CONTRIBUTIONS TO
THE ECONOMIC HISTORY OF NORTHERN INDIA

- 74189

Government of India,
Ministry of S. R. & O. A.
Gazetteer Unit
CONTRIBUTIONS TO
THE ECONOMIC HISTORY
OF NORTHERN INDIA
from the tenth to the twelfth century A.D.

By
PUSPA NIYOGI, M.A., D.Phil.

WITH A FOREWORD BY
DR. BENOY CHANDRA SEN, M.A., LL.B, Ph.D. (Lond.), F.A.S.
Department of Ancient Indian History and Culture
Calcutta University

CALCUTTA
PROGRESSIVE PUBLISHERS
1962
To

MY BELOVED PARENTS

DR. M. N. NIYOGI

and

SM. SNEHALATA NIYOGI
FOREWORD

It is with great pleasure that I welcome the publication of Dr. Puspa Niyogi’s work on the economic history of Northern India from the 10th to the 12th century A.D. It can legitimately claim to be the first of its kind to deal with the outstanding features of a period, not treated before in such a compendious form as in the present volume. The book comprises interesting chapters on land, land measurement, trade and commerce, crafts and industries, currency, weights and measures, the State’s income and expenditure, planning of towns and villages, temple economy and hoarded wealth. The materials on which they are based have been compiled with meticulous care from the extant sources, original and secondary, specially the epigraphic records which form a voluminous literature. The author shows a truly critical spirit in the selection of her materials, lying scattered in diversified contexts, as well as in her attempt to reconstruct a consistent and reliable theme with due appreciation of the many controversial problems connected with the subject. The book, written in an unpretentious style and embodying a large mass of information compressed with great skill and precision, is one of solid worth in a highly complicated field of research.

Dr. Niyogi surveys the economic condition of an age in which its rulers showed an extraordinary interest in militarism and political expansion. Probably their activities were not exclusively motivated by a desire for political glory, but partly by ideas of economic exploitation as well. In this age also there were renewed foreign inroads, ultimately leading to the beginning of Muslim domination in the North. The economic structure was put to a continuing strain of almost unabated intensity, and was, as a consequence, shaken to its foundations. When the Muslims invaded India they found fabulous concentrations of wealth in some places but the tragic experience of the Indian people showed that accumulated treasures were no sign of an
economy which could sustain a determined and prolonged struggle for socio-political integrity. The prevalent economy was a development on traditional lines, based on age-old factors of production and customary distribution of wealth.

India's foreign trade was being profoundly affected by what was happening outside her borders, which was sure to have its repercussions on the volume and organisation of her internal trade also. Dr. Niyogi seems to suggest in the end of her study that the general pattern of the economic system, which was spread over a vast area, was inherently incapable of averting the unprecedented crises which resulted in the breakdown of the old order. Her able exposition will be of indispensable help to all who are interested in the study of the economy of ancient India.

Benoy Chandra Sen

40, Dr. Sarat Banerjee Road,
Calcutta-29
23-8-62.
PREFACE

This thesis prepared under the supervision of Dr. B. C. Sen was approved for the Degree of Doctor of Philosophy of Calcutta University in 1957. I have attempted to present in my work an account of the economic condition of Northern India from the 10th to the 12th century A.D. The subject had a great fascination for me during my Post-graduate days when I was studying in our University the history of the socio-economic institutions of ancient India. After I took my M.A. degree I lost no time in drawing up a plan of research on economic history with special reference to the period indicated above. Fortunately, I was encouraged in pursuing my studies by the grant of a Research Scholarship by the Directorate of Education, Government of West Bengal, which I was privileged to enjoy for three successive terms (1952-55). I published a few papers during this period, and by way of encouragement the University of Calcutta was pleased to grant me a Research Scholarship for a further period in 1955. The award of these scholarships enabled me to keep myself engaged in carrying on a systematic course of research for about five years.

So far as Northern India is concerned, for the period mentioned, published works do not deal with its economic history on a comprehensive scale. In undertaking to investigate the economic conditions prevailing in the country for about three centuries preceding its conquest by the Muslims, I was prompted by a desire to contribute, by my humble labours, to the exposition of a subject, not known to have been adequately treated by any previous scholar. The Arabs conquered Sind in the beginning of the 8th century A.D., and subsequent Muslim invasions finally culminated in the subjugation of the whole of Northern India, which was practically completed by the end of the 12th century A.D. Failures of the Hindu rulers to meet the Muslim challenge must have been due to various causes, not
exclusively political or military, which require a minute investigation. Foreign invasions, and the resultant loss of political power by the Indian rulers, affected the economic institutions of the country, which had also played their part in shaping the situation that ultimately led to the Muhammadan conquest.

I have tried to compile my material from a variety of sources, including inscriptions, coins, works of Muslim writers and indigenous contemporary literature. I donot, however, feel satisfied that the available material is sufficiently clear or exhaustive in every respect. But I proceeded with my enquiry, being convinced that it was worthwhile to compile all that can be gleaned from the sources, accessible to me, and to make a serious attempt to assess its historical value. I have tried to resist the temptation of indulging in guesses or speculations to fill the gaps in my account, due to lack of material. In some places I have discussed earlier as well as later sources, but this has been done only where it was found necessary to attempt to clarify certain points, not intelligibly explained by contemporary sources. After a survey of the material, incorporated in the thesis, I feel convinced that the general economic pattern, existing in the period, was very largely a continuation, with modifications and adjustments, of the system which had taken centuries to grow and evolve. Muslim impact, no doubt, created serious disturbances in that system, which, however, became increasingly manifest after the alien conquest. But, chronologically, an enquiry into the complications that prominently exhibited themselves after the conquest, is outside the scope of the present thesis. There was much wealth in the country when the Muslims first appeared. A great part of this wealth was drained off. The wealth of the country had, to a large extent, remained hidden in secret hoards, which were violently seized and appropriated by the invaders. Of the traditional arts and crafts, those which had been flourishing for centuries under the patronage of princes, religious institutions, etc., and which were suited to the tastes, needs and temperaments of the indigenous population, were surely disrupted as a consequence of the Muslim attacks. It was difficult for India’s wealth to be regularly employed in trade and commerce
whose scope was being considerably restricted on account of insecurity, due to frequent inter-state wars. Lack of initiative and enterprise, and lessening of direct contacts with foreign markets outside India, must have also hindered economic expansion. The fall of famous cities like Kanauj must have disturbed the normal course of affairs, affecting the country's economy as a whole. A large-scale withdrawal of metallic currency in different regions was a sure symptom of economic decline. I have attempted to throw light on some of these and other allied problems that naturally arose in the course of discussing the evidence used.

The present work could not have been carried out without the help of numerous scholars whose valuable contributions have been utilised, wherever necessary. I have indicated my indebtedness to them in the text and in the bibliography. I take the entire responsibility for all mistakes of omission or commission to be found in the book, some of which are due to careless proof-reading. I regret the delay in the publication of the book which was sent to the Press in 1958.

I must express my deep gratitude to my revered teacher, Dr. Benoy Chandra Sen without whose constant guidance this work could not have been prepared and completed.

I take this opportunity to offer my tribute of respect to the memory of Dr. J. C. Ghosh for his affectionate interest in my work during his Vice-Chancellorship of Calcutta University. For their kind sympathy and unfailing encouragement I am indebted to our esteemed National Professor Dr. S. N. Bose, Dr. P. N. Banerjee, a former Vice-Chancellor of our University, Dr. Parimal Roy, Director of Public Instruction, Government of West Bengal (Retired), Dr. A. L. Basham of the School of Oriental and African Studies, London, Dr. B. B. Dutt of Calcutta University, my teachers in the Department of Ancient Indian History & Culture, with which I was associated as a Research Scholar and a Fellow for some years, and also to Principal H. B. Sarkar of Kharagpur College and Principal S. Chakrabortty of the H. M. M. College for Women, Dakshineswar. I should record my grateful appreciation of the very keen and generous interest which Sm. Bela Debi took in the progress of my research work. The staffs of the National Library and the Central Library,
Calcutta University, helped me in every possible way, for which I am sincerely thankful to them. In conclusion, I acknowledge my debt of gratitude to Sri Sushil Kumar Basu, Proprietor, Progressive Publishers. Thanks are also due to the Pooran Press for its co-operation in the publication of this book.

3rd October, 1962.

PUSPA NIYOGI
CONTENTS

Foreword . . . (vii)
Preface . . . (ix)
Abbreviations . . . (xiv)
Select Bibliography . . . (xx)

I. VILLAGES: ECONOMIC CHARACTERISTICS AND PLANNING . . . 1

II. LANDED WEALTH: OWNERSHIP AND DISTRIBUTION . . . 50

III. LAND MEASUREMENT . . . 81

IV. WEIGHTS AND MEASURES . . . 108

V. TOWNS AND TOWN-PLANNING . . . 117

VI. TRADE AND COMMERCE . . . 129

VII. THE STATE'S INCOME AND EXPENDITURE . . . 177

VIII. CRAFTS AND INDUSTRIES . . . 235

IX. CURRENCY . . . 260

X. TEMPLE ECONOMY . . . 285

XI. HOARDED WEALTH . . . 299

INDEX . . . 305
ABBREVIATIONS

AAG. Architectural Antiquities of North Gujarat, J. Burgess.

AB. Aitareya Brāhmaṇa.

ABH. RAT. Abhidhānaratnamālā of Halāyudha.

ABORI. Annals of the Bhandarkar Oriental Research Institute, Poona.

ACS. Antiquities of the Chamba State, J. Ph. Vogel.

AGNI-P. Agni Purāṇa.

AIK. The Age of Imperial Kanauj. Ed. by R. C. Majumdar and A. D. Pusalker.

AIP. India as known to Pāṇini, V. S. Agrawala.

AIU. The Age of Imperial Unity, Ed. by R. C. Majumdar and A. D. Pusalker.

AJ. The Asiatic Journal.

ALBERUNI. Alberuni's India. Ed. by E. C. Sachau.

INDICA. Rāṣṭrakūṭas and their times, A. S. Altekar.

ART. Arrian's account of India. Trans. by McCrindle.


ASI. Archaeological Survey of India, Annual Report.

ASR. Ānandāśrama Sanskrit Series, Poona.

ASWI. Archaeological Survey of Western India.

AV. Atharva Veda.

BA. Antiquities of India, L. D. Barnett.


BATṬṬĀ. The Relha. Trans. by M. Hussain.

BG. Bombay Gazetteer.

BI. Bibliotheca Indica, Calcutta.

BKU. Ballala Kirti, Uttarakhaṇḍa.
BMSS. Bakshali Manuscript.
BRAHMĀṆḌA-P. Brahmāṇḍa Purāṇa.
Bṛ. Bṛihat Sarhīta of Varāhamihira.
BṛIH. Bṛihaspati.
BR. UPAŅIṢHAḌ. Brīhad-Araṇyaka-Upanishad.
BSS. Bombay Sanskrit Series.

CHI. Corpus Inscriptionum Indicarum.
CHI. Cambridge History of India.
CME. Miscellaneous Essays, H. C. Colebrooke.
CMI. Coins of Mediaeval India from the seventh century down to the Muhammadan Conquest,—A. Cunningham.

HARSHA᳑ARĪTA.}
CRAW. Researches, Crawfurd.
CU. Chāndogya Upanishad.

DVY. Dvyāṣārā-kāvyā of Hemachandra.
EC. Epigraphhiā Carnatica.
EHI. Early History of India, V. A. Smith.
EI. Epigraphia Indica.

EL-MASʿŪDI’S EN-
CYCLOPAEDIA.}
FA-HIEN. Travels of Fa-hien, J. Legge.

RĀS MĀLĀ. }

GAU. Gautama Dharmaśāstra.
GERINI. Researches on Ptolemy's Geography of Eastern Asia, Gerini.

GOS. Gaekwad Oriental Series.

KLS. The Land-system in South India, K. M. Gupta.

HIED. History of India as told by its own Historians Ed. by H. M. Elliot and J. Dowson.

HKC. Kumārapālcharita by Hemachandra.

KUMĀRAPĀL-CHARIITA. Harvard Oriental Series.


HT. Hiung tsang.

IA. Indian Antiquary, Bombay.


IC. Indian Culture, Calcutta.

IHQ. Indian Historical Quarterly, Calcutta.

INDEX. Bibliographical Index to the Historians of Muhammadan India. Vol. I. Ed. by H. M. Elliot.

INSCS. Inscriptions.

I-TSING. I-ting.

TAKAKUSA. Journal of the Andhra Historical Research Society.


JASB. Journal of the Asiatic Society of Bengal, Calcutta.


JDL. Journal of the Department of Letters, Calcutta University.

JG. Jaina Gaṇita.

JIH. Journal of Indian History.

JMSB. Journal of M. S. University of Baroda.

INSI. Journal of the Numismatic Society of India.
JOI. Journal of the Oriental Institute, Baroda.
JRAS. Journal of the Royal Asiatic Society, Calcutta.
JRASB. Journal of the Royal Asiatic Society of Bengal.
KARPA. Karpūrāmaṇījāri of Rajaśekhara.
KHDS. Kāmarūpa Śāsanāvalī.
KANE, DHARMA. History of Dharmaśāstra, P. V. Kane. 4 vols.
ŚĀSTRA. Kauśitaki Upanishad.
KS. Kṛitya-kalpataru of Lakshmīdhara Bhaṭṭa.
MĀṆĀSOL. Mānasollāsa.
MĀRKAṆḌEYA-P. Mārkāṇḍeya Purāṇa.
MASB. Memoirs of the Asiatic Society of Bengal.
MASI. Memoirs of the Archaeological Survey of India.
MATSYA-P. Matsya Purāṇa.
MBHT. Mahābhārata.
MIL. Milandapañho.
NAR. Nārada.
NC. Numismatic Chronicles.
NS. New Series.
OC. Transactions of International Congress of Orientalists.
OHRS. Orissa Historical Research Journal.
P. Purāṇa.
PARIBHĀṢĀ Paribhāṣāprakāśa of Mitramiśra.
PE. Pillar Edicts of Asoka.
PHB. Early History of Bengal, P. L. Pal.
PIHC. Proceedings of the Indian History Congress.
PL. Prachin Lekha.
POC. Proceedings of the All-India Oriental Conference.
PPS. Purataana Prabandha Sangraha, Singhi Jain Series.
RAA. Ancient Accounts of India and China by two Muhammadan Travellers, E. Renaudot.
RĀJAT. Rājatarāṇī, A. Stein.
RĀM. Rāmayana.
RĀMACHĀRITA. Rāmācharīta of Sandhyakara Nandī.
RCM. Coins of Marwar, B. N. Reu.
RECORDS. Buddhist Records of the Western World, S. Beal.
RIB. Rock Edicts of Asoka.
RV. Rig Veda.
SABHA. Sabhaparvan.
SAMSJ. Sir Asutosh Mookerjee Silver Jubilee Volume (Orientalia).
ŚANTI. Śantiparvan, see Mahābhārata.
SB. Śatapatha Brāhmaṇa.
ŚAT. BR. Sacred Books of the East, Oxford.
SBE. Sacred Books of the Hindus, Allahabad.
SKANDA-P. Skanda Purāṇa.
SSI. Select Inscriptions, D. C. Sircar.
SUT. Suttanipata.
SUVARṆADVIPA. Suvarṇadvipa, R. C. Majumdar.
TAITT. BR.  Taittirīya Brāhmaṇa.
TAITT. SAM.  Taittirīya Sarhītā.
THERĪG.  Therīgāthā.
TIA.  Tabaqāt-i-Akbarī of Nizām-ud-dīn Ahmad.
TIN.  Tabaqāt-i-Nasirī of Minhāj-ud-dīn bin Sirāj.
TRAVELS.  Travels of Marco Polo. Eng. trans. by H. Yule.

UPA.  Upamitibhvaprapāñchākathā of Siddharshi.
UTBI.  Ta’rikh-i-Yamīnī of Al’Utbi.

VĀJ. SĀM.  Vājasaṃcyi-Sarhītā.
VAS.  Vaśiṣṭha.
VĀYU-P  Vayu Purāṇa
VHMI.  History of Mediaeval India. 3 vols. C. V. Vaidya.
VIS.  Viṣṇu.
TĀJ.  Yājñavalkya.
SELECT BIBLIOGRAPHY


AGRAWALA, V.S.: India as known to Pāṇini, Lucknow, 1953.


South India and her Muhammadan Invaders. Madras, 1921


History of Village Communities in Western India, Bombay, 1926.

AL’ URĀL: Ta’rikh-i-Yamnī. Lahore. Extracts trans. HIED, II. Extract trans. in Medieval Indian History (pp. 34-66) by R. Sharma, 1956.


ASHRAF, K.M.: Life and Conditions of the Peoples of Hindustan 1220-1550 A.D.

The land-revenue and its administration in British India. Oxford, 1907.


Prāchīna Mudrā (in Bengali). Calcutta, 1322 B.S.


Barua, B.M.: Barhut.


Basham, A.L.: The Wonder that was India, London, 1953.

Baudhāyana: Dharmasūtra. ASS.


The Travels of Fa-Hien.


Beni Prasad: The State in Ancient India. Allahabad, 1928.


Carmichael Lectures on Ancient India Numismatics. Calcutta, 1921.

List of Inscriptions of Northern India. Appendix to EI, XIX-XXIII.

Some Aspects of Ancient Indian Culture. Madras 1940.


   *The Indian Colony of Champā*. Adyar, 1926.
BREITSCHNEIDER, E.: *Mediaeval Researches from Eastern Asiatic Sources*.
   *Coins of India*. Calcutta, 1922.
BUCH, M.A.: *Economic Life in Ancient India*.
CARY AND WARMINGTON: *The Ancient Explorers*.
CHAKRABORTTY, S.K.: *Ancient Indian Numismatics*.
CHANDA, R.P.: *Gauḍa-rājamalā*. Rajshahi, 1319 B.S.
CHATTERJEE, S.K.: *The place of Assam in the History of Civilisation*.
   *India and Java*. Calcutta, 1933.
CHURCH, A.H.: *Food Grains of India*.
COLEBROOKE, H.T.: *Miscellaneous Essays*.
   *Architectural Antiquities of Western India*. London, 1926.
Coins of Ancient India from the earliest times down to the 7th century A.D. London, 1891.
Coins of Mediaeval India from the seventh century down to the Muhammadan Conquest. London, 1894.

War in Ancient India. 2nd Ed. Madras, 1948.
DUTT, N.: Early History of the spread of Buddhism and the Buddhist schools.

ELLIOT, H.M.: Bibliographical Index to the Historians of Muhammadan India. Vol. I.
ELLIOT, SIR H.M. AND DOWSON, PROF. JOHN.: The History of India as told by its own Historians. 8 vols. London, 1866-77.
Vol. II. Ed. by Habib, Aligarh, 1952.


GAUTAMA: Dharmasāstra. Eng. trans.` SBE, II.
GERINI: Researches on Ptolemy’s Geography of Eastern Asia.
The Agrarian system in Ancient India. Calcutta, 1930.
The Beginning of Indian Historiography and other essays. Calcutta, 1944.
Gibbon: Decline and fall of the Roman Empire. London, 1912.
Land-system in accordance with epigraphic evidence. IA, LI.

Hardy: Manual of Buddhism.
Hasan-un-Nizāmī: Tāj-ul-Mu‘āṣir. Extract trans. HIED, II.
Dvīḍraya-kāvyā. Ed. by A. V. Kathvate, BSS. Extracts trans. in IA, IV, 7 ff.

The Relḥa. Trans. by Mehdi Hussain, GOS. Baroda, 1953
( xxv )


KIELHORN: *List of Inscriptions of Northern India*. Appendix to EI, V.


LAWRENCE: *The Valley of Kashmir*.

LEKHAPADDAṆHATI: Ed. by C. D. Dalal G. K. Shrigondekar GOS. 1925.

LEGGE, J.: *Fa-hien*. Oxford, 1886


Kambujadeśa. Madras, 1944.
MAJUMDAR, R.C. AND ALTEKAR, A.S. (Ed.) : The Vākāyaka-Gupta Age
MAJUMDAR, R.C. AND PUSALKER, A.D. (Ed.) : Vol. IV. The Age of
Imperial Kanauj.
Vol. V. The Struggle for Empire. (Bharatiya Vidya Bhavan Series).
MANU : Manusmṛiti Eng. trans. by G. Buhler. SBE, XXV. Oxford,
1886 ; J. Jha, Calcutta, 1922-29.
MARCO POLO'S TRAVELS : The Book of Ser Marco Polo. Ed. with
MARSHALL, SIR J. : Mohenjo-Daro and the Indus Civilisation, 3 vols.
London, 1931.
MAYAMUNI : Mayamata. Ed. by T. Ganapatī Sastri. TSS. Trivandrum,
1919.
McCRINDLE, J.W. : Ancient India as described by Megasthenes and
Ancient India as described by Ptolemy. Calcutta 1825. 2nd. Ed. 
by S. N. Majumdar, Calcutta, 1927.
Ancient India as described in Classical Literature. Westminster,
1901.
MEHTA, R.N. : Pre-Buddhist India. Bombay, 1939.
Calcutta, 1894-1901.
MINHĀJ-UD-DĪN B. SIRĀJ-UD-DĪN : Taḥāqāt-i-Nasirī. Eng., trans. by
MIRASHI, V.V. : Inscriptions of the Kalachuri-Chedi Era. Two parts.
MITĀKSHARĀ : Yajñavalkya-smṛiti with the commentary Mitāksharā. Ed.


MOOKERJI, R.K.: Chandragupta Maurya and his times, 1952.
Indian Shipping and Maritime Activity. Bombay, 1912.

The Agrarian system of Moslem India. Cambridge, 1929.

MOTICANDRA: Sārthavāha. (in Hindi) Patna, 1953.

Caliphate—its rise, decline and fall. Revised by T. H. Weir.
Edinburgh, 1915.


PETECH, L.: Northern India according to the Shui-Ching-Chu, Rome, 1950.

Published by the Bhavnagar Archaeological Department, Bhavnagar, 1905.


Purāṇa Matsya: ASS. Poona, 1907.

Raghavan, V.: Yantras or Mechanical Contrivances in Ancient India. The Indian Institute of Culture, Basavangudi, Bangalore. Transaction No. 10
   Vastupāla-prabandha. GOS. No. VII. 197 Baroda, 1917.
   Indian Coins. Strassburg, 1877.


*Foreign Notices of South India*. Madras, 1939.


*The Theory of pre-Muslim Indian Polity*. Madras, 1912.


SEN, B.C.: *Some Historical Aspects of the Inscriptions of Bengal (Pre-Muhammadan Epochs)*. Calcutta, 1942.

*History of India (712-1205 A.D.)*

*(A Retrospect and a standpoint)* PIHC,—1950.

*Studies in the Jātakas*. JDL, XX.


*Old Routes of Western Iran*, 1940.

*Serindia*. Oxford, 1921.


SUBBA RAO, N.S.: *Economic and Political Conditions in Ancient India*. Mysore, 1911.


TARA CHAND: *Influence of Islam on Indian Culture*.


Travels in Western India, London, 1839.


Vyāvahāra Adhyāy. Part III. Trans. by Girish Chandra Tarka-lankar, Serampore, 1892.


WARMINGTON, E.H.: *Commerce between the Roman Empire and India*. Cambridge, 1928.

WASSĪF, 'ARB-U-LAH: *Taziyiyatu-l-Amsār*. Extract trans. HIED, III.


Dictionary of the Economic Products of India. 6 vols. 1891.


YAŚAṆPĀLA: Moharājarājājaya. Ed. by Muni Chaturvijaya. GOS. Baroda, 1918.


CHAPTER I

Villages: Economic Characteristics and Planning

In ancient India a ‘grāma’ was traditionally composed of different parts; such as the habitat (Vāstu-bhūmi), the pasture (go-chara), the cultivable and fallow land (kshetra), paths (patha), drains (gārtta), parks and gardens (vāṭikā), forests (arānya), etc. In inscriptions the word grāma is found used generally to denote a village irrespective of its size, population or revenue.¹ A very small village may have comprised, only a cluster of huts, small and large often grouped round a well or pond near which was a small open space with a few trees.² Some villages were inhabited by people belonging to different castes and occupations. As the constituent parts of the village show, it was agriculture which was the principal occupation of its people, but there were villages which were not completely devoid of industrial activity. Neighbouring villages were demarcated from one another either by natural or artificial barriers, and intercommunications between them were maintained through roads. In fact, villages were not isolated units but very often interconnected and vitally linked up from economic and administrative points of view. Much attention seems to have

¹ Dr. Pran Nath holds that ‘grāma’ does not mean a ‘village’ but an estate of survey village. He further holds that a ‘grāma’ contained only about five families and had only 15 or 20 acres of cropped areas.—Pran Nath, A study in the Economic condition, pp. 26-40: for a criticism of this view see, Kane, History of Dharma Śāstra, III, p. 140 and n. 182. In Kauṭilya’s time a ‘grāma’ may have contained from 100 to 500 families—Arth, II, 1, p. 43. In the Śukraniti, as will be seen later, a ‘grāma’ is stated to be a piece of land whose area is a croś and whose yield is 1,000 silver karsha.—Śukra, I, 285-6, p. 25.
² Basham, The Wonder that was India, p. 190.
been bestowed from early times on planning of villages. From the care with which details about topography, measurements, boundaries, etc. are furnished, it appears that their importance was recognised in defining and guarding ownership rights in respect of land. There must have been official records about holdings etc. from which details were collected while assignments were made.

Size of a 'Grāma'

According to the Śukranītisāra⁴ 'a grāma is that piece of land whose area is a croś'. A croś is defined in this work as an area measuring, according to Prajāpati, 5,000 cubits and according to Manu, 4,000 cubits. It is not to be understood that all the villages rigidly conformed to the size mentioned. Actually most villages must have differed widely in respect of their size and population. Mayamata⁵ classifies the sizes of villages on a two-fold principle; firstly, according to their peripherical measurement and, secondly, according to their length. According to the former, villages have been divided into 5 types, their sizes varying from 20,000 daṇḍas to 1,00,000 daṇḍas. According to the latter, villages belonged to 40 different types whose sizes ranged between 500 and 20,000 daṇḍas. Mānasāra⁶ seems

---

⁴ Pāṇini describes villages of his time as follow: "The villages were marked out by their natural boundaries, such as, forests, (vana), thicketts (kathina, IV, 4, 72), rivulets, hills (giri), jungle (jaṅgala, VII, 3, 25), and prastara (rocks, IV, 4, 72). The village proper consisted of houses, mostly peasant cottages (kuṭira, V, 3, 88), covered with a roofing of reed and straw (chhādisheya trīpa, V, I, 13). An individual house (kuṭī, V, 4, 95), sheltering one family formed the unit of village life. The entire settlement was called 'vasalt' (IV, 4, 104) and a multitude of villages by the name 'grāmatā' (IV, 2, 43). The village depended for its water supply on wells (kūpa), to which were attached nipānas (III, 3, 74) or water troughs from which cattle would drink. Wells were cleaned by specially trained labourers who acted as dredgers called 'udagāha' or 'udakagāha' (VI, 3, 60)."—AIP, p. 141.

⁵ Mayamata of Mayamuni, Chap. IX. Cf, Dutt, Town-planning pp. 202-3.

to refer to the latter classification when mentioning villages and towns whose sizes varied from 500 to 20,000 daṇḍas.

Inscriptions of the period, though rarely, contain some hints about sizes of villages. The area of the village of Vāllahatiṭṭha, for example, is indicated in the Naihāti copper-plate of Vallālasena. It measured 7 bhū-pāṭakas, 7 dronas, 1 āḍhaka, 34 unmānas and 3 kākas of land (according to the Vṛishabha-sañkara nala). In some of the inscriptions of Lakṣhmanasena also similar accounts are found. Thus in the Govindapur copper-plate, the area of the village of Vidḍāraśāsana is given as comprising 60 dronas and 17 unmānas (according to the nala standard of 56 cubits). In the Tarpanadighi copper-plate mention is made of the village Belahishṭi which consisted of 120 āḍhāvāpas and 5 unmānas of land (according to the particular nala standard prevalent in that locality). A village called Dāpaṇiyā-pāṭaka in the Mādhāimagar copper-plate of Lakṣhmanasena, contained 100 bhūkhāḍis and 91 khāḍikās. From these inscriptions, however, it is difficult to form an idea about the total length and breadth of the different villages to which they refer.

Statements Relating to Number of Villages

As regards the actual number of villages in a territory, it may not be safe to rely entirely on figures supplied in certain cases. Contemporary Muslim writers tried to throw some light on the subject, but it is doubtful if much reliance can be placed on the information furnished, as corroborative evidence is lacking. According to Rashid-ud-Din Gujarat comprised 80,000 flourishing cities, villages and hamlets combined, Sawālak 125,000 cities and villages and Mālwa 1,893,000, cities and villages. Wāsāf in his work gives an identical account so far as Sawālik

---

7 *IB*, p. 68 ff.
8 *ibid*, p. 92 ff.
9 *ibid*, p. 99 ff.
10 *ibid*, p. 106 ff.
11 *HIED*, I, pp. 67, 68.
12 *ibid*, III, p. 31.
and Mālwa are concerned. Regarding Gujarat he states, “Gujarat commonly called Kambayet contains 70,000 villages and towns”. Masʻūdi18 who visited the Indus valley in c. 915-6 A.D. noticed two Arab principalities with Multan and Mansurah as their capitals. Around Multan there were “one hundred and twenty thousand towns and villages.” In all these accounts towns, cities and villages are mixed up together and separate figures for villages are not available. Separate figures for villages have, however, been furnished in some accounts. Hemachandra14 tells us that the Arbuda country, over which the Paramāras ruled, contained eighteen hundred villages. Forbes15 states that ‘Kumārapāla was the rājā of the country of a hundred thousand villages’. Again, in another place he states that the principality of Ajmer consisted of a hundred thousand villages.16 It is quite probable that as there was no definite idea about the actual number of villages, figures like these were given in a conventional style. Kalhaṇa says rather vaguely that there are thousands of towns and villages in Kashmir.17 In the Lokapraṇakāśa the number of villages is said to be 66,063.18 The same number is given in Jonarāja’s Chronicle.19 It is recorded in the Tabaqāt-i-Nāṣirī20 that ‘Kadhah-Katankah or Gondwānah had 70,000 Karyahs i.e., villages’.

The statements, quoted above, refer to widely separated areas, and also to different periods; consequently a general estimate cannot be safely attempted. It is unlikely that the figures supplied are wholly fictitious, although exaggerated.

18 HIED I, p. 23 ff.
16 Rāṣa Mālā, p. 142.
16 ibid, p. 148.
17 Rājat, II, p. 438 ff.
20 TIN, p. 587 n.4.
VILLAGES: ECONOMIC CHARACTERISTIC AND PLANNING

One scholar\(^{21}\) has suggested that during the mediaeval period, the total population of the subcontinent was between 100 to 140 millions (i.e., 100,000,000 and 140,000,000). Dr. Basham believes that 'this figure is reasonable, although based on very slender evidence'.\(^{22}\)

Going back to much earlier times, to which the Buddhist Jātakas bear testimony, we find that Benaras once contained 60,000 villages (saśhi-gāmasahassāni paripuṇṇāni) and the kingdom of Mithila 16,000 (gāmasahassāni paripuṇṇāni solasa ...).\(^{23}\)

In a much later period, the Skanda Purāṇa gives a list of towns in India, with the number of villages in each country.\(^{24}\) The list begins from the north and seems to reflect the geographical distribution of India in the 9th Century A.D. It refers to Nepal as comprising one lakh of villages and to Kānyakubja with 36 lakhs. The number of villages of Kanauj, as mentioned in the Skanda Purāṇa, agrees with that given in the Prabandhachintāmaṇi. Next follows Gājaṇaka with 72 lakhs, while the Gauḍa country is said to have contained 18 lakhs. According to the same source Kāmarūpa and Oḍḍiyāna, Dāhala or Bundelkhand, Jālandhara and Lohapura, each had 9 lakhs of villages. The kingdom of the Rāshtrakūtas had 7 lakhs. Sapādā-laksha had 1½ lakhs, Gurjarātra—70,000, Sind—20,000, Kachchhamandala—16,020, Saurāṣṭra—55,000, Lāṭa—21,000, Konkana—36,000 and Laghu Konkana—16,000. The number of Kashmir villages given in the list is 68,000. Altogether a list of 72 countries has been furnished by the Skanda Purāṇa containing in all 96 crores and 72 lakhs of villages.

It seems that in the usual fashion of the Purāṇas, facts and fictions have been jumbled together in order to make up the total of 96 crores and 72 lakhs of villages, an exaggeration

\(^{21}\) Pran Nath, A Study in the Economic Condition, p. 122.
\(^{22}\) Basham, The Wonder that was India, p. 189.
\(^{23}\) Sen, Studies in the Jātakas, JDL, XX, p. 104.
befitting the Purāṇas. The figures supplied in any case, may not, strictly speaking, be regarded as acceptable. But one gets the impression that a very large part of the population must have lived in the villages in ancient times.

**Constituent Parts of a Village**

We may next discuss the constituent parts of a village. The expressions used to designate these parts are nearly the same in all inscriptions with slight variations in some cases. Thus the pattern was almost the same everywhere, though all inscriptions do not enumerate the different parts in an exhaustive manner. Relevant data regarding them are to be gathered from a few typical inscriptions. An inscription of the Pāla dynasty and another of the Gāhāḍavāla dynasty may be utilised here for the purpose of showing the different parts of a village in a more or less exhaustive manner. The Gāhāḍavāla inscription describes them in the passage: 'Sa-jala-sthalaḥ sa-lōha-lavan-ākaraḥ Sa-matsy-ākaraḥ Sa-parṇākaraḥ sagartt-ōsharaḥ Sa-madhūka-chūtā-vana-vāṭikā-viṭapa trīna-yūti-gōchara-pariyantāḥ . . . . . . '

The Pāla inscription contains some details in the extract: 'Sva-sīmā-trīna-yūti (gōcha)-raparyantāḥ Sa-talaḥ s-ō(dddēṣaḥ) . . . . so-jala-sthalaḥ sa-gartt-ōsharaḥ . . . . '. We may now proceed to examine the terms, occurring in these descriptive passages.

---

26 Basham, *The Wonder that was India*, p. 189.
28 *EI*, XV, p. 293 ff. "The area surrounding the village settlement consisted of (1) arable land, (śītya, IV, 4, 9), (2) pasture, (gocchara, III, 3, 119), (3) plantations of bamboo thickets (vayšakathina, IV, 4, 72), and reeds like šāra (VIII, 4, 5) and muṇja (saccharum muṇja, III, 1, 117), (4) fruit bearing trees (phalegrūḥi, III, 2, 26), (5) reserves of herbs and plants (auṣhadhi—vanaspati vana, VIII, 4, 6), (6) forests of timber as seinīpā, plaksha and mango (VIII, 4, 5), (7) waste saline tracts or uṣhara land (V, 2, 107)—*AIP*, pp. 141-2; cf, *Arthi*, II, 35, p. 158; III, 10, p. 194.
(a) Jala-Sthala

This phrase means land with water, which constituted the two broad divisions of a village. ‘Sthala’, as used here, must have included all that was built on it such as, temples, alms-houses, mills, granaries and similar other establishments, besides residential houses etc. In the Ichchhāwar plates of Paramârdideva (V.S. 1228) the list of items granted contains the expression ‘Sa-mandira’, which shows that the village in question had its temples.20 In the Ratnapur stone inscription of Jajalladeva of the Kalachuri dynasty, dated in the Chedi year 866 (i.e., 1114 A.D.)30 and in many other inscriptions references to temples situated in villages, are to be found. In the Assam plates of Vallabhadeva of Prâgiyotisha dated Śaka Samvat 1107 (=1184-5 A.D.)31 reference to an alms-house (bhakta-śālā, annasattra) is come across. Similar references also appear in the Dewal praśasti of Lalla of Chhinda (V.S. 1049).32 In this connection reference may be made to an establishment, set up by a king for ‘learned and pious brâhmaṇas’. This establishment is known as ‘patṭasaśālā’ and is referred to in the Maidahe plates of Jayasiṁha of Dharā of the Paramâra dynasty, (V.S. 1112).33 There were also granaries (kos̱ṭḥakas),35 threshing-floor (khalaka);35 oil-mills (talla-ghāṇaka);36 the village markets (haṭṭa)37 together with its shops (vīthi) and also baniya-shops (vanik haṭṭa)38 are referred to in the different inscriptions as being situated within the villages concerned. The element ‘jala’ in the phrase, quoted above, must have been represented

20 IA, XXV, p. 205 ff.
30 EI, I, p. 32 ff.
31 ibid, V, p. 181 ff.
32 ibid, I, p. 75 ff.
33 ibid, III, p. 46 ff.
34 IA, XLI, p. 17 ff.
35 ibid, XVIII, p. 110 ff.
36 EI, I, p. 97 ff; p. 287 ff; XI, p. 41 ff XIV, p. 176 ff; XIX, pp. 69 ff.
37 ibid, IX, p. 277 ff; XI, p. 60 ff.
38 ibid, XIX, p. 69 ff.
by tanks, etc. situated in a village. According to Mānasāra⁴⁰ ‘tanks and ponds are to be dug in all the inhabited parts and located in such quarters as can be conveniently reached by a large number of inhabitants.’ Wells and tanks sometimes formed objects of grants.⁴⁰ The ‘sthalā’ of a village was thus utilised in every possible way.

(b) Go-chara

The expression ‘go-chara’ is in most cases prefixed to the expression ‘paryantah’. This shows that the pasture land was situated in the extreme end of a village and marked its limit. Pasture land throughout formed an essential adjunct of an agricultural village from the Vedic period. Pastures appear to have been used in common by the villagers for the grazing of its cattle (grāmyapāśu-saṅgha).⁴¹ The village also had its cattle ranches called gos̄ṭha⁴² or vraja.⁴³ Settlements of cowherds (Gopāla) were known as ghosha.⁴⁴ The site of ranches in earlier times might be changed due to exigencies of fodder and other causes.⁴⁵

In the Mitākṣarā⁴⁶ it is stated: ‘Pasture ground shall be allotted for cattle, according to the desire of the villagers’. It also mentions that “there should be a space of one hundred dhanus (or four hundred cubits) between a grāma and the surrounding fields,” i.e., the space between the inhabited portion and the fields

---

⁴¹ El, XIII, pp. 210-211.
⁴² Pāṇini, I, 2, 73.
⁴³ ibid, V, 2, 18.
⁴⁴ ibid, III, 3, 119.
⁴⁵ ibid, VI, 2, 85.
⁴⁶ According to Pāṇini: ‘A place which had formerly been occupied by a gos̄ṭha was called gaushṭhīna (Gos̄ṭhāt khaṅ bhūtāpūrve, Pān, V, 2, 18). The entire village-land was marked out, as to-day, for habitation, grazing, dumping of manure and agriculture, the last three shifting after every twelve years. The plot for grazing was gos̄ṭha when in use and gaushṭhīna after it was abandoned’—AIP, p. 142.
of a village should measure one hundred dhanus (or four hundred cubits), in all directions, and should remain uncultivated.

Similar injunctions with slight additions and alterations are found in the works of Kauṭilya, Manu, Yājñavalkya, and the Purāṇas. Kauṭilya⁴⁷ states that an enclosed pasture with timber posts should be created around every village at a distance of one hundred dhanus. Manu⁴⁸ states that a space of three hundred dhanus should be left around a nagara. Yājñavalkya⁴⁹ mentions that the public pasture (parīṇāha) should be one hundred dhanus in the case of a Kharvaṇa (small town) and four hundred dhanus in the case of a nagara. According to some Purāṇas⁵⁰ a village pasture should be one hundred dhanus in space and a pasture in a town 200 or 300 dhanus in area.

In the Madanpur plate of Śrīchandra of Bengal,⁵¹ the designation of an official is mentioned as ‘gōchhahakapati’. One scholar takes it as a Prakrit form for the Sanskrit expression ‘Gōshṭha-kapati’, officer-in-charge of pasture lands and cowsheds. If so, his functions may have been similar to those of the Vivitādhyaksha of Kauṭilya’s Arthaśāstra.⁵²

(c) Trīṇa-yūṭi

‘Trīṇa’ means grass and ‘yūṭi’ may have meant small plants or shrubs. Thus the expression ‘trīṇa-yūṭi’ may have denoted a grassy plot of land lying in the neighbourhood of the ‘gochara’ or pasture land, with small plants or shrubs around it. ‘Trīṇapūṭi’ (cf. ‘pūṭa’, white kuṣa grass), sometimes found in the inscriptions of northern India, instead of ‘trīṇa-yūṭi’ probably meant grassy plots of land. These practically formed the boundaries of a village beyond its gochara, marked with a fence, and probably also a ditch. The inclusion of trīṇa-yūṭi and gochara together in the

⁴⁷ Arth, II, 2.
⁴⁸ Manu, VIII, p. 237.
⁴⁹ Yāi, II, 166, 167.
⁵⁰ Matsya P, chap. CCVI.
⁵¹ El, XXVIII, p. 51 ff.
⁵² Arth, II, 34, p. 171.
land-grants may indicate, as pointed out by K. Gupta,\textsuperscript{53} that the village boundaries were shown in both ways, by the gochara and the triqa-yati.

\textit{(d) Gartta}

From its frequent appearance in north Indian inscriptions it seems that ditches, trenches or drains were to be found in every village which the donor took special care to mention. That these garttas were not connected with the water supply of the village is clear from the fact that ‘jala’ is mentioned separately along with garttas in most of the inscriptions. It is reasonable to presume that the ditches and trenches of a village had a double purpose to serve. Firstly, as drains, they contained the waste water of the village and secondly, they were sometimes part of its boundary-lines. The drainage system of a village required these ditches to be situated in three different places namely, just around the habitat, around the pasture and around the whole village as in the case of village Pipparika whose northern boundary was the rivulet which flowed into the ditch belonging to Chikhillika.\textsuperscript{54} From the Belwa copper-plate inscription\textsuperscript{55} we learn that the whole village had a channel around it, measuring about 39’ to 40’ in width. In the Irdā copper plate of Nayapāladeva of Bengal (10th century A.D.),\textsuperscript{56} the word ‘gartta’ is preceded by the expression ‘jalādhāra’, i.e., water-courses (kshetra-jalādhāra-gartta). Here a distinction has been made between gartta and jalādhāra, or a reservoir of water, the former being possibly provided to hold waste-water and the latter for the supply of drinking water or water to be used for cultivation.

\textit{(e) Ushara}

The term ‘ushara’ is used together with the word gartta (sa-gartta-oshara) in most of the inscriptions. This was used to denote

\textsuperscript{53} Cf. IA, LI, p. 73 ff; Gupta, The Land-System in South India, chap. VIII.

\textsuperscript{54} IA, VI, p. 51 ff.

\textsuperscript{55} JASB, XVII, p. 117 ff.

\textsuperscript{56} EI, XXII, p. 150 ff.
sterile or barren land'. It cannot be expected that all the land in the village was cultivable. Some land may have been unsuitable for cultivation because of loss of fertility or due to the rocky nature of the soil which may have affected some parts of a village. It may be stated that the rocky nature of the soil is actually indicated in some records by adding the adjective 'pāshānah' to 'ushara' as in an inscription of Govindapāla and that of Devavarman-deva of the Chandella dynasty, (V. S. 1107), (sa-gartt-oshara-pāshānah). The term 'ushara' in many cases meant only that part of the village where nothing was grown or which was not used for purposes of habitation. It may also be presumed that it is a part of the conventional phraseology and need not necessarily mean that every village had ushara land.

(f) Tal-aoddeśa

The village included low land (tala) and high land (uddeśa). It is not unlikely that the latter term was also used to denote earthen grounds, ridges, embankments, etc., which rose above the lower level. The word 'āli' meaning a ridge, is sometimes mentioned separately. Sometimes ridges, separating cultivable fields, are mentioned. References to earthen embankments around village-lands are also found. Thus in the Gauhati copper-plate of Indrapāla mention is made of a ridge of the fields (kshetra-āli) and a big dike (vṛihad-āli). The Belwa copper-plates referring to village called Raghunathpur, speaks of a field surrounded by a high rampart and old brick structures. The rampart may be identified with the famous Bhūmer-Jāngāl. There are similar references, particularly in the inscriptions of Kāmarūpa (Assam). 'Tala' was the low land of the village, as distinguished from 'vāstu-bhūmi', 'kshetra', 'Kedāra', 'go-chara', and 'sthala'.

57 PL., III, 10.
58 I.A, XVI, p. 201 ff.
59 JASB, LXVI, p. 113 ff.
60 ibid, XVII, p. 117 ff.
61 JASB, LXVI, p. 113 ff.; p. 285 ff; LXVII, p. 99 ff; Kāmarūpa-śasanāvali.
It was unsuitable for cultivation and remained under water during the rainy season. In fact, it is the undeveloped and fallow part of the village.

It may be noted that some of the important constituent parts of a village are omitted in many inscriptions. For instance, ‘vāstubhūmi’ or ‘habitat’. It is not mentioned in many grants. The omission may be due to the fact that the donation did not include ‘vāstu-bhūmi’ and this ground may hold good where the subject of the grant is kshetra only. But the omission cannot be similarly explained when a whole village is transferred. We cannot imagine a village without any habitat, which is one of its essential constituents. However, the expression ‘vāstu-bhūmi’ occurs in descriptions of donated villages in many inscriptions, e.g., the Naihati grant of Vallalasena\(^62\) and the Sundarban copper-plate grant of Lakshmanasena\(^63\) of the Sena dynasty of Bengal, the Gauhatī copper-plate grant of Indraśāla,\(^64\) the Nowgong copper-plate of Balavarman,\(^65\) the Chittagong copper-plate of Dāmodara,\(^66\) the Idrā copper-plate,\(^67\) etc.

(g) Kshetra

Kshetra means cultivable land. Pāṇini defines ‘kshetra’ as a plot of land where crops are grown (Dhānyānāṁ bhāvane, V. 2.1)\(^68\). The use of the word kshetra being a part of the gift is to be noticed in many inscriptions.\(^69\) The object of a grant usually is a wider area than what is denoted by the word ‘kshetra’. The term, generally employed in referring to such an area in a grant, is bhūmi, with its boundaries specified. Kshetras outside the bhūmi (i.e., outside the area donated) are occasionally mentioned. The bhūmi is sometimes shown as comprising a number of

\(^{62}\) EI, XIV, p. 156 ff.; IB, p. 68 ff.
\(^{63}\) IB, p. 169 ff.
\(^{64}\) JASB, LXVI, p. 113 ff.
\(^{65}\) ibid, LXVI, p. 285 ff.
\(^{66}\) IB, p. 158 ff.
\(^{67}\) EI, XXII, p. 150 ff.
\(^{68}\) Cf, AIP, p. 142.
\(^{69}\) EI, I, p. 154 ff.; XXII, p. 150 ff.; JASB, LXVII, p. 99 ff, etc.
kshetras. In such cases the latter are specifically indicated. Thus in the India Office inscription of Lakshmanasena\textsuperscript{70} mention is made of a ‘bhū-bhāga’ or an area of land which consisted of a group of 4 khanda-kshetras, all marked out.

\textit{(h) Vana}

The word ‘vana’ used in some inscriptions means forest land. As it is not mentioned invariably in all land-grants, it may be supposed that forest land did not exist in every village, large enough to be mentioned or it may be that the \textit{vana} was left out for utilisation by persons other than the donees concerned. Outlying forests were gradually cleared and converted into cultivable or habitable land but they had their utility, which necessitated their preservation also in the interest of rural economy. They were the sources of woods and fuels; bamboos were used for huts and other structural purposes and trees supplied fruits for men and fodder for animals, and various articles of domestic and other uses were manufactured out of the wood collected from forest areas.

\textit{(i) Vāṭikā}

The word ‘vāṭikā’ means an enclosed space, a garden or an orchard. It occurs in some inscriptions.\textsuperscript{71} The Kalvan plate of Yaśovarman\textsuperscript{72} mentions a ‘pushpa-vāṭikā’ or a flower garden. Reference to a kitchen garden (griha-śāka-vāṭikā) and an orchard are found in a grant of Sōmavarmadeva and Āsaṭa-deva of Chamba (griha-śāka-vāṭikā-vṛkshāma-viśrāma-ōpetam).\textsuperscript{78} In the Raja-pura copper-plate of Madhurāntakadeva of the Chhinda family of Madhya Pradesh\textsuperscript{74} is a special kind of a grove, viz, a ‘meriah grove’. The word \textit{meriah} means victims and a ‘meriah grove’ is a place which is described as ‘a clump of deep and shadowy forest

\textsuperscript{70} \textit{EI}, XXVI, p. 1 ff.
\textsuperscript{71} \textit{ibid}, I, p. 33 ff.; p. 154 ff.; p. 287 ff., etc.
\textsuperscript{72} \textit{ibid}, XIX, p. 69 ff.
\textsuperscript{78} \textit{IA}, XVII, p. 7 ff.
\textsuperscript{74} \textit{EI}, IX, p. 174 ff.
trees which usually stands at a short distance from the village by the side of a rivulet'. The groves were regarded by the local people, the Khonds, as 'haunted grounds' and nothing was to be done to impede their natural growth.

Village-population—Economic-Significance

Many villages were inhabited by people, engaged in different occupations and belonging to different castes. Political changes did not, on the whole, change the general pattern of village-life, built up on solid foundations. In records dated between the 10th and the 12th century A.D. villages generally appear to be divided into two categories:

1. those in which men of different castes lived, and,
2. those occupied by particular communities exclusively.

Some villages are found to have enjoyed exceptional prominence. The Nārāyaṇapāla stone inscription of Guṇḍa Mahādevi, dated the Śaka year 103375 introduces a village called Nārāyaṇapura in Madhyadesa, which was full of people coming from various countries (nānā-dēśiya-jan-(ā)-kīrṇāś). In this village there was a temple of Nārāyaṇa which may have attracted people from outside. If so, this again may have been responsible for the influx of pilgrims, which must have been only temporary. As many people used to come here, the place must have grown large enough to accommodate them with a market where the necessaries of life were available to meet their demands. The influx of outside elements must have thus kept the people of the locality and its neighbourhood occupied profitably, and afforded good prospects for trade and business.

Reference to settlements of Brāhmaṇas are not rare.76 The Vaḍnagar Praśasti of the region of Kumarapāla of the Chaulukya dynasty, dated A.D. 1151,77 for instance, praises the ancient Brāhmaṇical settlement at Nagara of Anandapura, which was the original home of the Nāgaras, an important section of the Brāh-

75 EI, IX, p. 311 ff.
76 Cf, EI, XV, p. 301 ff.
77 EI, I, p. 293 ff.
maṇs of Gujarāt. An account of the settlement of the Pallīvāl Brāhmaṇaṇa is found in the Bithu inscription of Siha Rathod, dated c. a.d. 1139. 78 Ten kos from the town wall of Pāli was its bazar. The place contained one lakh and a quarter houses of the Pallīvāl Brāhmaṇaṇa. When a new and poor Brāhmaṇa came from outside, he was given by each family one brick to build a house with. Thus, the importance of the place grew along co-operative lines, contributing to the solidarity of the expanding Brahmin settlement. The Silimpur slab inscription of the time of Jayapāladeva 70 (11th century a.d.) shows that in the village of Bālagrāma there lived many Brāhmaṇaṇa families and that the pandit families in particular lived in its eastern portion. The latter migrated to a neighbouring place called Śiyambaka.

The village called Vappaghōshavāta had for its western boundary a ‘Brahmin settlement’. 80 Villages occupied predominantly by other castes in like manner are also mentioned. Thus from the Betkā Vāsudeva image inscription of the 23rd year of king Govindachandra, of Bengal, 81 it is learnt that in the village of Pāikpāra and in an adjacent village of Betkā district, Dacca, there lived from very early times flourishing families of betel-leaf cultivators. Again, villages of merchants (vanik-grāma) appear in the Lucknow Museum copper-plate inscription of Balavarmadeva 82 and in an inscription from Gaonri. 83 Villages, occupied more or less exclusively by particular communities, was not a new feature of this age. The system appears to have been well-known in much earlier times, as shown by the mention of cultivators’ villages, barbers’ villages, smiths’ villages, etc. in the Buddhist Jātaka stories. 84

78 IA, XL, p. 181 ff.
79 EI, XIII, p. 283 ff.
80 ibid, XVIII, p. 60 ff.
81 ibid, XXVII, p. 26 ff.
82 IA, XX, p. 123 ff.
83 EI, XXIII, p. 101 ff.
84 Jat, II, 18, 405; III, pp. 281-6; 376; 508; IV, 208. Cf. Sen, Studies in Jātakas, JDL, XX; p. 104; Mehta, Pre-Buddhist India, pp. 182-3.
We may next refer to villages where the population was of a mixed composition. Even where express mention is not made of the different elements of the population of the village concerned, it may be inferred from available hints that it represented different communities, occupying different parts of the village. Thus in the Mahobā plate of Paramārdideva,85 special mention is made of a nālā belonging to barbers. It may be inferred that the village contained other elements also and the particular nālā was mentioned in order to distinguish the barber residents from the other groups. In the Kalha plate of Kalachuri Sōdhadeva86 the expressions 'Asathāpāṭaka | Thiula-pāṭaka | vaṇiā-pāṭaka | Duāri-pāṭaka', used, may denote different quarters of the village, inhabited by different occupational communities, as may be evident from the mention of 'vaṇiā-pāṭaka', probably meaning the quarters where the Banias lived. The tendency may have grown even for the subdivisions of the same community to occupy separate portions of the village, which probably tended to protect and improve their respective interests.

Fishermen belonging to different groups had different places fixed for the anchorage of their boats, as shown in the Suālkusi grant of Ratnapāla of Prāgiyotish.87 On the west of the donated village was the anchorage of the boats of the Chande-men (paśchimēna Chandē-naukā-saha śimmi). Here stood the sālmali tree which had been recently planted; the north-west boundary was formed by the southern terrace of the boatmen of Kalangā and on the east there was a Choraka tree standing on the southern terrace of the Sādhava boatmen. Probably Chandī, Kalangā, and Sādhava, are names of separate classes of fishermen, residing in the village. Indian villages were generally to be planned with the object of encouraging a composite population and maintaining a degree of self-sufficiency in their economy, apart from interdependence of neighbouring villages.

According to the Śukranitisāra88 the village-head was to be

85 EI, XVI, p. 9 ff.
86 Ibid, VII, p. 85 ff; p. 91.
87 JASB, LXVII, p. 120 ff.
a Brāhmaṇa, the clerk a Kāyasthā, the lord of sāhasa a Kshatriya, the collector of taxes a Vaiśya, and the sentinel a Śūdra. Thus a village apparently was to be occupied for administrative purposes by members of different castes representing a diversity of occupations. This statement is more or less confirmed by epigraphic evidence. In the Garra plates of the Chandella Trailokyavaran, the village population not only comprised or included the Brāhmaṇas, high officials, dignitaries and mahattaras (headmen), etc. but also householders, Kāyasthas, Vaidyas, including even Medas and Chaṇḍālas (brāhmaṇān = anyāṁ = cha māṇyaṁ = adhikrītān = kuṭumbi - kāyastha - dūta - vaidya - mahattarān - Meda - Chaṇḍāla - paryantān). In the Ichchhāwar copper-plate inscription mention is made of the village population as comprising various elements from Brāhmaṇas to Chaṇḍālas.

In the Irdā copper-plate, the king, while granting a village, addressed the tradesmen together with the clerks, the cultivators along with the householders of the village. In the Bangarh grant the neighbouring Brāhmaṇas and others, Mahattamas and other families, down to the Medas, Andhras and Chaṇḍālas are spoken of. Accounts are to be found with similar details in the Amgāchhi grant of Vigrahapāla III, the Gauhaṭi grant, a plate of Madanavarmadeva of the Chandella dynasty, etc. The Ghaṭiṣyāḷā inscription of Kakkuka, dated V.S. 918, mentions the ‘Brāhmaṇa, Kṣaṭriya and the Vaiśya’ inhabitants of a village. In view of the evidence discussed above it will be reasonable to presume that many villages were composed of miscellaneous elements. Amongst the Brāhmaṇa dwellers of a village, there appear to have been a distinction drawn between those who depended on agricultural land as the

89 EI, XVI, p. 277 ff.
90 IA, XXV, p. 205 ff.
91 EI, XXII, p. 150 ff.
92 ibid. XIV, p. 324 ff.
93 ibid., XV, p. 293 ff.
94 JASB, LXVI, p. 113 ff.
95 IA, XVI, p. 207 ff.
96 EI, IX, p. 277 ff.
mainstay of their livelihood (kshetra-karān-Brāhmaṇān), and others, styled as ‘Uttama-Brāhmaṇās’ or Brāhmaṇaṇas engaged in a superior occupation (Uttama).\(^{97}\) It was not the poor people only who lived in villages. Traders and merchants sometimes lived in villages occupied exclusively by them, but in a separate locality in a village if it had other elements in its population.\(^{98}\) The Siyadoni inscription\(^{99}\) gives names of merchants, traders and artisans living in a village. The Kaman stone inscription\(^{100}\) similarly mentions the merchants residing in a village. It appears that these men had permanent connections with villages in which they carried on their transactions.

On account of frequent political disturbances, specially when the Muslims began their devastating expeditions, the wealthier people, generally living in cities, may have found it safe to have a home in the village where they might settle if the situation became extremely dangerous. Even occupational classes carrying on their activities in towns and cities might flee to neighbouring villages for the security of their life, property and religion. When conditions became unusually perilous, there was the possibility of an accentuation of pressure on the existing resources of villages and means had therefore to be found out to save rural economy from a breakdown.

Other people living in villages included: kuṭumbins (house-holders),\(^{101}\) kshetrakaras or karshakas (cultivators),\(^{102}\) rāuta, bhaṅḍārī (store-keeper),\(^{103}\) sādhus (sāhukāh), sonī or suvarṇakāras (gold-smiths), kāṁsāras (braziers), vaṇi-jyārakas (vaṇjārās), nau-vittakas (ship-owners),\(^{104}\) headman\(^{105}\)

\(^{97}\) El, XV, p. 278 ff.; XXVI, p. i ff, etc.
\(^{98}\) Cf, El, XIV, p. 176 ff.
\(^{100}\) ibid, XXIV, p. 329 ff.
\(^{101}\) ibid, I, p. 316 ff.
\(^{102}\) ibid, XI, p. 34 ff, etc.
\(^{103}\) ibid, XI, p. 34 ff.
\(^{104}\) IA, XLI, p. 20 ff.
\(^{105}\) ibid, XLI, p. 85 ff.
purohitas,\textsuperscript{106} local banker (mahājana),\textsuperscript{107} betel-sellers (tāmbūlikas),\textsuperscript{108} horse-dealers,\textsuperscript{109} cart-builders,\textsuperscript{110} telis (those who worked in oil-mills),\textsuperscript{111} kosajas (cacao producers), oilmen, sūtradhāra,\textsuperscript{112} fishermen,\textsuperscript{113} bell-metal workers (kāśya), washermen (rajakas), boatmen (nāvikas), ivory-workers (dantakāras),\textsuperscript{114} gardeners,\textsuperscript{115} door-keepers (pratihāra).\textsuperscript{116} The Prabandhachintāmaṇi gives some idea about the composition of the village population, which consisted of cooks,\textsuperscript{117} potters,\textsuperscript{118} herdsmen,\textsuperscript{119} masons,\textsuperscript{120} female dyers,\textsuperscript{121} craftsmen,\textsuperscript{122} chowrie-bearers,\textsuperscript{128} jewel-tasters,\textsuperscript{124} traders,\textsuperscript{125} shop-keepers,\textsuperscript{126} musicians,\textsuperscript{127} workers in iron,\textsuperscript{128} etc.

\textit{Wealthy residents}

That some of the village people were quite well-to-do is shown specially in the Dewal Prāśasti of Lalla of Chhindia,\textsuperscript{129} which states that ‘very wealthy people live in a village’.

\textsuperscript{106} IA, XLI, p. 200 ff.
\textsuperscript{107} EI, XI, p. 43 ff.
\textsuperscript{108} ibid, XI, p. 43 ff.
\textsuperscript{109} ibid, I, p. 184 ff.; IX, p. 323 ff.; IA, XLIII, p. 57 ff, etc.
\textsuperscript{110} ibid, XI, p. 46 ff.
\textsuperscript{111} ibid, I, p. 97 ff.; p. 118, n. 35.
\textsuperscript{112} ibid, IX, p. 311 ff.
\textsuperscript{113} JASB, LXVI, p. 113 ff.
\textsuperscript{114} EI, XIX, p. 277 ff.
\textsuperscript{115} ibid, I, p. 154 ff.; XXIV, p. 329 ff.; IA, XI, p. 337 ff.
\textsuperscript{116} IA, XI, p. 337 ff.
\textsuperscript{117} Prabandhachintāmaṇi, p. 63.
\textsuperscript{118} ibid, p. 3.
\textsuperscript{119} ibid, p. 6.
\textsuperscript{120} ibid, p. 57.
\textsuperscript{121} ibid, p. 82. and n. 3.
\textsuperscript{122} ibid, p. 86.
\textsuperscript{123} ibid, p. 88.
\textsuperscript{124} ibid, p. 104.
\textsuperscript{125} ibid, p. 106.
\textsuperscript{126} ibid, p. 118.
\textsuperscript{127} ibid, p. 121.
\textsuperscript{128} ibid, p. 202.
\textsuperscript{129} EI, I, p. 75 ff.
Natural Divisions

Agricultural products of a country depend mainly upon its climatic condition and natural features. Geographically, northern India presents two natural divisions, each of which is quite unlike the other, and mainly based on their respective physical conditions. In the north, we have the mountainous regions and south of it lie the great Indo-Gangetic plains. It is in the latter, i.e., in the Indo-Gangetic plains, extending over a great stretch of land, that the principal crops of northern India grow. The Indus plain now-a-days is more or less dry with hot summer and cold winter; on the other hand, in the Gangetic plain, the rain-fall is heavy and the soil more fertile.

Land and its fertility

There were vast stretches of exceptionally fertile land in the regions washed by the Ganges and the Brahmaputra. The fertility was due not only to these rivers and their offshoots but also to other climatic factors. This fact is attested by earlier writers.\textsuperscript{180} It was in this part of India that Varendri (North Bengal) was situated. Sandhyākara Nandi describes Varendri as "the land which had all its important regions filled up with crops and water and had as their ornaments the groves . . . . It had elevated lands bearing excellent flowers." Varendri, as described by him, had large marshy lands, besides, land in which paddy plants of various kinds grew. It abounded in "sugar-cane and bamboo and there were also vast fields for growing fine plants".\textsuperscript{181} Regarding the soil of Gujarat, Rashid-ud-Din\textsuperscript{182} remarks: "the soil is such, that if you were to place a cotton plant or a plane-tree it would throw out its roots and yield produce

\textsuperscript{180} Megasthenes—'India has many vast plains of great fertility—more or less beautiful . . . . The great part of the soil, moreover, is under irrigation and consequently bears two crops in the course of the year' pp. 29-30; \textit{FRM}, p. 42, 'An abundant crop covered the earth'. Hiuen Tsang in his account mentions about a dozen countries which were remarkable for their fertile soil.

\textsuperscript{181} \textit{Rāmācharita}, V. 17-20, p. 91 ff.

\textsuperscript{182} \textit{HIED}, I, p. 67.
ten years running.” Ibn Batūta gives a similar picture regarding the fertility of Mulūk (which lies between Huvaḍū and Addū atolls). “It is an island exceedingly rich in vegetation and soil, so that when you cut a branch from any of its trees and plant it either on the road or on a wall, it will grow, throw out leaves and become a tree.”

It has been mentioned by Ibn Haukal that from Cambay to Saimūr the villages lie close to one another and there is much land under cultivation.

The Sultan of Ghazni found the soil of Aqahilapura so fertile and the country so well cultivated and pleasant, that he is said to have proposed to take up his residence there for some years to make it his capital. In the side-valleys in Kashmir, there were stretches of cultivable land, watered by the tributaries of its rivers, some of which were of considerable length and breadth.

In a copper-plate grant of Govindachandra of Kanauj (V. S. 1188), fertile soil is designated as saṅkha bhūmi. Artificial irrigation kept the land fertile, where natural water-courses were not available. There is no evidence however to show that all land was under cultivation, or that land once brought under tillage was always cultivated. It is worth noting how Nārādā also distinguishes between different types of land. ‘A track of land,’ he says, ‘which has not been under cultivation for a year is called arthakāla (half waste). That which has not been under cultivation for five years is no better than a forest’.

There were some lands which were sterile and uncultivable. In the Bhuvaneswar Prasasti, sterile region in Uttara-Rādhā (West Bengal), is described as Jāngala patha, where there was no water (Rādhāyām = ajalāsu jāngalapatha).

133 RIB, p. 216.
134 HIED, I, p. 39.
135 Rās Mālā, p. 59.
137 IA, XIX, p. 294 ff.
139 El, VI, pp. 203-07; cf, Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 59.
Debal has been described as a ‘barren place’. Al Idrisi described it thus: ‘its soil is not fertile, and it produces scarcely any trees except the date-palm. The high lands are arid and the plains sterile’.

Inferior land and land used for purposes other than those of cultivation are mentioned in some inscriptions although rarely. ‘Apakṛṣṭa-bhūmi’, as used in the Bargao grant of Ratnapāla of Prāgīyotisha, means ‘inferior land’, which was comprised (samēta) in the fertile area (kṣētra), producing 2000 measures of rice, the former containing fields where gourds were grown (lābakūṭi). ‘Refuse-land’ is indicated by the term ‘āvaskara’ in the Gauhaṭi copper-plate grant of Indrapāla and in the Nowgong copper-plate grant of Balāvarman. The same expression is also found in the Idrā copper-plate grant of Naya-pāladeva (10th century A.D.). ‘Āvaskara-sthāna’ of the latter inscription means a place where ‘sweepings are thrown’. Such land presumably was not used for cultivation.

River-side land is probably indicated by the expression ‘kāchha-bhūmi’, which is come across in the Gagahā plate of Govindachandra of the Gāhaḍavāla dynasty. ‘Vāgarā bhūmi’, used in the same inscription, seems to bear the same meaning as Hindi ‘bāgar’ which stands for a hedge. ‘Dāumara-bhūmi’ in the Manglāṇa stone inscription of Jayatrasimha of the Paramāra dynasty, (V. S. 1272) may be read as ‘daumāra’, a term of the local dialect, corresponding to ‘dumāra’ which means ‘scarcity of water’ in Mārwāri.

It may be further noted that sometimes land was given away without a clear specification of cultivated and uncultivated

140 SIMH, p. 61.
141 HIED, I, p. 77.
143 ibid, LXVI, p. 113 ff; LXVII, p. 99 ff.
144 ibid, LXVI, p. 285 ff.
145 EI, XXII, p. 150 ff.
146 ibid, XIII, p. 216 ff; Dr. Barnett suggests that the word ‘kāchha’ may be connected with ‘kachchha’, meaning ‘river-side’—ibid, p. 217, n. 1.
147 JA, XLI, p. 85 ff.
areas; for example, one inscription refers to 55 pāthas of cultivated and fallow land in a village.\(^{148}\)

**Products**

Our main drawback is that we have no comprehensive account from which we can compile a fairly complete list of agricultural products of different parts of ancient India. Some material, however, lies scattered in the different inscriptions and in contemporary literary and historical accounts, including those left by Muslim writers.

A detailed study of the different sources clearly reveals the fact that the crops of India during the period were not on the whole very much different from those grown in earlier times. North India in our period produced most of the crops which grow now.\(^{149}\)

A list of Indian grains is found in the Abhidhānachintāmaṇi of Hemachandra.\(^{150}\) In this work the author mentions seventeen kinds of dhānyas (rice). The word 'dhānya' in this work is used in a wider sense and signifies grains in general and not merely rice. Thus, vṛihī, yava, maśūra, godhūma (wheat), mudgā (green gram—Hindi mung-pulse), māsha (black gram), tīla (sesame), chaṇaka (Bengal gram—it is commonly used as fodder for horses), anava (the meaning of the word is not clear). Hemachandra defines it as 'sāṅbhada'. Probably sāṅtī here indicates grain in general. The Pravachanasāroddhāra takes it to be 'yāvanālo', jvar, great millet. The commentator to the Pravachana interprets it as 'yugamdhāri'), priyāṅgu (Italian millet—the Sanskrit synonym is 'Kaṅgu'. According to Watt, 'china' and 'rāḷā' are its common vernacular names), kodrava (kodo millet), mayuṣṭhaka (theaconite leaves), śāli (rice), ādīhaka (pigeon pea, Hindi, arahār), kalāyā (pea), kulatttha (horse gram), śanā (hemp, Bengal sān). Two lists of grains are also found in

---

\(^{148}\) IA, XI, p. 337 ff.

\(^{149}\) Cf. G. Watt, *The Economic Products of India*; J. Mollison— *Text-Book on Indian Agriculture*; A. H. Church— *Food Grains of India*. 

Nemichandra’s Pravachanaśāroddhāra, a work antedating Hemachandra, with a commentary belonging to the 12th century A.D. One of these mentions twenty-four kinds of grains, and the other twenty-five.

The Pravachana lists anāva, chaṇa and mayushṭhaka. The additional items furnished in one list are yavavāva (a kind of barley), cavalaka (cow-pea), krshnaçauṣṭka (black chick pea), valla (climbing bean), atasi (common flax), lātva (sunflower), koradūṣṭaka, baratīa sidhārtha, rālaka, mūlaka (radish). In the other list are to be found sastika, triputaka (chickling vetch), ikshu (sugar-cane) and dhānyaka.

These lists together give us some idea about the common agricultural products of India. It may also be mentioned


152 The Amarakosa (11.4) has a whole section dealing with agricultural resources such as trees, plants, forests, gardens etc. For the information furnished by Megasthenes about the products of the Indian soil, see Meg. frag. I, pp. 30-31. The Vāj. Sām. (18.12) contains a list of 12 different kinds of crops such as rice, wheat, māśa, yava, mudga, masūra, etc. The Viṣādāranyaka Upanishad (VI. 3, 12) enumerates 10 kinds of grains (grāmyaṇi dhānyāṇa). The Arthaśāstra of Kautilya gives a list of crops, vegetables and fruits, viz. rice of different varieties; krodava, coarse grain; tīla, (sesamum) priyaṅgu, pepper and saffron; pulses like mudga, māśa and masūra; kulatta, yava, godhūma (wheat), kālāya, atasi (linseed); sarshapa (mustard); etc. vegetables called śaka and mūla; fruits such as plantains, pumpkins, gourds and grapes (mṛldviśka) and sugar-cane (Iksu) etc.—Arth. II. 24, p. 127 ff.

Hiuen Tsang gives an account of the varieties of agricultural products of India according to the different regions where they were grown. This list includes rice, wheat, ginger, mustard and pumpkins, mango, melon, tamarind, madhūka, jujube, wood-apple, plantain, cocoanut, jack-fruit, pears, plums, peaches, apricots, grapes, pomegranates and sweet oranges. While giving a detailed account he also mentions the ‘characteristic products’ of the regions visited by him. From this it appears that almost the whole of India was exclusively cultivated for cereals and fruits. I-tsing mentions non-glutinous rice, sweet-melons, sugar-canes and tuber fruits of various kinds all abundant in the country. But millet was scarce. It appears from his account that wheat flour was abundant in the north-west, rice and barley in the west and rice in Magadha (Record, pp. 43-44). Bāna says that the products of the Śrīkṣaṇtha region consisted of rice, wheat, sugar-cane,
that earlier literary sources throw important side-light on the subject, although all the names of grains available are not furnished in the inscriptions of the period.

Besides the above we have got other sources which throw important light on the subject. The Abhidhānaratnāmalā 153 gives the names of a variety of cereals and other food-grains. The list includes sāli rice of three varieties, coarse grain (kodrava), mustard (sarshapa) of two varieties, long pepper or saffron or 'Italian millet' (priyapāta), wild sesame (jartila), wild rice (nivāra), as well as pulses of four different kinds (masūra, kalāya ralla and ādhaka). A list of seventeen articles (including rice and barley) is included by the Smṛitis in the category of grain (dhānya), as noted by Medhātithī.154 Similarly Vishnudharmottara, quoted in Mitramiśra’s Paribhāṣāprakāśa, gives a list of five kinds of grains (dhānya), viz. barley, wheat, paddy, sesame and edible grains of two varieties, namely kaṅga or ṣyāmaka and chinaka.155 Among other agricultural products camphor and aguru are given by Medhātithī156 as examples of costly articles. The gośirsha variety of sandal-wood is included in a list of especially precious products in “Upamitibhavaprapiṇḍa-kathā.157

On the evidence, referred to above, we may classify the agricultural crops as follows:—

**Rice (Dhānya)**

It was widely cultivated and was one of the principal foodgrains of India from very early times.158 It was cultivated throughout

of the Puṇḍra variety, beans of different varieties as well as vines and pomegranates—Cowell, HC, III. For the list supplied by Ibn Baṭṭūṭa, see—RIB, p. XXXV ff, intro.

154 Medhātithī, VIII, 320.
155 Paribhāṣā, 115.
156 Medhātithī, VIII, 321.
157 Upa, 420.
158 In the Rīg-Veda ‘dhānya’ is taken to mean grain in general—VI, 3-4, though in later literature it means rice. In the Atharva-Veda rice is meant by the word ‘vṛīhi’—XII, 2, 54; XVII, 4; XVIII, 3, 6-9.
India. Inscriptional sources, however, are not very comprehensive. In the inscriptions of Assam, rice is frequently mentioned and major importance is given to it. It is on the basis of the quantity of rice produced that land was measured in Assam. Thus in the Nowgong copper-plate of Balavarman we find mention of a piece of land whose area is indicated by stating that it produces four thousand measures of rice. Similar references are also found in some other land grants of Assam. Bengal as now was another important rice-producing area. The Mahāsthān Brāhmī inscription of the Maurya period refers to a rice granary located in Puṣḍanagala (Puṣḍranagara). The Rāmācharita mentions paddy plants of 'various kinds' grown in Varendrī. The inscriptions of the Sena kings mention 'smooth fields' growing excellent paddy and 'myriads of villages consisting of land growing paddy in excessive quantities'. Ibn Baṭṭūṭa states that 'Bengal is a vast country and abounds in rice'. In the Pāṇāherā inscription of the time of Jayasimhadeva of the Paramāra dynasty of Malwa (V. S. 1116) grants of rice fields are

Tatt. Sam. distinguishes between black and white rice and speaks of ḍāu-viṣṇya and mahā-vīṣṇya—I, 3. 1. 3; also Tatt. Br. I. 7. 3. 4. The Periplus says that rice was exported from Barygaza. The Jātakas contain numerous references to rice—I, pp. 429, 484; II, pp. 135, 378; III, p. 383; IV, p. 276, etc.


JASB, LXVI, p. 285 ff.

Ibid, LXVI, p. 113 ff; LXVII, p. 99 ff.

EI, XXI, p. 83 ff; IHQ, X, p. 57 ff.

Rāmācharita, V, 176, p. 91.

IB, p. 129.

Ibid, p. 89-90.

RIB, p. 234.
noted. Dhānya (rice) is also mentioned in the Chambā copper-plate of Somavarmadeva and Āsaṭadeva, the Mathura Praśasti of the reign of Vijayapāla of Kanauj, (V. S. 1207), the Bhinnmāl stone inscription of Udayasinhadeva of the Chāhamāna dynasty (V. S. 1306). In the last-mentioned inscription occurs the word ‘choshā’, i.e. ‘chokhā’ which is taken in the sense of rice.

Rice was the most important product of the valley of Kashmir. Its repeated mention in the Rājatarāṅgiṇī clearly proves that it was the main cereal of the valley. Lawrence states: "The Kashmiris so far, have considered no crop worthy of attention save rice". Sometimes rice was used as a medium of exchange in Kashmir.

In the Rāş Mālā it is stated that "the cultivators' wives were guarding the ripening rice crop in the plains". From Muslim sources we learn that rice grew in Uscañ and it was cultivated from Kaura to Kancān, Malwa and Kanja. It is also mentioned that 'Sarsati (modern Sirsa) is a great place for rice'. Rice in great abundance grew in Famhal, Sindān, Saimur and Cambay.

Cotton (Kārpāsa)

Cotton was an important product of India from very early times. The use of cotton in manufacturing clothes was known in the period of the Indus-valley culture. Weaving was a common industry among the Rīgvedic Āryas. Mention of cotton is found

108 EI, XXI, p. 42 ff.
109 IA, XVII, p. 7 ff.
170 EI, I, p. 287 ff.
111 ibid, XI, p. 55 ff.
173 Lawrence—The Valley of Kashmir, p. 319.
175 Rāş Mālā, p. 42; cf, DV, III, 5; XV, V, 49; XVIII, V. 30.
176 Index, I, p. 54; the names are given in a slightly different forms' in HIED, I, p. 16 and n. 2.—'From Kura to Kilakān, Luār and Kanja'.
177 HIED, I, p. 38; Index, p. 67.
in the Āśvalāyana Śrauta Sūtra.\textsuperscript{178} Mann states that the sacrificial thread of a Brāhmaṇa must be made of cotton, so as to be put on over his head in three strings.\textsuperscript{179} In the time of the Manusamhitā the art of starching or weighing a textile was also practised. In Chapter VIII. 236, of this work it is enjoined that for ‘stealing thread’, raw cotton etc., the fine should be thrice the value of the article stolen.” Herodotus is perhaps the first foreign writer who seems to refer to cotton fibre. In his account of India he writes; “The wild trees of that country bear fleeces as their fruit, surpassing those of sheep in beauty and excellence and the Indian use cloth made from these trees.” The Greeks of the days of Alexander learnt of its use, and the name of ‘kārpāsa’ is actually mentioned in the accounts of the Greek writers. In the beginning of the Christian era cotton, both raw and manufactured, formed one of the staples of trade between India on one hand and Egypt and the Greek world on the other.\textsuperscript{180} According to Arrian it appears that in his time Indian cotton used to be exported to Adulie, a port on the Red Sea and that a trade was established with Ariake Barygaza, etc. It is mentioned in the Jātakas\textsuperscript{181} and also in the Arthaśāstra of Kauṭiliya.\textsuperscript{182} Fa-hein\textsuperscript{183} in the beginning of the 5th century A.D. calls the cotton fabrics of the country ‘po-tie’. Cotton with other products was included in gifts of villages, as learnt from inscriptive documents mostly belonging to the Chandella dynasty. In an inscription of Vijayasena of Bengal it is stated that the ‘ordinary rural folk were familiar with seeds of cotton’.\textsuperscript{184} The early Charyā-padas also refer to cotton cultivation.\textsuperscript{185} Marco Polo states\textsuperscript{186}: “They (i.e., the Bengalees) grow cotton, in which they derive a great trade.” We learn from an inscrip-

\textsuperscript{178} It was composed not later than the 8th century B.C.
\textsuperscript{179} Manu, II, 44.
\textsuperscript{180} See, The Periplus of the Erythrean sea.
\textsuperscript{181} Jāt, III, 286; V, 343; VL, p. 47-G, etc.
\textsuperscript{182} Arth, II, 2.
\textsuperscript{183} China Review, XIX, p. 192.
\textsuperscript{184} IB, p. 42 ff. (verse 23).
\textsuperscript{185} Majumdar, History of Bengal, p. 651, n. 4.
\textsuperscript{186} Travels, II, p. 115 ff.
tition\textsuperscript{187} that red silk cotton tree grew in Assam (śālmali vrikshah). The soil of Gujarat was fit for cotton production. It is said regarding Gujarat that "if you were to place a cotton plant on a plane tree it would throw out its roots and yield produce ten years running".\textsuperscript{188} It is still regarded as an important cotton producing area in India.\textsuperscript{189} It may also be noted that it was used as an item of trade as recorded in the Arthuna inscription of Paramāra Chāmuṇḍarāja\textsuperscript{100}

**Sugar-cane (Iksu)\textsuperscript{100}**

In some of the land-grants, we find it specially mentioned among the products of the land transferred by way of donation. In the inscriptions of the Chandellas\textsuperscript{191} in particular, there are references to 'iksu' or sugar-cane, which point to the fact that it grew in the land of the Chandellas between the Jumna and the river Narmada. It is still a sugar-producing area in India.\textsuperscript{192} It also grew in some parts of Bengal which is still a sugar-cane producing area.\textsuperscript{193} It is mentioned by Lucan that the Indians near the Ganges used to 'quaff sweet juice from tender reeds'.\textsuperscript{194} A kind of sugar-cane is referred to by Suśruta as 'paunḍraka'.\textsuperscript{195} Commentators agree that it was named because it was grown in the Paunḍrā country (North Bengal). The Rāmācharita also refers to the cultivation of sugar-cane plant in Varendri.\textsuperscript{196} All these facts point to the conclusion that certain kinds of sugar-cane were cultivated in Bengal from very early times. It

\textsuperscript{187} *JASB*, LXVI, p. 285 ff.
\textsuperscript{188} Index, I, pp. 42-3.
\textsuperscript{190} *EI*, XIV, p. 295 ff.
\textsuperscript{191} *ibid.*, XVI, p. 272 ff.; *IA*, XXV, p. 205 ff.
\textsuperscript{193} *ibid.*
\textsuperscript{195} 45, 138-140.
\textsuperscript{196} Rāmācharita, V, 17b, p. 91.
is also believed that some amount of sugar-cane grew in Gandhāra.\textsuperscript{197}

References to sugar-cane fields are found in some Muslim accounts.\textsuperscript{198} From Ibn Khurdāda we learn that the country from Mihrān to Bakr abounded in canes, in the hilly tracts.\textsuperscript{199} It also grew in Sindān.\textsuperscript{200} Medhātithi\textsuperscript{201} mentions sugar-candy (ikshukhaṇḍa) and sugar (śarkara) along with sweetmeats. A variety of sugar-cane (kośa-kāra) with its mass of flowers, is mentioned in the Kāvyamimāṃsā.\textsuperscript{202} It has been pointed out by a Muslim historian that in Rāsak much sugar-cane is cultivated and a special kind of sweetmeat called jāniz is made out of it. It is also mentioned that sugar and sweetmeats were manufactured at Māskān and in the district of Kasrān.\textsuperscript{203}\\n
**Oilseeds**

Oilseeds of various kinds were known and cultivated in different regions of India.\textsuperscript{204} In the Jātakas, there are references to oilseeds such as sesame.\textsuperscript{205} The early Greek writers also knew about it.\textsuperscript{206} The Vappaghoshavāta grant of Jayanāga (7th century A.D.)\textsuperscript{207} refers to a ‘sarshapa yānaka’ (mustard channel) in the Andumvari-vaishaya of Karnasuvarna. Oilmills (tila-pidana-yantra)\textsuperscript{208} were worked in some villages. These oilmills were sometimes subjected to the payment in kind, of a rent.

\begin{thebibliography}{99}
\bibitem{197} JBORS, IV, p. 437 ff.
\bibitem{198} HIED, III, p. 428 ff.
\bibitem{199} ibid, I, p. 15.
\bibitem{200} ibid, I, p. 15.
\bibitem{201} Medhātithi, VIII, 326 ff.
\bibitem{202} Kāvyamimāṃsā, XII; cf. DN, I, 28 79. Reference to a sugar-cane garden is found in the works of Hemachandra.
\bibitem{203} HIED, I, p. 81.
\bibitem{204} See, Bandyopadhyaya, Economic Life and Progress, p. 133 ff.
\bibitem{205} Jāt, VI, p. 335.
\bibitem{206} The Periplus informs us that sesame (tila) seeds and oil were exported from Barygaza, which were brought from the region in the Narmada valley (Ariake). It was exported to the West Indies.
\bibitem{207} EI, XVIII, p. 60 ff.
\bibitem{208} ibid, I, 97 ff.
\end{thebibliography}
in the nature of a religious cess, as mentioned in a few inscriptions.\textsuperscript{209}

**Wheat and other grains**

Mention may be made of other grains such as wheat (\textit{godhūmāḥ}). The latter is referred to in earlier sources and in the accounts left by Muslim travellers.\textsuperscript{210} In some inscriptions there are references to wheat and to wheat ready for being reaped (\textit{gōdhūmā pakva}).\textsuperscript{211} Other important grains are barley (\textit{yava}), \textit{yugamdhari},\textsuperscript{212} maize, etc. In the inscriptions of the Chāhamānas there are references to the first two. Yava is regarded as the earliest cultivable grain in India and is mentioned in the Rīgvēda and also in the Jātakas.

