cart. Besides, 'Sivika' and 'Pithika' were palanquins.

Manufacture of various types of chariots was responsibility of the Rathadhyaksa who was in charge of a separate department. This department was entrusted with work of maintenance and repair of chariots. There were separate departments for upkeep of elephants and horses. Theft of any animal or means of communication was punishable.

 PRIVILEGES OF TRAVELLERS

But the organisation of communications on land was not complete without provisions for a safe and comfortable travel. Mahabharata states that good kings
should construct meeting halls, prapas (drinking water stalls), tanks, temples and lodges for the Brahmanas. For protection from the Sun, there was a tradition of planting trees on either sides of roads. There were rest houses where travellers could take rest and overcome tiresomeness. These rest houses had provisions for food and water. Sukra recommends the construction of rest houses with the labour of criminals and prisoners.

MAINTENANCE OF ROADS

The State carried out the necessary maintenance repairs of the roads and took special cares in this direction. Anybody, engaged in subversive activities for damaging the roads, was liable for serious punishment. Digging or ploughing on the road was being heavily fined. Similarly there were fines for obstructing the roads. Kautilya recommends a fine of twelve panas for such an offence on Kaudrapasu and Manusyapatha, twenty-four panas.

---


41. Kautilya. Bk. III. Ch. 10.
panas for Mahapasupatha, fifty-four for Hasti and Ksetra, six hundred for setu and Vana, two hundred for Smasana, five hundred for Dronamukha and one thousand panas for obstructing Sthaniya, Ratra and Vivitapathas. 42 Sukra forbids any kind of obstructions on the roads, particularly to the movements of the poor, the blind and the physically handicapped. 43

SAFETY AND SECURITY ON ROADS

Some of long trade routes were usually infested with thieves, robbers and decoits apart from violent animals. For protection against these elements there used to be posted guards called 'Ataviraksaka'. The chief of these guards was called 'Arakhhijetthaka'. The State was required to clear the roads from the menace of robbers. Sukra lays down injunctions that for convenience of travellers king should protect roads and those who are oppressors of travellers must be very carefully repressed. 44 From Kalidasa, we learn

42. Ibid., Bk. III. Ch. 10.
43. Sukra. Ch. I. 99-100.
44. Sukra. Ch. I. 313-14.
that Gupta rules had made the trade routes comparatively safer than they were during earlier times and traders could move about without any fear. It appears that there were statutory rules for welfare of travellers, prominently displayed everywhere since the times of Kautilya. While stating the types of royal charters he discloses that a document in which the king orders his officials for the protection and benefit of travellers was called 'Sarvatmaga' for it was inscribed at all places on road-side in the country.

The extent of importance State attached to safety and security of roads is evident from Manu's injunction that those who did not give assistance, according to their ability when a village was being plundered or when a highway robbery was committed. They were to be banished.

Kautilya lays down that in the event of merchandise being stolen or lost in intervening places between any two villages the Superintendent of Pastures was to

45. Kalidasa, Raghuvamsha, XVII. 64.
46. Kautilya, Bk. II. Ch. 10 Cf. Asoka's R.E. II. & P.E. VII.
47. Manu. Ch. IX. 271.
compensate the travelling merchants. In case there
no pasture lands, the officer called 'Chorarajjuka'
was to compensate the loss and where such officer was
not posted people on the boundary had to contribute
for compensation and if there were no people on boundary,
the inhabitants of five or ten villages in the neighbour-
hood of place of occurrence had to compensate for the
loss collectively. 48

Manu includes cross-roads in his list of the
places which were to be guarded by companies of soldiers
both stationary and patrolling and by spies. 49

with a view to ensure safety there were certain
rules for the drivers of the vehicles who were called
'Chakrachara'.

SANITATION OF ROADS

The State had to see that the proper use and
sanitation of the roads was maintained and framed sui-
table rules for the purpose. Causing filth or nuisance on
road or its use for the purpose for which it was not
fixed. constituted an offence and made one liable for
punishment.

48. Kautilya, Bk. IV. Ch. 13 Cf. Gautama, X. 46.4,
    Visnusmriti, III. 66-67.
49. Manu. Ch. IX. 264-66.
TYPES OF WATERWAYS

Waterways were classified into three types:
1. 'Kulya' or common routes inside the country in rivers and artificial canals; 2. 'Kulapatha' meant for coastal traffic from one port of the country to another and 3. 'Samyanapatha' denoting a route in ocean meant for international communications.

MEANS OF NAVIGATION

Vessels plying in the waterways were of different types which were as follow:

1. Samyatya—Ship crossing the oceans
2. Sankhamuktagrahin
3. Mahanava
4. Pravahana
5. Apanavikadhisthita
6. Ksudraka
7. Svataranani
8. Himsika.

As the nomenclatures point out, 'Sankhamuktagrahin' was a vessel used for procuring pearls and Himsika for fishing. Mahanava was a large vessel used probably for coastal traffic whereas Pravahana
was a yacht and Kaudraka a boat. 'Aptanavikadhishthita' was a vessel for the dignitaries and royal personnels. Svataranani was a self-propelling vessel running itself without cars, probably with sails.

