ECONOMIC CONDITIONS OF CEYLON

(c.1070 A.D. to 1344)

By

Wathuge Indrakirti Siriweera

Thesis submitted for the Degree of

Doctor of Philosophy

University of London

1970
ABSTRACT

This study attempts to trace and examine the economic conditions of Ceylon during the period c. A.D. 1070 to 1344. The geographical area of the new capitals that were chosen by the Sinhalese kings after the abandonment of Polonnaruwa as the seat of authority resulted in some changes in the economic pattern and organization of the Sinhalese kingdom. By examining the nature of such changes where relevant, the author has primarily attempted to delineate the main features of economic organization of the Polonnaruwa period and the immediately following period which saw the gradual decline of the Rajarata reservoir system.

The introductory chapter outlines the political history of the period and examines the social framework of the Sinhalese. Chapter II analyses the patterns of land tenure and includes a close examination of the popularly accepted view that the king was the sole owner of land. This is followed by a chapter on irrigation which attempts to survey certain problems such as labour organization for irrigation works and methods of distribution of water.
The fourth chapter outlines the agricultural practices of the Island. In this chapter an attempt is also made to estimate the area of paddy cultivation in the thirteenth and fourteenth centuries. The nature of the internal trade and monetary transactions are being dealt with in the next chapter, while the sixth chapter is devoted mainly to foreign trade. The last chapter examines the revenue terms and principles and methods of taxation, and the conclusion brings out the main results of this study.
ACKNOWLEDGMENTS

This study was undertaken at the School of Oriental and African Studies, University of London, under the supervision of Professor K.A. Ballhatchet and Dr. J.G. De Casparis. Mr. C.H.B. Reynolds too has helped me in the preparation of this work. I am extremely grateful to them for their advice and encouragement. To Professor Ballhatchet, I am deeply indebted for his kindness in helping me during a period of great difficulty.

I also must express my gratitude to Mr. Justin Labroo, who personally helped me in many ways. Appreciation is also gladly extended to Professor K.W. Goonawardena, who suggested this field of research and to my friends and colleagues Dr. T. Kandiah, Dr. S. Pathmanathan, Dr. V. Kanapatipillai, Dr. A. Meegama, Dr. T. B. H. Abeyasinghe, Messrs. K. F. Kannangara, K. Malalgoda, P. G. K. Fernando, M. P. Perera, S. De Mel and Mrs. L. Devaraja who gave their assistance ungrudgingly whenever I needed it.

Finally, a word of thank should be expressed to my wife Lalitha who took a keen interest to see this work completed.

***
CONTENTS

Abstract pp. 2–3
Acknowledgments p. 4
Abbreviations p. 8
Preface pp. 9–18

Chapter I: Introduction
Brief Survey of the political history of the period- Framework of the Sinhalese society

Chapter II: Land Tenure pp. 33–79
Sources- Criterion of property in land- The concept of the king's ownership of land - Nature of the king's rights over land - Joint tenure- Communal ownership of land - Land belonging to religious establishments- Pamunu tenure- Divel tenure- Revenue farming and ukas tenure- Land measurements- Size of holdings - Procedure adopted in granting land

Chapter III: Irrigation pp. 80–124
Scope of the study- Village Irrigation Works- Construction of major Irrigation Works - Restorations- Structural aspects of the Irrigation Works- Maintenance of Irrigation Works- Distribution of Water
Chapter IV: Agriculture
Sources- Area of Cultivation- Paddy Cultivation- Other crops- Chena cultivations- Gardens- Protection of crops and agricultural beliefs- Implements used in Agriculture- Animal husbandry for Agriculture- Agricultural Labour- Inducements offered by the rulers for agricultural activities- Decline of agriculture towards the end of the period

Chapter V: Internal Trade and Monetary Transactions
The extent of internal trade- Centres of trading activity- Regulations concerning market places- Mercantile communities - Media of Exchange- Weights and Measures- Monetary Transactions

Chapter VI: Foreign Trade
Sources- Exports and Imports- Ports of the Island- Direction of Trade - Navigation
Chapter VII: Revenue and Taxation pp. 252-280

Theoretical beliefs on taxation- Land tax-
Tax on trade- Water dues- Other dues such as poll tax and house tax- Collection of taxes- Judicial fines- Treasure troves - Lost or 'ownerless' property- Death duties-
Revenue administration

Conclusion pp. 281-285

Select Bibliography pp. 286-309

Maps
1. Dry zone river catchments and irrigation works p. 125
2. Ceylon in the Polonnaruwa and Dambadeni periods p. 204
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTR.</td>
<td>Ancient Land Tenure and Revenue in Ceylon, H.W. Codrington.</td>
</tr>
<tr>
<td>ARE.</td>
<td>Annual Reports on South Indian Epigraphy.</td>
</tr>
<tr>
<td>ASCAR.</td>
<td>Archaeological Survey of Ceylon, Annual Reports.</td>
</tr>
<tr>
<td>Barbosa</td>
<td>Duarte Barbosa, A Description of the Coast of East Africa and Malabar in the beginning of the Sixteenth Century, translated by Henry E. J. Stanley.</td>
</tr>
<tr>
<td>B.M.</td>
<td>British Museum</td>
</tr>
<tr>
<td>CALR.</td>
<td>Ceylon Antiquary and Literary Register</td>
</tr>
<tr>
<td>CCC.</td>
<td>Ceylon Coins and Currency, H.W. Codrington.</td>
</tr>
<tr>
<td>CCMT.</td>
<td>Culture of Ceylon in Mediaeval Times, W. Geiger.</td>
</tr>
<tr>
<td>Ch. (chs.)</td>
<td>Chapter (chapters)</td>
</tr>
<tr>
<td>CHJ.</td>
<td>Ceylon Historical Journal</td>
</tr>
<tr>
<td>CJKHSS.</td>
<td>Ceylon Journal of Historical and Social Studies</td>
</tr>
<tr>
<td>CJJHSS.</td>
<td>Ceylon Journal of Historical and Social Studies</td>
</tr>
<tr>
<td>CJSG.</td>
<td>Ceylon Journal of Science, Section G</td>
</tr>
<tr>
<td>CLR.</td>
<td>Ceylon Literary Register</td>
</tr>
<tr>
<td>CV.</td>
<td>Culavamsa</td>
</tr>
<tr>
<td>EC.</td>
<td>Epigraphia Carnatica</td>
</tr>
<tr>
<td>ECT.</td>
<td>Economic Conditions in Southern India, A. Appadurai</td>
</tr>
<tr>
<td>Ed.</td>
<td>Edition, Edited by</td>
</tr>
<tr>
<td>E.I.</td>
<td>Epigraphia Indica</td>
</tr>
<tr>
<td>E.Z.</td>
<td>Epigraphia Zeylanica</td>
</tr>
<tr>
<td>JRASCB.</td>
<td>Journal of Royal Asiatic Society, Ceylon Branch</td>
</tr>
<tr>
<td>JRASGB.</td>
<td>Journal of the Royal Asiatic Society, Great Britain</td>
</tr>
<tr>
<td>MS.</td>
<td>Manuscript</td>
</tr>
<tr>
<td>MV.</td>
<td>Mahāvamsa</td>
</tr>
<tr>
<td>N.S.</td>
<td>New Series</td>
</tr>
<tr>
<td>P.</td>
<td>Pāli</td>
</tr>
<tr>
<td>PJV.</td>
<td>Pūjavaliya, Ed. Bentōta Saddhātissa, Colombo, 1930</td>
</tr>
<tr>
<td>Pt.</td>
<td>Part</td>
</tr>
<tr>
<td>P.T.S.</td>
<td>Pāli Text Society</td>
</tr>
<tr>
<td>S.</td>
<td>Sinhalese</td>
</tr>
<tr>
<td>S.B.E.</td>
<td>Sacred Books of the East</td>
</tr>
<tr>
<td>SDHRV.</td>
<td>Saddharmaratnavaliya, Ed. D.B. Jayatilaka, 1930</td>
</tr>
<tr>
<td>SII.</td>
<td>South Indian Inscriptions</td>
</tr>
<tr>
<td>Skt.</td>
<td>Sanskrit</td>
</tr>
<tr>
<td>SMC.</td>
<td>Society in Mediaeval Ceylon, M.B. Ariyapala</td>
</tr>
<tr>
<td>T.</td>
<td>Tamil</td>
</tr>
<tr>
<td>Tr.</td>
<td>Translation, Translated by</td>
</tr>
<tr>
<td>UCR.</td>
<td>University of Ceylon Review</td>
</tr>
<tr>
<td>UHC.</td>
<td>University History of Ceylon</td>
</tr>
<tr>
<td>Varthema</td>
<td>The Travels of Ludovico Di Varthema, Ed. J. Winter Jones</td>
</tr>
</tbody>
</table>
PREFACE

Hitherto, in writings on the 'ancient' and 'medieval' history of Ceylon, it is political events like wars, foreign invasions, palace intrigues and the construction of large religious monuments that have tended to loom large. Though the construction of stupendous irrigation works has merited the attention of writers, that alone does not exhaust by any means the picture of the economic life of the country. Thus in a sense the history of the Island has been viewed in the main as the history of the activities of kings, while the life of the ordinary people, their economic pursuits, their rights and obligations in society have only attracted cursory attention.\(^1\) Not surprisingly, this over-emphasis on political and religious history has led to the neglect of social history in general and economic history in particular.

These characteristics of the historiography of Ceylon can perhaps be explained by the fact that the efforts of the early historians were mainly concerned

---

with translating and editing the ancient Sinhalese chronicles of the Island. These chronicles were mainly concerned with recording the religious history of the Island, the munificence of its kings to Buddhism and incidentally a chronological account of those kings. This seems to have had its bearing even on later writers who in the main have devoted their efforts to using more richer and varied sources of information that have become available to either confirm modify or controvert the accounts of the chronicles.

More recent studies on the history of the Island, like the History of Ceylon\(^2\) and the Concise History of Ceylon\(^3\) have attempted to rectify this neglect by giving some importance to political as well as social and economic history.

Interest in social and economic history was pioneered by L. S. Perera's doctoral thesis on the Social and Economic Institutions of Ceylon from Inscriptions\(^4\). M. B. Ariyapala's Society in Mediaeval Ceylon\(^5\) is a further contribution in the same direction.

\(3\) S. Paranavitana and C. W. Nicholas, Colombo, 1962.
\(5\) Colombo, 1956.
Wilhelm Geiger's *Culture of Ceylon in Mediaeval Times*, posthumously edited and published by Heinz Bechert, is the latest addition to the meagre output on the general economic and social conditions of the Island in early times.

L. S. Perera's work, as the title itself suggests, is based on the then available (published) inscriptions. Covering as it does an extensive period (from the third century B.C. up to 1016 A.D.) the author has limited his sources to epigraphic records. The main theme of his work has been a detailed examination of the institutional aspects of the socio-economic organization of 'ancient' Ceylon.

Ariyapala's *Society in Mediaeval Ceylon*, apart from dealing with a period not dealt with by Perera, distinguishes itself by being mostly based on literary works. His main source is the thirteenth century literary work *Saddharmaratnāvaliya*. In the preface it is stated that the society depicted in this text and other contemporary literature is the "society of roughly the thirteenth century A.D." The author admits though that the *Saddharmaratnāvaliya* was an

---

6 Wiesbaden, 1960.
7 Ariyapala, *op. cit.*, p. VII.
adaptation of the Dhammapadāṭṭhakatha written in the fifth century A.D.⁸ In any case, he has attempted to portray the society of 'medieval' Ceylon on the basis of this literary work in the light of corroborative evidence found in other texts and inscriptions, but one notes a rather indiscriminate use of such evidence without regard to the period it would apply to, though his work purports to provide a picture of conditions that prevailed in the thirteenth century A.D.

Geiger's Culture of Ceylon in Mediaeval Times, posthumously published in 1960, was certainly written much earlier and hence understandably enough the body of the work does not contain the fruits of more recent research. This deficiency has been copiously filled in by its able editor, Heinz Bechert. But the author himself in his preface declares that "the present description of the mediaeval culture of Ceylon is in general based on the Mahāvamsa."⁹ The merit of the work though lies in the success with which the author has drawn a coherent and intelligible picture of life in 'medieval' Ceylon from a chronicle, which was mainly interested in providing a religious and political history

⁸ Ibid., p. 29.
⁹ CCMT.; p. xxi.
of the Island.

While the three above-mentioned works attempt to give a picture of economic and social life, there have also been various monographs of value on aspects of the economic history of the Island. It is worthy of note that these monographs have been the efforts not of professional historians but of government officials. H. W. Codrington's *Ceylon Coins and Currency* traces the history of coinage in the Island from early beginnings up to modern times and provides a useful description of the type of local and foreign coins found in the Island. Even though a considerable number of coins have been discovered since this monograph was written, its value for students of history and numismatics cannot be underrated. The *Ancient Land Tenure and Revenue in Ceylon* by the same author discusses the tenurial rights and the system of taxation in Ceylon from the earliest times till 1833. Though some of his views have been questioned his work represents the results of the first detailed analysis of the then available material.

---

10 Colombo, 1924.
11 Colombo, 1938.
relating to land tenure and revenue in Ceylon.

R. L. Brohier's *Ancient Irrigation Works in Ceylon* provides a comprehensive account of the reservoirs and canal system of ancient Ceylon, while the same author's two volume *Lands Maps and Surveys* in the main is of more importance for the recent periods of the Island's history, though it provides valuable information regarding measures and surveys in the early period too.

While the merit and value of the above-mentioned studies can hardly be questioned, the need for more studies on the economic history of the Island cannot be gainsaid. J. G. De Casparis' assertion, with reference to early Indonesian history, that in spite of the enormous output of work "almost nothing definite is known. We have theories rather than facts" can be equally said to be true of the 'ancient' and 'medieval' history of Ceylon. The problems and difficulties that face a student in an attempt to reconstruct the picture of economic conditions are certainly not inconsiderable. The problem of interpretation of obscure terms in the literary and inscriptionsal sources is undoubtedly one of

13 Three parts, Colombo, 1934 - 35.
15 Quoted in Francis Cornell, "South-east Asia and the Modern World", Oxford University Institute of Commonwealth Studies, Reprint Series, no. 20, pp. 9 - 10.
the stumbling blocks. In a recent study on the Portuguese rule in Ceylon, the author laments the obscurity regarding the origin of some of the economic institutions and practices of the Sinhalese. 16

It is the purpose of the present study to trace the economic history of Ceylon in the Polonnaruwa period (1070-1235) and the immediately following period (upto 1344), by limiting our study to roughly two and a half centuries. In this connection it may be pointed out that the nature of the sources, does not permit one to treat the Polonnaruwa period and the period immediately after the decline of the Polonnaruwa kingdom separately or analyse in detail the changes that occurred in the latter. In the first place, one should not forget that the reconstruction of the general features of the economy had to be done mainly on the stray references found in the inscriptions and the literary works such as Butsaraṇa, Fūjaṭivali and Rasavahini. The literary

texts reflect the conditions of the time in which they were written, but one cannot analyse the local variations of economic conditions because information obtained from such texts is insufficient. Secondly, it should be pointed out that in certain spheres, economic practices did not change throughout the centuries. The method of paddy cultivation described in the Pūjāvaliya datable to the reign of Parākramabāhu II of Dambadeniya, would not have differed from paddy cultivation methods in the Polonnaruwa period. Even to this date such methods have not undergone drastic changes, especially in remote villages of the Island. Thirdly, in instances where we have a considerable amount of inscriptive evidence we see that irrespective of the decline of the Rajaraṭa civilization certain economic institutions did not undergo changes for a considerable length of time. The tenurial practices depicted in the eleventh and twelfth century inscriptions did not differ much from those of the thirteenth century and the first half of the fourteenth century. The same may be said regarding the taxation system, the methods of communication etc. Moreover, inscriptions of the Polonnaruwa period and the period immediately after refer mainly to land grants and sometimes to regulations passed by the king. Such evidence does not
permit one to analyse the economic conditions of these two periods separately.

Certainly there were changes that occurred after the Polonnaruwa period. But it should also be remembered that Rajaraṭa area was not completely neglected after the Polonnaruwa period. The emergence of the wet zone as a politically and economically important entity, does not, it must be stressed, date from after the Polonnaruwa period. ¹⁷

What is attempted, therefore, in the present work is to examine the general features of the economy during the whole period indicated by the title of the work. Attention has been drawn to changes where they occurred. Treating the Polonnaruwa period and the period immediately following as two distinct epochs and delineating the main features of both separately would be unrealistic, if not impossible.

While the fruits of earlier studies are drawn upon for this study, new inscriptive and archaeological evidence made available is also used. The

¹⁷ A kshatriya family ruled from Kālaniya, which is in the wet zone, as far back as the 2nd Century B.C. A large part of the political division known as Dākkhinadesa was also in the wet zone. From the end of 6th Century A.D., this division became the principality of Yuvarāja and it continued to be the practice until the twelfth century.
accounts of foreign travellers such as Ibn Baṭūtā, proved to be of great value especially in describing foreign trade. The palm leaf manuscripts, chronicles and contemporary Pāli, Sinhalese and Tamil literary sources, too, have been utilized. Moreover, the evidence of earlier and later times has been freely drawn upon when it has been thought capable of throwing light on the economic conditions of the period under review.
Chapter I

INTRODUCTION

Before proceeding to discuss various aspects of the economy in detail, an attempt is made in the present chapter to survey the political history of the period briefly and also to examine the framework of the Sinhalese society against a background of economic institutions. In surveying the political history only secondary sources have been used as entering into details of political history is beyond the scope of this work. In examining the social framework, a few stray references found in the literature and in one or two inscriptions proved to be of great value, but it has to be admitted that the picture drawn from such references is incomplete.

***

Political History

The period prior to the settlements of Aryan speaking people in Ceylon in the sixth or fifth century B.C. falls into the category of pre-history. Even after that we are on a firm historical footing only from about the third century B.C.¹ The history

---

¹ K.W. Goonawardena, op. cit., p. 421.
of the Island from this time till 1017 A.D. is referred to as the 'Anurādhapura period', so named after the capital city of Anurādhapura.

During this period south Indians had seized the Sinhalese throne in several instances and become masters of the Island but their rule made little difference to the people as they merely took the place of Sinhalese kings and ruled the country mostly as the Sinhalese kings did before them. But when the Colas conquered the northern parts of Ceylon in 1017 A.D., the Island for the first time ceased to be an independent kingdom, and became a part of the Cola empire.

The names of the Cola officials in Ceylon and the details of their central administrative organization which ought to have been a replica of the court of Tanjore are not known. According to Nilankanta Sastri, it may be presumed that, subject to the payment of an annual tribute and the meeting of particular demands for supplies and services from the centre, the local administration of Ceylon was allowed to continue much in the old way, for that was more or less the practice of Indian 'empires'. But in the process of conquest and in the fights for suppressing risings, like those in Rohana, much damage was caused to people and
property and much wealth in the form of precious metals, gems and art products carried off as booty from the Island to the mainland. Anurâdhapura was sacked and ceased to be the capital. Its place was taken by more strategic Polonnaruwa.²

Even though there were many Sinhalese chiefs who attempted to overthrow the Cola power, it was prince Vijayabâhu who successfully expelled the colas in 1070 A.D.³ But the overthrow of Cola rule did not result in the restoration of peace and normalcy either. The liberator himself had to face opposition from various groups before gaining acceptance.

Having finally secured his authority, Vijayabâhu I (1070 - 1110/11) made attempts to improve the economic conditions of the country. But it appears that the impoverishment of the country during the century preceding his accession was not wholly made good in spite of the king's strenuous efforts. There was little new that was done in Vijayabâhu's time. All that the country could afford was a considerable amount of repair and restoration work in the field or irrigation.⁴

Intrigue and dissension followed immediately upon the death of Vijayabahu. The country was divided into three kingdoms, viz. Pihitirata, Mayara and Ruhunura each of them being ruled by a separate king. It was Parakramabahu I (1153 - 1186) who brought all these parts under one rule.5

With the death of Parakramabahu in 1186 the Island entered a period of disorder and confusion, which culminated in the invasion and sacking of Rajarata by Kalinga Maha about the year 1215. Factionalism and rivalry at the court, deposition or murder of the rulers by powerful generals who were a power behind the throne, were characteristic features of the political scene of the period. "Evidence of peaceful termination of the reigns of kings and normal succession to the throne is almost absent."6

According to the Chronicle, Parakramabahu was succeeded by his sister's son, Vijayabahu II (1186 - 87). At the end of one year's reign he was killed by his successor Mahinda VI. He does not appear to have had much popular support and was allowed only a reign


of five days after which Nissankamalla (1187 - 1196) put him to death and assumed rulership. The reign of Nissankamalla which lasted nine years, is a bright spot in the troubled history of the period. Nissankamalla who was of Kalinga origin adopted a conciliation policy to win the rival factions to his side.

After Nissankamalla, three members of the Kalinga dynasty ruled the country for one year. The last of them was deposed by a general of the opposing faction who placed Parākramabāhu's queen Līlāvatī on the throne. Thereafter the two factions struggled for supremacy placing in turn their nominees in power. The last of the Kalinga kings was Māgha (1215 - 36?) who adopted stern measures to crush all opposition especially in the first part of his reign.7

In the words of a recent writer "The period between 1186 and 1236 A.C. saw the last days of the glory that was Polonnaruwa. The culture and civilization of the Sinhalese which were fostered by Vijayabāhu I and were given a great impetus by Parākramabāhu I were gradually declining during this period, except for a bright flicker during the reign of Nissankamalla. The invasion of Māgha only hastened

7 Ibid., pp. 51 - 68; pp. 117 - 120.
this process, and brought about the final downfall of the civilization of the Polonnaru period."

The Sinhalese rulers that followed Māgha did not rule from Polonnaruwa, but chose as their capitals places in the south-west which gave them better security. Thus, Vijayabāhu III, his son Parākramabāhu II (1236 - 70) and Vijayabāhu IV (1270 - 72) chose Dambadeniya as their capital. Bhuvanekabāhu I (1272 - 1284) after residing for a few years at Dambadeniya took up his abode at Yāpavu. Bhuvanekabāhu II (1293 - 1302) and Parākramabāhu IV (1302 - 1326) established their capital at Kurunāgala. Bhuvanekabāhu IV (1341 - 51) shifted the royal court to Gampola.

The choice of safer places like Dambadeni, Yāpavu and Kurunāgala shows the insecurity in which the kings lived at this time. Frequent Pāndya invasions and the invasion of Chandrabhānu certainly disturbed the Island's political life during this period.

After about the middle of the thirteenth century most parts of the former Rajarāṭa was split into minor chieftancies under the rulers named Vannīs. In the meantime, a separate Tamil kingdom was established

---

in the north. It was Parākramabahu VI (1412 - 1467) of Kotte who finally brought political unity to the whole Island.

***

The Social Framework

The Aryan-speaking people who colonized Ceylon no doubt brought along with them as an inheritance from their ancestors the remembrance of Indian customs, institutions and the Indian ideology concerning social organization. These Aryan-speaking people in the course of time came under Dravidian influence too, and the infusion of Dravidian ingredients into the Aryan civilization was therefore inevitable. Thus both Dravidian and Aryan characteristics entered into the Sinhalese society.

The basis of the culture of the Aryan-speaking people in north India and the Dravidian culture in southern India was the caste system. Similarly, the Sinhalese culture too had its caste

---

characteristics. During the period under review, castes were sometimes denoted by the terms Jāti, gōtra and kula.\(^9\) It should, however, be noted that these terms were also used to indicate family, race or tribe. But as will be seen later, a distinction was made in society on the basis of one's birth and profession.

Various sources refer to the existence of separate castes or occupational groups such as Sādol, Candāla or Helloli\(^{10}\) (scavengers), Kēvattā or Kevulu\(^{11}\) (fishermen), Vaddhaki\(^{12}\) (carpenters), Pōsakāra\(^{13}\) (weavers), and Kumbhakāra\(^{14}\) (potters) in separate villages. These may be called mono-caste villages.\(^{15}\) In the towns, too, caste groups or people of different occupations seem to have been segregated in separate streets. The Saddharmālankārāya refers to a street of potters (kumbal viṭhi) in Anurādhapura.\(^{16}\) The Dambadeni Asna refers to a street of mercenaries (agampadī viṭhi) in Dambadeniya.\(^{17}\)

\(^9\) SMC., p. 284.
\(^{10}\) PJV., p. 709; Rasavāhinī-Lankādīpuppatīvatthūni, p. 7.
\(^{11}\) Rasavāhinī-Lankādīpuppatīvatthūni, p. 100; Saddharmālankārāya, p. 612, p. 628; Sinhala Bōhivamsa, p. 212.
\(^{12}\) Vamsatthappakāsini, p. 606; Sahassavatthupakaranā, p. 85.
\(^{13}\) CV., XLI, 96.
\(^{14}\) Vamsatthappakāsini, p. 483.
\(^{15}\) There may also have been multi-caste villages which were occupied by people of different castes but in the present study it is not intended to enter into a discussion of villages.
\(^{16}\) Saddharmālankārāya, p. 460.
\(^{17}\) Dambadeni Asna, p. 2.
As Appadurai points out, in certain contemporary south Indian towns different castes lived in different streets. Weavers had separate quarters at Cidambaram. Many streets of the Tanjore town were named according to the profession of the people who lived in them. Probably this was the case in Ceylon as well.

The Badumuttava Tamil inscription of A.D. 1122 records a judgment passed by five chiefs (pāñca pradhāna) of the king Śrīvīrābāhudēvar in a dispute between washermen and blacksmiths. But the chiefs having "inquired into the former custom" made them do so. This suggests the existence of a caste hierarchy, but it is difficult to determine the exact or even the approximate place of each caste in the hierarchical system.

The system of caste duties provided an institutional framework through which members of different castes were brought into relationships with one another. For instance, a potter could exchange his products for the products of a blacksmith, or both could exchange their products for grain of a cultivator (govi). But the caste system cannot be described only as a method

19 EZ. III, no. 33; The term pāñca pradhāna occurs in the Lankāṭilaka rock inscriptions as well. But it is not known who these five officials were.
20 Outcastes such as Cāndālas excluded.
of exchanging produce or labour. The above-mentioned Badumuttāva inscription clearly shows that the washermen had to perform their caste duties to people of certain other castes without any refusal. Thus, all caste services were not reciprocal in the strict sense of the term. The phrase "... having inquired into the former custom ..." in the inscription suggests that relationships between members of two castes were defined by custom and social usage.

The Ambagamu rock inscription of Vijayabāhu I clearly shows that a distinction was made between noble and low castes. According to this inscription, Vijayabāhu I had a terrace constructed below the main terrace of the sacred foot of Adam's Peak to facilitate worship of the footprint by low castes (adhamajātin).

— 21 The Saddharmaratnāvaliya states that the jāti (birth, caste race, lineage) of those of noble birth would be noble even though they be poor.

— 22 Probably people of lower castes in return for their services received some payment in kind or cash from those of higher castes. The Purjāvaliya states that cultivators had to pay a certain quantity of grain at harvest times to washermen (radavun), drummers

21 EZ. II, no. 35.
22 SDHRV., p. 230.
When people performed their caste duties to the temple they were remunerated by being given a plot of land of the temple and sometimes by giving a daily allowance of grain from the temple. Their services to the king were in accordance with the rājakāriya system which will be discussed in the body of this work.