References to maize fields are found in an inscription of Assam (\textit{kōśtha mākkhi-yāna}).\textsuperscript{213}

**Pulses**

The Abhidhānaratnamāla mentions pulses of four different kinds (\textit{masūra, kalāya, rallā, and āḍhaka}).\textsuperscript{214} There are inscriptional references to some of them.\textsuperscript{215} Pulse was cultivated in as early as the later Vedic age.\textsuperscript{216}

**Indigo**

It is interesting to note that indigo used to be extensively cultivated in Western India. According to Marco Polo there was

\textsuperscript{209} \textit{EI}, I, p. 287 ff; XIV, p. 176 ff; \textit{IA}, XLI, p. 85 ff.
\textsuperscript{210} \textit{HIED}, pp. 15-16; Index, I, p. 54.
\textsuperscript{211} \textit{EI}, XI, p. 55 ff.
\textsuperscript{212} Mentioned in an inscription of Kelhaṇadeva of the Chāhamāna dynasty (V. S. 1221), \textit{EI}, XI, p. 46 ff, Interpreted by Bhandarkar as a 'specific kind of corn known as jvār'. The commentator to the Pravacanā interprets 'jvār, as 'yugamdhari'.
\textsuperscript{213} \textit{JASB}, LXVI, p. 113 ff.
\textsuperscript{214} \textit{Abh. Rat}, II, 425-29; cf. \textit{ND}, I, 98; II, 110.
\textsuperscript{215} \textit{EI}, XI, p. 56 ff.
\textsuperscript{216} Bandyopadhyaya, \textit{Economic Life and Progress}, pp. 130-33.
plenty of indigo in Gujarat.\textsuperscript{217} In the Periplus references is made to the cultivation of indigo in Barbaricum.\textsuperscript{218}

Of other products mention may be made of śaṇa (hemp),\textsuperscript{219} kusuma (linen),\textsuperscript{220} saffron (kuṅkuma),\textsuperscript{221} camphor (karpūra), sandal-wood (chandana) and aloe-wood.

In the inscriptions of the period, kārpāśa-kusuma-śaṇa occur together. All these items were well known since the later Vedic period.\textsuperscript{222} Saffron was regarded as a famous product of Kashmir. It was most extensively cultivated in the Padma region (modern Pampar). A description of this plant is given in the fourth book of the Rājataraṅgini. Abul Fazl also gives an account of the plant and its cultivation.\textsuperscript{223}

**Betel-nuts**

Inscription of Bengal, in particular, refer to betel-nuts and it seems that betel trees grow abundantly in Bengal.\textsuperscript{224} A copper-plate grant of Viśvarūpasena states that the donor named Halāyudha had among other things, gardens of betel-nut trees which were regarded as a source of wealth.\textsuperscript{225} There is an incidental reference to the sale of betel-nuts in the Partabgarh inscription of Mahendrapāla II of Kanauj.\textsuperscript{226} As Bengal was particularly rich in betel-nuts these may have been sent to other parts of India where they did not grow so abundantly and thus a lucrative business was carried on in the article.

\textsuperscript{217} Marco Polo, Trans., by A. Ricci, p. 332. Hemachandra refers to indigo colour.
\textsuperscript{218} Periplus, p. 38.
\textsuperscript{219} EI, IV, p. 153 ff.; XVI, p. 9 ff.; p. 272 ff. etc.
\textsuperscript{220} ibid.
\textsuperscript{221} Rājat, Vol. II, p. 428 ff.
\textsuperscript{222} EI, IV, p. 153 ff.; XVI, p. 9 ff.; p. 272 ff.; Bandyopadhyaya, Economic Life and Progress, p. 237 ff. etc.
\textsuperscript{224} IB, p. 1 ff.; 14 ff.; 57 ff.; 81 ff. etc.
\textsuperscript{225} IHP, p. 77 ff.; IB, p. 140 ff.
\textsuperscript{226} EI, XIV, p. 176 ff.
Betel leaf (pān)

It may be presumed that the cultivation of betel-leaves was in the hands of a class of people known as Bārai in the village of Pāikpāra and neighbouring village of Belkā, as evidenced by an image-inscription.²²⁷ The betel-leaf cultivators lived there from very early times, and derived their wealth from the sale of betel-leaf grown by them. The copper-plate grant of Viśvarūpasena, to which we have already referred, shows that large plantations of betel-leaves existed in Bengal, during the Sena period, augmenting the wealth of her people.²²⁸ It is said in the Rājatarāṅgini²²⁹ that foreign traders sold betel-leaves with 'nāgarakhaṇḍa' and other ingredients. It is not clear what the Rājatarāṅgini means by the word 'nāgarakhaṇḍa'. Ginger is called 'nāgara' but it is not used as an ingredient of betel. A king of Kashmir liked betel so much that he is said to have gone to the extent of spending his whole revenue in procuring the commodity. This sounds fantastic, but it must have been costly and regarded as a rare luxury. Betel-leaves were to be carried over a long distance and particular care was to be taken by means of quick transport and other devices to preserve their freshness when they arrived for sale. All this must have accounted for the high price which was to be paid by the Kashmirians for this article. Bengal and Malabar being the most important betel-leaf growing regions in India, it may be surmised that the commodity came to Kashmir from those lands, and sold at exorbitant rates.

Trees

Various kinds of trees grew in the villages,—vetasa, hijjala,²³⁰ bhayakama, choraka, varuṇa,²³¹śālmalī, badari, kācimbala, āsvattha,²³² jāmun, bel, golden banyan tree (svarṇa vata

²²⁷ EI, XXVII, p. 26 ff.
²²⁸ IB, p. 140 ff.
²²⁹ Rājat, VII, 194.
²³⁰ IASB, LXVII, p. 99 ff.; p. 120 ff.
²³¹ ibid, LXVII, p. 120 ff.
²³² ibid, LXVII, p. 99 ff.
vrikshāḥ), waved leaved fig tree (jaṭi vrikshāḥ),²³³ mahuā,²³⁴ palm trees, etc.

The inscriptive account is well supplemented by the list given by Śukra.²³⁵ His list of large trees comprises khadira (catechu), asmanta (oxalis), sāka (teak), agnimatha (premna spinosa), syaunāka (bignonia Indica), vabbula (acacia), tamāla (cinnamomum tamāla), sāla (shorea robusta), kūṭaja (holarrhena antidysenterica); dhava (anogeissus latifolia), arjuna (terminalia arjuna), palāśa (butea frondosa), saptaparṇa (alstonic scholaris), ūmā (acacia spigera), tunna (cedrula toona), devadāru (pinus longifolia), vičekata (flacourtia sapida), karamanda (carissa carandas), inguddi (balanites roxburghii), bhūrja (betula bhojapatra), vishamushthi (strychons nuxvomica), kariraka (capparis aphylla), sallaki (boswellia serrata), kāśmari (gmelina arborea), pāṭha (stephania hermandi-folia), tinduka (diospyros embop-teris), vijasāraka (name of a tree not identified), haṭitaki (terminalia chebula), bhallāṭa (semecarpus anacardium), sampāka (not identified), arka (calotropis gigantea), pushkara (not identified), arimeḍa (acacia farnesiana), pitadru (a kind of pine tree), sālmalī (bombax malabaricum), vibhūtaka (termi-nalia bellerica), naravela (not identified), madhūka (bassia latifolia) and other large trees.

Śukra further states that expansive trees, shrubs and creepers are to be carefully planted in villages, if domestic, and in forest, if wild.²³⁶ He then defines wild trees as those which bear thorns, e.g. the khadira (catechu), etc. Some of the trees mentioned above were specially useful because of their value as timber.

Fruits and Flowers

In the Rāmcharita names of many trees are found, such as aśoka, āmalakī, karuna, pāriyāla, etc.²³⁷ References to gardens abounding with fruit-trees and flower trees occur in many ins-

²³³ JASB, LXVI, p. 285 ff.
²³⁴ EI, XIX, p. 291 ff.; XXI, p. 91 ff.
²³⁵ Śukra, IV, 4, 115-122, p. 166 ff.
²³⁶ ibid, IV, 4, 113-4 ; 123-24, p. 166 ff.
²³⁷ Rāmcharita, p. 90.
Certain kinds of fruits grow only in particular localities, as will be mentioned later. The fruit trees include cocoanut (nārikela), mango (āmra), madhūka, jack-fruit (panasa), walnut, gourd (lābakūṭi), grape, lemons, mouj, etc. Cocoanut (nārikela) is frequently referred to in the inscriptions of the different dynasties of Bengal. The Rāmcharita refers to Varendri as "the congenial soil for cocoanut trees in the world," and from another source we learn that it grew in Fāmhal, Sindān, Saimur and Cambay. Mango (āmra) grew in most part of Northern India as it is mentioned as a village-product in inscriptions from different parts of the country. There is a reference to a mango-track forming the boundary of a village of Bengal. Ibn Haukal states that Fāmhal, Sindān, Saimur, and Cambay all produced mangoes. Jack-fruit (panasa) appears frequently in the inscriptions of Bengal. It may be noted that it is mentioned in the T'ang-shu

238 Megasthenes states that "The soil bears on its surface all kinds of fruits which are known to cultivation. . . . India has many huge mountains which abounds in fruit trees of every kind . . . they are of spontaneous growth" pp. 28-29. Hiuen Tsang, I-taing, Kauṭiliya, Baṇa, etc. refer to different kinds of fruit trees. In an account of Anapilapura it is stated, that "the population delights to saunter amidst the groves of champaka, punja, tal (palmrya), jambu (rose-apple), chandan (sandal), mango, etc. with, variegated vela or creepers and fountains . . ." AAG, p. 34 ff; Muslim source refer to "Kādhah-Katanak or Gondwānāh as exceedingly rich in fruits. Ibn Baṣṭūja mentions Indian fruit trees such as mango, jack trees (kāṭhāl), 'diospyros peregrina (i.e. tendū') which is said to be a fruit of the ebony tree; jambol (jamūn or jām); sweet orange, lemon, madhūka etc. RIB, p. 16 ff.

239 It occurs frequently in the inscriptions of Northern India. It is believed that it was widely cultivated and was used for the manufacture of liquor.

240 JASB, LXVI, p. 113 ff; LXVII, p. 120 ff.
241 ibid, LXVII, p. 99 ff.
243 ibid, I, p. 38; Index, p. 56.
244 Index, p. 59.
245 Rāmcharita, V, 19b, p. 93.
246 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 99.
247 HIED, I, p. 38; Index, p. 67.
that in the 21st. year of the Chong-kun period (A.D. 647), a mission from Magadha which came to the court, presented the emperor with a po-lo tree. This tree, according to Hirth and Rockhill, resembled a pai-yung tree. Po-lo is said to be a Sanskrit word for a fruit and may have been a po-lo-mi or jackfruit, if not a pine apple.  

Mahuā fruits are referred to in some inscriptions such as those of the Gāhaḍavāla dynasty of Kanauj and the Jambulpore Kotwali plates of Jayasimha.

From the Rājarāṅgini we come to learn that grapes grew abundantly in the valley of Kashmir. Rashid-ud-Din informs us that in Gujarat grapes are produced twice during a year. From other sources we learn that it grew most in the North-Western part of India. It even grew in parts of Bengal. We learn that the western boundary of the village of Viḍḍarā situated in the subdivision of Vetaḍḍa-chaturaka (modern Bator in the Howrah district) was formed by an orchard of pomegranates (dālimvākṣhetra). Ibn Baṭṭūta says that the grape trees bear fruits twice a year.

In addition to the above, we have got an exhaustive list of trees, described by Śukra as fruit-bearing, which comprises the udumvara (ficus glomerata), aśvattha (the holy fig tree), vaṭa (banyan), chincha (tamarind), chandan (sandal), gambhala (lime), Kadamba (nauclea cadamba), aśoka (jonesia asoka),

---

248 Chau Ju-Kua, p. 213.
249 EI, XIX, p. 291 ff.
250 ibid, XXI, p. 91 ff.
251 Rājar, I, 42; IV, 192; VII, 498.
252 HIED, I, p. 67; Index, I, p. 42.
253 Al Istakhri states that vines grew in Kandābil—HIED, I, p. 29; Index, I, p. 53; Ibn Haukal states 'in Turan and Kasdar pomegranates, grapes and other fruits are met with in abundance'—ibid, I, p. 39; Index, I, p. 56.
254 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 62 and n. 2.
255 IB, p. 92 ff; Bhāratavarsha (a Bengali journal), 1332 B.S. pp. 441-45.
256 RIB, p. 18. Ibn Baṭṭūta further adds that in Mulāk, pomegranates grew continuously all the year round, p. 216.
VILLAGES: ECONOMIC CHARACTERISTIC AND PLANNING

vakula (mimusops elengi), vilwa (bel), amrita, kapitthaka (wood apple) rājadān (mimusops hexandra), āmra (mango), punnāga (calophyllum inophyllum), tuda (mulberry), champaka (michelia champaka), nīpa (a species of asoke), koka (a wild date tree), amra (spindias mangifera), sarala (pine), dārima (pomegranate), akśota (walnut), śimśapā (dalbergia sissoo), vadara (jujube), nimba (neem), jambira (lime), ksirike, kharjura (date), devakaraja (pongamia glabra), phālgu (opposite leaved fig tree), tāpinchha (tamāla), bhala (semecarpus anacardiam), kudvāla (ebony), lavali (phyllanthus distichas), dhātri (woodfordia floribunda), kramuka (betelnut), māṭulungaka (citron), lakucha (artocarpus lakoocha), nārikela (cocoanut), rambhā (plantains).\[257\] Regarding flowers it is stated by Rashid-ud-Din that in Gujarat 'during the four seasons, no less than seventy flowers (different sorts of roses) blow in this country'.\[258\] The Rāmācharita describes Varendra as a land of excellent flowers, where grew mālati, nāgakeśara, keśara, (i.e. vakula), madhu (āsoka), pārijāta, kanaka (i.e., dhustara or champaka), lotus and ketaka. The author further describes Varendra as a land suitable for the growth of flowers of endless varieties,—where blew a breeze which was cool and fragrant, because of the presence of water with plenty of lotuses, red and blue.\[259\] Manufacture of honey in some parts of the land is testified to by some Muslim writers.\[260\]

Village Planning

From a minute study of the evidence of land-grants, recovered from different places, it appears that villages were generally modelled on a more or less common plan.

In the available land-grants different villages are shown as possessing the same constituent parts, described in a conventional style. Beyond the habitat (vāstu-bhūmi) lay the arable land and beyond that was the pasture land. The 'vāstu-bhūmi' was high

\[257\] Śukra, IV, 4, 95-102, p. 165.
\[258\] HIED, I, p. 67.
\[259\] Rāmācharita, V, 22B, p. 95.
\[260\] HIED, I, p. 38; Index, pp. 24, 56.
land where the villagers had their houses. Mitāksharā\textsuperscript{261} lays down that “pasture ground shall be allotted for cattle, according to the desire of villagers, or in accordance with the land or in obedience to the king,” and “there should be space of one hundred dhanus (or four hundred cubits) between a grāma and the surrounding fields.” At the extreme end of a village lay the waste land and the forest land. On land not used for habitation or agriculture were situated temples, halls, markets, etc.

References to village-markets are also not rare. It may be inferred that near about the village habitat lay the small village market (haṭṭa), where sales and purchases went on. Śukra states that in the market-place, stalls or shops are to be placed according to the classes of commodities stocked for sale.

The internal roads of the villages may not have been usually constructed. There were village-paths for human use and paths for the use of animals (go-patha). These were generally formed through constant use and later became recognised as roads. The external roads, however, i.e. those which connected one village with another, or a village with a town, were better and are referred to in the inscriptions in connection with village-boundaries. Śukra says that the king should construct ‘rājamūrga’ in towns and grāmas to be used for the conveyance of marketable commodities.\textsuperscript{262} These ways (i.e. the padya, vīthi and mārga) should emanate from the centre of the grāma and run towards east, west, north and south.\textsuperscript{263} In each grāma there should be roads of ten cubits.\textsuperscript{264} The ‘padya’ is three cubits wide, and the ‘vīthi’ five cubits.\textsuperscript{265} Śukra\textsuperscript{266} states that the shape of roads is to be like the back of a tortoise (i.e. high in the middle) and that they should be provided with bridges. This device prevented water from accumulating on the road. The same purpose

\textsuperscript{261} Mitāksharā, Pt. II, Chap. II, Sec. IV, CLXVI, CLXVII, pp. 21, 22.

\textsuperscript{262} Śukra, I, 522, p. 34.

\textsuperscript{263} Ibid, I, 525, p. 34.

\textsuperscript{264} Ibid, I, 530, p. 35.

\textsuperscript{265} Ibid, I, 523, p. 34.

\textsuperscript{266} Ibid, I, 523, p. 35.
was also served by the scheme suggested by Śukra, providing roads with drains.\[267\]

According to the Śukranitisāra, on both sides of the road houses are to be built on a plan based on the classification of wealth of the villagers.\[268\] These buildings must face the ‘rājamārga’; and at their back there should be vihīs and places for committing nuisance.\[269\] The houses should be arranged in two rows.\[270\] Between every two grāmas, a serai is to be built.\[271\] This is to be kept neat and tidy and managed by the village authorities.\[272\] Śukra further states that the king should build the Gaṇja-house (a tavern) outside the village and there keep the drunkards.\[273\]

The king is asked to have domestic plants, planted in villages, and wild trees in the forests. The wild trees have been classified into three groups according as they are ‘good, middling and ordinary’. The distance to be maintained between two trees of the same group has been specified by him; it is to be of varying lengths to be determined according to the classification of trees furnished by him.\[274\] Trees bearing good flowers are also to be planted at a place which is very close to a village.\[275\] It is evident that the growing of trees and plants, as recommended by Śukra, is a part of the state’s programme for increase of wealth. Every villager, who has a house, has to lay out a garden to the left of his homestead.\[276\]

There are to be wells, canals, tanks and ponds in the village, which should be of prescribed size, provided with staircases and footpaths built around them. There should be as many tanks,
wells etc. as possible so that there may be plenty of water available in the village. 277

Temples of Vishnu, Saṅkara, Gaṇesha, the Sun-god and Pārvati are to be built by the king in the parks and squares, or in the centre, of a village. 278 Rules regarding the size and construction of these temples as well as the images to be installed in them have also been furnished in this connection.279

Kauṭilya advocates the policy of establishing new villages throughout a kingdom, "either by inducing foreigners to immigrate (paradesā-pravāhanaṇena) there or by causing the thickly populated centres of his own kingdom to send forth the excessive population (svadesābhishyandavyamaṇena-vā)". "The king" he says, "may construct villages either on new sites or on old ruins (bhūtapūrvaṁabhūtapūrvamvā)". These villages, each consisting of not less than a hundred families and not more than five hundred families of agricultural people of Śūdra caste, with boundaries extending as far as a croś (2,250 yards) or two, and capable of protecting each other shall be formed . . . . . 280

The Mayamata makes a detailed classification of villages into first, middle and lowest ranks according to the size and number of Brāhmaṇa inhabitants.281

The Mānasāra is regarded as the standard work on the subject, which treats of various topics, such as the science of Architecture, the system of measurement and the qualifications of an architect, different branches of architecture, selection of suitable sites for temples and dwelling houses, orientation of buildings, site-plans, town-planning etc.282 An idea about village-planning, as suggested in this work, may be formed from its description of a typical village. Such a village, says the Mānasāra, is surrounded by a wall made of bricks or stone beyond which there is a ditch broad and deep enough to prevent

277 Śakrā, IV, 4, 125-129, p. 166.
278 ibid, IV, 4, 132-133, p. 166.
279 ibid, IV, 4, 133-412, pp. 162-182.
280 Arth, II, 2, p. 45 ff.
281 Mayamata of Mamamuni, Chap. IX, 11 and 25.
282 See, Acharya, Architecture of Mānasāra.
any enemy from attacking the village. The village has generally four gates, each in the middle of a side and also four gates at the corners. Next to the surrounding wall, inside the village is a street which runs along the four sides. This is the largest street in the village. Two other streets, each leading to the two sides of the wall, intersect each other at the centre. The main street divides the village into four large blocks, each of which is subdivided into smaller parts by other streets which are always straight, running end to end within the block. Houses stand, facing only one side of the street. The ground floors of the houses on the main streets are used as shops. The street inside the wall which runs on all sides of the village is lined with public buildings, such as schools, colleges, libraries, guest-houses etc. All other streets generally have residential buildings on both sides. The houses, high or low are of the same type. The drains (jaladharā) are made 'towards the sloping of the village'. Besides ponds and tanks, there are temples as well as other public buildings, gardens, parks etc. which are situated at places where they may conveniently be used by the people. The best quarters are generally occupied by the Brāhmaṇas and the artisan classes. There are separate quarters for Buddhists and Jainas.

The habitations of Chaṇḍālas and the places for cremation are located outside the village wall, specially in the north-west.²⁸³

The Mānasāra classifies villages according to their shape into eight types, namely, Daṇḍaka, Sarvatobhadra, Nandyāvarta, Padmaka, Svastika, Prastara, Kārmuka, and Chaturmukha. They differ also in regard to the deities worshipped and the localities of their temples.

Daṇḍaka

A village that resembles a staff is of this type. It is rectangular or square and possesses a wall of the same shape, with one to five roads large enough for carriages to pass and other streets smaller in size. The main streets have two footpaths

²⁸³ Acharya, Architecture of Mānasāra, Chap. IX; Dutt, Town-planning, pp. 195-246.
with two rows of houses, standing on both sides. The houses should be three to five *daṇḍas* broad and the length should be twice or thrice their breadth. There should be a ditch or wall surrounding the village and there shall be four principal gates and other smaller ones. The village should contain 12, 24, 50, 108, or 300 Brāhmaṇa families.

*Sarvatobhadra*

A village of this type is oblong or square in shape. Like the *Daṇḍaka village* it has one to five carriage-roads and a surrounding street. Streets within the village instead of having two rows of houses on both sides, are to have a single row and the street next to the wall round the village has a double row of houses, with smaller streets running through all the parts. The ‘Paśācha’ (outer) part of the village is to be separated. The village should be surrounded by a ditch or wall, with four main gates on the sides and a number of smaller gates. The labourers’ quarters should be located on the high ways (*mahārathyā*), the quarters of the Vaiśyas (*trading class*) and the Śūdras separately in the southern part. Between the east and the south-east are to be situated the houses of the cowherds and beyond these the cowsheds. Between the south and the south-west there should be the houses of the weavers and beyond these the houses of the tailors and the shoemakers. Between the west and the north-west should be the houses of the black-smiths and beyond these the houses of the fishmongers and the butchers; and between the north and the northwest the houses of the community of scribes (*Śrīkara-kāyastha*) and the physicians (*Vaidyas*). On the out-skirts of the village should be the houses of the dealers in the bark of trees and oilmen and also the quarters of the Chaṇḍālas which should be situated in the north.

*Nandyāvarta*

In shape it may be either square or oblong. It may be either of the Chaṇḍīta or Sṭhaṇḍīla or the Paramaśāyika type.
The Chandita type consists of sixty-four parts: the central four parts are known as Brāhma parts; next to these twelve parts are called Daivika; the surrounding twenty parts are called Mānushya; outside these parts the remaining twenty-eight are called Paisācha.

The Paramāsāyika type consists of eighty-one parts, the central nine parts are known as Brāhma parts; outside this sixteen parts are known as Daivika parts; beyond this twenty-four parts are known as Mānushya parts; surrounding this thirty-two are known as Paisācha parts.

The Sthanādila type should consist of forty-nine parts, One central plot is for the Brāhma; eight plots beyond this for the Daivika; beyond this again sixteen plots to be called Mānushya; beyond the last-named plot there are to be twenty-four plots to be known as Paisācha.

A village of this type should have four main streets in the four sides running in each direction at a right angle, with other subsidiary streets. Some of the streets may have two footpaths; some one only and others without it. Lanes (kshudra-mārga) also are to be found in this type. The roads and streets should be consolidated with kankar (nodular limestone). The width of the streets (vīthī) should vary from three to twelve rods. The width of a large road (mahāmārga) should be equal to the width of a street of nine rods, etc.

The Mānasāra incorporates an elaborate account of street-planning in regard to this type, accompanied with details about population, distribution of sites and the plots to be occupied by the different castes, erection of temples, gates and side-gates, etc. Like the other types of villages it should also have a wall or ditch around it. Large gates should be built on the four sides.

Padma or Padmaka

The length and breadth of a village of this category are equal but the walls which surround it may be quadrangular, sexagonal or octagonal or circular. In its internal arrangement, it should be either of the 'Chandita' or the 'Sthanādila' type. "The
residential buildings should be built in the (four corners of) six plots, each divided by an oblique line”. The temple and the public hall should be built in these parts. There must be footpaths on both sides of the main roads. In addition to these roads, there may be four to eight other streets in the village. The surrounding walls should have four main gates in four directions. Its other features are mostly the same as those of the ‘Nandyāvara type’.

Svastika

The ‘Svastika’ village like the ‘Padma’ village should be of equal length and breadth and be based on the ‘Paramaśāyika’ plan. The streets should be svastika-shaped. A ‘Svastika’ village should have eight main gates and a number of smaller ones. It should be protected by ramparts with a ditch enclosing them. A svastic village is inhabited by all classes of people, though it is especially meant for kings. The plan on which such a village is to be built may be of the ‘Sthānīya’ or any other plan already described.

The king’s mansion may be built at the centre or at the intermediate points of the village. It may also be built, leaving out the ‘Brāhmya-plot’, at “the middle of the four plots called Ārya and others”. Mānasāra classifies villages of this type, according to the location of the royal residence. Temples are to be located inside the village. Around the temple of the village should be situated the residential buildings of the village. The central street should have one footpath. The quarters of the Chaṇḍālas should be outside the village in the north-east direction. On the east, north and in some other parts of the village there should be suitable pavilions built on solid foundations, to be used for the inspection of the army.

Prastara

In shape it is either rectangular or square and is specially suitable for Kṣatriyas or Vaiśyas. It should have eighty-one plots according to the ‘Paramaśāyika’, the Chaṇḍīta, the Sthāṇḍīla or
any other plan. The village should have different blocks, such as the 'Paśācha, the Pechaka, the Piṭha blocks, etc. with varying numbers of plots which should be connected by streets. If the village has a 'Mahāpītha', it should have twenty-five plots. Minute details have been furnished regarding the construction and the location of streets, measurements and details of temples and the installation of deities. The Vaiśya inhabitants of the village should have their houses built in the interior. The quarters of the working classes are to be localised round the 'Paśācha' part. Village shops should be built along the sides of the main road which will have two footpaths. This village, as usual, is to be surrounded by walls and ditches with four main gates and a number of other gates.

Kārmuka

It is semi-circular in shape; its breadth should be equal to its length or the length may be greater. It is of three varieties; (1) Paṭṭana, (2) Kheṭa, (3) Kharvaṭa respectively, inhabited in the main by the, Vaiśya traders and labourers and lower classes of people. Villages of this type are to be constructed on the bank of a river or on a sea-coast. The streets running inside the village should be interconnected as in a pair according to the requirements of the localities through which they pass. Thus there is to be junction between the south and the east, the north and the east, south and west and west and north. Where the two streets meet, the outside part of this junction should be bow-shaped, which explains the name given to the type (Kārmuka). Each separate part of the village should have one to five streets.

Chaturmukha

This type is square or oblong in shape. It is surrounded by a wall of similar shape, and four main streets on the four sides. 'Two large streets crossing at right angles in the centre divide the whole site into four square blocks and the principal four gates are raised over the terminuses of these two highways . . . .'. The south-eastern ward is to be occupied by the
Brāhmaṇas, the south-western by the ruling class while the north-eastern and western blocks are assigned to the trading class. Artisans and labourers are to have their quarters on extreme borders (Pārisācha block). No residential blocks are to be erected on the main streets. This type of village, if occupied exclusively by the trading class is to be known as 'Kolakosṭha'.

It should be added that the accounts, utilised above, have more a theoretical value than practical. It is evident, however, that much attention was given to the development of rural areas of various shapes and dimensions, suiting the needs of accommodation as well as the status and occupations of the different elements of the resident population. Considerable skill was also shown in the laying out of roads, linking up groups of neighbouring villages and towns for facility of communication. There was a lot of speculative activity in the country resulting in the evolution of a diversity of patterns of village construction.

**Village Boundaries**

Disputes often arose regarding boundaries of village and also those of individual holdings. In order to reduce the possibility of such disputes jurists like Manu, Brihaspati, Yājñavalkya, Nārada; etc., emphasise the maintenance of boundary-marks of different kinds.

Manu\(^2\) gives a list of visible and invisible boundary-marks. The visible marks include trees such as vataś, pippala, palāśa, śāl, mali, tāla, etc. and creepers, clumps of kubjakas, mounds of earth. The marks must be such as may not easily disappear. Moreover, there should be ponds, wells, temples wherever possible on the common limits. Invisible marks\(^3\) are those which remain hidden, such as stones, bones, cow's hair, chaff, ashes, potsherds, dry cow-dung, bricks, cinders, pebbles and sand. Similar other things which the earth does not

---

\(^2\) Manu, VIII, 246-48; cf., Mitākṣarā, III, I, p. 4.

\(^3\) Ibid, VIII, 249-51.
VILLAGES: ECONOMIC CHARACTERISTIC AND PLANNING

corrode should be buried "where boundaries meet". Vijñāneśvara, while commenting on Yājñavalkya,\textsuperscript{286} prescribes the use of an elevated ground, charcoal (remnanto), husks, trees, causeway, ant-hills, depressions of the soil, bones, memorials etc. as boundary-marks.

In the inscriptions of the period also boundary-marks are frequently mentioned. Thus in one of the copper-plates of Lakṣmimaṇsena\textsuperscript{287} the boundaries of the village granted are specified as follows:—East—āśvattha tree; south—a stream; west—a neighbouring holding, and north—a road or a highway. The boundaries of the village of Vāllahiti, as given in the Naihāti copper-plate\textsuperscript{288} in minute details, included a river, a ditch, a cattle-path and a village. Similarly the boundaries of the village of Viḍḍara\textsuperscript{289} in Bengal, were marked by a river, a temple, orchard of pomegranates and a neighbouring village. The boundaries, noticed in the Nowgong copper-plate grant,\textsuperscript{290} are: a well, a pathway for the cattle, a dike, reservoirs, a pond, and some trees, including jāmun, bēl, banyan, mango, cotton, fig, etc. The Gauhaiti copper-plate of Indrapāla\textsuperscript{291} shows the use of ridges, maize-fields, granaries, ponds, dikes, clumps of bamboos, rivers, rows of houses, embankments, walnut trees, fields etc. as boundary-marks. In the Bombay Asiatic Society copper-plate grant of Bhīmadeva II,\textsuperscript{292} the boundaries of a gift-land were indicated by an irrigation-well, a tank, a road, and a neighbouring field belonging to another village. Another inscription of the same king\textsuperscript{293} briefly mentions the main boundaries of a gift-village as constituted by the king's land on the east, the field of Soluyā on the south, and on the west the village of Bhuharaḍā, and on the north the boundary of Vahāṇi. The boundaries of the gift-land, as recorded in the Mahobā plates of

\textsuperscript{286} Mitāksharā, III, I, p. 1 ff.
\textsuperscript{287} JASB, LXII, p. 61 ff.
\textsuperscript{288} IB, p. 68 ff.
\textsuperscript{289} Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 62.
\textsuperscript{290} JASB, LXVI, p. 285 ff.
\textsuperscript{291} ibid, LXVI, p. 113 ff.
\textsuperscript{292} IA, XVIII, p. 108 ff.
\textsuperscript{293} ibid, XVIII, p. 110 ff.
Paramārīdideva\textsuperscript{204} are the nālā, belonging to the barber on the east, another nālā on the south, an embankment on the west and a Brahmin’s holding, a tank-embankment and a square of fifty-two cubits of land, on the north. There is a reference to a mango-track forming the boundary of a village of Bengal.\textsuperscript{205}

An analysis of epigraphic materials will show that boundaries generally included: (1) mounds and hills,\textsuperscript{206} (2) trees of different kinds,\textsuperscript{207} (3) pits and trenches,\textsuperscript{208} (4) ponds,\textsuperscript{209} tanks\textsuperscript{800} and water-channels,\textsuperscript{201} (5) river-banks and river-beds,\textsuperscript{802} (6) wells,\textsuperscript{803} (7) temples,\textsuperscript{804} (8) mustard channels,\textsuperscript{805} (9) cattle-paths,\textsuperscript{806} (10) fields,\textsuperscript{807} (11) public roads or king’s high road,\textsuperscript{808} (12) ant-hills,\textsuperscript{809} (13) potter’s ditch,\textsuperscript{810} (14) rocks.\textsuperscript{811}

Neighbouring villages are not infrequently mentioned as serving the purposes of boundaries.\textsuperscript{812} In this connection reference may be made to the grant of the village of Erathāṇa which is described as being bounded by eight ‘kheṭakas’ i.e. villages of agricultural peasants.\textsuperscript{813} There must have been proper safeguards for the maintenance of such boundaries. Any uncertainty

\textsuperscript{204} EI, XVI, p. 9 ff.
\textsuperscript{205} Cf, Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 99.
\textsuperscript{206} EI, X, p. 304 ff.
\textsuperscript{207} JASB, LXVII, p. 99 ff.; IB, p. 81 ff.
\textsuperscript{208} ibid.
\textsuperscript{209} JASB, LXVI, p. 113 ff.; p. 285 ff.
\textsuperscript{201} EI, XI, p. 306 ff.; IA, VI, p. 206 ff.
\textsuperscript{203} ibid, XI, p. 304 ff.; XIV. p. 154 ff.; IA, VI, p. 53 ff.
\textsuperscript{204} JASB, LXVI, p. 285 ff.
\textsuperscript{205} EI, XI, p. 304 ff.; IB, p. 92 ff.
\textsuperscript{206} ibid, XVIII, p. 60 ff.
\textsuperscript{207} ibid, XIV, p. 156 ff.; IB, p. 158 ff.
\textsuperscript{208} ibid, I, p. 316 ff.
\textsuperscript{2010} IA, XVI, p. 207 ff.
\textsuperscript{210} KS, p. 41 ff.
\textsuperscript{211} EI, I, pp. 154 and 161.
\textsuperscript{212} IA, VI, p. 193 ff.; XVIII, p. 344 ff.; EI, IX, p. 1 ff.; XI, p. 304 ff.; JASB, LXV, p. 6 ff.
\textsuperscript{213} IA, XXXI, p. 255 ff.
in this respect might cause a dispute between the villages concerned.

An interesting point is that when no natural mark existed, the new holdings were marked by planting trees or setting up wooden or bamboo pillars. The Śubhankara-pātaka-grant mentions the planting of śālmali trees (ropita-śālmali-vrikshāḥ) and bamboo posts (varāśa vrikshas) as boundary-marks.

Settlement of boundary-disputes

Regarding the settlement of boundary-disputes, opinions are divided. Kauṭilya, Yājñavalkya, Nārada and Bṛhaspati hold that the right of decision in boundary-disputes belongs to the inhabitants of the localities concerned. The king interferes only in exceptional cases. But according to Manu the king is the sole arbiter in boundary-disputes, but he may take the evidence of witnesses and of other persons, where it is difficult to decide.814

According to Viśnunātha815 the evidence of neighbours, old men and the like, cowherds, cultivators and “all whose business is in forests” is to be taken into account in determining boundaries where they are disputed.

814 Manu, VIII, 253-266.
815 Mitāksharā, III, p. 1 ff.
CHAPTER II

Landed Wealth—Ownership and Distribution

Donors in land-grants

Assignment of land on a wide scale was a common practice in the period under review. Inscriptions engraved usually on copper-plates in which gifts of land are recorded furnish necessary particulars about these grants. In some cases the value of the land granted is mentioned; sometimes the total yield of the land is also indicated. The rights of the donees concerned are usually defined in a more or less detailed form, in most of the land-grants. Lands were assigned not only by the king himself but by members of the royal family such as the prince, the queen, the queen-mother, as well as others of high ranks, viz. ministers, sāmantas, mahāsāmantas, etc. Private gifts of land are also recorded, such as those made by merchants, land-lords, traders, artisans, guilds, etc.

Categories of Assignments

Assignments may broadly be divided into distinct categories, viz. those of one or more village in favour of a single person, and those benefiting a group of individuals, with their respective shares and boundaries clearly marked out. Besides these, there are others comprising plots scattered in more than one village or relating to the substitution of one village in lieu of two, or one village in lieu of another.

Procedure

The essential features of the procedure adopted, while making these gifts of land, may be noted as follows:—

1. In the case of a grant of a number of villages to a group of persons, boundaries and details regarding individual shares were marked out.
2. When gifts were made of pieces of land, special details regarding measurement, total yield, price (as in some cases), boundaries, etc. were given.
3. Grant of a village was made after excluding portions already granted.
4. A single document was drawn up covering a number of assignments.
5. Royal sanction, where required, had to be secured before assignment.
6. Assignments were to be made with the consent of state-high-ranking-officials and sometimes also important persons resident in the localities concerned.

The recorded assignments are generally in favour of Brāhmaṇas, temples, ascetics, scholars, commoners, guilds, etc.

Most of the available land-grants of the period are found to have been assigned by kings. It is, therefore, needless to name inscriptions recording gifts by kings, as they are too numerous to be mentioned.

Assignments by princes and queens

In some cases assignments were made by princes and Yuvarājas (heirs-apparent) such as in the Kamauli inscription of Vijayachandra and Jayachandra of the Gāhaḍavāla dynasty of Kanauj (V. S. 1224), the inscriptions of Govindachandra and Mahārājputra Asphoṭachandra, (V. S. 1190) and of Govindachandra and Mahārājputra Rājyapāla, (V. S. 1203). It is recorded in the last-named inscription that the grant of the village, Chamaravāmi, was made with the royal consent, by the Mahārājputra Rājyapāla. In the above-mentioned inscription of Vijayachandra and Yuvarāja Jayachandra, the king records the grant of a village made with his consent, by the Mahārājaputra Jayachandradeva, acting as Yuvarāja, who was endowed “with all royal prerogatives”.

1 *EI*, IV, p. 117 ff.
2 *ibid*, VIII, p. 155 ff.
3 *ibid*, VIII, p. 156 ff.
Inscriptions were sometimes issued by the king’s mother and queens, and they were in most cases done with the approval of the king. Most of these inscriptions belong to Gāhādvāla dynasty of Kanauj and the Bastar state in Madhya Pradesh. There are cases where it is recorded that the land to be granted as a gift is at first transferred by the king himself to his mother or wife, as the case may be, and thereafter granted by her to the donee. This is in fact a case of double assignment. In the Pali plate of Govindachandra and his mother, Mahārājāī, Rālhaṇadevi, (V. S. 1189), it is recorded that the king made over to his mother, the Mahārājāī Rālhaṇadevi, 10 nālukas of land, to be given away by her to Thakkura Jayapālaśarman as stipulated by the monarch himself.

But there are instances of land-grants made by queens of reigning kings, many of which were issued with the approval (sammatyā) of the king. Thus in the Bangāvan plate of Govindachandra and his queen, Gosaladevi (V. S. 1208), it is recorded that the queen, endowed with all royal prerogatives, gave the village of Gaṭiara with the king’s consent. A similar example is also found in another inscription of Govindachandra and his queen Nayaṅakelidevi (V. S. 1176). This inscription is a case of double assignment. It opens as if it were meant to record a grant made by the king himself, i.e. by Govindachandra himself, but in reality the king makes known here that, while he was staying at Khayara, his queen Nayaṅakelidevi, with the consent of the king, endowed the village of Daravali, with all royal prerogatives.

Royal Consent

From the above-noted inscriptions, it appears that the king’s consent was required in making grants of land or villages as the case might be. But instances are also available of land-grants having been issued without any reference to royal approval.

---

4 EI, V, p. 113 ff.
5 ibid, V, p. 116 ff.
6 ibid, IV, p. 107 ff.
Thus, the two Kuruspāl inscriptions of Dhāraṇa Mahādevi of the time of Someśvaradeva⁷ it appears that queen Dhāraṇamahādevi, wife of Mahārājādhirāja Someśvaradeva, made a gift of a piece of land near Kalamba. From the Barsur inscription of Gaṅgamaḥādevi,⁸ we further learn that Gaṅgamahādevi the chief queen of Someśvaradeva, granted a village named Keramārka or Keramārka to two temples of Śiva. In the Sunārpāl stone inscription of Mahādevi,⁹ queen of Jayasimhadeva, is recorded a grant of land made by her. In the Nārāyaṇapāl stone inscription of the Gunda Mahādevi,¹⁰ dated in the Śaka year 1033, it is recorded that the Mahādevi granted some land, free from taxes. Similarly in the Kadambapadraka grant of Naravarman, (V. S. 1167),¹¹ it is stated that the Mahādevi, wife of Rājadeva, granted four halas of land. These are cases in which the approval of the king is not explicitly stated. Whether such approval had to be secured, is not known in the absence of any reference to it in the other cases cited.

Assignment of Income

An important fact to be noted is that sometimes queens endowed the revenues of villages in favour of religious bodies or institutions. In such cases the villages themselves were not given away but only the income derived from them was assigned. Thus from the Bilhari stone inscription of the Chedis, we learn that the queen Nohalā, the wife of the Chedi ruler Keyūrarvarsha erected a temple of Śiva and she endowed this temple with the revenues of the villages of Dhaṅgaṭapāṭaka, Ponḍi, Nāgabala, Khailapāṭaka, Vidā, Sajjāhalī and Goshṭhapālī. She also gave the villages of Nipāṇiya and Ambipāṭaka to the sage Īṣavaraśiva.¹² Similar evidence is furnished by the Bherāghāṭ

⁷ El, X, p. 31 ff.
⁸ ibid, IX, p. 162 ff.
⁹ ibid, IX, p. 163 ff.
¹⁰ ibid, IX, p. 311 ff.
¹¹ ibid XX, pp. 105, 108, n. 2.
¹² ibid, I, p. 251 ff.
inscription of the queen Alhaṇadevī (dated, the Chedi year 907), where it is recorded that the queen Alhaṇadevī and Jayasimhadeva, founded a Śiva temple, with a maṭha or cloister, a hall of study and gardens attached to it, and for the maintenance of these buildings and their occupants, she assigned the income produced by the two villages of Nāmaiṇḍī in the Jāuli pattalā and of Makarapāṭaka. In neither of these grants the previous approval of the king is sought. Probably the queens assigned the shares of their own income, which were due to them for the status they held.

Assignments by others—feudatories, officials, etc.

Lands were also granted by persons other than members of the royal family, such as, mahāsāmantas, sāmantas, local chiefs, feudatories, subordinate chiefs, etc. The Lucknow Museum copper-plate of the Mahāsāmantā Balavarmadeva, (9th or 10th century A.D.), records the grant of a village called Bhujaṅgikā, by the Mahāsāmantā Balavarmadeva, at the request of the residents of a village of merchants, subject to the approval of the rājakulas holding office, (rājakulasamamantavayam=etad). A sāmantaraṇāja named Śrī Madommanapāla grants the village named Vā (Dh?) mahithā in a copper-plate grant from Sundarban (Śaka 1118). The grant was formally announced in the presence of a large assembly of executive officers at Dvārāhāṭāka which is called the Mukti bhūmi of the donor. It is held by some that the donor was a member of the Pāla dynasty, and his chief was a Paramamaheśvara, whose name is unknown. Similarly, a mahāmaḍalaṇika named Pamparājadeva made a gift of two villages in the presence of his queen, Lakshmīdevi, prince Vopadeva and eight government officials, including the

13 EI, II, p. 7 ff.
14 IA, XX, p. 123 ff.
minister appearing as witnesses.\textsuperscript{17} According to a \textit{Pra\'asti} of Bajjn\'{a}th,\textsuperscript{18} a local chieftain’s mother grants a plot of land.

The plate of Avan\'{i}varman II (Y\'{o}ga), (V. S. 956)\textsuperscript{19} shows that Avan\'{i}varman II (Y\'{o}ga), a feudatory of Mahendrap\'{a}la, with the approval (\textit{anumaty\'{a}}) of the Antap\'{a}la (frontier guard), Dheika granted the village Amvulaka. It is to be noted that the approval in this case is sought not from the suzerain, but from one who seems to have been a high-ranking responsible officer. The feudatory in this record assigns all rights to the donee, and orders the people of the donated village to pay his share of taxes and other dues to the donee. In this context reference may be made to a few other inscriptions in one of which, Si\'{i}gara Vatsar\'{a}ja, a feudatory chief, under the G\'{a}ha\'{d}av\'{a}la ruler Govindachandra, does not express the approval of his suzerain for the confirmation of a grant made by him, but gives the well-known genealogy of Govindachandra of Kanauj, transferring to the donee the right to the enjoyment of the \textit{bh\'{a}gabhoga-kara, k\'{u}taka} and other customary taxes payable by the local people.\textsuperscript{20} The Kalvan plate of Ya\'{s}ovarman,\textsuperscript{21} records a gift of land by a \textit{s\'{u}manta}, the illustrious R\'{a}\'naka Amma, without making any reference to the king. It is not improbable that sometimes the political weakness of the paramount ruler encouraged feudatories to assume power which was beyond the lawful limit. Grant of land by a feudatory chief is also recorded in a copper-plate grant of \textit{Mah\'{a}r\'{a}naka} Sallaksha\'{n}avarmadeva (V. S. 1253).\textsuperscript{22}

A copper-plate inscription (V. S. 1231)\textsuperscript{23} refers itself to the reign of the Chaulukya king Ajayap\'{a}la of Anahilaw\'{a}d, but the endowment, recorded in this inscription, was made by one of his feudatories, the \textit{Mah\'{a}man\'{d}ale\'{s}vara} Vaijalladeva, of a village to an alms-house for the maintenance of Br\'{a}hma\'nas, (as communi-

\textsuperscript{17} \textit{El}, IX, p. 166 ff.
\textsuperscript{18} \textit{ibid}, I, p. 97 ff.
\textsuperscript{19} \textit{ibid}, IX, pp. 2-4, 6 ff.
\textsuperscript{20} \textit{ibid}, IV, p. 130 ff.
\textsuperscript{21} \textit{ibid}, XIX, p. 69 ff.
\textsuperscript{22} \textit{IA}, XVII, p. 227 ff.
\textsuperscript{23} \textit{ibid}, XVIII, p. 80 ff.
cated, by him to the local people). The Māṇḍalīka (feudatory chief), Madhurāntakadeva, who was a rājā of the māṇḍala, Bharamarakotya, granted the Rājapura village situated in the māṇḍala and 70 gadyāṅaka gold. From the Pāṇāherā inscription of the time of Jayasimhadeva of Malwa (V. S. 1116), the māṇḍalīka (a feudatory of king Jayasimhadeva), granted to a temple some lands and a garden behind Nagna-taḍāga (and the temple of) Varuṇesvari together with some rice-fields as well as lands in the villages of Nāṭṭapāṭaka, Pānāchhi, and Maṇḍaladhara. Mādhava, a great feudatory lord and governor at Ujjain, under Mahendrapāla II, granted the village Dhārāpadraka at the request of another feudatory, Indrarāja, son of Durlabhārāja of the Chāhamāna clan. A further endowment by this chief is recorded. It is signed by him (Mādhava) and counter-signed by Vidagdha.

A minister named Madoli received a gift from his master, the king (Jayāditya) and he transferred it to the Goddess Durgā. The Bangāon plate of Vigrahapāla III, (regnal year 17) contains a somewhat unusual endorsement in two verses in the end, which says that the real donor of the land was not the king, as recorded in the grant, but one of his Brāhmaṇa officers named Ghanṭiṣa. He is described as a ‘vidheya’ or a servant of the lord of Gauḍa i.e. the Pāla king. He seems to have made the grant out of his own possessions which he had got from his master (probably by purchase). The king may have merely permitted and ratified the grant, making the gift land a permanent revenue-free one.

Records of grants or endowments by individuals other than kings, feudatories or members of royal families are available. Thus grants by a person named Unṭata, Gaṇeṣvara, a

---

25 ibid., XXI, p. 32 ff.
26 ibid., XIV, p. 176 ff.
27 ibid.
28 IA, XXI, p. 169 ff.
29 El, XXIX, p. 48 ff.
30 IHQ, II, p. 77 ff.
Brāhmaṇa, Jīvaka, a merchant and by various other pious people are recorded in several inscriptions.  

Extent of donated land—individual, and groups of, donees—their shares

We have seen in the above that assignments of land etc. were made by people belonging to different strata of society, starting from the king. There was a great variation in the nature of assignments made. Assignment of more villages than one to a single individual or a group of persons, though rare, is not quite unknown. The Saheṭh-Maheṭh plate of Govindachandradeva of the Gāhadavāla dynasty, dated in the Vikrama year 1186, records a grant of six villages, namely, Vihāra in the district of Vāḍā-chaturāṣīti of Paṭṭana, Upalaiṇḍā, Vavvhalī, Ghosāḍī, attached to Meyī, and Payāsi attached to Poṭhivāra. In another inscription of Chandradeva (V. S. 1156), mention is made of 30 villages being given to 500 Brāhmaṇas in Vṛihaḍrihevedvarāṭha. Grants of several villages combined are recorded in many other inscriptions such as a plate of Jayachandra of the Gāhadavāla dynasty (V. S. 1230), the spurious Lapha plate of the Haihayas, the Nalanda copper-plate inscription of Devapāladeva of Bengal, the Pāṇḍukeśvar plate of Lalitaśūradeva, etc.

Instances of grants of two villages are furnished by the Banaras College copper-plate grant of Jayachandra (V. S. 1232), the Nagpur stone inscription, the Lucknow Museum plate of Kīrtipāla, the Kanker copper-plate of Pamparājadeva, etc. Grants of single villages are recorded in numerous inscriptions.

32 ibid, XI, p. 20 ff.
33 ibid, XIV, p. 197 ff.
34 ibid, VI, p. 123 ff.; cf, El, XXX, p. 184 ff.
35 ibid, IX, p. 293 ff.
36 ASI, 1924-25, p. 117 ff.
37 IA, XXV, p. 177 ff.
38 ibid, XVIII, p. 129 ff.
40 ibid, VII, p. 93 ff.
41 ibid, IX, p. 166 ff.
Although, as we have seen, entire village or groups of villages were frequently given away, it was no less usual to assign areas of much smaller extent, such as parts of a village or plots of land, as mentioned in numerous inscriptions of the period. While making such a grant particular attention was paid to the measurement of the land donated, the fixation of its boundaries and also occasionally the determination of its yield.

Some of the available grants show that plots of land donated were not contiguous but scattered in a village or even in different villages. The Dhullā copper-plate of Srichandra⁴² of the Chandra dynasty of Bengal records grants of several plots of land in Paunḍravardhana-bhukti, combined in one charter, as follows:—

1. In the village of Durvvāpattra in Vallīmūndāmaṇḍala, situated in Khediravallī-vishaya, 4 halas of land.
2. In Lopiyājoḍāprastara (prāntara?)—3 halas;
3. „ Tivaravillī village—2 halas;
4. „ the village of Pakkaḍimūndā in Yolāmaṇḍala in Ikkaḍāśivishaya,—2 halas and 6 dronas;
5. In the village of Mulapatrā (?) 7 halas.

Thus in all 18 halas and 6 dronas,

Similarly, the Calcutta Sāhitya-Parishat copper-plate of Viśvarūpasena,⁴³ furnishing details about 11 plots, altogether measuring 336\(\frac{1}{2}\) unmānas and yielding the total annual income of 500 purāṇas, locates them in the different villages as noted below:—

1 & 2. In the Rāmasiddhi-pāṭaka in the Nāvyā region of Vaṅga in the Paunḍravardhana-bhukti, measuring 67\(\frac{1}{2}\) udānas (=unmānas) and yielding 100 purāṇas, of which 19\(\frac{1}{2}\) was the income from 7 barajas (betel-leaf plantations).

3. 165 udānas yielding 140, in the Ajikulāpāṭaka which lay in Navasarinagrahachaturaka, including in the Madhukshīraka—āvṛtti, (previously) purchased by Halāyudha.

⁴² IB, p. 165 ff.
⁴³ ibid, p. 140 ff.
4. 25 udānas, yielding 60 in the village of Vinayatilaka in the same Nāvya region.

5. 25 udānas, yielding 50 in Deūlahastī in Lāuhaṇḍāchaturaka in Vikramapura; the last three plots yielded 250 in all.

6 & 7. Two plots in the same village of Deūlahastī measuring 10 udānas and yielding 25, purchased by Halāyudha.

8 & 9. Two more plots in the same village at Deūlahastī measuring 7 udānas, yielding 25, purchased by Halāyudha and subsequently presented to him by the minister.

10. 12½ udānas yielding 50, in Ghāgharakuṭṭipāṭaka in Urā-Chaturaka which lay in ?ndraftāpa, purchased by Halāyudha from the court poet of Maheśvara.

11. 24 udānas yielded 50 in Pāṭilādvīka which lay in ?ndraftāpa.

The Chambā copper-plate inscription of Somavarmadeva and Āsaṭadeva (c. 11th century A.D.) again, records a grant which comprised 15 bhūmīs or bhūs of land, which were not concentrated in a particular area but situated in different maṇḍalas, namely Pānthila maṇḍala, the Tāvasaka maṇḍala, the Pāra-kamaṭa maṇḍala. In this inscription it is mentioned that 4 bhūmīs, situated in Pānthila maṇḍala, which were comprised in the grant, were in the enjoyment of the Mahārājñī, the mother of the donor.

Alterations in grants, previously made, could be effected in suitable forms, as shown by this record. The Belwā plate (regnal year 5), of Mahīpāla furnishes another instance of distribution of several plots comprised in the same grant, situated in different areas. In the present case, although they were all situated in Pauṇḍravardhana-bhuki, they were scattered in Amalakshudduṅga in Phāṇita vīṭhī, belonging to the Puṇḍarikā maṇḍala, and in the Pañchanagarī vishaya.

44 IA, XVII, p. 7 ff.
45 EI, XXIX, p. 1 ff.
Specification of boundaries, etc.

Land-grants, which have been discovered in Bengal, usually contain details connected with measurement and yield etc., which are conspicuously absent in inscriptions of a similar nature found elsewhere. Thus in one of the Mālava inscriptions of the reign of Vākpati no more information is given than that the land granted covered a space of one croś. In this record even the standard of measurement used has not been mentioned, though the boundaries have been indicated in detail. Another Mālava inscription (of Ingoda), records the grant of a village without actually specifying its boundaries. It is merely stated that the village extended upto its boundaries; other details which are usually met with in similar records from Bengal are omitted. But such omission was not obviously due to an invariable custom, for the Mahobā plate of Paramārdideva, V. S. 1230, for example, gives the measurement and the boundaries of the land granted in detail. This practice is also followed in the Kahla plate of Kalachuri Soḍhadeva, V. S. 1135. Inscriptions of Assam, like the usual Bengal inscriptions, supply material information regarding land assignments. In most cases the measurement of the land is given in terms of its yield. Also the boundaries are clearly specified. A typical example is the Gauhaṭī copper-plate grant of Indrapāla of Assam, mentioning the output of the land donated to be four thousand measures of rice and stating its exact location with the usual details.

When a grant of a village is issued, the king, who is the donor, excludes from it existing endowments, if there be any, so that the rights, attributed thereto, may not clash with those subsequently transferred in terms of the second grant. Thus, in the Don Buzurg plates of Govindachandra of Kanauj (V. S.

46 See the inscriptions of the Sena dynasty of Bengal—IB.
47 IA, VI, p. 53 ff.
48 ibid, VI, p. 55 ff.
49 EI, XVI, p. 9 ff.
50 ibid, VII, p. 85 ff.
51 JASB, LXVI, p. 113 ff.
1176), it is stated that the village mentioned was granted with its outlying hamlets after excluding (the portions) already given to deities and Brāhmaṇas, as well as portions used for purposes of fortification. In the Charkhāri State inscription of Paramārdideva, (V. S. 1236), while recording the grant of the village Sagraudo, the donor excluded therefrom five halas (ploughs) of land belonging to the illustrious Buddha i.e., the temple which enshrined his image evidently for worship and maintenance. A similar conditional grant is referred to in the Chandrāvatī plate of Chandradeva, dated V. S. 1150, in which the right conferred by the king, is made subject to a previous grant of which the beneficiaries were certain temples, Brāhmaṇas and ‘vikāras’. The same kind of information may be gathered from the Semra plate of Paramārdideva also.

Confiscation and resumption of assignments, etc.

Grants made by previous rulers were not always respected. These were sometimes confiscated by their successors. The Rājatarangini states that king Sañkaravarman (883-902 A.D.), the son of Avantivarman (c. 8556—883 A.D.) deprived temples of all their properties to fill his empty treasury. Confiscation of land, already donated, is condemned in no uncertain terms by the Smritikāras. Parāśara, for example, says that the sin of resuming land, already donated, cannot be expiated even by performing a hundred Vājapeya sacrifices or by the gift of millions of cows. It appears that the king had the inherent right of resuming any land which may have been previously donated. A donee could not claim an inalienable right, although the gift made in his favour might be legally described by the donor as permanent and heritable. Forfeiture in default of certain conditions may have in certain cases warranted a resumption.

52 *EI*, XVIII, p. 218 ff.
54 *EI*, XIV, p. 192 ff.
55 *ibid*, IV, p. 153 ff.
56 *Rājat*, V, 166-170.
The Āradeṭ-Maheṭ plate of Govindachandra\textsuperscript{57} records that the six villages, which seem to have been given away on a former occasion, were subsequently resumed, and a fresh charter was issued conveying the grant of these villages to a new set of donees. This conclusion can reasonably be arrived at on the basis of the statement made in the inscription itself “that these six villages were given again by a charter.” It is stated in the inscription that Govindachandra superseded an earlier gift, made by a ruler of a separate dynasty, namely the Kalachuri Yaśāṇkarna, son and successor of Lakṣmī-Karṇa. Evidently, the village in question had once been in occupation of Yaśāṇkarna, who made the gift after it came into the possession of the Gāhādavāla king; he, for some reason not mentioned, cancelled the former grant and issued a new one.

A fresh assignment of land replacing a previous one is occasionally met with. Thus, to quote a typical example, in the Nagpur stone inscription (V. S. 1161),\textsuperscript{58} is recorded the grant of a village Mokhalapāṭaka in lieu of two in Vyāpura Maṇḍala, previously granted. The Śaktiputra copper-plate of Lakṣmīnasena of the Sena dynasty\textsuperscript{59} also offers another example of a similar nature though not wholly identical. It records a gift of a portion of a village, comprising a part of a Nīmāpāṭaka and the whole of five pāṭakas, all situated in the Dakṣinavīthi of Uttar-Rāḍhā, in the Kāṅkragrāmabhukti. The income from this land is said to be 500 kapardaka-purāṇas. The inscription reveals that the above grant was made in exchange of a kṣetra-pāṭaka, whose income was the same (i.e. 500 kapardaka-purāṇas), and which had previously been granted by Vallālasena to a Brāhmaṇa. It appears that Lakṣmīnasena by mistake gave away a Kṣetra-pāṭaka, which was already a gift made by his predecessor, Vallālasena. When the real fact was brought to his notice, he made a new gift. In this connection mention may be made of a charter in which king Lakṣmīvarmadeva confirms the grant of two villages

\textsuperscript{57} EI, XI, p. 20 ff.; cf, ibid, XXVI, p. 68 ff.
\textsuperscript{58} ibid, II, p. 180 ff.
\textsuperscript{59} ibid, XXI, p. 211 ff.
originally made by his father in favour of a certain householder.\textsuperscript{60}

A single document recording many grants

There are cases of a single document recording a number of assignments. In the Semra plate of Paramārdideva (dated V. S. 1223),\textsuperscript{61} to which we have already referred, grants of lands located in different villages, are noted:

1. In the district (vishaya) of Vikaura—(a) Khaṭauḍā-dvādaśaka and (b) Tāṇṭa dvādaśaka, belonging to Rālha and (c) Hāṭ-āśṭādaśaka and (d) Sesayigrāma;
2. in the district (vishaya) of Duddhī.—(a) Pilikhinī-paṅchela, and Itāva-paṅchela;
3. in the district (vishaya) of Vaḍavāri—(a) Isarahara-paṅchela (b) Uladaṇa and (c) Kakaradaha
4. in Gokula—(a) Nasahahathidahā (?) and (b) Patha.

This inscription contains the names of 309 donees and the share which each receives. This document is a confirmation of a former grant by Paramārdideva's grandfather and immediate predecessor Madanavarmadeva. Another single document assigning a number of villages, is the Harsha stone inscription of the Chāhamāna Vigrarāja, dated V. S. 1030\textsuperscript{62}:

2. His brother Vatsarāja gave the village of Kardamakhāta in the Jayapura vishaya.
3. Vigrarāja gave two villages—Chhattradhāra and Sarīka-

rāṇaka.
4. The sons presented two hamlets (?) in the Paṭṭabaddhaka vishaya and Darbhakaksha vishaya.

\textsuperscript{60} IA, XIX, p. 351 ff. The date of the original grant was Vikrama Year 1191 and that of his confirmation 1200.
\textsuperscript{61} EI, IV, p. 153 ff; cf, XIX p. 69 ff.
\textsuperscript{62} ibid, II, p. 116 ff.
5. Siṃharāja’s ‘Duḥṣādhyā' Dhandhuka gave the village of Mayūrapadra.

6. Jayanarāja gave the village of Kolikūpaka.

Similarly, in the Partabgarh inscription of the time of Mahendrapāla II and also in two Praśastis of Baijnāth, a number of assignments by different persons is recorded in single documents.

An interesting piece of information is derived from a copper-plate grant of Viśvarūpāsena of the Sena dynasty of Bengal. It is to be gathered from this record that Halāyudha purchased numerous plots of land in different parts of East Bengal, who taking them as gifts from princes and ministers with the King’s ratification as shown by the use of the royal seal. It is evident that a royal assignment carried greater security than those obtained by purchase or gift. Details of the transaction by which the personal properties were converted into royal assignments are not furnished by this inscription.

Combined gifts, land and money

Sometimes land and money together formed the object of a gift. In the Silimpur stone inscription of the time of Jayapāladeva of Kāmarūpa, it is recorded that Prahāsa refused to accept 900 gold coins in cash and a gift of landed property (kāsana), which yielded an income of 1,000 coins, from a king of Kāmarūpa named Jayapāladeva. It is to be learnt from the Rājapura copper-plate of Madhurantakadeva, dated Śaka samvat 987, that the village of Rājapura together with 70 gadāyānaka gold was granted to one Medipota and his descendants. From an old Nepalese Manuscript we learn that a man named Kārtika gave the author (Ārya Kshemīśvara) a large quantity of

63 El, XIV, p. 176 ff.
64 ibid, I, p. 97 ff.
65 IHQ, II, pp. 77-86; IB, p. 140 ff.
67 ibid, IX, p. 174 ff.
68 The MSS. was written between 1026 and 1481 A.D. and was edited by Hara Prasad Šastri. Cf. JASB, LXII, p. 245 ff.
gold, silver and land. There might be other objects of gift, besides money and land. The Bhāṭerā copper-plate inscription of Govinda-Keśavadeva⁶⁹ (later than 12th century A.D.) records that the latter made a donation of 296 houses along with 375 halas of land in honour of God Śiva.

The same source says that he gave to Śiva different kinds of attendants, belonging to ‘subject races’. The land granted was scattered in different places and the houses were located not in the same place. A difficult problem arises regarding the ownership of the houses which were comprised in the gift. We are told that they belonged to different persons such as to Kāśya-Govinda, the bell-metal worker; another to a washerman (rājaka) named Sirupā. Two houses belonged to Dyojye, the boat-man (nāvika) and others, and one house to Rajavigā, the ivory-worker (dantakāra). This sort of information has been furnished about only five out of the 296 houses offered to Śiva. If these houses were of other people, how could they be thus transferred by gift?

**Beneficiaries**

As a rule Brāhmaṇas or temples were beneficiaries of gifts of land. But there are some exceptional cases showing that gifts were not confined to them. Thus in one of the grants of Dharaniparāha of Vadhvān,⁷⁰ it is recorded that the village of Virikala was granted as a reward for learning (vidyādhanam). In the Rājapura copper-plate of Madhurāntakadeva⁷¹ mention is made of land and money being given to one Meḍipota. An interesting fact is disclosed by the Garra plate of the Chandella Trailokyavarman, V. S. 1261,⁷² where it is said that the village of Kādohā was granted to provide for the maintenance of the heirs of one who had suffered death at the battle-field. Grant

---

⁶⁹ El, XIX, p. 277 ff.
⁷⁰ IA, XII, p. 190 ff.
⁷¹ El, IX, p. 174 ff.
⁷² ibid, XVI, p. 272 ff.
of land to a house-holder is recorded in the copper-plate grant of Mahāraja Yaśovarmadeva and Mahākūmara Lakshmīvarmadeva.\textsuperscript{78} Endowment for the support of an astrologer is also noticed, in another grant.\textsuperscript{74} From the Nārāyanaapāl stone inscription of Guṇḍa Mahādēvi, dated in the Śaka year 1033,\textsuperscript{76} we learn that some land was given to a ‘sūtradhāra named Raṇavīra’ free from taxes. (Sūtradhāra-Raṇavīrāya bhūmi pradattā akareṇa). In this connection we may refer to the Prabandhachintāmaṇi,\textsuperscript{78} which gives the information that the king Kumārapāla made in favour of Āliṅga, the potter, the (vīchitra) grant of Chitrakūṭa, containing seven hundred villages. Endowments of land for the maintenance of alms-houses are also noticed.\textsuperscript{77} There are references to similar endowments to be found in South Indian inscriptions also.\textsuperscript{78}

Śukra and conditional gifts

In the Śukranitisāra we come across certain restrictions in regard to land-grants. It states that ‘the wise man should always give away lands for the gods, for parks and public grounds and for dwelling houses to the peasants’.\textsuperscript{79} It lays down, however, that ‘One should not give up even an aigula of land in such a way as to part with rights to it; may, however, give away (to persons) for their maintenance, but so long as the receiver lives’.\textsuperscript{80} Thus Śukra appears to be against the system of grant of land

\textsuperscript{78} IA, XIX, p. 351 ff.
\textsuperscript{74} EI, XIX, p. 209 ff.
\textsuperscript{75} ibid, IX, p. 311 ff.
\textsuperscript{76} Prabandhachintāmaṇi, p. 121.
\textsuperscript{77} IA, XVIII, p. 80 ff. In the Rājatarangini it is stated that the Kāyattha Kanaka made with the wealth of his uncle, Praśastakalasa (after his death) a permanent endowment for food distribution (avichitnasattra) by which famine-stricken people were given help,—Rājat, Vol. II, VIII, 570-71, p. 46; cf, EI, I, p. 75 ff.; III, p. 46 ff.
\textsuperscript{78} Gupta, The Land-System, pp. 160-166; also see South Indian inscriptions.
\textsuperscript{79} śukra, I, 423-24, p. 27.
\textsuperscript{80} ibid, 42-22, p. 27.
in perpetuity. He distinctly states that right of land is never to be given up and that gifts of land to poor people are allowable for life only. He further states that ‘the king should grant lands in the villages to all classes of men, high, middle and low and in the towns for the houses of men with families’.\textsuperscript{81} He categorically limits the extent of land which can be given to different classes of men.\textsuperscript{82} And in the end he adds that ‘the land in each case should be just adequate for the members of the family, neither more nor less’.\textsuperscript{83}

**Rights of Donees**

The epigraphic records of the period assigning grants of land describe the various rights transferred to the donees. They also in some cases tell us of the limitations imposed on them. On an analysis of a few typical North Indian inscriptions we find that rights generally extended not only over land but also water and everything else that stood on it. These records sometimes explicitly classify the different kinds of land included in a grant. Thus, in the Barrackpore grant of Vijayasena (12th century A.D.)\textsuperscript{84} reference is made to low lands, high lands, marshy lands, ditches and barren soil. In the Gauhati copper-plate grant of Indrapâla,\textsuperscript{85} it is said that ‘the land together with its houses, paddy-fields, dry-land, water, cattle-pastures, refuse-lands, etc. inclusive of any place within its borders for the fastening of boats and elephants,’ etc., was donated. Along with the land, the donee was also to enjoy fruit trees and other trees, gardens, etc. The Mahobā plate of Paramârdideva\textsuperscript{86}

\textsuperscript{81} Šukra, V, 174-5, p. 269.
\textsuperscript{82} ibid, 176-77, p. 269; ‘To the lowest class the land given should be 32 cubits in length and half that in extent; to the highest class the land should be double this in measure: and to the middle class it should be one and half that of the lowest class’.
\textsuperscript{83} ibid V, 178, p. 269.
\textsuperscript{84} El, XV, p. 278 ff.
\textsuperscript{85} JASB, LXVI, p. 113.
\textsuperscript{86} El, XVI p. 9 ff; cf, XXII, p. 150 ff; IA, XVI, p. 201 ff; XXV, p. 205 ff;
gives a very interesting list which includes among other items animals like deer, birds, aquatic animals, temples with ditches around the entrances and exits, trees like śāl, mango, mahuā (madhūka); kuśuma, sugarcane, cotton and śaṇa plants together with iron mines and similar other mines.

The donee’s water right extends to rivers, ponds, tanks, etc. The donee was also entitled to the dues to which the king was entitled; the list includes fines, taxes, etc. which went to the donee instead of the king. From a plate of Mahipāla I (regnal year 5)\textsuperscript{87} we learn that it included ‘daśāpachāra (daśāparāḍha of other records, which means fines realised for ten offences), with things recovered from thieves (sa-chaur-oddharana), together with all revenues such as bhāga, bhoga, kara, hiranya, etc. In the inscriptions of the Gāhaḍavāla dynasty the list is more exhaustive. In a plate of Vijayachandra and Yuvarāja Jayachandra (V. S. 1224)\textsuperscript{88} it includes a variety of taxes, such as ‘bhāgabhogakara-pravānikara-jalakara-gokara-turushkadaṇḍa-ka (ku)-marāgadāṅk-ādi-samasta-ādāyaṃ . . . . ‘

The Barrackpore grant of Vijayasena (12th century a.d.)\textsuperscript{89} mentions among other rights, freedom from all impositions (parihṛita-sarvapāḍa), freedom from the liability of presenting anything (akiñcit-praṅgṛāhyā) to royal officials and the right of enjoying all royal bhoga (i.e. the objects of enjoyment such as fruits, firewood, flowers etc. which the villagers had to furnish to their lord either daily or on certain occasions), kara (cess), hiranya and pratyaśa according to the maxim of ‘bhūmichchhiddra’ to last as long a time as the moon, the sun and the earth shall endure’.

\textit{Bhūmichchhiddraṅya}

The expression ‘bhūmichchhiddraṅya’ occurs in many grants of the period, particularly in the inscriptions of Bengal

---

\textsuperscript{87} EI, XXIX, p. 1 ff.
\textsuperscript{88} ibid, IV, p. 117 ff.
\textsuperscript{89} ibid, XV, p. 278 ff.
and Assam. The chapter in Kauṭilya’s Arthasastra, entitled ‘bhūmichchhidra-vidhānam’, which treats mainly of tracts not meant for cultivation. They were to be utilised for different purposes as pasture land, as forests for soma plantation, for religious purposes, to be made over to Brāhmaṇas, and also as game-forests, elephant-forests and timber-forests. In the Arthaśāstra grāmas or nāgaras i.e. villages or towns including cultivable areas have been distinguished from ‘bhūmichchhidra’ or land of other varieties. In Yādava’s Vaijayantī ‘Bhūmichchhidra’ has been explained as meaning “kṛishyayogya-bhūḥ” i.e. a piece of land which is not fit for cultivation, ‘a fissure (furrow) of the soil’.

In the Kamauli copper-plate grant of Vaidyadeva, we have the expression ‘bhūchchhidrañcha’ yatkinchitkaragráhyām meaning bhūchchhidra (uncultivable) land from which no revenue is to be collected. Such land was not, therefore, liable to assessment. Accepting this interpretation, Dr. Ghoshal concludes that under the rule known as the ‘bhūmichchhidranyāya’ land was granted with such right of ownership as was acquired by a person making barren land cultivable for the first time. Bühler connects the expression, ‘land unfit for tillage’ in the passage of Yādava’s Vaijayantī, quoted above, with the maxim embodied in the Śmrītis relating to the right of the first clearer and the seizure of unclaimed property. The right of the first clearer is acknowledged by Manu, according to whom, ‘a field belongs to him who cleared away the timber’. Applying this sense to ‘bhūmichchhidra’, Bühler thinks that under such a system land is made

90 The expression, ‘bhūmichchhidra-nyāyena’ occurs in a plate of Balavarman, of the time of Mahendrapāla II of Kanauj—EI, IX, p. 1 ff, text, l. 18.
92 Verse, 18; cf., CII, III, p. 138 n.
93 EI, II, p. 347 ff.; text l. 51.
95 EI, I, p. 74, n. 30.
96 Manu, IX, 44.
over to the donees with the full right of ownership that belongs to the cultivator, as mentioned by Manu, if he reclaim's it for the first time. This view is accepted by Ghoshal. The donee in such a case brings the land received under cultivation with no liability to pay rent for it.

According to Dr. Barnett, when land was given under this rule, it meant that the king reserved the right to eject the grantee, whose position was, therefore, that of a tenant-at-will, and not of a proprietor.

There is a clear provision in most cases showing that the grant made is not a temporary one, terminable at the will of the donor but a perpetual heritable grant. Even future rulers are asked to respect the rights transferred.

It appears that most scholars have accepted the original sense in which the expression is found used in the Arthaśāstra. But it may be pointed out that the expression occurs also in inscriptions recording grants of whole villages, not merely of individual pieces of land. In such cases the original sense is not applicable. It may be that in course of time the rule of alienation, known as 'bhūmichchhirānyāya' lost the original sense, as found in the Arthaśāstra, and came to be used in a conventional manner without carrying that specific sense, but in every case as a rule insisting that boundaries pertaining to the land or village should be lawfully fixed. Boundary-marks were essential and any uncertainty about them might be a source of dispute between neighbouring villages of undefined boundaries as well.

97 EI, I, p. 74, n. 3; cf, EI, XXIX, p. 5, n. 3; IHQ, V, p. 385 ff.

98 JRAS, 1931, p. 165 ff; But this view may be opposed on the ground, that the lands granted under this tenure, as the Nidhanpur copper-plate shows, might have been given in perpetuity, i.e., not only to the grantee himself but to his heirs as well, 'as long as the moon, sun and earth endure'. The rights transferred included exemption from payment of specified taxes and also ownership of the mineral resources of the area granted (Subhankarapāṭaka grant I. 35). Under the terms of the grant, state officers were not permitted to interfere with the enjoyment of the grant, nor to confiscate it—Barua, A Cultural History of Assam, Vol. I, p. 78.

99 CII, III, p. 170 ff.
as between different holdings. The necessity of avoiding the possibility of any such dispute was of prime importance particularly when a grant in perpetuity was made.\(^{100}\)

**Ownership of land.**

There is a long-standing controversy regarding the question of the ownership of land in ancient India. There are clear indications in the Šrīvedā that land was regarded as a valuable possession by the Aryan tribes. They were mainly agricultural and pastoral people. To such a people land must have been of vital necessity. Their requirements were mostly produced from the soil. During times of peace the Āryas ploughed their land and produced the food which they required. Plots of land in villages were shown as separate from one another by demarcating them with hedges. As boundary-marks were used, it is evident that they were to be treated as separate.\(^{101}\) The question whether the plots demarcated were owned separately by the individuals who cultivated them cannot be answered with precision. There is no conclusive evidence either to prove or disprove individual ownership of immovable property in the Šrīvedic period. Communal ownership of cultivable land among the Šrīvedic Āryas is not proved. Supposing the holdings were separate and not communal, it is not clear whether ownership in each case was vested in the head of a family or in the family as a whole. Agricultural plots, were not only demarcated but also measured.\(^{102}\) The words of Apālā\(^{103}\) which are sometimes quoted, do not indisputably prove private ownership of land. It must, however, be admitted that there was no scarcity of land in this early period. But this should not mean that there was an unlimited supply of land. New land had to be acquired by conquest and distributed to meet the growing demands of the people. The Šrīvedic hymns do not record any instance of land transaction,

---

\(^{100}\) Cf, Gupta, *The Land-System, IA*, II, p. 73 ff.

\(^{101}\) Cf, Macdonell and Keith, *Vedic Index* (grāma) ; Bandyopadhyaya, *Economic Life and Progress*, pp. 112-115.

\(^{102}\) *RV*, I, 110.5.

\(^{103}\) *ibid*, VIII, 91, 5 and 6.
or of inheritance of land or gift of land. The case of a gambler,¹⁰⁴ who lost his house, is recorded, but what may have been true of a house may not have been true of a land-holding. Besides, the homesteads of the villagers and the cultivable land there were the pastures which were collectively used for the grazing of the cattle under a herdsman.¹⁰⁵

The existence of khilas between cultivable plots in the Rigvedic period does not necessarily point to private ownership. Nor do they prove a survival of a supposedly earlier system of communal ownership, as some scholars think. These were for common use by the peasants cultivating the separate plots, devised as a means of facilitating agricultural operations. The relations between those, who were dispossessed of their land and those who came to secure them after a conquest, had to be settled. Moreover, it was necessary to determine the principle of division of the newly acquired land. Naturally, those whose services had been of great value to the Aryan chiefs in conquering new territories, were given the largest share of these lands. To the royal kinsmen, the Rājanyas of the early Vedic times, a large part of the newly acquired land must have been distributed. The Kshatriya nobility thus became a landed aristocracy, helping the king in his military operations.¹⁰⁶

With the expansion of the Aryan territory in the next period, extensive land came into the possession of the conquering people. If the earlier inhabitants of the conquered districts had developed their land-resources, the Aryas now secured the resultant benefit. Former ownership ceased. Many became slaves. But as those who were dispossessed, knew the special qualities of their land, their continued association with the land, which they lost, was indispensable to their new masters. As the state advanced, with the increase of its size and extent leading to a demand for higher production and for opening out greater faci-

¹⁰⁴ RV, X, 34.10 and 11.
¹⁰⁵ ibid, X, 19.3 and 4; cf. Bandyopadhyaya, Economic Life and Progress, pp. 113-4.
lities for trade and agricultural products land became a source of increasing profit. A system of land-tenure must have been evolved to suit the new conditions. Many of the defeated races became slaves, who came to be employed in the work of cultivation; but the position of these were not actually reduced to slavery. Their position may be presumed to have become like that of a serf. It is mentioned in the Aitareya Brāhmaṇa that the Vaiśyas were to be devoured by the Kshatriyas. Some of the Vaiśyas, at least were in this age transformed into tenants, being held responsible for the maintenance of the Kshatriya nobility who came to occupy the rank of a landlord. Thus there were to be found four distinct classes connected with the land system comprising respectively: I. the Kshatriya landlords, II. the Vaiśya tenants, III. the Śūdra serfs, and IV. the slaves. The Vaiśyas, as a class, however, did not appear to have been reduced to the position of rent-paying tenants. This is the period which witnessed the gradual emergence of a system of compulsory payment of agricultural taxes to the king and provision for the maintenance of the landed aristocracy. The solitary reference in the Śatapatha and Aitareya Brāhmaṇas to a gift of land, made to a Brāhmin by the king, which evidently was not approved, is not sufficient to prove that such a practice had already become universal. Land was so important that the Kshatriya nobility, closely associated with the king, came to be generally regarded as its custodian, enjoying superior rights than most of the other classes of the population.

Buddhist canonical texts contain instances of homestead land and plots of arable land belonging to the householder. It also appears that even a woman could make gifts of arable land and homestead land to bhikshus.

---

108 Śat. Br, XIII, 6.2 18; XIII, 7.1.13 and 15.
109 Sut, IV. X. 11; in the Kāmasūtra this ownership is spoken of in positive form (IV.1) ; cf, Jāt, II, 99; Mbht, XII. 296.3.
110 Therig. 340, e.g. see the account of Ambapali and Visakha Migaramata.
Cases of purchase of land, involving transfer of ownership, are also known. A typical example is furnished by the purchase of a park at Sāvatthi by Anāthapiṇḍaka from prince Jeta. The transaction is of a two-fold character: (1) the purchase of Jetavana by Anāthapiṇḍaka, and (2) its gift to the Buddhists by the same individual. 111 Besides, there are references to demarcations of plots and setting up of placards and erection of boundaries, thus distinguishing them from unclaimed land. 112 Early Buddhist tradition also shows that there were big landowners and owners of fields (khettasāmika). 113

Inscriptions of the 2nd century A.D. have been found in the Western Deccan, in which transactions of land-sale are alluded to. 114 A passage from Manu is frequently quoted to prove private ownership in land. This passage says that the 'first clearer of forest is the owner of the land thus reclaimed'. 115 Kane 116 has collected valuable materials from the Smritis and their commentaries and other allied texts, which, in his opinion, go to establish the theory of private ownership on an indisputable basis. He draws especial attention to a passage in Jaimini's Mīmāṃsāsūtra, in which it is stated that "land should not be given because it is common to all". 117 Land is distinguished from all the belongings of the king, which only can be given away at the Viṣvajit sacrifice. Savarasvāmī, in the 5th century A.D., holds on the basis of this view that land cannot be given away by a monarch. Another authority says: 'the king's duty is to protect his kingdom and collect taxes from it but that

---

111 See, Dutt, Early History of the spread of Buddhism and the Buddhist Schools, pp. 100, 143-4, 153, 161; Hardy, Manual of Buddhism, p. 218 ff.; Barua, Barhut, II, p. 31 etc.
112 The Dīgha-nikāya remarks on the 'division of rice-fields' and setting up of 'boundaries between the two'—XXVII, 18.
113 Cf., Mil, p. 47.
114 Eli, VIII, No. 9, p. 77, No. 10, p. 78.
115 Manu, IX, 44.
does not make him the owner.' An earlier authority, Kātyāyana, also expresses the opinion that the king is entitled to receive the \( \frac{1}{2} \) share of the produce in his territory and that he has no ownership that exceeds this right. This has been explained by Mitramiśra as meaning that 'the king has no mastership in land'.

The power of alienating land by gift, sale or by mortgage, etc., is an attribute of ownership, and this attribute as well as the right of the owner exercised in perpetuity or to inherit it is found to have been in existence in India from very early times. The king had his own domain lands which he could use for gift or other purposes. Vijāṇāneśvara (1076-1127 A.D.) appreciated the principle underlying the right of alienating land as an attribute of ownership.

Land-grants issued by kings are often found conveying the right to receive the royal share of the produce. Thus, for example, when the grant of a village is made, it means a transfer to the grantee of the income, derived by the king from that village. There is no evidence to show that such a grant affected the right of private ownership already possessed by its inhabitants in respect of the landed property situated in the village concerned. A grant-in such a case did not effect any change in the existing rights enjoyed by the residents of the village. Of course, there is no express mention of such rights being allowed to continue unaffected. The Saheṭṭha-Mahēṭṭha plate of Govinda-chandra, (V. S. 1186), states that the king granted six villages, which included water and dry land, mines of iron and salt repositories (i.e. ponds), pālīkāras, pits and deserts, up to and including gardens of madhūka and mango trees, parks,

---


120 Mītākṣharā, Ed. by Wāsudeva L.S. Pansikar (Text), ii chap. 8, 196-199.

121 El, XI, p. 20 ff.
bushes, grass and pasture lands up to their proper limits, clearly defined by their boundaries. It further commends to the donees the bhāgabhogakara, the pravanikara and turushkadanda and all other sources of income that are due to him. In the Edilpur plate of Keśavasena it is stated that the grantee was to enjoy the land 'having thereon erected temples, excavated tanks and so on and planted betel-nut, coconut, and other trees, etc. When, instead of a whole village, a plot of land only was given, ownership was transferred to the donee.\footnote{122}{IB, p. 118 ff.; cf., IA, XVIII, p. 9 ff.}

**Attributes of ownership**

Incidentally, reference may be made to the provisions embodied in some legal texts relating to the different valid modes of acquiring property. According to Gautama\footnote{124}{Gau, X, 39-41.} a person becomes owner (svāmi) by means of inheritance, purchase, partition, seizure or finding. Manu mentions\footnote{125}{Manu, X, 115.} seven lawful modes of acquiring wealth (vittāgama), namely, inheritance, finding, purchase, conquest, leading at interest, performance of work and acceptance of gift from the virtuous. Nārada declares the six

\footnote{122}{Some new information regarding land-system is available in the inscriptions from Pandukesvar, 54 miles North-East of Srinagar in the Garhwal district of U.P. ed. in Ep. Ind. XXXI, pp. 277 ff. Among these inscriptions particular mention may be made of that of Subhiksharājadeva (regnal year 4), which records a royal grant of several pieces of land in favour of certain deities. These pieces of land are described in the grant as belonging either to different individuals or collectively to the people of the localities concerned. In some cases 'sons and granddaughters' or 'sons' are mentioned as owners of lands included in this grant, indicating that they were heritable properties.}

The grant is thus found referring to (1) private ownership, (2) collective ownership, and (3) the right exercised by the king in making the donations recorded.