CREW FOR SHIPS

Among crews of ships or big vessels there used to be a 'Sasaka' or the Captain, 'Niyamaka' or steering-man, 'Dakrgrahaka' or anchorer, 'Rasmigrahaka' or rower and 'Utsechaka' was one who emptied water from the vessel.

OTHER MEANS OF WATER-COMMUNICATIONS

Apart from the boats and ships stated above, there were certain other means of water communications which may be put as under:

1. Kasthasanghata- Pieces of timber tied together
2. Venesanghata- Boat made by bamboos
3. Charmakaranda- Basket covered with leather
4. Chhatti- Leather bag
5. Gandika- Floating device made of leather of rhinoceros
MANAGEMENT AND CONTROL OF NAVIGATIONAL ROUTES

For management of waterways and means of sailing, there was a separate department in charge of the superintendent of shipping who was required to keep a watch on the various waterways including oceanic routes.\(^50\)

There were state-owned fleets which could be hired on payment of fare.\(^51\)

The Superintendent of shipping was to adhere to port rules fixed by Mayor of the city. It is said that for harbouring ships, ports should be fixed and kept under strict vigilence so that spies of enemies could get no entry into them.\(^52\)

Ships or big boats were not to be allowed to sail on a voyage unless they had full crew. The superintendent had to arrange for rescue operations, with the generosity of a father, in case of ships sinking due to error of direction or the storm.\(^53\)

Foreigners could enter the country only with the passport along with those persons who also had permission\

\(^50\) Kautilya. Bk.II. Ch. 28.\(^\)
\(^51\) Kautilya. Bk.II. Ch. 28.\(^\)
\(^52\) Ibid., Bk. II. Ch. 28.\(^\)
\(^53\) Ibid., Bk. II. Ch. 28.
for the entry. Anyone without passport or a suspect was to be arrested immediately.\textsuperscript{54}

There were fixed routes and hours for crossing rivers. Anyone plying his boat without permission either at other times or from other place was liable for punishment. However, sailors, wood-cutters, grass-cutters, horticulturists and watchman of crops were granted exceptions from this rule. The persons crossings waterways with seeds, food-stuffs for officials, fruits, flowers, vegetables and spices or crossing due to fear of thieves or the company of army going to complete the remaining work of the envoy, military-stores and detectives were exepted from the provisions of this rule. Also there was no ban on persons crossing by own boats.\textsuperscript{55}

Traders had to pay the tax on their commodities in accordance with the rules of the port. The tax on goods in rescued vessels was remissive either in full or in part considering the amount of damage. Such vessels were to be directed to port or were released. Taxes were to be collected at toll houses. Traders

\textsuperscript{54} Ibid., Bk. II. Ch. 28.

\textsuperscript{55} Ibid., Bk. II. Ch. 28.
rounded up for carrying goods without paying tax were liable for confiscation of their entire goods. Similarly those trying to cross with unusual loads at places other than jetty were also liable for confiscation of their goods. 56

In ferry service there were different rates for the various types of animals and classes of conveyances. These were fixed according to weights and the width of rivers also. The Brahmanas, sages, children, diseased, envoys, messengers and pregnant women were excepted from the payment of the ferry. 57

If any vessel sank due to carelessness of crew or inadequacy of necessary equipments or absence of repairs, the superintendent of shipping was to pay the compensation to passengers. 58

The stealing or disrupting of vessels was heavily punishable. Thus, we find that water communications were also there in a developed stage in ancient India and were under control and regulation of the state.

56. Kautilya. Bk. II. Ch. 28.
57. Ibid., Bk. II. Ch. 28.
58. Ibid., Bk. II. Ch. 28.
AIR COMMUNICATIONS

Regarding aeronautical communications, it is very difficult to say whether they were at all developed in India. We get a solitary reference in Ramayana that Rama had returned to his capital after his conquest in a plane named 'Puspaka - Vimana'. 59 There are many other references of travelling in air, in the vast ancient literature but they all certain to celestial beings. It is generally believed that these episodes themselves are the flights of imagination and there were no regular airways or aerouantal devices in India.

Whatever had been the modes of communication, we can safely conclude that ancient India did not lag behind in contemporary world in regard to the means of communication. It was development of these means of communications that led the country to become a premier trading nation through the ages.

Besides usual trade and commerce communications played the major part in expansion of Indian civilisation and culture to various countries. It is because

59. Ramayana, VI. 122-1. ff.
of them that cultural envoys of the country could be sent to other parts of the world. The eternal messages of the religious and spiritual leaders of India could reach and benefit the humanity scattered all over the world. The ancient literature abounds in references of voyages and travels for religious upliftment and propagation of ideals of philanthropy undertaken by ancient Indians. In absence of such a comprehensive organisation and net-work India would have never been successful in professing its spiritual knowledge to a large part of the world and mitigate its sufferings caused due to ignorance. It would have never been possible for her to become 'Preceptor of the world'. The harmonious relations, amity and friendship that country enjoyed in relations with other countries depended on efficiency of her means of communications.

Within the country communications played a dominant role in bringing various distant parts nearer and uniting divergent cultural units. In fact, communications paved the way for emotional integration. They provided people with the amenities of travelling and seeing vast country in addition to opening opportunities of meeting their Kiths and Kins, friends and
well-wishers living far away from them. It was because of communication that they could go for their religious and spiritual accomplishments by going on pilgrimages.