It is worth noting here that before the weakening of occupational character of caste restrictions due to the expansion of the economy, education and communications, there was a connection between certain castes and environment. For instance, people of the fisher caste lived close to the sea coast. The Galpāta vihāra inscription refers to a fisherman living in a village close to bemtoṭa (on the west coast). In some of the references in the literature fisher villages are referred to as muhudu asa, muhudubada and samuddatīre i.e. in the sea coast. The largely

---

23 PJV., pp. 356 - 357.
24 See below, pp. 30-32.
25 EZ. IV, no. 25.
26 Saddharmālankāraya, p. 454; Rasavāhini-Lankādīpuppattivatthūni, p. 100; Sinhala Bōdhivamsa p. 212; Fishing in reservoirs and rivers was also prevalent. The Pandaranga story in the Rasavāhini refers to a man fishing in reservoirs (p. 153). The Saddharmaratnāvaliya refers to fishing in rivers (SāDHRV., p. 449; 847). But whether this was done by a separate caste is not easy to determine.
cultivated areas were mainly inhabited by people of the govi caste. Potters were often aggregated in great numbers where an especially good supply of suitable clay was available.

The prevalence of division of labour on the basis of caste does not mean that a particular caste was restricted to only one economic activity. Very likely the medical profession was not restricted to a separate caste. As Geiger correctly points out, no reference is made to a caste of physicians. Even though certain literary sources refer to a velendakula it is difficult to establish that there was a caste of traders. Most probably what was meant by the term kula here was family. Moreover, the vocational specialization did not preclude those other than the govi caste from taking to agriculture as a supplementary or an alternative source of livelihood. The earlier mentioned mono-caste villages would have had land which was used for cultivation. It is very unlikely that such land was cultivated by people of the govi caste from other areas. According to the ninth century Sanskrit inscription from the Abhayagiri monastery stone cutters and carpenters were to be allotted one and a half kiri of fields from the land

27 GGMT., p. 33.
28 A land measurement.
set apart to finance renovation work at the monastery.
In addition, they were also given a plot of dry-land
for sowing 'inferior grains'.\(^{29}\) According to the tenth
century Mihintale tablets, five potters were given one
kiri each from the land of the Mihintale monastery
for the service of supplying five vessels a day to the
monastery. Another potter was allowed two kiri of land
and a daily allowance of two admana\(^{30}\) of rice in return
for supplying ten bowls and ten water pots every month.
One kiri and two payas of land with two admanā of rice
daily were allotted to the master-carpenter (vadu maha
ādurak) who was employed by the monastery. To each of
the two goldsmiths three kiriyas of land were allotted
and one kiri of land was given to each of the two black-
smiths who worked for the monastery.\(^{31}\) The Galpāta
vihāra inscription datable to the reign of Parākramabāhu
II refers to a coconut plantation in a village of
drummers' (beravāgama) and also to a plot of cultivated
land held by a fisherman (kevulu).\(^{32}\) About two centuries
later, i.e. in the time of Parākramabāhu VI, the
Mādavala rock inscription refers to a plot of land

\(^{29}\) EZ. I, no. 1, p. 5.
\(^{30}\) A measure of capacity.
\(^{31}\) EZ. I, no. 7.
\(^{32}\) EZ. IV, no. 25.
given to a smith named Paramanayā by the king.\textsuperscript{33}

Thus, land provided the majority of the people with sustenance and as will be seen later,\textsuperscript{34} the king with the major part of his revenue.

\textsuperscript{33} Ez. III, No. 24
\textsuperscript{34} See below, pp. 257-263.
Chapter II

LAND TENURE

The study of land tenure is based mainly on inscriptions. Most of the inscriptions of Ceylon are, in fact, legal documents which record grants of land and other benefits to individuals and institutions. These contemporary documents sometimes lay down precise details using various technical terms to define the content of the grant. One has to be wary in the use of this evidence though, for any misreading or a wrong interpretation of a term could only give a distorted picture. As L. S. Perera correctly points out, these inscriptions are not always free from ambiguity.¹

Incidental references to land tenure found in the chronicles and literary works such as the Saddharmaratnāvaliya and Pūjāvaliya are also useful, but these references cannot always be taken at their face value. Certain stories in literary works do not directly pertain to the period in which these texts were written and some stories are set against an Indian background. Moreover, literary sources in referring to the extent of land grants frequently give suspiciously

round numbers. But it is clear from the epigraphic records that such grants were not of vague extents of land. However, it has to be noted that texts written in a certain period may reflect the ideas of the time when they were written, and not necessarily of that to which they pertain.

***

It seems that the patterns of land tenure remained basically unchanged during our period. But under certain rulers, generally accepted tenurial rights were not respected. A few kings have acted in an arbitrary manner, disregarding customary practices. Māgha's reign over Rajarāja disturbed the normal political, social and economic set-up of the Island to a great extent. According to the chronicler Māgha expropriated villages and fields, houses and gardens, slaves, cattle, buffaloes etc. that belonged to the Sinhalese and gave them to Kerala mercenaries. This injustice was rectified by Parākramabāhu II of Dambadeniya who 'caused to be determined to what families the villages, fields, houses and so forth, long since seized by the alien foe belonged by heredity

---

2 CV, LXXX, 76-77.
(kulapavenikāyatte) and had them returned to their aforetime owners as before. The Pūjavaliya confirms this statement of the chronicle.

***

One of the main problems connected with land tenure is the question of rights on landed property. The terms such as 'ownership' and 'proprietor' have not been defined hitherto by any of the writers on ancient land tenure problems of Ceylon. H. W. Codrington, who pioneered the study of this subject, in his Ancient Land Tenure and Revenue in Ceylon states that "In the following pages it will be understood that the words "ownership", "proprietor", and the like are used with no precise legal significance. Whether the European legal conception of ownership prevailed in ancient India and Ceylon is doubtful". L.S. Perera in his paper, "Proprietary and tenurial rights in ancient Ceylon" uses similar terms such as

---

3 CV, LXXXIV, 1-2.
4 Pūjavaliya, 34th chapter, ed. Medhankara, p.33.
5 ALTR., p.6.
"owner", "ownership" and "inalienable ownership" but he also has not defined any of these terms.

Certainly the concept of ownership as exists in the present Ceylon is a modern one introduced by the Roman Dutch law. It seems unlikely that the absolute property in land, i.e. exclusive use and absolute disposal of land together with the right to alter or destroy the land itself, could have existed in a political organisation which had an ultimate claim on the property of individuals in order to ensure the protection it assured them. This makes it more necessary to define the terminology when explaining land tenure of ancient Ceylon. Otherwise using modern concepts in relation to ancient conditions would be anachronistic.

However, the concept of 'ownership' of land in the context of ancient Ceylon is not easy to define. The gradations between ownership and tenancy were so subtle that it is sometimes difficult to know exactly where to draw the line between the two. Therefore, what is attempted in the following pages is to examine the nature of rights over land by using the term 'ownership' to mean right to alienate land,

not that of exacting or alienating revenue or tax. Perhaps this criterion is not always satisfactory as there may be limitations on the alienation of land. In the first place the practice of alienation of land by the monasteries to others was unknown in ancient Ceylon. Secondly, as Codrington correctly points out, alienation of land by an individual of a particular village to a stranger was not welcomed by villagers. 7

M.B. Ariyapala states that in the thirteenth century, "... the king was the sole owner of land, which was given out to people by his grace either for a payment or in return for some kind of service." 8 But he has not given any evidence for his view. A similar view is held by Geiger. 9

Perera while suggesting that before the end of the eighth century there was the right of private individuals to own property 10 proceeds to discuss the question whether or not the king was the

---

7 ALTR., p.28.
8 SMC., p.140.
9 CCMT., p.50.
owner of all the land. He states that "The documents themselves on which our conclusions have to be based are ambiguous in as much as there were law-givers who intentionally propounded this theory. The fact is that there is evidence both for private and communal ownership of land as well as for a wide extension of the power of the king in respect of property in proportion to the increase of his authority and also in respect of the land over which he had proprietary rights. It is the growth of this latter development that we must trace, and which will provide the clue to this theory that the king owned all the land."

He goes on to say "This leads us therefore to the other implication that the king could in various ways acquire ownership rights similar to those exercised by long standing cultivators. In the codes of Manu this is not quite so apparent, but in the Arthasāstra it was taken for granted and was a matter of policy. In the verse from the Mahāvamsa about the fate of ownerless land the king is called putthuvisāmi (Skt. Prthvi-svami), the 'owner of the earth'. This may be a literary pun used by the author on the word assāmiko. In the inscriptions of the ninth and tenth centuries the king was often called vathimiyān-vahanse (Skt. vastu-svamin), or 'owner of land', thus emphasising
his ownership of property. It is possible, therefore, that the king gradually extended his rights over land along with the growth of his influence and power. But the acquisition of these rights must have been gradual.  

At least three reasons which prevent us accepting that the phrase *vathimiyay-vahanse* referred to above supports the view that the king was the sole owner of land can be pointed out. In the first place, the Sanskrit term *vastu* from which the word *vat* is derived could mean not only the land, but also the wealth. In fact, Perera himself states in a footnote that "In the present record however, it refers to the king, apparently as *vastu svami*, 'the owner of property', and we know it is so used in the *Mikāyasangrahaya* and in the *Kurunāgala Vistaraya*, e.g. Vijayabāhu Vathimi, Vathimi Bhuvanekabāhu and Vastuhimi Kumārayā."  

Secondly, even if the term implies the meaning 'owner of land', it does not imply that the king owned all the land. Thirdly, eulogistic terms used before the name of a king do not tell us much about the real tenurial problems of ancient Ceylon.

It is not clear how this theory of the king's sole ownership of land came to be reckoned by the writers on Ceylon. Codrington, writing in 1938, stated that "The king was bhūpati or bhūpāla, 'lord of the earth' ..." Unfortunately, he has not given the source of these particular terms. A recent scholar apparently has followed Codrington and stated "The central fact was that the king was the bhūpati, the lord of the land. He had absolute control over the manner of its disposal."

It seems that some of these scholars based their concept of the king's ownership of land largely on the literary usages such as bhūpati, bhūpāla or vathimi. The thirteenth century Saddharmaratnāvaliya also refers to the king as prthuvīsvara which may be rendered literally as 'lord of the earth'. But whether these rhetorical usages reflect the historical truth is a matter of doubt. Forming a basic conclusion on rhetorical usages without other substantial evidence seems to be improper.

Similar rhetorical usages are found also

13 ALTTR., p.5.
15 SDHRV., p.755.
in inscriptions. The phrase *lakdivu poloyana parapuren himi* is used in the inscriptions of this period in referring to kings.  

Paranavitana renders it into English as 'who is by right of descent, the lord of the young damsel that is the earth of the island of Lankā.'  

Godakumbure similarly translates the phrase as 'by right of descent husband of the damsel (namely) the soil of the island of Lankā.'  

It should be noted that in some inscriptions the phrases *Sri lankāva manusya vāsa kala Vijayarāja paramparāyen Lankāva himi* 'lord of Lankā by descent from the royal family of king Vijaya who made a human habitation of this *sri lankā*', and *taman yona parapuren lakdiva himi* 'by right of lineal succession of kings', occur in place of the above phrase. Hence it is clear that these phrases too do not imply the king's ownership of land or his economic rights but indicate only that the legal basis of the authority of the king and his political rights rested on the belief of his regular descent from the

---

16 EZ. II, no. 16; EZ. III, no. 34; EZ. V, pt. I, no. 1; pt. III, no. 35.  
17 EZ. V, pt. II, no. 16.  
18 EZ. V, pt. III, no. 35.  
19 EZ. V, pt. III, no. 43.  
20 EZ. II, no. 17.
line of previous lawful kings. In other words, this stereotyped phrase implies only that a particular king ascended the throne by right of succession without implying the king's absolute ownership of land.

An analysis of inscriptions and literary evidence shows that in certain instances a distinction was made between 'ownership' of land and the right to dues, services etc. In the Kantalāi inscription of Nissankamalla,\textsuperscript{21} reference is made to gamvarak ādi vū aya, 'a gamvara and other revenue'. An inscription of Sāhasamalla\textsuperscript{22} records a grant of gamvara hā parivāra hā siyalu sampattīya, 'gamvara,\textsuperscript{23} retinue and other wealth'. As Codrington has correctly pointed out, the term vara in the early inscriptions means 'due' or 'tax'.\textsuperscript{24} It is found in various combinations, for example in kirivar telvar,\textsuperscript{25} the last possibly being

\begin{itemize}
\item \textsuperscript{21} EZ. II, no. 42.
\item \textsuperscript{22} EZ. II, no. 36.
\item \textsuperscript{23} Paranavitana has correctly pointed out that in certain instances the term gama has been used to denote a single field or estate instead of a village (EZ. III, pp. 274-276.) Codrington too shows this meaning of the word gama (ALTR. p.1.)
\item \textsuperscript{24} ALTR. p.23.
\item \textsuperscript{25} EZ. III, no. 5.
\end{itemize}
the same as _tel badu_. 26 Hence, it is clear that such grants were limited to the transfer of royal revenue or tax and not the land itself. A passage in the Saddharmaratnāvaliya, too, mentions the grant by the king of the taxes of eighty villages to a certain chief. 27 Therefore, royal grants too cannot be taken as evidence in support for the view that the king was the sole owner of land.

The statement that a piece of land was granted by the king may convey at least two meanings. First, it could mean that the land referred to was handed over to the donee with complete proprietary rights. Originally such plots of land would have belonged to the king. In such grants the tenants of the land (if there were any) remained undisturbed but they had to transfer their services to the new 'proprietor'. It is noteworthy that in certain instances immunities from taxes were also granted along with proprietary rights. Secondly, it could mean that what was donated was merely the tax from the land which was due to the king. These plots of land were held by individuals. The original 'owners' or cultivators remained undisturbed by the grant.

26 _EZ. II, no. 4._
27 _SDHRV, p. 1003._
Furthermore, the existence of private 'ownership' is implicit in the land grants of this period. In the first place, there is no mention of consent of the king being made a condition precedent to alienation of land by individuals in any of these grants. The Galpāta vihāra rock inscription datable to the reign of Parākramabāhu II, which records a grant made by Demela Adhiśri Mahinda and his family, plainly states that the donors bought (ran dīlā gat) some plots of land from ordinary individuals before gifting them to the vihāra.28 This suggests that the donors bought the 'ownership' of the plots of land concerned. In this context the vendors had the complete right to alienate the land. The donors of the grant, too, acquired the same right by purchasing it. An inscription from Eppāvala which could be dated to the tenth century A.D.29 informs us that one paya of paddy land was sold for eight kalandas of gold. Neither in these instances nor in any other instance of individual transactions, is any reference made to obtaining prior permission from the king.

A few records also mention that the

28 EZ. IV, no. 25.
29 EZ. III, no. 18.
king bought property for donation. The Mahāvamsa states that King Gajabāhu I (A.D. 114 - 136) bought the plots of land which he donated to the Sangha. The Vihāregala inscription records that Subha (A.D. 60- 67) donated a reservoir after having bought it for five hundred pieces of money. The Nāgirikanda inscription records that King Kumāradāsa (A.D. 508 - 516) bought four vevasaras (small reservoirs) for the purpose of donating them to the Sangha. An inscription of Nissankamalla records a land grant made to an officer named Vijaya and the text makes it clear that the land was first purchased by the king before it was donated.

Therefore, as suggested earlier, if we accept 'the right to alienate land', not that of exacting or alienating revenue, as the criterion of ownership, there seems to have existed private 'ownership' of land. As the head of the political organization as well as the protector of the subjects, the king had to respect the rights of individuals. Theoretically the king must have been recognized as a spiritual overlord of all the land;

30 MV., XXXV, 118.
31 EZ., III, no. 15.
32 EZ. IV, no. 14.
33 EZ. V, pt. II, no. 17.
indeed, the prestige of such spiritual overlordship would have been essential to the efficacy of the system of royal justice, without which no 'landowner' would have been secure.

However, in practice too, the king had certain claims over most land. He could claim a certain portion of the produce as tax in return for the services he rendered to the people in maintaining order in the kingdom. The phrase ṇāvata mā mā rākṣena lesākīn raṭa hūnāṭa nubāvahāṇṭa baddak dīlā hindimī of the Saddharmaratnavaliya, 34 i.e. 'I shall live paying tax for being protected in this country', too, implies this idea. Ariyapala while commenting on this phrase states: "This cynical statement undoubtedly indicates that the people had to pay a tax merely for their existence." 35 But here too, it is clear that the king was eligible for taxes as he was the 'protector of the subjects'. According to Indian jurists such as Nārada and Vishnu, the king's revenue was for the protection of his subjects. 36

There is evidence to show that jungle

34 SDHRV., p. 373.
35 SMC., p. 134.
36 See Chapter VII, pp. 252-253.
land belonged to the king. It is said that the minister Devappatirāja of Parākramabāhu II, "had the whole of the vast forest called Mahalabujagaccha cleared by the roots, a fine village built there and in its neighbourhood a large grove of jack trees planted." 37

The king sometimes through his initiative cleared and cultivated jungle land. Parākramabāhu I, when he was ruling Dakkhinadesa, assembled all the village chiefs and entrusted them with cultivation. 38 In another instance, he laid out gardens planted with numerous trees in Dakkhinadesa. 39 Nissankamalla laid out flower and fruit gardens everywhere on the Island. 40

Parākramabāhu IV, too, had a park laid out in Titthagāma (modern Toṭagamuwa) provided with five thousand coconut trees. 41 Thus, jungle land and the land newly cultivated by the initiative of the king or his officials became royal property as there was no antecedent right of a private individual. For the king the prerogative of owning jungle land must have served a number of useful

---

37 CV., LXXVI, 49 - 50.
38 CV., LXVIII, 53 - 58.
39 CV., LXVIII, 57 - 58.
41 CV., XC, 93.
functions, including the promotion of expansion into new areas or the rehabilitation of older areas which had been deserted or devastated by disasters natural and human.

The king could grant complete proprietary rights of such property to any individual or institution. Thus, Parākramabāhu II of Dambadeniya granted to a monastery, for the purpose of holding a daily sacrificial festival of lamps, a large coconut plantation which he had laid out in his name in the immediate neighbourhood of that monastery.⁴² In another instance he granted to the minister Dēvappatirāja, as his hereditary property, the village Mahalabujagaṭṭha referred to above and other villages opened up by that minister.⁴³

Even though jungle land belonged to the king, if uncultivated small areas lay within any land of individual owners, the latter had proprietary rights over such plots. Among the land donated by certain eminent people of the period, to the Lankātilaka monastery, there was also jungle land appurtenant to cultivated land.⁴⁴

⁴² CV., LXXXV, 71 - 72.
⁴³ CV., LXXXVI, 53 - 54.
⁴⁴ S. Paranavitana, "Lankātilaka Inscriptions" UCR., 1960, p. 5.
The phrase *gaskola valpiṭa ātulu vū tānat* of the Lankāṭilaka inscriptions, is correctly rendered into English by Paranavitana as "lands appertaining thereto including trees and forests".\(^{45}\)

From the early Anurādhapura period, there is evidence to show that abandoned and ownerless land belonged to the king. Thus, thera Sanghamitta, in persuading Mahāsena to seize the land of the Mahāvihāra said: "Ownerless land belongs to the king."\(^{46}\) In commenting on this phrase, Perera correctly observes: "This was apparently the accepted practice because the Mahāvihāra monks combatted the threat, not by calling in question the principle invoked but by trying to prove that the land was never abandoned. They claimed that there were monks hidden within the premises in an underground chamber. This seems to indicate that land in continuous occupation could not be seized by the king, and that the owners in occupation had an inviolable right to the land".\(^{47}\) It is implicit in a passage of the Saddharmaratnaṭāvaliya, too, that ownerless property belonged to the king. This passage reads as *sitānan mala*

\(^{45}\) *Ibid*, p. 11.

\(^{46}\) *MV.*, XXXVII, 8.

\(^{47}\) L. S. Perera, *op. cit.* p. 3.
niyāwa asā kosol rajjuruvō sampat himivaṇṭa nisi darumalu
kenekun nāti kalatā mē sampat kavurun sāntaka vēdāyi
vicārā rajjuruvanta vēdāyi kī kalhi, 48 i.e., having
heard of the death of the setṭhi, the king of Kōsala
inquired as to who would become the owner of the wealth
when the deceased left no heir, and learnt that it was
the king who came into possession of such wealth.

It is interesting that in the Arthasastra,
which was known and studied in the Polonnaruwa period 49
the same principle is recognized. It is stated there that
a holding for which no claimant is forthcoming shall be
taken possession of by the king, 50 and that property
for which no claimant is found shall go to the king. 51

In the case of land without heir, the king
could probably exercise a residual right of overlordship
and cultivate the land. This would have been an integral
function of the king's responsibility to assure the well-
being and productivity of the land.

The Panākāduwa copper plate charter which
has been attributed to Vijayabāhu I by Paranavitana,

48  SDHRV., p. 867.
49  CV., LXIV, 43.
50  Arthasastra, ed. R. Shamasastri, Mysore, 1923, p. 208.
51  Ibid., p. 199.
embodies an order delivered by the king granting certain privileges to Sitnarubim Budalnāvan, who protected Vijayabāhu in his tender years. This charter states that even if an offence is committed by Sitnarubim Budalnāvan and his family, their share of land holdings should not be confiscated (dōsayak kalada pet pamunu nogannā koṭaca). This implies that the king could acquire the rights of confiscation of the property belonging to individuals who have committed crimes.

Apart from the rights referred to above, the king had his own private lands. Parākramabāhu I laid out a private garden in a region close to his palace, planted with trees bearing fruits and flowers. In another instance he made a number of villages for the royal use (kārapetvā rājabhōge aneke pi ca gāmake). In the

52 EZ. V, pt. 1, no. 1; ASCAR., 1949, pp. 28 - 34.
54 CV., LXXIII, 95 - 102.
55 CV., LXXIV, 49.
'Kandyan period', royal villages were called gabadāgam. A reference to gabadāgam is found in a palm leaf manuscript, the original of which may be dated back to the fourteenth century. But the absence of any other reference in the contemporary sources casts doubts on the validity of the term used in the manuscript. It is very probable that copyists of a later time added the word to the original context.

Paranavitana, while commenting on the word mutteṭtu of later times, states that it "is a corruption of the Tamil murruttu which means 'complete (murru) eating (uttu)' and is akin in meaning to the Sinhalese batgama, applied to estates of which the produce was reserved for the king. The documents of the fourteenth century and after contain references to batgama". In discussing the validity of this statement it may be pointed out that the term batgam occurs in the thirteenth century Saddharmaratnāvaliya, as well. Furthermore, it appears that batgam were not necessarily land or estates the produce of which was

56 Ralph Pieris, Sinhalese Social Organization, p. 44; p. 50; AIIR, p. 2, 4, 25, 32, 38, 40.
57 Kuruṇāgala Vistaraya, MS. (OR. 5042), B.M., fol. 11 b.
59 SDHRV., p. 339; p. 712.
reserved for the king as Paranavitana concludes. The Saddharmālankārāya records that king Kalankandetatis (A.D. 263 - 273) gave Māgama as a batgama to his minister Sangha.60 The same text states that the hero Nandimitta received a village as a batgama from king Kāvantissa (2nd Century B.C.).61

Therefore, until new sources come to light, it is rather difficult to ascertain the old Sinhalese term which denoted the plots of land set apart for the use of the king during this period.

Whether women had any proprietary rights over land is an important question to be raised. There are references to land grants by queens of this period. Queen Kalyānawatī assigned villages, fields, gardens and so forth to the monastery she built in the village named Pannasālaka.62 The Periyakulam slab inscription of Queen Līlāvati records that, having built an alms house at Anurādhapura, she endowed it with land, slaves and cattle.63 These or any other similar references are of no use in determining whether women had any proprietary

60 Saddharmālankārāya, p. 621.
61 Ibid., P. 494.
62 CV., LXXX, 35 - 36.
63 EZ. I, no. 14.
rights over land, as it is possible that such grants were made by ruling queens in their official capacity.

The Polonnaruwa Potgulvehera inscription records a building of a mandapa by Queen Candāvati, the second queen of Parākramabāhu I. Thus it seems that the consorts of kings had independent means of financing such projects. This may indicate that royal consorts owned land or derived income from land, as it was the main source of income. The Cūlavāṁsa states that Vijayabāhu I deprived his queen who disturbed the peaceful life of the vihāras, of her revenues. Two inscriptions of the first quarter of the fourteenth century record that Vihāramahādevi, the chief consort of two brother kings, granted certain plots of land to the Rūnumaha vehera.

Some other inscriptions throw valuable light on the proprietary rights of women over land. The Galpāta Vihāra rock inscription records a list of lands and serfs dedicated to that monastery by Demelādhikārin Mahinda and some of his relatives including his mother. A Sinhalese inscription of the thirteenth century found on

64 EZ. II, no. 39.
65 CV., 1x, 54.
66 EZ. IV, no. 19.
67 EZ. IV, no. 25.
the rock wall of the cave temple at Nakolagane in the Kurunāgala district records the gift of certain plots of land to the Nāgala monastery by Sumedhādevi (wife of a royal officer), her two sons and another person.68 Vijayabāhu I is said to have given land, food and clothing to women of good families who were unprotected or widowed.69 These instances may show that women too had proprietary rights over land.

Another problem related to land tenure is the question of joint tenure. Members who participated in the grant recorded in the Galpāta Vihāra inscription referred to above were Kahambalkulu Mindalnā, his mother, his nephews called Kadānā and Vijayānā and another relative named Kaṭuvitāna Sātambā.70 It is noteworthy that in this grant other relatives of the family of Kahambalkulu Mindalnā such as Kaṭuvitāna Sātambā also participated along with the members of the nuclear family. The participants in the grant made to the Nāgala Vihāra recorded in the inscription on the rock wall of the cave temple at Nakolagane were Sumedhādevi, her two sons Parākrama Ambara and Mīnd Ambara and another donor called

68 CJSG., I, p. 170.
69 CV., IX, 78.
70 EZ., IV, no. 25.
Prince Girihaṇḍa Sāṭa. In this instance too, Prince Girihaṇḍa Sāṭa did not belong to the nuclear family of Sumēdhādevi and her sons. Most probably he was a more distant relative of the family concerned. Thus, it seems that in certain cases members outside the nuclear family also had land rights jointly with those of the nuclear family. On the other hand, it is possible that the donors referred to above donated their individual plots of land having inscribed the grant on one inscription, but the balance of probability favours the first supposition.

Inheritance of land took place within a framework of kinship. An inscription of the twelfth century, which has been assigned to the reign of Nissankamallā by Paranavitana, records a permanent land grant (pamunu) by the king to an officer named Vijayā. In this grant the king lays down the rule that the plots of land granted should not be given to those who are neither Vijayā's descendants nor his relatives. Two rock inscriptions from Kōṭṭange, assigned by Paranavitana to the reign of Lokeswara II, record a permanent land grant (pamunu) made by the king to Loke Arakmenāvan.