The transfer by a King, of properties belonging to others in the circumstances noted in the grant, raises an interesting question bearing on land-tenure. A further critical examination of the document is necessary.
methods of acquiring wealth (dhanāgama) to consist of inheritance (or finding), gift, purchase, the reward of valour, the dowry of marriage and what is acquired from kinsmen without issue. According to Brihaspati immovable property is acquired in seven ways, namely, by learning, by purchase and mortgage, by valour, by marriage by inheritance and by succession to the property of kinsmen without issue.\textsuperscript{126}

Alienations of land by private individuals and village communities are not rare. When private parties could alienate land of their own accord, with no reference to the consent of the king, it may be presumed that they had the legal right to do so, which is an attribute of ownership. As we have seen above, there are instances of private donations in early Buddhist literature. Early epigraphic records also give similar evidence. An early instance of private transfer is furnished by Dhamanandin, son of the Upāsaka who made a bequest of a field for the clothes of some ascetics, living in one of the Nasik caves. Ushavadāta’s assignment of sixteen villages to Devas, Brāhmaṇas and Ascetics seems to imply only the assignment of revenues.\textsuperscript{127} Grants of land by a person named Unṭata, Gaṇesvara, a Brāhmaṇa, Jīvaka a merchant and by various other pious people are recorded in inscriptions.\textsuperscript{128} Assignment of fields by pious people is recorded in the Harsha stone inscription of Vigravarāja (V. S. 1030).\textsuperscript{129}

State Ownership

There is a view that the king was the owner of the soil, but this view is not widely accepted. It has been pointed out by a scholar that there is indirect evidence to show that the king’s title was given a wider meaning. In support of his argument he questions, ‘Else how could it persist on tax-free lands and on villages of which revenues were assigned and which assignment

\textsuperscript{126} Cf., Ghosal, \textit{Agrarian System in Ancient India}, pp. 86-9.
\textsuperscript{127} EI, VIII, No. 9, p. 77 ; No. 10. p. 78.
\textsuperscript{128} \textit{Ibid}, I, p. 97 ff.
\textsuperscript{129} \textit{Ibid}, II, p. 116 ff.
he retained the right to abrogate?" The cultivator's right to owe patrimony was limited, the limitation varying in degrees in different places and periods, and according to different legal opinions. In theory at least the king may have been regarded as the ultimate owner of all land in his kingdom, though in practice private property in land was recognised.  

**Double Ownership**

There is another group of scholars who think that ownership in land was double. They support their view mainly on the consideration that 'the very fiscal term bhāga or rājabhāga, which denotes king's regular or legitimate share, as opposed to controversial and additional imposts on land produce, would indicate a partnership of title between the peasant and the king'. But taxes were paid for the maintenance of the protective power exercised by the king.

**Joint Ownership**

The right of transfer of immovable property is sometimes found to have been exercised by a whole group of people in our period. A temple inscription at Gwalior records four donations made by the inhabitants of an entire area (i.e. the whole town of Gwalior—'samastasthāna') of a piece of land (bhūmikhandā) lying in a village and two fields (kshetra) in another, in favour of certain temples, and both the villages are expressly declared to be in their collective possession (avabhūtiyamāna). The pieces of land donated are specified as belonging to village so and so and cultivated by so and so. In the Siyadoni inscriptions is comprised in a long list of private donations the gift of a field, specified according to the current hasta measure, made by a whole town (sakalasthāna).

---

130 Cf., Jayaswal, Hindu Polity, pp. 174-183; Ghoshal—Agrarian System in Ancient India, Lecture V.
131 Hopkins, India, Old and New, p. 221 ff.
132 EI, I, p. 154 ff.
Land and Service

Feudalism is held by some scholars to have been in existence in India from early times. They use the term in a very wide sense 'applying it to any system where political power is chiefly in the hands of those who own land'.\(^{134}\) It is held that there was a hierarchy of leaseholders under the king, enjoying different ranks, graded in order, such as the Mahāsāmantadhīpati, Mahāsāmanta, Mahāmaṇḍalika, Sāmanta, etc. with the Kṣettrakaras and landless labourers, standing last in the list. It is true that high officials and dignitaries are sometimes mentioned in land-grants (generally) along with cultivators etc. This need not necessarily mean that there was a regular hierarchy in the sense in which it has been apparently taken by these scholars. Names of such officials are rarely mentioned; usually designations only are given. It seems that the object of incorporating a reference to these groups is to announce the grant concerned publicly. The term 'feudalism', as used in connection with the history of Mediaeval Europe, is defined in Chambers's Twentieth Century Dictionary as 'the system during the Middle Ages by which vassals held lands from lords superior on condition of military service'. The definition, as offered by Stubbs, is as follows: "A graduated system of jurisdiction based on land tenure, in which every lord judged, taxed and commended the class next below him . . . . in which private war, private coinage, private prisons took the place of the imperial institutions of Government." According to J. H. Ramsay, "Under the feudal system the allegiance of a man was due primarily to his immediate lord, and only secondarily to his over-lord the king".\(^{135}\) In India a defeated king might become a feudatory of the victorious one. A feudatory chief, acknowledging the paramountcy of his suzerain, was required to pay 'kara' or tribute to the latter and offer military help, whenever required. The membership of

\(^{134}\) Basham, The Wonder that was India, p. 93.

feudatory dominion was thus combined with certain obligations including those of military services. A king might, again, appoint someone to the post of a sāmanta or feudatory to rule over the regions, comprised in his dominion, but it is noteworthy that such sāmantas were to be paid out of the revenue collected by them.\footnote{Cf, \textit{Sukra}, I, 365-384, p. 24 ff.}

The ‘Damaras of Kashmir’, whose power and solidarity were based on their landed possessions, formed a class by themselves. ‘A kind of service tenure, the grant of land in return for military or other services’, may have been the origin of the system which led to the creation of this class. But the damaras are subsequently found to have little regard for the sanctity of any such obligations, whose allegiance could be bought at a heavy price.\footnote{\textit{Rājat}, Vols. I, and II.}
CHAPTER III

Land Measurement

In many inscriptions details about measurements of donated land are available but the information, thus obtained, is not of a comprehensive character. A common standard of measurement does not appear to have been in use throughout Northern India. Although it may be possible to bring the different standards of measurements, current in different areas, to a common base, it may not be safe to rely too much on this process of equation, for it is quite possible that a unit may have been called by a common name but may have conveyed different values in the different regions concerned.

The system of land measurement, apart from terminological differences, mentioned above, was not the same everywhere. The various standards used in different regions may be classified under the following heads:—

1. The *plough-measure*.
2. Measurement with the help of a *rod*, *nala*, *hasta*, etc.
3. Measurement according to the *seed sown*.
5. Other miscellaneous measures, more or less of a local character.

Some light is thrown on the equation that may be attempted between the standards applied respectively to land measurement with the help of a rod, *nala*, etc. the measurement of the quantity of seed sown or the amount of the crop produced. On the basis of the information furnished, it may be possible to form an approximate idea about the extent of land in some cases, the measure of seed that could be sown on it as well as the quantity of the harvest expected.

We may now take up the different kinds of measures, mentioned above, for a detailed discussion and afterwards deal with the problems of equation given rise to by the available records.
The Plough-Measure

The *plough-measure* is technically called "*hala*". This measure was current in many places as shown by records connected with the different dynasties of Northern India. Some typical cases of its use may be noted here. The term occurs as a land-measure in the Dhullā copper-plate of Śrīchandra (10th Century A.D.),¹ the Ren copper-plate of Govindachandra (V. S. 1188),² the Rāhan copper-plate of Madanapāla and Govindachandra (V. S. 1166),³ the Kadambapadraka grant of Naravarman (V. S. 1167),⁴ in many of the grants of the Chaulukyas,⁵ e.g., the Pālanpur plate of Bhimadeva (V. S. 1120),⁶ the Dohed inscription of Jayasimhadeva (V. S. 1196),⁷ the Bālī inscription of the reign of Kumārapāla,⁸ the Surat plate of Trilochanapāla (A.D. 1151),⁹ in the inscriptions of the Chandellas of Jejā-bhukti (Bundelkhand), e.g. the Semra plates¹⁰ and the Charkhari State inscription of Paramārdideva (V. S. 1236),¹¹ etc.¹²

In the Ren copper-plate grant of Govindachandra, V. S. 1188,¹³ mentioned above, the term *hala* can be traced in the expression "*haladagāṅige"* the meaning of which is, however, not very clear. On the basis of the interpretation, offered by Dr. Hoernle, it may be suggested that *hala* here signifies a plot of cultivable land, measuring in the present case ten *halas* suitably irrigated.¹⁴ In some inscriptions the land measuring one *hala* is

---

¹ IB, p. 165
² I.A, XIX, p. 249.
³ *ibid*, XVIII, p. 14 ff.
⁴ EI, XX, p. 105 ff.
⁶ EI, XXI, p. 171 ff.
⁸ ASWC, 1907-8, pp. 54-5.
¹⁰ EI, IV, p. 153 ff.
¹¹ ASR, 1929-30, p. 166 ff; EI, XX, p. 128 ff.
¹² EI, I, p. 97 ff; XXXI, p. 163; CII, IV, pp. clix-clxxi.
¹³ I.A, XIX, p. 249 ff.
¹⁴ *ibid*. 
called bhū-hala, (e.g., compare the Bhaṭerā plate of Govinda-
keśava16 and a copper-plate grant of Mahārāja Yaśovar-
madeva16). That hala definitely means a plough is clear from
the expression halavāha which is used in the Bombay Asiatic
Society copper-plate of Bhīmadeva II,17 which means that much
of land which could be ploughed with one plough, thus a
plough-measure of land. The same expression was used by the
Paramāra king Dhārāvarshadeva in one of his inscriptions.18

The use of the plough-measure in connection with a land-
grant seems to indicate that it was well known how much land
could be usually cultivated with one plough in a day. What the
area of a piece of land was in any particular case could be
approximately guessed on the basis of the number of ploughs
mentioned, even in the absence of figures denoting the actual
measurement of the land in question.19 The Hathal plates of
Dhārāvarshadeva (V. S. 1237),20 refer to an area of land that
could be tilled with two ploughs in a day. Similarly, the
Charkhari State inscription of Paramārdideva21 records a grant
of land which could be tilled by five ploughs in a day from
which, as in the other cases cited, the actual measurement of
the land is to be determined. The plough-measure of land thus
appears to have been conditioned by the time-factor.

In this connection it may be noted22 that the term hara is
still used in Gujarat where it means not a land-measure but a
measure of grain.23 It is also used to denote the current
measure of corn in Kathiawar. A suggestion has been made
that hara is only another form of the word hala, and that as the
name of a measure the word may have originally been connected

15 EI, XIX, p. 277 ff.
16 IA, XIX p. 348 ff.
17 ibid, XVIII, p. 108 ff.
18 ibid, LVI, p. 50 ff.
19 Cf. ASWC, 1907-8, pp. 54-5; IA, LVI, p. 50 ff.
20 IA, XLIII, p. 193 ff.
22 IA, LII, p. 249 ff.
23 ibid.
with the plough-measure, denoting a fixed quantity of grain produced "by the use of the hala or plough". In short, the suggestion is that, originally the word hara denoted the same thing as a plough-measure, but that later it may have come into use as the name of a measure of grain or corn only.

It seems that hāele is only a local variation of the word hala, denoting a particular land-measure. The word hala in this form is found in the Sāṇḍerāv stone inscription of Kelhaṇadeva24 of the Chāhamāna dynasty. Like the word hara mentioned above the term hāele may also be connected with hala, in which sense Dr. Bhandarkar interprets the word. The inscription in which it occurs mentions that the donor Analadevī granted one hāele of yugamdhari and that some rathakāras also granted another hāele of yugamdhari which Bhandarkar takes to mean "jvar corn". Thus it appears that the term hāele is used in this record as a measure of corn. If its connection with hala is assumed, one hāele of yugamdhari will mean one hāele of jvar corn which was the yield of a plot of land cultivated with one plough. It is evident, therefore, that in some places what was originally a plough-measure had a tendency of being converted into a measure of the yield of the soil. What is actually yielded by a piece of land, cultivated with one plough, came to be called by some word originally connected with the name of the plough-measure such as the hāele, hara, etc. The corn-measure thus used represents a definite quantum which is represented by the yield of a piece of land cultivated with one plough, nothing more, nothing less.

It is difficult to say when the word hala was first used as the name of a land-measure, although it is known to have been in extensive currency in the 10th, 11th., and 12th, centuries. The use of the word hala in the sense of a land-measure is found in Pāṇini,25 Patañjali26 etc. Bāņa,27 the author of the

24 EI, XI, p. 46 ff.
25 IV, 4, 97. In Pāṇini the area cultivated with one plough is called 'halya'. Also cf. 'dvi-halya', 'tri-halya'.
26 I, 1, 72.
27 Harshacharita, p. 199.
Harshacharita, shows familiarity with the use of this word in the sense of a land-measure as is evident in the passage where he refers to the bestowal by Harsha of a "hundred villages delimited by a thousand ploughs". The passage seems to show that the extent of land given away in 100 villages measured 1000 ploughs, i.e., as much land as could be tilled with that number of ploughs.

There is one difficulty in ascertaining the exact area that could be cultivated with one plough. The size of the plough may not have been uniform. Soil was of different qualities in different regions; the capacity of the plough depended on the variable character of the soil. As the grades of soil were of different categories, the extent of land indicated by the plough-measure could not have been the same everywhere. The Harsha stone inscription of the Chāhamāna King Vigraharāja (V. S. 930) refers to a big plough of land evidently to distinguish it from smaller ploughs of land.

Hasta and Allied Measures

Another system of measuring land in ancient India was based on the hasta as the unit. When a particular piece of land is measured under this system, a more or less clear idea can be formed of its size and extent. In the Siyadoni stone inscription of the Pratihāras of Kanauj mention is made of a field measuring 200 by 225 hastas. Sometimes the hasta is definitely mentioned as the hasta of the king, serving as a unit of land-measure. Thus in the Vāillabhaṭṭasvāmin temple inscription, there is a reference to the measurement of a piece of land on the basis of the hasta standard, the hasta being described as the hasta of the king (Pārameśvarīya-hasta). The land, referred to in this inscription, covered a flower garden measuring 270

---

28 A bigger unit is called 'parama-halya' by Patañjali (Bhāshya, I. 1. 72; 86).
29 EII, II, p. 116 ff.
30 ibid, I, p. 162 ff.
31 ibid, I, p. 154 ff.
hastas in length and 187 hastas in breadth. In South India the rod, with which land was measured, was equal to the king's foot. In connection with the land survey, which was conducted in the 16th year of Kulottunga Chola I, the foot of the king (śripada) was used as the unit of measurement. The hasta or the royal foot must have represented, as we know definitely in the case of the latter, by a rod, ḍanḍa, or nala, although in all cases explicit mention of this is not to be found.

The use of the nala-measure under the Pāla and Sena kings of Bengal is noticed in their inscriptions. A nala standard is sometimes described as "ashtaka-navaka", which probably means a rod or nala measuring 8×9 cubits or hastas. The "ashtaka-navaka-nala" seems to have represented an oblong measure, comprising an area of 9 reeds (each reed measuring probably one hasta) in length and 8 reeds in breadth. The unit must have been composed of two nalas, one for measuring length and the other for measuring breadth. That the figures 8 and 9 stood for the corresponding number of cubits respectively, is shown by the explicit reference in some inscriptions to the employment of hasta in the prevalent system of land-measurement. Taking the average measurement of a hasta to be 19 inches, Dr. B. C. Sen suggests that the area covered by a pair of "ashtaka-navaka-nalas" may have corresponded to an oblong area of 19×8×19×9=25992 square inches or 180 ½ square feet. Although this was the ordinary standard, there was no uniform system of measurement throughout the kingdom of the Sena rulers, during whose reign the use of the nala is found to have existed. There were local standards in Bengal as attested by references to Samatasya-Nala, evidently meaning a standard

---

82 MER, 87 of 1900.
83 ibid, 440 of 1912.
84 IA, XXXIX, p. 195 ff; JRAS, 1912, p. 710 ff; SAMSJ, III, Pt. II, p. 475 ff.
85 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 520 ff; cf. IA, XXXIX, p. 195 ff; EI, XV, p. 35 ff; IHQ. XIX, p. 264 ff.
86 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 520 ff.
87 EI, XV, p. 278 ff.
used in Samataṭa or South-East Bengal. Sometimes a nala is found associated with the name of the king as shown by the mention of Vṛishabha-Saṅkara-Nala. "Vṛishabha-Saṅkara" was the biruda of king Vijayasena, referred to in the Naihāti grant,\(^{38}\) the Ānuliā copper-plate,\(^{39}\) etc. The hasta measure was, therefore, not the same everywhere in Bengal for evidently the name Samataṭiya-Nala has been used to differentiate it from the nālas current in other parts of the Sena kingdom. Similarly, by the expression "tad-deśiya-samvyavahāra",\(^{40}\) is meant a nala standard which was current in Varendri. It appears that the nala may not have been always and everywhere based on the hasta unit. There were local nālas of different measurements, e.g. a nala measuring 56 cubits is mentioned to have been in use in a certain locality (Vardhamāna-bhukti).\(^{41}\) The India Office Plate of Lakshmanaśena refers to a measurement equivalent to 22 cubits (dvāviniśati-hastena parimitaḥ) which was in use in the North-Eastern part of the Dacca district.\(^{42}\) The passage in question is partly defaced which makes it difficult to understand its precise relation to the yashti standard to which it refers. In the Sundarban copper-plate of Lakshmanaśena\(^{43}\) the standard of 32 cubits was used. But there are cases where the measurement of the nala is not given. Thus from a plate of Mahīpāla 1 (regnal year 5)\(^{44}\) from Belwā, we come to know that the gift land consisted of 3 localities, all situated in Pūḍravardhanabhukti (North Bengal). The first was Osinna-Kaivartavṛitti, which measured 210; the second was Nandisvāminī, measuring 490 and the third was Gaṇeśvara, measuring 151, according to the standard land-measure. Here we find that the measure used is not specified. It may be noted that the standard measures of the Sena kings of Bengal were more or

\(^{38}\) IB, p. 68 ff.; EI, XXI p. 211 ff.

\(^{39}\) ibid, p. 81 ff.

\(^{40}\) ibid, pp. 84 ff.; 99 ff.

\(^{41}\) ibid, p. 92 ff.

\(^{42}\) EI, XXVI, p. 1 ff.

\(^{43}\) IB, p. 169 ff.

\(^{44}\) EI, XXIX, p. 1 ff.
less specified and definite, although different standards were in existence at one and the same time. But there is no such definite information about the standard land-measure or measures current during the reigns of the Pālas, as shown by the above mentioned inscription of the time of Mahāpāla I. The ashtakana-navaka-nala is not heard of again.

The length of the nala varied in different places, according to different local customs and usages, although the hasta as the unit in framing the size of the nala was generally not lost sight of. Where the exact size of a nala, however, is not indicated, it is difficult to ascertain it, for the available references clearly point to the use of nalas of different varieties in different regions. It is unlikely that a nala standard, associated with the name of a king, was invariably a case of a new standard being introduced. Probably sometimes a king confirmed the local standard, already current, by associating it with his name.

The use of the rod as a measure of land was known in some places. The use of the rod or danta in this sense is referred to in the Kadambapadraka grant of Naravarman.\(^{45}\) There is no precise information of the actual size of the rod used in Naravarman’s time. The use of a rod for measuring land can be traced back to the Rīg Vedic period. Thus in 1.110.5 of the Rīg Veda the Ribhus are spoken of as measuring “as a man measures fields with a staff or a rod”. The rod must have been of a standard size when it was applied for purposes of measurement. In Pāli Buddhist literature\(^{46}\) mention is made of the use of a rope for measuring fields. The duties of a Rajjugāhaka Amāccha is mentioned in connection with what seems to have been a survey of fields for the purpose of the settlement of revenue. The measurement of land, as mentioned in early Buddhist literature, appears to have been in terms of kariha, which according to Childers’ Pāli Dictionary denoted “an area of 8 acres”. Apparently a rope of a fixed standard size was used to ascertain the size of a piece of land, which had

\(^{45}\) El, XX, p. 105 ff.

to be expressed in terms of karihas. The practice of measuring land was current in the Maurya period, as stated by Megasthenes who refers to the Agronomi—“a class of country officers who measure land as in Egypt”.47

Measure of Seed sown and of Produce and their relation to land-measures

In many inscriptions of the period the extent of the land concerned is indicated by a term denoting the measure of seed which could be sown on it. An earlier use of this system of measurement is shown by some Gupta records in which the expression ‘kulyavāpa’ is employed as a denomination of land-measure denoting the area of land, possessed of the capacity of bearing one kulya of seed. The element “vāpa” in the compound “kulyavāpa”, derived from the root “vap” to “sow”, definitely establishes this interpretation. In later times land-measures allied to the kulyavāpa measure, e.g., droṇavāpa, āḍhāvāpa, etc., got widely current. It is to be noted that the use of the word “vāpa” in these expressions clearly points to the extent of the seed-bearing capacity of the land covered. The terms kulyavāpa, droṇavāpa or simply droṇa, bhū-droṇa (where the element “vāpa” is wanting but the implication is clear from the context) as measures of land in this sense are found used with details of measurement especially in inscriptions of Bengal.48

Other seed measures such as āḍhaka, pāṭaka, unamāna, kāka, kūkinikā, etc. are furnished by Bengal inscriptions. These along with kulyavāpa, droṇavāpa, āḍhāvāpa, etc. constitute different grades of measure, based on a common unit which has to be ascertained. In the India Office copper-plate of Lakshmanaṣena49 the expression “droṇika” occurs probably in the sense of an area of land on which one droṇa of seed could be sown. In the Pachar plate of the Chandella king Paramārdideva,

47 Megasthenes, p. 86.
48 IB, pp. 68 ff.; 81 ff.; 169 ff.; EI, XIV, p. 156 ff.
49 EI, XXVI, p. 1 ff.
dated, V. S. 1233, the size of the land given away is indicated by the measure 7½ dronas. In a grant of the Chandella king, Madanavarman, (V. S. 1190), the same seed-measure as an index of the size of the land denoted is mentioned. In the Vaiyabhaṭṭasvāmin Temple inscription mention is made of eleven dronas of barley as the amount of seed required for two fields, the areas of which are otherwise not indicated. This was the current measure in Gopagiri, as the inscription says.

Another denomination of seed-measure noted in the Pratagarh inscription of the Pratihāra king Mahendrapāla, is māni. This inscription records the gift of a field named Chhittullāka, on which ten mānīs of seed could be sown. Another indication of the size of the land, as furnished by this record, is that with the measure of seed (i.e., māni) sown on it, it could be irrigated by one leather bucket (kosavāpa).

In the Sunak grant of the Chaulukya king Karna I, dated, V. S. 1148, the name of another seed measure, viz., pāilāṁ, is found. The evidence of this inscription is important inasmuch as it throws light on the equation between a plough-measure (hala) and the seed-measure (pāila), which will be discussed later.

The inscriptions of Bengal furnish us with certain other seed-measures. Thus in the Mādhāinagar copper-plate and the Sundarban copper-plate of Lakshmanseṇa, mention is made of a land-measure known as khārika (khāri or khāḍika). This seems to be the same as khārivāpa of Amarakosha. We have already referred to the measure dromavāpa, also met with in some inscriptions of Bengal. From these sources it is clear that 16 dronas made one khāri or khārivāpa and that 16 dronas were equal to 2 kulyas or kulyavāpas. Thus a land, which

---

50 EI, X, p. 44 ff.
51 IA, XVI, p. 207 ff.
52 EI, I, p. 154 ff.
53 ibid, XIV, p. 176 ff.
54 ibid, I, p. 316 ff.
55 IB, p. 106 ff.
56 ibid, p. 169 ff.
measured one *khārivāpa* was double the size of that which measured one *kulyavāpa*. One *drona* constituted \(\frac{1}{5}\) part of a *khārivāpa*. Another term denoting land-measure based on seed-measure is *ādhāvāpa*. There are references to this measure in several inscriptions, particularly in an inscription of Vīgrahapālā III and in two inscriptions of Lakṣmanasena. The Belvā copper-plate inscription,\(^{57}\) gives important data from which an estimate about this measure can be formed. This inscription records the grant of the land called Lovanikāma which was divided into two parts, one of which measuring 1 *kulya*, 2 *dronas*, 3\(\frac{1}{2}\) *ādhāvāpas* and 3\(\frac{1}{2}\) *unmānas* was excluded from the gift and the other measuring 3 *kulyas*, 7\(\frac{1}{2}\) *dronas*, and 11 *udamānas* only was transferred by donation. Thus from the scale of measurement, indicated in this grant, *ādhāvāpa* comes next to *drona*, which seems to mean that the latter was lesser than the former. A further reference to the term *ādhāvāpa* is to be found in the Ānutī and Tarpandīghi plates of Lakṣmanasena.\(^{58}\)

It is known that four *ādhāvāpas* made one *dronavāpa*.\(^{59}\) As already stated, sixteen *dronavāpas* made two *kulyavāpas*; therefore one *kulyavāpa* was equivalent to eight *dronavāpas*.\(^{60}\) Hence \(4 \times 8 = 32\) *ādhāvāpas* (ādhakas) constituted one *kulya*. It is suggested that a *kulyavāpa* may have been equivalent to 128—160 *bighas*; a *dronavāpa* (\(\frac{1}{4}\) of a *kulyavāpa*)=16—20 *bighas*; and an *ādhāvāpa* (\(\frac{1}{4}\) of a *dronavāpa*)=4—5 *bighas*.\(^{61}\) In the Saktipur copper-plate of Lakṣmanasena,\(^{62}\) *drona* is used as a land-measure. It is also used as a land-measure in the Madanpur plate of Śrīchandra of the Chandra dynasty of Bengal, of the year 44,\(^{63}\) which refers to a rent-free

---

\(^{57}\) *EI*, XXIX, p. 9 ff.

\(^{58}\) *IB*, p. 81 ff.; 99 ff.

\(^{59}\) *EI*, XX, p. 59 ff.


\(^{62}\) *EI*, XXI, p. 211 ff.

\(^{63}\) *ibid*, XXVIII, p. 51 ff.
land measuring 8 dronas exceeded by 8 . . . . It may be presumed that it is the same as the “dronavāpa” of the Gupta period. Drona was sub-divided into āḍhaka or āḍhavāpa, āḍhaka into unmāna and unmāna into kāka or kākiṇikā.64

Another land-measure mentioned apparently in a number of variant forms is unmāna, udāna, or udamāna. Of these forms, udamāna is mentioned, as previously noticed, in the Belwā copper-plate inscription of Vigrahapāla III65 and the Āmgāchhi plates of the same king.66 The form ‘unmāna’ occurs in the Govindapur,67 Tarpandighi68 and Ānuliā69 plates of Lakshmanasena as well as in the Sundarban plate70 of the same king. It is also mentioned in the Naihātī plate of Vallālasena.71

In the Calcutta Sāhitya-Parishat copper-plate of the Sena dynasty72 the term udāna is shown to be the same as unmāna. Sometimes the term kulyavāpa is not used but the measurement is given in terms of dronavāpa and its sub-divisions including unmāna. Thus the Govindapur plate of Lakshmanasena78 refers to a land measuring 60 dronas and 17 unmānas. Even the dronavāpa measure is omitted while āḍhavāpas and unmānas are mentioned. The Tarpandighi copper-plate of Lakshmanasena74 refers to a land measuring 120 āḍhavāpas and 5 unmānas. The Ānuliā copper-plate of Lakshmanasena75 also omits kulyavāpa measures but includes pāṭaka measures along with dronas, āḍhavāpas, unmānas and kākiṇikās. The 60 dronas mentioned in the Govindapur plate,76 may have been otherwise

64 IB, pp. 68 ff.; 81 ff.; 99 ff.
65 EI, XXIX, p. 9 ff.
66 ibid, XV, p. 293 ff.
67 IB, p. 92 ff.
68 ibid, p. 99 ff.
69 ibid, p. 81 ff.
70 ibid, p. 169 ff.
71 ibid, p. 68 ff.
72 ibid, p. 140 ff.
73 ibid, p. 92 ff.
74 ibid, p. 99 ff.
75 ibid, p. 81 ff.
76 ibid, p. 92 ff.
described as 7 kulyavāpas and 4 dronavāpas. Similarly, 120 āḍhāvāpas mentioned in the Tarpaṇḍīghī plate\(^{77}\) could have been expressed as 3 kulyavāpas and 24 āḍhāvāpas. The 9 drona in the Ānulīḷī copper-plate\(^{78}\) similarly can be taken as equivalent to 1 kulyavāpa and 1 drona, on the basis of a table where an equation has been attempted between a kulyavāpa and a dronavāpa and the latter’s subdivisions. There must have been some reason accounting for the tendency towards the exclusion of the name kulyavāpa as a land-measure.

As regards the implication of the term ‘unmāna’ the Sundarban copper-plate of Lakṣmāṇasena\(^{79}\) supplies some useful data. This plate records the grant of a piece of land which measured 3 bhū-dronas, 1 khāḍika, (?) 23 unmānas and 2½ kākiṅgis. There is a further information, which is not usually given in our records, as to how the land was measured. It is stated that a standard of 32 cubits was followed in carrying out the measurement recorded in the inscription and that one unmāna was equivalent to 32 cubits and 1 cubit = 12 aṅgulas.\(^{80}\) On the basis of this valuable information supplied by the Sundarban copper-plate it may be possible to have an approximate idea about the size of the land forming the subject of the gift.

\(^{77}\) IB, p. 99 ff.
\(^{78}\) Ibid, p. 81 ff.
\(^{79}\) Ibid, p. 169 ff.

\(^{80}\) Attention has been drawn by Dr. D. C. Sircar (IHQ, XXVI, p. 309 ff) to the Dacca University History of Bengal, Vol. I, p. 653 n, where ‘dvādaśa-aṅgula-ādhiṇa’ hastena’ and ‘dvātrimśad-dhasta-parimitonmāṇena’ have been taken to indicate respectively a cubit of 12 aṅgulas or digits and an unmāna of 32 cubits. It is suggested that the first passage seems to refer to the cubit of 36 aṅgulas or 27 inches (cf. Hunter’s reference to the cubit of 20½ inches as prevalent in Sandvip in the Noakhali district) and the second to the nala or measuring rod of 32 cubits of the above length (cf. measuring rod of 56 cubits mentioned in the Ānulīḷī plates). The area denoted by ‘unmāna’ is taken as corresponding to 32×32 cubits=1024 square cubits or 9/6 th of a bigha. It is held that the āḍhāvāpa was originally equal to about 5 bighas and since the unmāna may have been about 1/6 th of a bigha, it is possible to suggest that 45 unmānas made one āḍhāvāpa. But this equation is not quite definite.
Two other names are found used in some inscriptions of the Pālas and Senas of Bengal. These are comprised in the enumeration of other land-measures discussed. This means that the two words denoted one and the same measure or one may have denoted a subdivision of the other. Some of the references to these terms have been already furnished above. Reference may again be made here to the Sundarban copper-plate of Lakshmanasena, in which mention is made of bhū-drona, khādikas, unnānas and kākinīs. The place of kākinī measure comes last in the enumeration. In the Āmgāchhi grant of Vīgrahapāla III. the different land-measures mentioned occur in the following order—drona, kulya, kākinī, unnāna. Here, however, drona takes precedence in the enumeration over kulya, but as we have already seen, a kulya was a much higher measure than a drona. The India Office plate of Lakshmanasena puts according to D. C. Sirīr kāka first and drona last in the list which, as he says, includes "ganda", besides ādhaka as two items. There is no evidence to show that drona is to be taken as the lowest in the list. Here, therefore, the order in which the terms are given is not helpful in the determination of their relative position, but if the term drona is to be taken as the highest measure, though last in the list, next to it will be ādhaka, which is lower than drona. The relation between the measures denoted by the two other terms in the context viz. kāka and ganda on the one hand and drona and ādhaka on the other is to be investigated. It cannot be maintained that in all cases the place, assigned to a particular measure in the order of enumeration, is an invariable guide for the ascertainment of its relative position in the system of measurement. In the Naihāti copper-plate of Vallālasena, however, the word kāka comes last in the list of measures, which includes bhū-pātaka, drona, ādhaka, unnāna in the order in which they are given here. On the whole, therefore, it will

81 IB, p. 619 ff.
82 EI, XV, p. 293 ff.
83 ibid, XXVI, p. 1 ff; cf. IHQ, XXVI, p. 313 ff.
84 ibid, XIV, p. 156 ff.
appear that the term kāka or kākini represents a lower measure in the table, if the order in which it is generally mentioned in the list is taken into account.

Hunter in his Statistical Account of Bengal,85 gives the name of a land-measure 'kāni'. "This" he says, "is a little over an acre in the Dacca and Mymensingh districts of East Bengal". In the Faridpur districts of East Bengal an area of 30 kānis is equal to 3622 square cubits of land. Thus one kāni should be equal to 120 square cubits. Moreover, from the measures current in Sandvip in the Noakhali district of S. E. Bengal, the following equations are available:

\[
\begin{align*}
4 \text{ kaḍās} & = 1 \text{ ganḍa} \\
20 \text{ ganḍās} & = 1 \text{ kāni} \\
16 \text{ kānis} & = 1 \text{ don (drona)}86
\end{align*}
\]

The last word seems to be a corruption of drona. It is interesting to know that the above table connects ganḍa, kāni and drona together. The India Office plate gives the two names ganḍa and drona; the third name kāka may have been the same as kāni. From the fact that udamāna is not to be noticed in the India Office plate, Dr. D. C. Sircar,87 is of the opinion that ganḍa mentioned there is to be taken by implication as a substitute for 'udamāna'. If the current measure of ganḍa is to be taken as a land-measure it will represent 120|20=6 square cubits of land. As 16 kānis make one don (drona), a drona will be equivalent to 120×16 square cubits=1920 square cubits.

In some land-grants the actual extent of land, given away, is not shown, but the quantity of rice yielded after cultivation is mentioned, serving as an indication of the extent of the area from which the yield is expected. Thus although it is a case

85 Vol. V, pp. 95, 448. The word kākini seems to be the same as kāni, which is \(\frac{1}{6}\) of a drona. cf. IHQ, XXVI, pp. 310-11; IA, XXXIX, p. 215 ff.
86 Sarkar, Select Inscriptions, p. 332.
87 IHQ, XXVI, p. 309 ff.
mentioned in a land-grant where such information is furnished, the amount of the yield is most useful, being the basis on which the size of the land is to be determined. As the boundaries of the land are shown, it was possible to form an approximately accurate estimate of the area donated which could be expected to produce the quantity of the crop specified. The Gauhati copper-plate grant of Indrapāla\textsuperscript{88} records a plot of land on which 4000 measures of rice could be grown (Chatuḥsahasrotpattika-bhūmau). It may be noted here that the standard measure adopted in this case is not mentioned by name. Similarly in the Nowgong copper-plate of Balavarman,\textsuperscript{89} mention is made of a grant of land called Hensivā, which produced 4000 measures of rice (dhānya-chatuḥ-sahasr-otpatti-maṭi-Hensive-abhidhānā-bhūmīḥ). Similarly, references are to be found in two copper-plate grants of Ratnapāla of Prāgjyotisha (1st half of the 11th century A.D.), which refer to a piece of land each producing 2000 measures of rice (dhānyadvī-sahasr-otpatti-bhūmau).\textsuperscript{90}

Miscellaneous terms denoting measures

In this connection mention may be made of the ‘nivartana’\textsuperscript{91} measure of land. The Kadambapandraka grant and the Kalvan plate of Yaśovarman\textsuperscript{92} refer to this measure, which is known to have been current fairly extensively in earlier times. Kauṭilya\textsuperscript{93} says that 4 arātnis are equal to 1 daṇḍa, 10 daṇḍas are equal to 1 rajju and 3 rajjus are equal to 1 nivartana, i.e. a nivartana is equal to 30 daṇḍas. The Baudhayana Dharma Sūtra\textsuperscript{94} speaks of a Brāhmaṇa who maintained himself by cultivating six nivartanas of land. A field of hundred nivartanas is mentioned

\textsuperscript{88} JASB, LXVI, p. 113 ff.
\textsuperscript{89} ibid, p. 285 ff; KS, p. 71.
\textsuperscript{90} ibid, LXVII, p. 99 ff.
\textsuperscript{91} EI, XIX, p. 69 ff; XX, p. 105 ff.
\textsuperscript{92} ibid, XX, p. 105 ff; XIX, p. 69 ff.
\textsuperscript{93} Arth, Bk, II, chap. XX, p. 117 ff.
\textsuperscript{94} III, 2, 2-4.
in a Nasik inscription, also *nivartana* is mentioned by the Kadambas and the Western Chālukyas. It also occurs in a grant of the Pallava king Śivaskandavarman and in a grant of Pallava Yuvamahārāja Vishṇugopavarman. According to the Kadamapadraka grant twenty *nivartanas* of land were measured with a *rod* (*daṃ* (ḍa) *nda*—pramāṇyena) which was 96 *parvas* in length and 42 *parvas* in breadth. The measurement of the unit ‘*parva*’ is unknown. *Nivartana* occurs as a land-measure in the Banswara plate of Bhojadeva, dated V. S. 1076, where it is recorded that he granted hundred *nivartanas* of village land. Kane holds that ‘a *nivartana* was so called because it represented a day’s ploughing by a team of eight or six oxen (from the root ‘vrīt’ with ‘ni’ marking the cessation of work after a day’s cultivation). The extent of a *nivartana*, however, differed according to different authorities. L. D. Barnett has utilised a source (The *Lilāvati*, Introduction) in defining a *nivartana* in terms of *hastas* and *varṇśas*. On this authority he holds that 10 *hastas* = 1 *varṇśa*; 20 square *varṇśas* = 1 *nivartana*. A *nivartana* is thus shown to be equal to a square of 20 *varṇśas* on each side, each *varṇśa* being equal to 10 cubits. Therefore, a *nivartana* covered an area of 40,000 cubits (200 × 200).

Now, according to certain authorities, as already seen, 4 *hastas* = 1 *daṃgha*; therefore, it would appear that 200 *hastas* = 50 *daṃgas* = 1 *nivartana*. But the equation between *daṃgha* and *nivartana* cannot be regarded as a fixed one, as there are different views amongst early Indian authorities on this point. Thus according to Baudhayana Dharma Sūtra, 1 *nivartana* =

---

95 *El*, VIII, No. 5 p. 72 ff.
96 *IA*, VI, pp. 25, 30, 91 ff.; VII, pp. 36, 109, 110, 111, 216, 217.
97 *El*, I, p. 6 ff.
98 *IA*, V, p. 50 ff.
102 Cf, *IA*, V, p. 53 and n; In the Mitāksharā the measure of a *nivartana* is held to be 200 cubit square—Mitāksharā, p. 2, n.
128 *danda*ś, against the equation already arrived at, showing 50 *danda*ś to be equivalent to 1 *nivartana*. According to Manu and Prajāpati, 1 *nivartana* = 25 *danda*ś. According to both of them, the area of a *nivartana* is 625 *danda*ś. From this it appears that both the authorities understand a *nivartana* to be invariably a square, the length and the breadth being equal.

The table prepared by Padmanath Bhattacharyya\(^{104}\) includes *yashṭi* as a measure still current in Sylhet. It is shown to be equivalent to 28 cubits. As will be shown later it is also related to the *hala* measure. The term *yashṭi* deserves special notice as it is found mentioned in a Sena land-grant.\(^{105}\) The Pāli form *yaṭṭhi* which is found in the Jātakas, seems to be allied to the measure *yashṭi*. It has been suggested\(^{106}\) that 1 *yaṭṭhi* = 2 *vitasis*, which represents 18 inches. From the above table it appears that a *hala* measure is also connected with the *yashṭi* measure. One *hala* of land is found to be equivalent to 28 \(\times\) 12 = 336 *yashṭis*.

A few other local measures may be noted here. One of them is *bhūmi*, occurring in two Chambā copper-plate inscriptions of Somavarmadeva and Āsaṭadeva (middle of the 11th century A.D.).\(^{107}\) Earlier use is indicated in the Vākāṭaka dominions. The terms *bhūmi* or *bhū* and *bhūmi-shaki* is used in the Chambā inscriptions.\(^{108}\) The term *bhūmi* or *bhū* is taken by Kielhorn as a superficial area.\(^{109}\) The Chambā inscriptions show that a *bhūmi* or *bhū* is divided into 4 *māśhakas* or *bhū-māśhakas*.\(^{110}\) A *bhū-māśhaka* represents, therefore, a certain portion i.e., a quarter of a *bhūmi*. But the actual size of a *bhūmi* and its subdivision *bhūmi-māśhaka* is not known. That the *bhūmi* is earlier used by the Vākāṭakas is evidenced

\(^{104}\) *IA*, LII, p. 18.
\(^{105}\) *EI*, XXVI, p. 1 ff.
\(^{106}\) Mehta, *Pre-Buddhist India*, p. 237 and n. 10.
\(^{107}\) *IA*, XVII, p. 7 ff.
\(^{109}\) *IA*, XVII, p. 7 ff.
\(^{110}\) *Ibid*, line 19; It has been pointed out that the *bhūmi* or *bhū* is equivalent to about 17 acres,—*ASR*, 1902-3, p. 250 and n. 5.
by the Chammak grant of Mahārāja Pravarasena II. This grant refers to 8000 bhūmis which are said to have been measured by the royal measure. The 'royal measure' must have been the standard measure in the Vākāṭaka dominions, something like the hasta-measure, associated with the Vākāṭaka king in question, like similar units current in other places as in East Bengal etc. Dr. Saletore’s proposal to regard it as equal to the ‘kulyavāpa reed’, current in East Bengal, has a mere hypothetical value.

‘Pāṭaka’ is the name of another kind of land-measure used in some inscriptions of Bengal. This is mentioned along with other measures in the Ānuli copper-plate inscription of Lakshmanaṇasena, which records the grant of a piece of land measuring 1 pāṭaka, 9 dronas, 1 āḍhāvāpa, 37 uṃmānas and 1 kākiṇikā. If the measures are measures of yield of the land it is reasonable to hold that pāṭaka is also used in the same sense. It can be gathered from the Guṇāighar copper-plate inscription of 507 or 508 A.D. that a pāṭaka in East Bengal was equal to 40 dronavāpas = 5 kulyavāpas. The use of the term pāṭaka as denoting a kind of measure was current in East Bengal in the 6th and 7th centuries A.D. as evidenced by the above-mentioned inscription and the Ashrafpur copper-plates. The relation between a pāṭaka on the one hand and a drona and a kulya on the other may be worked out from the data, furnished by these inscriptions. It is not, however, known definitely if the same relation continued in the later period. The use of a pāṭaka is also found in the Belāva copper-plate of Bhovarmandeva, which mentions 1 pāṭaka and 9½ dronas of land, the Rāmpāl copper-plate of Śrīchandra117 mentioning 1 pāṭaka of land, the Barrackpur grant of Vijayasena (of the 12th century A.D.)

111 CIHI, III, p. 235 ff; IA, p. 239 ff.
112 Saletore, Life in the Gupta Age, p. 356.
113 IB, p. 81 ff.
114 IHQ, VI, p. 45 ff; cf, Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 521.
115 MASB, I, p. 85 ff.
117 ibid, XII, p. 137 ff; IB, p. 1 ff.
118 ibid, XV. p. 278 ff.
mentioning 4 pāṭakas of land, also in several other inscriptions of the rulers of Bengal. In this connection reference may be made to the Saktipur plate of Lakshmanasena,119 which records the gift of six pāṭakas, each of which is given a name, namely, Rāghavahāṭṭa, Vārahakeṇḍa, Vāllihīṭa, Vijaharapura, Dāmaravaḍa and also Nīmāpāṭaka of which only a portion was included. It cannot be said definitely whether each of these six pāṭakas measured one pāṭaka or they represented different wards or parts of an area. There is some difficulty in accepting the second alternative as there will be no information about the measure of the land donated. Kielhorn has explained the term ‘pāṭaka’ as meaning grāmaikadeśa—‘a part of a village; outlying portion of a village or a kind of hamlet, which had a name of its own, but really belonged to a larger village’.120 According to the Abhidhānachintāmaṇī,121 “a pāṭaka is one half of a village (pāṭakastu tadardha syāt)”. Sometimes as in the Naihāti copper-plate of Vallālasena122 the expression ‘bhū-pāṭaka’ is used instead of a pāṭaka (7 bhū-pāṭakas, 7 dṛṇas, 1 āḍhaka, 34 unmaṇas, 3 kākas), which means the same thing.

The word ‘pāśa’ occurs in the Royal Asiatic Society’s copper-plate grant of Bhīmadeva II of the Chaulukya dynasty (V. S. 1266).123 Although the exact size, denoted by this term, cannot be ascertained on the evidence supplied, the grant shows the connection between a pāśa and another measure called ‘khaṇḍa’. It may be noted that the Gaṇesgad plate of Dhruvasena I, dated in the Gupta year 207124 mentions that khaṇḍas were measured in terms of the pāḍāvarta-measure. The khaṇḍa evidently is a measure of grain and pāśa (a chain)—a standard measurement of surface. The above-mentioned grant of Bhīmadeva II, uses the word four times. Once it refers to 50 pāśas and thrice it refers to 100 pāśas. The allotment of 100 pāśas

119 EI, XXI, p. 211 ff.
120 IA, XVIII, p. 135 ff.
121 Abhidhānachintāmaṇī, p. 135 ff.
122 EI, XIV, p. 156 ff; IB, p. 68 ff.
123 IA, XVIII, p. 110 ff.
situated in the village of Bhūharada represented a piece of land producing one khaṇḍa of grains. Similarly, it is said that a piece of land producing one khaṇḍa and measuring 100 pāsas was granted in another village. Thus this land measuring 100 pāsas yielded one khaṇḍa. Eight khaṇḍas according to the above mentioned inscription of Dhruvasena comprised 300 pādāvartas. A ‘pādāvarta’ was equal to one square foot, as explained by Böhtlingk and Roth. The word ‘pādāvarta’ in some Gupta inscriptions is used to denote the areas of irrigation-wells and agricultural land. It appears from the Royal Asiatic Society grant, mentioned above, that the gift in question was also land where there were irrigation-wells and agricultural land. A pāsa may have denoted a fixed length like the nala used elsewhere in measuring land. Pāṇini describes the area of a field in terms of a measurement known as ‘khaṇḍa’.

The word ‘nāluka’ denoting an unspecified measure of land is of rare occurrence; it is found used in a few inscriptions, such as a record of Govindachandra and his mother Rādhānādevī (V. S. 1189) and the Khala plate of the Kalachuri ruler Sudhadeva (V. S. 1134). The former inscription records a grant of ten nālukas of land and the later twenty nālukas of land. The plot of land, referred to in Sudhadeva’s inscription, further states that it was measured with the help of a standard rod known as ‘devakūṭikasṭha’. The word ‘nāluka’ may be equated with the Sanskrit word ‘nalava’, a measure of distance equal to 400 (or according to others, 100 or 120) hastas. In the Gagaha plate of Govindachandra (V. S. 1199) the names of two land-measures, pañcha and nālu occur together.

Another measure called ‘vaha’ occurs in the Praśasti of

---

125 Cf, El, III, p. 323, n. 3; CII, III, p. 170, n. 4.
126 IA, XVIII, p. 110 ff.
127 Pāṇini, IV, 1, 23; cf, AIP, p. 196.
128 El, V, p. 113 ff.
129 ibid, VII, p. 85 ff; p. 92.
130 ibid, V, p. 113 ff.
131 ibid, XIII, p. 216 ff.
Baijnāth. A ‘vaha’, according to Bühler, is equal to an area on which the measure of seed to be shown was limited to a standard of 4 drolas. It is a measure of the surface of the land.

In this chapter a detailed study has been attempted regarding various units and standards of measurement current in Northern India during the period under review. The omission to deal with some of the units separately was due to the reason that their use geographically appears to have been of a restricted character and the convenient adaptation of more widely prevalent standards to local custom and usage. The Mahobā plate of Paramārīdīdeva, of the Chandella dynasty133 refers to a land-measure known as ‘vādhā.’ The name of another land-measure associated with the plough-measure, i.e. hala, is found in the Rāhan copper-plate grant of Madanapāla and Govindachandra.134 This is ‘sīrā’ which is indicated in the record as measuring four ploughs of land. A ‘sīrā’ as a land-measure was thus equal to four ploughs, i.e. halas. In a Chaulukya grant, dated A.D. 1207135 there is a reference to the land-measure called ‘pāthas’. According to Wilson’s Glossary, one pātha is equal to 240 square feet. Reference to another land-measure known as ‘netana’ is found in an old commentary on the Gaṇitasara of Śrīdhara-charya.136 In this connection mention may be made of ‘pratyandaka’ the name of another land-measure. It is regarded as a square-measure.137

The land-grants of the period, belonging to different ruling families and to different periods, followed various systems of measurement of land, as discussed above, such as measures of seed, measures of yield, measures based on the hasta unit and measures carried out with the help of standard rods, etc. There is hardly any record in which all the different measures are stated together in giving an account of the donated land. Our informa-

132 EI, I, p. 97 ff.
133 ibid, XVI, p. 9 ff.
134 IA, XVIII, p. 14 ff.
135 ibid, XI, p. 337 ff.
136 Cf, JNSI, VIII, p. 146 ff.
137 IA, I, p. 80 ff.
tion would have been complete if the area of the land were given in terms of a recognized unit of measurement, and together with it the size of the instrument used to measure the land, the quantity of seed that could be sown on it and the amount of the yield expected. Instead, we have in most cases only one measure given. The standard followed was not the same everywhere. Even though a rod may be named, it is not possible to assert that its size was fixed in the same way everywhere. Therefore, an inherent difficulty is confronted in determining the exact size of a particular piece of land mentioned, in the absence of necessary details. Yet an attempt may be made to arrive at some sort of equation between the different prevailing systems of measures with the help of such evidence as may be available. Let us first take up the hala-measure.

Equations

Four ploughs of land, according to the Rāhan copper-plate grant of Madanapāla and Govindachandra,128 constituted one sīrā. The plough-measure is stated to be equivalent to ninty-six dandaśas or rods in the Kadambapadraka grant.130 The Mahobā plate of Paramārdideva140 shows that four dronas were equivalent to sixty-four prasthas. One fourth of a drona was four prasthas as the inscription clearly mentions. ‘Prastha’ is also brought into relation with ‘vādha’. The nature of the relationship between a ‘vādha’ and a ‘prastha’ is indicated in the rule of one prastha for every vādha, on which the measurement of the land given was based in this particular case. It is evident that vādha and prastha were two different kinds of measure; the former was the measure of land and the latter a measure of seed capacity, which means that one prastha of seed could be sown on one vādha of land. Sixteen prasthas constituted one drona.

128 IA, XVIII, p. 14 ff.
130 El, XX, p. 105 ff.
140 ibid, XVI, p. 9 ff.; cf, the Depalpur plate of Sidhurāja records the grant of 34 arīṃbas of level land (prastha) furnished with four ploughs (halaśōṭaśa saṃśvṛttanā) at Kirikākā see, H. C. Ray, Dynastic History of Northern India, Vol. I, p. 863.
Thus the equation available from this grant may be shown as follows:

1 vāḍha = 1 prastha
16 prasthas = 1 drona.

The same grant while recording the gift of a portion of a village with particulars relating to boundaries, states that an area of $10 \times 6$ square vāḍhas of land was cultivable with five ploughs (hala). From this inscription it appears that one hala-measure was equivalent to 12 square vāḍhas. If an equation is possible between a dāṇḍa-measure mentioned in the Kadamba-padraka grant and a vāḍha-measure on the basis of their being related to hala-measure, it may be concluded that 12 square vāḍhas = 96 dāṇḍas = 1 hala which means that a hala or plough was capable of ploughing 12 square vāḍhas or 96 dāṇḍas of land.

From the Brahmāṇḍa, Vāyu, and Mārkaṇḍeya Purāṇas as well as the Jaina Gaṇita, we come to know that 4 hastas = 1 dāṇḍa. Hence 96 dāṇḍas were equivalent to $4 \times 96 = 384$ hastas of land which again could be cultivated with one hala. It must be understood that the dāṇḍa-measure, based on the hasta unit, must have denoted a square measure; otherwise any correct idea of the size of a land cannot be made out. The Brahmāṇḍa and Vāyu Purāṇas mention that one hasta is equivalent to 24 aṅgulas; therefore, $24 \times 4 \times 96 = 9216$ square (?) aṅgulas = 96 dāṇḍas = 1 hala.

In the above the relation between dronas and prasthas is stated. In one of the plates of Madanavarmadeva of the Chandella dynasty, dated V. S. 1190, the relation of dronas in terms of the plough-measure (hala) is stated. It is mentioned here that an area of 10 halas of land was granted which required $7\frac{1}{2}$ dronas, i.e., of seed. The equation of one hala = $\frac{3}{4}$ dronas, as implied in this record, could not have been an invariable one for variations in different localities were quite

141 IA. XVI, p. 201 ff.
likely, due to the varying quality of the soil, differences in the size of the *hala* as well as the skill of the cultivator, which presumably were not of the same standard in all parts of the country.

In the Sunak grant of the Chaulukya king Karṇa\(^{148}\) light is thrown on the equation between a *plough-measure* (*hala*) and the seed-measure (*pāḷāṁ*). It is said in this inscription that 4 *halas* of land required 12 *pāḷāṁ* (or 48 seers) of seed corn. In the present case, therefore, 1 *hala* required 12 seers of seed.

The information, furnished by Padmanath Bhattacharyya,\(^{144}\) regarding measures current in Sylhet, may be briefly noticed here because it throws important light on the meaning of *hala*, as shown in the following tabular form:

| 7 cubits | = 1 nala (rod or rather reed of measure) |
| 1 nala × 1 nala | = 1 rekha |
| 4 rekhas | = 1 yashṭi |
| 28 yashṭis | = 1 kedāra (called Kayara commonly) |
| 12 kedāras | = 1 hala |

Thus, according to this table, a *hala* is \(7 \times 7 \times 4 \times 28 \times 12 = 65856 = 3.4\) acres; and one *hala* of land is found to be equivalent to \(28 \times 12 = 336\) yashṭis.\(^{145}\)

*Ancient Measures and their modern equivalents*

Attempts have been made to bring the different units and standards of measurement to a common base. It is very difficult in many cases to obtain concrete results because modern equivalents are not clearly known. But there are cases where approximate equations may be possible. The different units of measurement may be expressed in terms of cubits and their relative position in the system of measures, thus worked out, may be determined in a reasonably acceptable manner on the lines suggested below:

\(^{148}\) EI, I, p. 316 ff.
\(^{144}\) IA, LII, p. 18 ff.
\(^{145}\) *ibid*, LII, p. 18 ff.
‘Ashṭuka-nauka-nala’, which occurs in the Faridpur plates, is explained by Pargitar\textsuperscript{146} as \(8 \times 9\) cubits or hastas. The average measurement of a hasta is 19 inches. According to the Mārkaṇḍeya and Vāyu Purāṇas 4 hastas = 1 daṇḍa. Therefore, 1 daṇḍa is equivalent to \((19 \times 4) = 76\) inches or \(6\frac{1}{2}\) feet. According to Manu and Prajāpatī\textsuperscript{147} 1 nivartana = 25 daṇḍas. Therefore, the area of a nivartana is about 625 daṇḍas. One daṇḍa being equivalent to 4 hastas and each hasta being equivalent to 19 inches, one nivartana will be equivalent to 1900 inches, i.e., \(158\frac{1}{3}\) ft. According to the Rāhan copper-plate grant,\textsuperscript{148} one sirā measures four ploughs (halas) of land. From this it follows that one sirā is equivalent to 13.6 acres. According to the Mahobā plate of Paramār-dīdeva\textsuperscript{149} a piece of land measuring 60 square vādhās could be cultivated with 5 ploughs. Therefore, one plough (hala) could cultivate 12 square vādhās. The area measuring one vādha would therefore be equivalent to 16456\(\frac{1}{12}\) square yards (i.e., \(3,4\|12\) acre.) = \(1371\frac{1}{3}\) sq. yards. A nāluka comprises 400 hastas according to one source, which means that it is about 7600 inches or \(633\frac{1}{3}\) feet.

According to the Pāhārupur copper-plate inscription of the Gupta year 159 (= A.D. 479)\textsuperscript{150} 4 ṣāṅhāvāpas = 1 ḍrṇavāpa; 8 ḍrṇavāpas = 1 kulyavāpa. Dr. D. C. Sircar points out that the ancient land measures, kulyavāpa, ḍrṇavāpa and ṣāṅhāvāpa are still locally known in the Eastern districts of Assam. They are not, however, found used in this combined form in the same locality and their values are not the same everywhere. This difference in the measurement is explained by Hunter as due to the fact that 'the length of the measuring rods and also of the cubit is different in different localities.'\textsuperscript{151} It is also to be noted that although there is an undeniable similarity in the names

\textsuperscript{146} IA, XXXIX, p. 193 ff.
\textsuperscript{147} Cf., Śukra, I, 387-414.
\textsuperscript{148} IA, XVIII, p. 14 ff.
\textsuperscript{149} EI, XVI, p. 9 ff.
\textsuperscript{150} ibid, XX, p. 59 ff.; cf, Sarkar, Select Inscriptions, p. 347, n. 5.
\textsuperscript{151} Hunter, Statistical Account of Bengal, Vol. V.
used, there is little similarity in respect of the areas of land respectively indicated by the terms *kulyavāpa, dronavāpa* and *ādhāvāpa*, in different periods. Pargitar\(^{152}\) suggests that a *kulyavāpa* indicated an area of land requiring one *kulya* of seed in weight and that the area of a *kulyavāpa* was a little above an acre. D. C. Sircar arrives at the conclusion that 1 *kulyavāpa* = 128—160 *bighas* of land; 1 *dronavāpa* = 16—20 *bighas* of land; 1 *ādhavāpa* = 4—5 *bighas* of land; 1 *unmāna* = 1\(\frac{1}{9}\)th of a *bigha*.\(^{153}\) The matter is so complicated that it will be safe not to accept any conclusion as final for the present. It is stated in the Guṇāigarh copper-plate inscription of 509 A.D.\(^{154}\) that a *pāṭaka* in East Bengal was equal to 40 *dronavāpas* = 5 *kulyavāpas*. It is stated in the Amarakosha\(^{155}\) that sixteen *dronas* or two *kulyavāpas* made one *khāri* or *khārivāpa*. One *kulyavāpa* is equal to 128—160 *bighas* of land; therefore, one *khāri* or *khārivāpa* would be equivalent to 256 or 320 *bighas*. In regard to these two measures namely *pāṭaka* and *khārivāpa*, no attempt has been made above to explain them in terms of *bigha*, since there is, as already mentioned, a considerable difference of opinion as to the equations of *kulyavāpa, dronavāpa* and *ādhāvāpa* on which the former two measures are based.\(^{156}\)

The *pāṭha* measure, mentioned elsewhere,\(^{157}\) is noticed in Wilson’s Glossary, where it is described as equivalent to 240 square feet.

\(^{152}\) *IA*, XXXIX, p. 193 ff.


\(^{154}\) *ibid*, VI, p. 45 ff.

\(^{155}\) *Vaiśya-varga*, V. 10.

\(^{156}\) In a plate of Subhikśharaśaša from Panduksvar recently edited in *EI*, XXXI, p. 277 ff., references to *khārivāpa* and *dronavāpa* have been traced, showing the use of these measures in Panduksvar (54 miles North-East of Srinagar in the Garhwal district of United Pro-\(\text{v}i\)nce). This inscription moreover mentions a new measure, namely ‘*nālikāvāpa’*.\(^{157}\)

\(^{157}\) *IA*, XI, p. 337 ff.
CHAPTER IV

Weights and Measures

There are some scattered references to weights and measures in the inscriptions of the period, which are not much helpful in forming a clear idea of the system or systems on which they were based. Some of the weights mentioned may have been of local use, though for purposes of trade their equivalence with similar weights current in other parts of the country during the period was well known. Some of the weights, known from epigraphic sources, are also found included in standard tables contained in relevant Sanskrit texts.

Karsha

Mention may first be made of the term ‘karsha’, which is used in a few inscriptions as a measure of weight for oil and clarified butter.¹ In Sanskrit texts it is generally used not as a measure of weight for the articles mentioned, but for metals like gold, silver and copper.² It is also used as a coin denomination (kārshāpana), meaning a coin weighing one karsha in weight.³ In Śukra’s Nītisāra⁴ a table of weights is given, which shows:—

<table>
<thead>
<tr>
<th>10 gunja</th>
<th>= 1 māsha</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 māshas</td>
<td>= 1 karsha</td>
</tr>
<tr>
<td>10 karshas</td>
<td>= 1 pādārdha</td>
</tr>
<tr>
<td>10 pādārdhas</td>
<td>= 1 prastha</td>
</tr>
<tr>
<td>5 prasthas</td>
<td>= 1 āḍhaka</td>
</tr>
<tr>
<td>8 āḍhakas</td>
<td>= 1 armaṇa</td>
</tr>
<tr>
<td>20 armaṇas</td>
<td>= 1 khārikā, etc.</td>
</tr>
</tbody>
</table>

² Manu, VIII, 132; Br̥ih, X, 13-15; Arth, II, 19, p. 213 ff.
³ See, Chapter on currency.
⁴ Śukra, II, 775-8.
But it is not explicitly stated whether it was a table of weight for gold, silver and copper, or agricultural commodities. However, in one place Śukra\(^6\) uses it as a measure of weight for rice (one karsha amount of rice). Thus the use of karsha as a measure of weight for metals as well as certain agricultural and other commodities was current.

**Kalaśa**

Reference to a weight called 'kalaśa' is found in the Janvara inscription of the Chāhamāna Gaja Singhadeva and Kelhaṇadeva (V. S. 1218)\(^6\) and also in the Bhinmal stone inscription of Udayasimhadeva (V. S. 1306).\(^7\) In the former it is used as a weight for oil, and in the latter as a weight for ghee (butter). In the Nitisāra\(^8\) it is used in the sense of a pitcher. There is hardly any table of weight which mentions it. Probably a standard pitcher was used as a measure of weight for ghee and oil.

**Palikā and Pali**

Another weight denomination for liquids like ghee, oil, etc. is 'palikā' mentioned in some inscriptions, such as the Rājor inscription,\(^9\) the Partabgarh inscription\(^10\) and some other inscriptions including those of Vaśilabhaṭṭasvāmin Temple at Gwalior,\(^11\) Arthuna inscription,\(^12\) etc. In the Mathura Praśasti of the reign of Vijayapāla\(^13\) and also in the Anavada stone inscription of Sāraṅgadeva\(^14\) the word used as a weight of oil and ghee is 'pali' and not 'palikā'. The two words probably denote

---

\(^5\) Śukra, IV, 5, 483.  
\(^6\) El, I, p. 277 ff and p. 277 n. 27.  
\(^7\) JASB, XII, p. 101 ff.  
\(^8\) Śukra, IV, 4, 275-8, p. 175.  
\(^9\) El, III, p. 263 ff.  
\(^10\) Ibid, XIV, p. 176 ff.  
\(^12\) Ibid, XIV, p. 295 ff.  
\(^13\) Ibid, I, p. 287 ff.  
\(^14\) IA, XLI, p. 20 ff.
the same weight. Pandit G. H. Ojha,\(^\text{15}\) points out that the weight *palikā* is commonly called *palā* or *palā* which is a measure of capacity, approximating to six tolas.

**Pala**

*Pala* is the name of another weight. According to Alberuni,\(^\text{16}\) the weight *pala* was much used in all the business dealings in India, but the word signified different weights for different wares. The weights were also different in different provinces. This word occurs in the Partabgarh inscription\(^\text{17}\) where it denotes a weight for saffron and betel-nuts, and also for *'pedda'* (the meaning of this word is not known). In an inscription of the time of Allaṭa of Mewar\(^\text{18}\) it is used as a measure of oil. In the Nītisāra of Śukra,\(^\text{19}\) in one place it is used as a weight for *'svavarchi salt'*; sulphur and charcoal. But it is not mentioned in the table of weights given by Śukra.

*Pala* was in fact a standard weight for weighing foodcrops, edibles and other different articles. In the Manu-smṛiti\(^\text{20}\) and Yājñavalkya-smṛiti\(^\text{21}\) *pala* is used as a weight for gold and copper. The Nārada-smṛiti also refers to this weight. In the Gaṇitasārasaṅgraha *pala* is used as a weight for gold and other metals.\(^\text{22}\) It is also used as a weight in the medical *Saṁhitā* of Sāraṅgadhara. Varāhamihira\(^\text{23}\) used the word as a measure of dry as well as liquid substances. In the Rājatarangini\(^\text{24}\) it is used as a measure of grape-juice and wool.

\(^{15}\) *EI*, XIV, p. 176 ff.
\(^{16}\) *Indica*, I, p. 163 ff.
\(^{17}\) *EI*, XIV, p. 176 ff.
\(^{18}\) *IA*, VIII, p. 161 ff.
\(^{19}\) *Śukra*, IV, 7, 400-404, p. 236.
\(^{20}\) *Manu*, VIII, 132.
\(^{21}\) Yājñ, I, 361.
\(^{22}\) i, 42-44.
\(^{24}\) Rājat, VII, 1220, 1221.
Ādhaka

Another measure of weight, found in inscriptions is ‘ādhaka’. In the Bijapur inscription, ādhaka is used as a measure of weight for wheat and barley, and in another inscription as a measure of grain. It appears from the evidences quoted, that ādhaka was a measure of weight for grains like wheat and barley. It was regarded as a standard weight and is mentioned in some of the Purāṇas, the Gaṅitasāra and the Arthashastra of Kauṭilya. There is a general agreement among the authorities, mentioned above, regarding the equation between prastha and ādhaka on the one hand, and between ādhaka and droṇa on the other. It appears from their evidence that 4 prasthas = 1 ādhaka; 4 ādhakas = 1 droṇa. The table of weights, given by Śukra, differs slightly. According to him an ādhaka is equal to 5 prasthas.

Droṇa

Reference may now be made to another standard weight, namely ‘droṇa’. It is used in one of the Praśastis of Baijnath as a weight for grains and seed-corn, and also as a measure of weight for wheat, muṅg, barley, salt, rāla and such other objects ‘as can be measured’. In some Gwalior inscriptions it is explicitly stated that the word ‘droṇa’ used there meant the weight as current in the locality concerned (Gopagiriya-mūpyena). This shows that even though a term may have been used in different parts of the country, it did not necessarily mean a common standard. It is mentioned by many Smṛiti writers, and its equation with ādhaka is shown by

26 IA, LVIII, p. 161.
27 Arth, II, 19, p. 213 ff.
28 Varāhamihira also hold a similar view.
29 Śukra, II, 775-6, p. 97.
31 ibid, I, p. 154 ff.
most of them. From the Arthaśāstra of Kauṭilya\footnote{Arth. II, 19, p. 123 ff.} it appears that four kinds of droṇas, namely, those containing 162\(\frac{1}{2}\), 175, 187\(\frac{1}{2}\) and 200 palas respectively were in use. Dr. Pran Nath\footnote{Pran Nath, A Study in the Economic Condition of Ancient India, p. 75.} remarks: "The uniform difference of 12\(\frac{1}{2}\) palas between each of these droṇas is very remarkable, and was no doubt intended to serve some definite purpose. The use of the different varieties of the same (nominal) measures of weight has evidently been established from ancient times in India; and perhaps we find a perpetuation of such a system in the different sections of the same market at the present day". Dr. Pran Nath further refers to a fifth variety of droṇa, used in works of law and medicine, containing 256 palas. In the Chauhān inscriptions mention is made of kumāra-droṇa and droṇi. The meaning of the former is not clear. Probably it was a bigger measure than droṇa as 1 droṇi was equal to 4 droṇas.\footnote{Cf. Sharma, Early Chauhān Dynasties, pp. 181 ff.}

\textit{Khāri}

'Khāri' is frequently mentioned in inscriptions and literature. It is used in the sense of a weight for grain in a grant of Soma-varma-deva and Āsaṭādeva\footnote{ASR, 1902-3, p. 258 ff.} and also in the Rājataraṅgiṇī.\footnote{Rājat, VII, 1220.} In some old Sanskrit texts it is shown as equivalent to droṇa. Thus according to the Arthaśāstra,\footnote{Arth. II, 19, p. 213 ff.; cf. CII, IV, p. 195 n 1.} 16 droṇas=1 khāri. This standard occurs in some Purāṇas but the above equation of khāri to droṇa is not accepted by all.\footnote{Cf. Śukra, II, 777-8, p. 97.} According to Jivāśarman 20 droṇas=1 khāri. In the medical Sarāṅgadvīpa of Sāraṅgadhrā 1 khāri is shown as equivalent to 4 droṇas.\footnote{Barnett, Antiquities of India, p. 208 ff.} In this context reference may be made to the word ‘dōṇakāri’ found...
in the Patanarayana stone inscription\textsuperscript{40} as elsewhere mentioned. Its meaning is not definitely known. As suggested by the editor of the inscription, it may correspond to the Mārvarī word ‘doli’, otherwise the expression, as it is, may be taken as comprising two words ‘droṇa’ and ‘khāri’ which respectively mean 32 and 96 seers.

\textit{Goṇī}

The word ‘goṇīprāṣṭi’ occurs in the solitary Mathura Prāṣasti of the reign of Vijayapāla.\textsuperscript{41} Colebrooke\textsuperscript{42} explains ‘goṇī’ as a large measure equal to 4 \textit{khāris} and ‘prāṣṭi’ as a handful equal to 2 \textit{palas}.

\textit{Māṇī}

In the Partabgarh inscription\textsuperscript{48} the word ‘māṇī’ is used as a measure of seed. In a slightly variant form (\textit{māṇa}) the same term seems to be present in the Bhīmāl stone inscription.\textsuperscript{44} In the table of weights, given by Mahāvīra, one of the terms used is ‘māṇī’.\textsuperscript{45} It is not clear whether the three terms (\textit{māṇī, māṇa,} and \textit{māṇi}) are identical in meaning. Mahāvīra has tried to establish an equation between \textit{droṇa} and \textit{māṇi} on the one hand, and \textit{māṇi} and \textit{khāri} on the other.\textsuperscript{46} According to Pandit G. H. Ojha, \textit{māṇī} is a local measure of 12 maunds.\textsuperscript{47} According to Bühler a \textit{māṇa} is commonly called a maund.\textsuperscript{48}

\textit{Seī}

Few inscriptions of the period are acquainted with another weight denomination viz. \textit{seī}. It is used in the Manglana stone inscrip-

\textsuperscript{40} IA, XLV, p. 77 ff.
\textsuperscript{41} EI, I, 287 ff.
\textsuperscript{42} H. C. Colebrooke, \textit{Miscellaneous Essays}, I, p. 537.
\textsuperscript{43} EI, XIV, p. 176 ff.
\textsuperscript{44} ibid, XI, p. 55 ff.
\textsuperscript{46} According to Mahāvīra, 4 \textit{droṇas}=1 \textit{māṇi}=1 \textit{khāri}.
\textsuperscript{47} See, EI, XIV, p. 176 ff.
\textsuperscript{48} EI, I, p. 277 n. 31; cf., Indica, Vol. I, p. 163.
tion 49 as a weight for korada corn. The word seī also occurs in the Bhinmāl stone inscription 50 and Lālrāī stone inscription of Lakhaṇapāla and Abhayapāla. 51 In the former it is used as a weight of wheat and in the latter of barley corn. Pandit Rama Karna attempts to prove that seī is a measure of weight, equivalent to nearly 15 seers. 52 From the table, quoted by D. R. Bhandarkar, it may appear that 1 seī = 4 mānās. 53

Pāilā

The word 'pāilā' occurs in the Sunak grant of the Chaulukya king Karna I. 54 Bühler identified it with modern 'pāyali' 'a measure of 4 seers' (or 4.8 pounds). The word 'pāyali' or 'pāyāla' occurs in the Bhinmāl stone inscription of Udayasimhadeva (V. S. 1306). 55 The view that 'a pāyali measures 4 seers' has not been accepted by Padmanath Bhattacharya, 56 who equates it with a measure of corn current in certain parts of Sylhet, specially in the great rice producing pargana, Bāniyāchang. According to his view 7 1/2 seers = 1 pūrā; 16 pūrās = 1 bhūtā; 16 bhūtās = 1 pāilā = 7 1/2 × 16 × 16 ÷ 40 seers = 16 maunds. Thus a pāilā is roughly equivalent to 16 maunds. According to D. R. Bhandarkar, 57 4 pāilās = 1 pāyali. J. J. Modi holds that the word pāilā is the same as 'pallu' or 'pallo' of Gujarāt, which represents 6 1/2 maunds. 58 The word 'pāilā' occurs in two inscriptions

49 IA, XLI, p. 85 ff.
50 EI, XI, p. 55 ff.
51 ibid, XI, p. 50 ff.
52 IA, XLI, p. 85 ff.

4 pāilās = 1 pāyali,
5 pāyali = 1 mānā,
4 mānās = 1 seī
2 seīs = 1 maṇ.

54 EI, I, p. 316 ff.
55 ibid, XI, p. 55 ff.
56 IA, LII, p. 18.
57 EI, XI, p. 41 ff, See fn, 53 above for the table.
58 IA, LII, p. 249 ff.
of Rāyapāla. On the basis of the table, furnished by D. R. Bhandarkar, an equation can be attempted between pāllā and the other weights, such as māṇā and seī, discussed above.

Hāraka

The word 'hāraka' denotes a certain kind of measure of barley corn and is mentioned in the Lālrāi stone inscription of Kelhanadeva (V. S. 1233), Sevāḍī stone inscription of Aśvarāja (V. S. 1167), etc. Most probably it was a local measure. According to Dr. Bhandarkar, hāraka seems to be the same as the Marāṭhī word 'hāra', a large basket of a particular form and of loose texture, often used in measuring corn. Hāraka is also used as a measure of barley in the Arthuna inscription.

Bharaka

'Bharaka' is a measure of weight of candid sugar, Bengal madder, thread, cocoanuts, cotton, etc. as mentioned in the Arthuna inscription. In the Bijapur inscription we come across the weight 'bhārā'. It is used in connection with articles like cotton, copper, gum-resin, saffron, madder and so forth. Probably they denoted the same weight.

Kūṭaka

In the Harsha stone inscription 'kūṭaka' appears as a measure of salt. According to Dr. Bhandarkar this corresponded to the Marāṭhī word 'kuḍa', a measure of capacity.

59 EI, XI, pp. 41-42.
60 See fn 53, above p. 114.
61 EI, XI, p. 49 ff.
62 ibid, XI. p. 28 ff.
63 ibid, XIV, p. 295 ff.
64 ibid.
65 ibid, X, p. 17 ff.
66 IA, XLII, p. 57 ff; EI, II, p. 116 ff.
Hāele

In the Sāṇḍerāv stone inscription⁶⁷ we come across the word ‘hāele’. In that record, it seems to denote a measure of weight of yugamdhari. But Dr. Bhandarkar thinks, as we have noted elsewhere, that the word hāele stands for hala, a land-measure.⁶⁸

We may be warranted in inferring that articles of standard sizes capable of containing specific quantities or measures were in vogue. For example, carts of fixed size and capacity may have been used.⁶⁹ These probably carried specific measures of loads, which were known to the people concerned. It may be presumed that their signification was so well known that the specific mention of the quantity itself was not required. It is also likely that there was an approximate idea as to the standard weight of the load that could be carried by a bullock.⁷⁰ Use of vessels of standard sizes can also be inferred.⁷¹ These are used as substitutes for measures occasionally left unspecified. In this connection mention may be made of the expression ‘ghaṭaka-kūpaka’.⁷² Ghaṭaka means a jar, a pitcher, which is taken to denote a measure in terms of dṛṇas; and kūpaka, a leather oil vessel.

From what we have seen it appears that there was no uniform standard of weight used throughout India. As Dr. Barnett concludes, ‘different ages and provinces followed different standards.’ The Śukra Nitisāra admits that “these measures differ with countries”. Prof. Rapson remarks:⁷⁵ “The fact would appear to be that in ancient India as in modern India, very great diversity prevailed in the weight-systems of different districts, but that underlying this diversity there were certain general principles of very wide, if not of universal application.”

⁶⁷ El, XI, p. 46 ff.
⁶⁸ ibid. See chapter on ‘Land Measurement’.
⁶⁹ See, El, X, p. 17 ff; XI, p. 42 ff; IA, XL1, p. 20 ff.
⁷⁰ See, El, XIV, p. 295.
⁷¹ Cf. Śukra, II, 779-780, p. 97.
⁷³ Barnett, Antiquities of India, p. 206.
⁷⁴ Śukra, II, 775-8, p. 97.
⁷⁵ Rapson, Catalogue of Coins of the Andhra Dynasty, p. cixxxi.
CHAPTER V

Towns and Town-Planning

EVIDENCES, both inscriptional and literary, refer to a number of cities in North India as built near a sea or a river. From Al Idrisi\textsuperscript{1} we come to know that Dur (Alor), Kālari, Tubarān (Turān), Sindān, Fandarina were all situated on the banks of rivers. Cambay stood three miles from the sea, and Subāra one and a half mile. Somnath is described as being situated on the shore of the sea being actually washed by its waves. Kīrigrāma was situated on the river Kandukābindukā (the modern Binwā, a tributary of the Beas),\textsuperscript{2} the town of Chaḍobha (Dubkund) stood on the left bank of the Kumun river\textsuperscript{3} and the town of Tripurī on the bank of the Narmada.\textsuperscript{4} Neighbourhood of a river or sea provided natural advantages and opportunities for the growth of trade.

Sometimes the existence of a famous temple or a group of temples in a city contributed to its prosperity. Among the most important of such cities were Multan, Somnath, Benares and Mathura. The Vasantagaḍh inscription of Pūrṇapāla (V. S. 1099)\textsuperscript{5} mentions that the ancient town of Vaṭa (Vaṭa-nagara) was famous for its temples. From the ruins at Jagdalpur, it will appear that this place must have risen to importance for its temples leading to its recognition as the chief town of the old Bastar state.\textsuperscript{6} Towns and cities along the main or subsidiary trade-routes easily developed into commercial centres. Innumerable references to cities flourishing along such routes are found in the writings of Muslim historians.\textsuperscript{7}

\textsuperscript{1} HIED, I, pp. 76-86.
\textsuperscript{2} EI, I, p. 97 ff.
\textsuperscript{3} \textit{ibid}, II, p. 232 ff.
\textsuperscript{4} \textit{ibid}. XIX, p. 295 ff.
\textsuperscript{5} \textit{ibid}, IX, p. 10 ff.
\textsuperscript{6} \textit{ibid}, IX, p. 160 ff.
\textsuperscript{7} See, HIED, I. Accounts of Al Istakhri, Al Masūdī, Ibn Haukal, Al Idrisi, etc.; \textit{Indica}, Vols. I and II; W. Ouseley, The Oriental Geography of Ibn Haukal.
Some important towns and cities

Of the numerous towns and many cities which must have been in existence during the period, names of some only are available, including Gauḍa in North Bengal, which continued to flourish for several centuries. Another important city was Vardhamānapura, once the capital of Kāntideva, which may be indentified with modern Burdwan in West Bengal. Vaṭaparvatika is modern Vateśvar-parvat near Pathighata in the Bhagalpur district. Vilāsapura cannot be satisfactorily identified. It may be located somewhere on the Ganges. Haradhāma is regarded by R. D. Banerji as the victorious camp of Vighrāhapāla III, from where he issued his Āngāchhī grant. Sahasaganda is mentioned in the plate of Mahāpāla I (regnal year 5) and Kančhanapura in the Bangaon plate of Vighrāhapāla III. The identification of these two places is not certain. The first known capital of the Pālas in Bengal was founded by Rāmapāla, and was known as Rāmāvatī mentioned in the Manahali record of Madanapāla and the Rāmacharita of Sandhyākara Nandi. This is identified with the city of Ramauti of the Ā’in i-Akbarī. It was situated at the junction of the Karatoyā and the Ganges. The Sena kings of Bengal had their capital at Lakṣhmanaṭavi. The name is connected with the memory of the Sena king Lakṣhmanapāsaṇa. It was the Lakhnauti of the Muhammadan writers. It was situated on the banks of the Ganges, close to its junction with the Mahānanda, about 25 miles below Rājmahal. Vijayapura was regarded as the official capital (rājadhāni) of the Sena kings.

8 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 118.
9 PIHC, 1951, p. 319 ff.
10 Majumdar, History of Bengal, p. 32.
11 EI, XXIX, p. 9 ff.
12 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 154.
13 EI, XXIX, p. 1 ff.
15 Rāmacharita, V, 32.
18 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 119.
of Bengal, and it is located in the region of Triveṇī in the Northern part of the Hooghly district. The most important capital of the Chandra, Varman and Sena kings in East Bengal seems to have been Vikramapura, in the district of Dacca. Many inscriptions, were issued from here. The capital of the Kāṃbojas was Priyaṅgu. The Irdā grant was issued from here. Nadiyā was another capital of the Sena kings of Bengal. It is referred to in the Tabaqāt-i-Nāsirī, as the residence of the royal family during the reign of Lakshmanasena.

Alor is mentioned by Masʻūdī, Ibn Khurdādbī, Al Istakhri and Al Idrisi. It was for a long time the capital of the rich and powerful kingdom of 'Upper Sind. Amhal, Famhal, Kamhal, Mamhal are the different forms of the name of a city, which is said to have been situated on the 'border of Sind' and is mentioned by most of the Muslim writers in one form or other. Armā-bel has been described by Al Idrisi as 'well populated' and its environs were pleasant. Its inhabitants were rich. Elliot identifies it with the modern Bela, the capital of the province of Las. Other writers have also mentioned it. Al Istakhri refers to Bāniya as a city of Sind, and Al Idrisi says it is a little town. 'The inhabitants are rich. Living here is cheap and agreeable'. Elliot believes that Bhāṭī, mentioned by Alberuni, and Bāṭīya in the Chach-nāma, are variant spellings of the same name. Brāhmaṇābād was the capital of Lower Sind before the Arab conquest. According to Alberuni, the old name of the place was

---

19 Sen, Some Historical Aspects of the Inscriptions of Bengal, pp. 117-8.
20 ibid, pp. 2, 83, 84, 86, 88, 96, 371, 373, 409-11, 420, 437, 467, 474, 567, etc.
21 ibid, p. 380 ff. For names of other well organised towns see ibid, p. 494.
22 ibid, p. 66, 147.
24 HIED, I, pp. 28, 39, 79.
25 ibid, I, pp. 364-5.
26 ibid, I, pp. 367-8.
27 ibid, I, p. 369 ff; Cunningham, Ancient Geography, pp. 306-20.
Brhmanu. Dr. Smith places it within four miles of Thatta, corresponding to Pattala. According to Elliot it was situated on the eastern side of the Indus. Jandrud\textsuperscript{28} has been located by Al Idrisi at a distance of one mile from Multan. It is also mentioned by other Muslim writers.

Khajuraho\textsuperscript{29} was the capital of the Chandellas of Bundelkhand. According to Abū Rihān, Narāna was 25 parasangs to the north of Chitor in Mewar, 50 parasangs to the east of Multan and 60 parasangs to the north-east of Añhilwara.\textsuperscript{30} The capital of Gujarat was Anahilapātaka, modern Paṭṭan or Paṭan, 66 miles north of Ahmedabad. Muhammadan writers refer to it as Nehrwal.\textsuperscript{31} It was the capital under the Solāṅkis, the Muhammads, etc. The city was prosperous and very thickly populated. It was also a great emporium of trade. The Kumārapālacharita informs us that there were eighty-four marts in the city. According to Fleet Ānandapurā is modern Ānand, 25 miles south-east of Kaira. Burgess identifies it with Ānandapura of Kathiawad situated about 25 miles north-west of Wala. Others identify it with modern Vadnagar in North Gujarat.\textsuperscript{32} Karpatavanijja corresponds to modern Kapadway. It lay on the trade-route from central India to the coast. In the Solāṅki period the town was transformed into a fort by Siddharāja Jayasimha. Darbhavati is represented by modern Dabhoi, 40 miles north-east of Broach and 20 miles south-east of Baroda. Burgess holds that it was during the reign of Siddharāja Jayasimha (1094-1143) that Darbhavati was converted into a frontier fortress. Dhandalpura was 12 miles east of Chothia. It is claimed to be the birth place of Siddharāja Jayasimha. Navasārika is to be identified with modern Naosari. During Chaulukya rule in Gujarat it became a place of importance. Dr. Bhagavanlal Indrajii thinks that it was the capital of the Gurjara Chaulukyas. It was a town of great antiquity and is mentioned by Ptolemy

\textsuperscript{28} HIED, I, p. 380.
\textsuperscript{29} ibid, I, pp. 383-4.
\textsuperscript{30} ibid, I, pp. 393-6.
\textsuperscript{32} IA, LIV, p. 1 ff.
as Nonsaripa. Pilgrims to Prabhāsa had to pass Bahuloda which was a frontier town. It was here that a pilgrim tax was levied. On one occasion we are told that the amount of pilgrim tax reached a total of 72 lakhs. Forbes suggests that this Bahuloda must be the same as Bhaloda, a ford on the Narmada river, near its mouth, a little above Suklatirtha. It was situated somewhere on the boundary between north Gujarat and Kathiawad. Altekar identifies Bhumilliaka with the fort of Bhumli or Ghumli situated in the Barada hill, 25 miles north-west of Porbunder. It was the capital of the Mers in the 9th century A.D. The fortunes of the kingdom declined from the 10th century A.D. with the establishment of the Ahir supremacy there. In honour of Siddharāja a city was called Siddhapura. It rose to importance during the time of Mūlarāja.

Mention may also be made of the names of some other towns and cities of Sind and Western India, as gathered from Muslim sources, including Sindapur, Bana, Kandarina, Jirbatan, Kalkayan, Basmand, Bānīa, etc.

Names of some ancient towns and cities are available from the itinerary of Alberuni and also from the narratives of Sultan Mahmud’s expedition into India. These include Kanauj, Bārī, Mathura, Thaneswar, Abhāpurī, Kuraha, Barhamshil, Prayāga, Arku-tīrtha, Banārasī, Pātaliputra, Mungīrī (Monghyr), Janpa, Dugumpur (Hodiwalā identifies it with Vikrampur of Bengal), Dugum (same as Dagon on the bank of the Sarju, about 4 miles of Nahpara station), Shilahat (Sylhet), Bihat, Tilwat, Dahāla, Dhār, Nagarkot, Lohakot, Kirat, Nur, Lahore etc. Mention may also be made of Ujjain, Mandapa, Maheśvara, Udayapura, Bhojapura, Vardhamānapura, Harshapura, Narmadapura, Candrapuri, Rājabrahmapuri, Brahmapuri, Devapalapura, Nalakacchhapura, Ghargun, Bijagar, Hindiya, Bhilsa,

33 *HIED*, LIV, p. 1 ff.
34 *IA*, LIV, p. 1 ff.
35 *HIED*, I, pp. 27-30; 34-40; 76-86.
Sengama, Gogasthanā.37 Satyapura, Kanyānayana, Bhīnmāl, Phalavaradhiṅkā and Abu were sacred sites in the Chauhān dominions.38 Kalhaṇa gives a few names of important towns such as, Śrīnagarā, Vallapura, Rājapurī, Varahmul, Mārtāṇḍa Hushkapura, Suyapura, etc.39

The list of towns and cities and sites of ancient India furnished by epigraphical sources, includes Dhālopa,40 Vaṭa,41 Śrīmāla,42 Karṇaṅvatī,43 Bhogavatī,44 Sīhāwā,45 Udayapura,46 Mallāla,47 Kulāṅchā,48 Jagdalpur,49 Tuṁmāna;50 Vodāmayūtā,51 Ratnapura,52 Padmāvatī,53 Yaśovarmapura,54 Priyaṅgu,55 Simhapura,56 Tattānadhapura,57 Vishṇupura, Janakadevīpura,58 Prithūdaka,59 etc.

Town-Planning

Capitals were to be built on prescribed patterns. The capital was to be set up in a place, abounding in trees, plants, shrubs and

38 Sharma, Early Chauhān Dynasties, p. 296 ff.
39 Rājaṭ, Vols. I & II.
40 El, XI, p. 37 ff; Dhālopa modern village of the same name, 4 miles S. W. of Nadol; cf. Ray, 'Dynastic History of Northern India, II, p. 1112 n. 3.
41 El, IX, p. 10 ff.
42 ibid, XXII, p. 196 ff.
43 Ray, Dynastic History of Northern India, II, p. 1061.
44 El, X, p. 35 ff.
45 ibid, IX, p. 182 ff.
46 IA, XVIII, p. 341 ff.
47 El, I, p. 39 ff; Mallala (modern Malhār).
48 ibid, XXIV, p. 401 ff.
49 ibid, IX, p. 160 ff.
50 ibid, XXI, p. 159 ff.
51 ibid, I, p. 62 ff.
52 ibid, I, p. 32 ff; p. 251 ff.
53 ibid, I, p. 147 ff.
54 IA, XVII, p. 307 ff.
55 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 380.
56 ibid, pp. 74-75, 407-8.
57 El, XIX, p. 52 ff.
58 ibid, II, p. 358 ff.
other resources, with good sources of water and supplies of grain, astir with the movements of boats up the seas, and which should not be very remote from the hills.\textsuperscript{60} According to Bhoja, "the royal capital should be so many ‘rājakshetra squares’,\textsuperscript{61} as denoted by the number of the particular moment (lagna) at which the king, for whom the capital was going to be built, was born".\textsuperscript{62} In some of the Purāṇas hard and fast rules are laid down regarding the area of a town. The Brahmāṇḍa Purāṇa, for instance, suggests that the natural forts should be 8 yojanas long and 4 yojanas broad. According to the Agni Purāṇa the area of the town should extend over 8 or 4 miles square. It need not be supposed that all such rules were minutely followed. Aṉahilapura was 12 croś (or 24 miles?) in circuit.\textsuperscript{63} "(Judging) from the present ruins of Gaur it may be surmised that the city (Gaur) on the old bank of the Ganges was about 15 miles in length and 2 or 3 miles in breadth"\textsuperscript{64}. The town of Ayodhya was 12 yojanas in length and 3 yojanas in breadth, as stated in the Rāmāyaṇa, and the extended and reconstructed town of Dvārakā was 12 by 18 yojanas in area, as specified in the Harivarṇa.\textsuperscript{65} But the area of Mānsurah was about a mile long and a mile broad and that of Multān was half the size of Mānsurah.\textsuperscript{66}

There are special rules regarding the distribution of quarters for different purposes and among different classes. Thus, as the Yuktikalpataru suggests, the sites in the centre should be reserved for the nobility, the physicians, astrologers, and the pious men. The extreme border of the city is to be reserved for the mlechchhas, the low-born, soldiers and sentinels. The barracks of the soldiers should be pitched by the side of the town gate; the ministers and councillors should have their quarters in their neighbourhood. The quarters of the officials should be distributed

\textsuperscript{60} Śukrā, I, 425-28, p. 28.
\textsuperscript{61} Yuktikalpataru, Op. Cit.
\textsuperscript{62} Cf, Dutt, \textit{Town Planning}, pp. 62-3.
\textsuperscript{63} Burgess, \textit{Architectural Antiquities of North Gujarat}, p. 34 ff; FRM, pp. 192-3.
\textsuperscript{64} Sen, \textit{Some Historical Aspects of the Inscriptions of Bengal}, p. 119.
\textsuperscript{65} Dutt, Op. Cit., p. 65.
\textsuperscript{66} Yuktikalpataru, Op. Cit.
throughout the city, but these should be at a distance from those of ministers. The king should not allow the low-born and those attacked with infectious diseases, and also enemies to live near his palace.\textsuperscript{65}

The scheme of town-planning, offered by Lakshmīdhara, the prime minister of King Govindachandra of the Gāhāḍavāla dynasty of Kanauj, requires that a temple must stand in the centre and that in the square, surrounding it, the king’s palace with its out-houses should be built. Next to it, are to be located the house of the chief judge and the courts of law. To the south of the palace the king should build the treasury, the elephant-stables and the arsenals. These should face east. To the north of it, i.e. to the left of it should be built the royal kitchen (mahānāsa), the quarters of the royal chaplain (purodhā), the minister and the royal physician. The author introduces some rules regarding the erection of public and private buildings in the city. Thus Lakshmīdhara’s rules of planning apply mainly to the construction of the palace and the buildings of important personages and important offices. His references to public and private buildings are not exhaustive.

The account given by Šukra,\textsuperscript{68} is on the whole far more exhaustive than that furnished either by King Bhoja of Dhārā or Lakshmīdhara. He provides for the Sabhā or the Council House in the centre of the capital and the royal palace in the midst of the council-buildings. To the north of the palace, the king should locate the court and the šilpa šālā. The houses of ministers, clerks, councillors and high officers should be located towards the north of the palace, after leaving a space of 100 cubits. These buildings should be separate from one another. Šukra also tries to maintain an order in the allocation of buildings of the military personages. The site for military cantonment should be 200 cubits away from the royal palace, either to the north or to the east. Their houses should be built in the following order. First, those of the important personages, then the ordinary people, next, the officers, then the commanders of the army, then

\textsuperscript{67} Lakshmi, p. 63 ff.
\textsuperscript{68} Šukra, I, 431-512, pp. 29-34.
the infantry, then the cavalry, the attendants of horses and elephants, next buildings for guns and ordnances, mares and constabulary and sentry thereafter, Lastly foresters. Sites for the dwellings of citizens should be determined by considerations of 'wealth and birth'.

Instances of planned towns

The plan of the town of Anahilapura, as it appears in the Kumārapālacharita, seems to tally, to some extent, with the plans discussed above. This account of Anahilapura describes the city's glories in the middle of the 12th century A.D. "Anahilapura", it says, "was twelve croś in circuit, within which are many temples and colleges; eighty-four chauks or squares; eighty-four bazar or market places with mints for gold and silver coinage. Each class had its separate mahalla or quarters, as had each description of merchandise, i.e., hathīdānt or elephants' tusks, silks, purples, diamonds, pearls, etc. Each had its separate chauk. There was one bazar for sarrafs or money changers; one for perfumes and unguents; one for physicians; one for artisans; one for goldsmiths; one for silversmiths; there were distinct mahallas for navigators, for bards and for genealogists. The eighteen varṇas or castes inhabited the city. The palace groaned with a multitude of separate buildings—for armoury, for elephants, horses and chariots, for the public accountants and officers of state. Each kind of goods had its separate mandavi or mart, where the duties of export, import and sale were collected; as for spices, fruits, drugs, camphor, metals and every thing costly of home or foreign growth. It is a place of universal commerce . . . . There are many Jaina temples and on the banks of a lake is a shrine to Sahasralīṅga Mahādeva. The population delights in the midst of the groves of champaka, pauaļ, tal (palmyra), jambu (rose-apple), sandal trees etc. with variegated creepers and fountains . . . ." ⁶⁹

Regarding the town of Mathura, it is said that on both sides of the city there were a thousand houses, to which idol temples were attached, all strengthened from top to bottom by rivets of

iron, and all made of masonry work, and opposite to them were other buildings, supported by broad wooden pillars, to give them strength. In the middle of the city there was a temple, larger and firmer than the rest, which can neither be described nor painted". Rāmāvati in Bengal is described as a city of rows of palaces with plenty of gold therein. In the Bargaoon grant the city of Durjjāya has been described as impregnable where "the disc of the sun was hidden from view by the thousands of plastered turrets, which were rendered still wither by the nectar-like smiles of the love-drunk fair damsels standing on them". An inscription from Khajuraho records the name of the town, Padmāvati, which is said to be decorated with lofty palaces, built in an unprecedented manner and crowded with lofty rows of streets of palaces and full of bright palatial buildings. In the Ratnapur stone inscription of Jajalladeva, the city of Ratnapura is described as 'the city of (Kubera), the lord of riches; it is full of many-coloured sparkling jewels and hence like (the ocean) the abode of jewels; and since it is decorated with many temples, it looks like heaven'. From the Prthvīrāja-vijaya we learn that the capital of the Chauhāns was full of temples, multi-storeyed houses, step-wells, tanks and ṁapās.

Streets and their planning

As approaches to towns were made through streets, it was the duty of the king to see that they were well constructed. Śukra prohibits the construction of small lanes such as vīthis (small shopping alleys) and pādyaś (foot-ways) in the capital and also in large cities. On the other hand he recommends wide roads. According to him 'the best royal roads (rājamārgāḥ) are 30 cubits wide, the average 20 cubits and the worst royal roads are 15 cubits wide.' He further suggests that the ordinary roads (mārga) should be 10 cubits, the shopping lanes (vīthi) should

---

70 HIED, II, p. 44.
71 Rāmamārtha, V. 32 b.
72 Ṣī, I, p. 151.
73 ibid, I, p. 32 ff.; cf. ibid, I, p. 62 ff.
74 Canto V, Verses 119-190; cf, Sharma, Early Chauhān Dynasties, p. 297.
be 5 cubits and the footways (pādyas) 3 cubits wide. The number of streets running in a town or city should not be artificially restricted. There should be as many roads as the city requires. According to another text the largest city should have seventeen thoroughfares lengthwise and as many breadthwise; the average city four less and the worst to have only nine streets. Mayamata recommends the streets, from east to west, to be of an even number, such as 12, 10, 8, 6, 4 or 2 and as many, running from north to south. Or their number may be odd such as 11, 9, 7, 5, 3, or 1. Thus the foregoing discussion shows that the cities were classified and arranged according to the number and direction of streets. According to Dutt76 'The streets of India were arranged and planted according to what is known as the rectangular chess-board system of planning.' Lakshmīdhara77 presents a scheme of square-shaped town, one within another, with streets between. A remarkable feature of the towns of ancient India was the big boulevard circumscribing the city within its wall. Much attention was paid to the planning of streets in such a manner as to facilitate the flow of trade as well as traffic between the town and the country-side. It is recommended that the most direct thoroughfares should connect 'the city with the busiest and thickly populated portions of the outlying country'.78 Communication between the Pura and the Janapada must be maintained by well-built roads, and these were to be protected for the comfort and safety of travellers. Regular watch was to be kept by the police on village streets every night. Every egress out of and entry, into the village were to be examined. The roads were to be repaired.79 The open highway, leading from one town to another, was not to be less than 120 cubits wide, while the roads connecting villages were to be at least 80 cubits wide. These connecting roads as well as the principal roads of the towns formed the channels through which the main currents of commerce passed.

76 Śukra, I, 517-37, pp. 34-35.
76 Dutt, Town Planning, pp. 116-7.
77 Lakshmī, intro, p. 63 ff.
79 Śukra, 582-3; 585-6; p. 38.
Boundaries

In ancient times big towns like Ayodhya, Mathura, Pāṭaliputra were surrounded and encamped by walls. Regarding Pāṭaliputra Megasthenes writes to say that its “massive timber walls were defended by successive brick-lined moats filled with waters”.\(^{80}\) This ancient practice of putting walls round towns as boundaries remained in force for a long time. Lakshmīdhara, for instance, states that “the towns should be walled all around”.\(^{81}\) Śukra requires the walls to be guarded by “sentinels, protected behind the shrubs”.\(^{82}\) Sometimes these walls were very high. Mention is made of “the walls of the town of Bhatia of which the wings of the eagle could not surmount, and which was surrounded by the ocean, with a ditch of exceeding depth and breadth”.\(^{83}\) The walls of the city of Mathura were constructed of hard stone and those of Lakhnauti of hewn stone.\(^{84}\) Sometimes towns were protected in other ways. At Thaneswar, for instance, “beneath the city flowed a pure stream, the bottom of which was covered with large stones, and whose banks were “precipitous and sharp as the points of arrows”. At Asi, “around the fort”, there was impenetrable and dense jungle, “full of snakes which no enchanter could tame and so dark that even the rays of the full moon could not be discerned in it, there were broad and deep ditches all around”.\(^{85}\) The Prabhāvakacharita tells us that the fort of Ajmer was surrounded by a belt of thorn trees and bushes.\(^{86}\) The capital city Durjaya in Assam was encompassed by ramparts, furnished with a fence and “was provided with brilliant troops of warriors”. The four sides of the city of Śoṇitapura are said to have been protected by huge “flames of fire”.\(^{87}\)

\(^{80}\) Cf, Megasthenes’ account of Pāṭaliputra.
\(^{81}\) Lakshmī, intro, p. 63.
\(^{82}\) Śukra, I, 478-9, p. 32; cf, Dutt, Town Planning, p. 88.
\(^{83}\) HIED, II, p. 28.
\(^{84}\) ibid, II, p. 44; TIN, p. 556.
\(^{85}\) ibid, II, p. 44.
\(^{86}\) Sharma, Early Chauhān Dynasties, p. 297 ff.
\(^{87}\) Cf, Barua, A Cultural History of Assam, p. 72.
CHAPTER VI

Trade and Commerce

Indigenous evidence relating to the condition of trade during the period is extremely inadequate. It is to be largely supplemented by the information that can be gathered from the accounts left by travellers and chroniclers who came to India in the wake of Muslim invaders. Some of them, specially interested in trade, visited port after port, and other commercial towns. But there are some limitations in the accounts of these writers. None of them had the precision and commercial insight, possessed, for example, by the author of the Periplus of the Erythrean Sea. The accounts are neither exhaustive nor accurate in every way. The lists of exports and imports, furnished by them, are more or less in a scattered form. The details regarding ports are also not presented in a systematic manner. In some places the authors mix up the products of different parts of India, so that it is difficult to say which of the items mentioned by them belong distinctively to North India. Corruptions of Indian names constitute a practical difficulty in the identification of places mentioned. In spite of all these drawbacks the value of some of these accounts as contemporary sources cannot be over-estimated.

Ports

India’s ports were the channels through which she carried on her trade with the outside world. Circumstances, connected with the rise and fall of ports in the early mediaeval period, furnish interesting data pointing to shifting of trade-routes and consequent changes in the economic life of the people concerned. North Indian ports may be classified into three groups, viz., those lying close to the border of Sind, i.e., on or near the mouths of the Indus, those belonging to the sea-coast of Gujarat and those situated in Bengal and its neighbourhood. Some of
the ports mentioned by Muslim writers may be identified. The identifications of others are still uncertain.

The first port that may be noted here is Bhambūr, situated in Sind. It has been identified by Elliot² with the Barbaricum Emporium of the Periplus and the Barbari of Ptolemy. 'Its ruins skirt the water's edge for about a quarter of a mile, and covering a low hill almost surrounded by a plain of sand, a little to the right of the road from Karachi to Ghāro and about two miles from the latter place . . . .' This port has not, however, been mentioned by Arab writers of the 9th and 10th centuries. The port, that was known to the Arabs in the 8th century, was Debal, which was the chief port of the Indus when they invaded the lower part of Sind; but its existence in the earlier period as a town, if not as a port, cannot be denied for it is mentioned as having been captured during the Khalifet of Harunu-r-Rashid. Cunningham holds that the most westerly branch of the Indus once flowed past Bhambūr.² Its omission by the Arab writers in the 8th and 9th centuries may be due to the fact that it may not have been in a flourishing condition in the period. Scholars are divided in their opinion regarding the location of Debal;³ some are inclined to locate it near one of the mouths of the Indus somewhat distant from the sea in the interior.⁴ According to Elliot it is to be identified with modern Karachi.⁵ This identification has been rejected by many scholars.⁶ There are some

¹ HIED, I, p. 368; cf, Cunningham, Ancient Geography, pp. 337-9; Hodivala suggests an identification of Bhānbor with Manhābāri. It was known to lie at about two days' distance from Debal on the Ghāro channel, about twelve miles north-west of Lārāy Bandar—SIMH, p. 37 ff.
² Cunningham, Ancient Geography, p. 337 ff.
³ 'Daibul is situated on the eastern side of the river Mihran, on the sea-coast, . . . . . . ' The Oriental Geography of Ihn Haukal; cf, Index, pp. 59 and 65.
⁴ Briggs, IV, p. 404; See, HIED, I, p. 375 ff.
⁵ HIED, I, p. 375.
⁶ SIMH, p. 76 ff.
scholars, such as Burnes, Cunningham etc., who are inclined to place Debal between Karachi and Thatta. Its importance is emphasised by many contemporary writers. Ibn Haukal states that “the city of Debal is on the west of the Mihran, towards the sea. It is a large mart, and the port not only of this but neighbouring regions.” The prosperity of the city of Debal was due to the volume of trade which was conducted through its well-known port. We are informed by Al Idrisi that Debal was a populous place, where the vessels of Sind and other countries congregated. Trade here was carried on in a great variety of articles with efficiency and intelligence. Ships laden with the products of Umân (Oman) and the ships of China and India met at this port. Chinese vessels brought stuffs and other goods from China, and those of India, brought perfumes and aromatics. Debal is elsewhere described as a celebrated city “on the shore of the sea of Hind, an emporium where the rivers of Lahore and Multan discharge themselves into the salt sea”. Other sources also speak highly of the importance of the port of Debal which remained in a flourishing condition till the end of the 12th century. There is no mention of it by Ibn Baṭṭūta. Another port of this region, obviously not so important as Debal, was Lāhorī Bandar or Lārī Bandar mentioned by Alberuni as Loharānī and by Ibn Baṭṭūta as Lāharī. Some scholars hold that as the port of Debal decayed, it was probably superseded by Lāhorī Bandar,—a view which has not been accepted by others. Its importance was much less than that of Debal. Elliot admits that Lāhorī Bandar “is the next most probable site after Karachi”. Ibn Baṭṭūta describes it

7 HIED, I, p. 375 ff; Cunningham, Ancient Geography, pp. 340-46. Abul Fazl and later Muslim writers confounded Debal with Thatta. But this view is not accepted by Cunningham.
8 HIED, I, p. 37 and n, 2.
9 ibid, I, p. 77.
10 ibid, I, p. 377.
11 Indica, I, p. 208.
12 RIB, p. 10.
13 HIED, I, p. 378.
14 ibid, I, p. 377.
“as a handsome city on the shore of a big sea\textsuperscript{15} near which the Indus empties itself”. It is further stated that “two seas\textsuperscript{16} have their confluence near Lāharī which is a big port.” People from Yemen (Yaman), from Fārs and other countries used to visit this place. This led to an enormous increase of its revenue and was the cause of its great prosperity.\textsuperscript{17} Subsequently, this port was ruined and abandoned and the prominence, once enjoyed by it, came to the lot of Dhārāja, a port which lies a little to the east of Lāhorī.\textsuperscript{18}

In the Rās Mālā\textsuperscript{19} there are references to two ports both situated in Surāshṭra, namely Veraval and Somnātha-pattana. Some scholars are, however, inclined to hold the view that they are names of one and the same place. According to Postan\textsuperscript{20} the ‘old city of Pattan’ is to be located upon the projection of the ‘mainland forming the southern point of the small port and bay of Veraval.’ But there are others who believe that Somnath and Veraval were two different ports situated in close neighbourhood of each other.\textsuperscript{21} According to Ferishta the fortified city of Somnath was situated ‘on a narrow peninsula washed on three sides by the sea’.\textsuperscript{22} This place was famous not only for its temples but also for its maritime commerce. Alberuni says\textsuperscript{23} that the reason why Somnath became so famous was that it was a convenient station for ships plying between Sufāla and China. The port of Veraval is said to have been situated about two miles apart from Somnātha-pattana.\textsuperscript{24} It is the find-place of many inscriptions belonging to both ancient and mediaeval times.

\textsuperscript{15} 14 miles east of the Arabian Sea, north of the Rāhu creek.
\textsuperscript{16} The Rāhu creek and the Tumi creek.
\textsuperscript{17} \textit{RIB}, p. 10—A leading port of Sind in the 14th century. Now a village in the Karachi district, \textit{ibid}, p. 10 n. 1.
\textsuperscript{18} \textit{HIED}, I, p. 378.
\textsuperscript{19} \textit{FRM}, pp. 56, 189.
\textsuperscript{20} \textit{JRAIS}, 1838, p. 866 ff.
\textsuperscript{21} Cousens, \textit{Somnath and the Mediaeval Temples in Kathiawad}, p. 34.
\textsuperscript{22} Briggs, I, p. 69.
\textsuperscript{23} \textit{Indica}, Vol. II, p. 104.
\textsuperscript{24} Cousens, \textit{Somnath and the Mediaeval Temples in Kathiawad}, p. 34, n. 1.
The port of Goghā was of some importance under the Valabhīṣ and its influence dwindled with their decline but again it rose into prominence with the rise of the kingdom of Anahilapāṭaka. It was in ancient times one of the ports of Gundigaḍh. It is also mentioned by Ibn Batṭūta who locates it in the peninsula of Kathiawar on the Gulf of Cambay, 103 miles north-west of Bombay. It is described as a large city with a spacious market. Cambay was the principal port of Gujarat, which was the chief seat of Indian trade with the West for many centuries. Al Idrisi says that 'it is a country of India which touches upon Sind.' The port of the same name, according to him, stood three miles from the sea and was "very pretty" and well-known as a "naval station." Merchandise from every country was to be found here, and was sent on from here to other countries. It is placed at the extremity of a bay "where vessels could enter and cast anchor.........." Marco Polo calls it 'Kambāyat'. In the Rās Mālā this port of Cambay is called Stumbheteeth. In another work it is described as 'a principal port of Gujarat where many traders lived and as a highly flourishing place of power and importance'. Al Idrisi incidentally mentions the ports of Sindān and Sūbāra. He locates them south of Cambay. Both of them were ports of Gujarat. Regarding Sindān it is said that it was a mile and a half from the sea. It was populous, and the people were noted for their industry. The town was large and had an extensive commerce both in exports and imports. According to Abūl Fida "Sindān was also called Sindābūr." It was the last city of Gujarat and the first of Manībār (Malabar).

25 IA, III, p. 278 ff.
26 RIB, pp. 176-77; p. 176 n. 5.
27 HIED, I, p. 84.
29 FRM, p. 189.
30 Vasantavilasa-Mahākavya, p. VI.
31 HIED, I, p. 85.
32 Cf, HIED, I, pp. 402-3.
33 The suggestion put forward by Abūl Fida hardly in accordance with Alberuni and Rashid-ud-Din, cf, HIED, I, pp. 66 and 68.
Some scholars suggest its identification with modern Daman. Sūbāra was according to Al Idrisi, the other port, situated one and a half mile from the sea. It was populous, a busy town and was considered one of the entrepots of India. Surat is probably its modern representative. Hodivala identifies it with Sopārā near Bassein, 37 miles north of Bombay.

A celebrated port of ancient times was Broach. Its importance is recognised by the author of the Periplus who knew it by the name of Barygaza, derived from the Indian name Bṛigu-kachchha or Bharukachchha. It is interesting to note that the port continued to exist in our period, as it is found referred to by contemporary Muslim and Indian authors. “Barūh” (Barūch, Broach), is described by Al Idrisi as “a large handsome town, well-built of bricks and plaster.” Its inhabitants were rich and mostly engaged in trade. They showed skill and were enterprising enough to sail abroad to further their trade. To this port came vessels from China and Sind and through it contact was maintained with the ports of Sind. In the Rās Mālā there is a reference to a port of “Bhrigoopoor” which must be Broach.

Among other ports, noticed by Al Idrisi, mention may be made of Sindābūr which lies along the coast. It was situated “four days from Barūh on a great gulf where ships used to cast anchor”. It was a very well-known port as it is mentioned by Al Idrisi, Rashid-ud-Din, Abūl Fida, etc. In the Turkish Book of Navigation called ‘Mohit’ by Śīḍī Āli a voyage from Sindābūr to Aden is noticed. The trade of Sindābūr with Aden

35 HIED, I, p. 85.
36 ibid, I, p. 403.
37 SIMH, p. 66.
38 HIED, I, p. 87.
39 FRM, p. 189.
40 HIED, I, p. 89.
41 ibid, I, p. 68.
42 JASB, V, p. 464—See, the 24th Voyage.
is also mentioned by Ibn Baṭṭūṭa.\textsuperscript{43} It is evident from Ibn Baṭṭūṭa's account that it was a populous delta island. Its exact location is unknown.\textsuperscript{44} Ibn Baṭṭūṭa mentions the port of 'Gandhār' from where he embarked on sea.\textsuperscript{45} It has been located near the mouth of the river Narmada. It was a harbour of some importance throughout the thirteenth and fourteenth centuries.\textsuperscript{46}

A very celebrated port of Eastern India was Tāmralipti. It is represented by modern Tamluk, which is situated on a broad reach or bay of the Rūpnāraṇṇa river, 12 miles above its junction with the Hoogly.\textsuperscript{47} Varāhamihira refers to it as a city.\textsuperscript{48} The name 'Dāmalipīta' is used not only in the Daśakumāracharita but also in the Abhidhānachintāmaṇi where it occurs as one of the several synonyms for 'Tāmralipta' known to the lexicographer, Hemachandra, viz., Tāmalipīta, Tāmalipī, Tāmalini, Vishṇugriha, Stamṭapū.\textsuperscript{49} The name in the form Tāmraliptaka is used by Rājaśekhara. The Kathāsaritsāgara refers to the Tāmraliptiṇa, as situated near the eastern sea (pūrvam=ambudher=adurasthāṁ nāgarīṁ) and in the Daśakumāracharita\textsuperscript{51} it is portrayed as a flourishing centre of trade and maritime activities, close to the sea and not far from the river Ganges. Due to its advantageous position it becomes an important port in Eastern India for embarkation for China, Ceylon and Eastern Archipelago. Fa-Hien in the 5th century A.D. actually took ship from this place which was at the sea-mouth.\textsuperscript{52} Again, it was from this port on

\textsuperscript{43} RIB, p. xlv.
\textsuperscript{44} There is a great controversy among scholars regarding the correct location of the port of Sindābūr. Hodivala concludes that it seems certain that Sindābūr was somewhere near the coast between Goa and Kumṭa',—SIMH, pp. 23-24.
\textsuperscript{45} RIB, p. 175.
\textsuperscript{46} ibid, p. 175, n. 1.
\textsuperscript{47} Sen, Some Historical Aspects of the Inscriptions of Bengal, pp. 38-9; cf. JRAS, 1873, pp. 243-45.
\textsuperscript{48} Varāhamihira, X, 14.
\textsuperscript{49} Abhidhānachintāmaṇi, Bhūmi Kāṇḍa, p. 147, V. 45.
\textsuperscript{50} Kathāsaritsāgara, III, 4, 291.
\textsuperscript{51} Daśakumāracharita, Uchchhvāsa, VI, p. 287.
the coast of Eastern India that the Chinese visitor sailed for the land of Śribhoja, which, according to Takakusu, 'covered the North-East side of Sumatra from the southern shore of Malacca to the city of Palembang'. But the useful career of the great port of Eastern India came to a sad end due to natural causes. Its fall as a sea-port town was due to, 'the disappearance of the channel linking Tamlūk to the sea, which made the island more or less joined to the mainland,........and was largely responsible for its downfall'.

Exports and Imports

From very early times Indian goods had a wide market in the different parts of the world. In the West, Indian goods were sent to Persia, Arabia, the coasts of Africa and to the countries of Europe. Indian goods were also shipped to China, Ceylon, Burma, Indonesia and the Indian Archipelago. Merchants from many countries, in the East and the West, came to the ports of India and carried away Indian goods to their countries where there was a great demand for them. Some commodities of North India were exported to South India and even in North India coastal trade was practised and commodities were exported from one part to another wherever possible. Many commodities were imported to India from the world outside. Although detailed lists of exports and imports are lacking, it can be safely concluded from the available evidence that a great variety of commodities were exported from, and imported to, India. Thus Al Idrisi remarks, 'that trade is carried on in a great variety of articles in Debal'. Regarding Cambay and Sindān, of the former it is said that 'merchandise from every country is found here, and is sent on from hence to other countries', and about the latter it is mentioned that the port has got 'extensive com-

53 Takakusu, pp. xlvii, 144n, 185.
54 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 156 ff.
55 Chau Ju-Kua, p. 113—It is noted in the Chau Ju-Kua that Indians used to trade yearly with Ta-ts'in and Fu-nan, ibid, p. 111.
56 HIED, I, p. 77.
merce both in exports and imports. In this context attention may be drawn to the information, furnished by Wassaf regarding India’s exports and imports, which is more detailed in character than anything available from other sources. India, it is said, is “a country to which people export gold, silver, commodities and curiosities and from which, in exchange, they bring away only thorns, drugs, dust, pebbles and various aromatic roots and from which money has never been sent to any place for the purchase of goods”. Various kinds of articles, such as aloes-wood, sandal-wood, camphor and camphor-water, nutmeg, clove-pink, cubele, cococnut, vegetable stuffs and textures of velvety cotton, are included in the list of India’s exports by Ibn Khurdadba. Al Idrisi states that the mountains of Saimur (Chaul) used to produce various aromatic plants which were exported. He also refers to perfumes as an article of export, but does not give the name of the port from which they were exported. Abu’ Zaid notes that a kind of aloes-wood called ‘al kamaruni, were produced in Kamarun. Mas’udī substitutes ‘Kumār (Cambodia) for Kamarun’ in the corresponding passage. However, it is not easy to come to a definite conclusion regarding the identification of the place from where ‘al kamaruni’ was imported. It may be noted that if Mas’udī’s identification is accepted, it may be held that the aloes-wood called ‘al kamaruni’ was not an export of India, but an import from Cambodia. Another item of export was cotton or cotton-cloth. Ibn Khurdadba says that the country of Rāhma (or Rahmī) produced cotton cloths. Sulaimán further states that they were ‘so fine and delicate’ that a robe made of that cloth could pass

57 HIED, I, pp. 84, 85.
58 ibid, III, p. 30.
59 Ferrand, 31; cf, AIK, p. 402.
60 HIED, I, p. 85.
61 ibid, I, p. 77.
62 ibid, I, p. 11 ; RAA, p. 88.
63 ibid, I, p. 23.
64 SIMH, pp. 11-12.
through a signet ring.\textsuperscript{66} This place Rāhma has been identified by most scholars with the Pāla kingdom of Bengal.\textsuperscript{67} The export of muslins of ‘the finest sorts’ is referred to in the Periplus. In another account it is stated that ‘every year two thousand oxen, or more, laden with cotton-stuffs are sent over the roads to other countries to barter’, from Malwa where the product of white cotton-cloth is very common.\textsuperscript{68} Export of cotton is referred to by Marco Polo\textsuperscript{69} and Ibn Baṭṭūṭ.\textsuperscript{70} Another item of export is mentioned by both Sulaimān and Mas‘ūdī. Both of them record that the horns of an animal named ‘unicora’ were exported from the kingdom of Rāhma to China for being made into fashionable and costly girdles.\textsuperscript{71} This is also included in the list of exports, noted in the Liang-shu, as referred to in the Chau Ju-Kua.\textsuperscript{72} (Mas‘ūdī holds that the Indians also export ‘samara’ (saiman) from which fly-whisk or fly flaps are made, with handles of ivory and silver. These were held over the heads of princes when they gave audience. It is not unlikely that the goods manufactured out of ‘samara’ were exported, and not the raw commodity only. They were exported from the kingdom of Rahmi (Rāhma).\textsuperscript{73} It is noted by Ibn Khurdādbā that costus, canes and bamboos were exported from Sind.\textsuperscript{74} On the testimony of this statement and others it may be concluded that most probably costus from the Himalayas, indigo from Gujarat, camphor and rattan from Malaya and Sumatra, were brought to the ports of Sind for export.\textsuperscript{75})

\textsuperscript{66} HIED, I, p. 5 ; RAA, p. 17.
\textsuperscript{67} Majumdar, History of Bengal, p. 122 ; SIMH, pp. 4-5 ; cf., AIK, p. 409, n. 36.
\textsuperscript{68} Chau, Ju-Kua, p. 93.
\textsuperscript{69} Travels, II, p. 115.
\textsuperscript{70} RIB, p. xlv.
\textsuperscript{71} These girdles were prized so highly by Chinese royalty and grantees that they sometimes fetched 2000 or even 3000 pieces of gold in China—RAA, p. 18 ; Ferrand, 44, 105.
\textsuperscript{72} Chau Ju-Kua, p. 113.
\textsuperscript{73} Mymensingh Gitika, Vol. I, p. 391 ; cf. HIED, I, p. 5.
\textsuperscript{74} HIED, I, p. 15 ; Index, I, p. 53.
\textsuperscript{75} AIK, p. 402.
In the Liang-shu there is a list of Indian exports. It says that the usual exports of India were rhinoceros (horns), ivory, leopards (skin), marmot (skins?), tortoise-shells (huo-ts'í), gold, silver, gold embroidered skin rugs, fine hems (cloth?), muslins (po-te), fine fur garments and rugs (t'a tóng), and 'Huo-ts'í'. The Chau Ju-Kua, while presenting an account of Ti'en-chu (i.e. India), Gujarát (Hu-ch'a-la) and Malwa (Malo-hua), give some idea about the exports of India, which include sandal-wood and other aromatic woods, sugar-cane, sugar, and all kinds of fruits.

(The principal products of Gujarát comprised indigo, red kino, myrobalans and foreign cotton-stuffs of every colour. "These goods were transported to the Ta-shi (The Arabs) for sale". This information about the products of Gujarát, furnished by Chau Ju-Kua, is in agreement with the testimony of Marco Polo who reports that in Gujarát there grew much pepper, ginger and indigo, and a great deal of cotton also. "Their cotton trees are of very great size, growing full six paces high, and attaining to an age of 20 years". He further mentions that the indigo of Cambaet (Cambay) was very abundant. The 'foreign cotton-stuffs of every colour', referred to by the Chinese writer as suggested by Hirth and Rockhill, were probably 'chintzes'. Marco Polo also refers repeatedly to the delicate and beautiful buckrams and the export of cotton from Cambay. Rashid-ud-Din reports that sugar from Malwa, bádrú (balm), and baladí from the coasts of Gujarát were exported in ships to all countries and cities. Ibn Batúṭa furnishes a list of exports, which includes rice, food-grains

76 Chau Ju-Kua, p. 113.
77 The substance huo-ts'í may be isinglass. According to Smith it is lapis-lazuli.
78 Chau Ju-Kua, p. 111.
79 Ibid., p. 92.
82 Chau Ju-Kua, p. 93.
84 HIED, I, p. 67.
and cotton. They were exported from India to Dhofar (Zafār) and Qalhāt south of Oman; other Indian merchandise including wares were exported to Hormuz and Jarawan and thence to Arabia, Mesopotamia, Khurāsān and the rest of Irān.85


Imports

In regard to imports also a comprehensive account cannot be prepared for lack of sufficient evidence. From a statement made by Abu’ Zaid86 it appears that dināras of Sind, then under Muslim rule, were frequently brought into ‘India’. Also emeralds were imported, from Egypt, mounted as seals and enclosed in boxes, as well as coral and the stone dahnaj (a stone resembling the emeralds). It is held that this trade practically came to an end in about the 10th century A.D. when, as Crawfurd87 states, there was a decline of trade between India and Egypt under the Khalifs. The import of wine from Kapiša is hinted at by the synonym Kāpišāyana given for wine in the Abhidhānaratnamālā.88 An Arab writer of later date named Ibn Said89 mentions the import of dates from Basra into Daibul

85 RIB, p. xliv.
86 HIED, I, p. 11.
87 CRAW, II, p. 311; cf. Economic Condition of Southern India, p. 492, n. 27.
88 ABB. RAT, II, 174.
89 Ferrand, 48, n; cf. AIK, p. 404.
in Sind. From China were imported, according to Ibn Baṭṭūṭa,\(^{90}\) the Chinese cocks which bore the appearance of ostriches and were very big. Chinese porcelains were also imported to India. Chinese silk came to India during the period as in former times as suggested by the references to ‘chīnāṁśuka’ to be found in the literature of the period.\(^{61}\) It is held by Ibn Baṭṭūṭa that carpets were imported to India from Akseria (Aqsara) in Mesopotamia; finished garments of silk and velvet were imported from Nishāpūr; ‘ālūbukhāra’, a kind of prune or apricot came from Wabkana in the vicinity of Bukhara. Elephants were imported from Ceylon.\(^{92}\) On the basis of the story recorded in the Upamitibhavaprapaṇḍhika-kathā some scholars are inclined to hold that gems came from South-East Asia.\(^{93}\) It is held by Ibn Khurdādbā\(^{94}\) that aloe-wood was imported from Kāmūl and other neighbouring places by the sea route to Kūra, Kilkān, Lūār and Kanja. Again, if Abu’ Zaid and Mas’ūdī\(^{95}\) are correct in their statements, it will be seen that the costly aloe-wood presented to the Sun God at Multan was imported from distant Cambodia. The annals of the Sung Dynasty supply a list of principal articles, which were either exports from or imports to China in about the year 999 A.D. Among the articles mentioned in this list special reference may be made to ‘steel’ (pīn-t’le).\(^{96}\) Some are inclined to hold that it was ‘Damascene steel’, out of which sword blades are made. Marco Polo\(^{97}\) describes it as a product of Kermen, and in the opinion of Yule it is ‘hundwaniy’ i.e., ‘Indian steel’ which enjoyed a great fame. In Sindhrāja’s time sea-traders imported maddar.\(^{98}\) Perhaps the most important of

\(^{90}\) RIB, p. xliv ff.
\(^{91}\) For a flag made of China cloth on the temple of Adinātha, see, Vasantavilasa-Mahākavya, Cantos 10-13.
\(^{92}\) RIB, p. xliv.
\(^{93}\) AIK, p. 404.
\(^{94}\) HIRED, I, p. 16; Index, p. 54.
\(^{95}\) ibid, I, p. 8 ff; p. 23 ff.
\(^{97}\) Travels, I, pp. 90, 93n, 125n, 212, 215 n.
\(^{98}\) FRM, p. 189.
all trades was the horse trade in which the Hindus participated along with the Muslims. It may be noted that horses from Arabia were imported through Cutch to India\textsuperscript{99} and also to Sind.\textsuperscript{100} This trade continued even in later times. Thus Ibn Baṭṭūṭa holds that horses of good breed from Dhofar (Zafār), Qipchaq, Crimea (Qiram) and Azov were sent to India. 'The horse merchants', says he, 'pay a duty of seven silver tarnkas (i.e. dināras) for each horse on entering Sind' at Shashnaghār (Shashanqār). Then they pay a further duty at Multan. Horses required for racing were imported from Yemen, Oman and Persia.\textsuperscript{101} Munitions of war were also imported through the mouths of the Indus.\textsuperscript{102} Although our list of imports is not very exhaustive, it need not be presumed that the import trade was very meagre. We have already seen on the evidence of Al Idrisi\textsuperscript{103} that 'ships laden with the products of Oman, and the vessels of China and India came to Debal'. They brought stuffs and other goods from China and perfumes and aromatics of India. It is stated in another work that various kinds of select merchandise and clothes were brought to the countries of Hind and Sind from Chīn and Māchina in Chinese ships called 'Junks'.\textsuperscript{104}

\textit{Trade-routes}

The direct sea-routes connecting India with the West were mainly two, viz., the Persian Gulf route and the Red Sea route. During our period the Persian Gulf route seems to have enjoyed a relatively more important position than the Red Sea route, which re-opened about this time with much of its old importance diminished. The Red Sea route was also noted for its difficulties of navigation, and a voyage on it was regarded as perilous. The entrance of the route was called 'Babelmandeb'. It has been reported by

\textsuperscript{100} HIED, I, p. 468.
\textsuperscript{101} RIB, p. xlv.
\textsuperscript{102} HIED, p. 468.
\textsuperscript{103} ibid, I, p. 77.
\textsuperscript{104} ibid, I, p. 69.
Abu’ Zaid that no sailing was undertaken on this sea at night because of the number of rocks on it at the water’s edge. He further adds that this sea was also subject to very thick fogs and to violent gales of wind. But it was an important route, along which trade between the East and the West was carried on mostly under Arab intermediaries. Due to these difficulties, mentioned above, the Persian Gulf route was preferred. "The Persian Gulf route", according to A. T. Wilson, "has a place in the written history of mankind older than that of another inland sea; its history can be traced though not continuously from the very earliest historic times; its central position on one of the main highways between east and west has from the dawn of civilisation invested it with peculiar importance, it was the scene of great events." He further remarks that "though as a stage in the great line of communication, the Persian Gulf has at all times had a formidable rival in the Red Sea......" This route from the Persian Gulf run as far as Canton in China. It is regarded as the 'largest in regular use of mankind before the European expansion in the sixteenth century'. An account of this route, running from Canton to Bagdad, is preserved in the itineraries compiled by Kia Tan between 785 and 805 A.D., from which it appears that from Kuang-chóu (Canton) to Mount Chau-pu-lau (Culao Cham), in the sea, 200 li east of the Huan-wang, there were several stages of the journey including Mount T’un mon, Kiu-chóu rocks (Taya Islands) and Siang Sì. From Kuang-chóu to Mount T’un mon the distance was about 200 li towards the south-east. The next stage was to be reached by sailing westwards for two days, it took another two days to reach Siang-sì, and from Siang-sì to Huan-wang, the distance was usually covered in three days. A two days’ journey southward from here brought one to Mount Ling. The stages that followed concluded with a strait which the ‘Barbarians’ call Chî (identified with the Strait of Malacca by Pellicot and by Hirth

105 RAA, p. 93.
107 Hourani, Arab Seafaring in the Indian Ocean, p. 61.
108 Chau Ju-Kua, pp. 10-14.
and Rockhill, agreeing with Gerini, with the Singapore Strait).\textsuperscript{109} This long journey was finished in ten or eleven days. The direction was now to be changed from the south to the north. On the northern shore was situated Lo-yüé (the southern extremity of the Malaya Peninsula or Ligor),\textsuperscript{110} and on the southern coast is the country of Fo-shi (Eastern Sumatra).\textsuperscript{111} From Sumatra to Java (Ho-ling) the journey was four or five days. The vessel had next to pass Ko-ko-sōng-ch'i, an island separated in the north-east from Sumatra. The people of this country were pirates dreaded by sailors. On the northern coast was the country of Ko-ku-lo. The next stage was the island of Shōng-tōng. The ship now turned westward, and after five days' journey could arrive in the country of P'o-lu (presumably some place in north-western Sumatra, Perlak or Pedir). After six days' journey could be reached the island of K'ié-lan (one of the Nicobars). Northward after four days' travel the ship reached "the country of the lions" (Ceylon), whose northern extremity was about 100 li from the southern coast of the Indian Peninsula. From here, after four days' journey, one reached Mo-lai (the Malabar coast and more particularly the port of Quilon in South India). Proceeding north-west from 'Mo-lai', the ship passed more than ten small 'countries'. At the end of this period was reached the western frontier of P'o-lo-mōn (i.e. the whole of the West coast of India). Again, a journey of two days, in the direction of the north-west brought one to the country of Pa-yü (presumably some port on the Gujarath Peninsula). Sailing for ten days along the Western coast of T'ien-chu (India) and its neighbourhood the ship reached Ti-yü (Taiz) in which flowed the river Sin-t'ou or the Mihrān. Ti-lo-lu-ho marked a subsequent stage in the journey sailing from Ti-yu. Wu-la (in Oman) was only one day's journey from Ti-lo-lu-ho. "Now the Fu-li-la river of the realm of the Ta-shi flows southward into the sea. Small boats ascend it and reach the country

\textsuperscript{109} \textit{JRAS}, 1905, p. 505 ff.
\textsuperscript{110} Gerini, p. 820.
\textsuperscript{111} According to Kia Tan, the voyage from Canton to Eastern Sumatra occupied 20 days. This is exactly the time taken by I-tsing.
of Mo-lo (Old Hormuz)........Again going overland from (Mo-lo) in a north-westerly direction for one thousand li one comes to the capital of the Prince of Mau-môn, which is called the city of Fu-ta (in modern Cairo).112

Kia Tăn betrays ignorance of the regular direct route between Kulam-Male (i.e., Quilon) and the Persian Gulf, actually followed by Arab ships. The coastal route described by Kia Tăn was little used because it was a round-about one. The informants, whose reports were used by the Chinese writer, may have deliberately omitted to mention to him the other frequented route for the purpose of avoiding competition with the Chinese, who, if they had been correctly informed about the latter route, might use it to participate in the valuable trade controlled by the Arabs.

By the middle of the 9th century it is certain that there was regular sailing to China, and we have two independent accounts of the route at this time, written by Ibn Khurdādba and Sulaimán. Ibn Khurdādba describes the stages of the voyage from the Persian Gulf to China. Al-Mas'ūdi,113 who sailed to India and East Africa, speaks of the “ships of China” which used to go to Oman, to Siraf, to Obollah and Basra, while the ships of those countries sailed directly for China. Al Idrisi114 also mentions the Persian Gulf route running up to India. He does not say anything about the continuation of this route beyond India. A more detailed account of this route is preserved in a collection of reports with which the name of Sulaimán, a merchant, is associated. This work was commented on and supplemented by a citizen of Siraf, named Abú Zaid in 916 A.D.115 According to this work the navigation is performed in the following order. Most of the Chinese ships used to take in their cargo at Siraf, and also commodities brought there from Basra, Oman and other regions. From Basra to Siraf was 120 leagues, where many ships used to load and also to take in water. From Siraf, the

112 For the identification of place names see Chau Ju-Kua, 10-14.
113 El Mas'ūdi's Encyclopaedia, p. 328.
114 HIED, I, p. 77.
115 RAA, p. 8 ff; HIED, I, p. 3 ff.
ships had to proceed to a place called Mascat in the extremity of the province of Oman, about 200 leagues from Siraf. From here they departed for the Indies (India) and the first stage reached on this journey was Kaukammali (Cochin or Quilon)\textsuperscript{116} after sailing for one month. The Chinese stopped here to collect water for their ships. They had to pay a thousand \textit{drams} as duty while others paid only from one \textit{dināra} to ten \textit{dināras}. The sea was entered at Harkand. From Lajabulas they now turned towards China.\textsuperscript{117}

From the foregoing discussions it appears that the ships could take two routes to India. They could call at Mascat and other busy ports on the coast of Oman and from there sail across the Indian Ocean for Kulam Mali (Quilon) in south Malabar. This is the route described by Sulaimán. The other alternative route was open for a coasting voyage touching at Old Hormuz, Taíz in Makran, Daibul and other ports of Sind. This route led to the Gulf of Cutch and Kathiawar, bringing the voyagers to the western coast of India. From Kulam Mali or other Malabar ports, a voyage might be made to Ceylon. From South India, the route was diverted in two directions. A coasting voyage might be made by small ships through the Palk Strait and round the shores of the Bay of Bengal, or from Kulam Mali the ship would pass Ceylon and then set its course almost east to the Nicobar Islands. Next port was Kalah Bar (modern Kedah in Malaya). From there some sailed to Sumatra and Java. Then passing Indo-China, Champā, etc. and coasting round the Gulf of Tongking to Hanoi, from where it would arrive in Canton in China. The coast to the North of Canton was not unknown to the Arabs. They sometimes sailed further north, even as far as Korea.

The existence of empires on the route and development of maritime commerce in the countries of southern Asia during the period made it possible for the sea-route between the Persian Gulf and China to be more regularised than before. The T’ang

\textsuperscript{116} Cf, Chau Ju-Kua, p. 18 ff; El Mas’ūdī’s \textit{Encyclopædia}, Vol. I, pp. 324–8.

\textsuperscript{117} \textit{RAA}, pp. 841.
empire in China, Śri Vijaya under the Sailendras, and the 'Abbasid Khalifat at Baghdad flourished on this trade. In the Persian Gulf the port of departure was Siraf (mod. Tahiri). An account of it is found in the report left by Sulaimán.\textsuperscript{118} Mascat was also of some importance and was the watering place for ships.\textsuperscript{119} The other important ports have already been mentioned, including Quilon, Kalah in the Malaya Peninsula, Pulo Condore, Canton, etc. Owing to political troubles China became unsafe for foreigners in the latter part of the 9th century, which interrupted, for the time being, the established trade relations, and caused the foreigners at Canton and Zaytun to take refuge at Kalah on the west coast of the Malaya Peninsula.\textsuperscript{120} Chinese ships regularly called at the ports of the Malaya Peninsula. Ships from Siraf and Oman met those which came from China, and, according to Mas'ūdī,\textsuperscript{121} trade was carried on in this way at the time he visited the place, so that for a time Kalah seems to have taken the place of Canton and Zaytun as the destination of the ships which were engaged in the Eastern trade. At the end of the 10th century, the political situation in China improved and the Sung government of the day showed great interest in foreign trade. But the trade, which was welcomed in China at first, became a serious concern to the Chinese government in the 12th century A.D. The trade in luxuries resulted in the draining out of currency and precious metals, which ultimately led to the prohibition of their exports and introduction of restrictive measures against trade with Mālabar and Kulam i.e. Quilon in India,\textsuperscript{122} which was regarded as the furthest point in the west reached by Chinese junks in the 12th century A.D.\textsuperscript{123} From the same source we learn that traders coming from the

\textsuperscript{118} RAA, p. 8 ff.; cf. The Oriental Geography of Ibn Hankal, p. 11 ff.

\textsuperscript{119} RAA, pp. 8-9.

\textsuperscript{120} Chau Ju-Kua, p. 18 ff.; El Mas'ūdī's Encyclopaedia, I, pp. 324-8.

\textsuperscript{121} El Mas'ūdī's Encyclopaedia, I, p. 328.

\textsuperscript{122} Chau Ju-Kua, p. 18 ff.

\textsuperscript{123} ibid, p. 18 ff.; cf. El Mas'ūdī's Encyclopaedia, I, p. 328; Hourani, Arab Sea-faring in the Indian Ocean, p. 75; Chau Ju-Kua, p. 15, n. 3; IA, IX, p. 14 ff.
country of the Ta-shih (the Arabs), after travelling south to Quilon (Kulin) on small vessels, transfer to big ships¹²４ and proceed to China viz. Palembang.

The maritime activities of the Arabs on the Indian Ocean attained a high water-mark in the 9th century of the Christian era. Even after the 10th century the Arabs continued to sail to India, the East Indies and East Africa. But when Ibn Baṭṭūṭa in the 14th century A.D. visited China, he noticed that voyages from Calicut and other Malabar ports to China were made only in Chinese junks.

In the east, Tamralipta was for many centuries a great port linked up with trade-routes connecting India with the world outside. The sea-routes from this port ran in three directions. Two of them were coastal-routes, one of which ran in the south-westerly direction past the coast of Kaliṅga and Coromandal to South India and Ceylon. This was the route followed by earlier travellers including Fa-hien in the 5th century A.D. on his return voyage from India to China.¹²⁵ I-tsing mentions the names of thirty-seven of his contemporaries who took this route to India at different times. While travelling to India they first came to Canton whence to Western Java or Palembang in Sumatra. One stage of the journey was completed here and another began in a new ship on which they embarked, moving along the north coast of Sumatra and passing by the Nicobar Islands. This stage ended with their arrival in Ceylon. Here they changed ships again bound for Tamluk, situated at the mouth of the Ganges. From here they used to go by land to several places of India.¹²⁶ There was a south-easterly route from Tamralipta, via. the coast of Arakan to Burma and beyond. This route may have been followed in early voyages from Tamralipti to Suvarṇabhūmi. Ships also used to sail along

¹²⁴ Chou Ju-Kua, p. 24. The ‘Big Ships’ mentioned may be large Chinese junks, which regularly made voyage from Canton to Quilon.
¹²⁵ Fa-Hien, p. 100 ff. This route is mentioned in some of the Jātaka stories, in the Periplus and is also referred to by Pliny.
another route to Paloura near modern Chicacola, from Tām-ralipta, viz. Malaya Peninsula and the Far East. This route seems to have been known to Ptolemy in the 2nd century A.D.127 There is a reference to a route to the East in the record preserved by Rashid-ud-Din,128 which ran "by sea to Chīn and Māchīn, passing by the island of Sīlān, Lāmūrī, the country of Sūmūtra, the Darband Nīas, (a dependency of Jāva), Jampa and Haitam (subject to the Kā-ān), and so to Mahā Chīn (Canton) Zaitūn and Khansāī."

Perils of the Sea

Although India was well connected with the East and West by regular sea-routes, the ocean traffic was regarded as very insecure owing to piratical activities and inhospitable character of the sea. Stories of shipwrecks were not unknown, as can be gathered from Indian texts like the Kathāsaritsāgara.129 The coastal-route between Arabia and Western India was particularly unsafe on account of the notorious pirates. The pirates of the West coast of India, i.e. the region round the gulf of Cutch and Kathiawar, were specially dangerous. These regions were infested by pirates from very early times as can be gathered from the testimonies of Pliny and the author of the Periplus. Fleets of their vessels called 'bīra' actually swept the seas.130 An indication of the activities of pirates on the Indian Ocean is furnished by Al-Tabari131 and further interesting details are to be found in the work of Marco Polo.132 The method followed by the pirates was to join in fleets of twenty or thirty of their vessels together and form a sort of a sea-cordon. In this way they covered something like a hundred miles of sea, making it im-

127 See, Ptolemy; cf., Suvarṇadvīpa, I, 7; II, 35; Majumdar, History of Bengal, p. 662.
128 HIED, I, pp. 70-1.
possible for merchant-ships to escape from their clutches. It was their custom to make a signal by fire or smoke when a vessel was sighted and pursue and seize the goods in the vessel. Piratical activities flourished not only on the western coast of India but also along the Persian Gulf route and the Red sea route. Socotra was supposed to be one of their centres of activity.\textsuperscript{133}

As a defence against pirates merchant ships had to carry arms for protection. Pliny adds that merchant vessels from Egyptian ports carried, as a measure of precaution, companies of archers on board. The Arthaśāstra even recommends the destruction of pirate ships at first sight.\textsuperscript{134} It is recorded that ships went, if possible, armed and sailed in fleets for better protection. The Tao-i-chih-liu (1349 A.D.) says clearly that 'they go on in their company to escape the pirates which infested the coast from Kainkolam to Calicut'.\textsuperscript{135} It is to be gathered from Ibn Baṭṭūṭa's account that Arab traders sometimes carried as many as fifty soldiers for protection against pirates. There were also lookout stations kept for pirates on the seas.\textsuperscript{136}

In spite of the great danger the merchant ships had to face due to piratical activities, these are sometimes reported to have enjoyed royal patronage and encouragement. Marco Polo says that the king of Thana helped pirates to plunder merchants. It was agreed that the king was to get all the horses they captured, while the rest of the booty was to remain with them.\textsuperscript{137} It is held by some scholars that probably the great pirate fleets, referred to by Marco Polo were similarly equipped by Indian princes.\textsuperscript{138}

The natural dangers of the sea of Harkand are vividly des-

\begin{itemize}
  \item \textsuperscript{133} Cf. Hourani, \textit{Arab Sea-faring in the Indian Ocean}, p. 70.
  \item \textsuperscript{134} Arth, II, 28 p. 153.
  \item \textsuperscript{135} See Tao-i-chih-liu, Rockhill, Notes, Toung Pao, XVI, p. 446; cf, Travels, II, p. 389; Appadorai, \textit{Economic Condition of Southern India}, Vol. II, p. 637.
  \item \textsuperscript{136} Chau Ju-Kua, p. 13; Le Strange, Eastern Caliphaṭa, p. 43 ff; cf, \textit{Hourani}, Arab Sea-faring in the Indian Ocean, pp. 69-70.
  \item \textsuperscript{137} Travels, Vol. II, p. 395.
  \item \textsuperscript{138} \textit{Ibid}, II, p. 395.
\end{itemize}
cribed in the accounts, left by Arab travellers, particularly the phenomenon of a raging sea-storm and the havoc it caused to a vessel caught in a whirlpool. The Mohit warns sailors to avoid storms, which were quite frequent in the sea of Persia and Red sea in those days. It also emphasises the necessity of precaution against whirlpools. The wind blows continually from the sea and the current comes from the shore, so that the waves and contrary currents are not wanting, and a ship falling in with them runs great risk to be lost, if it is not saved by the grace of God; so it is necessary to avoid these places. The Periplus also refers to 'rushing whirlpools' in some places on the Western border of India. Besides this, there was the danger of shallow water. It is reported that there was 'shoal water' in many places in the sea of Persia and the Red sea. "In shallow water, a big ship comes to grief. Again, at the sea they are not afraid of the wind and the waves, but of getting shoaled, for they say that if they run aground there is no way of getting off again." Another danger that the seafarers confronted was from the "invisible rocks". In an Arab account we find that on the east coast of the Sea of Persia, between Siraf and Mascat, there were some rocks which were dangerous. It has been said by some writers that owing to rocks it was not possible to sail at night on the Red Sea. Examples of wreckages on account of such rocks are given in the Chinese Annals. The Tao-i-chih-lio, speaks of the dangers from jagged rocks near the waters of Colombo. Currents

189 RAA, pp. 5-6, cf, El-Mas'udi's Encyclopaedia, p. 356.
140 JASB, V, p. 456 ff.
141 RAA, p. 8.
142 JASB, V, pp. 456-7.
143 Periplus, p. 38; cf, JASB V, pp. 456-7,
144 RAA, p. 8.
145 Chau Ju-kua, p.34.
146 ibid, pp. 31.
147 RAA, p. 8 ff.
148 Periplus, p. 38; RAA, p. 93.
149 Rockhill, Notes T'oung Pao, XVI, pp. 385, 387, 389, 392, 446, 449 etc.
were sometimes so strong that they would easily destroy sailing in the water. The Gulf of Cambay and Cutch, as the Periplus records, were regarded as danger zones where many ships were caught unawares.\(^{150}\) In addition to the perils, mentioned above, reference may be made to the 'sea-magic' 'sea-monster',\(^ {151}\) 'dangerous fish',\(^ {152}\) 'dangerous snakes,' 'liver-eaters' etc.\(^ {153}\) As a rough sea was dreaded as dangerous, the calm sea also was not desired very much. Chinese junks, which sailed on the Chinese sea and its neighbourhood, used to be accompanied by some vessels. These helped them to move in the motionless seas. Every junk was equipped with as many as twenty oars, each driven by a group of thirty men.\(^ {154}\)

**Royal responsibility and charges in case of a track-off**

Another difficulty arose of a different nature when a ship was driven to a wrong port. Here the boat was bound to be plundered.\(^ {155}\) The Mānasollāsa\(^ {156}\) prescribes that the king should well guard all harbours that are near the sea, that when the boats of sailors residing in this own country return to the harbour the king should charge one-tenth (of the price of goods brought) as the duty and that when foreign boats are driven to his harbour by an unfavourable wind, the king should confiscate all their merchandies or may give a little to owners of these boats. In this connection it may be noted that a prince named Kṣemarāja is said to have once made a representation to a king and sought his orders as to how some foreign ships, arriving in one of his harbours, were to be dealt with. It was for the king to decide whether these were to be seized and confiscated by him or were to be allowed to depart on payment of


\(^{151}\) Kathāśārītsāgara, VI p. 209.

\(^{152}\) A kind of sea-fish (Lockham) praying upon men is mentioned,—RAA, p. 8; Chau Ju-kua, p. 33.

\(^{153}\) RAA, pp. 12-13; Chau Ju-Kua, p. 33; JASB, V, pp. 456, 463.

\(^{154}\) Ibn Baṭṭūṭa (Broadway Travellers), p. 278; Gibb, ibid, p. 467, n. 8.

\(^{155}\) Cf, Chau Ju-Kua, p. 31; Travels, II, pp. 385-6.

\(^{156}\) Manasol, II, 4, W, 374-76, p. 62.
a part of their wealth as duty. The king was informed that "the ships of a king of a foreign country having been driven out of their course by a cyclone, have come from other tidal shores to Someshvarapaṭṭana". These carried a thousand spirited horses, elephants and other things to a "number of ten millions". The commodities were meant to be conveyed to another country through the king’s own. In this case we find the king forbidding his son to confiscate the properties of the traders, bound for another port. But they soon ‘made ready an army in that very border district of their country, and in the stealthy manner of thieves intercepted that whole caravan and brought it to their father’. The king was so very aggrieved at the behaviour of his sons that he is said to have starved himself, and ascended the funeral pyre. . . . . .

Security measures

In order to ensure the safety of traders and by way of encouragement, a charter of security was granted (abhayaśāsana) by a south Indian ruler. Other efforts were also made to help sailors. Some attempt seems to have been made at lighting in the Persian Gulf and other places for the sailors. According to Mas’ūdi, marks of wood were erected for sailors in the sea, which looked like seats in the middle of the water. Upon this fires burnt at night to caution the vessels arriving from Oman, Siraf and other ports. Similarly, Al Idrisi refers to the ‘pilier-work’ on which there were cabins, occupied by coast guards. They went to these cabins in boats which were also used if they wanted to go ashore. Nasir-i-Khusraw, the Persian writer of the early eleventh century, in his Safar Namah, refers to these constructions and adds that "they are erected for a double purpose: firstly, for lighting during the night, by means of lights enclosed in glass to protect them from the wind, to warn vessels

159 EI, XII, p. 188 ff.
160 El-Mas’ūdi’s Encyclopaedia, I, p. 259.
to take precautions in these dangerous waters and, secondly, to show the navigator his position, to warn him against possible pirates.  

Overland trade-routes

India was connected with the outside world not only by sea-routes but also overland trade-routes. Information regarding the routes connecting part of India with territories to its west is generally available from incidental references in earlier sources. The most important of the ancient routes was known to Pāṇini (V. 1. 77) as ‘Uttarāpatha’, connecting Eastern India with Gandhāra, from which it ran towards further west. The Oxo-Caspian portion of this route is mentioned by Strabo and Pliny. According to the information, furnished by Strabo, the Oxus formed an important stage in the line of communication, along which Indian goods were carried to Europe by way of the Caspian and the Black Seas. Sind, which was under Muslim rule, kept up a regular communication with the rest of the Muhammadan empire. Caravans regularly passed between Khurasān and Sind usually through Kabul, Bāmiān, etc. Sind maintained communication with Zābulistān and Sijistān through Ghazni and Kandahār. Balādhurī in his work Kitāb Fāṭūḥ

---

101 Cf. A. T. Wilson, The Persian Gulf; ‘Abadon is a small fort or castle, inhabited, on the sea-coast, and the waters of the Dejlah (or Tigris) came up there. This is a station, where sentinels used to be placed, that they might watch the robbers of the sea or pirates,—The Oriental Geography of Ibn Haukal, W. Ouseley, p. 11.

102 Cf. AIP, pp. 140, 244 ff.

103 Strabo, II, 73, XI, 509.


106 HIED, I, p. 467: Mas‘ūdi refers to a overland-route. It runs from ‘the country of Soghd through the mountains of en-Nushadu, to et-Tubbet (Tibet) and China........The same caravan goes from Es-Sind to Khorasan, and the caravans of India go in the same manner
describes the route followed by Muhammad Ibn Qasim from Shiraz (the capital or Fars), via. Mukrān to the cities of Qannazbur (Fannazbār, modern Panjgur), Arma’il (Armabil), Qanil (Qanbali) and Daibul all of which apparently belonged to Sind:167 Extensive ruins of the ancient city of Akarrah and some others in the Banū district show that this tract, south of the Makhfiālah or Jūd mountains, was once the chief routes between India and Ghaznīn. Another route, further north, by the Jhelum, Rāwalpindī, Atak and Peshawar is mentioned in later Muslim works.168 Ibn Khurdāda169 noticed a road through the city of Karkūz, leading to the Eastern countries from Persia and another from Mihran to Bagar, which was a very important place on the borders of India. A very interesting remark is made by Alberuni with respect to the routes from the North of India. He observes that “we reach Sind from our country (Turkestan) by going through the country of Nimroj, i.e. Sijistān and we reach Hind through Kabul.” He further adds that it is not the only route, for one can arrive there (India) from all directions “when the passes are open and the obstacles removed.”170

Most Chinese travellers entered India from the west, although it was a round-about route. Hiuen Tsang came to Samarkand and proceeding along the banks of the Oxus, he reached the countries of Tu-huo-lo (Tokhara), Ta-mi (Termez) and continuing his journey came to the “south across the Oxus” and at Fo-ho (Balkh). Travelling further south, he entered the mountainous region called Fan-yen-na (Bamian). From here he went to Ka-pi-shih (Kafiristan) and finally arrived at the frontiers of Yin-tu (India).171 From this and other Chinese into this country, as far as Zabulistan.....—El-Mas’ūdi’s Encyclopaedia, Vol. I, p. 361.

accounts, it may be concluded that people travelling, by land came from China to India westward along the caravan routes skirting the rivers. North-eastern India was also connected with the territories outside India by overland routes. One of these was the route which connected Paunḍravardhana with Kāmarūpa. It was this route which Hiuen Tsang followed in his journey to the kingdom of Kāmarūpa in the 7th century A.D. This route did not terminate in Kāmarūpa but ran eastwards to South China through the vast tract in which are situated the hills of Assam and Upper Burma. It was a very old route which is testified to in the report submitted by Chang-kien in the 2nd century B.C. This route is known to have been used as late as the 9th century A.D., when it appears to have been connected with Annam, which had another route running from it. The itinerary of Kia Tan describes a land-route from Tonkin to to Kāmarūpa. From Kāmarūpa, coming towards the south, the Karatoya river had to be crossed. The land-route then as before terminated in Paunḍravardhana from where it had to be crossed to reach Kajaṅgala and finally arrive in Magadha. There was a difficult route through the passes of the Himalayas, past Sikkim and Chumbi valley, which extended to Tibet and China. As the Periplus shows, in the first century A.D., raw silk, silk yarn and silk cloth came into Bengal from China and these were re-exported to the south.

Internal trade

Available information on the subject is not exhaustive. There was a limit to production and generally local demands were satisfied. But in cases where resources exceeded local demands, the surplus was sent to other parts of India, including the south.

In Kashmir, king Ananta (1028-63 A.D.) is mentioned to have been heavily involved in debt with an Indian trader, named Padmarāja, who coming from outside, held the ‘royal diadem and the throne in pawn’, and acted as the agent of the king of Mālava. This trader used to supply betel-leaves to the king which were brought to his country from other parts of India. Salt used to be imported to Kashmir from the Punjab. Traders of Kashmir also went to far off regions in India. The Tabaqāt-i-Nāṣiri mentions that about one thousand five hundred horses were imported into Lakhaṇawaṭī from the North-East, used to be sold in the local cattle-market. Ibn Baṭṭūṭa points out that Sirsa produced a large quantity of fine rice which was exported to Delhi, and the city of Marh produced corn, which was exported to different places.

Towns were naturally the centres of internal trade. Some of them were noted for their volume of trade. Goods collected from different places, were brought for sale to these towns. The Arab writers give us some precious information about commodities carried from one place to another. Thus costus, rattan, camphor-water, indigo and bamboos are said to have been exported from Sind. Some scholars think that costus from the Himalayas, and indigo from Gujarāt, camphor and rattan, probably from Malaya and Sumatra, were brought to the ports of Sind to be carried to other places.

Towns of commercial importance, as known from contemporary Muslim sources, including port-towns, where, along with home products, foreign goods, brought from other parts of India as well as foreign countries, used to be sold. Al Idrisi, for example, gives us accounts of some of these towns which were noted for their commercial activity. Thus, Debal was a port-

---

177 Rājat, VII, 190-195; cf, Intro, p. 190.
178 ibid, VII, 49-4; cf, Jayyaka, the son of a house-holder at Salyapura who accumulated immense wealth, as a trader in distant regions.
179 TIN, p. 567.
180 RIB, p. xlv.
181 AIK, p. 402.
182 HIED, I, p. 77 ff.
town doing business on a large scale. Cambay was a naval station. Merchandise from every country was found here, as the Muslim writer says. Another such town which had extensive commerce both in exports and imports was Sindān. The inhabitants of Broach were rich and engaged in trade. Sharūsān (Sadūsān) was remarkable for its commerce. Many people went there in connection with trade. Much buying and selling went on at Kandil. Another well-populated and commercial town was Masurjan. Samandār was a large port-town, with a rich population and thriving commerce. Tribute is also paid to Kanauj as a “fine commercial city”.

**Shops and markets**

The Kathāsaratīśagara describes Paunḍravardhana as a great market place with streets lining with shops. The Somnath Temple inscription refers to Shergarh as a flourishing centre of trade, industry and agriculture. The Dubkund stone inscription of the Kachchhapaghata Vikramasimha mentions the town of Chāḍobha (now called Dubkund) whose lustre “spread on all sides” whose “excellent markets” and “thriving trade” were admired by the people that came to it from all quarters to traffic in things “which they had got or acquired”. The Bithu inscription of Siha Rathod, dated 1139 A.D. refers to its bazar which was situated ten croś from the town wall of Pālī the principal town of the district.

Business was done in villages through their hattas (markets). The Bhāṭerā plate speaks of shops (hättiyagraha) and big markets (hatta-vāra) in some of the donated villages. The Kalvan plate of Yaśovarman of the Paramāra dynasty mentions fourteen baniya shops (vaṅkhattta) situated

---

188 Kathāsaratīśagara II, 86.
184 *EI*, XXIII, pp. 131 ff.
185 ibid, II, p. 232 ff.
186 *IA*, XL, p. 185 ff.
188 *EI*, XIX, p. 282 ff.
189 ibid, XIX, p. 69 ff.
in villages. It appears that the bazar was a regular feature of every town and also of the more prominent villages. It is, difficult to form a realistic picture of an Indian bazar in those days. Some of the important markets in the town were under the control of Mahājanas. Only stray accounts of the nature and activities of a bazar in our period are available. In Anahilawara there were eighty-four bazars or market places, each specialising in a separate article, and located separately. Thus there were markets dealing in elephant tusks, in silks, diamonds, pearls, etc. In this chain there was also one market for money changers. This shows that people who came to do business in these markets from different places used different currencies which had to be converted into local currency. There were also separate areas occupied mainly by physicians, artisans, goldsmiths, silversmiths, etc. The different market-quarters may have been situated close to one another for the sake of convenience from the stand-point of business. It is to be further noticed that each kind of goods had its separate custom-house (mandavi), where taxes on exports, imports and sales were collected.

Probably, this was the actual plan of a bazar in India during this period. In some places the bazars were so big because of the volume of trade carried on, that they had to be divided into different quarters as was the case in Anahilawara described above. In other places, the bazar may have been comparatively small and in such a case one bazar was divided into stalls, each devoted to a separate commodity. From an account of Abul Fazl we learn that when Ahmad Niáltigin came to Benares he plundered ‘the markets of drapers, perfumers and jewellers’. It appears from this account that there were separate markets for the commodities mentioned, which were situated in different parts of the city, close to one another.

190 EI, I, p. 162 ff.
191 Tod, Travels in Western India, p. 156 ff; Burgess, Architectural Antiquities of North Gujarat, p. 34 ff; FRM, p. 192 ff.
This plan of a town-market is testified to in the Nitisāra, whose author suggests that in a market place, stalls and shops are to be placed according to the class of commodities dealt in. What appears to have been a typical bazar planned on the same conventional model, in a much later period, is described in a Muslim work. In the time of Akbar, the bazar at Bijapur, "to the north portico of the palace" was "of great extent, as much as 30 yards wide and about two cros long. Before each shop was a beautiful green tree and the whole bazar was extremely clean and pure. It was filled with rare goods, such as are not seen or heard of in any other town. There were shops of cloth-sellers, jewelers, armourers, vintners, bakers, fishmongers and cooks". Further detail about this bazar are also available. "In the jeweller's shop were jewels of all sorts, wrought into a variety of articles, such as draggers, knives, mirrors, necklaces and also into it were different forms of birds, such as parrots, doves, peacocks, etc. all studded with valuable jewels and arranged upon shelves, rising one above the other. By the side of this shop will be a baker's with rare viands, placed in the same manner upon tiers of shelves. Further on a linen draper's with all kinds of clothes shelves in like manner. Then a clothier's, then a spirit merchant's with various sorts of China vessels, valuable crystal bottles and costly cups, filled with choice and rare perfumes, arrayed and shelved, while in front of the shops were jars of double distilled spirits. Beside that shop, will be fruiterer's filled with all kinds of fruits and sweetmeats, such as pistachia nuts and relishes and sugar-candy and almonds". It appears from the above that the shops were made to look gay and attractive. All sales being concentrated in one place, the whole area must have became a centre of great activity, where all sorts of people had to come and buy their necessaries. The owners of markets and shops had to look after their establishments with particular care and attention, because on these their reputation and success in business depended. Sometimes on

198 Śukra, I, 516, p. 34.
194 HIED, IV, p. 150 ff.
feastive occasions the high road of the market was watered and shops were decorated with pearl-necklaces and beautiful clothes. They put golden vessels at prominent places and courtezans on such occasions were employed to give dancing performances on specially erected and attractively decorated platforms. Even kings and princes on special occasions decorated and illuminated the *bazars*. The Prabandhachintāmaṇi says that when king Bhoja wanted to illuminate the markets of the city, an oilman and a tailor did not like it and threw obstacles in his way. The greater the sale, the more was the revenue; hence kings had a natural interest in contributing to the attractiveness of the stalls in the market. The Ghaṭiyāḷā inscription of Kakkuka refers to a market (*ḥaṭṭa*) at Ghaṭiyāḷā, where village people and the *mahājanas* crowded. The inscription tells us that Kakkuka constructed a market place, 'decorated with variegated streets'. This shows that markets were also built by kings.

Markets were sometimes located near temples. Thus we have a reference to a market called Tuṅgeśvara. Similar references are found in Muslim accounts, where in one place we are told that the temple of Multan stood in the middle of a *bazar*. It was quite necessary to have a market in the vicinity of a well-known temple.

Mention may be made of shops, situated in or near a *bazar*, in which a particular commodity only was sold. The Kaman stone inscription shows that a certain *Kambilhaṭṭa* i.e. cattle market, was such a centre of activity that shops (*vīthis*) dealing in other necessary commodities had to be built near it. Some of the inscriptions use the word 'āvāri' in referring to markets, e.g. the Ahar stone inscription. The 'āvāri' stood in the centre of a town and in the middle portion of the eastern *bazar*. The

105 *MPY*, intro, p. XII.
106 Prabandhachintāmaṇi, p. 45.
108 *Rāja*, VI, p. 251, n. 190.
109 *HIED*, I, pp. 28, 35, 82 etc.
110 *El*, XXIV, p. 239 ff.
111 *ibid*, XIX, p. 52 ff.
āvārī in question was bounded in the east by the bazar; on the south by the āvārī belonging to the illustrious Daśavatāra-deva; on the west by the temple belonging to Sri-Nandā-Bhagavati, and on the north by the āvārī belonging to the temple of Sarvamangaladevi. These shops or āvāris, were close to a market and were in the immediate neighbourhood of temples where evidently they had a thriving business. In some inscriptions we hear only of shops (vīḥī) and not a bazar. The Kalvan plate of Yāsavarman, as already mentioned, speaks of fourteen 'baniya shops', which constituted a group called 'vaṭāik haṭṭāh'.

The Jālor inscription of Sāmantaśirhadeva (V. S. 1353) contains the expression 'niśra-nikshepa-haṭṭa'. It has been suggested that the word 'niśra' is to be taken to have the sense conveyed by 'nisār' which in Mārwar means an export as distinct from 'pasār' signifying an import. The expression may, therefore, mean a place in, or a portion of the bazar where goods intended to be exported were stored.

Articles in markets and Government dues

The Arthuna inscription of Paramāra Chāmuṇḍarāja (V. S. 1136) shows that dues were collected on the sale of various classes of articles, such as, cocoanuts, salt, areca-nuts, butter, sesame oil, clothing-fabric, jāla (bunch of buds), bars of gold, silver and other metals, frames of wood or iron in which pitcher are carried upon beasts, oil, cattle-fodder, sugar, barley, grain etc. Betel-leaf, cotton, copper, saffron, gum-resin, (pura i.e. guggular), madder, muṅg, as well as the items, mentioned, above, also occurs in the Bijapur inscription of Hastikundi of Dhavala. As stated elsewhere, animals such as elephants, cattle, horses, etc. were listed among the items, openly sold in the market.

According to Śukra duty or śulka is to be levied in market

202 EI, I, p. 162 ff.; 287 ff.
203 ibid, XIX, p. 69 ff.
204 ibid, XI, p. 60 ff.
205 ibid, XIV, 295 ff.
206 ibid, X, p. 17 ff.
207 IA, LVIII, p. 161 ff.
places, streets, etc. They are to be levied on goods only once. The king should receive the thirty-second portion of the value from the seller or buyer. He should not realise duty from the seller if the price of an article sold is less than, or just equal to, the cost. But he may get it from the buyer if he is a gainer. Although this may be a good maxim, its practical applications is beset with difficulties, if sales are not centralised in one place, and prices of all articles and their fluctuations not fully known. In short, a minute acquaintance with market conditions is required to carry out Šukra’s advice.

_Profiteering_

It appears to have been a common practice for merchants to indulge in profiteering. They sold their things when prices were high and kept them in reserve when prices were low. It appears that these merchants used to buy things when they were cheap and sold them at much higher rates when they were in short supply. Such methods were actually followed by the traders of Debal.

Adulteration must have been a common practice in business. The opinion of Šukra and others was definitely against adulteration of goods, which was to be treated as a punishable offence. Cornering, manipulation of supplies etc. to the mischief of consumers are strongly condemned. They had some notions of a fair price and just profit. How far the various rules, framed for the conduct of a fair trade, were followed, is not known.

**Prices**

In regard to some articles, a customary rate grew up in course of time, which may have remained current under normal conditions. Customary or fixed price of certain articles, particularly valuable metals, like gold, diamond, etc. are noted in the

---

208 Šukra, 213, p. 147.
209 *ibid*, IV, 213, p. 147.
210 *ibid*, IV, 46-48, p. 139.
211 *ibid*, IV, 641, p. 212.
Śukranīti.\textsuperscript{212} It is reasonable to presume that rates could not be uniform throughout India. The principle, noted in the Śukranīti\textsuperscript{213}, is that the price should be fixed according to time and place. Prices of things depended to a large extent on their usefulness. Thus it is said that there is no price for worthless things that cannot be used for any purpose.\textsuperscript{214} Prices have been categorised as high, low and middling.\textsuperscript{215}

Rates of exchange between diamond and gold as an indication of fixed prices are mentioned in Śukra’s Nītisāra. Thus the price of one whole ‘vajra’ (diamond) weighing one rāti, is five suvarṇas which were gold coins.\textsuperscript{216} Lower rates were current for inferior types of diamond. Thus for the same class of articles ‘high, low and middling’ different prices were current due to variations based on quality, weight, etc. Similarly, there are schedules of prices in regard to pearls, corals, etc. Corals and also best pearls were valued at half the prices of gold.\textsuperscript{217} Exchange rates were calculated in terms of gold in all these cases, mentioned by Śukra. Only rich people could take part in these transactions.