71 CJS. I, p. 170.
72 EZ. V, pt. II, no. 17.
73 EZ. IV, no. 11.
In this inscription too, it is laid down that the land should be enjoyed by those of the Māpanḍī family (Māpanḍī vaṁsaya). The Māpanḍī vaṁsaya in this context indicates members or kinsmen of the Māpanḍī family. Some of the plots of land which were donated to the Galpāṭa monastery by the members of Kahambalkulu Mindalnā's family were the hereditary property of the grantors, apa si parapurāva valandā ē. In this instance, parapura could mean not only the descent of the nuclear family but also that of the other families which were related to it by matrimony. The existence of these provisions for the future of family land holdings suggests that there was a reliance on the continued ability of the institution of kingship to guarantee law and order.

We cannot unfortunately say anything definite about communal ownership of land. Most probably pasture lands and areas set apart for recreation in villages were considered communal property.

***

Land attached to religious establishments held a significant place in land tenure. The Buddhist
Sangha, the main religious body of Ceylon, gradually developed into one of the institutions which had the largest vested interest in the country. The Hindu priesthood was patronized by some section of the population, though it was not as influential as the former. There are many references to donations of land, serfs and villages to religious institutions by pious kings and the nobility during this period as well as in earlier periods.

Land was held by religious institutions under various forms of tenure. First, they had proprietary rights over certain plots of land. As shown earlier, some plots of land donated to monasteries were the plots bought by the donors prior to donation. Thus, the donors first obtained the right of ownership which they later transferred to religious institutions. Parākramabāhu II granted to a vihāra a large coconut garden which he had laid out in his name in the immediate neighbourhood.

75 W. A. Warnakulasooriya, "Inscriptional Evidence bearing on the nature of religious endowments in Ancient Ceylon", UCR., April, 1943, p. 71.

76 EZ. III, no. 30; EZ. IV, no. 19, no. 25; EZ. V, pt. III, no. 26; CJSG. II, p. 21; ASCM., VI, p. 67; CV., LX, 14, LXXX, 35 - 36, LXXXV, 71 - 72.

77 See above, Pr. 44-48.
of that vihāra. 78 Therefore, some of the grants made to religious institutions, involved the transfer of a form of ownership which included and amounted to more than a share of the produce.

The Gaḍalādeniya rock inscription (A. D. 1344) refers to a donation of a 'plot of land' to the Gaḍalādeniya temple by an officer of the king. That plot of land was held on service tenure by him (tamanta divelata siti). 79 As will be seen later 80 land held under service tenure by officials were to be held only for the period of service. Therefore, in this grant, really not the land was donated to the temple but only the produce from the land. However, it seems that this type of grant to religious institutions was very rare during the period under review.

Thirdly, the grant of a village or a piece of land to a religious establishment could involve the right to labour from its inhabitants along with some or all of the rights mentioned above. Vijayabāhu I granted to the community of Bhikkhus the whole district of Alisāra together with the people dwelling there. 81 The Lankātilaka

78 CV., LXXXV, 71 - 72.
79 EZ. IV, no. 12.
80 See below, Pr. 68-69
81 CV., LX, 14.
inscriptions of the fourteenth century\textsuperscript{82} records that certain plots of land were donated to that temple along with the people living there. The Polonnaruwa Ḥāṭadāge portico slab inscription of Nissankamalla\textsuperscript{83} records that he dedicated land to that establishment along with serfs. In these instances religious establishments were entitled to receive services of the tenants or slaves as well as to the share of the produce.

Land granted to individual monasteries belonged to them alone and not to the Sangha as a whole. When a grant was made it was recorded in most cases as to which particular monastery it was donated.\textsuperscript{84} As Gunawardhana has pointed out, the fact that the inmates of monasteries came to believe that property granted to their monasteries belonged to them alone and not to the whole Sangha is evident from the boundary disputes between monks of the Mahāvihāra, Dakkhina vihāra and the Abhayagiri vihāra recorded in the chronicles.\textsuperscript{85} It is noteworthy that some of these grants were made not merely to a monastery but to a particular institution within a monastery.

\begin{itemize}
\item \textsuperscript{82} Paranavitana S., "Lankātilaka Inscriptions" UCR, 1960, p. 14.
\item \textsuperscript{83} EZ. II, pp. 87 - 88.
\item \textsuperscript{84} CV., LXXX, 39 - 40; EZ. II, pp. 87 - 88; EZ. III, no. 30.
\item \textsuperscript{85} R.A.L.H. Gunawardhana, \textit{op. cit.}, p. 68.
\end{itemize}
such as a parivena or a shrine. It remains to be examined whether individual monks had proprietary rights over land. According to an inscription of the thirteenth century A.D. from Kōṭṭange, Mahathera Abhaya of Vilgammula granted some plots of land including the pamunu called Kalama to the Sangha. It is recorded in an earlier inscription from the same place that this Kalama had previously been granted by Lōkāśvara to Loke Arakmēnā for valour shown in campaigns against the Colas. This land could have come into the possession of the monk Abhaya in any one of the following ways. In the first place, he could have owned the land before he entered the order. Secondly, the right could have devolved upon him through inheritance after he joined the order. This explanation recognizes the right of a monk to inherit property. Thirdly, he could have been offered the land, but if this were so, he must have made the grant sometime later as he refers to the land as belonging to him and not as recently received. Parākramabāhu II ordered that the land which had been assigned for the provision

86 Ibid.,
87 EZ. IV, p. 89.
88 EZ. IV, pp. 82 - 90.
89 R.A.L.H. Gunawardhana, op. cit, p. 113.
of priestly requisites and those which belonged to monks in common (ganasantaka gāma) and to individuals (puggalika gāma) should be clearly distinguished. 90 This reference to individual land of monks reiterates the idea of individual 'ownership'.

Probably monks did not have the same rights over their personal property as the laymen did for such 'ownership' would have come into conflict with the rules of the vinaya. But it is not clear how far the rights of individual monks extended. The property of Mahāthera Abhaya mentioned above is termed pamunu and involved the most complete 'ownership' possible within the tenure system but it is not clear whether a monk could transfer his property to a layman by way of sale.

Having examined the various forms of land holding and ownership, it is perhaps necessary to examine the terminology used in relation to land tenure during this period. Inscriptions as well as literary sources contain references to a form of tenure called pamunu. 91 The term pamunu is similar to Sanskrit pravēni and Pāli pavēni which mean in lineage, succession, inherited or

90  CV., LXXXIV, 3 - 4.

permanent possession. The contexts in which the term is used indicate that this word conveyed the same meaning. The Devanagala rock inscription of Parākramabāhu I, registers a pamunu grant made to Kitnuwaragal in recognition of his services in the Aramana campaign.\(^{92}\) The same inscription records that the grant should last as long as 'the sun and moon endure'. It is evident that the king granted proprietary rights over these plots of land to Kitnuwaragal to be enjoyed in hereditary succession. An inscription of Nissankamalla which records a pamunu grant made by the king to an officer named Vijaya, clearly states that the land should be enjoyed in hereditary succession.\(^{93}\) It is noteworthy that the same pamunu grant is referred to as me (this) ninda (possession) at the end of the record. The term ninda is derived from Sanskrit nija, which means 'one's own'. Hence it is evident that very often pamunu was the most complete 'ownership' possible within the tenure system. The holders of pamunu, whether they were individuals or institutions, had 'permanent' rights over them.

The king granted pamunu properties to individuals not as wages in lieu of their services but

\(^{92}\) EZ. III, no. 34.

\(^{93}\) EZ. V, pt. II, no. 17.
mostly as a reward. The Kantalāi Gal Asana inscription records that pamunu properties were bestowed on those who had performed extraordinary deeds (daskam kalavunṭa pamunu denu kala).\(^9\) The Kottange rock inscription records that King Siri Sangbo Lokāsvara granted pamunu properties to Loke Arakmenā for the valour shown in disposing the Colas.\(^9\) It was in recognition of the services in the Aramana campaign that Parākramabāhu I granted pamunu properties to Kitnuwaragal.\(^9\) Most plots of land that had been granted to religious establishments were also pamunu properties.

The Kapuruvaḍuoya pillar inscription of Gajabāhu II, which records a pamunu grant made to Dā-perā Rangidāge Hinābi by the king, lays down the rule that the treasury officials should not enter that plot of land.\(^9\) The Doratiyāva saṇṇasa of the Kotte period, which records a similar grant also states that treasury officials should not enter the gifted land.\(^9\) It is implied in both these cases that those plots of land were granted with immunities

---

95 EZ. IV, no. 11.
96 EZ. III, p. 321.
97 EZ. V, pt. III, no. 38.
from taxation.

Inscriptions as well as literary sources contain references to various terms such as pamunu, pavēni, pamunu parapuru, hirasanda pamunu, him panumu and him pamunu. An examination of these terms and the contexts in which they are used, suggests that all these terms refer to only one type of tenure. Just like the Sinhalese term pamunu, the Pāli pavēni is also similar to the Sanskrit pravēni which means permanent or hereditary possession. Therefore, pamunu and pavēni are identical. Wickramasinghe translates the term pamunu as 'permanent grants' and parapuru as 'heritages'. He renders the term hirasanda pamunu into English as 'grants which are in force so long as the sun and moon exist'.

Codrington, while commenting on the phrase pamunu parapuru, states that: "the word (pravēni) occurs

99 EZ. II, p. 147; p. 285; EZ. III, no. 33; EZ. IV, no. 11; EZ. V, no. 1; no. 38.
100 CV., IV, 31; CV., IX, 75.
102 EZ. I, p. 179; EZ. II, p.132; EZ. IV, p.87; p. 308.
103 Sinhala Thūpavamsa, p. 158; Saddharmālankārāya, p.485.
104 SDHRV., p. 315.
105 EZ. II, p. 127.
in its Pāli form as pāvēni-gāma in the reign of Vijayabāhu I (1056 - 1111, Mhv. LV, 31; IX, 75). Under Parākramabāhu II (1234 - 1269) kulappaveni in Mhv. LXXXIV, 12; LXXXVII, 19, 31, 22, is rendered in the contemporary Pūjāvaliya by pamunu parapuru and mav-piyan-ge kula parapura, property in unbroken succession (Sanskrit parampara) in the family of mother and father. The word parapura is common in Nissankamalla's inscriptions (1187 - 96) preceded by and perhaps qualified by pamunu, but Mhv. LV, 31 referred to below in the sections on pamunu, shows that the two were not identical.  

But Codrington himself agrees that pamunu was to last as long as the sun and moon exist. This implies the permanent rights over land. It is understood that a permanent holding goes in family succession. The term parapura implies exactly the same. Though the terminology used in various instances differs, it is justifiable to assume that pamunu and parapuru or pamunu parapuru are identical.

The same argument may be applied in explaining the term hirasanda pamunu. If the holdings were to be in force as long as the sun and moon exist,

107 AITR., p. 12.
they had to be passed in hereditary succession. Therefore, *hirasanda pamunu* is identical with *pamunu* and *parapuru* or *pamunu parapuru*. The Devanagala rock inscription confirms this view. It records a land grant made to Kitnuwaragal by Parākramabāhu I. At the end of the record it is clearly stated that it was a *pamunu* grant. But in the same record it is stated that the grant should endure as long as the sun and moon exist, (*hirasanda pavatina tek sitinā paridi*). 109 Hence it is clear that *pamunu* and *hirasanda pamunu* were the same. Further evidence in support of this view is found in the Kōṭṭange rock inscription. 110 It records a grant of *hirasanda pamunu* made by Lōkēsvara to Loke Ārakmēnā. The record contains the provision that the land should be enjoyed by those of the Māpanḍi family. It is implied though not plainly stated, that the grantee belonged to the Māpanḍi family.

Though there are only a few vague references to *him pamunu* 111 and *bim pamunu* 112 in the literary sources, it may be surmised on the above analogy that these

110  EZ. IV, no. 11.
111  Sinhala Thūpavamsa, p. 38.
112  SDHRV., p. 315.
two terms also denoted the same type of tenure.

***

The numerous officials of the kingdom enjoyed land in consideration of their services. These plots of land are referred to as *divel* in the contemporary records. The term *divel* is related to Sanskrit *jīvita* and Pāli *jīvana* which mean life, existence, subsistence and livelihood. Land held on *divel* tenure therefore, could be land held for subsistence for the period of service. The Oruvala sannasa of the Kotte period refers to *sēvā divelata dun banagama oruvala*, i.e. Banagama Oruvala which was given on service tenure. According to the inscriptions of Nissankamalla, he appointed ministers and provided them with *divel* lands, serfs, cattle etc. Thus it is clear that *divel* land was land given for maintenance in consideration of certain services or offices held by individuals. Unlike *pamunu* properties, these were not permanent possessions. The Oruwala sannasa referred to above records that the village Oruvala was earlier granted to two Brāhmanas in return

113 EZ. II, p. 105; p. 147; pp. 165 - 178; EZ. IV, p. 102.
114 EZ. III, no. 3.
115 EZ. III, p. 165.
for their services, but later the king, being pleased with one of them, gave it to him as a permanent holding. 116

It is pertinent to examine whether all in the service of the king were given land or a part of the revenue accruing from land in lieu of their services. The account of the Cūlavamsa on general Mittā's temporary seizure of the throne in the second year of the reign of Vijayabāhu IV, 117 throws some light on this problem. Mittā, on his accession to the throne, at first tried to win the support of the Sinhalese and foreign elements of the army by giving them their pay. It is implied in this account that soldiers were paid in cash. The Saddharma-lankārāya too, refers to the king paying wages to his army in cash. 118 This leads to the supposition that at least soldiers, especially mercenaries, were mostly paid in cash.

Some of the plots of land given to those in the service of the kingdom 119 probably belonged to the king. It is also possible that sometimes the king

116 Ibid.
117 GV. LXX, 1 - 20.
118 Saddharmalankaraya, p. 647.
119 Certain forms of service appear to have been more of a general form of duty to the king than an incident of tenure. See Chapter III, pp. 115-117.
commuted his share of taxes from the land of individual owners to his officers. In either case, divell holders did not have complete proprietary rights over them.

'Land' held on service tenure could be granted to religious establishments by the officers who held them. This would involve only the transfer of the share of the produce. The Gaḍalādeniya rock inscription referred to earlier, records a grant of a field which had been on service tenure by an officer named Sēnālankāḍhikāra. Even though such transfers of 'land' were possible, the officers had to continue rendering their services to the king in spite of the transfer.

The religious establishments, too, used forms of service tenure. The Kaludiya-pokuna inscription and many other records indicate that monastic employees were granted maintenance lands. A certain share of the produce from the plots of land held permanently by these religious bodies may have been given to those who performed various services to them. It is very likely that the recipients themselves had to cultivate such land.

Most of the inscriptions which record

120 EZ. IV, no. 12.
121 EZ. III, p. 265.
immunities granted to religious establishments by kings show that the peasants working these plots of land were not expected to provide services to the king. The grant of immunities from service due to the king would have implied that these obligations were to be performed for the monastery instead.

***

Inscriptions of the ninth and tenth centuries refer to a form of tenure named pāṭṭa. The term pāṭṭa in these records, according to Paranavitana, is derived from Sanskrit pāṭhya which denotes the instrument of lease. He suggests that pāṭṭaladdan were middlemen who farmed the revenue due from the tenant on behalf of the lord. But this system of revenue farming does not seem to have taken root in the Island for there are no references to the existence of middlemen after the tenth century.

The term ukas in relation to land indicates the common mortgage in Ceylon in the present day, by which the mortgagee receives all or part of the land in lieu of

123 EZ. II, no. 2; no. 3; EZ. V, pt. III, no. 34.
124 EZ. I, no. 4, no. 7; EZ. V, pt. I, no. 10.
interest, the mortgagor having power to redeem the property at any time after paying the debt. In the inscriptions of the ninth and tenth centuries, the term ukas has been used to denote a similar meaning. But there is no evidence to suggest that the same system prevailed during the twelfth, thirteenth and fourteenth centuries. The practice may have either died out for a certain period or continued without break, though the records do not mention it. The balance of probability seems to be in favour of the second inference for there are references to the practice of mortgaging movable property during this period.

***

Inscriptions as well as literary sources refer to various land measurements such as yāla, kiriya, amuna and pāla. The Tamils used different terms such as vēli and karisu to denote

126 EZ. I, no. 7; no. 8; EZ. III, no. 27.
127 See Chapter V, p. 199
128 EZ. II, no. 13, p. 78; EZ. III, p. 321; Sinhala Thūpavamsa, p. 38.
130 EZ. III, no. 24, p. 239; EZ. IV, p. 78; PJV., p. 50.
131 EZ. II, p. 105; PJV., p. 49.
133 SMC., p. 155.
measurements of land. A yāḷā was equivalent to twenty amunas and kiriya or karisu was equivalent to four amunas.\textsuperscript{134} Pāla was a quarter of an amuna.\textsuperscript{135}

It is noteworthy that the extent of land is defined in the records by the quantity of seeds required to sow it. But this would not have been an accurate method of measuring land as different localities possessed different degrees of fertility. Therefore, the sowing extent of one amuna of land in one area, may have differed in size from that in another area, even though the sowing capacity of that land was also referred to as an amuna in extent.

***

In some of the land grants, the size and type of the land granted are recorded along with the subject of the grant and the names of the donor and the donee. But another group of records describes the land grants by using various terms such as gama\textsuperscript{136} 'village, field, or estate'; kumbura\textsuperscript{137} 'field'; vatta\textsuperscript{138} 'garden'.

\textsuperscript{134} EZ. III, pp. 189 - 190; EZ. II, p. 231; SMC., p. 155.
\textsuperscript{135} EZ. II, pp. 220 - 235; SMC., p. 156.
\textsuperscript{136} CV., LXXX, 35 - 40; LXXXVI, 53-54; EZ. II, pp. 219-229.
\textsuperscript{137} EZ. III, no. 23, pp. 223 - 234; EZ. IV, no. 25, p. 203; Sinhala Thūpavamsa, p. 177.
\textsuperscript{138} EZ. IV, no. 25, p. 203.
etc. without giving the exact size of the land. The extent of these holdings cannot be ascertained precisely. Since the share of the produce and taxes were also granted, it is difficult to know exactly in every case whether the grantees had any proprietary right over them. Furthermore, without knowing population figures, the extent of cultivated land, the average size of a family and such demographic data, it is difficult to carry out a proper study on the size of holdings.

But one gains the impression that the size of land holdings of institutions and individuals differed in varying degrees. The king, as the head of the political organization possesses large tracts of land in various parts of the kingdom. The king's grants of proprietary rights over land to religious establishments in different provinces, grants of 'land' on service tenure and permanent grants made to individuals for their merits provide evidence in support of this view.

Some of the religious establishments, too, owned large extents of land. There was no uniformity in the size of the land holdings of these establishments. It may be surmised that more important religious centres were endowed with more land than less important ones.

Religious institutions sometimes held land at a considerable distance from the geographical
location of their establishments. The Lankatilaka rock inscription of Bhuvanekabahu IV, records that fourteen yālas of paddy fields were granted to that temple from Badalagoda (modern Batalagoda) in the Kurunagala district.\footnote{S. Paranavitana, "Lankatilaka Inscriptions", UCR., January-April, 1960, p. 5.} Batalagoda is situated about forty miles from the Lankatilaka temple.

The nobility too, derived income from large areas of land or owned fairly large extents of land. During the reign of Queen Kalyānawatī, the General Ayasamanta built a parivena and for its support assigned villages and fields together with male and female slaves.\footnote{CV., LXX, 39 - 40.} The minister Devappatirāja of Parākramabāhu received from the king the whole village of Mahalabujagaccha as his hereditary property.\footnote{CV., LXXXVI, 53 - 54.}

It is likely that the great majority of the farmers held only small plots of land to meet the needs of their families. Obviously, they would not have been in a position to donate or transfer them to others as those plots were their mainstay of livelihood. Since most of the inscriptions record the grants of land by those who had something extra to donate or transfer, there is no evidence enabling us to determine

\[\text{References:}\]
\footnote{S. Paranavitana, "Lankatilaka Inscriptions", UCR., January-April, 1960, p. 5.}
\footnote{CV., LXX, 39 - 40.}
\footnote{CV., LXXXVI, 53 - 54.}
the size of the holdings of these farmers, which must have been of a smaller size.

Evidence seems to suggest that there were also landless groups who worked as domestic servants\(^\text{142}\) or in the fields and gardens of others.\(^\text{143}\) Various inscriptions record grants of land to individuals and religious institutions along with 'slaves' or people living in those lands.\(^\text{144}\)

In most cases a rice field constituted the nucleus of a unit of land holding. Other types of land such as small plots of jungle land (valpita)\(^\text{145}\) house gardens (gevatu)\(^\text{146}\) and plantations (gasakola)\(^\text{147}\) are treated as appurtenances of the field. In some references relating to grants of land, not only the appurtenances stated above, but also men\(^\text{148}\) and animals\(^\text{149}\) are mentioned as attached to the land. This would indicate that the peasant cultivators belonging to one unit of land were permanently attached to it.\(^\text{150}\) These plots of land would have mostly belonged to the

\(^\text{142}\) Butsarana, p. 185; SDHRV., p. 219, p. 448.
\(^\text{143}\) Chapter IV, pp. 154-156.
\(^\text{144}\) EZ. I, no. 14; EZ. II, no. 23.
\(^\text{145}\) EZ. III, no. 23; pp. 233-234.
\(^\text{146}\) ALTR., p. 8.
\(^\text{147}\) EZ. III, no. 23; EZ. IV, no. 25.
\(^\text{148}\) EZ. III, no. 23.
royalty, nobility and to religious establishments.

***

As to the procedure adopted in transferring land, the evidence is limited. Inscriptions contain only incidental references to individual transactions. This is because only the grants of the king and the grants of individuals to religious institutions have been recorded in them.

The practice of granting various privileges and land or the transfer of land by royal edicts inscribing the details of the grant on a copper plate seems to have started with the reign of Vijayabāhu I. The discovery of the oldest known copper plate charter dated in the twenty-seventh year of Vijayabāhu disproves Nissankamalla's claim to have introduced into the Island the copper plate grants. This practice continued in the 'Kotte period' for we find in the Oruvala sannasa, Vēragama sannasa and Palukumbura sannasa that grants of land were inscribed on copper plates.

Evidence seems to suggest that the

151 ASCAR, 1949, pp. 28 - 34; See above T.P. 51, footnote 83
152 Ibid.
153 EZ. II, no. 27, p. 154.
154 EZ. III, no. 3.
155 EZ. V, pt. III, no. 46.
156 EZ. III, no. 25.
procedure adopted in grants of divel and pamunu varied as the conditions of these tenures differed. Divel involved transfer of rights only for a limited period and they were recorded separately by an officer named jīvitapoththakin. The Polonnaruwa slab inscription of 1105 A.D. too refers to an officer who maintained records of divel grants. It is very likely that such grants were not recorded on copper plates as they were not meant to be permanent.

In certain cases granting of special honours or permanent land rights (pamunu) by the king was done ceremoniously by pouring water on the hands of the donee. This practice prevailed in the 'Anuradhapura period' as well. The Panākṣaduwā copper plate charter which records special privileges given to Lord Budal by a king identified as Vijayabāhu I, gives a graphic picture of the king delivering his order in the assembly and furnishes the information that the king while delivering the order held an iron mace in both hands.

When permanent land grants were made the details of the grant were sometimes recorded on a rock or a pillar. In most of the grants, just as in a deed of

157 See Chapter VII., pp. 277-278.
159 MV. XXV, 24 - 25; EZ. III, no. 12.
160 ASCAR., 1949, pp. 23 - 34.
today, the names of the donors, recipients and witnesses giving their full identity and occupations are recorded.\textsuperscript{161} In certain cases precise boundaries of the plots of land transferred are also stated.\textsuperscript{162} The practice of setting up of boundary stones prevailed\textsuperscript{163} as at present. Some records refer to the exact date, month and year in which the grant concerned took place.\textsuperscript{164} All these references suggest that some form of legal procedure was adopted in transactions concerning land.

\textsuperscript{161} EZ. V, pt. II, no. 26; EZ. IV, no. 25.
\textsuperscript{162} EZ. III, no. 23; EZ. IV, no. 11.
\textsuperscript{163} EZ. III, no. 23.
\textsuperscript{164} EZ. IV, no. 30, no. 35; EZ. V, pt. II, no. 21.
Chapter III

IRRIGATION

The subject of irrigation has already been discussed by several scholars. Topics such as the construction of irrigation works have been dealt with by Brohier\(^1\) and Parker.\(^2\) The majority of the irrigation works mentioned in the chronicles have been identified by Nicholas\(^3\) and Codrington.\(^4\) These scholars have pioneered the study of this subject but have overlooked certain important aspects such as labour organization for irrigation works, maintenance and distribution of water.

This study attempts to concentrate on three main points. In the first place, the scattered writings on irrigation pertaining to our period are systematized with the inclusion of new material brought to light subsequently. Secondly, some of the views held by earlier scholars have been revised. Thirdly, a few aspects which had been overlooked by them are discussed.

***

\(^1\) Ancient Irrigation Works of Ceylon, 3 parts, Colombo, 1934-35
\(^2\) "The Irrigation Works of the Holy Kings of Ceylon", CHJ, nos. 1-4, 1954-55, pp. 52-68
\(^3\) "The Irrigation Works of king Parākramabāhu I", CHJ, nos. 1-4, 1954-55, pp. 52-68
\(^4\) "Notes on Ceylon Topography in the Twelfth century", CHJ, vol. IV, nos. 1 & 4, 1954-55, pp. 130-152; Some of the identifications of Codrington are also cited in CV., part 1, Tr. p. 280, note 5
Most ancient civilizations have developed on river banks and sought to meet the needs of an increasing population by utilizing the resources of rivers and rainfall for constructing irrigation works. In the opinion of Parker, the art of reservoir construction owes its origin to the early peoples of the Euphrates valley and it spread westwards and southwards reaching the Dravidian speaking districts of India possibly before the 'Aryan' invasions of the country and it was transmitted from there to Ceylon. Even though the Euphrates valley had developed irrigation schemes much earlier than Ceylon, Parker's view is not supported by conclusive evidence. It is generally believed that the first migrants from India came to Ceylon from north India and not from southern India. The earliest known irrigation works of southern India cannot be traced to a period earlier than the Christian era. We are also informed by the Vedas that the Aryan speaking people were acquainted with small scale irrigation in north India. However, as Nicholas points out, neither in north India nor in south India did they develop an irrigation system of the magnitude of that of Ceylon.

5. Ancient Ceylon, p. 353
6. UHC., pt. I, pp. 87-97; p. 219
8. Rigveda, III, 33, 6; IV, 19, 2
The people who migrated from India to Ceylon established themselves in river basins of the dry zone. They had to cultivate the adjoining lands for their livelihood. But in those dry regions they were faced with the problem of the conservation of water.

The dry zone area consists mainly of the northern, north-eastern, north central, eastern and south-eastern parts of the country, and it forms about seventy per cent of the total land area. This area receives rains only of the north-eastern monsoons and during the rest of the year (from May to September) the rainfall is very low. The main problem of the dry zone is therefore to provide an adequate supply of water for agricultural and domestic use during the dry season.

The Aryan speaking migrants responded to this challenge with efforts directed towards water conservation. The knowledge which they had acquired in India may have been of great use to them in their venture.

10. Probably the “Aryan speaking settlers, who first landed in the coast of the dry zone, did not concentrate on the wet zone due to the scarcity of flat land, the difficulty of penetrating and cleaning the thick forests of the latter.
However, one cannot altogether rule out the possibility that the earliest inhabitants of Ceylon practised some form of irrigation. But there is no evidence for this view.