The standard price of a cow giving one prastha of milk is said to be one silver pāla (\(= 8\) silver ‘rupees’).\textsuperscript{218} This is also the price of a strong sheep.\textsuperscript{219} The value of a she-goat is half that of a cow, that of a female sheep half of a she-goat.\textsuperscript{220} The price of the best cow is eight or ten times that of an ordinary cow, which is one silver pāla, as mentioned above.\textsuperscript{221} The highest price of a buffalo, is the same as that of a cow, or may be higher.\textsuperscript{222} A ‘good bull’ may be sold even at such a high price

\textsuperscript{212} Śukra, IV, 134 ff, p. 143.
\textsuperscript{213} ibid, IV, 208, p. 146.
\textsuperscript{214} ibid, IV, 209, p. 146.
\textsuperscript{215} ibid, IV, 210-211, p. 147.
\textsuperscript{216} ibid, IV, 134-135, p. 143.
\textsuperscript{217} ibid, IV, 161, p. 144 ; IV, 168-170, p. 144.
\textsuperscript{218} ibid, IV, 188, p. 145.
\textsuperscript{219} ibid, IV, 190, p. 145.
\textsuperscript{220} ibid, IV, 189, p. 145.
\textsuperscript{221} ibid, IV, 191, p. 145.
\textsuperscript{222} ibid, IV, 193 p. 145.
as sixty *palas*. Horses and elephants are priced at two, three, or four thousand *palas*. According to Ibn Baṭṭūta the most inferior type of horse could be obtained in India for a hundred silver *tankas*. The price was double or treble in the case of a better type. An excellent horse could be had for five hundred silver *tankas* or more. A racing horse was sold at a price ranging from one thousand to four thousand silver *tankas*.

Thus there was a tendency for prices of important articles at least to become fairly stabilised under normal conditions. Moreover, it appears that prices varied according to the quality, availability and the degree of usefulness of the articles concerned. Horses and elephants in particular were not available in every part of the country. They had to be imported from those regions where they were to be found in large numbers. They were used for military purposes, and when wars were frequent there must have been a rise in their prices. Then there was the industrial use of the elephant’s tusk, which added to the value of the animal.

In abnormal times, such as those of famines, droughts and floods, prices of food and similar necessaries rose. In one place Kalhana tells us that the regulation of the water of the Vitastā was undertaken for obvious reasons by king Lalitāditya. This being neglected under the feeble kings, who succeeded Jayāpāda, was the cause of a devastating flood which among other factors contributed to an almost unlimited increase of the price of rice. When the problem of controlling the Vitastā was solved by king Avantivarman (855-883 A.D.), the result was perceptibly felt in the economic life of the people of Kashmir. Previously, the price of a *kharī* of rice was two hundred *dinārs*. Now one *kharī* of rice could be bought for thirty-six *dinārs* only. This welcome change was due to the abundance of production, rendered possible under a well-planned system of

---

223 *Śukra*, IV, 194-5, p. 145.  
224 *ibid*, IV, 197, p. 146.  
225 *RIB*, P. XLV.  
228 *ibid*, V, 116-117, p. 201.
irrigation and flood control. The scarcity of rice in Kashmir was so great during the famine of 917-18 A.D. that one had to spend a thousand dinārs to get a kharī of rice. There was another famine in 1099 A.D. when rice of the same quantity was sold for five hundred dinārs. Prices of other things also rose during the time of the famine. Thus it is mentioned that in 1099 A.D. two palas of grape juice cost one dinār, and a pala of wool was sold for six dinārs. The figures in these accounts may be somewhat exaggerated, but it is true that any price may be demanded when an article becomes scarce in the market in a grave situation.

**Internal Trade routes**

From the itineraries of travellers it can be gathered that the country was covered with a net-work of roads and of waterways. References to roads within villages and those connecting neighbouring villages are frequently met with in inscriptions. These served the purposes of internal communication within a small area. The importance of these lines of communication, although confined to restricted areas, lies in the fact that these were essential for the maintenance of the larger trade of the country.

In Alberuni’s work on India mention is made of Kanauj being connected with other parts of the country by routes running in different directions. From Kanauj there was a route running towards the south along the banks of the two rivers (the Jumna and the Ganges), which passed Jajjamaun, Abhāpūrī, Kuraha, Barhamshil (= Brahmanaśaila=Brahmin’s rock), the Tree of Prayāga-(Allahabad). Further south, the same route extended to Arku-tīrtha, at a distant of 12 farsakh (1 farsakh=4 miles); this led to the country of Uwaryahār (Orissa), and to Ürdabishau (Urdhvavishaya) lying on the border of the sea. The route further extended to the shore of the sea.

---

229 Rājat, V, 271, p. 221.
230 *ibid*, VII, 1220, p. 364.
231 *ibid*, VII, 1220, 1221, p. 364.
towards the east, reaching Daraur, Kānji (Kānchi or Conjeeverman), Malaya, Künk, where it ended.

The route from Bārī to the east, along the Ganges was connected by a road with Ajodaha (Oudh), Banārasī, Sharwār, Pāṭaliputra, Mungīri (Monghyr) Janpa, Dūgumpūr and finally with the confluence of the Ganges with Gangāsāyara (Gaṅgāsāgara).

In the east there was a route with several stages leading to Bārī, next to Dūgum, and from the latter to the kingdom of Shilahat. The road from Kanauj further extended to Bihat, Tilwat, Kāmrū (Kāmarūpa) and finally to Naipal (Nepal).

In the direction of the south-east on the western side of the Ganges lay a route from Kanauj to Jajāhūti, of which the capital was Khajūrāho.

Another route in the south-west led to Asī (Asnī, on the banks of the Ganges), to Sahanyā, to Jandrā, to Rājaurī, to Bazāna, the capital of Gujarāt.

The route which ran towards the north passed Shirshāraha, Pinjaur, Dahmāla, Ballāwar. The route next turned towards the west to Laddā, thence it reached the fort of Rājagirī, and again turned towards the north, terminating in Kashmir.

Towards the west Kanauj was connected by road with Diyāmanau, Kutī, Ānār, Mīrat, thence to Pānipat; from Pānipat to Kawital and thence to Sunnām.

The north-west route passing through Ādittahaur, Jajjanīr, Mandahūkūr, the capital of Lauhāwūr, on the east of Irāwa, reached the river Candrāha and Jailam. The route next passed through Waihind, the capital of Kandhār, Sindh, Purshūwar, to Dunpūr and Kābul and ultimately terminated in Ghazana.

The account, given above, shows that Kanauj was not only connected with different parts of India but also with lands beyond its border. This explains the political and economic primacy enjoyed by Kanauj for several centuries.

Alberuni also tells us that a road connected Māhūrā with a large village called Dūdahī, and also a further stage with Bāmahūr, next Bhāilsān, and afterwards Ardīn, and finally Dhār.

A number of roads connected Dhār, the capital of Malwa, which was another place of central importance in the system of
communication, existing in the period. These roads connected Dhār with neighbouring territories.\textsuperscript{233}

Ferishta\textsuperscript{234} says that Mahmud entered Multan by the route of Bitunda.

An important land route by which horses came to Lakhaṇa-waṭi was the (Mahanmhā-i)-Darah (Pass). The road of the country of Karambatān passed through the ravines of the mountains. There were between Kāmrud and Tīrhut 35 mountain passes through which horses were brought to Lakhaṇa-waṭi. Near about the former route, ran another which Mahammad Bakhtiyar heard about, after he invaded Bengal and went to Kāmrup. This road, he was told, “after passing over the bridge, lay for 15 stages through defiles and passes of the mountains”. “At the sixteenth stage level land was reached. The whole of that land was well populated and villages were flourishing”.\textsuperscript{235}

A number of important trade-routes ran from various points in Bengal to the west and joined the network of highways which met at Benares. The Kathā-sarit-sagara mentions merchants travelling from Paunḍravardhana to Pāṭaliputra. The route followed must have existed from very early times.\textsuperscript{236} Routes connecting Bengal with the west formed the principal means of communication between Bengal and the rest of North India. The Indian part of the Uttarāpatha, already mentioned, was linked up with Pāṭaliputra and ultimately with the mouths of the Ganges. Rawlinson remarks: “The first thing which struck Megasthenes on entering India, was the Royal Road, from the frontier to Pāṭaliputra, down which the envoy must have travelled to the capital. It was constructed in eight stages and ran from the frontier town of Peukelaotis to Taxila…….”\textsuperscript{237}

\textsuperscript{233} For identification of place names and details regarding the routes, see Alberuni, Vol. II, pp. 316-320; HIED, I, pp. 54-64; SIMH, pp. 42-59.
\textsuperscript{234} Briggs, Vol. I, p. 41; for the routes followed by him on his return journey, on some occasion, see, ibid, pp. 78, 101.
\textsuperscript{236} Cf, I-Ising, XXXI; EI, II, p. 345 ff.
\textsuperscript{237} Rawlinson, Intercourse between India and the Western World, p. 42.
R. D. Banerji suggests that three different roads may have been followed by Muhammad Bakhtiyar to reach Nudiah from Bihar:

1. From Bihar to Bhagalpur or Mungir, then across the Ganges to Gaur and finally to Nudiah after crossing the Ganges again along the eastern bank of the Bhāgirathī.
2. From Bihar to Nudiah, through the hilly districts of Chota-Nagpur and Birbhum almost parallel to the modern railway lines.
3. Through the pass at Sahibganj along the southern bank of the Ganges and the western bank of the Bhāgirathī, crossing the Bhāgirathī at Nudiah.\footnote{JASB, IX, p. 271 ff.}

*Transport and Shipping*

The trade, both internal and external, which flourished during this period, required the use of vessels of all kinds. They were available in the country, as shown by the detailed treatment of shipping in a contemporary work entitled Yuktikalpataru.\footnote{Yuktikalpataru, Ed. by Pandit Isvara Chandra Sastri. It is a compilation by Bhoja Narapati of the Paramāra dynasty of Dhār.}

The Yuktikalpataru gives an elaborate classification of the ships based on their size. They belong to two principal classes: (1) Ordinary (*Sāmānya*) class comprising ships used in ordinary river traffic or water-ways; (2) Special (*Viśesha*), consisting of sea-going vessels. The ordinary category comprised ten kinds of vessels, which differed from one another in points of length, breadth and height. The largest of these vessels, called *Manthara* measured 120 cubits in length, 60 in breadth, and 60 cubits in height, while the smallest called ‘*Kshudra*’ was 16 cubits in length, 4 in breadth and 4 cubits in height. Between these extremes there were eight other varieties of vessels with their different measurements rising on a graduated scale.

The sea-going vessels (*Viśesha*) were of two classes viz. *Dirgha* and *Unnata*; the former probably were longer in length than the latter, which had greater height than the former. These two types are again classified into a number of varieties, based
on differences in regard to measurement of length, breadth and height. The variety called ‘Urdhva’, used to bring much gain or profit to the king.

All these vessels of the state were made of ‘wood of different castes’, viz. brāhmaṇa, kshatriya, vaiśya and śūdra. A ship might be built of the brāhmaṇa, kshatriya, vaiśya or śūdra ‘caste’ of wood. Those made of ‘kshatriya wood’ were vehicles of communication between territories separated by vast sheets of water evidently meaning seas. It seems that the ‘kshatriya wood’ was the strongest timber available in the country and constituted the most stable material for the building of sea-going vessels. Ships, made of wood of inferior quality, could not be used on high seas as they were liable to split easily and sink.

By the time of the Yuhtikalpataru the art of ship-building had attained to a high degree of efficiency and improvement. The author of the text knows that iron should not be used in joining together the planks which make up sea-going vessels, as iron will attack magnetic force to the vessel which will expose it to dangers. To avoid these risks, the Yuhtikalpataru suggests that planks of bottoms should be held together with the help of substances other than iron. The author was in favour of a rope-joint. The prevalence of ‘sewn’ or lashed timbers in Indian ships is also attested by Abu’ Zaid and Ibn Baṭṭūta. We learn from the account of Abu’ Zaid that “the ships of Siraf are so put together that the planks are not nailed (or bolted) but joined together in an extraordinary manner as if they were sewn; whereas the planking of all the ships of the Mediterranean Sea, and of the Coast of Syria, is nailed and not joined together, the other way”. Marco Polo noted the absence of iron in Indian ship-building. Later he describes how these were built: “Having felled as much wood (cocoanut) as they want, they let

240 Mookerji, Indian shipping, p. 21; Dr. Basham holds that the Indians were well acquainted with nailed vessels—see, Notes on Seafaring in Ancient India—Arts and Letters, XXIII, (1949), p. 65 ff. For direct evidences from Indian Sculpture, painting and coins, see Mookerji, Indian Shipping, p. 32 ff.

241 RAA, p. 60; Ferrand, p. 93; cf, Baṭṭūta, p. 243.

it dry, then strip off the leaves, and with the bark of the tree they spin a yarn, wherewith they sew the planks together and so build a ship of the same wood, they cut a round mast; of the leaves they weave their sails, and the bark they work into cordage."

Ships in the time of the Yuktikalpataru were pleasantly decorated and were furnished for the comfort and convenience of passangers. Gold, silver and copper and a compound of all these substances were used for different kinds of decorative works. A vessel with four masts was to be painted blue. Heads of animal such as lions, buffaloes, tigers, elephants, and those of serpents, birds etc. constituted the prows of ships.

Ships had cabins of varying sizes, which were located in different positions on a vessel. ‘Sarvamandira’ vessels had largest cabins, used for the transport of royal treasures, horses and women; the ‘Madhyamandira’ vessels had their cabins in the middle part, used for pleasure trips by kings. Some ships called ‘Agramandira’ had their cabins, situated towards their prows, used in the dry seasons after the rains. This particular type of vessels was suited for long voyages and specially also for naval warfare.243 Marco Polo also has noted with interest details regarding Indian ships. According to him the ships that are employed in navigation were built of fir-timber; they were all double-planked. "The bottoms are smeared over a preparation of quicklime and hemp, pounded together and mixed with oil procured from a certain tree, which 'retains its viscous properties' more firm." Marco Polo notes further that these ships could carry crews between 100 to 300 and heavy tonnage.244

Available material thus goes to show that ship-building was an advanced industry in the country. Minute rules had evolved for the construction of ships to be used for different purposes. The country, covered with a net-work of natural waterways, required this industry to grow and expand for purposes of internal communication and transport, not to speak of its essen-

243 Mookerji, Indian shipping, p. 26 ff.
244 ibid, p. 191 ff.
tial serviceability in the maintenance of its foreign trade and commerce.

We begin with the Punjab, where we have the first important notice of water-communication during the period under review, in the description of the famous river-battle at Multan between Sultan Mahmud and the Jats. According to the Tabaqat-i-Akbari of Nizamuddin Ahmad, the last expedition of Sultan Mahmud was directed against the Jats of the Salt Ranges, who had molested his army on its march from Somnath. It is stated that when Mahmud reached Multan he "ordered 1400 boats to be built, each of which was armed with three firm iron spikes, projecting one from the prow and two from the sides, so that everything which came in contact with them, would infallibly be destroyed." With this fleet of boats Mahmud attacked the Jats, who having intelligence of the enemy arrangement, sent their families into the island, and launched, according to some, four thousand boats, and another eight thousand boats manned and armed, ready to engage the Muhammadans and completely routed them.  

Doubts have been expressed by some critics as to whether the number of boats mentioned should be regarded as correct. The figures may be exaggerated. It was probably impossible for the Jats to collect such an immense flotilla of boats in such a short time to resist Mahmud's contemplated attack. There is no reason why the accounts should be regarded as utterly incredible; in this connection the scale of commercial operations on the rivers of the Punjab even at the time of Alexander's invasion may be taken into consideration.  

It may be concluded at any rate that the industry of boat-making was a flourishing one in the Punjab from very early times. In the north-eastern part of India also there was no lack of waterways. Here boats of varying sizes must have formed the principal means of conveyance. The early Bengali Charyā-padas frequently refer to boats, including sea-going vessels, and mention their component parts,

---

245 HEID, II, p. 478 ff.
246 ibid, p. 478 ff.
247 Native craftsmen supplied boats to Alexander, cf, EHI (4th ed.), pp. 68, 93; Mookerji, Indian Shipping, p. 100 ff.; also see Arrian, IV-V.
viz. helms, oars, masts, sails, wheels, etc. In the Rāmācharita there is a reference to the great river Ganges having been covered over by a fleet of boats. In another place there is a specific reference to Dharmapāla’s fleet of boats crossing the sea. This might refer to a naval expedition of which no other evidence has been preserved. What is meant by stone-boat ‘śilā-nauka’ is not very clear. That ferry service was quite frequent and was under the supervision of an officer, is clear from the use of the designation ‘Tarika’ in some of the Pāla inscriptions. The ‘Tarika’ appears to have been placed in charge of ferry services, and was besides responsible for carrying out those regulations which may have existed in regard to the movements of private individuals from one place to another.

Other means of conveyance

The Yuktikalpataru contains accounts of various kinds of conveyances. They are classified under several categories: four-footed, two-footed, footless and may-footed. Horses and elephants are regarded as four-footed conveyances, palkis as two-footed, boats as ‘foot-less’ and chariots ‘may-footed’. This work contains detailed descriptions of various kinds of litters such as the dola, chaturdola, ashadadora etc. They had different sizes. In this work there are also strange references to ‘aerial

---

248 Mookerji, Indian Shipping.
249 Rāmācharita, p. XXIX.
250 Rāmācharita, p.x. The term ‘nauvājaka’ occurs in several Bengal inscriptions (EI, IV, p. 249 ff, p. 252 n. 5; XXVIII, p. 51 ff) Kielhorn interprets it as meaning ‘a fleet of boats’ and equates it with ‘nau-vitāna’ used in Vijayasena’s Deopārā inscription. (pāśchātyachakra-jayakelishushyasva-yāvad-gaṅga-anudhavati-nauvitāna) (IB, pp. 48, 54). The expression ‘taraṇi-sambhavana’ used in the Rāmācharita of Sandhyakara Nandi (Rāmācharita, Chap. II, p. 46, v. 10) is explained by the commentator as ‘naukāmālakura’ i.e. ‘a fleet of boats’. All these are shown to have been plying in the Ganges. In the Kamauli plate of Vaideyadeva (EI, II, p. 351, v. 11) ‘nauvājaka’ occurs in connections with a battle in ‘anuttara-Vaṅga’ (South Bengal). It must therefore, mean a fleet of boats, cf, Gaudalekhamālla, p. 14; IHQ, VI, p. 645.
251 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 541.
cars' used by kings in ancient India. Carts of different sizes were frequently used for the purpose of conveyance and transport. Trained men were used as a means of conveyance. In Kashmir, people were carried on men's shoulders in a 'katūt'. Horses, carriages and elephants were meant for those who could afford the luxury.

In conclusion, it should be pointed out that accounts of ships, to be found in literary texts such as the Yuktikalpataru, although full of technical details, cannot conclusively prove that these were actually constructed in this period for oversea voyages if corroborative evidence is not available. For internal trade indigenous boats must have been used and they were also required for carrying imports to the different parts of the country and bringing commodities to the Indian harbours for export.

The share of the Arabs and the Chinese in Foreign Trade

The Arabs became one of the chief trading communities in India during the period. After the fall of the Roman Empire the Arabs came to the forefront and monopolised the sea-trade on the Indian Ocean. The Arabs established stations in all important ports along the coasts as far as Canton in China, where they appear to have had a settlement or colony as early as A.D. 300. Contemporary evidence shows that by the 10th century A.D. there were to be found many Muhammadans in the cities on the west coast of India, from Cambay to Saimur (Chaul, about 30 miles south of Bombay). There were Juma Masjids in those places. This information is to be obtained both from Al Istakhrī and Ibn Haukal. The whole coast of Kirman and Makran became studded with Arab settlements. A considerable number of Arabs must have settled in Sind after the Muslim conquest. In a 13th century inscription is found

---

253 HIED, I, p. 63 ff.
254 ibid, p. 27 ff.
255 ibid, I, pp. 34,38.
256 ibid, I, p. 468 ff.
257 ibid, I, pp. 23, 468; cf, TIN, p. 159.
TRADE AND COMMERCE

175

recorded an endowment in favour of a Mosque by the Arab shipowners of India. Arab hold on India’s foreign trade became predominant. The Arabs had extended their influence to a far wider region and built settlements over the whole of the south and east coast of Asia, including the Eastern Archipelago. This is attested by Marco Polo who states that Muslims were to be found in his time in Mansul, Tauris, Persia, Yezd, Hormuz, Badakshgar, Kashgar, China, Champa, Sumatra, Ceylon, Madagascar, Aden, Eshar, etc. The Arabs carried on a regular trade on the Indian Ocean, sailing from the coasts of Arabia to China, viz. India, Ceylon, the Malaya Archipelago. These traders frequented the ports of India with goods from their own and other countries and took goods from India, which they sold in the different trade centres of the East and the West. In view of this, Indian traders were naturally being pushed into the background and their actual participation in foreign trade was in all probability growing less and less. Muslim invaders must have hit Indian traders and crippled their business to an appreciable extent. But it is quite likely that Indian traders acted as middlemen in the field of trade. They brought to the various ports the required commodities from different parts of the country with which the Arabs themselves could not have any intimate contact. The Chinese had an important share in the Indian trade. Their sphere of influence and activity in the contemporary commercial world was, however, not as great as those of the Arabs. The earliest Arab account concerning China’s foreign trade dates from the 9th century A.D. when, as Sulaimán states, Chinese ships used to come to Siraf and, taking their cargo, sail to Mascat, then for the Indies, stopping at Kaucammali (i.e. Quilon). Broach and Debal used to be visited by Chinese merchants as stated by Al Idrisi. Marco Polo also refers to ships coming to Broach

261 RAA, pp. 8-9.
262 HIED, I, pp. 77, 87.
from many quarters of China. Chinese Annals of the 14th and early 15th centuries point to Chinese intercourse with many of the western ports including Quilon, Kainkolam, Cochin, Calicut, Pandarani, Cannanore, Mangalore, and those on the Persian Gulf. Ibn Battūta, during his visit to China in the 14th century A.D., noticed that the voyage from Calicut and other Malabar ports to China was made only in Chinese Junks. The Chinese were, however, unable to stand on the same footing with the Muslims in the race for India’s foreign trade. While the foreign trade of the country was passing into the hands of aliens, the position of the indigenous mercantile community was naturally affected in the changed situation. The influence of the Banias of Gujarat and similar communities in other parts of India during the period was probably due to the hold which they still had on internal trade. It was possible for them to establish and keep up the necessary links throughout the country for purposes of trade and commerce, which was not possible for foreign traders to do. Instance of Indian traders regularly visiting foreign countries during the period are so rare, that it cannot be concluded that they had any considerable part to play in the trade with the outside world, which was being monopolised by the Arabs. The merchants of Gujarat being very close to the highways of trade and commerce, were however, able to be benefited by the business still left in their hands. Over the mansions of the ‘Kotiwares’ or millionaires of Gujarat were hoisted huge banners and ringing bells. Their grandeur was almost royal. They had elephants and horses and maintained almshouses.

263 Cf, Mookerji, Indian Shipping p. 185 ff.; Chau Ju-Kua, intro.

264 A Japanese text of Mid-eighth century states that ‘heavily laden Merchantmen from India, Persia and Malaya regularly visited the port of Canton’ (Quotation from Dr. Basham’s article, ‘Notes on Sea-Faring in Ancient India’,—Arts and Letters, XXIII, p. 60 ff). Renaudot in his valuable notes on the accounts left by the Arab travellers, states that ‘the Chinese and the Indian merchants brought thither (i.e. Siraf modern Tahir) all the commodities the East could furnish’.—RAA, notes, p. 14. From a dramatical work of the 13th century A.D. we learn that Indian merchants undertook sea-voyages.—MPY, intro.; cf, RIB, p. xlviv.

CHAPTER VII

The State’s Income and Expenditure

Land-revenue and allied charges:

It is not easy to obtain from inscriptive sources a clear picture of taxation in India during our period. No doubt, a few fiscal terms are available but they seem to be repeated in most records in a conventional manner and are rarely accompanied with such details as might have been useful in rendering their meaning less doubtful and controversial. Nevertheless, the material furnished, though insufficient in many respects, has some utility inasmuch as it throws some light at least on certain sources of revenue, which can be recognised with reasonable certainty. It also provides a means for the study of the form in which the earlier system was carried down to this period, and also for assessing the difference between taxation in actual practice and taxation, as it is portrayed in the Smṛitis and other relevant branches of ancient literature.

We may at first turn our attention to that branch of taxation which is related to land, i.e., land-revenue and allied charges. Land formed one of the main heads of revenue, as shown by the Dharmasastras, the Smṛitis and the Arthasastra literature. The question whether there was any kind of compulsory taxation of land or land-produce in the early Vedic period is a controversial one, but a system of compulsory taxation was not slow to appear, as the evidence of the later Vedic texts shows. The Jātakas make it clear that the king had the right to a portion

1 RV, VII. 6.5.—King Nahusha is said to have forced his people to pay balli. In X. 173.6. Indra is invoked to make the commonalty (vīsah) pay tribute to the king. Cf, HRS, pp. 3-8, 27-28, 36, 58 and n, 171, 173, 189.
of the produce of the land. This is also the view of Kauṭilya. Taxation of land had been known for many centuries before our period, as shown by inscriptions and other sources available to us.

Land continued to be an important source of revenue during the period under review. This is definitely shown by the frequent mention of the fiscal expression bhāgabhogakara in most of the inscriptions of the period. It may be noted that the compound bhāgabhogakara is not known in this form to the literature of the Smritis nor is it used as a single revenue term in the Arthaśāstra, although each of the constituent elements of the compound, viz., bhāga, bhoga and kara was separately well known. Bhāga is translated by Kielhorn as 'a share of the produce'. Bhoga is interpreted as the 'periodical supplies of fruits, flowers, fire-wood and the like, which the villagers had to furnish to the king'. But in case kara is taken as the name of a general property-tax levied periodically, as well as tribute

2 The Kurudhamma Jātaka mentions a person, having carelessly plucked a handful of paddy from his own field, reports:—“From this field I have yet to give the king his due (bhāga), and I have taken a handful of rice, from the untithed field”—II, p. 318. In another place reference is made to the Doṇamāpaka Mahāmattā measuring the king's share of the produce at the door of the granary—II, p. 318.

3 Arth. II, 6. p. 58.

4 Frequently used in the inscriptions of the Pālas and Senas, the Chandellas, the Paramāras, the Gāhādvālas, the Chaulukyas, etc.

5 Ei, VII, p. 160 ff. It is often taken to mean three distinct terms ‘bhāga, bhoga and kara’ which are translated respectively as 'shares, rights of easement, taxes'—R. D. Banerji, Ei, XV, p. 293 ff., or 'share and use, tax in kind'—Vogel, ACS, pp. 167-69. Bhāga is interpreted as 'land-revenue paid in kind'—Majumdar, History of Bengal, p. 277. In earlier works it is used in the sense of 'the kings dues on land, trees, drugs, cattle, wealth, etc.—Manu, VII, 130-31; VIII, 305; Vis, III, 25. The Amarakosha treats ball, kara, and bhāga as synonymous—KHDS, III, p. 190 ff.; HRS, p. 214.

6 Ei, I. p. 75 n.; Manu, VII, 118. Pratibhoga, has been interpreted as meaning 'dues in the form of fruits, flowers and vegetables presented every day'—KHDS, III, p. 191. According to Altekar, ‘bhogakara’ is a petty tax in kind and cash—ART, p. 216.

7 Majumdar, History of Bengal, p. 277; HRS, p. 244; Vardhamāna explains kara as the dues recovered every month from villagers
paid by dependant rulers, it cannot be regarded as a distinctive agricultural tax.

In the Rājor inscription of Mathanadeva (V. S. 1016) the term bhāga and bhoga are, however, separately used. Other expressions are sometimes used, which appear to be substitutes for bhāga and bhoga. Thus in the Prabandhachintāmaṇi, we come across the expression dāṇī, which may mean the king’s share of the produce. In a grant of Dharaṇivarāha of Vaḍhvaṇ (Śaka samvat 839) both the terms dāṇī and bhoga occur. Ghoshal identifies the term ‘dāṇībhāga’ with dāṇībhogabhāga. The last term is mentioned in a Saurāśṭra land-grant, dated in the Śaka year 839, which has been taken to denote ‘the periodical supplies of fruits, firewood and the like by the villagers’ as meant by the word bhoga. The expression mayutā, occurring in the Rājor inscription, is probably a contribution of the same kind as held by the scholar. But it is not clear why the affix dāṇī is used in some cases.

An indication of the rates at which the king’s share was to be collected is given in the Śukranītisāra where it is laid down that the king should take one-third, one-fifth, one-seventh, or one-twentieth from the “collectors of grasses and woods”

Royal Shares
As regards the king’s share of the produce of the agricultural land, denoted usually by the word bhāga we find that there was a difference of opinion among the ancient authorities as to the specific share to which he was entitled. The king’s share of the produce varies from $\frac{1}{3}$ to $\frac{1}{5}$ in the Smṛitis, and the Dharmasastras.

This variation must have been due to difference in

and city dwellers—Dandaviveka of Vardhamāna, p. 5; cf. KHDS, III, p. 191; ‘Kara’ apparently a tax in money—KLS, p. 301.

8 EI, III, p. 263 ff.
9 Prabandhachintāmaṇi, p. 77 and n.
10 IA, XII, p. 190 ff.
11 HRS, p. 256.
12 EI, III, p. 263 ff.
14 Gau, X, 24; Manu, VII, 130 ff.; Vis, III, 22-23—in these it is declared that the king may ordinarily take a sixth part of the produce
the quality of land as well as regional and chronological factors. It is clear that the Mānava Dharmaśāstra in its present form could not have contemplated different rates unless they were known to have prevailed under different conditions. Śukra mentions different rates for the different classes of soil and also the net outturn of crops as the basis for the assessment of land-revenue. It lays down the rates of the king’s grain-share as follows:

\[
\begin{align*}
\frac{1}{2} & \text{ from land irrigated by river;} \\
\frac{1}{4} & \text{ tanks and wells;} \\
\frac{1}{4} & \text{ rain water;} \\
\frac{1}{4} & \text{ barren and rocky lands.}^{15}
\end{align*}
\]

Kulottuṅga Chola of South India is known to have divided land into eight classes for the purpose of taxation, based on classification of soil.

In this connection we may note the maxim laid down in the Śukranītisāra\textsuperscript{10} that ‘the ruler should realise his share of the produce from land according to Prajapati’s system; but in times of danger and difficulty, according to Manu’s system, not otherwise’. These systems represented two different standards for the measurement of land, the king’s share being presumed to be the same. According to Prajāpati 2500 cubits made one parivartana of land, while according to Manu it was equivalent to 3125 cubits.\textsuperscript{17} Consequently when Manu’s system was to be followed, the area being calculated as smaller than under Prajāpati’s system, the king’s total collection of the produce out of the same land was proportionately less. This may explain the variation in rates to some extent.

The traditional rate of \(\frac{1}{3}\) (shadbhāga) as the king’s share must have been normally current over a wide area and for a long period. The designation of the officer in charge of the

---

\textsuperscript{15} Śuk, IV, 2, 227-230, p. 148.
\textsuperscript{16} Ibid, I, 418-9, p. 27.
\textsuperscript{17} Cf, Śuk, I, 409-410, p. 26.
grain-share was ‘Shasṭhādhiḥkīta’ in the reign of Dharmapāla, the Pāla king of Bengal, early in the 9th century A.D. This shows that the rate $\frac{1}{6}$ was the normal rate in his kingdom. Earlier, in an inscription of the Kadamba king Śivamrīgēśavarma, dated in about 450 A.D. the king’s share is found fixed at $\frac{1}{6}$. It is recorded in an inscription of the Chola dynasty, dated 1046 A.D., that the monarch gave away as gifts to Brāhmaṇas $\frac{1}{6}$ of the produce of the land which he used to get as revenue. But the Raiwan plate of Govindachandra (V. S. 1180) shows that the king’s share of the produce in his time was fixed at one-tenth. This is also found to be the rate mentioned in another inscription of the same king (bhāga-kūṭaka-dāśa which means the share, bhāga, for the plough-share kūṭaka was dāśa, i.e. ten), the figure ‘ten’ meaning either ten-hundredths or one-tenth. Kalhaṇa refers to the impost of ‘dvādaśabhāga’ current during the reign of King Ananta (1028-63 A.D.) of Kashmir. From the few typical cases, cited above, it appears that actually there was no uniform rate fixed throughout the land; it was subject to changes, depending very much on variable factors including temperaments and policies of kings.

The victorious Arabs, after the conquest of Sind early in the 8th century, levied taxes on land at varying rates depending on the nature of irrigation used. The land-tax was usually rated at $\frac{1}{6}$ of the produce of wheat and barley, if the fields were watered by public canals; $\frac{3}{6}$, if irrigated by wheels or other artificial means; and $\frac{1}{4}$, if altogether unirrigated. Even if arable land were left uncultivated, it probably had to pay one dirham per jarib and $\frac{1}{6}$ of the produce, which would have been collected were the land actually cultivated. Of grapes, dates and garden produce, $\frac{1}{3}$ was taken either in kind or in money; and $\frac{1}{4}$ (khums) of the tax were levied on wines, fishing pearls and generally of any products not derived from cultivation were paid in kind or their equivalent value. These taxes were to be paid

---

18 EI, IV, p. 243 ff.
21 Rājat, VII, 203.
even before any expenses had been defrayed. This shows that the cost was not taken into consideration in fixing the taxes in question.\textsuperscript{22} Later these taxes further increased even to half of the produce of the land.\textsuperscript{23} The ability of the people to pay was sometimes taken into account. But much more was actually collected than merely the revenue fixed at the above rates. In many cases under the land-system that was in vague in this part of India, farmer not only covered their contracts but also to satisfy their greeds they took much more from the cultivators at their expense.

It may be presumed that the king’s share of the produce was, in some regions at least, paid in kind. In the Rājakātaśabha there is a reference to rice, collected as revenue during the reign of Sussala (1112-20 A.D.). In Kashmir the greatest portion of land-revenue was assessed and collected in khāris of grain.\textsuperscript{24} It may be noted that in several inscriptions of Assam the revenue of the land is found to have been estimated in measures of rice. This evidently points to the prevalence, in some places, of the system of payment of land-revenue in kind.

\textit{Hiraṇya}

The custom of paying taxes in cash was also current. The occurrence of the term \textit{hiraṇya} in most of the inscriptions, belonging to the major dynasties of Northern India during the period is significant. It is generally explained as ‘a contribution in cash’.\textsuperscript{25} But this view is opposed by some scholars who simply translate \textit{hiraṇya} as meaning gold.\textsuperscript{26} There is also a

\textsuperscript{22} \textit{HIED}, I. p. 474 ff.; AJ, XXX, p. 52 ff.
\textsuperscript{24} Rājat, Vol. II, p. 328 ff. The Lokapratasha fully supports this conclusion. \textit{Khāris of rice} (dhānyakhārī) are stated there in fixed quantities as payments of rents, fines, interests, etc.
divergence of opinion as to the particular item that was taxed to collect hiranya. N. C. Bandyopadhyaya suggests that hiranya was a tax 'on the hoard or capital or on the annual income', which means that it was a sort of income-tax. 27 Beni Prasad explains it as symbolising 'the right of the state to the gold and probably other mines as well'. 28 Dr. Ghoshal holds that "in the mediaeval period of Indian history while payments of the land-revenue before the revenue reform of Todar Mal were made in kind, certain classes of crops (called by the title zabti) were always assessed in cash on the ground that it was very difficult to divide them into shares". 29 According to this scholar hiranya was a tax of this nature, levied in cash upon certain special kinds of crops, as distinguished from the tax in kind which was charged upon the ordinary crops. 30 But no reason has been advanced to show why the Smritis, which specify other agricultural or industrial products, does not do so in respect of the items subject to the levy of hiranya. Most scholars agree, however, that hiranya was some kind of tax which was collected in cash. The Mallasārul grant (6th century A.D.) 31 mentions 'Hiranyasāmudayika' as the designation of an officer apparently connected with Vardhamāna-bhukti. Altekar thinks that he was an officer entrusted with the work of collecting tax in cash in Bengal. 32 Dr. B. C. Sen, is, however, of the opinion, that he was an officer in charge of all kinds of taxes, both in money and kind. 33

There is no doubt that land-revenue was sometimes collected in cash. In the Śukranitisāra it is stated that if the king receives a tax (rājabhāga) of one hundred silver

67, 79, etc. Against the interpretation of hiranya as meaning 'gold' see, HRS, p. 61.

27 Bandyopadhyaya, Kauṭilya, I, pp. 139-40.
28 The State in Ancient India, p. 302.
29 Cf, HRS, pp. 61-62.
31 EI, XXIII, p. 155 ff.; Head of the royal treasury or collector of revenue SSI, p. 148.
33 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 498.
karshas from the cultivators, he should make over twenty karshas to him (i.e. the cultivator). Unfortunately this text fails to mention what unit of land or what amount of crops was assessed to the tax of one hundred silver karshas. A 10th century Pratihāra record assigns 500 drāmmas for a temple out of the revenue of a certain village. It may be noted that in the inscriptions, belonging to the Sena dynasty of Bengal, the revenue of the land is estimated in each case in terms of current silver coins. This evidently points to the general prevalence of the system of payment of land-revenue in cash in the Sena territory.34

Khala-bhikṣā

Besides the Bhūgabhogakara, i.e. the usual grain-share and the periodical supplies of fruits, flowers and the like, the people in some parts of the country had also to pay a few additional taxes on land. These are incidentally mentioned in some inscriptions as belonging to different dynasties. Thus in one of the land-grants of Mathanadeva, a feudatory chief of the Pratihāra dynasty (960 A.D.),35 a reference to a tax called khala-bhikṣā is found. This means ‘beggings from the threshing floor’,36 and consequently, may have denoted an additional collection in kind from the grain brought to the threshing floor.37 There may not have been any fixed rate of such an impost as it is not specified. Whatever could be spared was accepted to meet any special purpose or an emergency that might arise in consequence of a famine or a similar calamity, due to war or other such causes. In this connection it may be mentioned that Kauṭilya38 requires the king to beg (yācheta) of the people to offer additional contributions; he employs the word praṇaya (request)

34 IB.
35 EI, III, p. 263 ff.
37 Ghoshal compares it with khalapunjī i.e. “the small heaps of grain taken from each larger pile at the time of measurement and under Maratha rule considered as a perquisite of the state”, cf, HRS, p. 237 n. 2.
38 Arth, V, p. 271.
for such demands, such taxes was not to be levied on inferior land, and he expressly says that an extraordinary demand of this nature can be made only once and not twice on the same occasion. The Śāntiparva contains a specimen of the long address to be given to the people when a king demands higher taxation in an emergency. The word prañaya occurs in the Junāgaḍh inscription of Rudradaman in connection with an emergent situation requiring an embankment to be repaired.

From the Mangalana stone inscription of Jayatrasimha of the Paramāra dynasty, dated V.S. 1275, we learn that a step-well was constructed, and for the sake of charity, the king levied a cess of one sēī (=15 seers and 1 tola) of koraḍa corn on each plough, worked within the limits of the village, Manglana. In the Pātanārāyaṇa stone inscription of the Paramāra Pratapsimha, dated V. S. 1344 it is stated that for the maintenance of a temple the villagers of Kālhāṇavādā were required to pay one seer of grain at each plough.

From the Mathura Praśasti of the reign of Vijayapāla of Kanauj, dated V.S. 1207, we learn that the fourth part of a māpaka was taken for the endowment of a temple. The literal meaning of the word 'māpaka' is a 'measurer'. Probably the text refers to the māpārī i.e., the official who had to measure the grain brought into the market, the rates of which were fixed by the government. The māpaka may have been entrusted to levy a small tax on the dealers in grain.

Our discussion above shows that besides the king's normal share of the produce and other specific taxes, villagers were sometimes required to pay extraordinary taxes such as the one levied on the plough. Such demands were to be met in kind and the amount collected did not go to the coffers of the state but was regarded as a local levy to be used for religious or charitable purposes.

39 EI, VIII, pp. 36 ff; p. 49 n.4.
40 IA, XLI, p. 85.
41 The term is borrowed from the local dialect. In Mārwār, mūṅg, mōṭha, chanā and gavāra, are collectively called koraḍa.
42 IA, XLV, p. 11 ff.
43 EI, I, pp. 287 ff; p. 289, n. 5.
In addition to the above mention be made of some items which seem to have been closely related to the land-tax. These had no wide application and were not levied throughout the land. In fact they appear to have been occasionally levied by some kings in some areas. Like the rice-producing areas, land producing betel-nuts and betel-leaves was also regarded as revenue yielding. From one of the inscription of the Sena dynasty of Bengal\(^{44}\) we come to learn that the king derived an income from betel-leaf plantations (barajas).

**Piṇḍaka**

In some of the land-grants, belonging to the Pāla dynasty of Bengal\(^{45}\) and Nepal\(^{46}\) we come across the name of a tax called piṇḍaka. Its exact nature is not known. It has been identified by Kielhorn with bhāgabhogakara\(^{47}\) and by Ghoshal with hiranya.\(^{48}\) Another scholar suggests piṇḍaka to be the same as piṇḍakara of the Arthaśāstra, which according to a commentator means taxes levied upon whole villages.\(^{49}\) Pandit Bhagvanlal Indraji and Dr. Bühler\(^{50}\) interpret the term ‘piṇḍaka’ to be found in the inscriptions of Nepal, in the sense of ‘assessment’.

**Udraṅga and Uparikara**

The terms udraṅga and uparikara in some cases occur together,\(^{51}\) and sometimes along with bhāga bhoga, etc.\(^{52}\) but not always. They are also noticed separately\(^{53}\). Udraṅga is mentioned along

\(^{44}\) IB, p. 177 ff.


\(^{46}\) IA, IX, p. 163 ff.

\(^{47}\) EI, IV, p. 254, n.

\(^{48}\) HRS, pp. 244-45.

\(^{49}\) Cf., HRS, p. 37.

\(^{50}\) IA, IX, pp. 163 ff.; p. 172, n. 31. Piṇḍaka here seems to denote a share of the produce of the field.

\(^{51}\) CII, III, pp. 135 ff.; 171 ff.; p. 213 ff.

\(^{52}\) EI, IX, p. 1 ff.

\(^{53}\) Udraṅga is mentioned with other fiscal terms in the Rājor inscription of Mathanadeva, a feudatory of the Gurjara Pratihāra dynasty.
with other fiscal terms in a few inscriptions belonging to the Gurjara Pratihara dynasty.\(^{54}\) The use of this revenue term may be traced to earlier inscriptions also.\(^{55}\) Bühl er explains it with the help of the words uddhāra and udgrāha (udgrāha?) as meaning 'the share of the produce collected usually' for the king.\(^{56}\) Dr. Ghoshal holds that this word udraṅga means the revenue imposed upon permanent tenants.\(^{57}\) The suggested interpretation does not specify the revenue in a definite manner, nor is it clear how the sense in which it has been taken can be actually derived from the evidence on which the theory is shown to be based.

The term udraṅga may have been connected with draṅga which means a 'watch-station or military-station'. The tax in question may have in that case been collected from places which were close to draṅgas or from draṅgas themselves. If so, it is not to be regarded as an agricultural tax like bhāga, although it may have been collected from people residing in villages. Another probability may be considered in this connection. The element 'raṅga' in the term used may not be devoid of the meaning in which it is generally understood. In that case udraṅga may have alternatively meant some kind of tax raised to meet the cost of some local festival periodically held.

**Uparikara**

As pointed out, this term occurs in inscriptions of some of the dynasties of Northern India. Like udraṅga it was current

\(^{54}\) **EI**, III, p. 263 ff. The term uparikara may be traced in some of the grants of the Pāla kings of Bengal and also in the inscriptions of Assam and of the Paramāra dynasty.

\(^{55}\) Prob ably it was used by the Sātavāhanas—**EI**, VII, p. 47 ff; for other inscriptions, see, **CII**, III, No. 21, 22, 23, etc.; **EI**, VIII, p. 284 ff; **XIX**, p. 127 ff; cf., **HRS**, p. 189 ff.

\(^{56}\) **IA**, XII, p. 189 and n. 3; According to K. Gupta 'udraṅga' is the share of the produce collected usually for the king—Gupta, Land System, p. 169.

\(^{57}\) **HRS**, p. 210; Dr. Altekar suggested that it may be a land-tax and it may be synonymous with bhāga with which it is never used in inscriptions—**ART**, p. 299; cf., **CII**, IV, p. cxli.
also in earlier times though there is no evidence of its extensive use. Fleet suggests that it was a tax levied on cultivators who had no proprietary rights in the soil.\textsuperscript{58} Dr. Ghoshal regards it as a rent paid by temporary tenants, as distinguished from permanent tenants,\textsuperscript{59} from whom the tax called \textit{udraṅga} was collected. Dr. Barnett\textsuperscript{60} thinks that \textit{uparikara} is equivalent to the Tamil expression \textit{melvarman} meaning a tax representing the crown’s share of the produce. But where the king’s share as a tax is mentioned along with \textit{udraṅga}, the latter cannot possibly have the meaning, as attributed to it above. It is not clear why the same tax should be called by different names in the Sanskrit inscriptions of North India and why the more familiar terms should have been discarded? Dr. Altekar suggests that \textit{uparikara} is identical with \textit{bhāgabhogakara}.\textsuperscript{61} Dr Dikshitar, in critising the former theories, states that “it is undoubtedly clear that both (\textit{udraṅga} and \textit{uparikara}) stand for charges imposed by the state on the produce of the land and to venture beyond this seems to be audacious. The attempted explanations are far from satisfactory and cannot therefore be generally accepted. It must be noted that on the same land are levied both taxes \textit{udraṅga} and \textit{uparikara}. It does not stands to reason that one and the same land was both under the permanent and temporary tenants at the same time...”\textsuperscript{62} Dikshitar’s view may be critised on the ground that where the two terms occur together, it may mean that the tax was to be collected was either \textit{uparikara} or \textit{udraṅga} as the case might be. It need not be assumed that the two taxes were collected from the same people and at the same time. That both \textit{udraṅga} and \textit{uparikara} were taxes levied on land is a view generally accepted.

\textsuperscript{58} \textit{CII, III}, p. 98, and n.; cf. \textit{ART}, p. 216.
\textsuperscript{60} \textit{JRAS}, 1913, p. 165 ff.
\textsuperscript{61} \textit{ART}, p. 216. According to Prof. V. V. Mirashi, ‘as \textit{uparikara} seems to signify an additional tax; it may have included the miscellaneous taxes in kind which traders and artisans had to pay’—\textit{CII, IV}, p. cxli ff.; K. Gupta identifies \textit{uparikara} with ‘cess’—Gupta, Land system, p. 169.
\textsuperscript{62} Gupta Polity, p. 168.
**Inconclusive evidence**

In attempting to explain the fiscal terms used in inscriptions, one feels that available evidence in many cases may furnish little or inadequate help in coming to definite conclusions. The suggestions offered are more or less in the nature of a guess and can hardly claim to have settled the disputed points in a final or conclusive manner. Thus the meanings, attributed to such terms as *uparikara*, *udraṅga*, *hiranya* etc., are obviously based on insufficient data. Some of the terms, although mentioned together, have not infrequently been taken as bearing the same meaning. It is doubtful that two or more terms have been used in the same context in the same sense. Of course, it is quite possible that the lists of such terms, often met with in inscriptions, do not rigidly conform to realities. It is not unlikely that sometimes the lists of taxes were made theoretically as comprehensive as possible, including items collected from diverse sources. The conclusion cannot be firmly supported in view of the conventional manner of enumeration that every item of taxation mentioned was actually current in respect of the land specified in a record concerning alienation of rights. This has inevitably led to some confusion and accentuated the difficulty of ascertaining the meaning of the different terms incorporated.

**Śukra and land-revenue organisation**

In Śukra’s polity there was to be an officer designated *Sumantra*, who had to prepare records containing statistical information regarding land cultivated, the amount of the revenue realised in the form of taxes and fines, amounts realised from cultivators, the products from forests, etc. The records were also required to show who received the rent, and who received the remainder after the payment of the rent.Śukra refers to a system under which the revenue, due from a village, was to be paid to the king by a rich man in advance either in monthly or periodical instalments. He was not a royal officer who must have

---

63 *Śuk*, II, 204-217, pp. 73-4.
received a certain share of the revenue as his fee to cover the cost of collection and also as remuneration for the work done under his supervision. In every way he was to be responsible for the collection and presumably, if the expected amount was not realised, he had to be responsible for it and make up for the loss. It is impossible to say whether the system, mentioned by Śukra was one of farming of taxes, whether it permitted the rich man, who had to stand as a guarantee for the proper realisation of the taxes, to make profits at the cost of the people by collecting much more than what was actually due to the government. The other system under which taxes might be collected was that of appointing officers for this work, who were to be paid fees at different rates out of these collections such as $\frac{1}{8}$th, $\frac{1}{2}$th, $\frac{1}{4}$th, or $\frac{1}{4}$th.\(^{65}\) The taxes due to the king were fixed, for each cultivator was to be provided with a deed of rent.\(^{66}\)

**Principal Taxes on Trade**

An attempt may now be made to focus our attention on that branch of taxation which was related to trade, or to put it more appropriately, to such articles of trade which were intended for sale in the course of their transit, or during transactions in the market or when they were assembled at watch-stations or in the custom-house. A term, known from the Vedic times is not frequently come across; this is *śulka*, whose history goes back to the age of the Atharvaveda Samhita. According to Whitney it means simply a tax, while Weber takes it to mean a *toll*. Ghoshal suggests that it is identical with ‘bali’. But this could not have been the sense conveyed by the terms in the post-Vedic period when its connection with commercial taxation becomes definitely established. In the Smṛitis and Sanskrit lexicons as well as in the inscriptions of the 5th and 6th centuries A.D., wherever it occurs it has been usually defined as meaning ‘ferry dues, tolls and transit duties’. Kauṭiliya seems to apply the term over a wide field of taxation, for, according to him, it means ‘duties levied upon articles

---

\(^{65}\) Śuk, IV, 2, 251-52, p. 149.

\(^{66}\) Ibid, IV, 2, 247, p. 149.
imported into the city, port dues, customs collected by the ferrymen and boundary-officers, duty upon mining (khani) products, duty upon imported salt, duty upon animals intended for slaughter, etc.67 Thus charges on certain well-defined commodities in addition to taxes levied on all kind of imports come within the meaning of the term śulka, as understood by Kautilya. Śukra68 uses the word in the sense of levies from vendors and purchasers on merchandise carried into, and out of, the kingdom. This, however, does not fully indicate the scope of śulka in the Nitisāra of Śukra. On the basis of the evidence, furnished by various sources, some of which have been quoted above, it may be reasonable to conclude that all taxes levied on foreign goods as well as those produced internally but intended for sale, collected at ports, or at the frontiers of a territory or at other places, were generally included in the category of śulka. Schedules of the different rates of śulka are also given in legal and other texts, specially by Vishnu69 whose rule requires that the king’s portion of the śulka should be \( \frac{1}{7} \)th of the merchandise of his own country and \( \frac{1}{8} \)th of that of foreign countries, thus differentiating the rate of taxation for foreign commodities from that imposed on commodities produced in his own territory. It seems that the policy was not to impose high taxes on imports, which might have the effect of raising their prices.

Śulka continued to be an important aggregate of revenue for the Hindu state during the period under review. In this connection it is interesting to note that some references to śulka-maṇḍapikā also occur, from which it may be concluded that there were regular custom-houses where this tax used to be collected. Unlike the Arthaśāstra, the Smṛitis, etc. inscriptions do not give any idea about the rates of taxation. Some of these refer to śulka-maṇḍapikā70 in connection with donations.

67 Arth, II, 22, p. 124 ff.
68 Śuk, IV, 2, 112, p. 147; IV, 2, 257, p. 149.
69 Vis, III, pp. 29-30; Vardhamāna explains ‘śulka’ as the twelfth share recovered from traders, cf. KHDS, III, pp. 190-95.
70 For the term ‘maṇḍapikā’ see, EI, I, p. 101; IA, XIV, p. 8; JASB, LV, p. 47 ff.
made out of the tax collected there, for instance, the Nadol plate of Alhaṇadeva,\textsuperscript{71} mentions that this Chāhamāna ruler granted to a Jaina temple a monthly sum of five *drammas* from the local *śulka-maṇḍapikā*. Here the amount to be paid to the temple authorities was specified, whatever might have been the actual collection at the *maṇḍapikā* in any month of the year. The same nature of information is available from the *Prāśastis of Baijnāth*\textsuperscript{72} which record that a local chief granted daily two *drammas* out of the income derived from the *maṇḍapikā*. The Nadol plate of Pratāpasimha (V.S. 1213)\textsuperscript{73} similarly records a grant by a feudatory of Kumārapāla, consisting of a *rūpaka* per day, which was to be paid out of the collection at the *maṇḍapikā* in favour of some Jaina temples. The Bayana inscription of Chitralekha (955 A.D.)\textsuperscript{74} refers to the collection of three *drammas* for a deity at the *maṇḍapikā* of Śrīpathā and of a similar sum at the *maṇḍapikā* of Vasāvaṭa. Similarly, the Nanana grant of the Chaulukya king Kumārapāla (V.S. 1212),\textsuperscript{75} mentions that Kumārapāla granted one *dramma* per day out of the collection at the custom-house of Nadol in favour of a temple. The information, supplied by the Bilhari stone inscriptions, is of a different nature. It appears from this inscription that various manufactures and traders as well as the inhabitants of a certain locality had to deliver or pay at the *maṇḍapikā*, for the benefit of a monastery and its occupants, certain articles such as salt, oil, betel, pepper, ginger, vegetables etc. and also fixed sums of money for every horse, elephant, etc. sold by them, evidently as taxes for religious endowments.\textsuperscript{76}

Special attention is deserved by the Somnath Temple inscription, dated 1017 A.D.\textsuperscript{77} which also contains a reference to the *maṇḍapikā*, for the reason that the grant therein recorded is not made either by a king or a feudatory but by a group of

\textsuperscript{71} EI, IX, p. 63 ff.
\textsuperscript{72} ibid, I, p. 97 ff.
\textsuperscript{73} IA, XLI, p. 202 ff.
\textsuperscript{74} EI, XXII, p. 120 ff.
\textsuperscript{75} *ABORI* (Silver Jubilee Number), XXIII, p. 29 ff.
\textsuperscript{76} EI, I, p. 251 ff.
\textsuperscript{77} ibid, XXIII, p. 137 ff.
merchants. It is stated in this inscription that three merchants jointly gave to Bhātṭāraka Nagnaka a daily gift of a karṣha or about three-fourths of a tola of ghee or clarified butter from out of the maṇḍapikā-tax. Three merchants named in the grant may have constituted the local authority for the collection of the maṇḍapikā dues. As members of the Municipal Board, if it existed in the locality concerned, they may have possessed some 'discretionary powers', as the learned editor of the inscription suggests, to make donations out of the collections at the maṇḍapikā situated within their jurisdiction. In this connection it may be mentioned that one of the Municipal Boards at Pāṭaliputra in the days of the Maurya Emperor Chandragupta was actually entrusted with the task of collecting tithes on sales, etc. If the step taken by the three merchants required confirmation by a higher authority, there is no mention of it in the Somnath Temple inscription. The Rājatarāṅgīpi in one place refers to an instance in which the dues appear to have been collected not in the maṇḍapikā but at a watch-station (draṅga—a military station). The case appears in the record of the reign of Jayasimha (1128-49 A.D.) when an unruly Dāmara, after imprisoning the kings' officers, had his own name stamped on red lead on the commodities as if he were the king himself. It will appear from this episode that the tax in question could be collected only by royal officers and that the seal of the king was to be stamped on all articles after the dues had been collected. The Arthaśāstra of Kauṭilya states that it was the duty of the Revenue Collector to collect fees at a military or police-station. Another early text, Divyāvadana gives the story of a merchant, in which a reference is made to the practice of collecting duties (śulka) and fees 'payable at military and police-stations and freight for merchandies'.

As regards the officers who were employed for the purpose

79 Customs revenue used to be collected at 'draṅgas' or 'watch-stations' which were situated near mountain passes. There was a customs-station (śulkasthāna) at Surapura in Kashmir, Rājat, Vol. II, Note D, iii, 227.
80 III, 5, p. 501.
of collecting śulka, sufficient details are not available, but one of the chief officers must have been the one designated ‘Śaulkika’. He figures frequently in the inscriptions of the period along with other high officials of the state, particularly in the Pāla grants. The officer designated ‘Śaulkika’ does not figure in the Sena inscriptions. The omission may be due to the neglect of trade during the rule of the Senas in Bengal.

It is said of Anahilapura that it had eighty-four squares; eighty-four market-places; each class having its separate quarter as had each description of merchandies. Each kind of good had its separate mart, where the duties of export, import and sale were collected. Anahilapura, is described as a place of universal commerce during the time of the Chaulukyas. The daily amount of duties collected is said to have been about a lakh of tankas.

Dvārikadāna and road-cess

In the Jājilpārā grant of Gopāla II (year 6) mention is made of the fiscal term dvārikadāna which seems to denote a tax or toll collected at the gates or dvāra or drāṅga as mentioned in the Chronicle of Kashmir. The second element in the compound dvārikadāna reminds us of the word dan, signifying transit duties levied by the kings of Anahilapura on goods conveyed through the country. There is an undoubted similarity, as pointed out by some scholars, between the expression occurring in the Jājilpārā grant and dvāravāhirikā-deyam mentioned by Kauṭilya. Road-cesses seem to be implied in the designation of an officer, mārggādāye kauptika referred to in the Somnath Temple inscription. ‘Kauptika’ certainly means tolls on roads, indicated by the term varitmani in

81 Inscriptions of the Pāla kings of Bengal; cf, Pandukesvar plate of Lalitasurādeva, IA, XXV, p. 177 ff.
82 Cf, FRM, p. 192.
83 JASB, XVIII, (No. 2), p. 137 ff.
85 FRM, p. 188.
86 Arth, II, 6, p. 60.
87 El, XXIII, p. 137 ff.
Kauṭilya’s Arthaśāstra. From the inscriptions of the period it appears that road-cesses constituted a definite source of revenue out of which donations were sometimes made. The Pāṇāherā inscription of the time of Jayasimhadeva of Malwa (V.S. 1116), for instance, records that the king assigned one viṁśopaka on every bull that passed on the road, for the maintenance of the worship of a deity. It is likely that in this case the assignment formed a part of the total collection of road-cess in a particular area, the charge on the bull being a levy on the standard load carried by the animal. The Nāḍlāi stone inscription of Rāyapāla (V.S. 1195) makes the point clear when recording that the king granted one-twentieth part of the income (ābhāvya) derived from the loads on bullocks going on their way or coming to Nāḍlāi for a religious purpose. The inscription, however, does not definitely show whether the donation in the recorded case was in cash or in kind. The Junā stone inscription of Sāmantasimhadeva (V.S. 1325) refers to a grant of one pāilā from every incoming or outgoing caravan ‘exceeding ten camels and twenty bullocks’. In default of this payment in kind, ten Bhīmapriya viṁśopakas were to be charged. It appears that the cess in question was levied on inland commercial transport, either arriving at or departing from a certain station. One Nāḍlāi stone inscription (V.S. 1202) furnishes similar information regarding cesses collected on highways. Here a distinction is draw between bullocks and carts as carriers of loads in fixing the rates of the cess. There are also certain specific details in this record in regard to the schedule framed for the purpose of charging the levy, which are lacking in similar grants. Thus the inscription notes that there were two different rates for bullocks and carts, and that in the case of bullocks two rūpakas were to be charged for each twenty pāilās of load, carried by the former, while one rūpaka was to be charged on each cart conveying commodities which

88 Arth, II, 6, p. 58.
89 El, XXI, p. 41 ff.
90 ibid, XI, p. 36 ff.
91 ibid, XI, p. 59 ff.
92 ibid, XI, p. 42 ff.
came under the class *kiraṇas* (i.e. substances, such as gum, dry ginger, black pepper, etc.). The charge per cart is mentioned without any specification as regards the weight of the load carried, which implies that carts in all cases were approximately of the same size and type and that their maximum carrying capacity was of a known standard which was invariable.

The inscriptions, so far considered in connection with cesses collected on roads, show that these were either in kind or in cash or in both. The amount of a donation was not fixed, for it depended upon the actual turnover, which may have varied, although it was quite possible to form an approximate estimate on the basis of past figures available to the donor. One inscription makes it definitely clear that the donation was out of the income from transport, but the other inscriptions do not mention this point specifically, from which it may be conjectured that the cess may have been an additional one which was levied for a religious endowment.

In the enumeration of rights, transferred to donees in connection with a land-grant, mention is made of the word *ghāta*, which means the dues charged for crossing rivers. Ferry dues constitute a source of income in the Kauṭilyan State. In the land-grants of the Pāla kings, the 'Tarika' appears in the list of officials. This officer may have been concerned with the collection of ferry dues.

**Market charges**

Another source of revenue was the *bazar* or the market where sales and purchases went on. The evidence, furnished by epigraphy in this connection, does not make the point clear whether grants were made out of the state's due on sales and purchases or of specific levies collected at the market for religious purposes. It is, however, evident that the transactions in the market were liable to taxation. Otherwise the market could not have been exploited in the way as shown in the records concerned.93 The point that cannot be definitely ascertained is

---

93 King Śankaravarman of Kashmir (883-902) is credited by Kalhana with the establishment of two revenue offices, one of which was charged with the share of the lord of the market (*hasta-patibhāga*). Apparently
whether the donations were included in the state dues normally levied on the market, or they were additional taxes on buyers and sellers, amounting to a kind of a religious-cess. The Rājor inscription of Mathanadeva (V. S. 1016)\textsuperscript{94} gives a list of taxes assigned to a religious institution, consisting of the following items:

1. Three \textit{vinīśopakas} on every sack of agricultural produce brought for sale to the market-place.
2. Two \textit{palikās} from every \textit{ghaṭaka-kūpaka} of clarified oil and butter.
3. Fifty leaves from every \textit{chollikā} (of leaves) brought from outside the town.

It appears that the particular market, mentioned above, dealt exclusively in agricultural products. No other kind of commodities is to be noticed in the list. It may not be unlikely that as appropriate levies had been already collected on such commodities at proper places, no further tax was imposed on them in the market. Another earlier inscription, which belongs to the reign of Allāta of Mewar (V.S. 1010),\textsuperscript{95} gives details about the taxation on sales, ear-marked for a religious institution. Donations, recorded in this inscription, comprised receipts from sources and at rates mentioned below:

1. One \textit{dramma} on the sale of an elephant;
2. One-fortieth of a \textit{dramma} on a horned animal;
3. Two \textit{rūpakas} on a horse;
4. One \textit{tula} from a \textit{lāta};
5. One \textit{chatuḥsar} from the flower-sellers every day. These taxes, like sale taxes, were collected on the sales taking place in the market. The Arthuna inscription (V. S. 1136)\textsuperscript{96} furnishes another list of dues from transactions going on in the market-place, as will be seen in the following details:

1. One fruit out of every \textit{bhāraka} of cocoanuts;
2. A \textit{mānaka} on each mūṭaka of salt;

it was concerned with the collection of royal market dues—Rājat, V, 167, p. 208.

\textsuperscript{94} \textit{EI}, III, p. 263 ff.
\textsuperscript{95} \textit{IA}, LVIII, p. 161 ff.
\textsuperscript{96} \textit{EI}, XIV, p. 295 ff.
3. One nut out of every thousand areca-nuts;
4. One *palikā* on every *ghataka* of butter and sesame oil;
5. One and a half *rūpakas* on each *koṭikā* of clothing fabric;
6. Two *pūlakas* on a *jāla* (bunch of buds);
7. Two *santas* on each *lagaṭā* (bar of gold, silver or other metal);
8. A *pāpaka* on each *karsha* of oil;
9. A *vrīsha-viṃśopaka* on each load of cattle-fodder;
10. A *dramma* on every pile of sugar, etc.

It appears from this inscription that the local market dealt in all kinds of commodities, including agricultural products as well as industrial, such as clothing fabrics, also gold, silver and other metals. Taxes were both in kind and in cash. The evidence of the Pehoa inscription (882-83 A.D.)\(^{97}\) seems to suggest that when it concerned a religious institution it was possible even for private individuals to introduce a tax, the payment of which was obligatory on the part of all similarly placed, not excepting the king himself. This inscription records that certain horse-dealers, meeting at a *yātrū* held at Pehoa, agreed to impose upon themselves and upon their customers certain taxes or tithes, which were to be distributed among some temples or priests. The taxes, thus voluntarily imposed, were:

1. Two *dharmanas*, which were to be collected by deducting from the sum received by the dealer in horse for each animal, sold at Prithūdaka to the king or to any of his subjects.

2. One *dharma*, to be paid by the buyer on each animal which was in excess of the stipulated price. Even if the king was a party to the transation, he was equally liable to pay his share in conformity with the agreement, arrived at.

There is another case of payment made both by the buyer and the seller, which is recorded in the Anavada stone inscription of Sāraṅgadeva (V. S. 1348).\(^{98}\) In this instance the transac-

\(^{97}\) *EI*, I, p. 184 ff.

\(^{98}\) *IA*, XLI, p. 20.
tions were in respect of certain agricultural commodities. It
gives the following details regarding rates, parties and commodities
involved:

1. Half a dramma paid by the seller on one dhaḍī of madder
(Maṅjishṭhā);

2. One dramma paid both by the seller and buyer on one
dhaḍū of solonum melongena (hingudī);

3. Some portion from each cart filled with grain, the
nature of which is not clear;

4. One palī from a ghāḍū or jar of butter by the seller.

In the Harsha stone inscription\(^{90}\) one dramma on every
horse was assigned to a temple by the horse-dealers. But the
occasion when this money was given is not stated. Similarly,
the Bayana stone inscription of Chitrarākhā (V.S. 1012)\(^{100}\)
shows that for a deity, one dramma was to be set apart, collected
on every horse sold, or on every horse-load of merchandise.
The Bāli stone inscription (V.S. 1200)\(^{101}\) records that whenever
a horse-fair was held, in which horses were sold, one dramma
per horse was to be levied and assigned to a goddess; two
drammas, similarly collected, to the Saṅghapati; one dramma
each to other persons and for other purposes. The contents of
the inscription are not clear with regard to these other bene-

ficiaries.

It appears that stalls of traders were also subject to taxation.
From the Arthuna inscription,\(^{102}\) to which reference has already
been made, it may be gathered that the king took one dramma
each from the shop of a trader on the Chaitra festival and the
‘festival of the sacred thread’ and that of a brazier in the local
market every month, and four rūpakas from each vanvuka of the
distillers. Similarly, the Rājor inscription\(^{103}\) states that the sum of
two vimśopakas was imposed on every shop per mensem. Śukra
mentions a tax upon building sites as well as on sites of shops.\(^{104}\)

---

\(^{90}\) EI, II, p. 116 ff.; IA, XLII, p. 57 ff.
\(^{100}\) ibid, XXII, p. 120 ff.
\(^{101}\) ibid, XI, p. 32 ff.
\(^{102}\) ibid, XIV, p. 295 ff.
\(^{103}\) ibid, III, p. 263 ff.
\(^{104}\) Śuk, IV, 2, 256-7, p. 149.
The evidence of some contemporary inscriptions, which has been considered above, raises one question which cannot be definitely answered, as has been already indicated. The assignment of a proportion of taxes, imposed on articles of trade, for religious or similar purposes is not explicit in most of the inscriptions. Where it is so, there remains no doubt that a fixed share of the state's collection only was thus set apart. But in those cases where there is no mention of any such fixed share, it is not clear whether special taxes were raised for the purpose of endowing religious or other such institutions. It appears, however, that the normal sources, which yielded revenue to the state, must have been generally exploited even if extraordinary cesses were demanded for religious purposes. For the sources, mentioned are on the whole the same as those which are noticed in the Smṛitis and the Arthaśāstra literature. Thus the Arthaśāstra of Kauṭilya mentions among sources of revenue śulka (tolls or octroi duties), dvārādeya (gate dues), paṇyasaṁisthā (market dues), varṭanā (transit duties or road-cess). Gautama¹⁰⁵ and Vishnū¹⁰⁶ specify the rate of śulka to be charged on the price of articles sold. Similarly Manu¹⁰⁷ and Yājñavalkya mention rates of śulka; the Dharmasūtra of Baudhāyana and the Mānasollāsa contain details of a like nature.¹⁰⁸ In Kauṭilya's Arthaśāstra¹⁰⁹ there is a schedule of rates for different categories of articles, which include flowers, fruits, vegetables, couchshells, diamonds, jewels, pearls, linen, silk, metals, clothes, animals, cotton, sugar, salt, liquors, etc. Sukra gives detailed instructions regarding rates of the charges to be imposed upon various articles, as well as certain general principles on which the revenue policy should be based. He insists that articles should be taxed only once, though they may be bought and sold many times. What is particularly noteworthy for our purpose is that the items mentioned in the literary texts are generally identical with those noted

¹⁰⁶ Vis, III, p. 29.
¹⁰⁷ Manu, VIII, 389.
¹⁰⁸ Cf, KHDS, III, p. 190 ff.
¹⁰⁹ Arth, II, 22, p. 135 ff.
in the inscriptions of our period, from which taxes were raised, to be assigned to religious institutions.

**Subsidiary taxes: oilmills**

Oilmills working in villages are mentioned in some cases to have contributed portions of their output, to religious or other endowments. Thus in the Mathura Prāsasti it is stipulated that from each engine (i.e. an oil-mill) a pālī was to be levied. According to the Manglana stone inscription of Jayatrasimha a cess of one karsha of oil was imposed on each oil-mill working in the village of Manglana to be spent for providing light for wayfarers. The Jhanvara inscription records that one kalaśa of oil, collected from the local oil-mills, was to be used for the lighting of a lamp in a temple. One inscription from Nāḍlāi records the assignment of the royal share of two palikās due from each oil-machine (ghaṇaka) in favour of some local Jaina saints. The Nāḍlāi stone inscription of V. S. 1200 is concerned with “a religious beneficitation, consisting of one viṁśopaka coin from the value of the pālīs accruing to him and two palikās from the palas of oil, due to him from every ghaṇaka or oilmill”. Sometimes grants were made, comprising the sale-proceeds of the oil levy. Members of guilds were sometimes subjected to such additional taxes. From the second inscription of Vāillabhaṭṭasvāmī Temple we come to know that the guild of oil-millers and the guild of gardeners, who dwelt on the top of the Gwalior fort, made donations in favour of a temple. In order to provide oil for the lamps, the chiefs of the oil-millers and the other members of the whole guild of oil-millers gave one palikā of oil per oil-mill. Also the chiefs

---

110 EI, I, p. 287 ff.
111 IA, XLII, p. 85 ff.
112 JASB, XII, p. 101 ff.
113 EI, XI, p. 34 ff.; In the Kuruspāl stone inscription of Somēvara-deva it is recorded that a subscription of 11 gadyāṇakas (coins) was raised by the inhabitants of a village to dedicate a lamp to God Lokeśvara, EI, X, p. 37 ff.
114 EI, XI, p. 41 ff.
115 ibid, I, p. 154 ff.
with other members of the local guild of gardeners were required under a similar arrangement to provide fifty garlands (mālās) of daily market flowers for purposes of worship. The Sevāḍī stone inscription of Aśvaraja (V. S. 1176)\textsuperscript{116} records the provision, for the daily worship of Śrī Dharmanāthadeva in the temple of Samipati, of barley corn equal to one hāraka for each of the wells belonging to a group of four villages. The Dubkund stone inscription of Kachchhapaghāta Vikramasimha (V. S. 1145),\textsuperscript{117} records that for the building of the temple, for keeping it in good repairs and also for the maintenance of worship he assigned a tax of one viṁśopaka, charged on each goṇi of wheat etc. Similar instances are available from other inscriptions of the period. It may be interesting to refer, for a comparative study, to the Bijapur inscription of Dhavala of Hastikuṇḍī\textsuperscript{118} which records a variety of donations as noted below:—

1. One ‘rupee’ for each twenty loads carried for sale;
2. One ‘rupee’ on each cart filled (whether going from by the village or passing by it);
3. one karsha for a ghāḍā at each oil-mill;
4. thirteen chollikas of betel-leaves by the Bhaṭṭas;
5. Pellaka-pellaka (?) by the gamblers;
6. one aḍhaka of wheat and barley from each araghaṭṭa, i.e. a well with a water-wheel;
7. five palas for peḍḍā (?) ;
8. one viṁśopaka coin for each bhāra (=2,000 palas);
9. ten palas from each bhāra of articles, such as cotton, copper, saffron, gum-resin (pura, i.e. guggulu), madder and so forth;
10. one mūnaka for each droma of wheat, mung, barley, salt, rūla and such other objects as can be measured.*

We have already referred to a case where guilds of their own accord made arrangements for the maintenance of worship

\textsuperscript{116} El, XI, p. 28 ff.
\textsuperscript{117} ibid., II, p. 232 ff.
\textsuperscript{118} ibid., X, p. 17 ff.

*Some of the terms in the above account are left unexplained. No explanation has been offered in similar other cases also where satisfactory evidence has not been found.
etc., by agreeing to contribute a certain share of their income. The Partabgarh inscription of the reign of Mahendrapāla II\textsuperscript{119} records that a permanent endowment was created by the king himself comprising one \textit{palikā} of oil per oil-mill, five bundles of foliage, hundred garlands of four-strings each, two \textit{palas} of suffron and one \textit{pala} of betel-nuts collected from the trading community in the month of \textit{Chaitra}. It appears that the trading community was subjected to this tax, which was imposed on them by the king for the benefit of the shrine attached to the monestry of Hari-Rishīśvara at Daśapura.

This must have been an additional levy which the king raised from the local people in excess of the taxes due to him under normal conditions. Collections like these cannot be supposed to have been free from the element of taxation in such cases as are recorded in royal charters, and not in documents of private benefactors.

Usurers and moneylenders were not free from the incidence of taxation. In the \textit{Śukranītisāra}\textsuperscript{120} it is stated that the king should take \(\frac{1}{4}\) portion of the interest from usurers and money-lenders.

Certain fiscal terms are found in inscriptions, the meaning of which is not sufficiently clear. Among these mention may be made of mārgaṇaka, prasthaka, daśabandha, kalyāṇadhana, lavaṇakara, gokara, jalakara, pravanikara, talārabhāvya, śrāddha-kara, maulakara etc.

\textit{Mārgaṇaka}\textsuperscript{121}

This tax is found in one or two inscriptions belonging to the Pratīhāra dynasty\textsuperscript{117} and the Chaulukyas of Gujarat.\textsuperscript{122} A Chaulukya inscription, while recording the gift of a village, stipulates that the grant was to include all dues in addition to the new or novel \textit{mārggaṇaka} (\textit{prāptādāya (h) abhinava-mārggaṇaka prabhṛiti-sarvvādāyaḥ...........}). It thus appears

\textsuperscript{119} \textit{EI}, XIV, p. 176 ff.
\textsuperscript{120} \textit{Śuk}, IV 2, 255, p. 149.
\textsuperscript{121} \textit{EI}, III, p. 263 ff.
\textsuperscript{122} \textit{JASB}, XXXI, p. 120 ff.
that the tax in question was a new imposition and the record shows that it was to be continued. It does not seem likely that the tax was extensively in force.

**Prasthanaka**

In the Rājor inscription\(^{124}\) prasthanaka is mentioned as a fiscal term. It is explained by Ghoshal as a contribution at specific rates for every prastha measure of liquids.\(^{125}\) Some Gādaṇjavāla records refer to items of revenue including:

1. Daśabarindhaviśatiqṭhūprastha,
2. Akshapāṭalapraṣṭha,
3. Pratīhārapraṣṭha.

These terms of revenue, ending with prastha, may be compared with the expression prasthanaka occurring in Mathanadeva’s above-mentioned land-grant. It has been proposed that these terms signifying contributions in terms of so much prastha payable by the villagers on account of the offices concerned.\(^{126}\)

This however, does not throw sufficient light on the nature of the taxes proposed. It appears likely that the word prastha, in its wide sense signifying a measurement in association with the offices mentioned above (Nos. 2 and 3), means in the first case collections for the office of the record-keeper, i.e. dues paid for keeping registered documents in the office; in the second case, dues for the maintenance of village-guards. Rajendralal Mitra however, interpreted ‘akshapāṭalapraṣṭha’ as a tax fixed for the administration of justice. The meaning of the first term, noted above, is not clear. These taxes may have been collected in kind, measured on the basis of the prastha unit. It may be presumed that the revenue term ‘daśabarindhaviśatiqṭhū-prastha’ mentioned in the Gādaṇjavāla inscriptions, is related with ‘daśābhandha’.

\(^{124}\) EI, III, p. 263 ff.

\(^{125}\) HRS, p. 237; In another place prasthanaka is explained as a cess on each prastha of grain over and above the usual grain-share—HRS, p. 296.

\(^{126}\) HRS, pp. 262-3; p. 296.
Dasābandha

A tax called dasābandha is mentioned in the Nadol inscription (V. S. 1200), according to which a certain chief (rāṇaka) Bhamara, belonging to the Karṇāṭa country, freed the dancing girls of Usapa-pattana from the tax called dasābandha. This is regarded as a tax imposed only on dancing girls. This interpretation may not be tenable as K. Gupta has shown that a kind of grant was known as dasābandha which may bear some affinity to the meaning conveyed by it in the inscription quoted above. The dasābandha of South India was ‘land granted to a person for repairing or building a tank, on condition of paying in money or kind one-tenth or some small share of the produce’ or “land granted at one-tenth of the usual rates to a person in consideration of his constructing or repairing a tank”. Such grants were also known as ‘Dasā-bandha-māṇya’. It is to be noted that the North Indian inscription, referred to above, mentions the tax as one levied on dancing girls. Gupta's interpretation does not explain why such a tax should have been imposed on dancing girls, from which exemption was secured from a chief. If the tax was similar to the one current in the south under an identical name it is to be presumed that it was collected in the particular case, reported in the above mentioned inscription from the north, from dancing girls who might have received land-grants on terms, referred to by Gupta.

Kalyāṇadhana

The term kalyāṇadhana is found among other fiscal terms in the inscriptions of the Kalachuris and the Paramāras, which

127 ASR. 1908-9, p. 119 ff.
128 Gupta, Land-system, p. 222 ff; IA, XXX, pp. 107, 267; EI, XVI, p. 52 ff; EC, III, p. 35 ff, IV, p. 12 ff; MER, 1921-22, p. 11 ff, 1922-23, p. 128; ASR, 1903-4, p. 205 ff; According to Kauṭiliya dasābandha implies a share of the produce given by a landlord to a cultivator or labourer,—Arth., II, 24, p. 128 etc.
130 EC, IV, p. 12 ff.
131 MER, 1923-24, p. 36 ff.
132 IA, XVI, p. 254, line 22.
Dr. Barnett interprets as meaning ‘marriage tax’. There is a proposal to connect the word with kalayana-nirodha, meaning, relief of the poor in times of famine and other calamities. It must, however, be regarded as an item of taxation. Dr. B. C. Sen suggests that kalayana-nadhana was probably a tax collected for construction of works of public utility or for any such undertaking by the State for the welfare of the people.

Lavanakara

Salt was a source of revenue to the state, and was regarded as a state monopoly by Kautilya.183 The state itself manufactured salt, took its share in salt manufactured by private persons and levied state dues on imported salt. It figures prominently in some of the inscriptions of the period, especially those belonging to the Gahaḍavala dynasty. In the Harsha stone inscription of Vighrahara, dated in the Vikrama year 1030,184 it is recorded that for the benefit of a temple one viṁśopaka on every kūṭaka of salt was assigned. Obviously this refers to a tax that was levied on dealers in salt.

Gokara, jalakara, pravaṇikara

Dr. Tripathi185 defines jalakara as a tax on water and regards it as a fruitful source of income, because the prosperity of the villages largely depended upon irrigation, to which, consequently, special attention had to be given. He explains gokara as meaning a tax on the breeding of cattle or a charge covering grazing rights. The term pravaṇikara is to be met with in most of the inscriptions of the Gahaḍavālas. Dr. Tripathi186 thinks that it was a tax on tumpikes intended to preserve the peace of the village by discouraging the ‘advent of a large number of visitors’. Leumann thinks that the nature of the tax is shown by the use of the word ‘pra’ as an affix to ‘vaṇij’ meaning, according to him, a retail dealer or perhaps a second-

183 Arth, II, 12, p. 88.
184 EI, II, p. 116 ff.
185 R. S. Tripathi, History of Kanauj, p. 349.
hand dealer. There is, however, no satisfactory explanation as to why one of the consonant is omitted in the expression, pravāṇi or pravāṇikara, if it is not due to a deliberate attempt at abbreviation. The pravāṇi, it may be noted, appears along with other persons belonging to the assigned villages and his place in the list is next to that of the vaṇik in the land-grants of Mathanadeva.\(^{187}\) The Somavāṃśī kings of Trikaliṅga\(^{188}\) mention the pravāṇikara and a tax on fields (kṣetrakara) assigned by a chief as a donation. The pravāṇikara may have been a kind of tax, imposed on pravāṇis in the locality concerned, who may have been small or retail dealers. The view that the term is to be understood in the sense of śulka, as suggested by Ghoshal, can be accepted only in a general way, for it may have formed an item only of the various charges which were classified under the general term śulka.

The Sāṇḍerāv stone inscription of Kelhaṇa (V. S. 1221)\(^{189}\) refers to an item of revenue called talārābhāvyā. The text does not clearly indicate the nature of the tax.

**Srāddhakara**

In the Rājataraṅgiṇī\(^{140}\) we find that a tax was levied on the Kashmirians, performing śrāddhas at Gaya. This was purely a tax on the people of Kashmir, introduced by their government. In attempting to abolish this tax a person was thrown into the water of the Vītāśā by queen Diddā with a large stone bound to his neck. But Kandarpa, lord of the ‘Gate’, was successful in freeing the Kashmirians from the tax on śrāddhas during the reign of king Harsha.


\(^{188}\) EI, XI, p. 147 ff.

\(^{189}\) *Ibid.*, XI, p. 47 ff. The expression talārābhāvyā also occur in some inscriptions,—Bhavnagar Prakrit and Sanskrit inscription, p. 158 ff, where it has been interpreted as meaning ‘the revenue of a Talāra’. Some scholars take it to mean “the income or revenue from tolla”. *Talāra* may be a corruption of *Tālavara* (Talavārika).

\(^{140}\) Rājaś, VI, 254-56; VII, 1008.
Maulakara

As a fiscal term it occurs in the Asni inscription of Mahipāla, dated V. S. 974, where the sum of five hundred drammas is mentioned as being given out of the tax belonging to the king’s household (rājakulaśya) for the benefit of a certain Śiva temple. 

Personal service

Personal service or labour was imposed in lieu of taxes. This is to be found in the Śukranītsāra which requires an artisan or a craftsman to perform one day's work every fortnight, instead of being required to pay any tax. The contribution in the shape of personal service may also be traced in other sources. In this connection reference may be made to the introduction of forced or compulsory carriage of loads (rūḍhabhūroḍhi) by Saṁkara-Varman of Kashmir (883-902 A.D.). This imposition has been aptly described by Kalhaṇa as ‘the harbinger of misery to the villagers’. An interesting side-light is thrown upon the methods of its execution by the author of the Kashmir Chronicle. It is said that the tyrant fined the villagers failing to carry the loads for one year, the value of loads calculated according to the highest price current in the region concerned. He punished in the same way all the villagers, not obliged to carry loads by imposing this punitive tax. Reference to this impost (corveé) is found later on in the reign of Harsha also.

Unowned or unclaimed properties

In one of the inscriptions of Mathanadeva, the term aputttri-kādhana occurs among other revenue terms. It literally means

---

141 IA, XVI, p. 173 ff.
142 Śuk, IV, 2, 241, p. 148.
143 Cf, Gau, X, 31-52; Mbh, XII, 87, 14-15; Usanas (Sukra) quoted by Maskarin in his commentary on Gautama (X, 31) holds the view that the artisan may either perform one day’s work every month without any remuneration or pay one kārshāpana as tax.
144 Rājat, V, 174.
145 ibid, VII, 1088; Lawrence is of the opinion that nothing had done more to ruin Kashmir than the corrupt and cruel manipulation of corvés.
146 EI, III, p. 263 ff.
'the property of one who has no appointed daughter to raise male issue for himself', which being ownerless came into the possession of the king.147 From the Mahārājaparajaya of Yaśahpāla,148 we learn that when a subject died sonless, none could remove his body until his whole property was occupied by the king through the agency of the Pañchakulas. The system of confiscating the property of persons dying without male issues was abolished by king Kumārapāla of the Chaulukya dynasty after he became converted to Jainism.149 It is recorded in the Rājatarāṅgini150 that king Kalaśa of Kashmir (1063-89 A.D.) confiscated the properties of those who died without issues. The income derived from this source, also referred to by Kālidāsa in his Abijñānśakuntalam was not a negligible one.

Pilgrim tax

A kind of tax used to be derived from pilgrims, apparently in regions, which were frequented by devotees from different parts of the country. It is noted that king Siddharāja (1094-1143 A.D.) levied a tax on pilgrims, visiting Somnath, collected at the frontier town Bahuloḍa. The tax amounted to 72 lakhs of 'rupees' a year, which Siddharāja remitted at the request of his mother.151 The amount may be exaggerated but it is clear that the pilgrim tax must have been a specially substantial source of income at places like Somnath. This tax may have been known by the name kur in Aṇahilapura.152 The practice of collecting dues from sacred places seems to have been current among the Yādava-varman rulers of Vikramapura in East Bengal in the 11th century. The Belava copper-plate grant of Bhojavarman153 in its list of high official includes one designated that Pithikāvitta whose

147 HRS, p. 237.
148 MPY, intro, pp. X-XI.
149 Cf, HKC; MPY, intro, pp. X-XI; FRM, p. 150; Prabandhachintāmanī, p. 133, etc.
150 Rājat, VII, 697.
151 Prabandhachintāmanī, p. 84.
152 FRM, p. 188.
153 IB, p. 21 ff.
function, according to Dr. B. C. Sen, was probably to collect "some kind of state dues from visitors to sacred places or from incomes accruing to religious institutions".  

Sometimes voluntary gifts to temples made by pilgrims, constituted a regular source of income to the state. It is recorded by Muhammadan writers that the great part of the revenue of the king of Multan was derived from rich presents brought to the idol. Mas'ūdi states that the inhabitants of Sind and India, who visited Multan as pilgrims from the most distant places, brought money, precious stones, aloe-wood, and all sorts of perfumes to offer to the deity, which made up the largest part of the revenue of the kingdom of Multan. According to some Muslim writers, the money, thus accumulated was spent on the temple and its devotees. Thus Al Istakhri says that the vast sum of money, which these pilgrims brought to the deity, were spent on the temple. Ibn Haukal, who visited India in 976 A.D., adds that "the sums collected from the offerings of the pilgrims at the shrines (of Multan) are taken by the Amir of Multan, and distributed amongst the servants of the temple at Multan."

Taxes on pilgrims were sometimes abolished by kings. According to a tradition a king called Bhuvanapāla of Anahilapura is said to have abolished the tax on Jaina pilgrims.

But there are also instances to show that strict measures were adopted by some kings in cases of non-payment of pilgrim taxes. Pilgrims were not even allowed to proceed to their destination without paying the prescribed tax. It is mentioned in the Prabandhachintāmani that Mayanalladevi, while describing the events of her former birth recollected the visit to Bahuloḍa, undertaken by her, to worship Someśvara. As in that birth she was unable to pay the duty which used to be levied at the place, she was not allowed to proceed further and perform

154 Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 552.
155 HIED, I, p. 23.
156 ibid, p. 27.
157 ibid, p. 36:
158 JBRAS, 1894, p. 8 ff.
the worship. Later she was instrumental in securing the abolition of the tax on pilgrims to Someśvara, collected at Bahuloḍa.\textsuperscript{159}

\textit{Revenue from fines}

Much income was derived from fines paid by convicted persons. In the land-grants this source of revenue is generally referred to as ‘\textit{daśāparāḍha}’ or ‘\textit{daŋḍadaśāparāḍha}’. An early reference to this is to be found in the land-grants of the Maitrakas of Valabhi.\textsuperscript{160} Fleet\textsuperscript{161} interpretes it as proceeds from fines for the commission of ten offences by the villagers, which shows that fines were imposed for the commission of offences conventionally grouped as ‘\textit{daśāparāḍha}’. This is also mentioned in the Arthaśāstra.\textsuperscript{162}

In the Rakshashkhalī Island plate of Māḍommaṇapāla dated Śaka 1118 (=1196 A.D.)\textsuperscript{163} a phrase of rare occurrence is found. The passage where it occurs runs as follows:—\textit{Vāmahitha-grāma (mo)-yam ratna-trama}. Dr. B. C. Sen corrects the reading ‘\textit{ratnatrama}’ as ‘\textit{ratnatraya}’ and holds that the expression has some Buddhist association.\textsuperscript{164} It has been pointed out that the term occurs in an identical context in the Manahali copper-plate inscription of Madaṇapāla (1.41 ‘\textit{ratnatraya—sambhoga}’).\textsuperscript{165} One scholar takes it to be a fiscal expression ‘which seeks to condition, among others of its kind, the rights and privileges accruing to the donees’ i.e. ‘right over wealth (deposited underground)’.\textsuperscript{166} But Dr. Ghoshal holds that it was some kind of royal “contribution from the villages for support of the Buddhist faith”.\textsuperscript{167} As the interpretation of the

\textsuperscript{159} Prabandhachintāmaṇi, p. 79.
\textsuperscript{160} \textit{EI}, IV, p. 74 ff.
\textsuperscript{161} \textit{CII}, III, p. 189, n and p. 218.
\textsuperscript{162} Cf, Beni Prasad, The state in Ancient India, p. 303; HRS, pp. 219-29.
\textsuperscript{163} Ed. by Dr. B. C. Sen, IHQ, X, 321 ff; later edited in \textit{EI}, XXVII, p. 119 ff.
\textsuperscript{164} \textit{IHQ}, X, p. 321 ff.
\textsuperscript{165} Gaudālekhāmālā, pp. 147-58.
\textsuperscript{166} \textit{EI}, XXVII, p. 122, n. 7.
\textsuperscript{167} HRS, p. 297; cf, \textit{PHB}, p. 135.
term is uncertain it cannot be definitely said whether it denoted an item of income or a liability of the state.

Revenue from mines
In those parts of the country which were endowed with mineral resources, the state derived some income from the working of its mines. The existence of mines of different metals is referred to in a few inscriptions. There are references to iron mines (lohākarah) in the Chandrāvatī plates of Chandraseva\textsuperscript{108} and a few other inscriptions of the Gāhaḍavāla dynasty. Mines of gold, silver and copper were worked during the period, as epigraphic evidences show. In the Bargaon grant it is stated that the king derived a revenue from copper mines.\textsuperscript{109} In the Arthaśāstra of Kauṭilya\textsuperscript{170} mines are regarded as a state monopoly. But different views were held by other authorities. Manu, while referring to mines as a source of revenue, states that the king should take only \( \frac{1}{2} \) of the metals found underground. Mānasollāsa recommends ‘that the king should impose a tax upon the output of the gold mines, silver mines, and mines of precious stones’. The Śukranītisāra\textsuperscript{171} also proposes the imposition of a tax upon mines, fixed on a graded scale, viz. \( \frac{1}{2} \) of gold, \( \frac{1}{2} \) of silver, \( \frac{1}{4} \) of copper, \( \frac{1}{4} \) of base-metal, \( \frac{1}{4} \) of tin and lead, \( \frac{1}{4} \) of precious metals, etc. Kauṭilya mentions ten kinds of revenue from mines.

In the Gāhaḍavāla inscriptions we come across names of some taxes about which definite information is lacking. These include:

1. Kumāragadāṇaka,
2. Kūṭaka,
3. Yamalikāmbali,
4. Vishayadāna,
5. dā (or di) gapasadīdvighagovicha,

\textsuperscript{108} EI, XIV, p. 192 ff.
\textsuperscript{109} The expression according to Barua, means ‘a lotus pond’—Barua, A Cultural History of Assam, p. 56, n. 110. For royal income from copper mines, ibid, p. 96.
\textsuperscript{170} Arth, II, 12, p. 88.
\textsuperscript{171} Śrut, IV, 2, 233-35, p. 148.
Kumāragadyāṇaka

This term has been explained by Dr. Ghoshal\textsuperscript{172} as a tax at the rate of so much gadyāṇaka (=32 guṇja berries)\textsuperscript{178} on behalf of a royal prince. He does not say from whom this tax was to be collected, nor why a special tax should be imposed for a royal prince. It is not also clear if the tax was to be increased, if so, at what rate, if there were more than one royal prince. According to Dr. Tripathi\textsuperscript{174} it was presumably something like modern nazar offered to royal personages on a ceremonial occasion. Mirashi \textsuperscript{175} suggests that the term does not refer to a coin denomination but presents given by the subjects to the king on the occasion of the birth of a son.

Vishayadāna

Dr. Tripathi suggests that most probably it was some kind of district tax.\textsuperscript{176}

Kūṭaka

The use of the term kūṭaka in the sense of a measurer can be traced in some contemporary documents, e.g. the Harsha stone inscription.\textsuperscript{177} In an inscription of Govindachandra\textsuperscript{178} it occurs in the expression ‘bhāga-kūṭaka-dāsa’, which may mean ten kūṭakas constituting the royal-share (bhāga).

Capitation tax

With the advent of the Muslims the Indian subjects had to pay a new kind of tax to their Muslim overlords. The Arabs in Sind derived this tax from those who did not embrace the Muhammadan religion. This tax was exacted in a manner causing

\textsuperscript{172} HRS, pp. 263, 294.
\textsuperscript{173} Yāj, III, 258—Yāj mentions that the weight of a gadyāṇaka is equal to 32 guṇja berries.
\textsuperscript{174} R. S. Tripathi, History of Kanauj, p. 349.
\textsuperscript{175} JNSI, XII, p. 3 ff.
\textsuperscript{176} IHQ, IX, p. 123 ff.
\textsuperscript{177} EI, II, p. 116 ff.
\textsuperscript{178} JASB, XLII, p. 314 ff.
great hardship to the non-Muslims. According to the original ordinance of ‘Umar’, Jizya or poll-tax from the non-Muhammadans was to be collected at the following rates: “A person in easy circumstances had to pay 48 dirhams a year, one of moderate means 24 dirhams, and those who were poorer including manual labourers had to pay 12 dirhams each. Women, children and persons unable to work were not required to pay anything. But a century had not elapsed, when ‘Umar the Second, considering the rates too moderate, calculated what a man could gain during the year, and what he could subsist on, and claimed all the rest, amounting to 4 or 5 dinārs, about two pounds a year”.

Turushkadaṇḍa

The word Turushkadaṇḍa occurs in a conventional list of taxes to be found in some of the inscriptions of the Gāhāḍavāla dynasty. Different scholars have tried to ascertain its meaning, but a satisfactory interpretation, suiting the context, is still a desideratum. It is well known that the Gāhāḍavālas came into conflict with the Muslim invaders of the 11th and 12th centuries A.D. The word Turushkadaṇḍa obviously must have some meaning connected with the Turushkas or these Muslims. There appears to be a substantial unanimity among scholars on this point. The rest is controversial. Führer’s suggestion that it means ‘taxes on aromatic reeds’ is not given any serious consideration. All other interpretations, so far proposed, are based on the view that the expression came into use with the advent of the Muslims. Thus F. E. Hall takes it to mean a ‘Muhammadan amercement’. C. V. Vaidya holds that it is the name of a tax, which was levied by the Gāhāḍavāla rulers on their subjects and given as tribute to the Muhammadan rulers of North-West. Pandit H. Sastri thinks on

180 ibid, I, p. 477 ff.
181 JASB, LVI, p. 113 ff.
182 ibid, LVI, p. 11 ff.
183 VHMI, III, p. 211 ff.
similar lines that the amount, collected in the shape of this tax, was utilised for paying the invaders off. Alternatively, it may have meant a tax which was raised to meet the military expenditure in fighting the Muslims. This is also the view, held by U. N. Ghosal, Smith and some others\textsuperscript{184} who take it as a tax levied on the Gāhadavāla subjects to meet the expenses of resisting the Turushka inroads. Some objections may be raised against the theories, referred to above. In the first place, if the turushkadanḍa was a tax which was raised to be paid as tribute to the Muslims, or for the purpose of preventing invasions, it is not clear why such a tax should have been collected precisely by those Gāhadavālas who had succeeded in defeating the Muhammadans, which they claim to have done on certain occasions. In the second place, if the tax was levied to pay the invaders off, it is equally not clear why it was not raised at a time when it was most necessary as during the reign of the Gāhadavāla king Jayachandra. The word turushkadanḍa does not occur in all the available inscriptions of the Gāhadavāla dynasty. No interpretation of the word will be acceptable unless it can reasonably explain both its occurrence and omission in the different records of the Gāhadavāla rulers.

The word dāṇḍa in the compound turushkadanḍa most probably means a fine. It is found in Pāṇini’s grammar\textsuperscript{185} where it is taken as meaning an ‘amount of fine by way of punishment’.\textsuperscript{186} A few examples are also available. Thus a fine of two pāda coins may be expressed in the form of ‘dvipādikam dāṇḍitah’; similarly dvīśatikam dāṇḍitah will indicate a fine of 200 kāṛśāpanas,\textsuperscript{187} etc. If dāṇḍa in the present case is to be taken in the same sense, turushkadanḍa will mean a dāṇḍa or fine imposed on a Turushka by way of punishment. It is particularly important to note the cases of its occurrence and those of its omission in the relevant records. Its earliest use goes back to the time of Chandradeva, the founder of the Gāhadavāla dynasty, when it occurs for the first time in an

\textsuperscript{184} HRS, p. 263; EHI, p. 400 and n. 1; IHQ, XXV, p. 135 ff.
\textsuperscript{185} Pāṇini, V, 4.2.
\textsuperscript{186} AIP, p. 148.
\textsuperscript{187} ibid.
inscription issued in 1148 V. S. (1090 A.D.). Its use was discontinued from the beginning of the reign of Jayachandra (V. S. 1225–1169 A.D.); while during the period extending from 1148 to 1225 V. S. it is found frequently alluded to in the Gāhaḍavāla inscriptions. During this latter period the Gāhaḍavāla kings are known to have been successful in resisting the Muslims and maintaining their authority against foreign invaders. From different sources including inscriptions it may be gathered that both Vijayachandra and Govindachandra had successful encounters with the Muslims. Both claim to have defeated their opponents. We have no personal grants of Madanapāla, the second king of the dynasty; those which refer to his reign were executed on his behalf by his son Govinda-chandra and his two queens. It was as crown-prince that Govindachandra defeated the invading bands of Muslims some time before 1109 A.D., for the Rāhan Plate, dated in that year, records that “he again and again by the play of his matchless fighting compelled the Hammira (i.e. Amir) to lay aside his enmity”. Thus from this inscription and other contemporary records it appears that the Muhammadans were defeated during the reign of Madanapāla by the crown-prince Govindachandra. The tax turushkadaṇḍa is mentioned in the inscriptions connected with the reigns of the first four kings, viz. Chandradeva, Madanapāla, Govindachandra, and Vijayachandra. The period covered by their reigns was one of success won in their contests against Muslim invaders. Vijayachandra was succeeded by Jayachandra. There are altogether seventeen land-grants of his reign, out of which fifteen were issued by the king himself. In none of these is there a reference to the turushkadaṇḍa. But in the remaining two inscriptions of

188 El, IX, p. 302 ff.
189 ibid, XVII, p. 16 ff.
190 IA, XVIII, p. 14 ff.
191 Opinions differ as to the results of Gāhaḍavāla struggles with the Muslims. The suggestion regarding the meaning of ‘Turushkadaṇḍa’ offered here is based on the acceptance of the theory, which is more probable, that the Gāhaḍavālas before Jayachandra had not been defeated by the Muslims and were able to maintain their power intact.
Jayachandra, issued during his father's reign, it is found included in the list of taxes mentioned. Jayachandra had an encounter with the Muhammadans on the plain between Chandwar and Etawah. He died in the battle field. The last king Harishchandra ruled as a feudatory of the newly established Muslim power in Delhi.

In the circumstances, discussed above, it does not appear likely that those very Gāhaḍavāla kings, who claim to have succeeded in their struggles against the foreigners, had imposed a tax on their people to pay off the invaders. It is supposed that the tax was collected to meet the expenses of fighting the Muslims; how is it then that it was not collected by Jayachandra on whom also as on the others devolved the task of resisting the aggressors?

It may not be unreasonable to infer that the tax was imposed upon the Muslims who were defeated by the Gāhaḍavālas. It may have been imposed either on the prisoners of war as a price for their liberation or on the defeated invaders by way of punishment (i.e. compensation). As the position of the Gāhaḍavālas became weak, it was impossible for them to raise this tax, which accounts for its omission in the records of Jayachandra, as already mentioned. This omission cannot be reasonably explained by the supposition that the "Gāhaḍavāla vigilance for defence against the Turushkas must have been relaxed, probably in view of the increasing weakness of the later Yamini Sultans". The idea behind this suggestion is that the Gāhaḍavālas raised this tax from their people to fight the Muslims, but thinking that the "Turushka menace itself was over, Jayachchandra discontinued it". The suggestion is based on an inference which has to be proved. Then, again, it is necessary to note that "a tax which was levied to pay a certain tribute, or to pay the invaders off or to meet military expenditure, incurred in resisting Turushka inroads, must have been

102 HIED, II, p. 251 ff; Briggs, I, p. 178 ff; R. S. Tripathi, History of Kanauj, p. 329 ff; TNH, p. 470 ff; CHI, III, p. 43 ff; Ray, Dynastic History of Northern India, Vol. I, p. 542 ff; etc.
103 R. S. Tripathi, History of Kanauj, p. 334 and n. 3.
104 IHQ, XXV, p. 135 ff.
reckoned as a central tax and consequently collected in the royal treasury to meet the particular requirements for which it had to be raised and not left for Brāhmaṇa donees to realise it, as it has been done in the Gāhaḍavāla records”.¹⁹⁵ The force of this argument cannot be denied. None of the interpretations, referred to above, therefore, can be treated as fairly acceptable as they fail to explain why a tax raised for a specific purpose should have given away to donees of land-grants. If, however, it is supposed that the tax was raised from the Muslims as a penal measure, it will explain how it was possible for the victorious rulers to obtain it and impossible for the vanquished, like Jayachchandra to have done so. It will, moreover, create no serious difficulty in explaining the occasional grant of this tax to Brahmāṇī donees, for it was quite possible that a part of the collection made in the treasury may have been sometimes given to those who were regarded as the pillars of Hindu society in this period.

Remission of Taxes

Under Hindu rule sections of Brahmins were sometimes exempted from payment of taxes. In a Jaina inscription belonging to the Chaulukya dynasty, it is recorded that the king Somasimhadeva remitted the taxes on Brāhmaṇas.¹⁹⁶ Evidence of occasional remissions of taxes granted to house-holders is also available. The author of the Prabandhachintāmaṇi, for example, tells a story of the reign of Bhūmadeva I. “Once a time, in a year when the rains had failed in Gujarat, the house-holders of the grāmas or small villages of Dandahee and Vishopuk were unable to supply to the king his usual share of the produce. A minister who was sent to make an enquiry, brought all the people, whom he found possessed of property, to the capital and presented them to Bhūmadeva. Prince Būlarāja was walking about that place attended by a servant of the king......when he perceived all these persons, alarmed, talking among themselves, having informed himself of their case through the

¹⁹⁵ From a note by Dr. B. C. Sen.
¹⁹⁶ EI, VIII, p. 200. ff.
attendant who was with him, he compassionated them with tears in his eyes”. “Soon after” he “......asked a boon from the king......that the house-holders might have their rents remitted to them......the king with tears of joy granted what he had asked”. 197 In the following year, blessed with a good harvest, the cultivators offered to pay the share which had fallen due to the king for two years. The king refused to take it. The king’s advisers asked him to accept it for the building of a temple.

The Śukranītisāra 198 advocates temporary remission of the land-revenue as a measure to encourage improvements and reclamations. No tax (bhāga), says Śukra, should be taken from persons who improve the lands by the construction of tanks, artificial water-courses, etc., as well as those who bring virgin land under cultivation, until they have earned twice their outlay. A similar advice is also given by Kauṭilya. 200 Lakshmīdhara grants remission of taxes on failure (partial or total) of harvest. 200

Revenue Year

The revenue year, according to some South Indian inscriptions, began in January—February or February—March. 201 But this was not the practice in North India. We learn from the Nadol plate of Kirti-pāla of the Chāhamāna dynasty (V. S. 1218) 202 that the twelve villages, belonging to Naddulai, had to pay their yearly money in the month of Bhādrapada of every year (August-September). According to Kulluka 203 also the dues from villages should be recovered every month or twice a year in Bhādrapada and Pausha. The Partabgarh inscription of Mahendrapāla II 204 shows that the particular cess, to which it

197 Prabandhachintāmaṇi, Chap. III, p. 77 ff ; FRM, pp. 76-77.
199 Arth, II, 1, p. 46 ff.
200 Lakshmī, intro, pp. 53-55.
202 IA, XL, p. 144 ff.
203 Cf, Kane, Dharmashastra, III, p. 191 ff.
204 EI, XIV, p. 176 ff.
refers, was collected in Chaitra, i.e. March-April. Taxes were sometimes levied during the Chaitra festival. The Arthuna inscription\(^{205}\) records the assignment of a house-hold tax which was to be collected at the time of the Chaitra festival.

Monthly collection of revenue were possible in the local bazar. In the Arthuna inscription, it is found that a monthly tax was imposed on the shop of the braziers, distillers and traders. In explaining kara one writer defines it as ‘dues recovered every month from villagers and city dwellers’.\(^{206}\) It appears that the system of monthly collection of this and other taxes, was both proper and convenient, but taxes, such as those on the produce of the soil could not be collected every month. Naturally it was suitable to do so once or twice a year.

*Instances of oppressive taxation*

It was customary for Indian kings to draw up their schedule of taxes generally on the basis of the rules, embodied in the Smṛitis and their commentaries. Increased taxation was permitted in the Hindu legal treatises. When there was an emergency or financial stringency taxes had to be increased. In the Gāhaḍavāla records we meet with a few revenue terms not mentioned elsewhere. We know that at a certain period of the history of the Gāhaḍavālas the items of their revenue exceeded ten in number including some for which names, unknown before, were used. The increased taxation was obviously necessitated by the grave difficulties which they had to face on account of repeated incursions of the Muslims and internal troubles. In the Rāmācharita\(^{207}\) it is recorded that in the land of Varendrī the people were oppressed with cruel taxation during the period of political disturbances, connected with the revolt of kaivarta chiefs. But with the re-establishment of Pāla authority in that region during the reign of Rāmapāla taxation become normal.

In Kashmir we find new revenue ordinances being introduced in almost every reign. We hear of appropriations of

\(^{205}\) *EI*, XIV, p. 295 ff.
\(^{206}\) Cf, *Kane*, Dharmaśāstra, III, p. 189 ff.
\(^{207}\) *Rāmācharita*, V, 206.
harvests for three successive years and confiscations of grants in Jayāpiḍa’s reign when some extraordinary taxes were also introduced and new officers appointed for the purpose, of their collection.\textsuperscript{208} The Rājatarāṅgiṇī describes the exactions of tyrannical kings particularly Saṅkaravarman (883-902 A.D.) and Harsha (1089-1101 A.D.), including appropriations of lands and villages belonging to the temples. During Saṅkaravarman’s reign two revenue offices, viz. the office, charged with the collection of the royal share of the market dues (haṭṭa-patibhāga) and the office concerned with domestic affairs (grihyakṛitya) were instituted.\textsuperscript{209} The officer in charge of the latter department had under him one treasurer and five secretaries.\textsuperscript{210} Reference to the office of the ‘grihyakṛitya’ occurs also later in the account of the reign of Sarināmarāja (1003-1028 A.D.). Saṅkaravarman (883-902 A.D.) not only appropriated the proceeds of sales of incense and so forth, but also plundered straightaway the properties of as many as sixty-four temples: resumed villages, belonging to temples after paying compensatory allowances (pratikara). Above all Saṅkaravarman introduced for the first time the well-known system of forced carriages of loads (rūḍhabhāroḍhi),\textsuperscript{212} which was also enforced later in the reign of Harsha.\textsuperscript{213} During the regency of Queen Didda (950-1003 A.D.) a low-born upstart, holding the office of the treasury (gaṇija), created a new revenue office in connection with his imposition of some new levies.\textsuperscript{214} The next important landmark in the revenue history of Kashmir is associated with the reign of Harsha. Spoliation of temple properties, as already mentioned, was carried to an extreme in his reign. Divine images were destroyed and melted so that gold or other valuable metals, of which they were made, could be credited to the treasury. The offices of the

208 Rāj., IV, 628 ff.
209 ibid., V, 167.
210 ibid., V, 177.
211 ibid., VII, 42.
212 ibid., V, 168-174.
213 ibid., VII, 1088.
Devotpātanāyaka and the Arthanāyaka were opened to carry out the new duties connected with these extraordinary devices for the purpose of increasing the income of the state. Householders were taxed beyond their capacity and even nightsoil was an object of taxation, for which a separate officer was appointed.

Some Principles of Taxation

The earlier Śṛṅgīkāras like Manu, Gautama, etc. laid down certain principles of taxation, which were generally followed by those who came later. Lakshmīdhara held that the king receives taxes as mere wages in lieu of his services to the people; some of the earlier authorities also hold the view that ‘taxes are the wages (vetana) of the king and that originally the subjects made a contract with Manu to that effect’. According to Lakshmīdhara the king should see that the taxes, imposed by him, are proportionate. It is also the view of the earlier authorities that the king should not levy taxes at his pleasure. There was to be a limit to taxation which was not to be exceeded. Manu has left no vagueness in stating his idea about just taxation. “Just as the leech, the calf, and the bee take their sustenance little by little”, so, says Manu, “must the king draw from his kingdom annual taxes little by little.” He warns that the king should not “cut up his own root (by levying no taxes) nor the root of the others by excessive greed”. This is also the view supported in the Śantiparva of the Mahābhārata. It requires that taxes should be drawn lightly in the manner of the bee, drawing honey from the trees. The example of the calf not bruising the udders should be followed. In the Śukranītisāra also it is stated that the king should draw rent from the peasant in such

Rājat, VII, 1091, 1100-1101; 1103-4; 1105-6.
ibid, VII, 1100-1101.
ibid, VII, 1107.
Lakshmī, intro, p. 55.
Gau, X, 28; Nar, 17-48, etc.
Lakshmī, intro, p. 53 ff.
Manu, VII, 129 and 140.
Śuk, IV, 2, 22-24, p. 147.
a manner that it may not destroy him. The rule, thus enunciated in these texts, seems to embody three basic principles:—(1) That taxes should be collected as without these the state will be ruined, (2) that for the relief of the tax-payer dues should be collected in periodical instalments, and (3) that taxes should not be so heavy as to destroy the tax payer altogether. The fundamental principle of taxation, advocated by Lakshmīdhara, agrees with the earlier theory.223

One guiding principle, according to Lakshmīdhara, is that 'every one must contribute to the extent of potential capacity.'224 He further adds in this connection that 'he who has no resources need not be asked to pay taxes.' He has quoted Āpastamba in mentioning the classes exempt from taxation with the remark that 'those who from their dependent condition are themselves in need of help’ should not be taxed.225 Manu, however, maintains that even a very poor man, who earns his living by following some occupation, should pay a tax (kara). Manual workers, such as cooks, artisans like blacksmiths, etc. should, in lieu of the taxes due from them, give one day's service gratis to the king every month.226 Śukra insists on two days’227 service which doubled the burden and liability of workers, unable to pay the usual taxes. According to Lakshmīdhara, a person who is physically fit but unable to pay any tax on account of poverty, should contribute his labour.228

Extra taxes in times of emergency were allowed to be levied, but it is necessary to note that such taxes were permitted only if the people were not enraged. Even extra-ordinary taxation had certain limits.

We have already seen that the burden of taxation during the reign of the Gāhaḍavālas was heavier than usual, as shown by the mention of some new imposts, otherwise unknown, in

223 C.f., Manu, VII, 129 and 140; Śuk, IV, 2, 223-24, p. 147; Lakshmī, intro.
224 Lakshmī, intro. p. 55.
225 Ibid., p. 91-92.
226 Manu, VII 137-8; cf., Gau, X, 31; Vis, III, 32.
227 Śuk, IV, 2, 241, p. 148.
228 Lakshmī, intro, p. 55.
their inscriptions. Although Lakshmīdhara was a responsible minister under the Gāhaḍavālas, his view, as quoted above, seems to indicate that he was somewhat sympathetic to poor people. He was probably an advocate of cautious policy in regard to taxation. The principle, upheld by him, is that a person is to be taxed if a surplus is left, after he has been able to meet the cost of his bare maintenance.220 Lakshmīdhara further states that when preparing to destroy the enemy he should receive from people special grants of duties, fines, etc. According to Śukra the amount, obtained by extra taxation, imposed, for example, when an enemy is to be destroyed, should be paid back in due course. Thus the extra amount was viewed as a sort of a 'national' loan raised by the king which was to be repaid with or without interest not mentioned.220

It seems that Lakshmīdhara was more in favour of imposing new charges than enhancing the established rates of the current taxes. Their number tended to increase with the needs of the state, and the ingenuity of the Gāhaḍavāla finance minister—Lakshmīdhara must have been taxed in suggesting new sources of additional income for the state. Lakshmīdhara's policy was based on the principle that taxes should be only on what accrues, that is to say, they were to be related to the actual receipts of the tax-payer. It seems, therefore, that either the new taxes were added because the people concerned were able to pay them on the strength of their actual income, or that, presuming that these taxes were heavy he desperately advised their introduction to save a grave situation, and thus failed to put into practice what he preached in his book.231

But no ancient authority permitted extra taxation, prompted by the greed of the king.

In regard to the specific branch of industrial taxation Lakshmīdhara232 proposes that levies are to be based on certain primary considerations, e.g. the cost of establishment and maintenance charges, the cost of security measures taken by him were all to

220 Lakshmi, intro, pp. 54-55.
220 ibid, intro.
231 ibid, intro, p. 54 ff.
232 ibid, intro, p. 54 ff; cf, Arth.
be taken into consideration before rates were to be fixed. There is no deviation in this respect from the broad principle, enunciated by Manu.\textsuperscript{288} As a consequence of this minute consideration, it might so happen that the king would find it necessary not to collect his taxes, otherwise his dues from a merchant who could prove for his satisfaction that he had received what was “less than or just equal to the cost.” In such an event the buyer was not liable to pay anything even though he may have obtained it at a lower price to the disadvantage of the seller. As in the Šukranitiśāra,\textsuperscript{294} Lakshmiḍhara\textsuperscript{295} opposes double payment. The duty, charged by the state, was to be levied only once in the whole course of transactions relating to a particular commodity.

‘National’ incomes

From the material at our disposal it is difficult to form a definite idea about the probable income of a typical Indian state during the period under review. The income must have varied according to the size and resources of a state. To attempt an exhaustive estimate of public finance is an impossible task in view of paucity of material. In the Prabandhachintāmanī\textsuperscript{296} it seems to be mentioned in a legendary style that the total income of a certain kingdom amounted to eighteen hundred thousand gold coins. But it is difficult to accept such figure as correct. Receipts were not to be calculated only on the basis of income in gold. Tawney thinks that the number expressed in the Prabandhachintāmanī refers not to coins but to villages. The account, given in the Kumārapālacharita, states that “the daily amount of duties was a lakh of tankas in Aphiilawara, about the middle of the 12th century A.D.”\textsuperscript{297} This was derived from one specified source only. The revenue, which the Arab princes of Sind derived from their several provinces, is pronounced to be very

\textsuperscript{288} Manu, VII, 127; cf, Śānti, 87, 13-14.
\textsuperscript{294} Śuk, IV, 2, 214-15, p. 147.
\textsuperscript{295} Lakshmiḍi, intro, p. 55 ff.
\textsuperscript{296} Prabandhachintāmanī, p. 89 and n. 5.
\textsuperscript{297} Burgess, Architectural Antiquities of North Gujarat, p. 34 ff; FRM, p. 192 ff.
small. In connection with the Sindhian campaign it is stated that Hajjāj (died in 714 A.D.) received 120,000,000 dirhams representing the one-fifth share of the produce. The total receipts may be estimated to have amounted to 600,000,000 dirhams (taking one dirham=51 pence).\textsuperscript{238} From what we know, the figure represents receipts to cover the royal share of the agricultural produce. Payment was either in cash or the amount shown was the value of the share received in kind. The information, supplied regarding tax collections for subsequent times by Ibn Haukal, Ibn Khurdādba and Khaldūn raises several doubtful points. Of course, the figures cannot be taken as exact but at best only approximate. It is difficult to say whether the revenue is to be taken as (excepting in cases where it is not clearly specified) consisting only of the land-tax or of collections of all kinds in the aggregate. It should be noted also that political boundaries were frequently changing, which must have affected total collections, not clearly shown in the estimates presented.

It may be pointed out that when the invaders came, they plundered the treasury which included not only the surplus of the revenue collected, but also the hoarded wealth. Moreover, the expenditure of the state is also to be taken into account. Consequently, when figures are given, it may not be possible, unless otherwise mentioned, to estimate the state’s total income from taxes, as distinguished from accumulated wealth, taking into account administrative and other expenses already incurred, of which there is no definite account.\textsuperscript{239} During the reign of Timur, in a later period, the whole amount of the revenue of India is stated to have been 6 arbs (=6,00,00,00,00 miskals of silver). But it is not known how this information regarding the revenue of the whole of India was obtained.\textsuperscript{240} In his autobiography Babar says, “the countries from Bahrah to Bihar, which are now under my dominion, yield a revenue of 52 crores. . . . . . . . . of this

\textsuperscript{238} Cf, \textit{HIED}, I, p. 458 ff.; p. 470 ff.

\textsuperscript{239} Cf, \textit{ibid}, p. 473.

\textsuperscript{240} \textit{ibid}, III, p. 389 ff.
amount, *parganas* to the value of eight or nine crores are in the possession of some *Rais* and *Rajas* who from older times have been submissive".\(^{241}\) This information also relates to a much later period.

*Items of Expenditure*

Items of public expenditure may have been generally the same everywhere, although amounts spent on them may have differed according to the varying incomes of the different states concerned, large and small. In times of emergency additional income through increased taxation, as already mentioned, was allowed. Under an Indian government in the 7th century A.D. the income derived from the ‘royal land’ was as Huien tsang says, divided into four parts. One part was for the “expenses of government and state worship, one for the endowment of great public servants, one to reward high intellectual eminence, and one for acquiring religious merit by gifts to the various sects.”\(^{242}\)

The expression ‘royal land’ has not been explained by Huien tsang. It is not clear whether it means land in general. In the same context it is said that the king’s tenants pay one-sixth of the produce as ‘rent’. The reference to ‘king’s tenants’ is not helpful in solving the problem.

The income from royal land, it is also to be noted, has been evidently treated as distinct from ‘duties collected from tradesmen’. It is difficult to obtain from the account a definite idea about the total income derived from various sources, not merely from the ‘royal land’, which only is mentioned as divided into four parts devoted to the several items of expenditure noted.

But the evidence of the pilgrim clearly shows that a large part of the state’s income was spent for cultural and religious purposes.

Huien tsang’s account further shows that government servants were paid according to the nature of their duties: “Ministers of state and common officials” reports the Chinese pilgrim “all have their portion of land, and are maintained by

\(^{241}\) *HIED*, IV, p. 223 ff.

\(^{242}\) *HT*, I, 176.
the cities assigned to them”. The cost of administration was not apparently met fully out of the \(\frac{1}{4}\)th of the income from ‘royal land’. Ministers and many other employees had land probably in addition to salaries and their maintenance was also provided for out of charges from cities specially assigned to them.

One may naturally conclude that there was a uniform pattern of expenditure in India during Huien tsang’s time. In the working out of details at least there must have been differences. It may be presumed that the picture applies more to Harshavardhana’s government which came under his special observation, than any other Indian government of his time.

Some information about public expenditure may be derived from the Šukranītisāra. On some points earlier literary sources are also helpful in supplementing the information, thus obtained. Sukra lays down separate rules of public expenditure for the guidance of a feudatory (i.e. a sāmanta) and that of a king having an annual income of 100,000 (gold or silver) coins (karshas). In Sukra’s polity a sāmanta is the head of a number of grāmas.\(^{243}\) His share is \(\frac{1}{6}\) of the income collected from a grāma. The remaining \(\frac{5}{6}\) parts of the income are to be spent on different items in proportions, noted below:

1. Army 
   \[ \cdots \cdots \cdots \cdots \cdots \frac{1}{2} \text{ of the income} \]
2. Charity
   \[ \cdots \cdots \ldots \frac{1}{5} \cdots \cdots \cdots \cdots \cdots \cdots \cdots \]
3. Maintenance of ‘the people’
   \[ \cdots \cdots \frac{1}{5} \cdots \cdots \cdots \cdots \cdots \cdots \cdots \]
4. Maintenance of ‘the officers’
   \[ \cdots \cdots \frac{1}{5} \cdots \cdots \cdots \cdots \cdots \cdots \cdots \]
5. Personal expenditure
   \[ \cdots \cdots \frac{1}{5} \cdots \cdots \cdots \cdots \cdots \cdots \cdots \]

The total expenditure under these heads amounts to \(\frac{5}{6}\) to which is to be added his own share, i.e. \(\frac{1}{6}\) as stated above. Thus, according to the estimate, provided for, about \(\frac{1}{2}\) of the total amount is left to be remitted to the Central Government.

As pointed out, Sukra furnishes a second list\(^{244}\) of public expenditure which is meant for a king (?) with an annual income of a lakh of karshas. Amount of expenditure under different items

\(^{244}\) Ibid, IV, 7, 53-8, p. 219; Ibid, p. 219 n. 2.
\(^{245}\) Nos. 6 and 7 of the latter list correspond to No. 1 of the former and Nos. 2 and 5 of the second list agree with item 2 of the first.
as comprised in this list, are specified below:

1. Necessaries, gifts, and king’s personal expenses . . . . . . 1500 karshas,
2. Clerks . . . . . . 100 "
3. Ministers . . . . . . 300 "
4. The royal family . . . . . . 300 "
5. Gifts to learned men . . . . . . 200 "
6. Cavalry, horses, and infantry . . . . . . 4000 "
7. Elephants, camels, bullocks, and military ‘engines’ . . . . . . 400 "

The balance of 1,500 karshas is to be deposited in the state treasury.

From the above it appears that the former list gives an annual statement of expenditure in fractional terms while the latter a monthly one in terms of money. There are obvious similarities with regard to the items of expenditure comprised in both the lists.\footnote{\textit{Ś}ak, IV, 2, 5-6, p. 138.}

In addition to the above, the Śukranīti lays down a broad principle of public expenditure. It says that if revenue is accumulated for the purpose of meeting the cost of the army and the performance of sacrifices as well as for the benefit of the subjects, it confers happiness upon the king in this as well as in the next life.\footnote{\textit{Ibid.}, IV, 2, 7-8. p. 138.} But the text strongly denounces accumulation of revenue for the comfort of the royal family and for personal enjoyment.\footnote{It is said in the Śukranīti (IV, 7, 47-52, p. 219) that the ruler whose income is one lakh of karshas, should have every year one hundred reserve force of the same age. 300 foot soldiers, 80 horses, 10 camels, 2 elephants, 16 bulls, 6 clerks, and 3 councillors, etc. This may be regarded as the ‘unit’ for a ruler whose income is 1,00,000 karshas (i.e. rupees). Šukranītisāra (V, 188, p. 269) further notes that “those who are rich among troops” (?) should be granted proper remuneration, e.g. one-thirtieth in addition to the actual travelling expenses incurred by them.}

It may be presumed that in an age of political unrest and aggressive warfare a large proportion of the state’s income must have been ordinarily spent on the army and military operations.\footnote{Ibid.}}
The well-being of the troops was regarded as a special concern of the king in ancient India. In the Rāmāyaṇa and the Mahābhārata, the king is advised to look after, and provide the men of the army with proper food and wages. Similar rules are also found in the Arthaśāstra which require that they are to be provided with amenities also. Compensations are to be paid to the heirs of those who die in the battle-field. From the Garra plates of Chandella Trailokyavarman (V. S. 1261) we learn that the village of Kādohā, situated in the territory of Pāniuli, was granted "with its land and water, movable and immovable objects, overhead and underground, circumscribed within its boundaries, with its whole produce, etc." by a charter, "by way of maintenance for the heirs of one who suffered death on the battle-field (mrityuka-vṛitti), to Rāūta Sāmanta, son of Rāūta Pāpe, who was killed at Kakadādaha in a fight with the Turushkas (........ Kakad(a)dahe Turushkena saha yuddhe-mrīta-rā|Pāpe putṛaya rāūta Sāmanta-nāme mrityuka-vṛttau sāsanarṁ kṛtva pradattā iti matvā bhavadbhir.........)

Another important item of public expenditure was concerned with the payment of salaries to ministers and officials. In the

249 Mbht, II, 5, 48-49; Rām, 100, 32-33.
250 EI, XVI, p. 272 ff. This kind of land-grant is to be distinguished from the usual form of grant in perpetuity. On this point see, Ray, Dynastic History of Northern India, Vol. II, p. 723 n. 2; Bose, History of the Chandellas, p. 143 ff. For the State's responsibility for maintaining families of those who die in its service see Mbht, Sabhā 5, 54; Vas, XIX, 20; etc.
251 Manu, VII, 118-119; Arth, V, 3, p. 276; cf. Śukra mentions (II, 117-204, pp. 65 ff) numerous officers of the army, the treasury, etc. with a schedule of salaries for officers, when the king's income is one lakh of mudrās a year (IV, 7, 24-27, pp. 217 ff.). He further states (II, 141-142, p. 68 ff.) : "the priest, the viceroy, the premier, the commander, the councillor, the judge, the scholar, the Sumantraka, the Amātya, as well as the spy—these are the ten departments of the king" whose "incomes are 1/3 more than those of subsequent men up to the spies (i.e. the income of the priest is 1/3 greater than the Pratinidhi. That of Pratinidhi 1/3 greater than that of Pradhāna, and so on)". Else where it is said that 'the king is to have eight departments and these eight departments of political organisation have equal remuneration' (145-47). The eight departments are sumantra, scholar, minister, pradhāna, sakhya,
inscriptions of the period mention is made of a good number of officials, which clearly shows that the administrative machinery was not a simple and inexpensive one. If a prince worked in the administrative department, he was also paid a salary. Thus we learn that a prince was paid "two thousand crowns from the treasury" of a king whose monthly income was "sixty thousand crowns".

The revenue was further drawn upon in maintaining royal establishments as we have already seen. The statement in the Śukranītisāra on this point is to be taken as indicating in a general way the usual items of expenditure as well as the proportions and percentage of expenditure under different heads. If the total income exceeded the figure mentioned in the text, it may be presumed that expenditure under each would in that case be correspondingly higher. Kings are known from charters left by them to have occasionally made grants, transferring their own dues to temples and other religious institutions. Sometimes special taxes appear to have been collected and earmarked for religious purposes.

The state also spent on works of public amātya, justice, and viceroy. It may be noted that there are two schemes of payment of salaries. According to one it varies in certain proportions,—there being a regular gradation of scale's. According to the second, there is equality of income of officials. In times of emergency the king should pay only half of \( \frac{3}{4} \) of the fixed salaries to the officers (V, 104-5, p. 265).

252 The list of officers mentioned in the Naihāti grant of Vallālasena (IB, p. 68) may be quoted as an instance. It recorded 'Rājanas, Rājanyas, the Queens, the Rāpakas, Rājaputras, the Prime Minister, the Priest, the Mahādharmanādhavaksha, Mahāsāṃdhivigrahika, Mahāsenāpati, Mahāmudrādhikrita, Antaraṅgabhihaduparika, Mahākshapatalika, Mahāpratihāra, Mahābhogika, Mahāpilupati, Mahāgaṇastha, Daussādhika, Chaurodhkarapika, officers engaged over fleet, army, elephants, horses, cows, buffaloes, goats, sheep, etc., the Gaulmika, Danḍapāṣika, Danḍanāyaka, Viśhayapatis and all other servants of the king.

253 FRM, p. 140.

254 Śukra, IV, 7, 53-8, p. 219; V, 103-4, p. 265.

255 See, p. 197 ff, above.
utility, such as roads, tanks, almshouses, etc. It also undertook measures of relief to alleviate the sufferings of the people, due to calamities such as famines, floods, drought, etc. Gifts to pious and learned Brāhmaṇas in different forms may have sometimes consumed a large part of the state’s income. Gautama in his Dharmasūtra tells us that learned Brāhmaṇas are to be maintained by the king. In the Agni Purāṇa it is stated that the king should deposit half of his revenue in his treasury and grant the other half to Brāhmaṇas. If this injunction were literally followed, the state would be left with only fifty per cent of its total income to provide for all kinds of expenditure including that on defence and the army. Kauṭīlya deals elaborately with this subject on a practical basis.

Available inscriptions of the period show that kings were often keen on extending their very generous patronage to Brāhmaṇas. Sometimes gifts of whole villages were made to Brāhmaṇas and temples, which meant that the state lost so much revenue which would have otherwise accrued to it and might be utilised for various administrative purposes.

Available evidence goes to show that state income was not always spent for the good of the public. For instance, several cases of misuse of revenue are cited in the Rājatarāṅgiṇī. The consequences of such actions are vividly portrayed by Kalhana in a passage where he says that “the wealth which the kings

266 This had been a practice from very early times. Aśoka, for example, spent large sums of money in establishing hospitals for men and animals and raising gardens of medicinal herbs within his vast empire and even outside it (R. E., II; P.E. VII). In the Jātakas there are references to the erection of alms-houses from which food were daily distributed (Jāt. I. 262; II 367; III. 129; 470; IV. 355, 402; VI. 484); cf., II, p. 25 ff; EI, I, p. 32 ff; p. 75 ff; p. 144 ff; p. 147 ff; 214 ff; IX, p. 123 ff; XIX, p. 295 ff; XXI p. 148 ff; IA, XVI, p. 63 ff; XVIII, p. 80 ff; 238 ff; RC, V. 42 B, etc.

257 Arik, V, 3, p. 234 ff; EI, XXI, p. 83 ff; XXII, p. 1 ff, etc.

258 See chapter on ‘Landed Wealth—its distribution’.

259 Gau, X, 9.

260 Agni-P. CCXXIII, 14.

261 See chapter on ‘Landed Wealth—its distribution’.
acquired by oppressing the people must fall a prey of rivals or of enemies or of fire". He has actually given some examples to prove his point. Thus money raised by Jayāpiḍā was wasted by Utpala and the other sons of a slave-woman who killed his grandson. The treasures, accumulated by Saṅkaravarman, were wasted by Prabhākara and other paramours of his wife. Ill-gotten wealth of Pāṅgu (Nirjitvarman) was spent by Sugandhā, who was in intrigue with Pāṅgu’s wife. Yaśahkara’s wealth was also used up by his wife. The treasures of Saṅgrāmarāja were robbed by Ṭyaḍḍa-sūḍha and others and that of Ananta reduced to ashes. Kalaśa’s wealth was destroyed by his sons and wife. Harsha’s possessions were buried along with his palace, wives and sons. Mallārjuna’s treasures were wasted, among others, by ‘thieves, intriguers, courtiers and parasites.

In Kashmir, the methods which were followed by some of its rulers in raising money, were notoriously extortionate and oppressive, but the riches amassed were squandered away for personal pleasure and enjoyment. In other regions, due to temptation to win spiritual merit and reputation for patronage, rulers may have not infrequently exceeded the limits, which should have been imposed upon their generosity for the well-being of the people as a whole and for administrative reasons. In the land-grants kings very often refer to their donations as promoted by a personal desire to increase their own fame as well as the merits of their parents. The effect of this, if carried to an excess, was likely to affect adversely the financial position of the state concerned. In spite of generous donations or extravagant expenditure in which some rulers indulged, we do not hear much

262 Rājat, VII, 1951.
263 ibid, VII, 1952.
264 ibid, VII, 1953.
265 ibid, VII, 1954.
266 ibid, VII, 1955.
267 ibid, VII, 1957.
268 ibid, VII, 1958.
269 ibid, VII, 1959.
270 ibid, VII, 1950.
of dire lack of funds as a formidable handicap. Glowing accounts of India's wealth have been left by Muslim writers of the period.²⁷¹ Non-use of wealth, equally with financial mismanagement, might have contributed to administrative and political weaknesses. Money acquired by taxing the people was sometimes uselessly hoarded instead of being devoted to worthy purposes. The hoarded wealth attracted the cupidity of invaders and could be easily plundered, leaving some governments in a miserable plight from which they could hardly save themselves.

²⁷¹ See chap. on 'Hoarded Wealth'.
CHAPTER VIII

Crafts and Industries

In the list of crafts and industries practised in the period there may have been indeed very few, whose history cannot be traced back to much earlier times. It is difficult to find any reliable evidence to show that any revolutionary technological advance was achieved. The traditional hereditary skill of artisans and craftsmen was maintained. The usefulness of tools and implements, to which the people had been accustomed from generation to generation, was not yet over. Surely they were not suited for the type of large-scale production which has developed in the modern scientific age. The scope of an industry depended on the nature of its organisation. If a large number of artisans could be employed in a particular concern and their production centralised, it could naturally assume the proportions of a big business, if hired skill was available. An exhaustive account of the industries of this age cannot be prepared as detailed information is not available. An attempt may be made here to refer to some of the more important of these industries.

Textile industry

This was one of the most important industries of ancient India. By the middle of the first century A.D., it had already attained a high reputation. Kautilya refers to the variety of linens manufactured in Lower Bengal (Vaṅgaka) and North Bengal (Pauṇḍraka). Huien tsang mentions the different kinds of clothing materials used in North India such as kausheya,

1 Dr. V. Raghavan in his ‘Yantras or Mechanical Contrivances in Ancient India’ describes certain mechanical devices, supposed to have been known in Ancient India. Though quite interesting, his material, being derived from literary texts only, should be used with extreme caution.

2 Cf, Basaham, The wonder that was India, 216.

3 HT, I, p. 148.
kshauma, kambala (woollen textiles). A particular variety of textiles made from the wool of a wild animal, which was soft and could be easily manufactured into finished goods for clothing purposes, is also mentioned by Huien tsang. Early centres of textile industry were Kasi, Vatsa, Magadh, Bengal, Kāmarūpa, Kaliṅga, Gujarāt, Aparānta, Madura, etc. There was a great demand for Indian textile goods, specially the fine fabrics of Bengal, as testified to in the Periplus of the Erythraean Sea, from which it is learnt that Indian muslins used to be exported to the West. It is to be gathered from the testimony of Sulaimān that in the kingdom of Rahmī there were “about ten to fifteen thousand men in his army employed in fulling and washing clothes.” There was a stuff, made in this country, which was not to be found elsewhere; so “fine and delicate is this material that a dress made of it may be passed through a signet-ring”. Al Idrisi mentions that the town of Multan made cotton clothes and sold them in the country around. References to various kinds of woollen blankets and other textiles are to be found in the Rājatarangini. Huien tsang says, he found the people of Kashmir using white linens. Mujmalu-T Tawārikh, writing about the kingdom of Hal, says, “this country was remarkable for the superior quality of the cloth that was manufactured there. The exportation of this fabric without the stamp of the king was prohibited. This stamp was an impression of his foot with saffron”. Kashmir maintained its reputation as a prosperous centre of textile industry for many centuries in ancient times. Thus it appears that textile and connected industries flourished in many parts of India, meeting her internal as well as external demands.

As regards internal consumption, Ibn Haukal, reports that

4 HT,
5 Periplus; 63, pp. 67-8.
6 RAA, pp 16-17; HIED, I p. 1 ff.
7 HIED, I, p. 92.
10 HIED, I, p. 107.
11 ibid, I, p. 39.
the people "from Cambay to Saimūr used fine muslin garments". Wassāf’s\textsuperscript{12} testimony also goes to support the above statement. He says that the Muhammadans, who invaded Cambay, plundered a great variety of cloths, both silk and cotton, stamped, embroidered and coloured. Marco Polo\textsuperscript{13} refers to the superfine textiles of Paithan which used to be sold for very high prices. Mufujat-I Timuri,\textsuperscript{14} while giving an account of the sack of Delhi, mentions among the booty collected "brocades and silk of great value". Wassāf\textsuperscript{15} again in his account relating to the invasion of Malwa states that ‘fine linens (kirbas) were among the precious articles carried off by the victorious people’. It is said by a later authority, viz. Abul Fazl. Al Baihaki,\textsuperscript{16} that when Ahmad Nialtigin came to Benares he plundered the whole market of drapers. The Arthuna inscription shows that clothing fabric used to be sold in the bazar.\textsuperscript{17}

Metal Industry

Indians manufactured all sorts of metal articles and jewellery which were of constant use to the people at large. The rich mineral resources of India and their exploitation contributed to the growth and development of metal industries from very early times. The metals, which were generally used for the manufacture of jewellery, articles of domestic use and various other objects, were gold (hiranyya), silver (rajata), aysa, (copper—tāmra), iron or steel (loha), lead (ṣīsha), tin (trapu), etc.

Articles of gold and silver were used for decoration and other purposes in temples, in the royal courts and in the aristocratic circles. Muslim writers give glowing accounts of the valuable articles plundered by the Muslim invaders from temples which formed the special targets of their attacks. In the Somnath temple, for example, Mahmud of Ghazna was struck

\textsuperscript{12} HIED, III, p. 43.
\textsuperscript{13} Marco Polo, II, 391.
\textsuperscript{14} HIED, III, p. 446. It is not contemporary account.
\textsuperscript{15} ibid, III, p. 31.
\textsuperscript{16} ibid, II, p. 124 ff.
\textsuperscript{17} EI, XIX, p. 205.
with amazement at the sight of the main idol. He gave orders for seizing the spoils and the appropriation of the treasures which the temple contained. Among these there were many idols of gold and silver and vessels set with jewels. The largest of these idols was known as 'Manat'.

It is mentioned by Minhâju-S Siraj in his Tabaqât-i Nâsiri that while in the course of his expeditions Muhammad Bakhtiyar came near a bridge in the land of Kâmarûpa, he saw a temple in which there were numerous idols of gold and silver and one very large golden idol, which exceeded two or three thousand miskals in weight. Sultan Mahmud, when he attacked the fort of Bhîma, found about a hundred idols of gold and silver. One of the golden images in this fort is said to have weighed a million miskals. The Sultan appropriated all these for the decoration of a mosque.

Kalhana mentions idols made of gold and silver and also jewellery, preserved in temples in Kashmir which were appropriated by Kashmir kings to meet financial exigencies. Not only there were idols of gold and silver, these were also decorated with precious stones. We learn from the Tabaqât-i-Nâsiri, that in a temple of Mathura there were five idols of gold, five gaz or ells in height, the eyes of one of them were formed of two rubies and the eyes of another were formed of two sapphires. From a stone inscription of Dhaûnda we come to know that he erected a temple with two lingas, one of which was of emerald.

We come across references to jewellery made of gold and silver and also various other objects made of valuable metals. Among other things plundered from the fort and temple of Nagarkot by Sultan Mahmud, was a folding house made of silver, measuring thirty yards by fifteen yards and a richly

19 HIED, II, p. 312; TIN, p. 564.
20 ibid, III, p. 63.
21 Rihot, VII, 1083, 1091.
22 TIN, p. 85.
23 EI, I, p. 137.
24 TIA, p. 7; HIED, II, p. 36.
decorated throne reputed to be that of Rājā Bhīma of the Pāṇḍava dynasty.

The splendour and magnificence of Indian courts often evoked admiration of foreign observers. The following is a typical description of Indian kings left by Muslim writers. “The kings of India are accustomed to wear ear-rings of precious stones mounted in gold. They also wear necklaces of great value, formed of the most precious red and green stones. Pearls are held in the highest esteem and are greatly sought after”. It is said that when Jaipal was defeated and taken prisoner he wore a necklace, which the invaders took off his neck. It is said to have been composed of large pearls and shining gems and rubies set in gold, of which the value was 200,000 dināras; and twice the value was obtained from the necklaces of those who were taken prisoner or slain. Some references to the jewellery used in Bengal in particular are to be found in inscriptions and literary texts. Thus the Rāmcharita of Sandhyākara Nandi refers to the jewellery used by princely families, comprising of ‘anklet-bells, charming ornaments set with diamonds, lapis lazuli, pearls, emeralds, rubbies and sapphires and necklaces with central gems and pure pearls of round and big shape’. In the Karpūramanājari of Rājaśekhara we find the names of some jewellery. The Deopārā inscription of Vijayasena mentions “flowers made of precious stones, necklaces, ear-rings, anklets, garlands and golden bracelets were worn by the wives of the king’s servants”. The same epigraph also speaks of the temple girls, “the charms of whose body were enhanced by (the wearing of) jewellery”. The Naihāti plate of Vallālasena refers to necklaces of pearls, worn by ladies of the royal blood.

Persons connected with the royal court not only used jewellery but also utensils made of precious metals. Cups and

25 HIED, II, p. 11.
27 Rāmcharita, v. 33-34.
28 Karpa, II, 14 ; III, 13.
29 IB, p. 42 ff, Vs. 11 & 30.
30 ibid, p. 68 ff.
dishes made of gold and silver were according to Kshemendra and Kalhana used by kings and nobles. Drinking cups made of gold, silver, crystal or glass were known to the author of the Yuktikalpataru. It is recorded in the Tabaqat-i-Nasiri that when Muhammad Bakhtiyar reached the gate of Rai Lakhmaniya's palace, 'the Rai was at his dinner, and gold and silver dishes filled with food, were placed before him according to the usual customs'.

Jewellery, made of precious metals, were extensively used by the Indians from a very early period. It was even a practice among the commoners to have some sort of jewellery for decorative purposes. Ferishta says, "when Mahmud invaded India the Hindu females sold their jewels and melted their gold ornaments to furnish resources of the war". That jewellery was extensively used in later times is testified to by the account of Muluzat-I-Timuri, who states that, 'during the time of the sack of Delhi, gold and silver ornaments of the Hindu women were obtained in such qualities as to exceed all account'.

In inscriptions mention is made of the goldsmith (sorî), the blacksmith, the braziers (kaṁśāras), coppersmiths (pitalahāra) etc. In this connection mention may be made of the bronze-casting industry. The discovery of numerous bronze and octo-alloy images in different parts of India reveals the prosperity of this industry.

The country was conversant with the manufacture of useful articles made of iron particularly, those required for military purposes such as weapons of diverse sorts, chariots, ordnances, etc. and also those required for domestic and other uses such

31 Rājat, VII, 265.
33 ibid, VI, p. 207 ff.
34 ibid, III, p. 446 ff.
35 IA, XLI, p. 20 ff.
36 ibid, XLI, p. 20 ff; the Edilpur plate of Kesavasena mentions water-vessels made of iron,—IB, p. 128 ff; The idol of Somnath was made of iron,—HIED, I, p. 99.
37 IA, XLI, p. 20 ff.
38 EII, IV, p. 153 ff. There is a reference to a coppersmith of Multan,—HIED, I, pp. 28, 35.
as needles, razors, water-vessels (cf, the Edilpur plate of Keśavasena,\textsuperscript{39} etc. Crucible-making seems to have been a well-known industry. Vāgbhaṭa furnishes a classification of ingredients in making crucibles.\textsuperscript{40} The Meharaulī iron pillar of the Gupta period bears magnificent testimony to the skill that was attained in iron-industry.

Of the two alloys mentioned in the Śukranītisāra\textsuperscript{41} kāmsya was produced out of a combination of tin and copper, this may have been either tin or bell-metal. The constituents of pīttala was made of brass and zine. Copper and the different alloys mentioned were used in the manufacture of various articles, requiring skill of a technical or specialised character such as utensils, images, badges, coins, plates and dishes. In this connection it may be noted that copper was particularly useful in Hindu religious ceremonies. Hence it was extensively used for making such objects as were required for the performance of Hindu worship.\textsuperscript{42}

As military operations were frequent and widespread in this country, the requirements of the army could not be overlooked in the field of manufacturing industries. From the variety of weapons and other articles used in ancient Indian warfare it may be assumed that the allied industries must have kept large numbers of artisans occupied with their manufacture. The skill of the artisans may not have been always of a rigidly conventional type. Specialisation in some cases may have advanced on competitive lines. These weapons were not manufactured merely out of iron.

Metals were used for the manufacture of weapons and armaments. Weapons of various kinds must have been used and manufactured in India from the earliest times. Excavations at Mohenjo-Daro, Harappa and other sites have yielded among other articles chert blades, spears, knives, arrowheads, axes, saws, etc. The Rigveda\textsuperscript{43} describes armours and weapons of

\textsuperscript{39} IB, pp. 123 and 128.
\textsuperscript{40} Cf, Majumdar, Socio-Economic History, p. 198.
\textsuperscript{41} Śukra, IV, II, 176.
\textsuperscript{42} Journal of Indian Art, III, No. 29, p. 29.
\textsuperscript{43} R.V., V, 53.
metals (e.g. Vṛṣi, Rukma, Khādi, Rishi). Arrows were tipped with metal points (Ayasāgra) and the God Puṣan was armed with a metal goad. In the Vedas there are also references to razors and swords (śyāma). Early Pāli literature refers to craftsmen in metals (kāmmara) who used to manufacture various weapons of war. From Diodorus it is to be gathered that “the fourth caste consisted of artisans, of whom some were armourers, while others were the manufacturers of the implements which husbandmen and others found useful in their different callings”. In the Sanskrit Epics also we have elaborate accounts of weapons—protective and military. Utbi45 says that the soldiers of Brāhmaṇapāla, son of Ānandapāla, used white swords, blue spears and yellow coats of mail. Alberuni also refers to the makers of arrows, spear points, swords and knives, who carried on their business in Northern India. The author of the Śukranītisāra46 regards those who could make light machines, arrows, swords, bows and quivers as servants of the king. According to the Yuktikalpataru,47 Benares, Magadha, Nepal, Saurāshṭra and Kaliṅga were noted centres for the manufacture of swords. There were other regions like Rishaka, Vaṅga, Sūrpāraka, Videha, Chedideśa, Kāliṅjar, as stated by Sāraṅga-dhāra, where this industry flourished, producing distinctive types of swords. A high degree of skill was attained in the making of this weapon, as shown by the testimony of foreign and indigenous writers.

From the above it is clear that various kinds of weapons used to be produced in India from the earliest times. Some kind of heavy armament industry may have grown up in later times. According to some,48 it was the Muslims who introduced the heavy armament industry into this country. Muhammad ibn-kasim, the conqueror of Sind, is said to have enjoyed the exclusive monopoly of catapults (munjaniqué), which the Muham-

44 Taṅkt. Sam, 7.5.1; Kā Sam, XVIII. 10; Vāj. Sam. XVIII, 10.
45 HIED, II, p. 33.
46 Śvetā, II, 196-7.
47 Yuktikalpataru, p. 150, Vs. 24-29.
48 Cf, HIED, II, p. 47 ff.
madans had learnt to manufacture from the Romans. This weapon became so popular in India that by the end of the 12th century every fort, worth the name, came to be supplied with Munjaniquis and Munjaniqustones. It may be supposed that originally catapults were constructed by skilled Musalmans in the service of the Indian rulers. There is some evidence to suggest that some sort of heavy armament industry may have existed in India even in earlier times. We learn from the Uvāsagadasāo that Ajātiṣatru, the king of Magadha in the 5th century B.C. in his war with Vaiśāli used the Mahāsilākanṭaga and ra(t)hamusala against his enemies. The first seems to have been some engine of war similar to a catapult throwing big stones. The second was a chariot with a mace attached to it, which was used in the battle-field to effect a great destruction of human life. Dr. H. C. Raychaudhuri compares the ra(t)hamusala to ‘the tanks used in the great European wars of 1914-18 and 1939-46’.49

Ivory Work Industry

The Bhāṭerā plate of Govinda-keśava mentions an ivory worker (dantakāra) by name,50 while the Edilpur plate of Keśavasena refers to “palanquins supported by staffs made of elephant’s task”.51 Al Istakharī speaks of dealers in ivory of Multan, who had their centre in the bazar near the idol temple.52 This account is confirmed by the account left by Ibn Haukal.53

Wood Work Industry

Massive wooden constructions and other wood works clearly point to the existence of this industry from early times. Even as early as the period of the Rṣigveda we hear of the carpenter, e.g. the Takṣan and Tveṣṭr and the Rathakāras who made

50 EI, XIX, p. 277 ff.
51 IB, p. 127 ff.
52 HIED, I, p. 28.
53 ibid, I, p. 35.
Rathas (chariots). During the period, represented by the Buddhist Jātakas, the workers in wood used to engage themselves in building wooden constructions. The wood workers may thus be divided into three classes, viz. those engaged in building houses, temples, etc.; in constructing ships, boats, carriages, etc. and in making household furniture, and other things. Incidentally, attention may be drawn to the Mulfuzat-I Timuri, where there are references to wooden constructions which are to be applied to a later period. It states that in Kashmir the buildings of the city are very large and are made of wood. They are four or five storey high and seem to be very durable. This account is well confirmed by Kalhana’s Rājatarāginī from which we come to know that wood was freely distributed for building purposes. Wood played an important part in the construction of private houses at Srinagar. It is stated by one contemporary writer that the edifice of the temple of Somnath was built upon fifty-six pillars of teak-wood, covered with lead.57

Stone work industry: Building industry and Masonry

The remains of innumerable massive structures—buildings, temples, forts, etc. and the pre-Muhammadan stone images in different parts of India, bear convincing testimony to the efficiency and skill, the stone work and building industry must have achieved. Contemporary Muslim writers speak highly about them. Workmanship in these fields was also highly appreciated. In the Tabaqāt-i Nāsiri in connection with Sultan Mahmud’s expedition to Mathura it is recorded that “at Mathura there were nearly a thousand palaces of stone and an idol temple of such extent and size that if a thousand times a thousand thousand dināras should be expended, and builders and workmen of the greatest activity and energy should be employed for two

54 See, Bandyopadhyaya, Economic Life and Progress in Ancient India, p. 149 ff.
55 HIED, III, p. 476.
56 Raja, VIII, 2390.
57 HIED, I, p. 98 ff.
58 TIN, p. 82.
hundred years, they could not complete the like". Another contemporary writer gives similar information in his account of Sultän Mahmud’s expedition against Kanauj. Kalhaṇa records that in Kashmir, a king built ‘thousand matyas, agraḥaras, mansions and great buildings with fine tanks and gardens’. The Chronicler further states that ‘king Harsha had numerous palaces of wonderful splendour and buildings which reached the cloud’. About Lakaṇṇaṇaṭi, it is said in the Tabaqat-i-Nāṣiri that “it is a city of great size, and the whole of its walls are of hewn stone”. It is further reported by the same writer that “the ramparts of the city of Karambatan are built of stone”. The same author records that near the bridge, in the land of Kāmarūpa, Mahmammad Bakhtiyar saw a temple, very lofty and strong, of beautiful structure.

Houses built of bricks and plasters are also referred to in some works. Al Idrisi states, that in Mansūra the houses were constructed of bricks, tiles and plasters and in Broach houses were built of bricks and plaster. In the Ahar stone inscription there are references to houses built of ‘burnt bricks’, and in the Irdā copper-plate of Nayapāladeva it is said that ‘the golden rampart walls of the city of Priyaṅgu were as resplendent as fire’. It may be inferred from this that these walls were built of the red laterite stone. Some of the buildings were also decorated as testified to by Muslim writers. In Kulaṃ, it is said, the buildings were curious, for the pillars were covered with shells from the backs of fishes.

Masons were also employed in constructing wells, tanks, etc. Names of two masons (sūtradhara) Asala and Jahaḍa are to be

50 HIED, IV, p. 154.
51 Rājat, VII, 608
52 ibid, VII, 611 ff; Suyya constructed stone dam and protective stone embankments along the river.
53 TIN, p. 567.
54 HIED, II, 311.
55 ibid, II, p. 312.
56 ibid, I, pp. 78, 87.
57 El, XIX, p. 52 ff.
58 ibid, XXIV, p. 43 ff.
59 HIED, I pp. 95-6.
found in the Mangalāṇa stone inscription of Jayatrasimha, which refers to the construction of a step-well. The stones used in this construction were worked and shaped by the two artisans.⁶⁹ There are some ancient texts on Architecture, which throw important light on the science of building or constructing houses and temples, etc. which, as all evidence shows, reached a high degree of development. The workmanship of Indian artisans was appreciated even by contemporary Muslim writers, who had no reason to be partial to them. Their services were so much valued afterwards that ‘I (Timur) ordered all artisans and clever mechanics who were masters of their respective crafts’, were to be picked out from the prisoners and set aside, I (Timur) had determined to build a masjid in Samarqand, the seat of my empire, which should be without a rival in any country; so I ordered that builders and stone masons were to be set apart for the purpose of constructing an unrivalled temple in Samarqand’.⁷⁰

**Pottery**

An important industry was the pottery industry. Its existence may be traced back to prehistoric times as shown by the discoveries made at Mohenjo-Daro and Harappa, to which can now he added remains found at other sites, representing successive chronological phases which are being excavated under auspicious of the Archaeological Department of India. Potters (kumbhakāra) are mentioned in the Kamauli copper-plate⁷¹ and a potter’s ditch (kumbhakāragartta) in a copper-plate from Assam.⁷² The Kaman stone⁷³ inscription refers to the guild of potters. In the Rājatarangini⁷⁴ references to potter women are found. Potsherds and potteries have been discovered at various places in India. There is such a wide and varied

⁶⁹ IA, XLI, p. 85. ff.
⁷⁰ HIED, III, 447.
⁷¹ Gauḍalekhamalā, p. 135.
⁷² Kāmarupa—Ṣasanavali, p. 41.
⁷³ EI, XXIV, p. 329 ff.
⁷⁴ Rājat, Vol. I.
range of evidence, not confined to epigraphic sources, regarding potteries that it is not possible to make a detailed study of the subject here. Potters were so numerous, specially where the products of their labour and skill were valued, that they could easily develop into prosperous occupational caste and preserve their social integrity and economic interests by organising themselves into guilds and other such corporations. They lived together, where they had their own ditch. Potters belonging to both sexes, worked in their quarters.

Glass industry

The existence of a glass industry is proved by the testimony of the Śukranītīsāra and the Yuktikalpataru.\textsuperscript{75}

Tanning industry

In the Rājatarangini there are references to the leather workers of Kashmir. The leather workers in the Vedic period were known as charmanna. The Rgveda refers to bags and pots of hide or skin in which milk, wine or curd were kept.\textsuperscript{76} The use of leather saddles were noticed by contemporary Muslim writers.

Cane, bamboo and leaf-work industries

Cane and bamboo trees, which grew abundantly in India, were utilised for the manufacture of lutes, baskets, mats, palm-leaf-fans, leaf sun-shades, etc. Some of these things were also used in the making of bullock carts and in furnishing huts. The workers used to get canes and bamboos from the neighbouring forests, out of which different articles were made. It appears that there were some localities which were specially known for their supply of canes to other parts of the country. Thus we are told by Ibn Khurdādba\textsuperscript{77} that ‘from Sind are


\textsuperscript{76} See, Bandyopadhyaya, Economic Life and Progress in Ancient India, pp. 506-26; The Vedic Age, Chap. XXIII, XXVII, pp. 449-467; 506-526.

\textsuperscript{77} HIED, I, p. 15.
brought canes and bamboos'. The word 'kata' used in a copper-plate grant of Govindachandra of Kanauj\(^\text{78}\) means 'reed for mat making'; 'kitkā' in the Partabgarh inscription\(^\text{70}\) means 'matting screen for the erection of flower porch'. Manufacture of baskets is alluded to in the Sevādī stone inscription of Aśvarāja,\(^\text{80}\) where the word 'hārā' is used in the sense of 'a large basket of particular form and size'.

**Organisation:** Śrenī:

The origin of the type of economic organisation, known as śrenī, can be traced back to the later Vedic literature.\(^\text{81}\) Its development is revealed in literature and inscriptions\(^\text{82}\) of subsequent times. Guilds were given the power to lay down rules for themselves.\(^\text{83}\) The king's duty in regard to the affairs of the guilds is emphasised in the books of Yājñavalkya, Nārada, Kātyāyana, etc. In the Gupta period the guild was already a well-established institution.\(^\text{84}\) After the Gupta period also we do frequently come across the word 'śrenī' or other words in different dialects denoting a guild. Available sources refer to

\(^\text{78}\) *JASB*, XLII, p. 318 ff.

\(^\text{70}\) *EI*, XIV, p. 176 ff.

\(^\text{80}\) *Ibid*, XI, p. 29 ff.

\(^\text{81}\) Śrēṣṭhi—*AB*, III, 30.3; IV, 25.8-9; VII, 18.8; Śraishṭhya; *SB*, XIII, 7.1.1; CU, V, 2, 6; KU, IV, 15-20. The high position of the Śrēṣṭhi is frequently emphasised in early Buddhist literature, etc.

\(^\text{82}\) 'Heads of guilds'—*Mbh*, III, 249.16; cf, Arth; Dh. S, e.g. Manu, Yāj, Nār, Gau., etc. See Nasik inscs.—Luders' List 1131, 1137; Junnar inscs.—Luders' List, 1162, 1165.

\(^\text{83}\) "Cultivators, traders, herdsmen, moneylenders and artisans (have authority to lay down laws) for their respective classes"—*Gau*, XI, 21; 'A king, who knows the sacred law must inquire into the laws of castes (jāti) and districts or peoples (jānapada), guild-law, and family-law;—*Manu*, VIII, 41. 'If a man belonging to a corporation inhabiting a village or a district, after swearing to an agreement breaks it through avarice (the king) shall banish him from his realm;—*Manu*, VIII, 219.

\(^\text{84}\) *Saitore*, Life in the Gupta Age, pp. 365-70; The Classical Age, pp. 592-3.
the existence of guilds of oilmillers, gardeners, artisans, stone-cutters, potters, horse-dealers and associations of merchants. The Kaman stone inscription and the Vaibhavasavamin Temple inscriptions show that there might be more than one guild at the same place. Dr. Bhupendranath Dutta suggests that each guild had a patron deity as its protector.

Deśī and Śreṇī

In inscriptions we come across the term deśī in addition to śreṇī which is more commonly used. Śreṇī in Manu, as explained by Medhatithi, means alternatively, a guild of merchants, artisans, bankers or Brāhmanas learned in the four Vedas, etc.; Govindarāja understands by śreṇīs guilds of merchants and husbandmen; while Nandana refers to guilds of merchants and actors. According to Mitāksharā śreṇī is a community of those who

85 El, I, p. 154 ff.
86 ibid.
87 ibid, XXIV, p. 329 ff; cf, In the Deopārā inscription of Vijayasena of the Sena dynasty of Bengal (12th century A.D.) the engraver of the record, Śūlapāṇi is described as the 'crest-jewel of the guild of artists of Varendra' (North Bengal) (Varṇendrika—aśūlpigoshṭi). The word goshṭhī is taken by N. G. Majumdar to mean multitude, a guild—IB, pp. 42 ff; p. 45 ff; R. C. Majumdar takes it in the sense of 'a guild'. Majumdar, Corporate Life, p. 71.
88 El, I, p. 162 ff.
89 ibid, XXIV, p. 329 ff.
90 ibid, I, p. 184 ff; II, p. 116 ff.
92 ibid, XXIV, p. 329 ff.
93 ibid, I, p. 154 ff.
94 Studies in Indian Social Polity, p. 151 ff—Dr. Dutta holds that this practice still persists in the traditions and rites of some of the present day castes. Thus the Gandha-vānīks of Bengal still worship the goddess Gandhēśvari as their patron deity. The Karmakārās worship Viśvakaśika, the divine architect as their patron god.

95 Manu, VIII, 41.
96 Mitākṣhara III, p. 48; The term śreṇī in Nārada (I, 7) has been defined by one commentator as an assemblage of notable merchants; others explain it as denoting a company of artisans. In Kauṭilya
earn their living by selling a particular kind of vendibles, or practising a particular craft. It is evident, therefore, that guilds were organisations composed of persons occupied in different branches of profession, industrial, commercial or otherwise. The bond that united the different members of a śreṣṭi was the common occupation in which they were engaged.

The meaning of the word desī is not clear. Having regard to the context in which it appears in the Peheva inscription from the temple of Garibnāth, some scholars have taken it in the sense of a guild. The expression bhāmmaha-desīya occurs in the Harsha stone inscription of Vigrahārāja (V.S. 1030). Kielhorn, in editing the inscription, suggests that the expression may be connected with the wood desī which, according to him, means a guild, bhāmmaha being interpreted as denoting 'a class of traders'. The word also occurs in the Nāḍīlāi stone inscription (V. S. 1202) where some vanājārakas (vanjārīs) are mentioned to have formed themselves into a desī.

Śreṣṭi was a guild of persons, who earned their livelihood by the same kind of labour, although they may have belonged to different castes or to the same caste, e.g. of dealers in cattle, betel, the weaver and the currier. In such cases, therefore, it was the unity of occupation, which formed the basis of the corporation, the question of caste being usually of no consideration. But generally occupation was hereditary, passing from father to son. This is attested by Sulaimān who notes that 'in all the kingdoms he had seen, the profession never went out of caste'. But examples of change of occupation are not rare. The Mitāksharā itself speaks of dvijas who carried on the occupations of cowherds and traders. Inscriptions similarly mention Brāhmaṇas practising agriculture.

śreṣṭi is defined as a guild of workmen and a military clan and the term is applied to corporations that subsist by agriculture, trade and military science.—Artha, 11, 4; IX, 1; etc.
97 EI, I, p. 184 ff.
98 ibid, II, pp. 116 ff; 130, n. 83.
99 ibid, XI, p. 42 ff.
100 HIÉD, I, p. 6 ff; cf. ibid, IV, p. 223 ff;
101 EI, XXIV, p. 329 ff.
Localisation

One well-established characteristic of economic corporations was localisation of trades and crafts. Sometimes whole villages were inhabited by men engaged in the same work only. In the Lucknow Museum copper-plate grant of the Mahāśāmanāta Balavarmadeva (10th century A.D.) we hear of a village of merchants (grāmanivāśinaḥ = cha brāhmaṇaḥ - ottarān). There is another reference of a village of vanīks or merchants in copper-plate inscription. In the Betkā Vāsudeva image-inscription of the 23rd year of Govindachandra of the Chandra Dynasty of Bengal, we hear of a village inhabited by betel-leaf cultivators. Similar examples are frequently met with in the Buddhist Pāli literature. Localisation is also evidenced by the Kahla plate of the Kalachuri Soḍhadeva, in which the different localities inhabited by different people, are specified. There are some literary references to crafts, localised in special quarters of towns and cities. In the Silpaśāstra work, called Mānasāra is described a village-plan called Nandyaśvarta, meant for a mixed population of different social grades assigned to different localities. The Mayamata gives a more complicated plan. Residence in the south is to be assigned to the weavers, while wheelwrights or carters (chakrinah) are to be located in the outermost parts, which are to be divided into a number of separate blocks, reserved for dealers in (a) fish, meat, dry food and vegetables, (b) staple food, (c) pottery, (d) brass and bronze, (e) cloth.

102 IA, XX, p. 123 ff.
103 EI, XXIII, p. 101 ff.
104 ibid, XXVII, p. 26 ff; In the village of Pāikpāra and in the adjacent village of Betkā district, Dacca, there lived from time immemorial, flourishing families of betel-leaf cultivators, the class being generally known as the Bārai. They formed a distinct class throughout Bengal and lucrative profession of cultivating and selling betel-leaves has made the class well-to-do.
105 Smith villages of 1,000 families—Jāt, III, 281-6; village of wheelwrights numbering 500—Jāt; II, 18, 405; IV, 208; villages famous for potters—Jāt, III, 376, 508.
106 EI, VII, p. 85 ff.
shops, (f) rice and paddy, (g) tailors and dealers in salt and oils, (h) dealers in perfumeries and flowers, etc. All these establishments are to be arranged in the above serial order between residential sites. Along the roads within the boulevard are to be located shops of jewels and precious stones, gold clothes and condiments like mañjishṭha, pepper, pipal, ginger, honey, ghee, oil, medicines, etc. Thus the plan shows that stalls and residential quarters are to be placed side by side, in the interior of a town. But in the ports or in the trade-marts stalls are not to be inter-residential, i.e. they are not to be mixed up but must occupy an area exclusively in which there are to be no alternative residential quarters. There they are to be arranged in continuous rows. An alternative order of planning is furnished which requires artisans and manual workers to be placed in the outer zone of the city so that having common interests they may work more efficiently. The potters, barbers and other craftsmen are assigned to the east or north; fishermen to the north-west; butchers to the west; oilmen to the north; architects to the south-east or the north-west, further off washermen; at a distance of about a cros the sweepers’ quarters are to be situated. The Pāli Buddhist literature\textsuperscript{108} also supplies numerous references, showing how in far earlier times different occupations or professions were also assigned different localities. Residence of people, belonging to the same occupation, must have been an important factor contributing towards the development of industrial or other corporations. The practice appears to have continued for centuries, as shown by the later texts, quoted above.

Śresṭhī, Mandalika, etc.

The śresṭhī in a trade-guild occupied a position of decided superiority. In the Lucknow Museum copper-plate grant of

\textsuperscript{108} The ivory-workers’ bazar in the city of Benaras—Jāt, I, 320; II, 197; the localities of dyers, perfumers and florists—Jāt, IV, 81, 82; the cooks’ quarters in Sāvāṭhi—Jāt, III, 48; sometimes the crafts were associated with special streets named after them in the cities, e.g. washermen’s street—Jāt IV, 81; the Vaikṣya-street and quarter—Jāt VI, 485.
the Mahāśāmanta Balavarmadeva, mention is made of a śresṭhī named Dammuka. In some inscriptions the designation mahattaka is used to denote the position of headship. Thus one inscription has been found which refers to mahattaka of tailikas or oilmillers. The same inscription seems to refer to the chiefs of gardeners under the epithet mahar, which may be a local word carrying the same sense as mahattaka. In the Barrackpur plate of Vijayasena, the designation of an official is found to have been mahāganastha of uncertain meaning. In Pāli literature the headman of a craft guild is called Pamukha or Jetṭhaka (Alderman).

The word mandalika is found used in the Arthuna inscription (V. S. 1136) to denote some sort of a corporate body. It refers to a mandalika of merchants, belonging to the village of Arthuna, who may have formed a local organisation for the benefit of their trade. A traders’ community is also mentioned in the Partabgarh inscription. But it is difficult to ascertain the constitution of such bodies and their functions for lack of detailed information.

Official connections

In this connection it may be observed that, as in earlier times, influential members of trades were often intimately connected with the king’s court. Thus in an inscription of Soḍhadeva the Mahāśresṭhī figures as an important personage among officials. In the Pandukesvar plate of Lalitāsūrādeva (latter half of the 9th century A.D.) the śresṭhī-purogāh or the foremen of guilds and vaniks or merchants figure as important personages

109 IA, XX, p. 123.
110 EI, I, p. 154 ff.
111 IB, p. 57 ff.
113 EI, XIV, p. 295 ff.
114 ibid, XIV, p. 176 ff.
115 ibid, VII, p. 91 ff.
116 IA, XXV, p. 177 ff.
among officials. In the Rajapura copper-plate of Madhurāntaka, dated 1065 A.D., the association of a śreṣṭhī with a princely family is noticed. Here the name of the śreṣṭhī Puliama is mentioned along with those of queen Nagala Mahādevī, Prince Nāyaka, Nāyaka Sūdraka and Prince Tuṅgarāja who jointly made the gift of a village. Several passages in the Jātakas indicate the importance of these offices in early times. Thus it is shown that the heads of guilds sometimes held high posts in the state and were favourites of the king. Reference is also made in this early literature to a state officer, the Bhāṇḍāgārika (Treasurer or Superintendent of Stores) whose office carried with it the judgeship of all the merchant guilds.

Members of guilds were sometimes entrusted with responsible work of the state and public duties, for example, they were appointed as witnesses. Thus in a list of witnesses contained in the Nadol stone inscription of Rāyapāla (V. S. 1198) is included the entire community of local bankers (mahājanas). They acted as witnesses to a document, which contained a solemn promise on their part to apprehend the wrong-doers. In the Anāvādā stone inscription of Sāraṅgadeva, V. S. 1348 is recorded a gift made by five classes of people of a town, one of which consisted of the local mahājanas. Some of these were śreṣṭhīs.