It is likely that large reservoirs gradually developed from small works. In the legendary account of Vijaya, it is stated that the earliest Aryan speaking people who arrived in Ceylon established villages in places where water was readily available.\textsuperscript{11} According to the same legends the first tanks were constructed at Anurādhagāma \textsuperscript{12} in the fifth century B.C. Some of the earliest inscriptions indicate that there were individually owned small tanks.\textsuperscript{13} Moreover, the earliest reservoirs constructed by kings were not very large. As Nacholas points out, the Tissavāpi constructed in the reign of Devānapīyatissa was originally small but was enlarged in or after the fifth century A.D.\textsuperscript{14}

The chronicles, other literary works and the lithic records pertaining to our period refer mainly to irrigation works undertaken by kings. However, it should not be concluded that irrigation works were never constructed by other individuals or institutions during this period. It is possible that some of the tanks constructed by others

\textsuperscript{11} MV. VII, 43-44
\textsuperscript{12} MV. IX, 11
\textsuperscript{13} EZ. III, no. 15; EZ. IV, no. 14
\textsuperscript{14} UHC., vol. I, pt. I, p. 220
during the reign of a particular king were attributed to the initiative of that monarch by the chronicler with a view to extolling the king's philanthropic nature. The hundreds of ancient irrigation works scattered over the greater part of the Island could not have been constructed solely on the initiative of the monarchs or the 'central government'.

But compared with the early 'Anurādhapura period', private or joint irrigation works of villagers seem to have been less in number during the period under consideration. From about the first century B.C. some of the individually 'owned' reservoirs or the income derived from them were donated to the Buddhist Sangha. Though there are no similar donations recorded in the lithic records and chronicles of our period, the Kahambiliyāwa slab inscription attributed to the reign of Vikramabāhu I, suggests the possibility that private individuals could own small irrigation works. This inscription states that king Vikramabāhu ordered the villagers of Girinarugama not to cut canals and convey water from the canal which Kandan Vallan had constructed to lead water from the Mahakalāhoya to irrigate his paddy fields at Girinarugama.  

injunction prohibiting others cutting branch canals from the canal of Kanda Pilantavan Vallan indicates that it was not uncommon for private individuals to construct small irrigation works on their own.

Reference is made to a Kunuru canal, Saboku canal and Yakdessapeta canal in the Polonnaruwa slab inscription which has been dated to 1105 A.D., as boundaries of a certain plot of land. These must have been small in size and are not mentioned in the chronicles and were probably the works of villagers.

In the lists of names of the irrigation works restored by the rulers of this period as given in the chronicles and other literary works there are certain reservoirs which are apparently not found in the sources of previous periods. Thus, the Dighavattuka, Kittagabodhipabba and Sarahera which were restored by Vijayabahu I, are not mentioned in the lists of construction by earlier rulers. This may be due to one or more of the following reasons. First, the names of the reservoirs may have changed from time to time and it is possible that after restoration the king concerned altered the name of the reservoir. In

17. EZ., V., pt. II., no. 26
18. CV., LX., 50
19. Ibid.
20. CV., LX., 48
Such cases it is difficult to identify them even if the chroniclers had referred to their constructions. Secondly, it is possible that the chroniclers failed to recognize the works of certain monarchs who did not patronize the Sangha generously. Thirdly, those reservoirs may originally have been constructed by villagers, but the chronicles did not record the works by ordinary people but only those by kings, their relatives and court officials.

***

During the reign of Vijayabahu I, many reservoirs and canals were restored, but the only original construction was Buddhagunavāpi. It was constructed by his Uparāja Virabahu. According to Nicholas, this is certainly the large breached reservoir now known as Budugunavāva in the south-east corner of Uva.

There was internal political turmoil in the country from the death of Vijayabahu I till Parākramabahu's accession to the throne. As evidenced by the Cūlavamsa, during this period of conflict between various parties that sought political power, many reservoirs and weirs of canals were destroyed. Although the chronicle attempts to

21. CV., IX, 80-83
22. Ibid.,
23. C.W. Nicholas, "Historical Topography..., JRASCB, N.S. VI, special number, 1959, p. 57
24. CV., LXI, 63-66
exaggerate the miserable conditions that obtained in the country before the rise of Parākramabāhu I, it is reasonable to conclude that no large new reservoirs and canals were constructed during this period as the political conditions were not favourable for such constructions.

The reign of Parākramabāhu I was distinguished by remarkable developments in the field of irrigation. Apart from the restoration of a large number of irrigation works, he is credited with the construction of new irrigation works of enormous dimensions. When he was ruling Dakkhinadesa, his main constructions were around Dāduru-oya or Jajgaranadī. Across this river, the monarch constructed three dams at different points which were headworks of three river-diversion schemes. The first was known as the Koṭṭhabadda dam, the second as the Sūkaranijjhara dam and the third the Dorādattika dam.

---

25. The boundaries of Dakkhinadesa during this period were: on the north the Kalā oya; on the east, the eastern half of Mātale district through udadumbara to Adam's Peak and on the south the Bentota river. (C.W. Nicholas, Irrigation Works of King Parākramabāhu I", CHJ., IV, nos. 1-4, 1954-55, p. 52)

26. CV., LXVIII, 16-18
27. CV., LXVIII, 32-36
28. CV., LXVIII, 37-38
According to the Cūlavamsa, the Kotthabaddha dam was an old work in ruin. Pārākramabāhu's workmen extended it. First a canal was constructed from the dam site to the Rattakara district. Then the dam was built and water diverted by it was discharged to the sea through the canal. As a result cultivation was made possible on the land lying on either side of the canal. In the opinion of Nicholas, the present Sengal oya was in all probability the canal which once diverted the waters stored by the Kotthabaddha dam. He also asserts that the Kotthabaddha scheme was situated in the area between the Rattambala oya and the Dāduru oya.

The second scheme on the Dāduru oya was constructed at the confluence of the two tributaries Sankhavaddhamānaka and Kumbhīlavāna. Nicholas identifies these tributaries with the modern Hakvaṭunā oya and Kimbulvāna oya respectively. The site of the dam was called Sūkarani jhāra and from the dam a canal conducted water to the Mahāgallaka tank. The only canal which enters Māgallavāva is the present Ridibāndi āla which must there be identified with that constructed by Pārākramabāhu I.

29. CV., LXVIII, 16-25
30. CV., LXVIII, 30-31
31. "Historical Topography...", JRASCB, N.S., VI, special number, 1959, p. 51
33. CV., LXVIII, 32-33
34. "Historical Topography...", JRASCB., VI, 1959, p. 97
35. CV., LXVIII, 34-35
known as Demodera. With the object of increasing his revenue, Parakramabahu converted into fields the lands extending from Demodera to Sukaranijjhara.

The third scheme on the Daduru oya was built at Doradattika. There, too, he constructed a dam and water was conducted through a canal to irrigate the fields lying between Sukaranijjhara and Doradattika.

Parakramabahu drained into the rivers the great marshes and swamps in the Pancayojana district. They are not mentioned in the chronicles, so that it is reasonable to conclude that these were minor works to which the chroniclers made only passing references.

Thus we see that during the 'Polonnaruwa period', more irrigation works were constructed in Dakhinadesa than in the 'Anuradhapura period.' This may be due to the expansion of the population in that region and Parakramabahu's desire to increase his revenues as ruler of Dakhinadesa in his effort to extend his power over the whole Island.

37. C.W. Nicholas, "Historical Topography...", JRASC, vol. VI, 1959, p. 97
38. CV., LXVIII, 36-38
39. CV., LXVIII, 37-38
40. Ibid.
41. CV., LXVIII, 51-52
When Parākramabāhu became the sole ruler of the Island he continued to pay attention to irrigation. His outstanding achievement during this period was the construction of the gigantic reservoir, Parakkamasamudda. The chronicler gives the following description of this unique work: "By damming up the Kāragangā by a great barrier between the hills and bringing its mighty flood of waters hither by means of a vast canal called the Akāsagangā, the Ruler created that king of reservoirs continually filled with water and known by the name of Parakkamasamudda." 42

The identification of this great reservoir was a matter of dispute a few decades ago. Major Forbes surmised that the series of lakes connected by the Alahāra canal might be the waters which Parākramabāhu named after him. 43 L.De.Zoysa who contested Forbes' view indicated in 1856 that the Padavikulam or Padavi of the Vanni district could be the sea of Parakrama. 44 Later, much work has been done on the subject by Brohier, Hocart, Geiger and Nicholas. Their contributions have proved that Parākramabāhu, when he was ruling Dakhkhinadesa, enlarged Pandāvāya and gave it the name Parākramasamudra, and that he constructed another large reservoir.

42.CV., II, TR. LXXIX, 24-26
43. Quoted in L.De.Zoysa's paper, "Account of the Works of Irrigation constructed by King Parākramabāhu contained in the sixty eigth and Seventy ninth chapters of the Mahāvanso with introductory remarks", JRASCB., III, no.9, 1856-58, p.126
44. Ibid., pp.127-129
in the name of Parākramasamudra close to Polonnaruwa, after he had become the sole ruler of Ceylon. According to Nicholas, the identity of this large and more important Parakkamasamudda, described in the seventy ninth chapter of the Culavamsa, with the present restored reservoir at Polonnaruwa, to which the same name has now been given is beyond doubt. His arguments may briefly be summarized as follows.

The Karaganga which was dammed to build the Parākramasamudra is the modern Ambanganga and the Akāsagangā is the Angammādilla canal. The Pūjavaliya states that king Mahāsena dammed the Karaganga to supply water to Minihiravāva. The reference here is to the dam on the Ambanganga. The Ambanganga was known as Karagangā in ancient times. The Culavamsa indicates that four canals which issued from the great Parakkamasamudda passed close to specified sites outside the walled city of Polonnaruwa. Therefore it is clear that the present restored Parākramasamudra at Polonnaruwa was the Parakkamasamudda, the king of reservoirs, described in the Culavamsa chapter seventy-nine.

45. C.W. Nicholas, "Irrigation Works of King Parākramabahu I", CHJ. IV, nos. 1-4, 1954-55, p. 60; "Historical Topography...", JRASCB. N.S., VI, 1959, p. 185
46. JRASCB. N.S., VI, 1959, p. 185; CHJ. IV, nos. 1-4, 1954-55, pp. 60-1
According to the Cūlavamsa there were many sluices in the great Parakkamasamudda. Seven of these are mentioned together with the names of the canals which led water from the reservoir. One of the names of these canals, Tungabhadrā, is mentioned in a slab inscription of Nissankamalla. Therefore, it may be assumed that the list of names given in the chronicle is reliable.

Further the Cūlavamsa states that two canals issued from the reservoir Tovavāpi (Tōpāvāva). According to Nicholas, when the Parākramasamudra was completed, Tōpāvāva would have been incorporated into it, but the old name was apparently retained for the uppermost portion of the new extensive reservoir. The Parākramasamudra is referred to as Mahāsamudra in the Pūjāvaliya and in the Rājaratnākara. This reservoir had a subsidiary source of water supply from the north-west by a canal from Giritalakavāpi through two intervening reservoirs named Kadduravaddhamānkkka and Arimaddavijayagāma. This link connected two gigantic irrigation systems both originating in the Ambanganga, the older system including Minneriya,

47. CV, LXXIX, 40-48
48. EZ, V, pt. II, no. 17, p. 204
49. CV, LXXIX, 46-47
50. "Historical Topography...", JRASC, VI, 1959, pp. 185-186
51. Pūjāvaliya 34th Chapter, ed. Medhankara, p. 24; Rājaratnākara-ya, p. 32
52. C.W. Nicholas, Irrigation Works...", CHJ, IV, 1954-55, p. 61
Giritale, Kavudulla and Kantalai tanks and the canals linked with them, and the later system including the Parākramasamudra and the network of small canals and tanks under it. 53

The Gūlavamsa states that Parākramabāhu also built the reservoirs Parakkamatalāka, Mahindatalāka, Ekāhavāpi and Parakkamasāgara. 54 Of these Mahindatalāka cannot be taken as an original construction for we know that a reservoir which bore the same name was constructed by Aggabōdhi I. 55 It is therefore very doubtful whether Parākramabāhu constructed an original reservoir of the same name. In all probability the reference is to the old Mahindatalāka tank, and Parākramabāhu may have only restored it. It is stated in the Gūlavamsa that the Parakkamasāgara was filled by the waters of the Kāragangā by means of a canal named Gōdāvari. 56 According to Nicholas, the Gōdāvari canal was a branch of the Ākāsagānga which flowed far northwards and the Parakkamasāgara appears to have been a reservoir between the Parākramasamudra and the Minneri oya to the north of Polonnaruwa. 57 The two other reservoirs, Parakkamatalāka and Ekāhavāpi, cannot be identified with any degree of certainty.

53 C.W. Nicholas, "Historical Topography...", JRASC., N.S., VI, 1959, p. 186
54 CV., LXXIX, 27-29
55 CV., XLII, 29
56 CV., LXXIX, 57
57 "Irrigation Works of King Parākramabāhu I", CHJ., IV, nos. 1-4, 1954-55, pp. 63-64
Parākramabāhu brought into existence also a well organized system of canals. These were known by the names of Gambhīra, Hēmāvati, Nilavāhinī, Salalavatī, Vettāvatī, Tungabhādrā, Ngalalagānā, Campā, Candabhāga, Nammadā, Sarasvatī, Vēnumatī, Yamunā, Sarabhu, Nēranjarā, Bhagiratī, Avātaganā, Tambapanni, Aciravatī, Kāverī and Sōmāvati. Nicholas states that all these came under the canal system connected with the Parākramasamudra. But it is likely that at least one of these canals was not connected with the area watered by the Parākramasamudra or its associated canals. The Cūlavamsa specifically states that the Tambapanni canal flowed from the Ambāla tank towards the north. The Ambāla tank was restored by Parākramabāhu in Dakhinadesa. Codrington

58. CV., LXXIX, 40-57; These names show how strong the tendency was to name new constructions after ancient Indian river names. Hēmāvati is the Skt. Haimavatī, a name of the Ganges. Sarasvatī and Yamunā are well known rivers in north India. Vettavatī is a tributary of the Yamunā, now called Betwā. Nammadā is the Skt. Narmadā. Tungabhādra, Kāverī and Gōdāvari are names of rivers in the Deccan. Tamraparnī was a river in south India. Gomatī was a tributary of the Ganges. Aciravatī was the ancient name for the river Raptī. Candrabhāga, Avātaka and Vēnumatī were also Indian river names. (see CV., II, Tr. p. 127, note 1)

59. "Historical Topography...", JRASCB., N.S., VI, special number, 1959, pp. 186-187

60. CV., LXXIX, 51

61. CV., LXVIII, 47
has identified the place Ambāla as a region in the Nikavāraṭiya district. Nicholas himself has indicated that this identification is correct. There is a considerable distance from Nikavāraṭiya to Polonnaruwa. Since the Tambapanni canal flowed northwards from the Ambāla tank in Dakkhinadesa it could not have come under the canal system linked with the Parākramasamudra of Polonnaruwa.

Apart from the above mentioned canals, Parākramabāhu also constructed canals to divert the waters of the Mahavāligangā. Reference is made to the Gōmati canal which flowed eastwards from the river, the Malapaharā, the Saturuddhā, Nibbindā, Dhavalā and Sīdā canals which flowed eastwards. Parākramabāhu constructed a canal named Kālindī which flowed in a southerly direction from Manihira or the Minneriya tank and another canal named Gōdāvartī which branched off from the Kāragangā and flowed to the Parakkamasāgara.

---

63. "Historical Topography...", JRASCB., N.S., VI, 1959, p. 97
64. CV., LXXIX, 51-52
65. CV., LXXIX, 52-53
66. CV., LXXIX, 53-54
67. The Indian river Yamunā was also known as Kālindī. (see: CV., II, Tr., p. 121, note 1)
68. CV., LXXIX, 54
69. CV., LXXIX, 57
Field work done by Brohier and Nicholas suggests that the chronicler's description regarding these irrigation works is correct. They have identified the present Kālinga-yōdi-āla with the Aciravati canal of the chronicle. The Gomati canal which flowed to the east on the right bank of the Mahāvāliṅgaga has been surveyed for a distance of twenty-one miles. 70

In his inscriptions Nissankamalla claims to have constructed many reservoirs. Nevertheless his claims cannot readily be accepted as the inscriptions often credit him with achievements which were not his own. But he restored some of the existing ones. These will be discussed subsequently.71

The country would not reap the benefits arising from Parākramabāhu's irrigation works for a long time. During the reign of Nissankamalla there was considerable prosperity as evidenced by his inscriptions. The bounteous donations made by him72, the wide range of cultural activity73 and the liberalization in taxation74 during his reign imply that he possessed large economic resources. His death

71 See below, pp. 106-107
72 EJ. II, nos. 14, 15, 17, 18
73 EJ. II, nos. 14, 15, 17.
74 EJ. II, nos. 14, 15, 17, 19
inaugurated an era of political instability. There are no means of ascertaining whether the major irrigation works were maintained properly during the last phase of the Polonnaruwa period. Māgha invaded Ceylon and continued to occupy Rajarāṭa for forty years. According to the Gūlavamsa when Polonnaruwa was recovered by Parākramabāhu II, tanks, ponds, dikes and other similar units of the irrigation system had their bunds breached and were found to be devoid of their deep water. Moreover, the environs of Polonnaruwa were devastated and covered with shrubs. Therefore it may be inferred that the irrigation system continued to decline throughout the first half of the thirteenth century. The chronicles only refer incidentally to the efforts made by Parākramabāhu II and his successors to restore the irrigation works. However, it does not appear that a considerable amount of work was done in this direction. During their reigns only little attention was paid to the construction of new irrigation works. Vanni Bhuvanekabāhu is credited with the construction of the Kurunāgala tank. In one instance five officials of Vikramabāhu III constructed a dam and a canal close to Venderupitiya, 753 cubits in length.

75. CV., LXXXVIII, 111-113
76. CV., LXXXVIII, 94
77. H.W. Codrington, "Gampola Period of Ceylon History", JRASCB., XXXII, no. 86, 1933, p. 261
78. Report on the Kāgalla District, p. 79
Settlements expanded in the wet zone after the decline of Polonnaruwa. In this region the construction of large reservoirs was not indispensable as in the dry zone for there was sufficient and regular rainfall. Moreover, the waters of perennial rivers could be diverted through canals for irrigating large stretches of paddy land. But cultivation on a very extensive scale was not feasible in this area as the land available for cultivation was limited. Frequent and devastating floods which were accompanied by erosion hindered productive agriculture.

***

A large number of reservoirs were restored by various monarchs of this period. When Vijayabāhu I ascended the throne he found many reservoirs and canals breached. The important reservoirs restored by him were: Mahāhēli, Sarahēru, Mahādattika, Katunnaru, Pandā, Kalalahallika, Erandēgalla, Dhīgavattuka, Mandavātaka, Kittaggabōdipabbata, Valāhassa, Mahādāragallaka, Kumbhīlasobbhaka, Paṭṭapāsāna and the reservoir called Kāna.

79. UHC. I, pt. II, pp. 718-719
80. CV., LX, 48-51
81. Ibid.,
Among these the reservoirs named Mahāhēli and Mahādattika were originally built by Dhatusena and the former is identical with the present Māeliya reservoir near the 12th milestone on the Ibbagamuwa-Polpitigama road. Mahādatta is identical with the present Mādatugama near the 51st milestone on the Dambulla-Kākārāva road. The Katunnaruvāpi was probably situated at Katnoruwa about four miles north of the 7th milestone on the present Galgomuwa-Nikavārajīya road. The present Panduvasnuwaravāva, situated three miles away from Īettoipola, is the Pandavāpi restored by Vijayabāhu I. It was considerably enlarged by Parākramabāhu I as part of his plan to develop his principality of Dakkhinadesa. The Kalalahallika reservoir may have been situated around modern Madahapota five miles north of the 16th milestone on the Kurunāgala-Dambulla road. The Erandegalla reservoir was the Enderagalla built by Aggabōdhi II, and is now known as the Ināmaluwa reservoir in the North.

82 CV., XXXVIII, 50; PJV., p. 729
83 C.W. Nicholas, "Historical Topography...", JRASC., N.S., VI, 1959, p. 100
84 Ibid., p. 167
85 C.W. Nicholas, "Irrigation Works...", CHJ., IV, 1954-55, p. 58
86 C.W. Nicholas, "Historical Topography...", JRASC., N.S., VI, 1959, p. 104; Geiger, CV., Tr. I, p. 219, note 1
87 CV., LXVIII, 39
88 C.W. Nicholas, "Historical Topography...", JRASC., VI, N.S., 1959, p. 108
Central Province.\textsuperscript{89} The Mandavātaka tank could be identified with the present Mahamadagalla, a breached reservoir, on the Mahā Oya about two miles north of Polpitigama.\textsuperscript{90}

According to Nicholas, the present reservoir named Mahagalkadavala may be the Mahādāragallaka reservoir repaired by Vijayabahu I and subsequently by Parākramabahu I. The Kumbhīlasobbaka reservoir may be identical with Kumbālakavāpi built by Mahāsena. Probably it was the present breached reservoir known as Nirāmullavāva.\textsuperscript{91} The Paṭṭapāsāna is identical with the Nāccadūwa reservoir\textsuperscript{92}, and Kāna with the Mahakanadarāwa, a large breached reservoir near Mihintale.\textsuperscript{93} The reservoirs named Sarahēru, Dhīgavattuka, Kīṭṭaggabōdhipabbata and Valāhassa cannot be identified with any degree of certainty.

In addition to the restoration of these reservoirs Vijayabahu repaired the damaged Tilavatthuka canal and filled the Manihira or the Minneriya reservoir with water.\textsuperscript{94} As Nicholas has correctly pointed out, Tilavatthuka canal was the branch of the main Alisāra canal which flowed into the Minneriya reservoir.\textsuperscript{95}

\begin{itemize}
\item \textsuperscript{89} Ibid.; pp. 199-110
\item \textsuperscript{90} Ibid., p. 99
\item \textsuperscript{91} UHC., I, pt. II, p. 554
\item \textsuperscript{92} C. W. Nicholas, "Historical Topography...", JRASCB., 1959, p. 102
\item \textsuperscript{93} C. W. Nicholas, UHC., vol. I, pt. II, p. 557
\item \textsuperscript{94} C. W. Nicholas, "Irrigation Works...", CHJ., IV, 1954-55, p. 66
\item \textsuperscript{95} C. W. Nicholas, "Historical Topography...", JRASCB., VI, 1959, p. 160
\item \textsuperscript{96} "Historical Topography...", JRASCB., VI, 1959, p. 183
\end{itemize}
The maintenance of irrigation works was not an easy task. A few decades after the restorations of Vijayabahu I, some of the above mentioned reservoirs had to be restored again by Parakramabahu I. The reservoirs known as Mahādattā, Valāhassa, Kumbhīlasobbhaka, Mahādāragallaka, Paṭṭapāsāna, Kāna, Katunnaru, Kalalahallika and Pāṇḍavāpi are known to have been again restored by him.

There is no evidence for considerable activity in the field of irrigation from the death of Vijayabahu I till the rise of Parakramabahu as ruler of Dakkhinadesa. During this period of political turmoil the economy of the country was at a low ebb.

On assuming the rulership of Dakkhinadesa, Parakramabahu developed the resources of that principality in order to obtain the means to dominate the whole Island. In Dakkhinadesa he restored the reservoirs named Setṭhivāpi (present Hettipola in Giritalāna Korale), Tabbavāpi (Tabbova vāva in Rājavanni Pattuwa), Ambavāsavāpi (Vāsiyāva near Nikavāraṭiya), Giribāvāpi (Giribāva), Māndikavāpi (Madiyava 3 miles north of Maho), Moravāpi (probably the large breached reservoir south of Kalā oya), Sādiyaggāmavāpi (present Hātigamuwa mahāvāva on the Maho-Nikavāraṭiya road), Mālavallivāpi.

97. CV., LXXIX, 31-36
98. CV., LXVIII, 47-49
99. CV., LXVIII, 39
(probably Malavelliya near Chilaw), Kāliyāpī (kaliyawaḍana in the Piṭigal Korale north), Kannikaragālavāpi (Velangolla reservoir on the Ibbāgamuwa-Polpitigama road), Sukaragāmāvāpi (Uṟāpotta in the Kiniyama Korale), Mahakirālavāpi (Mahagirilla north of Nikavāraṭiya), Giriyāvāpi (Giriyavāva on the Galgomoowa-Nikavāva road), Rakkhamānavāpi (Rakvāna in Nikavā-Gampahe Korale), Ambalavāpi (Ambale reservoir on the Kurunāgala-Puttalam road), Kaṭunnaruvāpi (Katnoruwa on the Galgomoowa Nikavāva road), Tintinigāmāvāpi (Siyambalagāmuwa Mahāvāva on the Pādeniya Anurādhapura road), Kirāvāpi (Kirāvāva east of Chilaw), Karavūthvilāttavāpi (karavīta and Vilattāva reservoirs near Bingiriya), Munuruvāpi (present Mālagane 2 miles south east of ḍettipola), Kāsallavāpi (Kasālla on the Kalāvāva-Galewela road), Kalaluhallikāvāpi (probably present Maḍahapota on the Kurunāgala-Dambulla road), Gītisigāmukāvāpi (Galgāmuwa reservoir), Polonnarutāla vāpi (probably Polonnarutarālavāva 15 miles south-west of Nikavāraṭiya), 100 Mahāgallakāvāpi 101 (probably Māgallevāva near Nikavāraṭiya), Tilagullakāvāpi (Talagalle váva south of Māho) 102 and Buddhagāmakaniḷijhara. 103

100. "Irrigation Works...", CHJ., IV, 1954-55, pp. 57-59
102. "Historical Topography...", JASCSB., VI, 1959, 97
103. C.W. Nicholas, "Irrigation Works...", CHJ., IV, 1954-55, pp. 57-59
104. CV., LXVIII, 45
In this connection one remark may be made regarding the Buddhagamakani, jhara reservoir. A tenth century inscription from Mānīkdena in the Mātale district refers to a Buddhagamakera. Vijayabahu I captured a Cola fort at Buddhagama. In his attempt to conquer Rājarata, Parākramabāhu I once sent troops to Bōdhigamavara. In all probability Buddhagamakani, jhara reservoir must have been situated close to Mānīkdena in the Mātale district.

Some of the other reservoirs such as Cattunatavapi, Pātalavapi, Kittakandhakavapi, Jallibavapi, Udumbaragamavapi, Nalannaruvapi, Uttarālavapi, Dhavalavittika-gamvapi, Nūlavārikavapi; and Visīratthavapi supposed to have been restored by Parākramabāhu when ruling Dākkhinadesa cannot be identified.

After becoming the sole ruler of the Island Parākramabāhu I continued the implementation of his plans for increasing revenue. Among the works he restored during this period were Jayaganga (present Yōda Ala), Manihire (the Ninneri reservoir), Suvannatissavapi (the Kavudulla reservoir), Dūratissavapi (probably Kandalama), Kalavapi (the Kalāvāva), Brāhmanagamavapi, Nālikeramahāthambavapi (the present breached Polvattavāva) about twelve miles south of

105. ASCAR., 1908, pp. 14-15
106. CV., LVIII, 43-44
107. CV., LXX, 88
108. CV., LXVII, 43-50
Polonnaruwa), Raharavāpi (to the north of Polonnaruwa), Giritalākavāpi (the present Giritalavāva), Kumbhīlasobbha vāpi (probably the present breached reservoir known as Nirāmulla vāva north of the 16th milestone on the Kurunāgala-Dambulla road), Kānavāpi (the large breached reservoir near Mihintale called Mahakanadarāwa), Padīvāpi (the Padaviyavāva), Katīvāpi (present Kattiyāwa close to Eppāwala), Paṭṭapāsāna vāpi (the Nāccadūwa reservoir), Mahānavāpi, Mahānāmamattakavāpi (probably present Jiant's tank), Vaddhanavāpi, Mahādattavāpi (present Mādatugama between Dambulla and Kākirāwa), Vīravāpi (present Vīravila near Tissamahārāma), Valāhassa vāpi, Śūramāna vāpi, Pāsānagāma vāpi (present Pānankāmam in the Mannar district), Kālavalli vāpi (near Buttala), Kāhali vāpi, Angagāma vāpi (Angamuwa vāva in the N.C.P.), Hillapatthakhandavāpi, Madaguvāpi, Uruvela vāpi (the present breached Etimolavāva 8 miles southeast of Monarāgala), Pandukolambavāpi (in Rohana) and Kānagāmavāpi.

109. C.W. Nicholas, "Irrigation Works...", CHJ., IV, nos. 1-4, 1954-55, pp. 65-68. Some of the above mentioned reservoirs such as Uruvelavāpi, Katīvāpi and Angagāmavāpi have been identified by Codrington.
Regarding Kānaṇagāmavāpi one remark may be made here. Nicholas identifies it as a reservoir situated north-west of Kalāvāva in the Anurādhapura district. In favour of this identification he cites the evidence of the Cūlavamsa (LXXII, 176-204) which suggests the existence of a place named Kānamulla near Kalāvāva. But the Cūlavamsa itself informs us that there was a place called Kānagāma in Rohana near Māgama. Therefore it is also possible that Kānagāma reservoir was in this village and not in the Anurādhapura district.

After the reign of Parākramabāhu I, the number of irrigation works restored was small. According to his own inscriptions Nissankamalla had many reservoirs constructed. But in view of the fact that the achievements of Nissankamalla are exaggerated in these records one has to be cautious in utilising the information found in them.

111.CV., XLV, 38-45
It has been found that most of the reservoirs which Nissankamalla claimed to have constructed were in existence before his reign. Thus the reservoirs such as Nissankasamudra and Pandāvāpi mentioned in his lithic records must be identified with reservoirs that existed before his reign. The Nissankasamudra was the Parākrama Samudra re-named by Nissankamalla who effected some repairs to it. An inscription which mentions Nissankasamudra was found near the embankment of the Parākramasamudra. Nissankamalla also claims to have constructed Pandāvāpi. Before Nissankamalla's reign, a reservoir of this name had been restored by Vijayabāhu I and enlarged by Parākrama-bāhu I. It is very likely that Nissankamalla after renovating the same reservoir claimed that he constructed it. An inscription found at the bund of the Galamātiyānavāva states that Nissankamalla built the Pandivijayakulam reservoir in commemoration of his successful expedition to the Pāṇḍyā country and that its construction was completed in one day. It is difficult to prove that Nissankamalla

112 S.M. Burrows, "A Year's Work at Polonnaruwa", JRASCB, X, no. 34, 1887, pp. 64-67
113 C.W. Nicholas, "Historical Topography...", JRASCB, N.S., VI, 1959, p. 178
114 CJSG, II, pp. 168-173; Inscription no. 373;
115 CJSG, I, p. 160
116 CV, LX, 48-53
117 CV, LXVIII, 39
118 CJSG, II, pp. 186-199, inscription no. 600
invaded the Pāndya country with success. Moreover, it is impossible to complete the construction of a reservoir in one day. Considering the difficulties which Nissankamalla had to face from rival groups and his benevolent attitude to subjects which was mainly due to his need to maintain himself in power, it is difficult to believe that he commandeered all the labour necessary to complete such a project in one day. Such an act would have inconvenienced many people who lived in distant regions. On the other hand Parākramabāhu I established the village Pāṇḍuvijayagāma in honour of his 'successful' invasion 119 of the Pāndya country. According to Nicholas, this village may have included a reservoir. 120 Therefore, it may be surmised that the reference in the inscriptions of Nissankamalla is to the restoration of a reservoir which he re-named. Apart from these reservoirs Nissankamalla may have restored many others for his inscriptions refer to restoration of many reservoirs 121 but their names are not given.

---

119. Initially it was successful. But the end was disastrous.
120. C.W. Nicholas, "Historical Topography...", JRASCb., N.S., special number, 1959; p. 46
An inscription found on a slab near Batalagodavāva in the Kurunāgala district mentions the repairs done to that reservoir by an officer named Cuddamanā in the fifth year of the Queen Kalyānawati. The Minipe slab inscription which may be assigned to the first fifteen years of the thirteenth century refers to the restoration of the Minipe dam by a general named Bhāma. It is said that the princes Vijayabāhu and Virabāhu restored reservoirs and canals in Polonnaruwa during the reign of Parākramabāhu II.

But on the whole the number of reservoirs and canals repaired or constructed after the fall of Polonnaruwa seems to be comparatively small. The dry zone area gradually turned out to be less important during this period. This entailed decline and neglect of irrigation works.

It would be pertinent to examine here the reasons which induced kings to construct and restore irrigation works. One objective was the increase of royal revenue. Even the chroniclers who extolled the activities of kings, have indicated this as a reason. But apart from

121. CJSG. I, p. 215; EZ. IV, no. 10
122. EZ. V, pt. 1, no. 12
123. PJV., p. 752
124. UHC. I, pt. II, pp. 713-719
125. CV., LXVIII, 36; 54-55
this, the construction or restoration of irrigation works was considered a means of acquiring merit. As Appadurai points out, certain south Indian inscriptions quote verses from religious treatises extolling the merit of constructing reservoirs. In some of these inscriptions reservoir construction is looked upon as one of the seven meritorious acts which a man ought to perform during his life-time. It is justifiable to assume that similar beliefs prevailed in Ceylon, too. King Mahasena who is credited with the construction of many reservoirs, was deified by the people after his death. Whichever their motivating cause, the increasing of revenues or the gaining of merit, the construction and restoration of irrigation works obviously had the effect of bringing economic prosperity to the country.

Moreover, the irrigation works had to be constructed and restored to meet the demands of food supply. It is very unlikely that all the reservoirs and canals mentioned in the chronicles were in use at the same time.

126 A. Appadurai, ECI., vol. I, p. 200
127 ET., III, p. 64, note 3; p. 92
128 Even to this day the rural peasantry refer to him as Mahasen Deviyō (God Mahasen).
Some of the earlier irrigation works may have been destroyed in the course of time. Later rulers may have used the site of some of those reservoirs and constructed new ones which bore different names.

The reigns of Vijayabahu I and Parākramabāhu I witnessed large scale restorations of irrigation works. The amount of restoration work in this period as well as in other periods depended essentially on two factors; political stability in the country and the ability of the monarch to organize resources. When either of these was lacking such work was not possible.

***

The dry zone, both in the north and in the south, is not a completely flat plain, but a lowland interrupted by ranges of ridges spreading fan-wise. This topography was of great assistance to irrigation engineers in their construction works. The gaps along the low ridges running across the plains, both in the northern and in the southern dry zone, were used efficiently to impound the flow of water running through them.
Two different systems of irrigation were adopted by the Sinhalese depending on physical conditions. According to the first, water was impounded in reservoirs, from which it was diverted to the paddy fields by means of excavated canals. For the construction of reservoirs an embankment was built across a valley where water was available from seasonal streams and rivers.

According to the second system part of the water flowing down the rivers was turned into excavated canals which conveyed water to more distant lands and reservoirs. For this purpose dams were constructed across the rivers below the off-takes of the canals in order to divert into these a large quantity of water. Parākramabāhu's irrigation schemes on the river Jajjara may be cited as good examples of this method. A large number of the reservoirs in an area were connected with each other by excavated canals so that the excess water from one reservoir flowed through these canals to another.

129. AIWC., pt. 1, p. 2; H. Parker, Ancient Ceylon, p. 347
130. AIWC., pt. 1, p. 2
Most of the reservoirs, whether big or small had certain common characteristics. The inner and outer faces of their embankments were given a uniformly flat slope. In order to allow the passage of flood water, there were some openings (flood escapes) in the embankments. The term for flood escape or waste weir used in the chronicle is वारि-सम्पाता or वारिपात। Each reservoir had at least one sluice in order to divert water to canals leading into other reservoirs or small canals or paddy fields. When there were more than one sluice these were at different levels to enable the outward flow of the water on different water levels. The sluices were constructed with burnt bricks or stones. The brick-works were laid in excellent mortar made with lime burnt from coral. The stone-work in all the sluices consisted of long thin slabs of considerable breadth.

All the sluices consisted of three essential parts: (a) A rectangular open well or pit (बिसोको-तुवा) from a spot near the crest of the dam down to a certain depth; (b) An inlet culvert through which the water passed into this well; (c) A discharging culvert from

131.CV.,XLVIII,48;LXVIII,35
the well (bisōkōtuwa) to the foot of the outer slope of the bank. To the bisōkōtuwa an apparatus was fitted by raising or dropping of which the culvert could wholly or partially be closed. This is called āvarana in the chronicle. The bisōkōtuwa was designed to regulate the outward flow of the water. Two invariable and peculiar features in the bisōkōtuwas were that they were always rectangular and the faces of their walls were polished.

The length and height of the embankments varied from reservoir to reservoir. Roughly an embankment of a fairly large reservoir was more than 20 feet in height. According to the figures shown by Nicholas the embankment of the Kantalavāva was about one mile in length, its height was about fifty two and a half feet. The embankment of the Giant's tank was about three miles in length. In certain places the embankments reached even a height of ninety feet.

Considering the magnitude of the ancient reservoirs one would conclude that there undoubtedly had to be conscious and proper planning. The inter-relationship between large reservoirs and canals also suggests that they were well planned, and minute details of construction engineering properly understood. It is very unlikely

---

132. CV., LXXIX, 69
133. H. Parker, Ancient Ceylon, p. 379
134. Ibid., p. 380
135. UHC. I, pt. 1, p. 359
136. ATNC., pt. 1, p. 28
that ordinary people who supplied labour for building these works had prepared the plans too. There must have been a body of specialised technicians for such planning but unfortunately the available evidence does not throw any light on this question.

The chief technicians responsible for planning, design and construction of irrigation works were undoubtedly men of highest technical ability. We have no evidence of their methods of planning, their devices used for survey and the instruments they used. But it is known from surveys carried out in recent times for the restoration of ancient schemes that the instruments they used were capable of the same accuracy as modern instruments. In some sections of the ancient canals the fall was only six inches in a mile and in most sections one foot in a mile. 137

***

So far sufficient attention has not been focussed on the subject of labour organization which was essential for large irrigation works. The irrigation works of Ceylon were enormous in size and number. Henry Parker states that the reservoirs of Ceylon still rank among the finest and greatest works of its kind in the world. Sir Henry Ward, a governor in British times, commenting on

137 C.W. Nicholas, "A Short account of Irrigation Works upto the 11th Century", JRASCB., VII, N.S., 1959, p. 57
138 Ancient Ceylon, p. 382
one of the ancient reservoirs described it as a "marvellous work which must have occupied 50,000 men for many years".  

Such irrigation works could not have been constructed without a properly organized labour force. Only a few scattered references in the chronicles and other literary works of our period are available regarding the labour organization for such purposes. Although too scanty to provide a definite clue, one would not be wrong in suggesting that a form of rājakāriya was used for the construction and restoration of large irrigation works.

The Gūlavamsa, in describing Parākramabāhu's irrigation works in the Rattakara district of Dakkhinadesa, states "as in this district there was a lack of stone masons the far famed (king) called altogether in great number: coppersmiths, blacksmiths and goldsmiths and made them lay down a dam". It is stated in the Sinhala Bōdhiyamsa that prince Dīgābhaya ordered some of the families of his principality to send one person from each to serve him. The Saddharmaratnāvaliya indicates that all laymen had to perform rājakāriya (gihi geyi vasana kala raja daruwanta rājakāriya hō kala mānava).  

---

139. Quoted in AIWC., pt. II, p. 10  
140. See chapter IV, pp. 156-157  
141. CV., LXVII, 25-26  
142. p. 154  
143. SDHRV., p. 819
it was in accordance with this rājakāriya system that Parākramabāhu employed coppersmiths, blacksmiths and goldsmiths to perform the services of stone masons. This may also indicate that the king could employ any group or any caste of people to perform certain essential functions.

Since no evidence is available to suggest that smiths and ordinary labourers who participated in the construction and restoration of irrigation works were paid regular wages, it is reasonable to presume that they had to provide their services in accordance with the practices of the rājakāriya system.

During the reigns of later Sinhalese rulers the subjects had to perform rājakāriya mainly in or around their villages under normal circumstances. However, in times of war and in other exceptional circumstances they were expected to serve anywhere. For the construction of forts and roads, the British in the early nineteenth century compelled the villagers to work in areas far away from the locality of their homes. This caused deep dissatisfaction and resulted in protests and disturbances. The reason given

by the people for their protests was that working outside their provinces was contrary to the ancient usages of the country.  

But we are not in a position to determine precisely the nature of the functioning of the rājakārīya system during the period under discussion. The Cūlavamsa evidence which shows how Parākramabāhu employed coppersmiths blacksmiths and goldsmiths of the Rattakara district to perform the services of stone masons, as there was a lack of stone masons in that district, may suggest that rājakārīya services were used close to the villages from which such labour was commandeered. But in the Cūlavamsa itself it is stated that on one occasion Vijayabāhu IV brought together from all over the Island turners, potters, bamboo workers, goldsmiths, painters, brick layers and carpenters to restore the ruined city of Pulatthinagara.  

Judging from the functioning of the rājakārīya system in more recent times, however, one may be justified in surmising that normally rājakārīya services were used as closely as possible to the village of the service supplier. Utilizing rājakārīya far away from the localities of the service suppliers during times of warfare and for special projects may be considered exceptions.

---

145. Ibid., p. 190
146. CV., LXXXVIII, 105-108
147. see also below, pr. 156-157
The **Samantapāśādikā** contains some of the rules and regulations which governed the maintenance of irrigation works. 148 According to these regulations, if any person damaged the dam of a reservoir by driving cattle over it, it was considered an offence. 149 If one caused village boys to drive cattle over the dam of a reservoir and those cattle caused the dam to be breached with their hoofs, the person who caused the cattle to be driven had to accept the responsibility. Whenever the bund of a reservoir was breached by cattle led into the reservoir, the person who led them or who caused them to be so led was responsible for any damage done. 150 The context in which these regulations are found suggests that those responsible for damaging or breaching the dams of reservoirs had to pay compensation. 151 According to the same regulations when one cut or caused someone to cut a tree growing in the waters inside a reservoir, and if the waves raised thereby

---

148. The **Samantapāśādikā** was written a few centuries earlier than the period under discussion. There is no evidence to show that the regulations laid down in this text changed rapidly in the course of time. On the assumption that they were in operation during our period, material is drawn from the text for this discussion.

149. **Samantapāśādikā** (P.T.S.) vol. II, ed. by J. Takakasu and M. Nagai, 1927, p. 344

150. Ibid., p. 344

151. Ibid., pp. 344-346
breached the dam, the responsibility devolved on that person who caused damage himself or caused another to damage it. This was tantamount to committing a theft.\footnote{Ibid., pp. 344-345}

When a dam was weakened by a person and thereafter if cattle that came either on their own or led by village children raised waves in the reservoir, or a tree cut down by another person fell into the water raising waves, which led to the breaching of the dam, the person who originally weakened the dam was liable to pay compensation.\footnote{Ibid., pp. 344-345} Persons who damaged the flood-escapes or abused the use of the valve pit were also liable to pay compensation.

These regulations were applicable to all irrigation works irrespective of their size. But there were also specific regulations which governed the maintenance of small irrigation works in villages.

According to these regulations, if any person breached the reservoir belonging to himself situated above another's reservoir so that water rushed out sweeping away the dam, it was considered an offence.\footnote{Ibid., p. 344} Such an act could have damaged the lower reservoir. If any person tried to divert water which led to another's reservoir or to a field it was also considered an offence.\footnote{Ibid., pp. 344-345}
These regulations suggest that in ancient Ceylon there were well defined rules governing the maintenance of irrigation works. This system helped to maintain a large number of reservoirs in working order for many years. It has to be noted however, that on account of uncontrollable natural forces such as floods and erosion and also on account of warfare, the bunds of reservoirs and canals were often destroyed.

The inscriptions of the tenth century refer to a 'department' of twelve great reservoirs (dolos maha-vātān). According to Paranavitana, it was empowered to commandeer the labour of villagers whenever necessary. There is no evidence to name the twelve reservoirs which came under this department but it seems that in the tenth century the maintenance of a number of large irrigation works was the responsibility of the king and his officials. It may be presumed that this feature prevailed in the 'Polonnaruwa' period too, for we know that large reservoirs functioned properly during this period and that central authority commanded labour for the construction and maintenance of irrigation works. Small reservoirs could have been maintained by the village communities or individuals themselves.

157 CV., LXI, 64-65
158 EZ. II, p. 191, note 7; EZ. IV, no. 23
There was a well-organized system of distribution of water. This was essential as every farmer had to get an equal share of water during the periods of scarcity. The farmer's share of water was called diyamura. For his share of water he had to pay a stipulated amount to the king or to the local authority. As Perera points out, in the early Anurādhapura period this payment was called dakapati and it was paid not only to the king or local authority but also to the 'owner' of any source of water supply. But there are no references in the sources of our period to the payment of water dues to individual owners of reservoirs or canals. This may be due to the fact that ordinary individuals owned small reservoirs only to meet their own needs. In that case the common distribution of water was controlled solely by the 'central administration' or 'local authorities'.

In the ninth and tenth centuries the payment for the share of water was called diyabedum. It was called diyadada in our period. The term dada in the present day usage implies only a payment imposed as a fine. But dada in old Sinhalese denoted not only an imposition as a penalty but also 'payment' or 'service'. However,

162. EZ. I, pp. 167-171; p. 171 note 1; p. 199 note 8
163. EZ., V, pt. III, no. 17, p. 204, p. 206, p. 208
164. SDHRV., p. 88; p. 320
there is no evidence regarding the amount paid as diyadada. The evidence of the Iripiniyāwa and Buddannehāla inscriptions suggest that in certain instances the land belonging to monasteries were exempted from the payment of water dues.

With respect to individually owned irrigation works, persons who constructed them had the exclusive right to use them. This is proved by the Kahambiliyāwa slab inscription of Vikramabahu I. According to this inscription the king had ordered the inhabitants of the village Girinarugama not to convey water from the canal which Kanda Pilantavan Vailan had constructed on his own to lead water from the Mahakalahoya to his paddy fields. The inscription also states that royal officers should not enter the land irrigated by the canal of Vailan. It may be inferred that it was exempted from taxes.

\[165.\textit{EZ.} I, \text{no.} 12, \text{pp.} 167-171; \textit{EZ.} I, \text{no.} 16, \text{pp.} 191-200\]
\[166.\textit{EZ.} V, \text{pt.} \text{III}, \text{no.} 39\]
The large reservoirs and canals that issued from them were considered public property. Water from those main canals was diverted to the paddy fields by smaller ones which ran through the fields. The latter were owned by individuals who had an exclusive right to the water in those branch canals. When the water in the reservoirs was reduced during times of drought, the distribution of water was done in turns. In such circumstances one was not entitled to receive water at another's turn. Receiving water at the turn of another was considered a case of theft.

168. Ibid., pp. 345-346. The general practices, according to which lands adjoining an irrigation canal in the Uva province were worked in the nineteenth century have been described by Mr. Bailey from whose report it appears that all landholders benefiting from the canal were bound to take an equal share in the repairs of the canal. Each landowner was responsible for the proper repair of a certain portion of the canal and sudden and unforeseen accidents were attended to by the joint labour of all. No person was entitled to water if he neglected to contribute to the repairs of the dam or canal. No new land could be cultivated to the detriment of the existing fields. During the dry season fields were irrigated in rotation. When the volume of any supplying stream was insufficient for the irrigation of all the lands depending on it, they were divided into portions of such extents as would admit of each being properly irrigated and these portions received the whole volume of water during succeeding seasons in rotation. Report of the Central and Provincial Irrigation Boards for 1888, pp. 1-2
Like certain Hindu temples of ancient India, monasteries in Ceylon enjoyed privileges regarding the distribution of water. In the tablets of Mahinda IV at Mihintale, the king decrees that the whole supply of water of the Kānaṇavāva shall be utilized for the Mihintale monastery only. When a dispute between the royal officials and the employees of the Isurumunīya monastery concerning the rights to water from the Tissa tank was brought to the notice of a king identified as Mahinda IV, he gave his decision in favour of the monastery and set up an edict for the future guidance of the people. The fields belonging to the monastery were to be given precedence in the distribution of the water from the reservoir. The inscription further states that if the crops in the land belonging to the monastery were destroyed through the failure of royal officials to supply water, the damage was to be assessed and paid from the treasury. These references also suggest that the regulation of water supply was in the hands of royal officials.

170. EZ.I, no. 7, p. 112
171. EZ.I, no. 2, pp. 29-38
Chapter IV

AGRICULTURE

With the available sources it is not possible to paint a complete picture of agriculture prevalent during this period. Demographic data is almost absent for ancient Ceylon and it is extremely difficult to estimate the average size of an agricultural unit and the surplus of agricultural produce. In order to assess to what extent the weather conditions affected the harvest one needs to know more about the atmospheric circumstances in the past than we do. The chronicler's references like "... once upon a time when through the influence of evil planets a great heat arose in Lankā by which everything was burnt up..."¹ and "... once when a famine arose ..."² do not tell us much. Thus more archaeological studies, soil analysis in different regions and research into demographic problems may help to unfold a great deal of facts on agricultural history. Unfortunately, such work has not yet been systematically done. Inscriptional evidence sheds little light on agriculture though it provides valuable material on related subjects such as land tenure. Therefore, in the following pages it has been attempted to reconstruct the

¹ CV., Tr. LXXXVII, 1.
² CV., Tr. XC, 43.
general features of agriculture, mainly with the help of incidental references in Pāli, Sinhalese and Tamil literary works.

Geographically, Ceylon may be divided into three broad regions: lowland dry zone, lowland wet zone and the hilly region. The lowland dry zone covers over two-thirds of the land area of the Island, and has greater extents of flat land suitable for cultivation of rice than the wet zone. But the seasonal shortage of water for agriculture is the main problem in the former. Therefore, as noted earlier, from very ancient times streams in most parts in the dry zone were dammed, and as technical knowledge improved the Sinhalese constructed large reservoirs, many of them interconnected by canals. Rajaraṭa, which was in the dry zone, was the main centre of economic activity until the thirteenth century. After the Polonnaruwa period it was in the process of a gradual decline, but the construction and restoration of irrigation works and the establishment of new rice fields in that area were not completely neglected. This leads to the supposition that it continued

5 CV., LXXXVIII, 111 – 115; Pūjāvaliya, 34th Chapter, ed. Medhankara, p. 48; See also UHC. I, pt. II, p. 628.
as a centre of agricultural activity for some time after the fall of Polonnaruwa and that the depopulation of Rajarata did not coincide with the shift of the political centre. It would rather seem that the economic decline of Rajarata gradually followed the shift of political centre.

The Jaffna peninsula emerges as a separate region from the rest of the dry zone. This area does not contain large rivers but it has underground water which may be tapped by shallow wells. Agriculture was practised in this area, if not from ancient times, at least from the time a separate Tamil kingdom was established in the north and this must have been done mainly by using the subterranean water drawn upon by well-sweeps. Various agricultural practices prevalent among the people there are recorded in the Tamil astrological work Sekarasasekaramalai of the fourteenth century.

In the wet zone, there are perennial rivers and the rainfall is normally well distributed throughout the year. These factors certainly influenced the agricultural economy of the wet zone to a considerable

---

7 Sekarasasekaramalai, 129 - 140; 149 - 152; 262 - 266.
8 O.H.K. Spate, op. cit., p. 769.
extent. Paddy fields in this region were frequently found near the rivers and streams. Coconut palms and other tree crops could be grown almost everywhere. These wet zone regions played a very important role in the economy especially after the shift of political centres from Rajarata.

Different geographical conditions obtain in the hilly region. This region does not rise abruptly from a level base, but consists of mountain range over mountain range on a succession of ledges of great extent at various elevations. Certain parts of it belong to the wet zone while some other parts belong to the dry zone. The paddy cultivation in this mountain zone could be practised mostly in the valleys and on hill slopes in terraced fields.

***

The palm leaf manuscript named Kurunāgala Vistaraya, the original of which has been dated back to the 'Kurunāgala period' by De Zoysa and Modder contains

9 Ceylon Sessional Papers, XI, 1875, p. 10.
10 F. Modder, "Kurunāgala Vistaraya with notes on Kurunāgala Ancient and Modern", JRASCB, XIII, no. 44, 1893, p. 35. (Wickramasinghe, leaving allowances for certain doubts, states that it must have been written prior to Rajasingha I. Catalogue of the Palm Leaf manuscripts in the British Museum, pp. 83 - 84.)
the following description regarding the extent of paddy fields in Ceylon during its author's time.

"In the fields of Maya kingdom twenty yālas\(^{11}\) and sixty thousand amunas of paddy were sown. Twenty yālas and ninety five thousand amunas of paddy were sown in the fields of Pihiti kingdom. In the fields of Rohana kingdom one yāla and sixty thousand amunas of paddy were sown. In Maya ratha an area in which 3,020,000 amunas of paddy could have been sown, was covered by jungle, mountains, tanks, etc. In the Pihiti kingdom, an area in which 1,020,000 amunas of paddy could have been sown, was covered by jungle, rivers, tanks, mountains etc. An area in which 712,000 amunas of paddy could have been sown was covered by jungle etc. in the Rohana kingdom."\(^{12}\)

Those who seek only absolutely reliable statistics may discard the figures in this passage with a mere glance, but as references of this nature are very rare in ancient texts, it is worth examining whether there is any truth at all in this statement. Taking an

\(^{11}\) A yāla is equivalent to 20 amunas.

See Chapter II. p.73,

\(^{12}\) MS. Kurunāgala Vistaraya, (B.M.) OR. 5042, fol. 12b.
amuna as two acres as it is in the present day, the following figures could be gained from the passage quoted above.