It is to be noted that kings sometimes conferred the title of śreṣṭhī on Jaina leaders belonging to families of śreṣṭhīs. The Dübkuṇḍ stone inscription of the Kachchhapaghata Vikramasimha (V. S. 1145) gives the genealogy of two Jaina traders, Rishi and Dāhaḍa. Their grandfather Jāsūka had been a śreṣṭhī himself.

Guilds as custodians of donations etc.

Inscriptions throw important sidelight on the responsibility of guilds for the maintenance, upkeep, etc. of religious institutions

117 El, IX, p. 174 ff.
118 Jāt, II, 12, 52.
119 ibid, IV, p. 37.
120 El, XI, p. 37 ff.
121 IA, XLI, p. 20 ff.
out of deposits received by them. The Kaman stone inscription (786-905 A.D.)\textsuperscript{128} belonging to an earlier period, records deposits of donations and endowments made from time to time, to be used for specified purposes. It is recorded in one of these inscriptions that a guild of potters (kumbhakāra), living in Kāmyaka, received a sum of money in advance, which must have been credited to its account, and in return, stipulated to pay a permanent cess which was to be made up by contributions at the rate of one pana per wheel every month, to be paid by each individual member of the guild. In part IV of the same inscription it is again stated that a guild of gardeners (mālikānām), living in Kāmyaka, in consideration of a sum of money paid in advance, bound itself by an agreement to supply permanently sixty garlands to the temples. Part V of the same series records that a local guild of artisans received an amount in advance, and in exchange for it made a permanent endowment, to which every local artisan had to pay one dramma per month. Here (i.e., in all these documents) the different guilds appear to function like banks, receiving permanent deposits, and remaining responsible for fulfilling the stipulated terms with the help of collections at fixed rates, subscribed by the members of the guilds concerned. It appears from the above inscriptions that the guilds sometimes levied a small cess on every individual member. Three different guilds, connected with the same region, are mentioned in these inscriptions, viz. those of potters, artisans and gardeners. The members of the last-named guild were to pay their contributions in kind, while those of the remaining two had to pay a small cess probably because the articles, manufactured by them, were not regularly required for the use of the temple, but the guild did not pay out of its common fund. We further notice that the guilds comprised all the members of their respective professions; for in two cases the inscription explicitly states that every one who followed a particular profession in Kāmyaka was to contribute a fixed amount.\textsuperscript{124} We have discussed the evidence of the Kaman stone inscription at some length, for, though

\textsuperscript{128} EI, XXIV, p. 329 ff.

\textsuperscript{124} Cf, EI, XXIV, p. 329 ff.
strictly speaking, outside the limits of our period, they furnish interesting material about one important function of guilds, which is rarely found in later inscriptions.

Permanent religious endowments were made with these guilds under conditions definitely laid down. Thus in an inscription at Gwalior\(^{125}\) it is recorded that the members of a guild of oil-millers decided to supply one palikā of oil each for the lamps of the temple. On the same day it was further stipulated by members of a guild of gardeners including their chiefs (mālika-mahara), that they were to give daily, for the requirements of worship, fifty garlands (mālā) of such flowers as were available at a particular season. Similarly, the Harsha stone inscription\(^{126}\) records the decision to raise a certain fixed levy from the members of a deśī for the benefit of a temple. An association of horse-dealers of the north also subscribed to a fund at a prescribed rate for a similar purpose. In the Sāṇḍivāv stone inscription of Kelhanadeva (V.S. 1221),\(^{127}\) it is recorded that the rathakāras of a locality in a body made a donation. In the Partabgarh inscription of the time of Mahendrapāla II,\(^{128}\) again, it is recorded that a permanent endowment was created by a trading community at Daśapura out of the contributions by its members in the month of Chaitra. This is an example of collective action in the nature of subscriptions raised for charitable or religious institutions. Payment of one dramma per annum, by every merchant (mahājana) in honour of a deity, is mentioned in another record.\(^{129}\) The system of paying a fixed number of coins per unit of article of trade was also current. When traders and others act as distinct community in these cases and the like, it may be presumed that they had some kind of organisation through which common action could be taken.

Another form of collective action was for each shop to pay a certain amount. From a Chaulukya grant dated 1207 A.D.,

\(^{125}\) *EI*, I, p. 154 ff.

\(^{126}\) *ibid.*, II, p. 116 ff.

\(^{127}\) *ibid.*, XI, p. 46 ff.

\(^{128}\) *ibid.*, XIV, p. 176 ff.

\(^{129}\) *IA*, XI, p. 337 ff.
we learn that the merchant (śresṭhī) Valahala and all the other merchants (mahājanas) of Timbāṇaka gave to the gods, installed by the Mehara king Śrī Jagamalla, one rūpaka yearly per shop. It is also recorded in the same inscription that every merchant in Timbāṇaka was obliged to give to the gods one dramma annually. Likewise each of the shops in Talājhā and two other places had to give one dramma yearly.

Guild Executives

The inscription of the Vaillabhaṭṭasvāmin Temple at Gwalior refers to the executive officers of several guilds. For instance, it mentions the chiefs of the guild of oilmillers (taṭika-mahattaka), and then adds ‘and the other members of the three guilds of oilmillers’. Chiefs of three guilds of oilmillers were respectively 4, 2 and 5 in number, as stated in this record.

Trading Communities and their financial help to State

The śresṭhīs were distinctly a community of traders. According to C. P. Brown, the word shetti means ‘a shop-keeper’ in plain Telugu. Appadorai holds that the word cetti of South India is derived from the Sanskrit śresṭhī. The śresṭhīs formed an important section of the Vaiṣya caste of ancient India, whose duty was trade and allied business. Venkatarama Ayyar is of the opinion that the term Valanjīyam (Bananjīka) used in South India, is derived from the Sanskrit vaṇij, and means traders (rather export traders). The Valanjīyar were traders in general and belonged to various corporations. The terms vaṇik was also corrupted into bania. Marco Polo refer to Abraiaman, whom Appadorai identifies with the banias. “These Abraiaman”, Marco Polo says, “are the best merchants

---

180 Eli, I, p. 154 ff; cf, Brīh, XVII, 4, 10.
181 Yule and Burnell, Hobson—Jobson, S. V. Chetty; cf, Appadorai, Economic Condition of Southern India p. 379, n.
182 Appadorai, Economic Condition of Southern India p. 379.
183 IHQ, XXV, p. 269 ff; cf, Majumdar, Corporate Life pp. 88-96.
184 Travels, II, pp. 363-5.
185 Appadorai, Economic Condition of Southern India p. 382.
in the world and the most truthful, for they would not tell a lie for anything on earth."\textsuperscript{136}

The banias of Añahilapura under the Chaulukya were very affluent. There were many millionaires and over the mansions of the Kotśvaras (those possessing a crore or more) were hoisted huge banners and ringing bells. Their grandeur was quite royal.\ldots These merchants earned enormous wealth by sailing to foreign waters.\textsuperscript{137} They were so wealthy that even kings and princes looked to them for financial support and assistance. Kumārapāla of the Chaulukya dynasty of Añahilapura, leaning towards Jainism, had a practical object in view, viz. the winning of the support of the wealthy bania corporations, mostly Jaina by faith. The king’s wars must have depleted his treasury, and this may have led him to depend on the Jaina community among whom were to be found men, prominent in the fields of industry, commerce and banking in Gujarat.\textsuperscript{138}

References about the Sauvarnikas are met with in some inscriptions of the period.\textsuperscript{139} It is said about them that in the 12th century A.D. they formed a highly prosperous community. They were rich bankers. There is a story\textsuperscript{140} that once when king Vallālasena was involved in debts, he approached one Vallabhānanda Adaya, the richest and the most influential banker of the day in Bengal, and received a loan of rupees one crore. There are also literary references to mahājanas advancing money to agriculturists in times of famine and flood, and appropriating the paddy fields of the debtors when they failed to clear off the incurred debts. These references seem to apply to later times but it will not be wrong to infer the demands of the mahājana bankers who may not have been restrained by human considerations. As famines and floods were not unknown, and as the distress of the people became acute, it is likely that the rich traders

\textsuperscript{136} Travels, II, pp. 363-5; p. 369, n. I.
\textsuperscript{137} MPY, intro, p. X ; cf, Kumārapālacharita.
\textsuperscript{138} Cf, Ray, Dynastic History of Northern India, II, p. 997.
\textsuperscript{139} EI, XIX, p. 52.
\textsuperscript{140} BKU, Chap. II ; Mynensingh Gitika, p. 44.
and usurers may have given financial help to the poverty-striken people in default of state help.

**Defensive measures**

Sometimes trading communities may seem to have taken measures for the effective security of their properties and interests. In the Kanker copper-plates of Pamparājadeva (1213 A.D.) the expression vaṇikotta occurs in connection with the grant of a village. Though it is not definitely known what the expression really means it has been suggested that there may have been a traders' fortress, probably erected by the local Banjārās for the security of the stores for transport. In older times the Banjārās are known to have carried even guns for protecting themselves from plunder. Jaipurā may have been one of the central depots, which they fortified, and the village therefore came to be called Jaipurā Vaṇikotta. It need not be supposed that the Banjārās alone were privileged to take this kind of security measure. This does not seem to have been an innovation as it is found to have been a familiar custom as early as the period, portrayed in the Buddhist Jātakas. In the Jātakas there are references to villages of robbers whose business it was to rob caravans. In order to safeguard their lives and properties merchants moving with their caravans placed themselves under the leadership of of Sāṭṭhavāhas during their journey from one place to another in the course of their trek. The Arthaśāstra and the Dharmaśāstras also mention that guilds (śrenīs) sometimes maintained their own armies (śrenī-balā). Śrenī, moreover, are described as bearing arms.

---

141 *Ei.* IX, p. 166 ff.
142 It has been suggested that 'Jaipurā Vaṇikotta' may have been the name of village in the vicinity of Jaipurā, and may have been used as an adjunct to distinguish it from other villages of the same name, *Ei.* IX, p. 169, n. 1.
143 *Jāt.* I, 296, 297; II, 388; IV, 430, etc.; cf. Majumdar, Corporate Life, p. 28 ff.
CHAPTER IX

Currency

General features

The currency system of the period shows a number of striking characteristics\(^1\):—

1. Different standards of coinage were issued by different rulers, but despite variations there was a large measure of unity amongst them.

2. Although gold coins are found to have been current, they were frequently debased.

3. Barter was not out of vogue.

4. Cowrie shells were used along with metallic currency as the medium of exchange presumably in small transactions.

Metallic coins available for this period may broadly be divided into two classes, according as they were of indigenous or foreign origin. Again, they were of three categories: those of gold, silver and copper. Coins made of billon were also of common use. Billon, as is well known, 'is a kind of base-metal and is an alloy of silver with copper, tin or the like'.\(^2\)

Drammas of various designations

Drammas are frequently referred to in inscriptions and literature. The name *dramma* originated from the Greek *Drachma*, the weight of which was about 67.5 grains.\(^3\) Drammas current in India were made of gold, silver and copper. According to Dr. D. R. Bhandarkar,\(^4\) the name *dramma* should be applied to

\(^1\) *JNSI*, XIV, p. 151 ff.
\(^2\) Chamber's Twentieth Century Dictionary, 1947.
\(^3\) There are drammas which weigh less than 60 grains—Bhandarkar, *Indian Numismatics*, p. 206 ff.; *CCIM*, p. 251 ff.
\(^4\) Bhandarkar, *Indian Numismatics*, p. 206 ff. According to Dr. D. R. Bhandarkar, the *kārshāpaṇa* of Kātyāyana's table 'must evidently stand for a silver coin and is probably another name for *drammā*.'
silver coins only. This is also the view of Prof. Mirashi.\textsuperscript{5} But there is epigraphic and numismatic evidence regarding *drāmmas* made of gold and copper as well.\textsuperscript{6} Sometimes *drāmmas* were named after kings by whom they were issued. Śrīmadādīvarāha *drāmmas* were issued by Bhoja Ādīvarāha of the Pratihāra dynasty;\textsuperscript{7} Vigrahapāla *drāmmas* by a king called Vigrahapāla probably of the Pāla dynasty of Bengal;\textsuperscript{8} Ajayadeva *drāmmas* by Ajayadeva, the Chauhān king who founded the city of Ajmer in Rajputana;\textsuperscript{9} Vīnāyakapāla *drāmmas* issued by Vīnāyakapāladeva (914—33 A.D.) of the Pratihāra dynasty;\textsuperscript{10} Viśalapriya *drāmmas*

\textsuperscript{5} JNSI, III, p. 25.

\textsuperscript{6} In the 9th century A.D. we even hear of gold *drāmmas* (*Kaṅchana-drāmma-satam*), IA, XIII, p. 136 ff and iron *drāmmas* (*lokhādīya-drāmma*), JNSI, VIII, p. 140 ff.

\textsuperscript{7} EI, I, p. 162 ff. Regarding the base silver coins with the figure of Ādīvarāha, attributed to king Bhoja, compare V. A. Smith's observations. Smith regards the more refined specimens to have been minted in the reign of Mihira-Bhoja I (9th century A.D.)—CCIM, pp. 233-4; cf, JNSI, X, p. 28 ff.—The more debased Ādīvarāha coins may have been issued either in the latter part of Bhoja's reign or during the reigns of his two immediate successors, Mahendrapāla I (885-910 A.D.) and Bhoja II (910-914 A.D.)—JNSI, X, p. 28 ff; XV, 214 ff.

\textsuperscript{8} The discovery of a number of silver coins with their weights varying approximately from 52 to 58 grains with the legend Śrī Vigrāha-(ha), Śrī-Vi or simply Śrī including those found in Devapāla Temple at Ghoshrawa, shows that silver coins of the weight fixed for the purāṇa were in use in the Pāla period. It is quite probable that the name *drāmma* was given to this type of coinage.—Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 570. Vigrahapāla I is supposed to have issued the *Vigrahapāla drāmmas*. Marked affinities between these *drāmmas* (*Vigrahapāla drāmmas*) and the Ādīvarāha-*drāmmas* are noticed. Those debased of the *Vigrahapāla drāmmas* may have been issued after the original by the second or the third king of that name or even other rulers, not necessarily of the Pāla dynasty—CCIM, p. 239; ASI, 1927-28, p. 105.

\textsuperscript{9} IA, XLI, p. 209 ff; Reu, Coins of Marwar, p. 3 ff; SCCIM, p. 64 ff; PRASWC, 1906, p. 59 ff.

\textsuperscript{10} In the Dravya-Parikhā by Thakkur Pheru (V. S. 1375), there are references to some Gurjara coins (*Gurjari mudrās*) including coins called *Vīnāyaka-mudrās*. The latter may be identical with the silver coins of Vīnāyakapāladeva. According to V. S. Agrawala, the weight of some of the coins of this series varies from 62 to 69 grains. Some
were perhaps issued by Mahārāja Viśāladeva and were current in Gujarat and Marwar. Mention may be made of the Bhīma-priya-drammas which are mentioned in variant forms in a Jaina manuscript. These were perhaps issued by a Mahārāja named Śrī Bhīmasena. These coins were probably made of iron as may be inferred from the adjective lohādiya. Most probably these drammas are connected with the Bhīmapriya-viṁśopaka.

We have also epigraphic references to other drammas, not similarly named after kings, such as Shadboddika drammas, mentioned in the Junapur inscription. The term Shadboddika is explained as comprising six (shaḍ) bodākas, the word bodāka being a Hindi corruption of the Sanskrit word pādīka. The pādīka in earlier times was equal to one-fourth of ancient karsha. The weight of a boḍāka is about the same as that of the Greek obolus weighing 11.2 grains. Hence a shadboddika dramma may be taken as a coin weighing 67.2 grains, which is the weight of a Greek drachma. Rapson identifies these coins with the Gadhāiya Paisa. But Agrawala suggests the possibility of associating them with copper coins.

We have in the Siyadoni inscription reference to a kind of dramma called pāñchiyaka-dramma the meaning of which, however, is not clear. One view is that it may have denoted a copper coins of Vināyakapāladeva, with the boar on the obverse and the king’s name on the reverse have also been found—JNSI, X, p. 28 ff; XIV, p. 151 ff.


See, JNSI, VIII, p. 139 ff.

The commentary on the Gajitāsāra supplies some interesting information about iron coins; cf, JNSI, VIII, p. 140 ff.

El, XI, p. 59 ff. Some viṁśopakas are known to be associated with drammas of other designations, e.g., Vigraha-drammas and Varāha-drammas.

JRASB, XXVI, 33 ff. The Greek Obolus (11.2 grains) may have been equal to a pādīka, equivalent to a karsha.

Rapson, Indian coins, p. 34 ff.

El, I, p. 162 ff.
coinage struck by the local *panchayat*. Unless it is shown that local *panchayats*, during this time were empowered to issue coinage independently, it may be difficult to accept this interpretation. It has also been interpreted to mean a piece of five *boḍṭikas*. As a *boḍṭika* is supposed to be equivalent to 11.2 grains, a *paṇchīyaka* being a piece of five *boḍṭikas*, it must have weighed 56 grains. This weight agrees with that of the silver coins issued by the *Brāhmaṇa* kings of Ohinda.

**Pāruttha drammas**

Some *drammas* were called *pāruttha drammas*. According to Kharataragachchhapatṭāvali (1010-1336 A.D.) Naravarman Parmāra of Malwa (c. 1097-1111 A.D.) offered Jinaśabhadhā, a scholar and reformer, a gift of either three villages or 3,00,000 *pāruttha drammas*. References to these *drammas* also occur in epigraphic records of the South, e.g. in an inscription of Aparāditya II, of the Śaka year 1106 (=1184 A.D.) found at Loṇḍa near Kalyāṇa in the Bombay Presidency and in an inscription of Silāhāra Someśvaradeva from Chhaṇya (Koṇāka), dated Śaka year 1182 (=1260 A.D.).

The exchange value of *pāruttha drammas*, as compared to other varieties of *drammas*, is indicated in a passage which says that the minister of Rao Udaya Simha of Jālore having expressed his willingness to make a gift of *pārūṭhaka drammas*, the courtiers, informed him that “one *pārūṭhaka dramma* was equivalent to eight ordinary *drammas*.” In the *Purātanaprābandhasaṅgraḥa* also the exchange value of *pārūṭhaka dramma* is given in similar terms. There are scholars who associate these *drammas* with foreign coins. Alexander Kyd Nairne suggests that the ‘*pāruttha drammas* are to be equated with Parthian *drammas*’.  

---

18 *Bhandarkar, Indian Numismatics*, p. 208.  
19 *JRASB*, XXVI, p. 33 ff.  
20 *IHQ*, XXVI, p. 224 ff.  
21 *JBORS*, XXIX, p. 211 ff.  
22 *EI*, XXIII, p. 280 ff.  
V. S. Agrawala is of the opinion that they were the same as the Bhillumāla or Srīmāliya drammas.\textsuperscript{26} C. D. Dalal\textsuperscript{26a} on the other hand suggests that the term represents some proper name associated with drammas, while according to R. C. Agrawala, 'it does not seem plausible to associate these coins with any foreign currency, as they were in circulation in the area of Mārwār and Bombay Presidency'.\textsuperscript{27}

Mention may be made of another kind of drammas, evidently referred to in an abbreviated form: 'Drā Eli' in an inscription of the reign of Mahārāja Kelhanādeva.\textsuperscript{28} Its name cannot be restored with the help of this text only.

\textit{Drammas without designation}

Drammas without any prefix frequently appear in the inscriptions of the period, particularly those of the Chāhamānas such as the Harsha inscription (V. S. 1030),\textsuperscript{29} the Bālī inscription of Asvaka (V. S. 1200),\textsuperscript{30} the Nadol plate of Alhaṇadeva (V. S. 1218),\textsuperscript{31} the Nadol plate of Kīrtipāla (V. S. 1218),\textsuperscript{32} etc.; the inscriptions of the Paramāras, e.g. the Kalvan plate of Yaśovarman,\textsuperscript{33} the Arthuna inscription,\textsuperscript{34} the Patananrayana stone inscription;\textsuperscript{35} in the inscriptions of the Pratīhāras of Kanauj, viz., the Ahar stone inscription,\textsuperscript{36} the Pehoa inscription,\textsuperscript{37} the Asnī inscription of Mahipāla (V. S. 974),\textsuperscript{38} etc.; in the inscriptions of the Guhila dynasty, e.g., in an inscription of Allāta of Mewar (V. S. 1010)\textsuperscript{39}

\textsuperscript{26} \textit{JNSI}, XVII, p. 75 ff.
\textsuperscript{26a} Dalal, Lekhapaddhati, p. 114 ff.
\textsuperscript{27} \textit{JNSI}, XVII, p. 75.
\textsuperscript{28} EI, XI, p. 51 ff.
\textsuperscript{29} \textit{ibid}, II, p. 116 ff.
\textsuperscript{30} \textit{ibid}, XI, p. 32 ff.
\textsuperscript{31} \textit{ibid}, IX, p. 63 ff.
\textsuperscript{32} IA, XL, p. 144 ff.
\textsuperscript{33} EI, XIX, p. 69 ff.
\textsuperscript{34} \textit{ibid}, XIV, p. 295 ff.
\textsuperscript{35} IA, XLV, p. 77 ff.
\textsuperscript{36} EI, XIX, p. 52 ff.
\textsuperscript{37} \textit{ibid}, I, p. 184 ff.
\textsuperscript{38} IA, XVI, p. 173 ff.
\textsuperscript{39} \textit{ibid}, LVIII, p. 161 ff.
also in Chaulukya grants, e.g., the Nanana grant of Kumārapāladeva (V. S. 1212),\(^\text{40}\) a grant dated A. D. 1207;\(^\text{41}\) and also in some inscriptions of Bengal and Bihar for instance, the Mahābodhi inscription of the 26th year of the reign of Dharmapāla,\(^\text{42}\) the Edilpur copper-plate of Keśavasena,\(^\text{43}\) etc.\(^\text{44}\) From its wide use in inscriptions it may be safely inferred that the *dramma* was regarded as one of the chief media of exchange under some of the most prominent dynasties ruling in this period.

**Literary evidence**

We have also got some literary sources which furnish information about *drammas*, viz., the Bakhshali Manuscript,\(^\text{45}\) the Āvaśyakachūrni, a Jaina work of the 7th century A.D.,\(^\text{46}\) Ashaya, the commentator on the Nārada Smṛiti, assigned to the 8th century A.D. by Altekar, who has specifically referred to one lakh *drammas*,\(^\text{47}\) the Prabandhachintāmaṇi,\(^\text{48}\) the Gaṇitasāra of Śrīdharaśārya,\(^\text{49}\) etc.

Numismatic sources confirm to a large extent the testimony of inscriptions and literary texts. Thus Gāṅgeyadeva of the Kalachuri dynasty issued gold coins of the name of *dramma* the weight of which was equal to that of the Greek *Drachma* (67.2 grains).\(^\text{50}\) According to Agrawala\(^\text{51}\) the maximum weight

\(^\text{40}\) *ABORI, XXIII.*

\(^\text{41}\) *IA, XI,* p. 337 ff.

\(^\text{42}\) *J & Pro. ASB (N.S.)*, IV, pp. 101-2.

\(^\text{43}\) *IB,* p. 118 ff.

\(^\text{44}\) *EI,* I, p. 97 ff; *XI,* p. 47 ff; *XXIV,* p. 329 ff; *IA,* XLII, p. 20 ff.

\(^\text{45}\) In 1881 A.D. an Indian treaties was discovered at Bakhshali near Mardan. The work was published by Hoernle in *IA,* XVII, and was later edited in the *ASR* (New Imperial Series), XLII. Hoernle assigns it to the 3rd or 4th century A.D. while another scholar places it in the 9th or 10th century A.D.—*IA,* LVIII, p. 140 ff.


\(^\text{48}\) Prabandhachintāmaṇi, pp. 18, 121, 163, etc.

\(^\text{49}\) Cf, *JNSI,* VIII, p. 138 ff.

\(^\text{50}\) *CCIM,* p. 251. The gold and silver coins of Jaijalaideva I, Ratnadeva II, and Prithvideva II are supposed to be of this standard, although this is rarely reached, cf, *JNSI,* III, p. 21 ff.

\(^\text{51}\) *JNSI,* III, p. 25 ff.
of Gāṅgeya’s gold *drammas*, preserved in the Lucknow Museum, is 69.5 grains. These coins are found in M. P. and U. P. The *Lakṣmī* type, introduced by Gāṅgeya-deva’s coinage, became popular in North India and was imitated not only by his successors but also by kings of other dynasties. Similarly the gold coins of Kumārapāla of the Tomara dynasty of Ajmer (1019-49 A.D.) are *drammas*. The weight of these coins varies between 61.7 and 62.7 grains.\(^{52}\) The gold *drammas* of Govindachandra of the Gāhaḍavāla dynasty are abundant. In most cases they are made of extremely base metal. Eight hundred of such coins were discovered near Nanpara in the Bahairch district, Oudh.\(^{53}\) The Chandellas, to a large extent, imitated the coinage of Gāṅgeya-deva.\(^{54}\) It may be suggested that Kīrtivarman Chandella adopted and introduced the coinage of Gāṅgeya-deva after defeating Lakshmi-Karṇa. Coins of the Chandella dynasty were issued in three metals, viz. gold, silver and copper, and in three denominations, *drammas*, *ardha-drammas* and *pāda-drammas*.\(^{55}\) Kīrtivarman issued gold coins,\(^{56}\) some of which weigh 30.8 grains, which is less than that of a half *dramma*. King Jayavarman, who ruled during the second quarter of the 12th century is believed to have issued silver and copper *drammas*. Cunningham mentions one silver coin of Jayavarman.\(^{57}\) The collections of Rai Bahadur Vyas contains an *ardha-dramma* in copper issued by this ruler. Its size is .5” with a roughly round diameter and its weight is about 30 grains,\(^{58}\) approximately half the weight of an ordinary *dramma* of 67.2 grains. The coins of Madanavarman, which have been found, are

\(^{52}\) *CCIM*, pp. 256-7; p. 259.
\(^{55}\) *ASR*, X, p. 27 ff.; *CCIM*, p. 251 ff.
\(^{56}\) The Chandella king Kīrtivarman struck coins in his name. His Lakshmi-type gold coins resemble those of Gāṅgeya-deva, the Kalachuri king. His successors also struck gold coins of this type. Their copper coins were of the Hanumān type, which bear some resemblance to the *Adiwarāha* coins, cf., *IA*, XXXVII, p. 147 ff.; Bose, *History of the Chandellas*, pp. 182-3.
\(^{57}\) *CMI*, pp. 77-78.
\(^{58}\) *JINSI*, IV, p. 33 ff.
of three varieties: gold, silver and copper. Three gold coins to be attributed to his reign weigh between 15.6 and 62.3 grains.\(^5^9\)

**Lower denominations**

Four denomination of *drummas* seem to have been known. Smith calls them *drummas*, half-*drummas*, quarter-*drummas* and one-eighth *drummas*.\(^6^0\) Mirashi\(^6^1\) states that the lower denominations of *drummas* were known as one-quarter, two-quarter and three-quarter *drummas*. One-quarter *drummas* were also known by the name *pañchiyaka-drummas*, because they were equated in value to five *vimśopakas*. That a *pañchiyaka-drumma* was a quarter *drumma* is clear from the Siyadoni inscription\(^6^2\) in which a quarter Āḍivara-ha *drumma* appears to be mentioned in figures as ‘*pam dra 1’* (abbreviation of *pañchiyaka-drumma*). In the same inscription a half-*drumma* is called *drammārdha* and a three-quarter *drumma* *drumma-tribhāga*. *Drammas* of the Chandella dynasty were known in three denominations, namely *drummas*, *ardha-drummas* and *pāda-drummas*. Some coins of these denominations have actually been found including an *ardha-drumma* of king Jayavarman of the Chandella dynasty (2nd half of the 12th century A.D.). It is a copper coin weighing about 30 grains.\(^6^3\) Cunningham describes one gold coin of Gāṅgeya-deva weighing 7 grains, approximately corresponding to \(\frac{1}{4}\) *drumma*.\(^6^4\) A *drumma* in Smith’s Catalogue weighs about 5.6 grains.\(^6^5\) Three very small silver coins of

---

\(^{59}\) In the British Museum one copper *drumma* of Madanavarman and two other *drummas* have been found. The Lakṣmi type of Gāṅgeya-deva was adopted by Madanavarman and later Chandella kings on their copper coins. It is probable that these coins, though made of copper, were plated with silver and may have passed as silver coins—Bose, History of the Chandellas, p. 183. 48 silver coins of Madanavarman, of which 8 are *drummas* and 40 quarter-*drummas*, have been discovered—*JASB* (N.S.), X, pp. 199-200.

\(^{60}\) *CCIM*, p. 251 ff.

\(^{61}\) *JNSI*, III, p. 21 ff.; p. 37 ff.

\(^{62}\) *EI*, I, p. 162 ff.

\(^{63}\) *JNSI*, IV, p. 33 ff.

\(^{64}\) *CCIM*, p. 251 ff.

\(^{65}\) *ibid.*, p. 251 ff.
Prithvīdeva II of the Kalachuri dynasty resembling the $\frac{1}{4}$ dramma pieces of Gāṅgeyadeva have also been found.\textsuperscript{66} Two-quarter drammas of Gāṅgeyadeva (11th century A.D.) have been found in the hoard discovered at Barala, containing about 125 gold coins.\textsuperscript{67}

Subdivisions

Drammas seem to have still lower subdivisions, as evidenced by the Siyadoni inscription.\textsuperscript{68} These are pādas and viṁśopakas. As already stated, the former were probably represented by the pāñchihyaka-drammas, sakta-pādas, and pādas, associated with the name of Ādivarāha. The viṁśopa, as a subdivision of a dramma, appears under the denominations, already noted, viz. Varāhakiya-viṁśopa, the Vigraha-dramma-viṁśopa and Bhīmapriya-viṁśopa, etc. Viṁśopa probably denoted one-twentieth part of a dramma, weighing about three grains only. Its use is testified to by inscriptive references.\textsuperscript{69}

Attempts have sometimes been made to bring out the value of a dramma in terms of other coin denominations. Bhāskarāchārya, the great Mathematician states, in the Lilāvatī that sixteen panas is equivalent to one purāṇa of shells and one dramma is $\frac{1}{16}$th part of a gold nishka.\textsuperscript{70} Cunningham holds that forty half-panas were equivalent to one dramma.\textsuperscript{71} According to a South Indian inscription 10 drammas equalled 32 pons.\textsuperscript{72} In the Gaṇitasāra of Śrīdhārāchārya a dramma is shown to be equal in value to five rūpakas.\textsuperscript{73} Dr. D. R. Bhandarkar thinks that the kārshāpāṇa of Kātyāyana’s table is a silver coin probably signifying a dramma.\textsuperscript{74}

\textsuperscript{66} INSI, III., pp. 31-32.
\textsuperscript{67} NC, XII., pp. 133-35.
\textsuperscript{68} EI, I., p. 162 ff.
\textsuperscript{70} Cf., Barnett, Antiquities of India, pp. 207-8.
\textsuperscript{71} INSI, III., p. 39 n. 85; cf. ASI, X., p. 27 ff.
\textsuperscript{72} EI, XVI., p. 277 ff.
\textsuperscript{73} INSI, VIII., p. 144 ff.
\textsuperscript{74} Bhandarkar, Indian Numismatics, p. 210 ff.
It is interesting to find references to *drammas* in business documents. Thus a mortgage-deed engraved on a brick, found in a village near Junapur, which is dated in samvat 1273, records the loan of 2250 *drammas* on the pledge of certain fields.\(^{75}\)

**Earliest use of *drammas***

There are some differences of opinion among scholars regarding the earliest use of *drammas*. According to D. R. Bhandarkar the earliest epigraphical record mentioning *drammas* is the famous Gwalior inscription of Bhojadeva.\(^{76}\) But Dr. B. C. Sen points out,\(^{77}\) that 'the view that no reference to a *dramma* can be traced to a date earlier than 875 A.D. is not correct, as the Mahâbodhi inscription of the 26th year of the reign of Dharmapâla shows',\(^{78}\) which refers to the construction of a tank at the cost 3,000 silver *drammas*. A still earlier reference to *drammas* is found in the Dadhi-mata's inscription from Goth and Mânglod (Jodhpur division) which is dated in the 7th century A.D.\(^{79}\) Some scholars trace the use of *drammas* to a still earlier period. The term *dramma* is supposed to be mentioned in abbreviated forms (like 'dra' and 'dha')\(^{80}\) in certain Kharoshthi inscriptions from Taxila. S. K. Chakravarti holds that the Greek term *drachma* was actually used by the Indians. Subsequently, of course, it was changed into an Indianised form.\(^{81}\) The coins, however, came to be more frequently used in North India from the 9th century onward. The use of the *drammas* was not restricted to North India but can be traced in South India also as inscriptive evidence shows.\(^{82}\)

---

\(^{75}\) *JASB*, XIX, pp. 454-56; *EI*, XXV, p. 3 n. 1.

\(^{76}\) Bhandarkar, Indian Numismatics, p. 206 ff.

\(^{77}\) Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 257 n. 2.

\(^{78}\) Gauḍalekhamālā, p. 32 ff.

\(^{79}\) *EI*, XI, p. 299 ff.

\(^{80}\) *JNSI*, XV, p. 153 ff.

\(^{81}\) *ibid.*, XVII, Pt. II, p. 65 ff.

\(^{82}\) *EI*, XVI, p. 285 and n. 4; XXV, p. 62 ff; *JNSI*, III, p. 37 ff.
Dināra

The coin name ‘dināra’ is derived from the word Denarius of the Roman Empire with which India became familiar early in the Christian era. The use of dināras seems to have continued till the end of the Hindu period. Under the Guptas there was a variety of gold coins known as dināras. The Rājatarāṅgini speaks of dināras of gold, silver and copper. In the Bakhshali Manuscript the dināra appears to be a copper coin. Wilson notices figures given in two passages by Kalhaṇa but as they would be incredibly large if calculated in terms of gold, he suggests that the dināras mentioned might have been copper coins. In fact, it is held that in the post-Gupta period the word used was “in the sense of any kind of coined money or even cash, thus ceasing to be the designation of any particular monetary value”. Stein suggests that it is to be taken as ‘an abstract unit of account’. In this connection he states: “If the dināra was more than a mere abstract unit of account, it could not well have been represented by any other token than the cowrie. For the weight of copper which would correspond to the 25th part of a Pañchaviniśatika, viz. 2/15 or 3.64 grains, is manifestly too small for a real coin”. No copper coin of this weight has been found in Kashmir. References to dināras are also noticed frequently in the writings of the Muslim historians and also in other literary texts. They are mentioned not only in round hundreds and thousands but also in lakhs and crores.

84 ASR (New Imperial Series), XLII, p. 140 ff.
85 Bhandarkar, Indian Numismatics, p. 204 ff.
87 Cf, JNSI, XVI, p. 123 ff; cf, HIED, I, p. 78 ff.
88 Prabandhachintamani, p. 9; Rājat, Vols. I and II, etc.
89 Rājat, Vol. II, p. 309 ff. As regards the ratio between dināra and other coins including Suvarga, see, EI, XXI, p. 78 ff; Barnett, Antiquities of India, p. 207 ff; JNSI, VIII, p. 138 ff; XVI, p. 123 ff; cf, JASB, LX, p. 50 ff, etc.
Purāṇas and Kapardaka-purāṇas

In the Sena inscriptions of Bengal we come across two terms, purāṇa and kapardaka-purāṇa, which are usually taken as coin names. They have been generally used to denote the amount of the income derived from specified plots of land donated by kings, or prices of lands. According to Dr. Chakravarti the two terms are interchangeable, not representing two separate classes of coins, the expression 'kapardaka being prefixed to purāṇa'. In some land-grants numbers are given in figures, e.g. 500 in the Śaktipur plate of Lakshmanaṇasena, 200 in the Edilpur inscription of Keśavasena, 627 in the Madanpāḍa plate of Viśvarūpasena, 100, 60, 140, 50, 25, 25, 50 in the Calcutta Sāhitya Parishat copper-plate of Viśvarūpasena, etc., the figures in the last-named grant representing the income derived from separate plots of land without reference to any coin denomination. Had there been two different kinds of coins in circulation side by side, the name of the particular coin meant should have been mentioned in these cases. Dr. Bhandarkar suggests that the purāṇa, referred to, contains 32 ratis of silver, a kapardaka-purāṇa being a purāṇa which is shaped like a kapardaka or cowrie. Not a single coin of the Sena period has, however, been discovered so far. We are further told by Muslim historians that at the time when the Muhammadans first invaded Bengal, they noticed no silver currency in the country but found cowrie-shells used as a medium of exchange. They also state that when a king in those days wanted to make a monetary gift, it was made in cowries, the lowest number of cowries given on such an occasion being one lakh. S. K. Chakravarti holds that the kapardaka-purāṇa was not the denomination of an actual coin but the term was used to denote the corresponding number of

90 Majumdar, History of Bengal, p. 668 ff.
91 EI, XXI, p. 211 ff.
92 IB, p. 118 ff.
93 ibid, p. 132 ff.
94 ibid, p. 140 ff.
95 Bhandarkar, Indian Numismatics, p. 139.
96 Minhaj-ud-din, see, TIN, p. 556.
97 ibid.
cowrie-shells equivalent in value to the amount mentioned in terms of purānas, which were the existing coins. In other words, “payments were made in cowries and a certain number of them came to be equated to the silver coin, the purāna, thus linking up all exchange transactions ultimately to silver, just as at present the rupee, the silver coin, is linked up to gold at a certain ratio”.98

Dirhams

They were used by early Muslim rulers,96 referred to in Muslim accounts. But it is not known whether this name was given to coins, issued by these foreign rulers, or to some kind of coins which were found current in the country. Both gold and silver dirhams were current. Some scholars hold that a dirham vaguely represented the drachma.100 Ferishta says that it was a small silver coin valued at about 5 pence.101 Ibn Batūţa considers it “an equivalent of a hashtkānū, a coin which was equal to a modern two-anna piece”.102 In this connection mention may be made of the Tatariya dirham mentioned in some Muslim texts in different forms. Al Idrisi108 says that they were in use at Mansura and also current in the Malaya Archipelago.104 Cunningham identifies the Tatariya dirhams with ‘the rude silver pieces’, generally known as ‘Indo-Sassanian’, with Indian characters inscribed on them. They may have been introduced by Scythian or Tatar princes who ruled in Kabul and North-West India. They are to be found throughout the Kabul Valley and the Punjab and also in Sind, Rajputana and Gujarat.105 Thomas

98 IHQ, VIII, p. 597 ff; Majumdar, History of Bengal, p. 664 ff.
96 Codrington, A Manual of Musulman Numismatics, p. 117 ff;
HIED, Vols. I-VIII.
100 Appadorai, Economic Condition of Southern India, Vol. II, p. 719;
cf, Ed. Yule, Cathay and the Way Thither, IV, p. 56.
102 RIB, p. xlix.
103 HIED, I, p. 78 ff.
104 ibid, I, pp. 3-11 ; p. 13 ff ; p. 24 ff ; p. 35 ff ; p. 78 ff ; Al Mas‘ūdī calls it ‘Tahiriya’, p. 24 ; Ibn Haukal calls it ‘Tātarf’, p. 35.
105 Cunningham, Ancient Geography, p. 313.
holds that the word Tātariya is connected with the Musalman dynasty of Tahirides, who ruled in Khurāsān in the 9th century A.D. The weight of the dirham called Tahirīya was that of one dirham and a half.

Panā

In the Kaman stone inscription we come across the word panā, evidently in the sense of a coin. In the Arthaśāstra of Kauṭilya kārshāpana is mentioned instead of panā with its subdivisions such as ½ panā, ¼ panā, ⅛ panā, etc. We do not know whether there was any correspondence in weight between the panā referred to in the Kaman stone inscription and a kārshāpana. Nor is it known if it was a copper coin. It may be noted in this connection that karsha as the name of a coin occurs in a 10th century epigraph from Bijapur. The word karsha is used as the name of a monetary token in the Śukranītisāra.

Rūpaka

These coins were current as testified to by epigraphic and literary evidences. The Arthaśāstra of Kauṭilya refers to silver and copper rūpakas as rūpya-rūpa and tāmra-rūpa respectively. In Kshīravāmin’s commentary on the Amarakosa and in the Bṛihat-Saṅhitā silver rūpakas only are mentioned. In the Baigrama copper-plate inscription of the Gupta period rūpaka

106 See, HIED, I, p. 3 n. 4.
107 ibid, I, p. 3 ff; 424 ff; Ibn Haukal states that the Tātari coin was stamped at Kandahār, whose weight was equal to a dirham and a third—ibid, I, p. 35. In another work Tariya-dirhams are mentioned to have been silver coins weighing half a dram and these were to be found in the treasures of the Balhara i.e. the Rāṣṭrakūṭas.
108 El, XXIV, p. 329 ff.
109 ibid, X, p. 17 ff.
110 Arth, II, 12, pp. 86-7.
111 Bri, Chap. 81.
112 El, XXI, p. 78 ff; In the Baigrama plate there is a reference to rūpakas; eight rūpakas being equivalent to a half-dinar, which means that one dināra, was worth sixteen rūpakas in value—cf, Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 521; Sarkar, Select Inscriptions, p. 343 n. 5.
appears as a silver coin. Sometimes gold rūpakas are specified, such as suvarṇa rūpakas in the Rājatarāginī. The commentary on Dvyāśraya Mahākavya of Hemachandra refers to rūpakas. According to Mirashi, early Kalachuri king Krishṇarāja issued rūpaka coins (Krishṇarāja-rūpakas). These rūpakas may have been struck to the standard of a hemidrachma. There are some inscriptive references to rūpakas. One subdivision of a rūpaka is known, viz., the ardha-rūpaka, mentioned in the Prabandhachintāmani.

Taṅkas

In the Rewah inscription of Malayasimha, of the year 944, it is stated that a tank was excavated at a cost of 1,500 taṅkas, stamped with the effigy of Bhagavān (i.e. Buddha). Further particulars about these coins are wanting. The name was known to Kalhaṇa, and taṅkas are said to have been current in India before the Muslim conquest. In Gujarat copper coins known as taṅkas were used. About taṅka Cunningham says: ‘At first it was perhaps a simple weight and after a stamp was added, it became the name of a coin. But it was applied to the silver karsha and also to the copper pana which was also known as copper taṅka. It soon became a general term for money’. The name seems to have been of Indian origin, as suggested by Cunningham.

112 Rājat, Vol. I, VI, 45; in the Kātha-sarit-sāgara (78, 11 and 13) the denaras are spoken as ‘suvarṇa-rūpakas’.
113 Cf., JNSI, VIII, p. 138 ff.
114 JNSI, III, p. 36 ff; cf., CHI, p. 147.
115 ibid.
116 IA, XI, p. 337 ff; XLV, p. 210 ff; JRAS, 1913, p. 272 ff; etc.
117 Prabandhachintāmani, p. 38; Hemachandra represented half a rūpaka as ‘Bhāgaka’—JNSI, VIII, p. 138 ff; cf., Ganguly—History of the Paramāras, Chap. VIII, p. 235 ff.
118 El, XIX, p. 295 ff.
119 Rājat, VIII, 142, etc.
120 During the sack of Delhi by Timur an immense booty was collected including taṅkas of gold and silver of the celebrated Alai coinage, HIED, III, p. 445 ff; cf., RIB, p. xlix.
121 JRASB, XXVI, p. 33 ff.—The Monetary system of India at the time of Muhammadan conquest—Paresh Nath Bhattacharya.
Gadyāṅaka

In the Rajapura copper-plate of Madhurāntakadeva\(^{128}\) (1065 A.D.) mention is made of a class of gold coins called gadyāṅaka (suvarṇa gadyāṅaka). The name is also found in the Kuruspāl stone inscription of Someśvaradeva.\(^{124}\) According to Yājñavalkya,\(^{125}\) the weight of a gadyāṅaka is 32 guṇja berries. It is interesting to note that gadyāṅakas also appears in some Canarese inscriptions.\(^{126}\)

Vrishabhas and Varāhas

The Hindu kings of Ohind and the Tomaras of Delhi issued silver and billon coins, with the figure of a horseman on the obverse and that of a bull on the reverse. It is not known whether coins of these types are those referred to in the Somnath Temple inscription\(^{127}\) under the name vṛishabha. The name varāha mentioned in the same inscription may be regarded as the denomination of the silver coins issued by the Pratīhāra king Bhoja (Śrīmadādivarāha-dramma) which was probably continued to be struck by his successors as well.\(^{128}\) In the Dravya-Parīkṣa\(^{129}\) there is a reference to a Gurjara coin named varāha-mudrā. Probably this is the same as the varāha coin, mentioned in the Somnath Temple Inscription.

Dharma etc.

Dharma in the Pehoa inscription (882-3 A.D.)\(^{130}\) may have denoted a certain class of coins. Bühler thinks that this word

\(^{123}\) El, IX, p. 174 ff.

\(^{124}\) Ibid, X, p. 37 ff.

\(^{125}\) Yājñ, III, 258.

\(^{126}\) El, III, p. 3 ff.; pp. 184, 231, 236; XX, p. 66 ff. In. Kittel’s Kannada—English Dictionary a ‘Gadyāṅa’ is explained to mean ‘a weight about equal to a ruvvi or farthing, a kind of small gold coin (at Bellari, occasionally in Mysore)—El, III, p. 296, n. 7.

\(^{127}\) El, XXIII, p. 131 ff.

\(^{128}\) Rapson, Indian coins, p. 110 ff.

\(^{129}\) This treatise is written by Thakkura Pheru, mint master at Delhi in the reign of Allaūddin Khilji. This work is now being edited by V. S. Agrawala—see, JNI, X, p. 28; XIV p. 154 ff.

\(^{130}\) El, I, p. 184 ff.
was specifically used only as meaning a religious gift, the amount of which, in terms of coin, was settled by custom. The exact value indicated by the term is not known. Dr. B. C. Sen however, suggests that the word 'dharma' may probably be a mistake for *dramma*. References to some other coin-denominations, such as *suvarṇa*, *nīshka*, *sukī coins*, *śāna*, *pala*, *prati*, *bista*, *māshaka*, *prastha*, *śurpa*, *varāṭaka* are available. A mediæval Jain work, refers to coin-names such as *dāma-mudā*, *dramma-mudā* and *māḍhuka* as current in those days. *Mudā*, *mūṭaka*, and *māḍhuka* have been taken to mean certain measures of capacity. The commentary on the Purātana-Prabandha-Saṅgraha furnishes some details about them where it says that 8,000, 16,000, and 21,000 *mudās* were given to king Viṣaladeva, Hammīra and the Sultan respectively by the banker named Jaguda. Possibly *dāma* and *dramma* are identical. Names of coins like *lohaḍiū*, *vaṅkuṭiū*, etc., which are found in the Gaṇita-Saṅgraha, were apparently of local origin.

It is interesting to note that names of queens were sometimes inscribed on coins. Thus the legend *Di-Kshema* was issued by Kshemagupta, who ruled in Kashmir from 950–58 A.D. 'Di' in the legend is the abbreviated form of his queen's name Diddā. Coins were also struck in her own name during her rule

---

131 Cf., *Jār*, VI, 69, 186; *AIP*, p. 260 ff.; Bhandarkar, Indian Numismatics, p. 212 ff.; *BMSS*, *ASR*, XLII.
133 To Śivadāsa, the king of Nepal, is attributed the issue of *'Suki coins'*. These coins were made of an alloy of copper and iron, bearing the figure of a lion, see Ray, Dynastic History of Northern India, Vol. I.
134 *BMSS*; *AIP*, p. 263 ff.
135 *BMSS*.
136 *JNSI*, VII, p. 32 ff.
138 *ibid*, p. 145.
139 *ibid*, a very small coin.
141 Puratana Prabandha Sangraha, Singhi Jain Series, p. 8.
142 *JNSI*, VIII, p. 138 ff.
in Kashmir where they were most commonly used.\textsuperscript{143} Coins bearing the name of Somalādevī, wife of Ajayarāja, the Chāhamāna chief of Sambhar in Rājputana, were also current.\textsuperscript{144}

From the account given above it is evident that there were abundant issues of coins in India during the period. The Prithvirājaśīva states that Ajayarāja filled the world with rūpakas of Durvarṇa, i.e. with silver coins every day.\textsuperscript{145} In conclusion it is necessary to stress the point that available evidence, discussed above, shows beyond doubt, that drammas were used in various parts of Northern India, under different rulers, during the period. The name dramma seems to have been the most familiar one in the currency systems of the time. But it is difficult to reconstruct a systematic history of Indian coinages prevalent in early mediaeval times in the absence of actual specimens of the various types and categories as mentioned in literary and inscriptive sources.

\textit{Medium of Exchange}

Side by side with the metallic currency certain kinds of articles were used for exchange purposes, such as gold ornaments, gold leaves,\textsuperscript{146} etc. which were used as substitutes for monetary tokens in grave situations arising out of political troubles. On one occasion, in Kashmir, when a bracelet was required to meet the cost of provisions, barley was given instead.\textsuperscript{147} The price of this commodity must have risen high during the period indicated. At the same time scarcity of coins is also proved by such references. Another medium of exchange was rice, as shown in the Rājataranginī,\textsuperscript{148} where the expression ‘dināra-ojjāmacirikā’ occurs side by side with ‘dhānyojjāmacirikā’ denoting respectively a bond of debt for cash and a bond of debt for grain. Similarly,

\textsuperscript{143} Rājat, Vol. II, p. 315 n. 38.
\textsuperscript{144} JRAS, 1900, p. 121 ff.; Rapson suggests that Somalādevī, may have struck the coins as regent for her son, after her husband's death, cf., JNSI, VII, p. 70 ff.
\textsuperscript{145} Prithvirājaśīva, Vs. 88, 90; cf., JRAS, p. 277 ff.
\textsuperscript{146} Rājat, VII, 1607, 1621.
\textsuperscript{147} ibid., VII, 1621.
\textsuperscript{148} ibid., Vol. II, p. 313 ff.
the list of *Hunḍikas* or letters of exchange (the modern *Hundi*) comprises the items ‘*dinārahunḍika*’ and ‘*dhānyahunḍika*’. In Kashmir, a *khāri* of rice was frequently used as a medium of exchange (cf. ‘*dhānyakhāri*’); it might be offered even in payment of rents, fines, interests, etc. In such cases amounts, forming the subjects of contracts were quoted in *dināra* figures. Salaries of government servants were sometimes paid in *khāris* of rice as equivalents of *dināras*. The *Rājatarāṅgiṇī* contains enough material to justify Stein’s conclusion that rice constituted a sort of subsidiary currency in Kashmir where the “relative value of the cash amounts mentioned can be judged on the basis of the standard furnished by the prices of grain in different times.”

In a way, rice as a medium of exchange may be presumed to have been current in other parts of Northern India. The prevalence of the system of payment of land-revenue in kind in places where monetary tokens were also in use shows that rice was recognised, at least to a limited extent as a medium of exchange, by which the value of other things was estimated. This was possible in places where people did not have much money to spare. It was used from the earliest times and was in fact the most common medium of exchange in India.

*Cowrie* shells formed another medium of exchange. It may be noted that metallic currency seems to have been largely replaced by shells (*cowrie*) in various regions, particularly Bengal. As reported by Muslim writers, metallic currency was not found in circulation in Bengal when it was invaded by the Muhammadans. From one source we learn that in Rhumī (i.e. Bengal) trade was carried on by means of *cowries*, which formed the current money in the country. It is further to be noted

---

140 *Rājat.*, VIII, 147 n.
150 *ibid.*, Vol. I and II.
152 *Prabandhachintāmaṇi*, p. 46; *El.*, I, p. 162 ff.; XXIII, p. 131 ff., etc.
154 *HIED*, I, p. 5 ff.; *RAA*, p. 17 ff.
that the army of Madanapāla is said to have been maintained by cowries.\textsuperscript{155}

Kalhana seems to refer to the cowrie as the lowest monetary value in a passage where mention is made of a favourite of king Samgrāmarāja (A.D. 1003-1028), who starting with a cowrie (varāṭaka), amassed crores.\textsuperscript{156} Kshemendra, the Kashmir king, is said to have noticed a miserly trader, who gave three cowries to meet the daily expenditure of his household. Such figures may not be correct but it is evident that cowries were largely in use. Elsewhere we are told that for a dinner, arranged by a miserly merchant, vegetables could be bought for two cowries. This may give some idea about their purchasing power.

In Kashmir, hundred cowrie shells appear to have corresponded in value to one copper coin which consequently came to be styled šata (lit. one hundred modern one ‘hat’).\textsuperscript{157} That the cowrie was from early times used as a token of value is evidenced from discoveries of this article in large hoards. At Sohepur in Orissa the number of cowries which accompanied 27 Kalachuri coins, was 25,000.\textsuperscript{158} Again in the village of Bhondri in Sisendi Raj (district Lucknow), was found a hoard consisting of 54 silver coins and about ten seers (9834 in number) of cowrie shells\textsuperscript{159}. This find of cowrie shells, according to Agrawala, shows that they were in common use for small currency in an age during which copper coins of small denomination were rare. But in this hoard no copper coin was found.

It has been suggested that cowrie shells were used to be imported into India from the Maldives Islands and that 3200 of them were taken to be equivalent to one rupee in Eastern India, but this price was not a fixed one; the value of cowrie shells used to rise and fall according to the extent of their availability in the market, and its value differed from time to time.\textsuperscript{160}

\textsuperscript{155} Rāmcharita, V, 366 p.
\textsuperscript{156} Rājat, VII, 112.
\textsuperscript{157} ibid, Vol. II, p. 323 ff.
\textsuperscript{158} IINSI, XIII, p. 92 ff.
\textsuperscript{159} ibid, X, p. 28 ff.
\textsuperscript{160} ibid, VII, p. 82 ff.
The following table is available, showing the relative value of a cowrie for exchange purposes:

- 20 cowries = one kākini
- 4 kākinis = one copper pāna,
- 16 pānas = one silver dramma.

Thus $20 \times 4 \times 16 = 1280$ cowries were equivalent in value to a silver dramma and sixteen pānas$^{101}$. It appears highly probable that exchange transactions were ultimately related to silver on the basis of a definite ratio between the metallic standard and the cowrie where it was current.$^{102}$

The value of monetary tokens was variable under changed conditions. Thus from the evidence of the Rājatarāṇī$^{103}$ it appears that during the reign of Bhikṣhachara (1120-1121 A.D.) the old money (dināra) was being withdrawn from circulation. The new token that was introduced, replacing the old, carried a value which was twenty per cent more than that of the old dināra. One hundred such dināras were equivalent in value to eighty of the new money. Again, in the Kanker copper-plates of Pamparājadeva, dated Kalachuri Samvat 965-966,$^{104}$ it is stated that the revenue of a land-grant was payable at first at 130 in former coins and 140, afterwards issued in the new reign. There is no information as to whether there was any change in the metallic content or weight of the new coins replacing the old.

**Metallic composition of coinages**

To sum up, the evidence, so far discussed, shows that gold was sometimes used for purposes of currency. Silver was also used.$^{105}$ In some places copper and billon money were in vogue. It

---


$^{102}$ Cf. IHQ, VIII, p. 599 ff.

$^{103}$ Rājat, VIII, 883.

$^{104}$ EI, IX, p. 166, and p. 169, n. 3.

$^{105}$ V. A. Smith was not very certain as to whether any of the dynasties really struck a silver coinage; CCIM, pp. 251-2.
seems that the use of billon was quite common. In fact, in North India towards the end of our period the currency consisted mainly of billon money.

In North India gold coinage disappeared with the extinction of the Gupta power. In the 11th century A.D. it was revived by the Kalachuri ruler Gāngeyadeva, and was adopted by the Chandellas, Gāhaḍavālas, etc.

The gold coins, which were issued in North India during the 11th and 12th centuries, however, seem to have conformed to a new standard of weight; such coins were called *drammas* and were about 60 grains in weight. Subdivisions of *drammas* like half and quarter *drammas* were also used. These have been found in large quantities. The weight of the silver coins in our period also varied between 60 and 67 grains.

Billon is a "base-metal"; it is an alloy of silver with copper, tin or the like. The existence of coins made of billon can be traced in the coinages of many dynasties of North India. It appears that the ‘bull and the horseman type’ coins of the Tomara dynasty of Ajmer and Delhi were composed of billon. Some of these in their composition contained an element of fairly good silver, and others nearly pure copper. The elements of silver is present in such a pronounced form that the coins concerned may have easily passed as tokens of silver.166 The weight of this series of coins appears to have agreed with that of an ancient *purāṇa* of 32 *ratis*, i.e. about 58 grains.167 Madanapāla (1105-9 A.D.), father of Govindachandra of the Gāhaḍavāla dynasty, issued ‘bull and horse-man’ coins, most of which were billon currency168. Billon coins were also issued by some king’s of the Chauhan dynasty of Delhi and Ajmer. Both Someśvaradeva (1170-1175 A.D.) and Prithvīraja (c. 1175-1193 A.D.) issued the ‘bull and horse-man’ type of coins made of billon.

In this connection reference may also be made to the *Dillīwals*, mentioned by Muslim historians. This name was

---

166 *CCIM*, p. 256 ff.
167 *ibid*, p. 256 ff.
168 *ibid*, p. 257 ff.
given to the ‘bull and horseman’ type of coins, which were in circulation during the period. *Dilliwals* resembling the ‘bull and horseman’ type were composed of a mixture of silver and copper (i.e. *billon*): Their weight approximately corresponded to that of the ancient purāṇas or punch-marked coins of 32 *ratis* about 58 grains. The Hindu name of this series of coins is not known. This coinage was adopted by early Muslim conquerors.169

Coins made of another metal designated by Cunningham as ‘white metal’ were used in Kashmir for about a century, from 980 A.D. to 1089 A.D. by Diddá, Saṅgamāmarāja, Ananta and Kalaśa. These coins were probably better than copper coins but their value must have been less than that of silver.170

The monetary system of Kashmir and north-east India, i.e., Bengal and Assam, presents some special features.

Gold and silver coins were not common in Hindu times in Kashmir although their use was not entirely unknown.171 The only reference to gold and silver coins of Kashmir is to be found in the account of Harsha’s reign (1089-1101 A.D.). Under him, as Kalhaṇa tells us, “the use of gold and silver money (*dināra*) was plentiful in the land, but that of copper money rare.” The last part of this statement is contradicted by the extreme abundance of Harsha’s copper coins,172 as pointed out by Stein. The coinage of Kashmir was mainly of copper173 but its weight changed from the time of Śankaravarman (883-902 A.D.) onwards. Stein174 has shown that the currency of Kashmir was based on a decimal system of values, starting from a very small unit. The monetary system of Kashmir, reflected its economic condition, which was gradually deteriorating on account of internal and other troubles.

In Bengal, very few specimens of coins have so far been

169 *CCIM*, p. 257 ff.
170 *Rājat*, Bk. VI and VII.
172 *Rājat*, p. 317.
173 Stein thinks that the Karkoṭa kings only struck copper coins. In the *Rājarāngīṇi* Kalhaṇa refers to the striking of copper coins by some Karkoṭa princes—*Rājat*, II, p. 308 ff; cf., *CCIM*, p. 265 ff.
discovered. The Vigrahapāla drammas have been generally assigned to king Vigrahapāla of the Pāla dynasty of Bengal. V.A. Smith attributed the finer specimens of this type to Vigrahapāla I and the debased ones to the second or third king of that name.\footnote{175}

Coming to the Sena period of Bengal history, we find in the inscriptions of the Sena dynasty, the use of two currency terms, viz. purāṇas and kapardaka-purāṇas. There is a difference of opinion among scholars regarding their interpretation. It has been suggested by some that they were cowrie shells.\footnote{176} We learn from Muslim sources that when they first invaded Bengal they noticed no metallic currency in use in Bengal.\footnote{177} Instead cowrie shells were used. No metallic token of the Sena period has been noticed as yet, although some Sena copper-plate grants mention drammas.\footnote{178}

The monetary history of Bengal presents the following characteristics:—

1. Drammas were current in Dharmapāla’s reign. Dramma coins have been found associated with the name of Vigrahapāla. Their attribution is uncertain.

2. Dearth of information as regards the continuation of metallic currency in the reign of the Later Pālas;

3. Use of purāṇas and kapardaka-purāṇas by the Sena kings;

4. Cowries serving as a medium of exchange in the Sena period on the eve of the Muslim conquest of Bengal.

5. Use of the term dramma in some Sena inscriptions, but no coin of the Sena period has so far been found.

In Kāmarūpa history there is a solitary reference to the use of gold coins. The Sillimpur inscription belonging to the 11th century A.D.\footnote{179} mentions that a Brāhmaṇa of Bengal was

\footnote{175} CCIM, p. 239 ff; ASI, 1927-8, p. 105 ff; Sen, Some Historical Aspects of the Inscriptions of Bengal, p. 570 ff.

\footnote{176} Majumdar, History of Bengal, p. 668 ff; cf, Bhandarkar, Indian Numismatics, p. 139 ff.

\footnote{177} TIN, p. 556 ff.

\footnote{178} IB, p. 118 ff; IHQ, II, p. 77 ff.

\footnote{179} EI, XIII, p. 283 ff.
offered by king Jayapāla of Kāmarūpa, 900 hema pieces or gold coins (hemamśatāni nava). The use of cowrie, as a medium of exchange, is referred to in the Tejpur rock inscription.

In north-eastern India, (i.e. Bengal and Assam) it appears probable that the use of metal for currency purposes was not popular.

In the currency system two standards were generally followed: (1) the dramma of 67 grains and (2) the ‘bull and horse-man’ type of 58 grains. The first of these was adopted by Gāngeyadeva of the Kalachuri dynasty and was followed by the kings of the Chandella, the Gāhadavāla, Tomara dynasties, etc. The second denomination strikingly agrees with the silver purāṇa of 32 ratis, the antiquity of which can be traced back to the beginning of the India currency system as represented by extant punch-marked coins. The continuity of this denomination, although in different names, from the earliest times to the end of the 12th century A.D., is a remarkable feature of the history of currency in this country. The data collected lend confirmation to the view expressed by Thomas, who says, “Proceeding onwards and avoiding any complication due to Greek intervention, this same weight reappears in the money of Śyāla and Sāmantadeva, the Brāhmaṇical sovereigns of the Punjab and North India in the 9th century A.D. It then runs through the entire issue of their Rajput successors, from whom it passed to Qutbuddin and the Muhammadan conquerors in A.D. 1191, when it had become so much of a national institution that the representative coins were known by the appropriate name of Delliwāls.”

180 Numismaties Orientalia, p. 68 ff; JRASB, XXVI, p. 33 ff.
181 JNSI, XV, p. 229 ff; XVI, p. 112 ff; cf, Wright—Coinage and Metrology of the Sultans of Delhi, p. 12 ff.
CHAPTER X

Temple Economy

Wealth of Temples

Many temples in ancient India were repositories of wealth, hidden in their vaults. An estimate of the amount of wealth in the possession of a temple can be formed mainly from foreign accounts and epigraphical records.

Our evidences show that some of the temples amassed huge amounts of wealth composed of cash money, jewellery, precious stones and bars of gold, etc. Some temples had large areas of land under their direct control and management; of immovable property they owned house-sites and houses, either built at their own cost or presented to them as gifts. Temples sometimes owned shops also and some of them possessed gardens where they grew their required fruits and flower trees. They received donations from time to time, from generous and religious members of society, in cash and kind, as well as from kings and princes. In short, the wealth of temples was derived from rich gifts made by kings, dignitaries, wealthy classes of the population, as well as pilgrims and others. Steps were taken to increase this wealth through such methods of investment as were known and practicable in those days.¹

Of a temple at Mathura it is said that in it “there was an idol of such extent and size, that “if a thousand times a thousand dināras should be expended and builders and workmen of the greatest activity and energy should be employed for two hundred

¹ ‘A great temple is regarded as a city in miniature in the medieval period. It was enormously wealthy, and a source of wealth to the town from the many pilgrims who visited it. Such a temple was a great land-owner, with many employees, such as priests, musicians, attendants and dancing girls for the temple services, a staff of scribes, and accountants and many craftsmen and labourers. Often the temple maintained schools and refuges for the sick men and animals; it dispensed charity to beggars and relieved the poorer citizens in times of distress and famine’—Basham, The Wonder that was India, p. 200,
years they could not complete the like”. Within this great temple were five idols of gold, five gaz or ells in height and the eyes of one of them were formed of two rubies which were valued at 50,000 dināras of gold. The eyes of another were formed of two sapphires of the weight of 400 miskals (600 miskals = 1 seer = 1 lb. 13 oz.). From the lower extremities of one of the idols, pure gold of the weight of 4400 miskals was obtained. Besides these great idols, there are two hundred others of silver in the temple'.

About the temple of Multan it is said that it was ‘situated in the environs of Mansura, and people came on pilgrimages to it from many months’ distance. They bring thither the Indian aloes called al Kamrum from Kamrun. These aloes are of the finest quality………’ The idol was held ‘in great veneration by the Hindus’.

In the Tabaqāt-i-Nasiri a description of the idol temple of Kamrud (Kāmarūpa) is found. It is said to be of ‘exceeding height, strength and sublimity and very handsome and in it numerous idols of gold and silver were deposited and one great idol so (large) that its weight was by conjecture upwards of two or three thousands mans of beaten gold’.

Regarding the famous temple of Somnath it is said that its idol was the greatest of all the idols of Hind. The temple was built upon 46 pillars of teak wood covered with lead. ‘An ordinary feature was that on auspicious occasions, Hindus, numbering a hundred thousand went on pilgrimage to the temples, carrying with them precious articles for presentation to the deity. The temple was endowed with more than 10,000 villages. In the custody of the temple there were hoarded jewels of the most exquisite quality and of “incalculable value”………There were priests to perform the daily worship of the idol. A sort of colony grew up to accommodate the pilgrims visiting the temple. Three hundred persons were employed in shaving the heads and beards

3 HIED, I, pp. 11, 23, 28, 35-36, 81-82, etc.
4 ibid, I, pp. 81-82.
5 TIN, p. 569.
of the pilgrims. Three hundred persons sang and danced at the
gate of the temple. The information that can be gleaned from
the available sources shows that the temple establishment was
considerably large in which hundreds of people were employed
in diverse capacities. The shrine was lighted by the most
exquisitely jewelled chandellers; near the idol was a chain of
gold to which a bell was attached, the weight of which was 200
maunds. When a certain portion of the night had passed, this
chain was shaken to ring the bell and thus rouse a fresh party of
Brāhmaṇas to carry on the worship. The treasury was near, and
in it there were many idols of gold and silver. Over it there were
veils hanging, set with jewels, every one of which was of immense
value. The worth of what was found in the temple exceeded two
million dināras.

The temple in some cases had, as already stated, large areas
of land under its possession, thus giving the organisation the
status of a landlord. This is clear from what we learn about the
temple of Somnath from Muslim accounts. We are told that it
had 10,000 cultivated villages under its direct control. We learn
from the Rājatarangini, that king Kalaśa, (A.D. 1063-89) con-
fiscated the villages which formed the endowments of the Avan-
tisvāmin and other temples. The evidence shows that some
temples in North India had vast landed property although detailed
information on the point is not forthcoming.

Gifts and Donations

Inscriptions sometimes record grants of land in favour of temples
which were earmarked for meeting the cost of daily worship.

7 ibid., IV, p. 154; cf., Briggs, Vol. I, p. 73, it is stated that 'the
different princes of Hindustan had bestowed in all two thousand
villages, the revenue of which is applied to maintain its priests......'
8 Rājat, VII, 570.
XXII, p. 120 ff.; XXVII, p. 277 ff.; IA, VI, p. 48 ff.; XI, p. 337 ff.;
XIV, p. 159 ff.; XXI, p. 169 ff.; JASB, VI, p. 777 ff.; ASI, 1924-25, p. 117
ff., etc.
10 EI, XIII, p. 283 ff.
Temples also owned gardens which were utilised for growing fruits and flowers required for their everyday use. References to such gardens are to be found in some of the relevant inscriptions of the period.\textsuperscript{11} It was also customary to present house-sites and houses to temples on certain conditions. Thus we are told in the Ahār stone inscription\textsuperscript{12} that a house-site was granted as surety for a monthly payment of ten vimśopakas to Kanakaśrīdevī, which had been acquired by the grandfather of the donee for a term of 99 years and on which they had themselves constructed, with burnt bricks, two apavarakas (inner apartments). It is further stated that the sons, grandsons and other descendants (of the donees) in succession were to enjoy the rent of the above-mentioned house after they had paid every month ten vimśopakas to the temple. Elsewhere,\textsuperscript{13} we are told that the donees made over the entire rent and not ten vimśopakas only, as previously arranged, by a deed of 99 years, to the goddess in consideration of payments made out of the funds of the temple. The object of this transaction would appear to have been the safe investment of the income of the temple by taking a lease of the house for 99 years that it could be let out on rent, the entire amount thus realised being credited to the temple’s account. From the same source it is learnt that by a deed of 99 years the Gōshthi (i.e. the managing committees of the temple) also purchased the southern half of a building site with money belonging to the temple. A similar purchase was made by the Sauvarṇika Mahājana on behalf of the temple.

Grants of houses in favour of temples are recorded in some inscriptions, e.g. the Mathura Praśasti of the reign of Vijayapāla,\textsuperscript{14} the Siyadoni inscription,\textsuperscript{15} the Bhāṭerā copper-plate inscription,\textsuperscript{16} etc.

\textsuperscript{11} El, I, p. 32 ff, p. 135 ff; II, p. 232 ff; XIII, p. 283 ff; XXI, p. 42 ff, etc.
\textsuperscript{12} Ibid, XIX, p. 52 ff.
\textsuperscript{13} Ibid, p. 52 ff.
\textsuperscript{14} El, I, p. 287 ff.
\textsuperscript{15} Ibid, I, p. 162 ff.
\textsuperscript{16} Ibid, XIX, p. 277 ff.
Some temples had shops, which were let out on a rental basis. From the Ahar stone inscription, it is to be gathered that with the money belonging to the Goddess Kanakaśridevi, was purchased an āvārī, containing three rooms. Out of the rent yielded by the property, funds were to be provided for saffron, flowers, incense, lamps, flags, for perpetual cleaning and plastering, white-washing and repair work in the temple. Similar other purchases are also recorded in the same inscription. There are also instances on record to show that temples on many occasions received shops as gifts.

Endowments, received by temples, included assignments of taxes on trade. Endowments were made mostly for specific purposes in accordance with stipulated terms. Thus to provide oil for lamps, an inscription from Shergaḍh records donations consisting of an assignment of the entire produce of two oil-mills, owned by Thāiyāka, chief of the guild of oilmillers, a daily gift of a vodi, i.e. cowrie for providing incense and for the purpose of providing incense and sandal the gift of five vrishabhas is mentioned. A Praśasti of Baijnāth says that the founders of the temple gave an oil-mill, which they possessed in Kīragrāma, to provide the cost of lamps; a shop and a piece of land for bhoga (ceremonial offering of food) and the maintenance of the deity. In the Bālī stone inscription of Āśvāka, V.S. 1200, it is recorded that in connection with the festival of the goddess Bahughriṇa . . . . at the time of the horse fair, one dramma was to be given to the goddess, etc. The Bhinmāl stone inscription of Udayasimhadeva (V.S. 1306) records the deposit of forty dramma coins in the treasury of the god Jagatśvāmin, out of which were to be defrayed the expenses of the 'divasa-bali'. The inscription also gives us an idea about the provisions for the bali, which was to be composed of 2 seśa of wheat and 8 kalaśas of boiled ghee, be-

17 EI, XIX, p. 52 ff.
18 ibid, I, p. 162 ff; XIX, p. 52 ff; XXIV, p. 329 ff.
19 PIHC, 1953, p. 163 ff.
20 EI, XXIII, p. 131 ff.
21 ibid, I. p. 97 ff.
22 ibid, XI, p. 32 ff.
23 ibid, XI, p. 55 ff.
sides for naivēdya or offering to the god, fixed quantities of pulse, rice and ghee, etc. A permanent endowment made in favour of a shrine as recorded in the Partabgarh inscription,\(^{24}\) includes one palikā of oil per oil-mill, 5 bundles of foliage, 100 garlands of four-strings, 2 palas of saffron and one pala of betel-nuts to be given by a trading community in the month of Chaitra. From the Sasbahu Temple inscription\(^{25}\) it is understood that a prince took necessary steps for the maintenance of the employees of a temple. Beside making donations for naivēdya and for light, he also presented a number of valuable gifts such as a golden diadem, covered with precious stones and a large jewel in the middle, a frontal ornament made of emeralds, a golden ornament for the neck, a pair of arm-rings and four bracelets, all of which were studded with precious stones.

**Trust Funds**

The temples sometimes served the purpose of a bank by receiving deposits of donations and endowments which they held as trust funds. Available evidences show that it was desirable to keep intact the principal as a permanent deposit, and collect the interest at fixed rates. The Ahar stone inscriptions\(^{26}\) record purchases of lands and houses out of the revenue of a temple of the goddess Kanakaśridevi. These transactions seem to have been effected by way of investment of the income of the temple. The houses and other properties, acquired by purchase, were let out on rent and the amount obtained was utilised for the maintenance of the temple and similar other purposes.

It is not known whether the North Indian temples like their counterparts in the South served as depositaries of private funds. Deposits in temples being regarded as safe because of their sanctity, private individuals sometimes might have presumably placed their funds in their custody on terms and conditions settled between the parties concerned.

\(^{24}\) *EI*, XIV, p. 176 ff.
\(^{25}\) *IA*, XV, p. 33 ff.; for some other assignments, see chapter on 'State's Income and Expenditure.'
\(^{26}\) *EI*, XIX, p. 52 ff.
Temple Staffs, Tenure and Allowances, etc.

The temple had under it different categories of employees. Some of them were permanent and others temporary. To the temple of Somnath were attached 2000 Brāhmīns who officiated as priests, 500 dancing women, 27 300 musicians and barbers, whose duty it was to shave the devotees before they could be admitted to the sanctum. The Sasbahu Temple inscription (V.S. 1150) furnishes the information that after appointing the chief priests for the people, the prince made suitable arrangement for the maintenance of the required staff of attendants, musicians, singers, etc. This inscription further records that the prince appointed carpenters, engineers, carmen and others for excavating and building reservoirs, wells, tanks, etc. They appear to have been appointed on a temporary basis. References to the pujaries or priests of the temple of Ādināth are to be found in the Prabandachintāmaṇi. 29 In the Sevadi and Nadol inscription of Jajjala-deva (V.S. 1147), mention is made of the court ezans, attached to a temple. 30

Nothing definite is known regarding terms of appointment, wages, etc. It may be presumed that appointments to some of the temple offices were generally hereditary. It is not known whether as a rule the temple employees were paid in cash or in kind 31 but in one instance it is mentioned that most of the

27 The practice of attaching dancing girls to temples is of responsible antiquity. The Rājatarāṅgiṇī (IV, 269) speaks of two dancing girls attached to a temple (devagr-aśrita nartakyau) who danced and sang at a place as it was the custom of their family, though the temple was buried underground. In the Vaghli stone inscription there is a grant of Govindarāja making provision for dancing and singing by damsels (vilasini)—EI, II, p. 227 ff.

28 IA, XV, p. 33 ff.

29 Prabandachintāmaṇi, p. XVIII.

30 EI, XI, p. 26 ff. The attendants of the Temple of Multan live in the close neighbourhood of the temple, HIED, I, p. 82.

31 In the Sasbahu Temple Inscription of Mahipāla I (IA, XV, p. 33 ff), it is stated that Dēvalabdhī, Śrīdharādiṣṭha and Kṛttivrata these three received each one share and a half (v. 80). Eighteen sages received one share each. Shatthabha received three-fourth share (v. 83). Ratna and Tīhāṇa, the worshippers of the Gods, received both half
necessaries of life were provided out of the offerings to the deity. Service rules must have been framed for the guidance of the employees; for instance, the courtesans, attached to a certain temple, are mentioned to have been required to put on their ornaments and best garments at the time of a festival. In the temple of Somnath the priests were divided into two groups to work on a shift-basis. “Near the idol was a chain of gold to which bells were attached . . . . . when a certain portion of the night passed, this chain was shaken to ring the bells, and so rouse a fresh party of Brāhmaṇas to carry on the worship . . . . . . .”

Expenditure and local collections

The temple had to spend some money for the performance of its daily worship, of which a portion was derived from endowments. The daily requirements of a temple included such items as flowers, leaves, incense, light, clarified butter, salt, sandal, pepper, oil, rice, sugar, fruits, etc. Aloe-woods were also used. On festive occasions temples spent on a much larger scale.

The temple did not remain an isolated entity. In fact, where a temple was situated in a village its residents maintained an active contact with it. Occasional contributions from them added to its income. Besides, fixed local and regular contributions were to be collected, such as, for instance, one kalaśa of oil from each of the oil-mills operating in the village for the lighting of a lamp in its temple of Vāsudeva, as recorded in an inscription of the Chāhamāna Gaja Sinhadēva and Kelhaṇadeva (V.S. 1218). For the daily worship of Śri Dharmanāthadeva in the temple of Samīpājī barley corn equal to one hāraka was to be obtained from four villages, namely Padrādā, Medraṁchā, Chhechhaṇdiyā and Maddaṇji, belonging to the town of Nadol as detailed in the

a share each (v. 84)’. The king is said to have given the tenth part of his revenue and the twentieth part to Aniruddha (v. 102). In this case the temple employees seem to have been paid in cash. As we do not know the amount of the total income, it is not possible to say how much each received in terms of money.

32 HIED, IV, p. 180 ff; Briggs, I, p. 72 ff.
33 JASB, XII, p. 101 ff.
Sevāḍī stone inscription of Aśvaraja (V.S. 1167). As the Kuruspāl stone inscription of Someśvaradeva shows, a lamp was provided for the God Lokeśvara by the inhabitants of a village.

Sometimes members of guilds showed their interest in the maintenance of village temples by deciding to raise subscriptions from amongst themselves on a stipulated basis. Thus an inscription at Gwalior states that in order to provide oil for lamps, chiefs of oilmillers and other members of their association agreed to give one palikā of oil per oil-mill. On the same day when this agreement was drawn up, it was also decided that the chiefs of gardens (mālika-mahara) and other members of the entire guild of gardeners were to furnish for daily requirements of worship, fifty garlands (mālā) of seasonal flowers, etc on a perpetual basis. Other people of the town also made a joint grant for the benefit of the same temple. A similar endowment is recorded in the Kaman stone inscription which shows that a guild sometimes did not pay out of its common fund, but levied a small cess on every member working in a particular locality. The inscription mentions three such guilds, viz. those of potters, artisans and gardeners. We find that the members of the last named guild were to pay in kind, while those of the first two had to pay a small cess probably because the articles produced by them were not regularly required for the use of the temple. Our inscription explicitly states that every one of the potter who followed the particular profession in the place called Kamyaka, was to contribute one pāṇa per wheel every month; and likewise the guild of gardeners stipulated to supply permanently sixty garlands; and every artisan, who worked in the same place, undertook to pay one dramma per month. Obviously the different guilds could be trusted to collect the stipulated amounts from their respective members and pay them regularly to the beneficiary of the endowments.

34 EI, XI, p. 26 ff.
35 ibid, X, 37 ff ; cf, IA, XLV, p. 77 ff.
36 EI, I, p. 154 ff.
37 ibid, XXIV, p. 329 ff.
Further contact was maintained through the investment of endowed money with villagers, who agreed to pay the interests on the sums deposited, to the authorities of the temples concerned.

Surplus

It was through gifts and donations that the temple amassed surpluses from its annual income—though money was frequently spent in celebrating festivals or in rendering financial help to the poor and the distressed people, etc. After meeting all usual expenses, the money, that was left over, was utilised in making gold ornaments and silver vessels. These articles were added to the list of valuable gifts received by the temple. No wonder, therefore, that the fabulous wealth of our temples often attracted the cupidity of invaders and plunderers from outside. The hoarded wealth of temples was a sort of ‘reserve fund’ that might be drawn upon in emergencies. There are evidences to show that it was sometimes used by rulers when they were in desperate need of money.

Management of properties

It appears that ways and means had to be found for the administration of temple properties. The most common method was to entrust such properties to a ‘Managing Committee’ known as ‘Goshthi’. This is mentioned in some of the inscriptions of the period. The Pehoa inscription, for example shows that the management was entrusted to some Goshthikas, selected from amongst the most respectable inhabitants of the locality concerned. A Chaulukya grant dated 1207 A.D. furnishes names of eight trustees along with that of Rāūla Uchchhadeva. The trustees, it is stated, had to transact all kinds of business of behalf of the institution. They had a special responsibility along with Rāūla for guarding the temple properties even at the risk of their lives. Curiously, there was a provision requiring the trustees to pay out

88 *Goshthis* were in existence even as early as the 2nd century B.C.—Votive inscription at Sañchi, *EI*, II, p. 87 ff.
89 *EI*, I, p. 184 ff.
40 *IA*, XI, p. 337 ff.
of the donations received, an allowance to the deity, worshipped in the temple. It appears that Sobhārka was the mouthpiece of the board of trustees, formed in this particular case.

The Jaina inscription of the temple of Neminātha on Mount Abu mentions the names of the trustees appointed and some of their functions. "All bathing, worshipping, supervising, etc. in this temple", says the record, were to be done and carried on forever by the brothers Malladeva, Vastupāla and Tejaḥpāla and their descendants. The management of the temple was thus left in the hands of the three brothers and their descendants in perpetuity. The Ahar stone inscription shows that a Sauvarṇika-Mahājana effected most of the purchases of properties on behalf of the temple Kanakṣarīdevī, probably as an agent of the gosṭhī, which managed its affairs. The function of the gosṭhī, in this instance was apparently to ensure the utilisation of the rent, derived from the properties purchased, in providing the materials required for worship, etc. and also in meeting the cost of repairs and other incidental expenses. 'Uttarasaḥhā' mentioned in two other documents (Nos. III, & VIII) of the Ahar series, would appear to have been identical with the gosṭhī or a larger controlling body.

Ministers of the temple of Multan are mentioned in some Muslim accounts. Their duties and functions were probably the same as those of Gosṭhīkās (i.e., members of a gosṭhī).

In Kalhaṇa's history of Kashmir we come across references to parshads or corporations of priests. Such a parshad, used to receive in its collective capacity the revenue of a temple. An administrator is found to have been appointed at Parihasapur, but while acting as such he had already been a prominent member of the parshad. His function may have been connected with the management of the corporation's property as well as of the temple, to which it was attached.

It may not be out of place to quote some of the relevant views of Šukra in this connection. He appreciates the necessity

---

41 EI, VIII, p. 200 ff.
42 ibid., XIX, p. 52 ff.
43 Index, p. 6 ff.; cf., HIED, I, p. 11.
44 Rājat, Vols. I & II.
of appointing officers for administering religious establishments, such as temples, dharmashalas, etc. The officer in charge of the religious establishments and the supervision of charities was to be endowed with necessary qualifications suited to his sacred duties, "That man should be appointed" says he, "to the post of superintending the religious establishments and institutions who is mindful of his duty in life, always devoted to religious practices and has no greed or hankering".45 He sums up the requisite qualifications of the Superintendent of Charities by saying that he "is to be that person who does not disappoint the beggar, does not amass wealth, who is charitable, has no greed, can detect the merits of others, is not slothful, who is kind, gentle in words, knows the proper objects of charity and is very humble".46 Manu and other jurists lay down that it is part of the king's duty to prosecute and fine persons interfering with or destroying the property of temples.

The State and the Temple

We have seen that on many occasion kings erected temples47 and made provisions for their maintenance. Sometimes kings kept their treasures stored up in temples as a security measure. Kalhaṇa's Rājatarāṅgini mentions that king Ananta (1028-63 A.D.) had his store house of treasures at Vijayeśvara.48 Due to this special measure adopted by the king for the protection of his treasures, his financial position was believed to be firm and stable. The view, however, is expressed that temple property is inviolable and that, it can neither be destroyed nor employed for any object other than those concerning the temple. It is not proper even for a king to draw upon this reserve, as stated in the Rājatarāṅgini. But the history of Kashmir as told by Kalhaṇa bears witness rather to the denial than confirmation of this theory in actual practice. Ananta's own son

45 Śukra, II, 327-328, p. 80; cf., EI, XI, pp. 32-33; XXVIII, p. 51 ff.
46 ibid, II, 329-332. p. 80.
47EI, I, p. 251 ff; II, p. 17 ff; 174 ff; XI, p. 47 ff; XXII, p. 120 ff; XXVII, p. 24 ff; p. 277 ff; XXVIII, p. 88 ff, etc.
48 Rājat, VII, 416.
(i.e., Kalaśa) set fire to the town where the shrine was situated. The town was reduced to ashes along with the treasure stored by his father. The queen recovered a liṅga made of jewels and sold it for 70 lakhs of dināras. “So much of gold and other valuables the king got out of the ground below the heaps of ashes”, that its mere mention engages curiosity.