(A) **Extent of cultivated rice fields:**
- Pihitiṟaṭa $95,400$ amunas $= 190,800$ acres
- Māyāraṭa $60,400$ amunas $= 120,800$ acres
- Rōhana $60,020$ amunas $= 120,040$ acres
Total extent of paddy fields: $431,640$ acres

(B) **Extent of uncultivated area, including jungle, tanks, mountains etc.:**
- Pihitiṟaṭa $1,020,000$ amunas $= 2,040,000$ acres
- Māyāraṭa $3,020,000$ amunas $= 6,040,000$ acres
- Rōhana $712,000$ amunas $= 1,424,000$ acres
Total extent of uncultivated area: $9,504,000$ acres

(C) **Total land area of Ceylon:** $15,997,904$ acres
Total figure of the rice cultivated and uncultivated area: $9,935,640$ acres
The balance could be other crops: $6,062,264$ acres

(D) **Percentage of the planted wet rice area** $2.7$
**Percentage of other crops cultivated area** $37.8$
**Percentage of uncultivated area** $59.5$

---

13 This is a broad assessment. In fact, amuna is a seed measure. The area to which it corresponded must have varied with the type of soil. See R.L. Brohier, AIWC, Pt. III, p.VI; T.B.H. Abeysinghe, Portuguese Rule in Ceylon, p. 227.

14 This figure is based on the Census of Agriculture 1962, p.17. It is assumed that the area of Ceylon during our period was similar to the area today.
Two obvious inaccuracies which compel us to doubt the validity of most of these figures should be pointed out. In the first place, total figure of cultivated and uncultivated areas of Pihitiaraṭa is very small compared to that of Mayāraṭa. But, as we know Mayāraṭa was smaller than Rajaraṭa. Probably the author of the manuscript could not even roughly estimate the uncultivated area of Rajaraṭa since only a small part of this area was under the control of Kurunagala kings in his time. The extent of uncultivated area in Rajaraṭa at this time must have been higher than the figure given by the author. Secondly, the area in which other crops would have been grown is unimaginably higher than the area in which paddy was cultivated, the ratio being approximately 16 to 1. Therefore, one may seriously question the reliability of most of these figures.

But this should not lead one to discard all the figures. Since there was no proper method of assessing the area of uncultivated land, the writer may have inserted figures based mainly on rough estimates in referring to them. However, the figures given in the passage regarding the areas in which paddy was cultivated appear to be of some value. Since cultivators knew the sowing extent of their fields it would have been com-
paratively easier to estimate the approximate figures of areas in which paddy was cultivated.

An examination of those figures gives the impression that 2.7 per cent of the total land area was used for paddy cultivation towards the end of our period, i.e. after the Rajarata civilization began to decline. This is only two fifths of the area of cultivated paddy land in present day Ceylon.\textsuperscript{15} During the time of Polonnaruwa kings the area of paddy cultivation must have been more than that of the time of the Kurunagala kings.

Patterns of cultivation during our period may be divided into two broad types according to their situation. In the first place, there were fields or plantations without any permanent human settlements attached to them. Long tracts of fields, chena lands, the fields situated away from the farmer's house can be put under this category. Fields or gardens surrounding a dwelling house come under the second category. Most of these may have been small holdings owned by the farmers.

The areas where various crops were grown and their local distribution cannot be determined with any degree of accuracy. But judging mainly by the present

\textsuperscript{15} This ratio is obtained by comparing the aswedddumized paddy fields in Ceylon (1,138,188 acres given in the 1962 Census of Agriculture, p.24) with the total extent of area in which paddy was cultivated given in the manuscript passage quoted above.
types of soil and climate certain assumptions may be made. Thus, it seems likely that *chena* cultivation was mainly limited to the dry zone. Crops such as coconut trees were mainly found near the sea coast, and this is confirmed by the sources too. Sesamum and cotton on the other hand, may have grown mostly in the dry zone. The cultivation of paddy ought to have been carried on throughout Ceylon, depending on the inhabited areas and the availability of regular supply of water either through artificial irrigation systems or through rainfall. But the techniques of cultivation employed in hill country and low country would have been different.

***

Since rice was the staple diet of the people and was the main source of revenue, great importance was attached to its cultivation. Rice fields were measured in terms of sowing capacity. There were small rice fields attached to separate individual gardens and also large tracts of fields. A large tract of field was called *varupata* or *viyala*. The term *viyala* was

16 See below, pp. 141-143.
17 See Chapter II, p. 73.
18 EZ., III, p. 234.
19 EZ. I, p. 179.
21 EZ. I, p. 179.
also used to denote land newly brought under cultivation.\textsuperscript{22} A small rice field was named  \textit{kumbura} \textsuperscript{23}  \textit{keta} \textsuperscript{24} or \textit{kettvata}.\textsuperscript{25} A small division of a paddy field bounded by ridges for the purpose of retaining water was \textit{liyatda} \textsuperscript{26} which may be compared with modern \textit{liyadda}. \textit{Niyara} \textsuperscript{27} was the term used for ridges and is similar to modern \textit{niyara}. Seed paddy prepared for sowing was called \textit{bijuvata}.\textsuperscript{28}

Paddy was grown not only in wet fields but also on dry land. Reference is made to \textit{goda goyam} (paddy grown in dry land) in the \textit{Saddharmaratnāvaliya}.\textsuperscript{29} This text further states that the varieties of paddy grown in wet fields were not suitable for dry land and vice versa.\textsuperscript{30} It is obvious that the latter had no regular water supply and depended only on rain water. Geiger points out that paddy grown in hills where no artificial irrigation was required was called \textit{sāli}.\textsuperscript{31} The Sinhalese equivalent of that term is \textit{hāl vi} and is similar to modern term \textit{hel vi}. The \textit{Saddharmaratnāvaliya}

\begin{footnotes}
\item[22] \textit{ALTR.}, p. 7; \textit{EZ. II}, no. 36; \textit{EZ. V}, pt. II, no. 26.
\item[23] \textit{SDHRV.}, p. 12.
\item[24] \textit{PJV.}, p. 483.
\item[25] \textit{PJV.}, p. 143; \textit{Butsarana}, p. 245.
\item[26] \textit{EZ. III}, no. 23, p. 234; \textit{PJV.}, p. 9.
\item[28] \textit{PJV.}, p. 356; \textit{SDHRV.}, p. 33.
\item[29] p. 125; \textit{SDHRV.}, p. 869.
\item[30] p. 869.
\item[31] \textit{CCMT.}, p. 41.
\end{footnotes}
refers to chena lands where hāl paddy was grown. Even in the 'Portuguese period' the importance of dry-land paddy cultivation follows from the references in the Portuguese 'tomhos'. This practice, which did not involve as much labour as wet-field cultivation, probably prevailed in areas where there was regular rainfall. However, as very few references are made to the dry method of paddy cultivation, it may be concluded that the practice was not very extensive compared with wet-field cultivation.

Various kinds of paddy were sown. Among these the variety named hāl vi was considered the best. As stated above, this kind of rice was grown principally on dry land. Another variety called rat hāl is mentioned in the Pujāvaliya. Certain varieties required three months to ripen, while some other varieties needed four to five months. The variety named sī nāti required three to four months. According to the Pujāvaliya, the variety named māvi needed six to seven months.

The process of paddy cultivation is

---

32 p. 556.
33 ALTR., p. 7.
34 PJV., p. 162; Sinhala Thūpavamsa, p. 98.
35 PJV., p. 665.
36 Saddharmaratnakaraya, p. 78.
37 PJV., p. 356.
38 Ibid.
described in various texts in detail. Cultivation had to be done at the proper time to reap a good harvest. The preliminary operation was the eradication of rank growth in the boundaries of the field and in the attached canal. Thereafter, tilling and ploughing the land had to be done. The latter is described as a combination of sixteen different factors connected with various parts of the plough, the pair of bulls and the tiller of the soil. It was usually started at an auspicious time. Ploughing the field three times was considered ideal. The day of ploughing was a festive occasion, and the ridges were prepared on the same day or after.

Having ploughed the field and repaired the ridges, the lumps of earth were beaten down and the mud was levelled by drawing a plank over it. Then the seed had to be prepared and sown. The earlier part of the day was believed to be auspicious for the sowing of paddy. There is no definite evidence as to whether the practice of transplanting paddy was prevalent. One may interpret

39 SDHRV, p. 81, pp. 254 - 259, p. 870,
40 PJV., p. 355.
41 SDHRV., p. 151.
42 PJV., p. 355.
43 Ibid.
44 PJV., p. 356; SDHRV., p. 151.
45 PJV., p. 143; Sinhala Thūpavamsa, p. 30; Saddharmalankārāyaya, pp. 691 - 692.
46 PJV., p. 356; SDHRV., p. 151, p. 893.
47 SDHRV., p. 893; PJV., p. 356.
48 SDHRV., p. 625.
the words **vapurami** and **nelami** of the *Saddharmaratnāvaliya*, as "I shall sow" and "I shall transplant". The Sinhalese term **nelami** could mean either transplanting or weeding. The *Dhampiyā Atuvā Gātapadaya* explains the term as weeding.

After sowing, the farmers had to see that sufficient water reached the field. Channels had to be kept clean as no water could reach a field when they were blocked. Sown paddy had to be protected from birds and animals for one week. When the plants were growing too, the farmer had to be constantly watching the field to chase away the animals who would damage the plants. In the meantime, weeding the paddy field had to be done.

Certain diseases which could affect paddy plants were known during this period. It was believed that these diseases would be remedied by carrying out certain measures of a magical nature. These measures were denoted by the term **kem**. Thus, it seems that in agriculture rational behaviour was intermingled with ritual and superstition. From the time plants came to

---

49 *SDHRV.*, p. 730.
50 *Dhampiyā Atuvā Gātapadaya*, pp. 224 - 225.
51 *SDHRV.*, p. 151, p. 893.
52 *SDHRV.*, p. 770.
53 *PJV.*, p. 356.
54 *PJV.*, p. 356; *SDHRV.*, pp. 254 - 255.
55 *SDHRV.*, p. 648.
56 *SDHRV.*, p. 152.
57 *SDHRV.*, p. 152; *PJV.*, p. 356.
ear until they were ripe sand was thrown into the field.\textsuperscript{58} Sand may also have been thrown as a remedy for diseases. Whether any special technique in the preparation of fertilizers was applied is not known. The references in the Butsarana\textsuperscript{59} indicate that manuring of paddy fields was prevalent, but to what extent it was carried out cannot be determined. Since the practice of rearing cattle was prevalent it may be assumed that cow dung was used as the main fertilizer.

When paddy was ripe the crop had to be reaped and brought to the threshing floor, known as the kamata. Mostly oxen were used for threshing the paddy or threshing sticks and flails were used for that purpose. Literary evidence shows that the richest harvest one could reap from a fertile field was one yāla for one pāla of seeds sown,\textsuperscript{60} the ratio being eighty to one.

In the sources of the period under consideration, reference is made to two main seasons of paddy cultivation called maha and yala.\textsuperscript{61} The Tōnigala inscription of the fourth century A.D. refers to three

\begin{itemize}
  \item SDHRV., p. 893.
  \item SDHRV., p. 247; goyam bhōga vanu pinisa kumburehi puvara lana govitāna daksā ekek hu se.
  \item FJV., p. 483; Saddharmālankārāya, p. 10.
  \item SDHRV., p. 152; FJV., p. 356; Even today there are these two main seasons for paddy cultivation, the maha season during the north east monsoon, the yala season during the south west monsoon. O.H.K. Spate, India and Pakistan, p. 760.
\end{itemize}
crops named *pita dada hasa*, *akala hasa* and *mäde hasa*. These terms denote three crops, viz. *maha* season, *yala* season and middle season. Probably there were three crops in some villages of Rajarata where fields were irrigated by means of reservoirs and did not depend on the uncertain rainfall. However, it has to be pointed out that all paddy fields were not cultivated even during two main seasons since certain varieties of rice required about seven months to ripen. Moreover, it is worthy of note that not all the fields could obtain a regular water supply throughout the year.

The foregoing description shows that the paddy cultivation in our period was quite similar to that of the present day. Paddy occupied a dominant position in the economy and stimulated the development of irrigation schemes in the relatively dry zones. In the wet zone, too, paddy production was the pivot round which the economic life of the villager revolved.

***

There are numerous references to the growing of palms such as coconut (*Cocus nucifera*), arecanut (*Areca catechu*), palmyra (*Borassus flabelliprmis*)
and kitul (Caryota urens). It should, however, be noted that some of these trees did not grow in the whole of Ceylon. In the regions over 3,500 feet, coconut and palmyra do not thrive and there is no reason to believe that they were grown in these areas in the past.

The available evidence suggests that coconut was cultivated on a larger scale than other palms. When the population was spreading to the south-western and southern coastal areas of the Island, people may have been compelled to engage in types of cultivation which suited the climate and soil of those regions, as a result of which extensive coconut plantations sprang up. Hence, it is reasonable to assume that coconut plantations occupied an important position in the economy especially from the thirteenth century.

The Rasavāhinī refers to coconut plantations at Kappakandara in Rāhana.\(^{63}\) It is said that Parākramabāhu II granted to a monastery a large coconut garden.\(^{64}\) The Galpāta Vihāra rock inscription refers to a coconut plantation which had been laid out by a setṭhi in a place close to Bemtoṭa.\(^{65}\) The same inscription refers to a plantation in which arecanut and coconut trees were

---

63 Rasavāhinī - Lankādīpuppattivatthūni, p. 82.
64 CV., LXXXV, 71 - 72.
65 EZ. IV, no. 25.
The *Pūjāvaliya* states that the minister Devappatirāja of Parākramabāhu II laid out one stretch of coconut plantations from Kalutoṭa to Bemtoṭa.\(^66\) The *Cūlavamsa* confirms this statement.\(^67\) Parākramabāhu IV is said to have laid down a park in Titthagāma (modern Toṭagamuwa) provided with five thousand coconut trees.\(^69\) The *Dambadeni Asna* refers to gardens filled with coconut, arecanut, mango, jak fruit and other trees.\(^70\)

From these references certain conclusions may be drawn regarding coconut cultivation. First, it appears that towards the end of our period coconut was playing an important role in the agricultural economy. It should, however, be noted that even in the earlier periods coconut was grown to a fairly considerable extent. According to the *Cūlavamsa*, a large coconut plantation was laid out in the sixth century by Aggabōdhi I.\(^71\) But coconut plantations seem to have been exploited on a larger scale towards the end of our period. This is borne out by the fact that more references are found regarding coconut during this period than in the previous periods.

---

66 Ibid.
67 34th Chapter, ed. Medhankara, p. 40.
68 *CV.*, LXXXVI, 44 - 45.
69 *CV.*, XC, 93.
70 p. 1.
71 *CV.*, XLII, 15 - 16.
Secondly, it is evident that the king and the nobility as well as ordinary people were enthusiastic in laying out such plantations. Thirdly, it seems that coconut was planted separately as the only crop in large extensive areas. But there can be no doubt that as at present, a number of coconut trees were planted in the gardens around the houses as well.

In the wet zone, people had to adjust themselves to the conditions of life prevalent there. Sesamum from which the edible oil was extracted in the dry zone was not found in sufficient quantity in the wet zone. Thus, the use of coconut in their dietary habits had to be extended. The sap of the coconut tree was a source of toddy and its leaves as well as those of palmyra palms were utilized for thatching. Hence it was necessary for the people of the wet zone, especially of the coastal areas to extend the cultivation of coconut which suited their environment.

As stated above, cultivation of certain other palms such as *kitul*, palmyra and areca was prevalent. Juice extracted from the flower of the *kitul*, palmyra and coconut was used for preparing toddy.  

72 Since chewing betel was a widely prevalent habit, arecanut was important for a large majority of the people.

---

72 Vimativinōdinī, p. 328.
Other crops mentioned in the literature are undu⁷³ (a kind of pea), mun⁷⁴ (green gram), tala⁷⁵ (sesamum), amu⁷⁶ (Paspalum seribiculatum), aba⁷⁷ (mustard), duru⁷⁸ (cummin seed), yava (a kind of cereal akin to barley) and tana⁷⁹ (Setaria italica). Most of these were probably grown in chena lands.

Vegetables were grown in the house gardens and chenas. Varieties of brinjal such as karabatu⁸⁰ tibbatu⁸¹ vambatu⁸² and other vegetables such as kākiri⁸³ (cucumber), alu puhul⁸⁴ (ash pumpkin), tiyambara⁸⁵ (a kind of cucumber), puhul⁸⁶ (luffa acutangula), murunga⁸⁹ (drumsticks) and mā⁹⁰ (a kind of bean) are mentioned in the literary works of the period. These references indicate that most of the vegetables known

---

⁷³ Butsarana, p. 95.
⁷⁴ Ibid.
⁷⁵ PJV., p. 96; The Book of Ser Marco Polo, II, p. 295.
⁷⁶ SDHRV., p. 585, p. 618.
⁷⁷ Sinhala Thūpavamsa, p. 177.
⁷⁸ Ibid.
⁸⁰ Sinhala Bōdhivamsa, p. 40.
⁸¹ PJV., p. 165.
⁸² PJV., p. 97; Vesaturudāsanne, p. 67.
⁸³ Jātaka Atuvā Gātapadaya, p. 79.
⁸⁵ Butsarana, p. 42.
⁸⁶ Saddharmaratnākārāya, p. 32.
⁸⁷ Butsarana, p. 42.
⁸⁸ Ibid.
⁸⁹ Jātaka Atuvā Gātapadaya, p. 188.
⁹⁰ Saddharmaratnākārāya, p. 31.
now, except those introduced by Europeans such as cabbages, beetroot etc., were known and cultivated in medieval Ceylon.

Literary references also indicate that fruits such as varieties of mango, jak, banana, wood apple, breadfruit, oranges, and lime were available.

In this context it has to be mentioned that sugar cane, betel, ginger (inguru), sweet potatoes, chillis (miris), and cotton were known and grown.

A survey of the above list leaves the impression that the Island grew many of the fruits and crops now grown. It may be surmised that only a very limited quantity of these crops and fruits entered trade as it was possible for the people to cultivate most of these crops in house gardens for their domestic needs.

***

91 Eluattanagaluvamsaya, p. 33.
92 Ibid.,
93 Butsarana, p. 42; CV. LXX, 211.
94 SDHRV., p. 285.
95 SDHRV., p. 61.
96 MS. Kurunagala Vistaraya, folio 3-5.
97 Eluattanagaluvamsaya, p. 33.
98 PJV., p. 612.
99 EZ. III, no. 35.
100 Sinhala Thupavamsa, p. 177.
101 MS. Kurunagala Vistaraya, folio 5b.
102 Fujavaliya 34th Ch. ed. Medhankara, p. 6.
103 SDHRV., p. 1004.
At the present time the chena cultivation begins with felling the trees of a selected forest area and burning the shrubs. Then the soil in which the ashes are mixed as manure is sown with dry corn. Here and there vegetable seeds such as pumpkin and melon-gourd are planted. Even in the past, chena cultivation would not have been different from that of today for we find various references to similar forms of cultivation. This method of cultivation could be compared with the 'slash and burn agriculture' which was prevalent in some early western European countries such as Denmark and with the 'shifting cultivation' or 'swidden agriculture' which was practised in some south-east Asian countries such as Indonesia.

Since large quantities of cereals and vegetables could be grown in chena lands, considerable importance was attached to chena cultivation during this period. Various references to chena lands in literary and inscriptional writings leave the impression that

104 MV., XXIII, 51; SDHRV., p. 139; Pujavaliya, Chs. 12 - 14, ed. by D.E. Hettiaracchi, p. 154; Saddharmaratnakaraya, p. 442; EZ. II, 105.
105 Slicher Van Bath, Agrarian History of Western Europe, p. 7.
106 C. Geertz, Agricultural Involution, p. 41.
this mode of cultivation was fairly extensive. However, in comparison with wet cultivation, relatively little importance was attached to chena cultivation.

The Polonnaruwa Galpota inscription refers to chena cultivation as a difficult task. It further states that Nissankamalla relinquished taxes from chena lands.\textsuperscript{108} Since the clearing of jungle was involved in this mode of cultivation, it would have been a fairly difficult task. As the crop was mainly dependent on rain water insufficient rainfall would have resulted in the failure of crops. Moreover, protecting chena lands from wild animals was difficult as these were situated close to jungle.

Special measures had to be taken to protect paddy fields and chena cultivations from wild animals and birds. Moreover, there was the possibility of damage by stray cattle to be guarded against.\textsuperscript{109} References in the Saddharmaratnāvaliya and the Visuddhimārga Sannaya indicate that fences were constructed around fields and chena lands,\textsuperscript{110} obviously to guard the cultivations against stray cattle and wild animals. Grain

\textsuperscript{108} EZ. II, p. 105.  
\textsuperscript{109} SDHRV., p. 554; Visuddhimārgasannaya, ed. K. Dhammaratana, II, p. 312.  
\textsuperscript{110} SDHRV., p. 228, p. 554; ed. K. Dhammaratana, op. cit., I, p. 104, p. 106.
cultivations had to be protected from birds. In most cases temporary huts were constructed in fields or chena lands and the farmers stayed there in order to guard the crops against birds and animals.

Beliefs connected with the protection of crops and other various stages of cultivation prevailed as in the present day. The Sarajōtimālai describes the devices which may be practised to keep animals and birds away from the crops. Thus it states that if the wood of a roof of a ruined house is burnt and the ashes are spread in the ridges of a paddy field, animals and birds will not destroy the crop.

The agriculturist made use of instruments and techniques derived from the accumulated knowledge and experience of his ancestors, but since cultivations were always liable to interference by supernatural events, by drought, flood and pestilence, the peasant also resorted to certain magical and astrological practices handed down to him from time immemorial. Some of these beliefs are recorded in various texts of this period. The Sekarāsasēkaramālai prescribes the days and the

---

111 PJV., p. 356.
112 Sarajōtimālai, Eramangalappadām Section, 14; Saddharmalankaraya, p. 33.
113 Sarajōtimālai, Eramangalappadām Section, V.16.
constellations on which activities in the paddy fields have to be avoided. It further states that ploughing should be done on the second and the twelfth day of the fortnight, as well as on the new-moon and full-moon days and on certain yogas. It also gives the dates favourable for sowing and ploughing. Similar instructions are found in the Sarajötimalai of the Dambadeni period and in the Sinhalese palm leaf manuscript named Navapatala Sangraha. According to the latter, even the building of irrigation works had to be started at an auspicious hour. The Pujävaliya states that the activities in the field have to be started at a favourable constellation.

***

In an era when industrial inventions were rare, the farmer had to depend mainly on his labour to see his cultivations thrive. Therefore, almost all the utensils and implements used in agriculture were those

114 Sekaräsasēkaramālai, v.129.
115 Ibid., v.130.
116 Ibid., v.134.
117 Ibid., vv. 135 - 140.
118 Sarajötimalai, Eramangalappadam Section.
120 Ibid., foll. 40 b.
121 PJV., p. 355.
which one individual farmer could use. The plough was used in ploughing the paddy field with the help of oxen. Sometimes only one bull was tied to the yoke of the plough but mostly it was a pair of bulls. Various component elements of the plough, such as nangula, viyadanda, rāna, and sīvāla are mentioned in literature. Nangula not only indicates a plough as a whole, but also the ploughshare in particular. The latter was usually made of iron and was used to dig the soil of the field. The term viyadanda denotes the yoke in which the oxen were tied. Rān and sīvāl were the strings used to tie the oxen to the yoke. Mamoties (udalu) were used in shaping the soil, cleaning the shrubs, digging the canals, breaking the clods of earth etc. The axe (porowa) and bill-hook (kātta) were used mainly in felling trees; the adze (vāva) to make certain wooden implements, such as handles for

122 SDHRV., p. 559, p. 596, p. 634; PJV., p. 143.
123 SDHRV., p. 634.
124 SDHRV., p. 704; PJV., p. 355.
125 SDHRV., pp. 740 – 741; Saddarmālankāraya, p. 692.
126 SDHRV., pp. 740 – 741.
127 SDHRV., p. 777.
128 PJV., p. 336.
129 SDHRV., p. 596.
130 SDHRV., p. 257, p. 759.
131 SDHRV., p. 281, p. 704.
132 EZ. II, no. 6.
133 SDHRV., p. 338, p. 448.
mamoties; the sickle (dākāṭṭa)\textsuperscript{134} to clear the grass of the field and for harvesting. Winnowers (kulu)\textsuperscript{135} were used particularly in the times of harvesting and before sowing in order to separate the better seeds from bad ones.

Obviously most of these implements were owned by farmers as these were indispensable for them. But it is very likely that as at present poor farmers were in the habit of borrowing these utensils, specially ploughs, from others. Most of these implements, except rāṇa, sīvāla and kulla were made by blacksmiths and carpenters. The farmers had to buy these from them normally by exchanging a part of their crops for the tools.

***

Since oxen were indispensable in agriculture, cattle breeding was practised to a fairly considerable extent. Apart from being used in agriculture, cattle supplied milk. Owing to the influence of Buddhist and Hindu religious beliefs, cattle would not have been reared for meat. But in an age when means of communication were comparatively little developed, they were used for

\textsuperscript{134} PJV., p. 336; Jātaka Atuvā Gātapadayā, p. 184.

\textsuperscript{135} PJV., p. 163.
transport purposes. Hence cattle were considered one of the important forms of wealth. The Rasavāhinī refers to a person who bought a cow for eight kahāpanas. The practice of donating cows to Hindu temples was prevalent as in southern India. Cattle owners seem to have entrusted their flocks to herdsmen employed by them. It is, however, reasonable to assume that poorer people looked after their own cattle. Probably there were separate pasture lands used for cattle and goats. A reference in the Saddharmaratnākaraya clearly shows that some knowledge of diseases which could affect cattle was prevalent.

The goat and fowl are mentioned among other livestock. To what extent rearing of these was carried on cannot be determined but it may be inferred that to meet the daily needs some farmers reared them. It is unlikely that there were separate extensive farms only for livestock. However, certain economic importance was attached to animal husbandry. A story in the

---

136 Chapter V, Pr. 170-171.
137 Rasavāhinī, Lankādīpuppattivatthūni, p. 30.
138 CJSG., II, p. 117.
140 Saddharmaratnākaraya, p. 468.
141 Saddharmālankaraya, p. 475.
142 Saddharmaratnākaraya, p. 404.
143 Saddharmālankaraya, p. 628.
Saddharmālankārāya\textsuperscript{144} mentions the sale of goats. Chicken\textsuperscript{145} was considered a delicious dish and poultry farming would also have been important for economic reasons.

***

An examination of the available evidence leaves the impression that the bulk of the agricultural operations was carried on by the small peasant farmer with the help of his family. But it is reasonable to assume that even the peasant cultivator hired labour for special agricultural operations, for it is one of the features of rural life that the demand for agricultural labour is never uniform throughout the year but varies with the season. Agriculture was mainly an occupation of men. Women may have taken part in certain agricultural activities like harvesting and winnowing. Usually the farmer's mid-day meal was brought to the field or to the chena by one of the female members of his family.\textsuperscript{146}

In present day rural communities, the method of exchanging labour named attan or kaiya is practised fairly widely.\textsuperscript{147} According to this method

\textsuperscript{144} p. 404.
\textsuperscript{145} Ibid., p. 628.
\textsuperscript{146} SDHRV., p. 579.
\textsuperscript{147} Nur Yalman, Under the Bo Tree, p. 44; E.R. Leach, Fuleliya, p. 264.
a farmer works in the fields or chenas of another farmer and in return receives the labour of the latter on some other stipulated day. This mode of exchange of labour may have prevailed from the earliest times but there is no evidence for this view.

The employment of hired labour in agricultural activities was well known during this period and even earlier. The Saddharmaratnāvaliya refers to a person who went to plough in another's field in return for wages. The Saddharmālankārāya refers to a person who harvested another's field for daily wages. The Sahassavatthupakarana contains a story about a man who went in search of work and was hired to harvest a field owned by an administrative head of a district. Some of the literary references suggest that the labourers were poor as they received only a small amount as wages. The stories in the Saddharmaratnāvaliya indicate that labourers hardly received enough for a satisfactory life. The wages were paid in kind, especially in rice but cash payments were not unknown.

148 p. 886.
149 p. 598.
150 p. 54.
151 p. 44, p. 219.
152 SDHRV., p. 448.
153 Ibid.
154 SDHRV., p. 219.
Mainly the monasteries\textsuperscript{155} and the nobility\textsuperscript{156} used hired labour. Other social groups, too, may have used it to a limited extent.

Those belonging to the upper strata of the social hierarchy and those who were engaged in occupations other than agriculture, used another form of labour. According to this method, the 'landowner' entrusted the cultivation to a farmer on a crop-sharing basis. The practice was called the \textit{ande}\textsuperscript{157} system and has continued hitherto. The term \textit{ande} corresponds to Sanskrit \textit{ardha} and Pāli \textit{addha} which mean 'half'.\textsuperscript{158} The cultivator had to pay half of the crop to the 'landowner' according to this system.\textsuperscript{159} In some other cases the crop was divided in the proportion of one third for the owner and two thirds (\textit{tun ande}) for the cultivator.\textsuperscript{160} According to Gunnawardhana, these methods were practised also in relation to monastic lands.\textsuperscript{161} He further states that apart from paying the share, the tenants sometimes had to serve at the monastery.\textsuperscript{162} Higher officers were also

\textsuperscript{155} E.Z. I, p. 44.
\textsuperscript{156} \textit{Sahassavattupakarana}, p. 54.
\textsuperscript{158} \textit{ALTR.}, p. 9.
\textsuperscript{159} \textit{FJV.}, p. 348, p. 356.
\textsuperscript{160} \textit{FJV.}, p. 356.
\textsuperscript{161} R.A.L.H. Gunnawardana, \textit{op. cit.}, pp. 99 - 100.
\textsuperscript{162} \textit{Ibid.}, p. 100.
entitled to the service of the tenants in addition to the share of the crops. When kings granted plots of land to individuals, along with the services of the people living on those plots,\textsuperscript{163} it could imply that cultivators living on the land had to pay the royal share to the new 'owner'. Secondly, it would mean that in addition to the paying of the share of the crops, they had to perform various services to the new 'landowner' of a similar kind as those which they had performed to the king.

The Galpāta vihāra inscription provides a list of slaves (vahal) dedicated to that monastery by a person named Mindalnā and members of his family.\textsuperscript{164} Probably such servile labour was also used by those in the upper strata of society as well as by monasteries. In speaking of agricultural serfdom, however, one has to be cautious not to apply the Graeco-Roman conception of slavery to conditions that obtained in Ceylon.

In this period, in which taxes were paid mostly in kind and services were remunerated mostly in rights relating to land,\textsuperscript{165} there was another type of labour. The political organization could receive the

\textsuperscript{163} EZ. II, no. 23.
\textsuperscript{164} EZ. IV, no. 25.
\textsuperscript{165} Chapter II, PP. 68-71.
labour of the people as an obligatory duty according to the rājakāriya system. Probably this labour was utilized in some agricultural activities of the king such as reclamation of forests, laying out of new fields and establishing parks. An inscription from Buddannehūla which records certain regulations concerning land of a monastery, carries the provision me rat yedenavun me kumburat pet sama kota diya pānā kot. This has been translated by Paranavitana as "employees in this district shall level the beds and lead the water to this field." According to Gunawardana, this would mean that at times the labour due to the king was used to cultivate the land of the monasteries too.

***

Since the basis of the country's economy continued to be agriculture, the rulers at every opportunity encouraged the people in agricultural activities. The cultivation of the arable land and the enforcement of the regulations that ensured this in an orderly manner were of vital importance to the village 'community' for its existence and there was no need for the king to interfere.
under normal circumstances. As Nicholas points out, the peasants attended to these avocations according to the directions ofeldermen of the village. 169

The Cūlavamsa states that when Parākramabāhu I wished to increase the production of cereals in his principality of Dakhinadesa he summoned all the village elders and instilled enthusiasm into them for the due performance of their tasks. 170

The construction, repair and maintenance of major irrigation works were considered to be a moral responsibility of the king. This is proved by the enormous number of reservoirs and canals built and repaired by the king during this period as well as during the preceding period. Moreover, the king induced farmers to construct their own small irrigation works specially channels and afforded full protection to them. As already noted, the Kahambiliyāwa slab inscription of Vikramabāhu I lays down a specific rule to the effect that other villagers should not cut canals and convey water from the canal which Kaṇḍan Pilantavan Vallan had constructed to lead water from the Mahakalā hoya to a field which he himself had prepared for cultivation. 171

170 CV, LXVIII, 53; SCN, r.
The same inscription states that the royal officers should not enter that land of the aforesaid person.¹⁷² The context indicates that in instances where a lot of labour on the part of the agriculturist was involved, the king did not tax the produce of such fields, probably in order to induce the people to engage more and more in agricultural activities.

Such inducements were not restricted to the cultivation of paddy alone. Nissankamalla abolished taxes from chena cultivation 'for all times'.¹⁷³ He particularly states in some of his inscriptions that taxes were abolished on chenas mainly because such cultivations were troublesome for the farmers.¹⁷⁴ Another reason was probably that chena cultivation took place mainly in the jungle and was, therefore, difficult to control. Once Nissankamalla set up a precedent it would have been followed by the successive rulers for a considerable period, for we find no mention of taxes on chenas during the latter part of our period.

The rulers promoted agriculture by laying out plantations, gardens and fields. It is said that Parākramabāhu I once used the words "not even a little

¹⁷² Ibid., p. 407.
¹⁷⁴ EZ. II, p. 93, p. 105.
drop of water that comes from the rain must flow into the ocean without being made useful to man".  

Parākramabāhu II had a large coconut garden laid out and donated it later to a monastery. Parākramabāhu IV is also said to have had a large coconut garden planted at Toṭagamuwa. In the reign of Vikramabāhu III five of the highest officials co-operated in opening a stretch of rice fields on land which had never been utilised before for that purpose by constructing a dam and a canal 753 cubits in length. Vijayabāhu IV, in attempts at restoring Polonnaruwa as a capital, is said to have repaired the dams and canals of Polonnaruwa and opened up vast tracts of rice fields that had been abandoned for about half a century and made the country around that city prosperous once more. No evidence is available to suggest that his measures proved successful but such activities of the ruling groups would have induced the people to cultivate more land.

***

In spite of the efforts of kings such as

---

175 CV., LXVII, 11.
176 CV., LXXXV, 71 - 72.
177 CV., XC, 93 - 94.
178 Report on the Kegalle District, p. 79.
179 Pujavaliya, 54th Ch. ed. Medhankara, p. 48.
Parākramabāhu II and Vijayabāhu IV, agriculture in Rajarāṭa showed a gradual decline towards the close of our period. Most profound factor which influenced the decline of agriculture in Rajarāṭa was the breakdown of the tank-based irrigation system. The kings appear to have concentrated more on developing the south western regions of the Island after the shift of political centres to those regions.

Various views have been put forward to explain the decline of the Rajarāṭa reservoir system and the agriculture based upon it after the Polonnaruwa period. It has been supposed that a climatic change gradually made Rajarāṭa area unproductive and incapable of supplying the large population of earlier times. But as Rhoads Murphy and Paranavitana have correctly pointed out, there is no evidence in support of the view that in ancient times these regions enjoyed a rainfall greater than at present. Nothing about the ancient irrigation works, fords or bridges suggests that the volume of water carried by dry zone rivers before the thirteenth century was greater than now and, in fact,

one of the strongest arguments against the assumption of a climatic change is that the modern and ancient irrigation works are similar and can irrigate the same amount of cultivated land. Had there been a change of climate it would almost certainly have included some changes in the demarcating line between the dry and wet zones. Yet ancient irrigation works are found all over the modern dry zone but are absent from the modern wet zone; the present wet-dry zone line coincides almost with the line between the ancient irrigated and unirrigated areas.\textsuperscript{182}

It is fashionable to attribute the decay of ancient civilizations to soil erosion and followers of this view have not been lacking in Ceylon. It has been postulated that agriculture practised over a long period on a single crop basis would have led to the exhaustion of the soil, which ultimately led to the abandonment of Rajarata by its inhabitants.\textsuperscript{183} Those who have studied this aspect of the problem have found no conclusive evidence in support of this explanation.\textsuperscript{184}

Some scholars have indicated that the

\textsuperscript{182} Rhoads Murphy; \textit{Ibid.}, p. 190.
\textsuperscript{184} Rhoads Murphy, \textit{op. cit.}, p. 191.
decline of Rajaraṭa civilization was due to diseases such as malaria. According to Rhoads Murphy, since malaria was known in the Mediterranean at a much earlier date, it may have reached Ceylon through south India in the course of time. But as Paranavitana has correctly pointed out, whether malaria was the main cause or the effect of the abandonment of Rajaraṭa is a debatable point.

However, an acceptable point of view regarding the decline of the Rajaraṭa civilization has been put forward by Murphy and subsequently elaborated by Paranavitana and Liyanagamage. In the words of Murphy, "...The complexity of irrigation works suggests that it was a well organized, centrally administered system ... It was not the invasions themselves which forced the abandonment, but the total disintegration of the old order, a disintegration to which the invasions undoubtedly contributed but which they did not wholly produce ...".

According to Paranavitana, "... In the Polonnaruwa period, however, there was a tendency towards

---

186 Rhoads Murphy, op. cit., pp. 198 - 200.
188 Rhoads Murphy, op. cit., pp. 194 - 196.
the centralization which reached its fullest development in the reign of Parākramabāhu I. ... This concentration of the administrative departments no doubt contributed towards efficiency so long as there was a strong ruler at the centre to direct affairs, and the state was powerful enough to defend itself against aggression from without or to deal with internal discord. But once the strong guiding hand was removed and the capital city sacked by the invaders, the administrative machinery would have been dislocated with the loss of the archives and the dispersal or death of the bureaucrats ...". 189

Liyanagamage's view is explained in the following words, "... Once the administrative machinery was weakened, it would have been a very difficult task to maintain in good repair the elaborate irrigation system, which was the basis of the economy of the Sinhalese kingdom." 190

Another explanation is also possible, if not for the decline of the reservoir based agriculture of Rajaraṭa, at least for aggravating the process of decline. Probably the Tamil kings in Jaffna who gradually formed a separate kingdom after the middle of the

190 A. Liyanagamage, op. cit., p. 72.
thirteenth century and the Sinhalese rulers in the south western regions treated the areas in Rajaraṭa as a buffer region. Forming a separate Tamil kingdom in the north was a notable long-term result of the south Indian invasions of the thirteenth and fourteenth centuries. Neither the Tamil rulers nor the Sinhalese kings could establish their capital in Rajaraṭa as there was an equally powerful enemy close by. When there were no political centres, gradually communications and contacts with other areas declined in Rajaraṭa. The settlements became isolated and local chieftains named vaunnis came to power in those isolated settlements. Village folk who survived in the isolated settlements managed the irrigation works and cultivated their paddy fields. The isolation, however, paved the way for stagnation. The complete decline was a very long process but the first stages of this decline was to be seen clearly towards the end of the period under discussion.
Chapter V

INTERNAL TRADE AND MONETARY TRANSACTIONS

In the agricultural society of Ceylon, the villager and his household lived in a closed economy to a great extent. Production and consumption of the village were taken care of by the villagers themselves. Transport and communications were irregular.

Yet the transport of some commodities from one area to another for purposes of trade was inevitable. Commodities such as pepper, ginger, arecanut and coconut that did not grow in every locality, cloth which was not manufactured in every village and imported commodities had to be supplied by traders. Salt and dried fish had to be brought from coastal areas to the interior for sale. Moreover, craftsmen belonging to various castes apart from rendering their services to people of 'higher castes', the king and to monasteries exchanged their products or sold them. Thus there was a certain amount of trade in commodities such as pottery and jewellery. To this extent trade was important in all inhabited areas of the country.

This type of trading activity was more prominent in towns such as Anuradhapura, Polonnaruwa, Kurunagala, Yapahuwa and Dambadeniya which were political centres in different periods. Courtiers and their
families formed a considerable part of the population in these political centres. Their living standards were certainly higher than those of the ordinary villagers. The population of towns also was greater than that of villages. Therefore, there was a better demand for commodities of the trader in these towns than in villages. Since there were roads connecting different towns the trader also found easy access to the town.¹

Towns had specific places for trade. Certain streets were reserved for the bazaar in Polonnaruwa. In these streets there were open shops where all wares were kept for sale.² The palm leaf manuscript Kurunāgala Vistaraya refers to merchant streets - kadapil and velenda vidi - in Kurunāgala.³

Certain ports such as Valigama, Galle and Dondra⁴ also functioned as trading centres. Moreover,

---

1 One main road connected Mahātīthā or Māntāi with Anurādhapura (MV. XXV, 79 - 80). Another highway linked the capitals of Rajaratā with Rohana. It ran from Anurādhapura to Polonnaruwa and from there via Mahiyangana, Buttala to Mahāgāma (MV, XXV, 1 - 52; CJSGr, II, pp. 129 - 134). There were two other main highways in the western and eastern parts of the Island which ran from Mahānāgahula in Rohana to areas in Rajaratā (CV. LVIII, 42 - 51; UBC. I, pt. II, p. 426). Another main highway connected Dambadeniya with Polonnaruwa in the thirteenth century (CV. LXXXIX, 13 - 14).

2 CV., LXXIII, 149.

3 MS. Kurunāgala Vistaraya, B.M. (OR. 5042) foll. 3b.

4 See Chapter VI, pp. 233-234.
there were market villages in various parts of the country. These were denoted by the term nigama or niyangama in inscriptions and literature. The translation of the term niyangama as market town by certain scholars seems to be inaccurate. In the Jātaka Atuvā Gātāpadaya, gama is explained as a 'small village' and nigama as a 'bigger village'. The Vimātipinodinī qualifies gāma with khuddako and nigamo with mahanto sāpanako. The context in that text suggests that a niyangama had a few wayside kiosks, but it does not favour the interpretation of niyangama as a market town. The Kṣekhāvitarani Pitapota refers to niyangama as a large village that did not have ramparts as in towns. The Sinhala Anāgatavamsaya too provides evidence in support of the view that niyangama was a village larger than an ordinary one. Therefore, it would be more appropriate to translate the term niyangama as market village. This suggests that all villages did not possess proper market places and that an important market village served some of the needs of a few surrounding villages.

5 M.B. Ariyapala, SMC., p. 40; D.M.De Z. Wickramasinghe, EZ II, p. 95, p. 141.
6 p. 39
7 p. 77
8 p. 38
9 p. 108
The tenth century Badulla pillar inscription of Udaya IV, lays down certain rules concerning the administration of a market village named Hopitigama close to Mahiyangana. As Indrapala points out, Padaviya seems to have been a commercial centre in the eleventh and twelfth centuries for Tamil inscriptions of this period attest the presence of south Indian traders, especially the well-known Viravalanjiyāras at this place.

Small ordinary villages had no specific trading localities. The Gūlavamsa states that there were "... shops here and there on the outskirts ..." of Polonnaruwa. There would also have been a few scattered 'shops' along principal routes.

Trading places were commonly denoted by the term salpila. The Ruvanmal Nighanduwa explains the word salpila as a place where merchants kept their goods for sale. The Atadāsannaya indicates that salpila was a place where valuables were sold.

The pedlar or hawker played an important role in trade. The Saddharmālankārāya refers to a

---

10 EZ. V, pt. II, no. 16.
12 CV., LXXII, 212.
14 p. 104.
merchant of Māvatu Pațuna who went eastwards selling various commodities. The Rasavāhini refers to a pedlar going from Mahātīṭṭha port to a small village close to Anurādhapura. The same text mentions a merchant who went from village to village selling lime (chunna). The Cūlavāṃsa indicates that prince Parākramabāhu sent spies in the guise of pedlars into Rajaraṭa. The Pūjāvaliya refers to a man who maintained his family by hawking.

Most of the above references show that hawkers or pedlars went to villages from ports or towns from where they could collect various commodities needed by the villagers. These were sold from house to house in the village. Hawking may have been prevalent in towns, too, but possibly not to the same extent as in rural areas. There were established trading centres in towns. Pedlars who went on foot used a pingo (kata) or a box to carry their articles of trade.

There were also bands of traders who travelled over the country. Their goods were transported

---

15 p. 641.
16 Rasavāhini Lankadipuppatthivatthūni, p. 128.
17 Ibid., p. 24.
18 CV, LXVI, 134.
19 PJV., p. 517.
on carts drawn by bullocks. These traders not only sold their goods at market places but also supplied them to traders who owned small shops in towns and villages. As Paranavitana points out, the leader of such a band was known as Sāttunā. Many inscriptions refer to carts, oxen and buffaloes. In the Kiribatvehera inscription reference is made to a cart road (gāl maga). It is difficult to ascertain precisely the sizes of ox-wagons, their ordinary loading capacity and the extent of their use etc. No single vehicle is described in detail in our sources. The load wagon must have been a form or type of the modern bullock cart (single, double or both). The Badulla pillar inscription indicates that carrying goods on oxen and buffaloes was also prevalent.

Traders who travelled with cart loads collected different commodities on their return journey. Certain merchants made special trips on bullock carts to the countryside purely to collect commodities such as ginger. These merchants no doubt travelled along roads

21 Sinhala Thūpavamsa, p. 136; Muvadevdāvivarana, Kumaranatunga, v. 138.
23 EZ. I, p. 44, 173, 195.
24 EZ. I, p. 158.
25 EZ. V, pt. II, no. 16.
26 Sinhala Thūpavamsa, p. 166.
between well-known centres of population. Therefore, this type of trade was restricted to a few routes. For purposes of trade as well as other considerations the proper maintenance of such roads must have been regarded as one of the duties of the king.

***

The tenth century Badulla Pillar inscription lays down certain regulations regarding the administration of a market place at Hopitiigama. According to this inscription, a trader who kept his shop open on a pōya day was liable to a payment of a padda of oil for the burning of the lamps at the Mahiyangana monastery. If he failed to do so, a fine was to be imposed and used for the same purpose. Two plausible inferences may be drawn from this evidence. Firstly, it is possible that all shops were expected to be closed on pōya days and that those who did not do so had to make a special payment to the monastery. Secondly, it may be interpreted to mean that those who opened stalls on monastic grounds on pōya days had to pay a fixed levy. However, the first inference seems to be the more plausible since regulations in the inscription seem to apply to the traders in the

---

27 EZ. V, pt. II, no. 16.
market place.

The same edict states that goods being brought to the market place should not be purchased before they reached the market and that toll duties should not be levied if the goods were merely being transported through the market place and not meant to be sold there. It further states that goods liable to toll duties should not be sold at unauthorized places. We may infer from this that toll duties were levied only on certain kinds of commodities. But we are not in a position to define these taxable articles and the amounts charged as toll dues on them. Only one inscription, i.e. the inscription on the stone canoe within the citadel of Anurādhapura, states that one pata of paddy was to be taken from each sack brought into the city.\textsuperscript{28} In the case of goods that have not been shown to the authorities of the market place double toll duties were to be levied.\textsuperscript{29} This shows that the king's officers were vigilant on matters concerning trade to check evasion. Weighing and measuring goods with unauthorized weights and measures were not allowed.\textsuperscript{30} Probably authorized weights were stamped with the king's seal.

\textsuperscript{28} EZ. III, no. 9, p. 133.
\textsuperscript{29} EZ. V, pt. II, no. 16.
\textsuperscript{30} Ibid.
Even though these regulations concerned only the administration of the market place at Hopitigama in the tenth century, it is likely that similar rules were applicable to trade in other market places and towns as well. Such rules and regulations involved fundamental principles which would not have differed from place to place. It is also possible that these regulations in some form or other were effective not only in the tenth century but also in the immediately preceding and following centuries for we know that the institutions of ancient Ceylon changed rather slowly. However, nothing definite could be said on this as it is unwise to generalize on the basis of one single example which does not even belong to our period.

***

Some of the traders in the Island were grouped in guilds from ancient times. There are early Brāhmī inscriptions mentioning mercantile guilds (puga or pugiya). From inscriptions of the fourth and fifth centuries A.D. we learn that mercantile guilds received deposits of paddy and other grains and paid regular interest on them. These guilds also received deposits of money. The tenth century Badulla inscription refers

31 ASCAR., 1932, p. 9.
32 EZ. III, no. 17, no. 26.
to a mercantile guild named vanigrāma at a trading centre near Mahiyangana.  

During the period under discussion we find references to Tamil mercantile communities such as Valaṅjiyār or Vīra-valaṅjiyār, Nagarattār,  

Balāṇji or Balija and Nānādesi.  

It is a well-known fact that similar mercantile bodies operated in contemporary South India and most likely in both countries these bodies had common characteristics.  

The Anurādhapura slab inscription of Līlāvatī states that this queen caused an alms-hall named Palabalavi Mādhāvi to be built at Anurādhapura for the purpose of giving alms to the poor.  

It further states that for the supplying of spices and other articles required for

---

33 EZ. III, no. 4.  
34 CJSG, II, p. 194.  
35 EZ. II, no. 38.  
36 EZ. I, p. 179.  
38 EZ. I, p. 179.
it, she caused the 'customs house' known by the same name, to be constructed in the neighbourhood of the alms-hall by the mercantile community known as נֶנֶדֶסִיס. The presence of נֶנֶדֶסִיס and other communities in places such as Padaviya, Vāhalkada, Vihārahinna and Anurādhapura in the interior may suggest that they were engaged in internal trade.

A Tamil inscription from the ancient port of Mahātītthā records an arrangement made for the burning of a street lamp outside the Tiru-Īrāmīswaram temple at Mātottam by a certain Tevan. It is stated in this inscription that the money for the purpose of burning the street lamp was deposited with the Cankarapātiyār, the Verrilai-Vāniyar and the Valakkay-Vāniyar, all of Mātottam. As the names imply, Verrilai-Vāniyar and

39 D. M. De Z. Wickramasinghe in his edition of the above inscription in the Epigraphia Zeylanica, Vol. 1, reads the word madigha as masisa and renders it into English as 'platform' (EZ. I, pp. 179 - 181). Paranavithana points out that the reading of the word is incorrect and corrects it as madigha. (Lankātilaka Inscriptions, UCR., January, 1960, pp. 12 - 13). The same word occurs in the Lankātilaka inscriptions and he translates it as 'customs house'. In both cases translations do not completely agree with the context but one has to await further light on this from fresh discoveries. In the light of the present knowledge any other interpretation is also not possible. However, Paranavithana's translation seems to be more suitable than the other and it is accepted tentatively in this discussion.

40 See below, p. 179

41 STII, IV, no. 17141b.
Valakkay-Vāniyar were traders in betel and bananas respectively. It is unlikely that betel and bananas came under the category of imports and exports. Therefore, it is possible that these merchants traded in those articles at Mahātittha and in neighbouring areas.

As to the function and organization of the mercantile communities such as the Valañjiyārs and Nānādēsis in South India, Ceylon and in some parts of South East Asia a detailed study of Tamil, Kannāda and Telugu inscriptions is required. Here only some aspects of these problems can be considered.

According to Indrapala, Nānādēsis, Valañjiyār and Nakarattār appear together with a community named Ainnurruvār in many South Indian inscriptions. Most prominent among these were the Ainnurruvār. In many of the inscriptions of Ainnurruvār there are as many as forty six bodies associated with them. These include Nānādēsis, Valañjiyārs and the Nakarattārs. The exact relationship between the Ainnurruvār and other communities is not easy to determine. Indrapala points out that the Ainnurruvār were a community distinct from all others mentioned with them. This view seems to be correct as there are instances to show that the Ainnurruvār presided

42 K. Indrapala, op. cit., p. 137.
over several meetings where affairs of the other communities were settled.\textsuperscript{44}

The above mentioned mercantile communities are described as 'corporations of merchants' and guilds in certain modern works.\textsuperscript{45} Activities of these communities extended from South India to Ceylon and South East Asia.\textsuperscript{46} If all these were single unified 'corporations' having members in different countries, there should have been one central organization in each of them to deal with profit sharing, accounting etc. But no evidence is available to suggest such possibilities. It may also be pointed out that such organizational methods are recent developments.

It should, however, be stated that those communities had certain features in common with guilds. Thus, Vijñānesvara in his \textit{Mītākṣara} defines śrēnayāḥ as guilds of persons earning their livelihood by the same kind of labour, belonging either to different castes or to the same caste.\textsuperscript{47} The bond of union in the guild was that its members followed the same occupation. If this definition is applied to commercial groups such as Nānādēśis and \textit{Valaṅjiyāraś}, they can be regarded as guilds. As

\begin{itemize}
\item \textsuperscript{44} EC. VII, p. 150.
\item \textsuperscript{46} K.A. Sastrī, \textit{Nilakanta}, \textit{The Colas}, 1937, pp.420 - 422.
\item \textsuperscript{47} \textit{Mītākṣara} II, 30, 192. Quoted in \textit{Economic Conditions in Southern India} by A. Appadurai, Vol. I, p. 358.
\end{itemize}
Appadurai points out, they acted collectively to obtain privileges for themselves and in making gifts. Every member had to subscribe to a collective pool and donations were made from it.  

In many instances where donations were made by them, these were recorded in the name of the community or group. As a community they would have been organized to safeguard their interests and to provide protection to each other. It is stated in some of their inscriptions that almost all the communities were bound together by the *banāṇju dharma* which they claimed to have followed. Some of them were also bound by kinship ties. The Polonnaruwa slab inscription of *Vēlaikkāras* states that the *Valanseyār* and *Nakarattār* were their elders and kinsmen.  