Spoliation of temples was ruthlessly practised by some rulers of Kashmir. We are told that king Harsha (1089-1101 A.D.) to save himself from the grave financial difficulties, caused by his extravagant habits, indulged in a reckless spoliation of temples without showing any consideration for their sanctity. The king set upon robbing the temples, without any exception, of the wonderful treasures they had accumulated for ages. Not satisfied with it he even appointed a ‘prefect for the overthrow of divine images’ (devotpātananāyaka) and ‘prefect of property’ (Arthanāyaka). Images made of gold, silver and other materials rolled about on the roads. Huge quantities of valuable metal were obtained by melting these images. King Śaṁkaravarman’s exactions also extended to spoliation of temple properties and temple corporations (parshad).

It thus appears that properties and wealth, hoarded in temples, were not always actually regarded as inviolable. There is hardly any evidence to show, that they had a definite or concrete plan of utilising temple wealth, which they knew only to hoard. Its economic use was unknown; conventional items of current expenses only appear to have been known. The wealth went on accumulating, attracting the greed of indigenous rulers as in Kashmir, or of foreign invaders. Even when there was

49 Rājat, VII, 416.
50 ibid, VII, 414.
51 ibid, VII, 416.
52 ibid, VII, 1090 ff.
53 Rājat, VII, 1091, 1103-4. In the Arthaśāstra of Kauṭiliya provision is made for the appointment of an officer called ‘devatādhyaksha’ when the kings treasury became empty, it was his duty to bring together all the wealth of the temples in the kingdom so that the king could use it in an emergency.
54 ibid, V, 1093.
a great crisis, due to Muslim invasions, the hoarded wealth is not found to have been utilised to meet the cost of defence. When the crisis deepened, most of this wealth had already been plundered.

Although the wealth of the temples did not materially help the state from the administrative point of view, temples as places of worship were a source of income to the state. Sometimes the state derived considerable revenues out of the pilgrim tax.55 But remission of this tax is stated to have been granted in some cases, for example, by a king (निर्या) at the request of his wife, to the tune of 72 lakhs.56 The accuracy of this figure may be doubted but it may be presumed that substantial benefit was sometimes provided by the state at the cost of the state revenue. There is just a possibility that material needs of the state may have been overlooked through generosity. Kings, actuated by piety or a desire for fame frequently made large gifts to shrines. But from the point of view of the State, this surely meant a draining of its financial resources, which could have been used to meet pressing needs for its material advancements.

55 Prabandhachintāmani, pp. 83-4; FRM, p. 188 ff.
56 Ibid.
CHAPTER XI

HOARDED WEALTH

The devastating raids of the Muslims during our period enabled them to have a peep into the hidden wealth of India. The Muslims did not at first make raids with the intention of a permanent settlement or occupation, but to plunder her wealth. Sultan Mahmud, as is well known, led several expeditions into India. In the course of these invasions, Muslim leaders came to know directly that her temples and forts contained large amounts of hoarded wealth. Apart from the religious impulse, their frequent raids of the great temples of India were motivated by greed which was satisfied for the time being when they succeeded in carrying off through this process whatever they got. Muslim accounts give exciting details regarding the wealth, preserved in the temples and forts which were subjected to furious attacks.

The first Muslim ruler of Ghazna, who came to India, was Sabuktigin. He came to the throne about c. 977 A.D. and then after a year or two turned his attention to India. Sabuktigin was succeeded by his son Mahmud, who followed in the footsteps of his father, whom he outrivalled, devastating country after country and town after town.

It is now generally admitted that Mahmud did not come to India to establish a permanent empire. Within a short time he came to know about the secrets of hoarded wealth in India. This aroused his temptation, which was the main motive of his subsequent expedition into India. Mahmud led his first expedition to India in A.H. 390, and his second after a year when he met Jaipal in the battle-field, and defeated him. According to Nazim, the spoils captured by him after the defeat of Jaipal during his second Indian expedition, exceeded his “fantastic

1 Nazim, The Life and Times of Sultan Mahmud.
expectations”. These included fifteen necklaces of pearls, one of which was valued at 80,000 dināras and other booty, ‘beyond all bounds of calculations’ fell into their hands. Ferishta’s account, which is somewhat different, says that the price of one of the sixteen necklaces, which came into the conqueror’s possession, belonging to Jaipal, was estimated to be 180,000 dināras in value. The Muslims after this were naturally convinced that India was a land of fabulous wealth. The expeditions that followed were to a large extent actuated by the desire of appropriating this wealth as far as possible.

In c. A.H. 395 (=1004-5 A.D.) Mahmud came again to take the city of Bhera, situated on the Jhelum. When its ruler Baji Raj, after his defeat by Mahmud took shelter in his fort, surrounded by a deep and wide ditch, it was attacked by the enemy and immense booty ultimately fell into his hands. The invader got huge amounts of gold, silver, as well as other things of immense value.

Subsequently, after this expedition Sultan Mahmud marched and crossed the river Indus near Peshawar and defeated Anandepal. When the Sultan next marched to the garrison of Multan the citizens appealed for protection in return for which they “offered to pay a fine of 20,000,000 dirhams.” In A.H. 398 Mahmud captured the rebellious Sukhpal. He took from him a fine of 400,000 dirhams. In A.H. 399 Sultan Mahmud again met the Hindus organised under the leadership of Anandapal. On this occasion also valuable spoils were obtained by the conqueror.

The Sultan afterwards proceeded to capture the fort which was supposed to be a very ancient one. There was a temple in this fort, which was held in great veneration, and ‘was famous for the wealth that had accumulated in its vaults.’ After the surrender, spoils “beyond the limit of calculation” were captured by the conquerors. These consisted of 70,000,000 dirhams of coined money, 70,000 mans of gold and silver ingot and costly apparel, besides a folding house made of silver, measuring 30 yards by 15 yards, a canopy of linen measuring 40 yards by 20

---

yards which was reared on poles of gold and silver and a richly decorated throne reputed to be that of the Rājā Bhīma of the Pāndava dynasty. Soon after this great victory the Sultan returned to Ghazna and ordered these spoils to be publicly displayed in the beginning of A.H. 400 (=1009 A.D.).

At Mathura, again, Mahmud destroyed a number of temples, whose massive beauty impressed him. From these temples he obtained huge booty including five idols of gold. According to Utbī⁸ one of these was set with two rubbies of the value of 50,000 dināras. The other articles seized, included 200 idols of silver and a sapphire of unusually large size.

From all his expeditions in the Ganges Doab, Sultan Mahmud collected a vast booty—the total value of which being reckoned at about 3,000,000 dirhams, besides 55,000 slaves and 350 elephants.

Shortly after the return of Sultan Mahmud to Ghazna from his expedition against Kanauj, in A.H. 409, Trilochanapāla is supposed to have entered into an alliance with Ganda, the Rājā of Kalinjar. The Sultan came to India again and defeated Trilochanapāla. Rich spoils were captured, the share of the Sultan alone including coffers full of precious stones.

The power of Ganda was not broken during this expedition. So the Sultan determined to invade India again in A.H. 413. On his way he captured the fort of Gwalior and besieged Kalinjar. Some estimate of the wealth of the rulers of contemporary India can be formed from the account of the fort of Kalinjar, supplied by Muslim writers. It is reported that this fort had sufficient ‘accommodation for 500,000 men, 20,000 head of cattle and 500 elephants and contained sufficient provisions, weapons and other requirements’.⁴

By far the most impressive account of the wealth of India, preserved in temples, is the one which Muslim historians have given in connection with Somnath, that fell a prey to the greed of the invader (416 A.H.). The account, given by Ibn Asir of the Somnath expedition of Sultan Mahmud, furnishes a glimpse

---

⁸ Utbī, p. 308.
⁴ Nazīmī, The Life and Times of Sultan Mahmud; p. 113.
into the splendour and magnificence of the temple, its vast material resources and almost incalculable wealth. The temple and the sacred image, worshipped in it, attracted pilgrims from all parts of India, who sometimes numbered about a hundred thousand at a time. Thus it is evident that a substantial part of the temple's wealth was derived from the offerings of the pilgrims who used to congregate there periodically. The temple had a permanent endowment consisting of more than 10,000 villages, the income derived from which formed the chief source of its revenue. In the temple were amassed almost inexhaustible stores of precious jewels. About a thousand Brāhmanas belonging to the permanent establishment of the temple were employed in the daily worship of the image. About three hundred barbers were employed, attending to the pilgrims visiting the temple. There were in the service of the temple dancers and singers, each of whom received a fixed daily allowance. The shrine was lighted by the most exquisitely jewelled chandeliers. Near the idol was a chain of gold in which bells were attached, weighing 200 mans. The treasury contained many idols of gold and silver. Over it there were veils hanging, set with exceedingly precious jewels. The value of all that was plundered and carried off by the invader exceeded two millions of dināras.

India's fabulous wealth was one of the greatest causes of her misfortune. Legends about this wealth spread to distant countries and attracted raiders and plunderers who created a havoc in her political, economic and cultural life.

The early Muslim invaders did not completely drain away her wealth, for the Sultans of Delhi are also known to have captured enormous booty during the expansion of their power. There was enough left in the land to be carried away by Timur.
at the end of the 14th century, but his activities were confined only to a small part of the country. 5

Internal trade did not come to an end and those who took part in this and also acted as intermediaries between the people of this country and the Muslim traders, who monopolised a large part of India's external trade, were able to maintain their prosperity, although the riches, with which the country still abounded, appear to have been in possession of some classes of people only. It was usually large cities and towns where traders and bankers, kings and princes and high officers lived, which contained elements of prosperity but there is nothing to show that the population as a whole was prosperous. Poor people—peasants, small dealers and craftsmen, agricultural labourers, with or without land, working on hire, lived in villages which do not appear among the places raided by the Muslims. Only a portion of accumulated wealth seems to have invested in current trade or industry. It appears that the practice of hoarding cash in the shape of coins was also widely resorted to. Metallic currency had to be withdrawn in many parts of the land, and it was being largely replaced by cowrie shells. This was an unmistakable symptom of decline of large-scale trade and commerce.
ERRATA

Folio heading in Chap. I pp. 3-48, for characteristic read characteristics

Folio p. 49 for Landed Wealth—Ownership and Distribution read Villages: Economic Characteristics & Planning

p. 11, (f) for Tal-aoddesa read Tal-oddesa
p. 28, l. 21 for Fa-hein read Fa-hien
p. 43, l. 11 omit , (comma) and insert . (stop) after parts
p. 58, l. 1 insert an before entire
p. 73, l. 5 for were read was
p. 127, l. 13 for planted read planned
p. 157, l. 10 omit were and insert , (comma)

p. 170, l. 18 for attack read attract
p. 177, l. 17 for he read the
p. 181, l. 32 for of read on
p. 182, l. 3 insert a before half
p. 182, l. 8 for farmer read the foreigners
p. 182, l. 9 for greeds read greed
p. 183, l. 16 for does not read do not
p. 188, l. 24 for critised read criticised
p. 190, l. 22 for frequently read infrequently
p. 195, l. 25 for draw read drawn
p. 209, l. 27 omit that
p. 218, l. 30 for Būlarāja read Mūlarāja
p. 220, l. 5 for collection read collections
p. 225, l. 22 for figure read figures
p. 227, l. 6 for spends read spent
p. 251, l. 3 omit only
p. 268, l. 16 for bring out read calculate
p. 288, l. 14 for old read told
p. 294, l. 26 for of read on
p. 298, l. 17 for of read off
p. 298, l. 19 for advancements read advancement
p. 300, l. 19-20 for Anandepal read Ānandapāla
p. 303, l. 16 insert been after have.
INDEX

A

‘Abbasid Khalifat 147
Ābhāpurī 121, 166
Abhayapāla 114
Abhidhānachintāmaṇi 23, 100, 135
Abhidhāna-ratnamālā 25, 31, 140
Abijānsākuntalam 209
Abraham 257
Ābu, Mount 122, 295
Abul Fazl 32, 131n, 159
Abul Fazl Al Baihaki 237
Abū Fida 133, 134
Abū Rihān 120
Abū Zaid 137, 140, 141, 143, 145, 170
Acharya, P. K., 2n, 8n, 40n, 41n, 251n
Addū atolls 21
Aden 134, 175
Ādīhaka 3, 89, 91, 92, 94, 108, 111, 202
Ādīhāvāpa 3, 89, 91, 92, 99, 106, 107
Adinātha 141, 291
Āḍittahaur 167
Āḍivarāha 261, 266n, 268
Āḍivarāha-drama 267
Adulie 28
Africa 136, 145
Africa, East 148
Agni Purāṇa 123, 232
Agramandira 171
Agrawala, R. C., 264
Agrawala, V. S., 261n, 262, 264
Agronomi 89
Ahar stone inscription 161, 264, 288-290, 295
Ahir 121
Ahmad Niāltīgin 159, 237
Ahmedabad 120

Ā’īn i-Akbarī 118
Aitareya Brāhmaṇa 73
Ajaṭśatru 243
Ajayadeva 261
Ajayadeva drama 261
Ajayapāla of Anahilawāḍ 55
Ajayarāja 277
Ajikulāpāṭaka 58
Ajmer 4, 128, 261, 266, 281
Ajodaha 167
Akaraḥ 6
Akbar 160
Akkarrah 155
Aksara (Aqsa) 141
Akshapāṭalapragrastha 204
Alai coinage 274n
Alberuni 110, 119, 121, 131, 132, 133n, 155, 166, 167, 168n, 242
Alexander 28, 172
Alhapadeva 192, 264
Alhaṇadevi 54
Al Idrisi 22, 117, 119, 120, 131, 133, 134, 136, 137, 142, 153, 157, 175, 236, 245, 272
Āliṅga, the potter 66
Al Istakhri 117n, 119, 174, 210, 243
Allahabad 166
Allaṭa of Mewar 110, 197, 264
Allaudin Khilji 275
Al Mas‘udi 117n, 145
Alor 117, 119
Al-Tabari 149
Altekar, A. S., 121, 178n, 180n, 183n, 187n, 188, 265
Amalakhuddunga 59
Amarakosha 24n, 90, 107, 178n, 273
Āmāṭya 230n
Ambapali 73n
Ambīpāṭaka 53
Amhāl 119
Amēsa 103n
Amulaka (village) 55
Anahilapatāka 120, 133
Anahilapura 21, 35n, 123, 125, 194, 209, 210, 258
Anahilawara 159, 225
Analadevi 84
Ānand 120
Ānandapāla 242, 300
Ānandapura 14, 120
Ananta (king of Kashmir) 157, 181, 233, 282, 296
Ānār 167
Anāthapiṇḍaka 74
Anavada stone inscription 109, 198, 254
Andhra 17
Andumvarika-vishaya 30
Aṅgula 66, 93, 104
Aṅhila 120
Aniruddha 292n
Annam 156
Antapāla (frontier guard) 55
Antaranāgābhyaduparika 231n
Ānuliā copper-plate 87, 91-93, 99
Apakṣaśta-bhūmi 22
Apālā 71
Aparāditya II 263
Appadorai, A., 150, 219n, 257, 272n
Aputtrikādhana 208
Arab 119, 130, 139, 143, 145, 146, 148, 150, 151, 174-176n, 181, 213, 225
Arab travellers 150
Arab writers 157
Arabia 136, 140, 149, 175
Arabian Sea 132n
Arakan 148
Aranya 1
Aratnis 96
Arbudan country 4
Archaeological Department of India 246
Archipelago 175
Archipelago (Eastern) 135, 175
Archipelago (Indian) 136
Archipelago, Malaya 175, 272
Arḍha-drama 267
Arḍha-khila 21
Arḍīn 167
Ariake 28, 30n
Arku-tirtha 121, 166
Arma-bel 119
Armabil 155
Arma'il 155
Armaqnas 108
Arrain 28, 172n
Arthanāyaka 22, 297
Arthaśāstra 9, 24n, 69, 70, 111, 112, 150, 177, 186, 191, 193, 200, 211, 212, 230, 259, 270, 297n
Arthuna inscription 29, 109, 115, 162, 197, 199, 220, 237, 253, 264
Ārya Kathemīśvara 64
Aryan 71, 72
Ārya 27, 71, 72
Asala 245
Āśa-deva 13, 27, 59, 98, 112
Ashaya 265
Ashrafpur copper-plate 99
Ashta-kavaka 86
Ashta-kavaka-nala 86, 88, 106
Asi 128, 167
Asia 146
Asia, South-East 141
Asnī 167
Asnī inscription 208, 264
Āśoka 232n
Asphtagachandra 51
Assam 7, 11, 26, 29, 31, 60, 69, 106, 128, 156, 182, 187n, 246, 282, 284
Āśvāka 264, 289
Āśvalāyana Śrauta Sūtra 28
Āśvarāja 115, 202, 248, 293
INDEX

Atak 155
Atharva-veda 25n
Atharva-veda Sarthita 190
Avanivarman II (Yoga) 55
Avantisvamin 287
Avantivarman (of kashmir) 61, 165
Āvārī 289
Āvasakara 22
Āvaskara-sthāna 22
Āvalyakachūrni 265
Avicchinnasattra 66n
Ayodhya 123, 128
Ayyar, Venkatarama 257
Azov 142

B

Babar 226
Babelmandeb 142
Badakshgar 175
Bagar 155
Bagdad 143, 147
Bahairch 266
Bahrah 266
Bahuloda 121, 209, 211
Baigiram copper-plate inscription 273
Bajnaṭh 192
Bajnaṭh Prasasti 55, 102, 192, 289
Baji Raj 300
Bakar 30
Bakhshali Manuscript 265, 270
Balādhurī 154, 155n
Bālagrama 15
Balavarmadeva 15, 54, 251, 253
Balavarmadeva, plate of 15, 54
Balavarna 12, 22, 26, 96
Balhara 273n
Balī 177n
Bali inscription 82
Balī stone inscription (of the Chāhamanas) 199, 289
Balkh 155
Ballāswar 167
Bāmāhūr 167
Bamian 154, 155
Bāna 24n, 35n, 84
Bana 121
Banajiaka 257
Banaras College copper-plate 57
Banārasī 121, 167
Bandypadhyaya, N.C. 30n, 31n, 32n, 71n, 72n, 183 244n, 247n
Banerji, R.D. 118, 169, 178n, 182n
Bangāon plate 56, 118
Bangārgh grant 17
Bangāvan plate 52
Banias 16, 121, 176, 257, 258
Bāniya 119
Bāniyāchang 114
Bānjarās 259
Banswara plate 97
Banū district 155
Barada hill 121
Bārai 33, 251n
Barajas 58
Barala 268
Barbari 130
Barbarians 143
Barbaricum 32
Barbaricum emporium 130
Bargaon 126
Bargaon grant 22, 126, 212
Barhamshil 121, 166
Bārī 121, 167
Barnett, L. D., 22n, 70, 97, 112n, 113n, 116, 188, 206, 268, 270n,
Baroda 120
Barrackpore grant 67, 68, 99
Barsur inscription 53
Barua, Bārhub 74n
Barua, B. K., 69n, 70n, 128n, 212n
Barūḥ (Barūch, Broach) 134
Barygaza 26n, 28, 30n, 134
Basham, A.L., In, 5, 6n, 79n, 170n, 176, 235n, 285n
Basmand 121
Basra 140, 145
Bassein 134
Bastar State 52, 117
Bātiya 119
Bator 36
Baudhâyana 200
Baudhâyana Dharma Sûtra 96, 97, 200
Bay of Bengal 26n, 146
Bayana inscription 192, 199
Bazâna 167
Beal, S., 135n, 148n, 156
Beas 117
Bela 119
Belahôstî 3
Belavâ copper-plate 99, 209
Bellâri 275n
Bell-metal workers 19
Belwâ copper-plate 10, 11, 91, 92
Belwâ plate 59, 87
Benares 5, 117, 159, 168, 237, 242, 252n
Bengal 26, 28, 29, 32, 33, 35, 36, 47, 48, 57, 58, 60, 64, 86, 87, 90, 91, 94, 99, 100, 115, 118, 119, 121, 126, 138, 156, 181, 183, 186, 187n, 194, 236, 239, 249n, 251n, 261, 271, 278, 282, 283, 284
Bengal, East 64, 95, 119
Bengal inscriptions 32, 89, 90
Bengal, Lôwer 235
Bengal, North 29, 87, 118, 235, 249n
Bengal, West, 118
Bengalees 28
Beni Prasad 183, 211
Betel-sellers 19
Betkâ district 15, 251n
Betkâ Vásudevâ Image inscription 15, 33, 251
'Bhâdrapada 219
'Bhêga 78, 178, 181, 186, 187, 213
'Bhêgabhôgakara 55, 68, 76, 178, 184, 186, 188
'Bhêgaka 274n
'Bhagalpur 118, 169
'Bhagavanlal, Indraji Dr. 120
'Bhágirathî 169
'Bhâilsân 167
'Bhakta-fâlî 7
'Bhaloda 121
'Bhamara 205
'Bhamûr 130
'Bhammaha-desya 250
'Bhânbor 130n
'Bhândâgîrika 254
'Bhândarî 18
'Bhandarkar, D. R., 31n, 84, 114-116, 182n, 260, 268, 269, 270n, 271, 276n, 283n,
'Bhâraka 115, 197
'Bhârata Kaumudi 91n, 107n
'Bharukachchha 134
'Bhâshya 85n
'Bhâskarâchârya 268
'Bhâterâ copper-plate 65, 83, 158, 243, 288
'Bhâtî 119
'Bhattacharya, Padmanâth 98, 105, 114
'Bhâtjâraka Nagnaka 193
'Bhavanagar Prakrit and Sanskrit inscriptions 207n
'Bhera 300
'Bherâghât 53
'Bhikshachara 280
'Bhillamâla 264
'Bhilsa 121
'Bhîma (Epic hero) 239, 300
'Bhîmadeva I (of Gujarât) 82, 218, 238
'Bhîmadeva II (of Gujarât) 47, 83, 100
'Bhîmapriya 195
'Bhîmapriya-dramma 262
'Bhîmapriya-vinôopaka 195, 262, 268
'Bhîmasena, Mahârâja 262
'Bhîmer-jângâl 11
'Bhîmâ-nil 122, 262n
'Bhîmâ-nil stone inscription 27, 109, 113, 114, 289
'Bhoga 178, 186
'Bhogâvati 122
'Bhoj (of Dhârâ) 123, 124, 169n
INDEX

Bhoja I (of Kanauj) 261n, 269, 275
Bhoja II (of Kanauj) 261n
Bhojadeva (of Malwa) 97
Bhojapura 121
Bhojavarmadeva (of Bengal) 99, 209
Bhondri 279
Bhramarakotya 56
Bhrigooopoor 134
Bhrigukachchha 134
Bhū 59, 98
Bhū-bhāga 13
Bhū-hala 83
Bhūharāda (village) 47, 101
Bhujāngikā 54
Bhūkāḍi 3
Bhūmasaka 98
Bhumī 12, 59, 98, 99
Bhūmichchhirdrayāya 68-70
Rhūmikhanḍa 78
Bhumillika 121
Bhūmi-shaki 98
Bhumli 121
Bhū-pātaκa 3, 100
Bhūtā 114
Bhuvana pāla 210
Bhuvanaswar Praśasti 21
Bihar 169, 226
Bihat 121, 167
Bijagarh 121
Bijapur 160, 273
Bijapur inscription 111, 115, 162, 202
Bilhari stone inscription 53
Binwā (a tributary of the Beas) 117
Bīra 149
Bīrbhum 169
Bista 276
Bīthu 158
Bīthu inscription 15
Bitunda 168
Black Seas 154
Boḍḍika 262, 263
Böhtlingk 101
Bombay 133, 134, 174
Bombay Asiatic Society copper-plate 47, 83
Bombay Gazetteer 262n, 263n
Bombay Presidency 263, 264
Bose, N., 230n, 266n, 267n
Brāhmaṇa 17, 18, 28, 48, 55, 57
96, 181, 218, 232, 249, 283, 287, 292, 302
Brāhmaṇa kings 263, 284
Brāhmaṇa-kṣetra-karān 18
Brāhmaṇa utama 18
Brāhmanābād 119
Brāhmaṇapāla 242
Brahmanāśaila 166
Brahmāṇḍa Purāṇa 104, 123
Brahmapuri 121
Brahmaputra 20
Brahmin’s rock 166
Brahmin’s settlement 14, 15
Brāhmya 43
Brāhmya plot 44
Bretschneider, E., 141n
Brhmanu 120
Briggs, J., 120n, 121n, 130n, 132n, 142n, 168n, 217n, 238n, 286n, 287n, 302n
Brihaspati 46, 49, 77
Brihat-sarhhtī 273
British Museum 267n
Broach 120, 134, 158, 175
Brown, C.P., 257
Bührer 69, 102, 113, 114, 182n, 186, 187, 275n
Bukhara 141
Bundelkhand 5, 120
Burdwan 118
Burgess, J., 120, 123n, 125n, 159n, 225n
Burma 136, 148
Burma, Upper 156
Burnes 131
Burnell, Yule and 257n
Chandra dynasty 58, 91, 251
Chandra Gupta 193
Chandra kings 119
Chandravaati plates 61, 212
Chandwuar 217
Chang-Kien 156
Charkhari stone inscription 61, 82, 83
Charyapa das 28, 172
Chatterjee, S. K., 156n
Chatuhsar 197
Chaturmukha 41, 45
Chauhans, The 112, 122, 126, 261, 281
Chau-Ju-Kua 36n, 136n, 138, 139, 143n, 145n, 146n, 147n, 148n, 150n, 151n 152n, 175n, 176n
Chaul 137, 174
Chaulukyas, The 14, 55, 82, 90, 100, 102, 105, 114, 120, 178n, 194, 203, 209, 258
Chaulukya dynasty 209, 218, 258
inscriptions 203
grants 265, 294
of Gujarat 203
Chau-pu-lau 143
Chau roodharanika 231n
Chedi 53
Chedidesa 242
Chedi year 7
Chetty, S. V., 257n
Chhādisheya trīṇa 2n
Chhañye 263
Chhattradidhārā (village) 63
Chhecchañiyā 292
Chhindar, 7, 13
Chhittupāla (name of a field) 90
Chi 143
Chicacola 149
Chikhillikā 10
Childers Pāli Dictionary 88
Chin 142, 149
China, South 156
Chinese annals 151, 176
INDEX

Chinese government 147
Chinese junks 147, 148, 176
  merchants 175
  ships 147, 175
  travellers 155
Chātor 120
Chitrakūṭa 66
Chitralekhā 192, 199
Chittagong copper-plate 12
Choḍabha 117
Chola dynasty 181
Chola, Kulottunga 180
Chollikā 197, 202
Chong-kun 36
Chorakha 16
Chota Nagpur 169
Chothia 120
Chowrie-bearer 19
Christian era 148, 270
Chronicle of Kashmir 194, 208
Chumbi Valley 156
Church, A. H. 23n
Cochin 146, 176
Codrington 272n
Colebrooke, H. T., 74n, 113
Colombo 151
Conjeeverman 167
Coromandal 148
Corvees 208n,
Cousens, H., 132n
Cowell, H. C., 25n
Crawfurd 140
Crimea (Qirim) 142
Culao Cham 143
Cunningham, A., 119n, 130, 131,
  266-268, 272, 274, 282
Cutch, Gulf of 142, 146, 149, 152

D

Dabhoi 120
Dacca 15, 87, 95, 119, 251n
Dādhi-mata’s inscription 269
Dagon 121
Da(i)gapasadīdvighagovīcha 212
Dāhaḍa 254
  Dahāla 5, 121
  Dahtmāla’ 167
  Daibul 130n, 140, 146, 155
  Daivyka 43
  Dakshiṇa-vīthi 62
  Dalal, C. D., 264
  Damalipta 135
  Dama-mudrā 276
  Daman 134
  Dāmaras 80, 193
  Dāmaravāḍā (pāṭaka) 100
  Damascene steel 141
  Dammuka 253
  Dāmodora 12
  Dāṇḍas 2, 3, 86, 88, 96-98, 104
  106
  Dāṇḍadaśaparādha 211
  Dāṇḍaka 41, 42
  Dandahee 218
  Dāṇḍanāyaka 231n
  Dāṇḍapanīka 231n
  Dandaviveka 179n
  Dāṇi 179
  Dāṃbhaga 179
  Dāṃbhogabhāga 179
  Dantakāras 19
  Dāpani-pāṭaka 3
  Daraur 167
  Daravati (village) 52
  Darband Nias 149
  Darbhakakska (viśaya) 63
  Darbhevati 120
  Daśabandha 203-205
  Daśabharhaviśāṭṭhāprastha 204
  Daśā-bandha-mānya 205
  Daśāparādha 211
  Daśāparādha 211
  Daśāpura 203, 256
  Daśavatra-deva 162
  Daumara-bhūmi 22
  Daussādhika 231n
  Debal 22, 130, 131, 136, 142, 157,
  163, 175
  Deccan 74
  Dejilah (Tigris) 154n
  Delhi 157, 237 274n, 275, 281, 302
Denarius 270, 274
Deopārā inscription 173n, 239, 249n
Depalpur plate 103n
Dēśī 249, 256
Deulahasti 59
Devakutikāśṭhā 101
Devalabdíhi 291n
Devapāladeva 57
Devapālāpurā 121
Devapāla Temple at Ghoshrawa 261n
Devavarmādeva 11
Devatādhyaśa 297n
Devotpātananayaka 222, 297
Dewal Prārasti 7, 19
Dhālōpa 122
Dhamanandin 77
Dhandalpura 120
Dhandhuka 64
Dhaṅga 238
Dhaṅgatapātaka 53
Dhanu 8, 9
Dhanyahūṇḍika 278
Dhānyakārī 182n, 278
Dhānyanāṁ bhavane 12
Dhānyojāṃcīrīkā 277
Dhār 121, 167, 168, 169n
Dhārā 7, 124
Dhārāja 132
Dhāraṇa Mahādevī 53
Dharaṇivāraśa 65, 179
Dhārāpadrakā 56
Dhārāvarhadeva 83
Dharma 198, 275n, 276
Dharmānāṭhadeva 202, 292
Dharmapāla 173, 181, 265, 269, 283
Dharmāstra 177, 179, 259
Dharmasūtra 200, 232
Dhavala 162, 202
Dheika 55
Dhofar (Zafār) 140, 142
Dhrusena I 100, 101
Dhullā copper-plate 58, 82
Diddā 207, 221, 276, 282
Digha-nikāya 74n
Di-kahema 276
Dikshitar, V. R. R., 69n, 188
Dilliwalas 281, 282, 284
Dināra 140, 146, 165, 166, 215, 239,
244, 270, 273n, 278, 280, 282,
286, 287, 297, 300, 302
Dinārāhuṇḍika 278
Dīnāra-ojāmacīrīkā 277
Diodorus 242
Dīrgha 169
Dīrham 215, 226, 272, 273, 300,
301
Divyāvadana 193
Diyaṃau 167
Dohey inscription 82
Doli 113
Don Buzurg plates 60
Dōṇakārī 112
Doṇamāpaka Mahāmattā 178n
Dow 302n
Drachma 260, 262, 265, 272
‘Dra Ela’ 264
Dramma 184, 197-199, 208, 255,
257, 260-269, 276, 277, 280, 281,
283, 284, 289, 293
Dramma—ardha 266

—earliest use 269
—kaṇḍhana 261n
—lohādiya 261
—names 261-264
—subdivisions 268
—muda 276
Draṅga 187, 193
Dravya-Pārīkṣhā 261n, 275
Drona 3, 58, 89, 90-95, 99, 101,
102-104, 111-113, 116
Droṇa,—bhu 89, 93, 94
Droṇavapa 89, 90-93, 99, 106-107
Droṇi 112
Droṇika 89
Dubkund 117, 158, 254
Dubkund stone inscription 158,
202, 254
Dudahi (vishaya) 63
Düdahi (village) 167
Dügum 121, 167
INDEX

Dūgumpūr 121, 167
Duṣādhya 64
Dunpūr 167
Dur 117
Durjāya 126, 128
Durlabharāja 56
Durvarṣa 277
Durvāpattra 58
Dutt, B. B., 2n, 123n, 251n
Dutt, B. N., 249
Dutt, N., 74n
Dvārādeya 200
Dvārahāṭaka 54
Dvārakā 123
Dvāravāhirikādeyaam 194
Dvārakadāna 194
Dvārāśraya-kavya 4n, 274
Dyojye 65

E

Eastern countries 155
Edilpur plate 76, 240n, 241, 243, 265
Egypt 28, 89, 140
Egyptian ports 150
Elliot, H. M., 119, 120, 130, 131
Erathāṇa 48
Eshar 175
Es-Sind 154n
Etawah 217
Europe 136, 154
Elphinstone, M., 302n

F

Fa-hien 28, 135, 148
Famhāl 35, 119
Fandarina 117
Fannazbār 155
Fan-yen-na (Bamian) 155
Faridpūr 95
Faridpūr plate 106
Far East 149
Fars 155
Ferishta, M. K., 132, 168, 240, 272, 300
Ferrand, G., 137n, 170
Fleet, J. F., 188, 211
Fo-ho (Balkh) 155
Forbes, A. K., 4, 121
Fo-sī 144
Fu-li-la 144
Fuan 136
Fu-ta (in modern Cairo) 145

G

Gadhaiya Paisa 262
Gadyāṇa 275n
Gadyāṇaka 56, 64, 213, 275
Gagāha plate 22, 101
Gāhaṇavahālas, The, 6, 36, 51, 52
55, 57, 62, 68, 124, 178n, 204,
206, 212, 214-220, 223-224,
281, 284
Gājāṇaka 5
Gaja Sinhadeva 292
Gāṇḍa 94, 95, 301
Gandhār 135
Gandhāra 30
Gandha-vanīk 249n
Gandhēsvaṇ 249n
Gaṇēṣgad plate 100
Gaṇēśvara 56, 77, 87
Gaṅgāmahādevī 53
Gaṅgāsāgara 167
Gaṅgāsāyara 167
Gaṅges 20, 29, 118, 123, 135, 148,
166-169, 173, 301
Gaṅgeyadeva 265-68, 281, 284
Gaṇītā (Jaina) 104
Gaṇītāśāra 102, 111, 262n, 265,
268
Gaṇītāśārasaṅgrehā 110, 113n, 276
Gaṅguly, D. C., 4n, 122n, 274n
Gaonri 15
Garhwal district 76n, 107n
Garibanțh, temple of 250
Garra plate 17, 65, 230
Gartta 1, 6, 10
Gațīara 52
Gate, Lord of 207
Gauḍa 5, 56, 118
Gauḍalakhamalā 118n, 173n, 211n, 246n, 269
Gauhaṭi copper-plate 11, 12, 17, 22, 47, 60, 67, 96
Gaulmika 231n
Gaur 123, 169
Gaushṭhīna 8n
Gautama 200, 208n, 222, 232
Gaya 207
Gazetteer, Bombay 262n, 263n
Gerini 144
Ghāṛgarakāṭipāṭaka 59
Ghaṭṭīśa 56
Ghaṛgūn 121
Ghāṛo 130
Ghaṭāka-klipaka 116, 197
Ghaṭiyāḷā 161
Ghaṭiyāḷā inscription 17, 161
Ghāzaṇa 167, 299, 301
Ghazni 154
Ghaznin 155
Ghoṣāḍī 57
Ghoṣha 8
Ghoṣhal, U. N., 69n, 70, 75n, 77n, 78n, 179, 183, 184n, 186, 187, 188, 190, 204, 211, 212, 215
Ghoṣhrawa 261n
Ghumli 121
Gibb 152n
Gīṭika, Mymensingh 258n
Goa 135n
go-chara 1, 6, 8-11
Gōchhahakapati 9
Gōgasthana 122
Gōgā 133
Gokara 68, 203, 206
Gokula 63
Gondwānah 4, 35n
Gopi 113, 202
Gonijiprasṛtī 113
Gopaḷa II 194
Gopagiri 90
Gosaladevi 52
Gosṭha 8
Gōsṭhakapati 9
Gōṣṭhapāli 53
Gōṣṭhi 249n, 288, 294, 295
Gōṣṭhikas 294, 295
Goth 269
Govindachandra (of Bengal) 15
251
Govindachandra (of Kanauj) 21, 22, 51, 52, 55, 57, 60, 62, 75, 82, 101-103, 124, 181, 213
216, 248, 266, 281
Govindachandra and Aspotoachandra, inscription of 51
Govinda-Kesavadeva 65, 83, 243
Govindapāla 11
Govindapur copper-plate 3, 92
Govindaraṇāja 249, 291n
Grāma 1, 2, 228
Grāmatā 2n
Grāmyapaṣu-saṅgha 8
Greks 28, 30 260, 262, 265, 269, 284
Guggula 202.
Grihyakṛitya 221
Guhila dynasty 264
Gujarātra 5
Gupkīghār copper-plate inscription 99, 107
Gūḍa Mahādevī 14, 53, 66
Gundīgaḍh 133
Guṅja berries 213n, 275
Guptas, The 89, 101, 270, 281
Gupta, K. M., 10, 66n, 71n, 75n, 187n, 188n, 205
Gupta period 92, 241, 248, 273
Gupta year 106
Gurjara 120
Gurjara coin 275
Gurjara Pratihāra 187
Gurjari mudrā 261n
Gwālior 78, 109, 256, 257, 293, 301
INDEX

Gwalior fort 201
Gwalior inscription 78, 111, 269

H

Habib, M., 302n
Hāela 84, 116
Haihayas 57
Haitam 149
Hajjāb 226
Haitam 149
Hal 236
Hala 53, 58, 61 82-84, 90, 98, 102-106
Haladagārhtge 82
Halavāha 83
Halāyudha 32, 58, 59, 64
Hall, F. E., 214
Hamilton 278n
Hammira 216, 276
Hanoi 146
Hara 83, 115, 248
Haradhama 118
Hāraka 115, 202, 292
Harappa 241, 246
Hara Prasad Sastri 214
Hardy, 74n
Hari-Rishiśvara 203
Harishchandra 217
Harivamśa 123
Harkand 146, 150
Harsha (of Kanauj) 85, 186n
Harsha (of Kashmir) 207, 208, 221, 233, 245, 282, 297
Harshacharita 84n, 85
Harshapura 121
Harsha stone inscription 63, 77, 85, 115, 199 206, 213, 250, 256, 264
Harum-Rashid 130
Hashtkānī 272
Hasta 81, 85-87, 97, 101, 104, 106
Hastikundi 162, 202
Hāṭ-āśṭādāśaka 63
Hathal plate 83

Hemachandra 4, 23, 24, 30n, 32n, 135n, 217, 274n
Hemidrachma 274
Hensivā 96
Herodotus 28
Himalaya 26n, 138, 156, 157
Hind 131, 142, 155, 286
Hindi 262
Hindiya 121
Hindu legal treaties 220
Hindustan 287n
Hiranyā 68, 182, 183, 189
Hiranyakṣamudayika 183
Hirth, F., 36, 139, 143, 156n
Huang tsang 20n, 24n, 35n, 155, 156, 227, 228, 235, 236
Hōdivala, S.-H., 121, 134, 135n
Hoernle, A. R., 82, 265n
Ho-ling (Java) 144
Hoogly 119, 135
Hopkins, E. W., 78n
Hormuz 140, 175
Hormuz, Old 145
Hourani, G. F., 143n, 147n, 149n, 150n
Howrah 36
Huan-wang 143
Hu-ch'a-la (Gujarat) 139
Hunter, W. W., 93n, 95, 106
Hushkapura 122
Huvadī 21

I

Ibu Asir 301
Ibn Bašīfa 21, 25n, 26, 35n, 36, 131, 133, 135, 138, 139, 141, 142, 148, 150, 152n, 157, 165, 170, 176, 272
Ibn Haukal 21, 35, 36n, 117n, 131, 147, 174, 210, 226, 236, 243, 272n, 273n
Ibn Khurdādbba 30, 119, 137, 138, 141, 145, 155, 226, 247
Ibn Said 140
Ichchhāwar plates 7, 17
Ikkaḍāsivishaya 58
India 6, 33, 35n, 144n, 148, 168n
India (North) 117
India (Northern) 81, 187
India (North Eastern) 284
India (North West) 269
India (South) 86, 136, 144, 146, 148, 180, 205, 257
India Office plate 13, 87, 89, 94, 95
Indian Archipelago 136
Indian Ocean 146, 148, 149, 174, 175
Indian Peninsula 144
Indies (India) 146
Indies, East 148
Indo-China 146
Indo-Gangetic plains 20
Indo-Sasanian 272
Indra 177n
Indradvīpa 59
Indrajī, B. L., 120
Indrajī, Pandit 186
Indrapāla 11, 12, 22, 47, 60, 67, 96
Indrarāja 56
Indus 120, 130
Indus plain 20
Indus valley 4, 27
Ingnoda 60
Irāwa 167
Irād copper-plate 10, 12, 17, 22, 119, 245
Inscriptions, North Indian 67
Inscriptions, South Indian 66, 219, 268
Īštānakūpa 63
Isarahara-pañchela 63
Īśvaraśīva 53
Iṣṭakhri 36n, 117n, 174
Īśava-pañchela 63
I-tsing 24n, 35n, 144n, 148, 168n
J
Jabulpore Kotwali plates 36
Jagamalla, Śrī 257
Jagatsāmin 289
Jagdalpur 117, 122
Jahaḍa 245
Jailam 167
Jaimini’s Mīmāṃsāsūtra 74
Jaina 125
Jaina Ganita 104
Jaina inscriptions 218, 295
Jaina pilgrims 210
Jaina temples 192
Jaipal 239, 299
Jaipara 259n
Jaipara Vaṇikoṭṭa 259
Jajāhūti 167
Jajalladeva 7, 126, 291
Jajalladeva I 265n
Jājilpārā grant 194
Jajjamau 166
Jajjanīr 167
Jala 6, 7
Jalādhāra 10
Jala-kara 68, 203, 206
Jālandhara 5
Jala-sthalah 6, 7
Jālor 263
Jālor inscription 162
Jampa 149
Janakadevipura 122
Jandrā 167
Jandrud 120
Jangala 2n
Jāṅgala patha 21
Janpa 121, 167
Janvara inscription 109
Jarawan 140
Jarrett 118n
Jasuka 254
Jats 172
Jātakas 5, 15, 26n, 28, 30, 98, 177, 232n, 244, 254, 259
Jaulī pattalā 54
Java 144, 148, 149
INDEX

Jayachandra 51, 57, 68, 215, 217
Jayāditya 56
Jayānāga 30
Jayanārāja 64
Jayapāladeva 15, 64, 284
Jayapālasarman 52
Jayāpīṭa 165, 233
Jayapura vishaya 63
Jayasimha (of Dhārā) 7
Jayasimha (of Gujarat) 8
Jayasimha (of Kashmir) 193
Jayasimha (of Madhya Pradesh) 36, 54
Jayasimha (of Malwa) 26, 56, 195
Jayaswal, K. P., 75n, 78n
Jayatrasiṃha 22, 201, 246
Jayavarman 266
Jayyaka 157n
Jejābhukti 82
Jeta (Prince) 74
Jetavana 74
Jetṭhaka 253
Jhanvara inscription 201, 202
Jhelum 155, 300
Jina Vallabba 263
Jirbatan 121
Jivaka 57, 77
Jivasarman 112
Jizya 214
Jodhpur division 269
Jonarāja’s Chronicles 4
Jūd mountains 155
Juma Masjids 174
Jumna 29, 166
Junaka 121, 142, 147, 148, 152
Junapura 269
Junapura inscription 262
Junā stone inscription 195

K

Kā-an 149
Kabul 154, 167; 272
Kachchhapaghata 254
Kachchhapaghata Vikramasimha 158, 202, 254
Kāchha-bhūmi 22
Kachchhhamandala 5
Kadās 95
Kadambas 97, 181
Kadambapadraka grant 53, 82, 88, 96, 97, 103, 104
Kadkhah-Katankah 4, 35n
Kādokā (village) 65, 230
Kafiristan 155
Kainkalam 150, 176
Kaira 120
Kaitvarta 220
Kajangala 156
Kak, R.C., 247n
Kāka 3, 89, 92, 94, 95, 100
Kakadādaha 230
Kakaradāha 63
Kākinī 93, 94, 95n, 99, 280
Kākānīkā 89, 92, 99
Kakku 17, 161
Kalachuris, The 7, 16, 60, 62, 101, 205, 251, 265, 266n, 268, 274, 279, 281, 284
Kalah 147
Kalah Bar 146
Kalamba 53
Kālari 117
Kalaśa (a weight) 109, 201, 289, 292
Kalaśa (king of Kashmir) 282, 287, 209, 233, 297
Kālhaṇavāda 185
Kalha plate 16, 60, 101, 251
Kaliṅga 148, 236, 242
Kaliṅjar 242, 301
Kalkayan 121
Kalvan plates 13, 55, 96, 158, 162, 264
Kalyāṇa 263
Kalyāṇadhana 203, 205, 206
Kamarupa 5, 11, 64, 156, 167, 236, 238, 245, 283, 284, 286
Kāmarūpa Śasanāvali 11n, 22n, 246n
Kāmasūtra 73n
Kamaulī inscription (of Vijaya
chandra and Jayachandra) 51
Kamaulī plate (of Vaidyadeva)
69, 173n, 246
Kambalīhatā 161
Kambāyet 4, 133
Kāmbōjas 119
Kambal 119
Kāmrū (Kāmarūpa) 167
Kāmrud 168, 286
Kāmrūn 137, 286
Kāmrūnī 137
Kāmrup 168
Kānsāras 18, 240
Kānṭīl 141
Kāmyaka 255, 293
Kanakāśīdevī 288, 289, 290, 295
Kanauj 5, 21, 32, 36, 60, 85, 121,
124, 158, 166, 167, 185, 245,
248, 264, 301
Kancān 27
Kandābil 36n
Kandahār 167, 273n
Kaṅkagṛmabhukti 62
Kanchanapura 118
Kāncī 167
Kandahār 154
Kandarina 121
Kandarpa 207
Kandīl 158
Kaṅdukābindukā 117
Kānc, P.V., In, 97, 219n, 220n
Kaṅphapalliṅka 63
Kāṃji 95
Kāndja 141
Kānji 167
Kaṅkagṛmabhukti 62
Kankre copper-plate 57, 259, 280
Kāntideva 118
Kānyakubja 5
Kanyānayana 122
Kapadway 120
Kapardaka-purāṇa 62, 271, 283
Kara 79, 178, 179n
Karachi 130-132
Karambata 168, 245
Karatoyā river 118, 156
Kardamakhāta (village) 63
Kariha 88, 89
Karkoṭa kings 282n
Karmakāra 249n
Kāṭmukā 41, 45
Kāraṇa I 90, 105, 114
Karna country 205
Karṇasuvārṇa 30
Karṇavati 122
Karpatavanjiya 120
Karpūramaṇjūri 239
Karsha 1n, 108, 109, 201, 202,
228, 229, 262n
Karsakas 18
Kārshiṇa 108, 208n, 260n, 268
Kārtika 64
Karyaḥ 4
Kasdar 36n
Kashgar 175
Kashmir 4, 5, 21, 27, 32, 33, 36,
157, 165, 166, 167, 174, 181,
182n, 193n, 194, 196n, 207-209,
220, 221, 233, 236, 238, 244,
245, 247, 270, 276-279, 282,
295-297
Kashmir Chronicle 208
Kashmirins 207
Kasi 236
Kasrān 30
Kāśyapa 19
Kāśyapa-Govinda 65
Kathā-sarit-sāgara 135, 149, 152n,
158, 168, 274n
Kathina 2n
Kathiawad (Kathiawar) 83, 120,
121, 133, 146, 149
Kuṭūṭ 174
Kātyāyana 75, 248, 260n, 268
Kaucammalī 146, 175
Kaupṭika 194
Kaura 7
Kullāñchā 122
Kulin 148
Kulluka 219
Kulottuṅga Chola I 86, 180
Kulyas 90, 91, 94
Kulyavāpa 89-93, 99, 106-107
Kumār (Cambodia) 137
Kumāra-droṇa 112
Kumāragadiṇa 212, 213
Kumārapāla 4, 14, 66, 82, 192
209, 258, 265, 266
Kumārapālacharita 120, 125, 225,
258n
Kumn 117
Kumṭa 135n
Künk 167
Kura 27n, 141
Kuraha 121, 166
Kurudhamma Jātaka 178n
Kurupāḻ inscription (of Dhārāpa
Mahādevi) 53
Kurupāḻ stone inscription (of
Someśvaradeva) 201n, 275, 293
Kutaka 55, 115, 181, 206, 212, 213
Kuṭi 2n
Kutī 167
Kutira 2n
Kuṭumbins 18

L

Ladda 167
Laghu-Konkana 5
Lāharī 131, 132
Lahore 121, 131
Lāhorī 132
Lāhorī Bandar 131-
Lajabulas 146
Lakhanapāla 114
Lakhanawatī 157, 168, 245
Lakhamaniya, Rai 240
Lakhnauti 118 128
Lakshmanasena 3, 12, 13, 47, 62,
87, 89, 90-94, 99, 100, 118,
119, 271
Lakṣhamāṇavatī 118

Lakṣhmīdevī 54
Lakṣhmīdhara 124, 127, 128, 219,
222-225
Lakṣhmī-Karṇa 62, 256
Lakṣhmī-type 266, 267n
Lakṣhmīvarmadeva (of Malava)
62, 66
Lalitāditya 165
Lalitasūrādeva 57, 194n, 253
Lalla of Chhinda 7, 19
Lāhārī stone inscription 114, 115
Lāmūrī 149
Land Measurement 81
Land and service 79
Lan-Poole, Stanley 302n
Lapha plate 57
Lārī Bandar 131
Lārry Bandar 130n
Las 119
Lāṭa (place name) 5
Lāṭa (weight) 197
Lauhāvūrī 167
Lavanakara 203
Lawrence 27, 208n
Leggo, J. 135n
L Le Strange 150n
Leumann 206
Liang-shu 139
Ligor 144
Līlavāti 97, 268
Līng, Mt. 143
Lockham 152n
Lohadīlu 276
Lohādiya-dramma 261n
Lohakot 121
Lohapura 5
Loharrī 131
Lokaprakāśa 4, 182n
Lokesvara (God) 201n, 293
Lopaṭa 263
Loniyājodaprastara 58
Lo-yü-lé 144
Luṣṭ 27n
Lūār 141
Lucan 29
INDEX

Lucknow 279
Lucknow Museum 266
Lucknow Museum copper-plate 15, 54, 251, 252

M

Macdonell and Keith 71, 276n
Māchín 142, 149
McCirndle 29n
Madagascan 175
Madanapāla (of Kanauj) 82, 102, 103, 216, 281
Madanapāla (of Bengal) 118, 211, 279
Madanavarmadeva (Chandella) 17, 63, 90, 104, 266, 267n
Madanpāḍā plate 271
Madanpur plate 9, 91
Madada 292
Mādhānagar copper-plate 3, 90
Mādhava 56
Mādhuban plate 186n
Mādhuka 276
Mādhukshiraka 58
Madhurāntakadeva 13, 56, 64, 65, 254, 275
Madhyadeśa 14
Madhyamandira 171
Madhya Pradesh 13
Madoli 16
Maṭommanpāla 54, 211
Madras 26n
Madura 236
Magadha 24n, 36, 156, 242, 243
Mahābhārata 222, 230
Mahābhogika 131n
Mahābodhi inscription 265, 269
Mahā Chīn 149
Mahādeva 125
Mahādharmāhyaksha 231n
Mahāgaṇaṭṭha 231n, 253
Mahājanas 19, 159
Mahākṣhapatalika 231n
Mahammad Bakhtiyar 168, 169, 238, 240, 245
Mahāmudrādhyakṣita 231n
Mahānanda 118
(Mahānāma) 1-Darab Pass 168
Mahāpālupati 231n
Mahāpitha 45
Mahāpratihāra 231n
Mahārājaśparajaya 209
Mahāśāṃdhibrahmaṇa 231n
Mahāśenapati 231n
Mahāsīlākaṇṭṭa 243
Mahāśreṣṭhi 253
Mahāsthān Brāhmaṇ inscription 26
Mahātaka 253
Mahattamas 17
Mahāvīra 113
Mahāvīracharya 113n
Mahendrapāla I 261n
Mahendrapāla II 32, 56, 64, 69n, 90, 203, 219, 256
Mahēśvara 59, 120
Mahīpāla I 291n
Mahīpāla (of Bengal) 59, 87, 88, 118
Mahīpāla (of Kanauj) 208, 264
Mahmād, Sultan 21, 121, 168, 172, 237-238, 240, 244, 245
Mahōbā plate 16, 47, 60, 67, 102, 103, 106, 299-301
Māhūra 167
Maitrakas 211
Majumdar, B.P., 241n
Majumdar, N.G., 249n
Makarapāṭṭaka 54
Makhiūlah 155
Makran 146, 174
Malabar 33, 133, 146-148, 176
Malabar Coast 144
Malacca 136
Malacca, Strait of 143
Mālava 157
Mālava inscription 60
Malaya Archipelago 272
Malaya Peninsula 144, 147, 149
Malayasinha 274
Maldiva Islands 279
Malhár 122n
Malladeva 295
Mallalä 122
Mallärjuna 233
Mallsärul grant 183
Ma-lo-hua 139
Malwa 3, 4, 26, 27, 56, 138, 139, 167, 195, 237, 263
Mamhal 119
Máñâ 113-115
Manahali record 118, 211
Mánaaka 197, 202
Mánaśāra 2, 8, 40, 41, 43, 44, 251
Mánaśollāsa 152, 200, 212
Manat 238
Mánaava Dharmaśāstra 180
Máṇḍaladhara 56
Mándahūkur 167
Máṇḍalika 56, 252, 253
Mándapa. 121
Máṇḍapikā 191n, 192-3
Máṇḍapikā-tax 193
Mándhata plate 7
Mánglana 185, 201
Mánglana stone inscription 22, 113, 185, 201, 246
Mangalore 176
Mánglod 269
Mánhābāri 130n
Máṉi 90, 113
Máñiabar 133
Maññiañṭẖā 199
Mánsul 175
Mánsurah 4, 123, 245, 272, 286
Mánthora 169
Mánu 2, 9, 28, 46, 49, 69-70, 74, 76, 98, 106, 110, 178n, 179n, 180, 200, 212, 222, 223, 225, 249
Mánuśhya 43
Mánsarhiṅṭī 28
Mápaaka 185
Marāṭhi 115
Marco Polo 28, 31, 32n, 133, 138, 139, 141, 149, 150, 170, 171, 175, 237, 257
Marden 265n
Márgaṇaka 203
Márggāḍhya Kaupṭika 194
Márh 157
Márkāṇḍeya-Purāṇa 97n, 104, 106, 110
Mártāṇḍa 122
Márwår 162, 185n, 262, 264
Márwari 113
Máscat 146, 147, 151
Máshas 108
Máshaka 98, 276
Máskān 30
Maskarin 208n
Máṣṭūdi 4, 117n, 119, 137, 138, 141, 145, 147, 151n, 153, 154n, 210
Mathanaḍevas 13, 179, 184, 186n, 197, 204, 207, 208
Mathura 117, 121, 125, 128, 238, 244, 285, 301
Mathura Prāṣasti 27, 109, 113, 185, 201
Matsya Purāṇa 9n
Mau-mön 145
Maulakara 203, 208
Mauya 26, 89, 193
Mayamata 2, 40, 127, 251
Mayanalladevi 210
Mayūrapadra (village) 64
Mayutā 179
Medas 17
Medhāṭithi 25, 30, 249
Meḍipota 64, 65
Mediterranean Sea 170
Medzrażčhā 292
Megasthenes 20, 24n, 35n, 89, 128
Mehara King 257
Meharauli Iron Pillar 241
Mehta, R.L. 15n, 98n
Meriah grove 13
Mers 121
Mesopotamia 140, 141
INDEX

Mewar 110, 120
Meyi 57
Mihira-Bhoja I 261n
Mihran 30, 130n, 131, 144, 155
Mill 302n
Mimânhasûtra 74
Minhâj-S Siraj 238, 271
Mirashi, V.V. 188n, 213, 261, 267, 274
Mîrat 167
Mitâkṣhara 8, 38, 46n, 47n, 49n, 75n, 97n, 249, 250
Mithila 5
Mîtra, R. L. 204
Mitramîtra 25, 75
Modi, J. J., 114
Mohenjo-Daro 241, 246
Mohit 134, 151
Mokhalapâṭaka 62
Mo-lai 144
Mollison, J., 23n
Mo-lo (Old Hormuz) 145
Monghyr 121
Mookerji, R. K., 154n, 170n, 172n, 173n, 176n, 253n
Moreland, W. H., 182n
Mount Chou-pu-lau 143
Mount Ling 143
Mount T‘un Mon 143
Mrîtyuka-Vrîtti 230
Mudâ 276
Mudrâs 230n
Muhammadan amercement 214
" Empire 154
" writers 210
Muhammad Ibn Qasim 155
Muhammad Ibn Kasim 242
Mujmalu-T Tawârfikh 236
Mukrân 155
Muktibhûmi 54
Mulâpatra 58
Mûlârâja 121, 218
Mulufgat-I Timuri 237, 240, 244
Multan 4, 117, 120, 123, 131, 141, 142, 161, 168, 172, 210, 236, 240n, 243, 291n, 295
Mulâk 21, 36n
Municipal Boards 193
Mungirî (Monghyr) 121, 167, 169
Muñja 26n
Munjanîquš 243
Munjanîquš-stone 243
Musalmans 243, 273
Muslim conquest 174
" Historians 281
" rule 154
" rulers 272
" writers, 278
" work 160
Mûtaka 197, 276
Mymensingh District 95
Mymensingh Gitika 138n, 258n
Mysore 205, 275n

N

Naddulai 219
Nadiyâ 119
Nâدلâi 195, 201, 250
Nâدلâi stone inscriptions (of V.S. 1200 and 1202) 195, 201, 250
Nâdol 5, 122n, 292
Nâdol Inscription (of V.S. 1200) 205
Nâdol plates (of Alapaâdeva and Kirtipâla) 219, 264
Nâdol stone inscription (of Râja-pâla) 254
Nâdol inscription (of V.S. 1147) 291
Nâgabala 53
Nâgala Mahâdevî 254
Nagara 14
Nâgârakhaṇḍa 33
Nâgarkot 121, 238
Nâgna-taḍâga 56
Nagnaka, Bhâttâraka 193
Nâgpur stone inscription 57, 62
Nahpara Station 121
Nahunsha (king) 177n
Naihâti copper-plate 3, 12, 47, 87, 92, 94, 100 231n, 239
Naipal (Nepal) 167
Nairne, Alexander Kyd, 263.
Nala 81, 86, 88, 101, 105
Nala standard 3, 87
Nalakacechapur 121
Nalanda copper-plate 57
Nalava 101
Nālīkāvāpa 107n
Naalu 101
Nāluka 52, 101, 106
Nāmaṭāpīḍi 54
Namana grant 192, 265
Nandā-Bhagavati, Śrī 162
Nandana 249
Nandīsvāminī 87
Nandīvartya 41, 44, 251
Nanpara 266
Naosari 120
Nārada 21, 46, 49, 76, 110, 248
249n, 265
Narāna 120
Naravarman 53, 82, 88, 263
Nārāyaṇa 14
Nārāyaṇapāla stone inscription 14, 53, 66
Nārāyaṇapur 14
Narmada 29, 30n, 117, 121, 135
Narmadapur 121
Nāsahahathidabā 63.
Nasik Caves 77
Nasik Inscriptions 97, 248n
Nasir-i-Khusraw 153
Nath, Pran 1n, 5, 79n, 112
National Income 225
Naṭapātaka 56
Natural Divisions 20
Naukāmālakara 173n
Nauvējakha 173n
Nau-vittaka 18
Navasainghragahatapuraka 58
Navasāruleka 120
Nāvyikas 19
Nāvya region 58, 59
Nāyaka, Prince 254
Nāyaka, Sūdraka 254
Nayañakelidevi 52
Nayappāladeva (of Bengal) 10, 22, 245
Nāzīm, M., 302n
Nehrwa 120
Nemichandra 24
Neminātha 295
Nepal 5, 167, 186, 242, 276n
Nepālese Manuscript 64
Netana 102
Nīalīgin, Ahmad 237
Nicobars 144
Nicobars, Islands 146, 148
Nidhanpur copper-plate 70n
Nimapātaka 62, 100
Nimroj 155
Nīpānas 2n
Nīpānīya 53
Nirjītvarman 233
Nīshāpūr 141
Nīshka 268, 276
Nīśra-nikshepa-hatța 162
Nīvartana 96-98, 106
Nīzamuddin, Ahmad 172
Noakhali District 93n, 95
Nohalī 53
Nonsaripa 121
Nowgong copper-plate 12, 22, 26, 47, 96
Nudiah 169
Nur 121
Nushadu-en (?) 154n
O
Obolalah 145
Odīdyāna 5
Ohinda 263, 275
Ojha, G. H., 110, 113
Old Hormuz 145, 146
Oman 131, 140, 142, 145-147, 153
Orissa 26n, 166, 279
Osinna-Kaivarttaavṛitti 87
Oudh 167, 266
Ouseley, W., 117n, 154n
Oxo-Caspian 154
Oxus 154, 155
INDEX

P
Pachar plate 89
Pāda 268
Pāda-drama 266, 267
Pādārdhas 108
Pādāvarta measure 100, 101
Pādika 262
Padma 43, 44
Padmaka 41, 43
Padmarāja 157
Padma region 32
Padmāvatī 122, 126
Padrājā 292
Pahārupur copper-plate 106
Pālkpārā 15, 33, 251n
Pālila 90, 114, 195, 201
Paśācha 42, 43, 45, 46
Paithan 237
Pala 110, 112, 164-166, 201-203, 290
Pālā 110
Pālā 110
Palambang 136, 148
Palanpur plate 82
Pāli 98
Pāli literature 88, 242, 253
Pāli (weight) 109, 199, 201
Pāli 15
Pāli Dictionary 88
Pāli plate 52
Palikā 109, 110, 197, 198, 201, 203, 256, 290, 293
Palk strait 146
Pallava 97
Pallikaras 75
Pallīvāl Brāhmaṇas 15
Paloura 149
Pampar 32
Pamparājadeva 54, 57, 259, 280
Pamukha 253
Pānās 255, 268, 273, 274, 280, 293
Pānāchhi 56
Pāṇāhera inscription 26, 56, 195
Pāṇaka 198
Paśccha 101
Paścchakulas 209
Paśchamanerī viṣhaya 59
Paśchavimśatikā 270
Panchayat 263
Paśchiyaka-drama 262, 267-268
Pandarani 176
Pāṇḍava dynasty 239, 301
Pandit Bhagvanlal Indrāji 186
Pandit Haraprasad Sastri 64n, 214
Pandit Isvara Chandra 169n
Pandit Rama Karna 114
Pandukesvar 76n, 107n
Pandukesvar plate 57, 194n, 253
Pāṅgu 233
Pāṇini 2n, 8n, 12 82, 101, 154, 215
Pāṇipat 167
Pāṇiuli 230
Panigur 155
Pānthila maṇḍala 59
Paṇyasarasthā 200
Pārakamaṇḍa maṇḍala 59
Parama-halyā 85n
Paramāras, The 4, 7, 22, 26, 29, 83, 158, 162, 178n, 185, 187n, 205, 264
Paramārīdeva 7, 16, 48, 60, 61, 63, 67, 82, 83, 89, 102, 103, 106
Paramaśāyika 42-44
Pārameśvarīya-hasta 85
Parasangs 120
Parāśara 61
Pargitar, F. F., 106, 107
Paribhāśāprakāśa 25
Parīhāsapur 295
Parkadimunḍa 58
Parshad 295, 297
Partabgarh inscription 32, 64, 90, 109, 110, 113, 203, 219, 248, 253, 256, 290
Partithi dramma 263
Pārṇuttha dramma 263
Pāsha 100, 101
Puṣan, God 242
Pāṭaka 62, 89, 92, 99, 100, 107
Pāṭaka, bhū 94, 100
Pāṭaliputra 121, 128, 167, 168, 193
Pāṭan 120
Pāṭanārāyana stone inscription 113, 185, 264
Patañjali 84, 85n
Patha 63
Pāṭhas (land-measure) 102, 107
Pathighata 118
Pāṭiladāvika 59
Pāṭtabadhaka-vishaya 63
Pattala 120
Pāṭan 120, 132
Pāṭana 45
Pāṭapānī 57
Pāṭaśāla 7
Pauḍāra 29
Pauḍraka 235
Pauḍravardhana 156, 158, 168
Pauḍravardhana-bhūkti 58, 59, 87
Pāṭyāli 114
Pāṭyāsi 57
Pa-yīl 144
Pechaka 45
Pedir 144
Pehoa 122n, 198
Pehoa inscription 198, 264, 275, 294
Pellaka-pellaka 202
Pellicott 143
Periplus 26n, 30n, 32, 130, 134, 148n, 149, 151, 152, 156
Periplus of the Erythrean Sea 28n, 129, 152n, 236
Perlak 144
Persia 136, 142, 151, 155, 175, 176n
Persia, Sea of 151
Persian Gulf 143, 145-147, 150, 153, 176
Persian Gulf route 142, 143
Personal Service 208
Peshwar 155, 300
Peukelaitos 168
Phalavaradāhikā 122
Phāṇita viṭhī 59
Pheru, Thakkur 261n, 275n
Pilikhiqī-pāñchela 63
Pīṇḍaka 186
Pīṇḍakāra 186
Pinjaur 167
Pīpparikā (village) 10
Pītalahāra 240
Pīta 45
Pīthikavitta 209
Pliny 148n, 149, 150, 154
Plough (big and small) 85
Plough-measure 81-85, 90, 102, 103-106
P'o-lo-mōn 144
P'o-lo 144
Poṇḍī 53
Porbunder 121
Poston 132
Pōṭhivāra 57
Prabhākara 233
Prabhāsa 121
Prabhāvakacharita 128
Pradhāna 230n
Prāgijyotisha 7, 16, 22, 96
Prahaṣa 64
Prājāpati 2, 98, 110, 180
Prājāpati's system 180
Prāṇa 185
Pran Nath 1n, 5n, 79n, 112
Prasad, Beni 183, 211n
Prāṇastakālaṇa 66n
Prāṣasti, Baijnāth 55, 64, 101-102, 111, 192, 289
Prāṣasti, Dewal 19
Prāṣasti, Mathura 27, 109, 113, 185, 201, 288
Prāṣasti, Vadnagar 14
Prāṣṭiti 113
INDEX

Prastara 41, 44
Prastha 103, 104, 108, 111, 164, 204n, 276
Prasthāka 203, 204
Pratapasimha 185, 192
Prati 276
Pratibhoga 178n
Pratiharma (door-keepers) 19
Pratihāras, The 85, 90, 184, 186n, 187, 203, 261, 264, 275
Pratihāraprasāha 204
Pratinidhi 230n
Pratyandaka 102
Pravachana 23, 24, 31n
Pravachanasāroddhāra 23, 24
Pravanī 207
Pravāṇikara 68, 76, 203, 206-7
Pravarasena 99
Prayaga, Tree of 166
Principles of taxation 222
Prithudaka 122n, 198
Prithvīdeva II 265n, 268
Prithvirāja 281
Prithvirājajivijaya 126n, 277n
Priyaṅgu 119, 122, 245
Ptolemy 120, 130, 149
Puḍanagala 26
Pūlakas 198
Pulimā 254
Pulo Condora 147
Puṇḍarikā maṇḍala 59
Puṇḍra 25n
Puṇḍranagara 26
Punjab 157, 272, 284
Pūrā 114
Puṇaṇa (texts) 5, 6, 9, 97n, 104, 106, 111, 112, 123, 232, 271
Puṇaṇa (coins) 58, 261n, 268, 271, 272, 283, 284
Puṇāṭānaprabandhāsaṅgraha 263, 276
Puṛapāla 117
Purushāwar 167
Pushpa-vāṣika 13

Q
Qālhāt 140
Qanbalī 155
Qanil (Qanbalī) 155
Qannazbur 155
Quīlōn 144-148, 175, 176
Qutbuddin 284

R
Rāghavahāṭṭa (a pāṭaka) 100
Raghavan, V., 235n
Raghunathpura 11
Rāhan copper-plate 82, 102, 103, 106, 215
Rāhma (Rahmī) 137, 138, 278
Rahmī 137, 138, 236, 278
Rāhu creek 132n
Railwan plate 181
Rājābhāga 78
Rājābrahmāpuri 12f
Rājadēva 53
Rajagiri 167
Rajakas 19
Rajakṣhetra square 123
Rājanas 231n
Rājanyas 72, 231n
Rājapura 56, 64
Rajapura copper-plate 13, 64, 65, 254, 275
Rājapuri 122
Rājaputras 231n
Rājaśekhara 135, 239
Rājatarāṅgini 27, 32, 33, 36, 61, 66n, 110, 112, 182, 193, 207, 209, 221, 232, 236, 244, 246, 247, 270, 274, 277, 278, 280, 282n, 287, 291n, 296
Rājauri 167
Rajavigā 65
Rajju 96
Rājmahal 118
Rājor inscription 109, 179, 186n, 197, 199, 204
Rajput 284
Rājputana 272, 277
Rājyapāla 51
Rakshashkhalī Island plate 211
Rālha 63
Rālhaṇadevi 52, 101
Rāmācharita 20n, 26, 29, 34, 35, 37, 118, 126n, 173, 220, 239, 279
Rāmapāla 118, 220
Rāmasiddhi pāñjaka 58
Ramauni 118
Rāmāvati 118, 126
Rāmāyaṇa 123, 230
Rāmpāl copper-plate 99
Ram Raj 2n, 251n
Ramsay, J. H. 79n
Rāṇakas 231n
Rāṇaka Amma 55
Rāṇavīra 66
Rangacharya, M., 113n
Rao Udaya Sīnha 263
Rapson, E. J., 116, 262, 275n, 277n
Rāsak 30
Rashid-ud-Din 3, 20, 37, 134, 139, 149
Rās Mālā 4n, 21n, 27, 132-134
Rāshtrakūṭas, 5, 273n
Ratnā 291n
Ratnadēva II 265n
Ratnāpāla 16, 22, 96
Ratnāpāla copper-plate 96
Ratnapura 122, 126
Ratnapur stone inscription 7, 126
Rathakārās 243
Rāṇila Uchchhadeva 294
Rāuta 18
Rāūta Pape 230
Rāūta Śāmanta 230
Rāwalpindī 155
Rawlinson, H. G., 168
Ray, H. C., 103n, 122n, 155n, 175n, 215n, 230n, 258n, 276n
Ray, S., 236n
Rayapāla 115, 195, 254
Raychaudhuri, H. C., 243
Red Sea 28, 143, 151
Red Sea Route 142, 150
Rekha 105
Renaudot 176n
Reu 261n
Revenue collector 193
Rewah inscription 274
Rhumi 278
Ribhus 88
Rice, L., 205n
Rīg-veda 25n, 71, 88, 243, 247
Rīgvedic 71, 88, 241
Rishaka 242
Rishi 254
Rishi 242
Rockhill 150, 151n
Rockhill, Hirth and 36, 139, 144
Rod 86
Romans 243
Roman Empire 174, 270
Roth 101
Royal Asiatic Society copper-plate 100, 101
Royal Road 168
Rūḍhabhārodhi 208, 221
Rudradaman 185
Rujjugāhaka Amāccha 88
Rukma 242
Rūpakas 192, 195, 197-199, 257, 268, 273, 274, 277
Rūpakas, ardha 274
Rūpaka, Krishnarāja 274
Rūpaka, Suvarṇa 274
Rūpnāraṇa river 135
Rūpya-rūpa 273n

S

Sabukttigin 299
Sachiva 230n
Sadhava 16
Sadusān 158
Ṣafar Nameh 153
Sagaudo (village) 61
Sahanyā 167
Sahasagaṇa 118
Sahasrālinga 125
INDEX

Saheth-Maheth 57, 62, 75
Sahibganj 169
Sāhitya-Parishat copper-plate 271
Sāhukāh 18
Sailendras 147
Saimur 21, 35, 137, 174, 237
Sajjāhati 53
Sakta-padas 268
Saktipur copper-plate 62, 91, 100, 271
Śakva bhūmi 21
Saletore, R. N., 99, 148n, 248n
Sallakshānapimāveda 55
Salt Ranges 172
Śālyapura 157n
Samandār 158
Śāmanta 80
Śāmāntadeva (of Punjab) 284
Śāmāntasirnāveda 162, 195
Śāmānya 169
Samara 138
Samarkand 155, 246
Samatata 87
Samataṭiya-Nala 86-87
Sambhar 277
Saraghapatā 199
Sarigrāmarāja 221, 233, 279, 282
Samipāti 292
Śaṅkarāṇaka 63
Śaṅkaravarmān 208, 221, 233, 297
Śāṅga 276
Śaṅchi 294n
Sandhyākara Nandi 20, 118, 173n, 239
Sānderāv stone inscription 84, 116, 207, 256
Sandvip 93n, 95
Sanjān 134n
Śaṅkaravarmān 61, 196n, 221, 282
Sāntiparva 185, 222
Sapādalaksha 5
Sarahkōṭta (vishaya) 63
Sāraṅgadeva 109, 198, 254
Sāraṅgadhara 110, 112, 242
Sarju 121
Sarkar, B., 247n
Sarkar D. C., 94, 95n, 106n, 107, 273n
Sarsati 27
Sarvamangaladevi 162
Sarvamandira 171
Sarvatobhadra 41, 42
Sasbahu Temple inscription 290, 291
Śastrī, H. P., 64n, 214
Śātapātha Brāhmaṇa 73
Śātavāhanas 187n
Satthavāhas 259
Satyapura 122
Saulkika 194
Saurāshṭra 5
Saurāshṭra land-grant 179
Saivarapāras 18
Saivarṇikas 258
Saivarṇika Mahājanas 288, 295
Savarasvāmi 74
Śaivaṭihi 74, 252n
Sawālak 3
Scythian 272
Śēi 113-115, 289
Semra plate 61, 63, 82
Sen, B. C., 5n, 15n, 21n, 35n, 36, 47n, 48n, 54n, 86, 99n, 118n, 119n, 122n, 123n, 135n, 136n, 173n, 183, 206, 210, 211, 218n, 253, 261n, 269, 273n, 276, 283n
Senas, The 12, 26, 33, 62, 64, 86, 87, 92, 94, 98, 118, 119, 178, 194, 249n, 271, 283
Senart 182n
Sengama 122
Sesayigrāma 63
Settlement of Brāhmīps 14
Sevāḍī stone inscription 115, 202, 248, 291
Shaḍbhāga 180
Shaḍbodjdika-drammas 262
Sharma 112, 122n, 126n, 128n
Sharūṣān 158
Sharwār 167
Shashnaghar (Shashanqār) 142
Shashthādhikritā 181
Shatthabha 291n
Shergarh 158, 289
Shetti 257
Shilahat 121, 167
Shiraz 155
Shirāhāra 167
Shōng-tōng 144
Śiāng-sii 143
Śiddharāja (Jayasimha) 120, 121, 209
Śiddhapura 121
Śīdī Āli 134
Śīdurāja (of Malwa) 103n
Śīha Rathod 15, 158
Śīhāwa 122
Śījistān 154, 155
Śikkm 156
Śilāhāra 263
Śilān 149
Śilimpur stone inscription 15, 64, 283
Śilpaśāstra 251
Śīrhagoshṭha 63
Śīrhapura 122
Śīndābūr 133, 134, 135n
Śindān 30, 117, 133, 134n, 136, 158
Śindapur 121
Śindhān campaign 226
Śindhurāja 141
Śingara Vatsarāja 55
Śingapore Strait 144
Śinghadeva, Gaia 109, 292
Śīn-t‘ou 144
Śīrā 102, 103, 106
Śīraf 145, 147, 151, 175, 176n
Śīrsa 27, 157
Śīrupā 65
Śisendrī Raj 279
Śītya 6n
Śivadāsa 276n
Śivamrigesavarma 181
Śivaskandavarma 97
Śiyadoni inscription 18, 78, 85, 262, 267, 268, 288
Śiyambaka 15
Śiy-yu-kī 135n
Śkanda Purāṇa 5
Śmith, V. A., 120, 139n, 215, 261n, 267, 280n, 302n
Śmītī 25, 74, 177-179, 183, 190, 191, 200, 220
Śmītikāras 61, 222
Śocotra 150
Śoḍhadeva 16, 60, 101, 251, 253
Śoghd 154n
Śohapur 279
Śolāṅkia 120
Śoluyā 47
Śomalādevi 277
Śomavarmi king 207
Śomavarmadeva (of Chambā) 13, 27, 59, 98, 112
Śomeśvaradeva (the Chauhan king) 281
Śomāsinhadeva (of Gujarat) 218
Śomeśvara (God) 210, 211
Śomeśvaradeva (Nāgavarmi king of Bastar) 53, 201n, 275, 293
Śomeśvaradeva (the Śilāhāra king of Koṅkana) 263
Śomeshvarapātana 153
Śommāth 117, 132, 172, 209, 240n, 291, 292, 301
Śomnath Temple 236, 244, 286, 287
Śomnath temple inscription 158, 192-194, 275
Śomnatha-pattana 132
Śoḍī 18, 240
Śoṇītapura 128
Śopārā 134
Śrāddhakara 203, 207
Śrāṣṭhāhya 248n
Śṛṇt 248-50, 259
INDEX

Šreṇi-bala 259
Šreshthi 248n, 252, 254, 257
Śri 261n
Śribhoja 136
Śrichandra (of Bengal) 9, 58, 82, 91, 99
Śridharacharya 102, 265, 268
Śridharadikshita 291n
Śrikantha 24n
Śrikarakāyastha 42
Śrimadādvāraha -drāma 275, 261
Śrimāla 122
Śrimāliya -drāmas 264
Śrinagar 76n, 107n, 122, 244
Śri-Nandā-Bhagavatī 162
Śripathā 192
Śrivijaya 147
Stambapū 135
Sthaṇḍila 42-44
State ownership of land 77
Statistical Account of Bengal 95
Stein, M. A., 270, 278, 282
Sthāniya 44
Strabo 154
Stubbs 79
Stumbhateerth 133
Suālkuśi grant 16
Subara 117, 133, 134
Subhankarapāśaka 70n
Subhankara-pāśaka-grant 49
Subhiksharājadeva 76n, 107n
Śūdra 17, 42, 73
Sufāla 132
Sugandhā 233
Sukhpal 300
Suki coins 276
Śuklatirtha 121
Sulaimān 137, 138, 145-147, 175, 236, 250
Śulapāṇi 249
Śulka 162, 190, 191, 193, 194, 200, 207
Śulkampaṭapika 191; 192
Śulkasthāna 193n
Sultan Mahmud 299-301
Sumantra 189
Sumantrakā 230n
Sumatra 136, 138, 144, 148, 149, 157, 175
Sun God 40, 141
Sunak grant 90, 105, 114
Sunārpāl 53
Sunārpāl stone inscription 53
Sundarban copper-plate 12, 54, 87, 90, 92-94
Sung dynasty 141
Sung government 147
Sunnām 167
Superintendent of charities 296
Surapura 193n
Surāśṭra 132, 242
Surat 134
Surat plate 82
Śūarpa 276
Śūrpa 242
Suāruta 29
Sussala 182
Śūtra-dhara 19
Suvarṇa 270n, 276
Suvarṇabhumī 148
Suvarṇadvipa 149n
Suvarṇa-rūpakas 274n
Suvya 245n
Suyyapura 122
Syastika 41, 44
Śyāla 284
Sylhet 98, 105, 114, 121
Syria 170

Tātariya 273
Tātariya-dirham 272
Tatriya-dirham 273n
Ta-ts’in 136n
Tattānadapura 122
Tauris 175
Tāvasaka-mañḍala 59
Tawney, C. H., 225
Taxila 168, 269
Tejahpāla 295
Tejpur rock inscription 284
Termez 155
Thākkur Pheru 261n, 275n
Thana 134n, 150
Thāiṭyāka 289
Thaneswar 121, 128
Thatta 120, 131
Thomas 272, 284
Tibet 154n, 156
Tien-chu 139, 144
Tigris 154n
Tīhnēka 291n
Ti-lo-lu-ho 144
Tilwat 121, 167
Timbūṭa 257
Timur 226, 246, 274n, 302
Tīvaravillī 58
Ti-yu (Taiz) 144
Tod, J., 159n
Todar Mal 183
Tokhara 155
Tomara dynasty 266, 275, 281
Tongking, Gulf of 146
Tonkin 156
Traikalakaka 63
Trailokyavarman (Chandella) 17, 65, 230
Trikaliṅga 207
Trilochanapāla 82, 301
Tripa-yūti 9, 10
Tripathi, R. S., 206, 213, 215n
Tripuri 117
Trivenī 119
Tubaran (Turān) 117
Tu-huo-lo (Tokhara) 155
Tula 197
INDEX

Tumi creek 132n
Turhāna 122
Tunakūpaka 63
Tungarāja, Prince 254
Tungesvara 161
Tun mon, Mount 143
Turān 36n, 117
Turkestan 155
Tushkhas 214, 215, 217
Tushkadaṇḍa 68, 214-216
Tveṣṭra 243

U

Uchāhhadeva, Rāūta 294
Udāgāha or Udakagāha 2n
Udāmānas 91, 92, 95
Udāna 58, 59, 92
Udayapura 121, 122
Udayasīṃhadeva (Chāhamāna dynasty) 27, 109, 144, 289
Uddea 11
Udṛanga 186-189
Ujjain 56, 121
Uladaṇa 63
Umlān 131
Umar 214
United Provinces 107n
Unmānas 3, 58, 89, 91-94, 99, 100, 107
Unnata 169
Unṭata 56, 77
Upalatūḍā 57
Upamitibhavaprāpaṇchā-kathā 25, 141
Uparikāra 186-189
Upāsaka 77
Urā-chaturaka 59
Urdbishau (Urdhvavishaya) 166
Uṛddhvā 170
Urdhvavishaya 166
Uśanas 208n
Usapa-pattana 205
Uścan 27
Uśhara 10
Uṭbi 242, 302n
Uṭpala 233
Uttarāpatha 154, 168
Uttara-Rādhā 21, 62
Uttara-sabhā 295
Uvāsagadasā 243n
Uwāryahār (Orissa) 166
V

Vāḍā-chaturasīti 57
Vāḍavāri (vishaya) 63
Vāḍha 102-4, 106
Vāḍhvāṇ 65
Vā(Dh) mahīthā 54
Vadnagar 120
Vadnagar Prāṣasti 14
Vāgara bhūmi 22
Vāgbhāṣa 241
Vaghli stone inscription 291n
Vaha 101
Vahānī 47
Vaidya 17, 42
Vaidya C. V., 5n, 6n, 214
Vaidyadeva 69, 173n
Vaḷijaladeva 55
Vaḷlabhaṭṭasvamin Temple 109, 257
Vaḷlabhaṭṭasvamin Temple inscription 85, 90, 201, 249
Vaśāli 243
Vaśṣya 17, 42, 44, 45, 73, 257
Vaśṣya-street 252n
Vaśṣya-varga 107n
Vājapeya sacrifice 61
Vākāṭaka 98, 99
Vākpati 60
Vaḷabhās 133, 211
Valadī 212
Vaḷahala 257
Vaḷanjiyam 257
Vaḷanjiyār 257
Vaḷabhadeva 7
Vaḷabhānanda Adaya 258
Vaḷlahithā 3, 47
Vaḷḷalasena 3, 12, 92, 94, 100, 239, 258
Vaḷḷapura 122
Vaḷḷihiṭṭā (a pāṭaka) 100
Government of India,
Ministry of S.R. to C, A.
Omnitrope Unit,

C.ataloged.