The *Nāṇādesis*, *Valaṇjiyārs* and *Nakarattārs* were only a few of the South Indian commercial communities active in Ceylon in the twelfth century. Indrapala points out that there are at least three Tamil inscriptions in the Island which refer to several others. These records, which are unpublished, have been found at Vāhalkaṇṭa, Vihārahinna and Padaviya and contain the prasasti of the Ainnurruvār

---

49 EC. VIII, p. 89 of the text.
50 EZ. II, no. 40.
at the beginning. Among those mentioned are Cettis, Cettiputras, Virakkoṭi, Valankāi, Angakkāras, Ilaicinkam and the Kongavālas. 51

In this connection it is pertinent to examine the term setthi 52 or sitāna 53 used in inscriptions and literature. The Pāli term Setthi corresponds to the Tamil Cetti which was applied to a South Indian mercantile community. Functions of Cettis in South India were trade and monetary business, especially money lending. 54 Both terms Cetti and Setthi are apparently derived from Skt. Srēsthin. Some scholars have stated that the term Setthi in Ceylon was used as a designation for a head of a mercantile guild. 55 But most probably the term Setthi or Situ had a different connotation in Ceylon. As Ariyapala points out, it was a titular rank bestowed upon certain wealthy citizens - whether they were engaged in trade or not - by the king, as a mark of social eminence and recognition. 56 The Mahāvamsa says that the title Setthi was conferred by

52 EZ, IV, no. 25.
53 EZ, IV, no. 12; SDHRV., p. 236, pp. 452 - 453; Sinhala Bodhivamsa, p. 172.
56 SNC., p. 104.
Asoka on an envoy sent to him by Dēvānampiyatissa. The Saddharmaratnāvaliya contains many references to the bestowal by the king of the title Setthi on wealthy citizens. There are similar references in the Saddharmaratnakaraya. Reference is made to two titular ranks named Mahasitunā and Sulusitunā in the Sinhala Bōdhi vamsa. It is difficult to ascertain whether all the Setthi had any influence in the administrative affairs of the country. But all Setthi seem to have been represented by one chief Setthi in the council of the king. Reference is made to a revolt organized by three officers who bore the titles Cattaggāhakanātha, Dhammaggehakanāyaka and Setthinātha during the reign of Vijayabāhu I. The Mādavala Rock Inscription of the Kotte period refers to a high official named Jōti Sitāna who had set his signature to a grant of land along with the ūpā. The Nikāyasangrahaya, too, mentions Situnā as an officer of the king during the time of Parākramabāhu I. The Kandavurusirīta, giving a list of officers to whom the king gave

---

58 SDHRV., p. 97, pp. 452 - 453, p. 743.
59 Saddharmaratnakaraya, p. 455.
60 Sinhala Bōdhivamsa, p. 219.
61 CV., LIX, 17.
62 EZ. III, no. 24.
instructions daily, refers to situnā (chief of setthis) and mahavelendanā (chief of traders). The Pūjāvaliya, too, refers to situvaru (setthis) and mahavelandana-varu (chiefs of traders), indicating that they were not identical. This supports our earlier assertion that in Ceylon the term setthi was not strictly applied to a community of traders but it was a titular rank bestowed upon eminent citizens.

Paranavitana equates the term kada-gosthayēhi-ättavun of the Council Chamber Pillar inscriptions with the term situnā. He states: 'situ-nā is the principal situ (Skt. sresthin) i.e. the head of the mercantile or banking corporation. This office probably corresponded to the pada-gosthayēhi-ättavun in the Council Chamber Pillar inscriptions ...' H.W. Codrington, too, holds a similar view. But, as discussed above, the evidence available does not suggest that the term situnā was applied strictly to the head of a mercantile or a 'banking' corporation. According to Paranavitana: "... in the term kada-gosthayēhi-ättavun, kada is a word of Tamil origin used in Sinhalese, meaning 'market'. Gostha or

65 PJV., p. 113.
67 CJSG. II, p. 139.
gosthi is a Sanskrit word meaning 'society', 'association', or 'corporation'; gosthayehi is the locative or genitive singular form. Attavun means 'those of'; the whole phrase thus signifies 'members of the mercantile corporation'.\textsuperscript{68} Paranavitana's explanation of the words on etymological grounds may well be correct, but the conclusion that the whole phrase corresponded to situna is hardly tenable. It is based on the assumption that situna was the chief of traders. It would be more appropriate to equate the term Kada-gosthayehi-attavun with mahavelandanaā.

***

As to the commodities circulated in the country by means of trade, certain deductions may be made. Most of the exports such as elephants, gems and pearls and imports such as horses\textsuperscript{69} did not have much importance in the internal trade. Probably this was because the export trade was a royal monopoly and that some of the imports were directly taken for the use of the king and his courtiers.

One would not be wrong in assuming that

\textsuperscript{68} UHC., I, pt. II, p. 540.
\textsuperscript{69} See Chapter VI, pp. 222-225.
salt and dried fish were two of the most important commodities that were in demand all over the country and had to be supplied by the itinerant trader.

Among the other kinds of food, grains and spices may be mentioned first. Reference is made to the sale of grains such as undu (black peas) and mun (peas). The Anuradhapura slab inscription of Queen Līlavatī and the *Sinhala Thūpadvamsa* suggest that merchants were engaged in the spice trade. However, the extent of trade in these commodities is not easy to determine.

As the inscriptions and literature refer to people of the fisher caste it may be assumed that sale and exchange of fish was prevalent. But due to the lack of transport, facilities and developed methods of fishing fresh fish was not certainly available everywhere. In the areas where river fishing was prevalent, fish was mostly sold at the bank of the river itself.

Similarly, it is reasonable to assume that the sale of meat was also conducted by those who hunted wild animals. But it is very unlikely that there were

---

70 SDHRV., p. 263.
71 EZ. I, p. 179; Sinhala Thūpadvamsa, p. 141.
72 EZ. IV, no. 25.
73 Saddharmālankārāya, p. 612, 628; Sinhala Bōdhivamsa, p. 212; Rasavāhini-Lankādippattivatthūni, p. 100.
74 SDHRV., p. 449.
regular places where meat was sold.

Since the chewing of betel was widely practised among the Sinhalese and Tamils, there was a regular demand for betel, arecanut and lime (chunna). According to Paranavitana, the mention of arecanut trees among the gifts in the Ambagamuwa inscription indicates that this commodity was a royal monopoly in the twelfth century as it was in the eighteenth. But the mention of arecanut trees in a royal grant does not prove that arecanut was a royal monopoly. The Galapāta Vibāra inscription states that a piece of heritable land with coconut and areca palms, belonging to certain individuals was donated by them to that vibāra. The order contained in the Badulla inscription that betel and arecanut shall only be sold in separate stalls suggests that private traders could trade in those commodities though sale of these were subject to stricter control than other commodities. If at all the king had any monopoly it must have been in the export trade.

Among other trade commodities in the Island

---

75 EZ. V, pt. II, no. 16, p. 183.
76 EZ. V, pt. II, no. 16, p. 183.
79 EZ. IV, no. 25.
80 EZ. V, pt. II, no. 16.
reference may be made to clothes, jewellery, glassware and pottery. Of these, pottery⁸¹ would have been sold mostly in the areas where it was manufactured. Even today with developed communication methods, this is the normal practice in Ceylon. But commodities like jewellery, clothes and glassware were certainly transported from one area to another. The Gūlavamsa indicates that rings and bracelets of glass were carried for sale by hawkers. The Sahassavatthupakarana refers to a request made by King Dutugemunu, while staying in Mahāgāma, to a merchant in Anurādhapura to send various requisites including cloth for an offering.⁸³

An eleventh century inscription states:
"... buffaloes, oxen and goats which were brought from outside for sale shall only be bought after due identification of them and on security being given ..."⁸⁴

But we are not in a position to determine the extent of this trade and the manner in which it was carried out.

***

One of the two main types of exchange in

---

⁸¹ SDHRV., p. 220; PJV., p. 644.
⁸² CV., LXVI, 134.
⁸³ Sahassavatthupakarana, pp. 102 - 103.
⁸⁴ E.Z. V, no. 6, p. 251.
in trade was barter. The Saddharmantrapakaraya refers
to a fisherman who exchanged two thirds of his fish
daily for rice, ghee, milk and oil. The Saddharmantrapakaraya
states that a certain person traded by bartering
different kinds of commodities.

Using currency in trade was certainly
prevalent but whether the predominant type of exchange
was barter or currency is not easy to determine. The
Culavamsa explicitly states that Parakramabahu I issued
kahavanus for purposes of trade in the country.

Inscriptions show that the minting of coins was a royal
monopoly. No coin struck by the Sinhalese rulers of
Rohana during the Cola occupation of the northern
provinces of the Island has come to light. The first
king to whom any coin with the sovereign's name can be
assigned is Vijayabahu I. Most of the gold and silver
coins bearing the legend Srivijayabahu can be attributed
to him. The coins of the Sinhalese rulers of the
thirteenth century later came to be known as 'Dambadeni
Kasi', a phrase correctly indicating the dynasty by
which they were issued.

85 Saddharmantrapakaraya, p. 469.
86 SDHRV., p. 704, Baduvata badu gannmen velandam karati.
87 CV., LXXVII, 102.
88 EZ., IV, no. 3.
89 CCC., p. 63.
90 Ibid.
91 Ibid., p. 64.
The most important coin which is frequently mentioned is kahavanu, kahāpana or karsāpana. The coin known as māsaka or massa in the commentaries of Buddhaghosa was one twentieth of the kahāpana. But during the period under discussion kahavanu, kahāpana or karsāpana was also synonymous with massa or masuran. The term massa or masuran was often used by Pāli and Sinhalese authors to denote kahāpana. The word kahāpana in the Pāli texts is sometimes rendered into Sinhalese as massa or masuran. The Saddharmaratnāvaliya indicates that the massa was equal to the weight of a kalanda. The kahāpana was also thought to be identical in weight with kalanda. Atthakahāpana in the Dhammapadathakathā is rendered into Sinhalese in the Saddharmaratnāvaliya as ata massak. Commenting on this reference, Ariyapala states: "... it is very likely that the author was here thinking in terms of the cost of flowers in his day, and was not giving the equivalent of the Pāli". It seems that this explanation

92 Butsarana, p. 89; Jātaka Atuvā Gātapadaya, p. 110, 163; EZ. II, 105.
93 CCC., p. 15.
94 SDHRV., p. 394; ... mal ata nāliyak ... dīlā ... mal nāliyakata massak bāgīn ata kalandak labati ... SDHRV., p. 890.
95 CCC., p. 53.
96 SDHRV., p. 204.
97 SMC., p. 143.
is quite untenable. As paranavitana has correctly pointed out, in Sinhalese literary works of the Polonnaruwa period and later, masu which originally denoted a weight equal to one twentieth of a kahāpana, became synonymous with kahāpana.98

Various coins such as massas and half massas of Parākramabāhu I, massas of Līlāvatī,99 massas of Sāhasamalla and Dhammāsokadēva,100 massa, half massa and quarter massas of Bhuvanekabāhu I101 have been found in different parts of the Island. In 1917 a pot filled with Sinhalese coins was found in Jaffna. This pot consisted of 60 coins of Līlāvatī, 105 coins of Sāhasamalla and 10 of Siri Dhammāsokadēva. All these coins were copper massas.102

The weights and metals of the standard coin changed from time to time, but the money value remained the same.103 After the middle of the fourteenth century massas or kahāpanas fell into insignificance and coins such as panam104 were more widely used.

The currency up to the end of the tenth century was of gold. The majority of Vijayabāhu's coins

---

98 UHC., II, pp. 551 - 552.
99 CCC., p. 69.
100 Ibid.
101 CCC., p. 71.
103 CCC., pp. 66 - 74.
104 EZ. IV, no. 12.
were of silver or of gold but the latter were so debased as to be hardly distinguishable from silver. Under Parākramabāhu I and his successors, the old principal coin had become one of base metal or copper. By the fourteenth century the word masuran was applied to copper. 105

In this connection it should be mentioned that massas or kahāpanas are loosely referred to as gold coins in the literature of the twelfth, thirteenth and fourteenth centuries. 106 But these references cannot be taken at their face value for more authentic numismatic evidence does not support them. The kahavanu was a gold coin before the eleventh century but, as shown earlier, the gold contents of coins declined after the eleventh century.

Uncoined gold and silver weights were also used as media of exchange. A fragmentary Sinhalese inscription found on a stone plinth of the shrine of Katugalvihāra in Giruvāpattu, Hambantoṭa District records a gift of twenty kalandas of gold. 107 The Jātaka Ātuva Gātapadaya refers to goods worth two and a half viyatas of gold. 108 Saddharmaratnāvaliya indicates that fish

---

105 CCC., pp. 73 - 81.
106 SDRRv., p. 223; Saddharmālankārāya, p. 567.
107 CJSGL. II, p. 120.
was exchanged for weights of gold or silver known as aka.  

Other weights of gold and silver used as media of exchange are madata and nikkha or nika. The Cūlavamsa states that Parākramabāhu II of Dambadeniya spent five thousand gold nikkhas to build receptacles for the casket of the Tooth Relic.

The Jātaka Atuvā Gātapadaya renders the word hirañña into Sinhalese as amuran and masuran. The Vesaturudā Sannaya renders the Pāli phrase hiraññam vā suvannam vā as masuran and ratran. In another instance the Jātaka Atuvā Gātapadaya renders the same phrase as masurana and ratrana. In the Purāna Vinaya Sannaya of the thirteenth century, hirañña is explained as kahavanu and suvanna as 'red gold'. Thus it seems that uncoined gold was known as suvanna or ratrana and coins as hirañña, amurana, kahavanu and masuran.

***

The subject of weights and measures has
been dealt with in some detail by several scholars.  

Therefore, attention is focussed in this discussion mainly on the description of the weights and measures which were used in trade.

The Saddharmaratnāvaliya indicates that riyan was a measurement used in measuring articles such as cloth.  

The Pūjāvaliya gives a list of measurements in the ascending order, viz. angula, viyata, riyana, yata, isba, gavuva and yodana.  

According to the list of measurements of length in Moggallāna's Abhidhānappadīpikā, calculated by T.W. Rhys Davids, twelve angulas were equal to one vidatthi or viyata. Two viyatās were equal to one ratana, riyana or hattha, seven ratanas to one yatthi or yata, twenty yatthi or yatas to one usuba or isba, eighty usabas to one gāvuta and four gāvutas to one yodana.  

Of these, angula, viyata and riyana were used in trade especially in measuring cloth. Other measures were generally regarded as measures of length in estimating the distance from one place to another.
Most important measures of capacity were pata, \(^{121}\) manāva, \(^{122}\) nāli, \(^{123}\) lahasu, \(^{124}\) pāla, \(^{125}\) amuna, \(^{126}\) karisa, \(^{127}\) and vāla. \(^{128}\)

Rhys Davids points out that according to the list of Moggallāna's Abhidhanappadīpikā, four pasatas were equal to one nāli \(^{129}\) and that the terms pata and pasata indicated the same measure. \(^{130}\) The term padda (Skt. prastha) is also synonymous with pata. \(^{131}\)

The next measure of capacity was manāva. The Saddharmaratnāvaliya clearly shows that nāliya consisted of two manāvas. \(^{132}\) Therefore, two patas were equal to one manāva. According to the same text, lāssa or lahassa consisted of four nālis. \(^{133}\) Inscriptions, too, confirm this. \(^{134}\) Reference is made to a maghada nāliya in many texts. \(^{135}\) Rhys Davids points out that one

---

121 EZ. I, no. 7, p. 83, 94, 95, 97.
122 SDHRV., p. 773.
123 Jātaka Ātvā Gātapadaya, p. 52; SDHRV., p. 282;
Pūjāvaliya, 34th Chapter, ed. Medhankara, p. 8.
124 SDHRV., p. 755; PJV., p. 34; EZ. III, no. IV, p. 79.
125 EZ. IV, no. 12, p. 104; EZ. III, p. 134.
126 EZ. III, p. 321.
127 EZ. III, no. 18.
128 Pūjāvaliya 12th to 16th Chapters, ed. Hettiaracchi, p. 129.
129 Numismata Orientalia, VI, p. 18.
130 Ibid., 18 - 20.
131 EZ. III, no. 4, p. 94.
132 SDHRV., p. 773.
133 Ibid., p. 774, p. 960.
134 EZ. III, no. 4, p. 95.
135 Sinhala Thūpavamsa, p. 91; SDHRV., p. 837.
Sinhalese nāli was equal to one and a half of the maghada nāli. The nāli was a liquid as well as a dry measure. The Pujañavaliya shows that it was used to measure ghee, jaggery and honey. As Ariyapala has pointed out, pata and lahassa were also dry as well as liquid measures. The Badulla inscription refers to a padda of oil.

The same inscription states that commodities should not be measured with lahassu measures other than the gana lahassa. Gana is a term frequently used to indicate 'community'; gana lahassa may be the measure accepted by the 'trading communities' or guilds and approved by the king. Pāla, amuna, kiriya and yāla were land measurements which have been discussed elsewhere.

Measures of weight frequently referred to in the sources are viyāta (paddy seed), madata aka, kalanda and nikkha.

137 Ibid., p. 19.
138 Pujañavaliya, Chapter 34, ed. Medhankara, p. 8.
139 SMC, p. 157.
140 EZ, V, Pt. II, no. 16.
141 Ibid.
142 Chapter II, Pr. 72-73.
143 SDHRV, p. 821.
144 EZ, III, no. 4.
145 Ibid.
146 EZ, IV, no. 33; SDHRV, p. 799.
147 Jataka Atuva Gatapadaya; Atadassannaya, p. 89.
As Codrington has correctly pointed out, eight viyatas were equal to one madata.\(^{148}\) According to the Yogaratnakaraya, twenty viyatas were equal to one aka.\(^{149}\) The same text and the Saddharmaratnāvaliya state that one kalanda was equal to eight akas.\(^{150}\) This tallies with the list of weights given in the Abhidhānappadīpiκā as calculated by Modder.\(^{151}\) The Saddharmaratnāvaliya renders the Pāli phrase pādamattampi na agghati of the Dhammapadatṭhakathā as satalis viyattakut novatti.\(^{152}\)

This may suggest that the weight pada equal to two akas, known in the age of the Dhammapadatṭhakathā, i.e. in the fifth century, was not in use during the period under discussion.

In the Jātaka Atuvā Gātapadaya, madata is given as one of the several meanings attached to the word māsaka.\(^{153}\) The Saddharmaratnāvaliya renders the Pāli phrase pañca māsaka mattaṃ of the Dhammapadatṭhakathā into Sinhalese as ratran dā akak.\(^{154}\) Therefore, two and a half madatas were equal to one aka. As shown elsewhere,

\(^{148}\) CCC., p. 11.
\(^{149}\) Yogaratnakaraya, ed. Don George Samaratunga, Colombo, 1907, v. 284.
\(^{150}\) Ibid., v. 284; SDHRV., p. 623.
\(^{151}\) F. Modder, "Sinhalese Weights and Measures", JRASCE., XII, no. 43, 1892, pp. 172 - 183.
\(^{152}\) SDHRV., p. 497.
\(^{154}\) SDHRV., p. 388.
one aka was equal to twenty viyatas. Hence eight viyatas were equal to one madata. This calculation tallies with other evidence. According to the list of the Yōgaratnā-karaya as calculated by Modder twenty madatas were equal to one kalandā. 155 One kalandā was equal to eight akas. 156 Therefore, two and a half madatas were equal to one aka.

There are contradictory statements in different texts on the weight known as nikkha. According to the Atadāsannaya and the Jātaka Atuvā Gātapadaya, one nikkha or nika was equal to fifteen kalandas. 157 But as Modder points out, according to the list of the Abhidānappadīpikā one nikkha was equal to twenty-five kalandas. 158 The Ummagga-jātakaya too, indicates that twenty-five kalandas were equal to one nikkha. 159 Since all these texts belong to a contemporary period one cannot assume that these texts indicate the usages of two different periods. Therefore, one may only say that nikkha was a weight equal to fifteen or twenty-five kalandas.

These weights were mostly used in weighing medicines and precious metals such as gold. 160 The weight

---

155 JRASCB, XII, no. 43, 1892, pp. 172 - 183.
156 See above, p. 193.
157 Atadāsannaya, p. 157; Jātaka Atuvā Gātapadaya, p. 89.
158 F. Modder, "Sinhalese Weights and Measures"; JRASCB., XII, no. 43, 1892, pp. 173 - 183.
159 Ummagga-jātakaya, p. 171.
160 CJSGL. II, p. 120; SDHRV., p. 821.
known as kalanda was also used in weighing commodities such as camphor. As in the present day, scales were denoted by the term tarādi.

***

In the texts of medieval Indian jurists such as Vijñānesvara and Mādhava, there are many references to various legal aspects of debts, deposits of money etc. These references enable the historian to study facts pertaining to different kinds of monetary transactions in relation to South India. But in Ceylon no similar texts are available for the corresponding period and the student of history has to obtain his material mainly from scattered references in literary works and inscriptions.

The Saddharmālankārāyā refers to a person who gave 60 kahāpanas on loan. The Pūjāvaliya and the Saddharmanatnāvaliya refer to money received as debts. Commodities such as rice were also made use of in similar transactions. Reference is made to a person who borrowed rice which had to be paid back with interest.

---

161 EZ. IV, no. 33.
162 Atadāsannaya, p. 223; SDHRV., p. 786, p. 856, p. 956; EZ. V, Pt. II, no. 16.
163 Saddharmālankārāyā, p. 431.
164 Pūjāvaliya, Ch. 12 to 16, ed. Hettiaracchi, p. 66; SDHRV., p. 418.
165 Saddharmālankārāyā, p. 586.
There is evidence to suggest that some form of law of surety was in existence. At least two methods are known. According to one, loan agreements were written down as a kind of contract. According to the other, the borrower or a close relative of the borrower stayed in the lender's house as surety and served him in lieu of interest. If the debts were not settled they were expected to become permanent servants. But there is no evidence to decide whether the lender could sell the servant if the loan was not settled.

The Saddharmālankārāya refers to somebody's daughter who worked as a servant girl in a house at Māgama having borrowed twelve kahāpanas from the householder. It should be noted that in certain instances loans obtained by having become a servant of the lender or by keeping one of the relatives as a servant were also written down.

Interest was paid on such loans where nobody became a servant of the lender. But we have no means of ascertaining the amount paid as interest. The word used in Sinhalese literature and inscriptions to

---

166 Rasavāhinī-Lankādīpuppattivatthūni, p. 16; SDHRV., p. 561; Saddharmālankārāya, p. 431, p. 694.
167 Saddharmālankārāya, p. 564.
168 Rasavāhinī-Lankādīpuppattivatthūni, p. 16.
denote interest is poll. Even at present this word has the same meaning.

Evidence is lacking to ascertain whether there was a community of money lenders in Ceylon during this period. Debt transactions took place on a personal basis. Probably those in the upper strata of society who could afford to lend money or commodities such as rice, lent them to those who were in need, but this was not done strictly as a means of livelihood or as an occupation.

The practice of mortgaging movable property also existed. The Saddharmālankārāya refers to a person who mortgaged (ukas kota) his small sword for eight kahāpanas. The Rasavāhini contains a story about a woman who mortgaged her pearl necklace to obtain rice worth one kahāpana. These references certainly depict the conditions of the time but the procedure and the conditions of the mortgages cannot be ascertained.

At least from the fourth century A.D. there had been institutions in Ceylon which afforded facilities

---

169 Atadāsannaya, p. 237; SDHRV., p. 418, p. 650; Saddharmālankārāya, pp. 586 - 588; Pūjavaliya, Ch. 12 to 16, ed. D.E. Hettiarachi, p. 66; EZ. III, no. 17 EZ. IV, no. 5.

170 For immovable property see chapter II. Pp. 71-72.

171 Saddharmālankārāya, p. 660.

172 Rasavāhini-Lankadīpuppattivatthūni, p. 169.
for depositing money or grain for interest. These institutions were called niyamatana in the Anurādhapura period.\textsuperscript{173} If the deposit had been made on condition that the interest should be spent for a specified purpose the body which accepted the deposit had to fulfil those conditions. The Tōnigala inscription dated in the reign of Sirimēghavanna records the donations made by a person named Dēva to the monastery at Yahisapavata to cover the expenses necessary for the Ariyavasa festival.\textsuperscript{174} Dēva deposited two yālas and ten amunas of paddy, six amunas of undu and ten amunas of beans with the assembly of merchants’ guild at Kalahumana.\textsuperscript{175} The expenses for the Ariyavasa festival were to be made available from the interest derived from the capital which was deposited with the institution. The Labuāṭabāndigala inscription datable to the fifth century states that a person named Sirinaka deposited 100 kahāpanas with the guild of Mahatabaka and the annual interest derived from it was to be spent on the Vassa festival of the Dēvagiri vihāra.\textsuperscript{176}

It appears that similar forms of deposits continued to exist at least till the end of the period.

\textsuperscript{173} EZ. III, no. 17, no. 26.
\textsuperscript{174} EZ. III, no. 17.
\textsuperscript{175} Ibid.
\textsuperscript{176} EZ. III, no. 26.
under discussion. An inscription from Anurādhapura datable to the reign of Dappula IV, records a deposit of 200 kalandas of gold at a monastery with specific instructions as to how the income from this endowment was to be utilised. It is clear from this record that the donor expected a return of a substantial amount of annual interest.177 The monastery, therefore, would have had to invest the money on its own or with an institution which accepted deposits in a manner which would have enabled the fulfilment of the conditions laid down by the donor. Among the donations made by Nāgaiccani to the shrine called Tenkailāsam in Kantalāi, recorded in the Tamil slab inscription from Pālamottāi datable to the reign of Vijayaśāhu I, were 35 kācu and 9 kalaṅcu of gold.178 The interest from money so deposited was to be used to meet the expenses in maintaining the shrine. This grant, too, implies that the shrine either had to invest the money on its own or through an institution which invested money on behalf of others.

Frequent references to poli180 (i.e. interest)

177 EZ. I, pp. 23 - 29.
178 EZ. IV, no. 24, pp. 191 - 196: Kalaṅcu was a weight equal to 1/6 oz. of troy; i.e. Sinhalese kalaṅda (EZ. III, p. 336, note 6). Kācu was a gold coin equal to 28 grains of troy (EZ. III, p. 311, note 3).
179 EZ. IV, no. 24, pp. 191 - 196.
too, suggest that investment as a profitable medium was practised. But unfortunately no material is available to ascertain detailed procedures of deposits, investments, re-investments, rates of interest etc.

Depositing money for interest was known also in South India at this time. According to Appadurai, the large majority of South Indian inscriptions mentioning such deposits refer to the investment of money endowments by temples. These temples invested the endowments on their own or through others. In one instance, it is stated that where the safety of the capital invested was in doubt, the persons to whom the amount had been lent had to produce the capital at the end of every fifth year before the managers of the temple.

It may be mentioned here that the concept of advance payments to ensure that goods would be reserved for the buyer was known and practised in Ceylon during the period under discussion. The Dhampiya Aṭuvā Gātapadaya translates the Pāli phrase saccakārasadisam into Sinhalese as hātyuruvāni and explains as badu gahana bava kāmātiyā badu himiyā hata dena at panduru vānnai sēi. This means that an advance paid by a person who was willing

182 Ibid., pp. 435 - 441.
183 Dhampiya Aṭuvā Gātapadaya, p. 62.
to buy goods subsequently was called *saccakāra* or *hātyuru*. The *Jātaka Ātuva Gātapadaya* explains the word *saccakāran* or *attikāran* as *anunta badu nodena bavata him kota atlas kota tabana vastuya yū tān*. This phrase too indicates that an advance was paid to ensure that merchandise would not be sold to anybody till the person who advanced money came and bought it. There is no evidence to determine whether this was a widely prevalent practice. From the knowledge of the limited extent of money circulation and that of internal trade it may be surmised that such practices prevailed only between traders.

---

184 *Jātaka Ātuva Gātapadaya*, p. 57.
CEYLON
IN
THE POLONNARU & DAMBADDENI PERIODS.

IMPORTANT ROUTES
• Ports.
© PLACE NAMES.

0 — 27 Mls.
Chapter VI

FOREIGN TRADE

The sources for the study of foreign trade may be classed into four main categories: (a) foreign notices, (b) coins, (c) inscriptions and (d) literature.

Several foreign writers have left accounts of Ceylon, which vary in their importance as historical sources. The famous Arab geographer, Al-Idrisi (12th century) in his work Al-Kitāb-al-Rudjārī, which deals with eastern lands, refers to some of the products and exports of Ceylon. In Kāzwīnī's (13th century) work Adjāib-al-Buldān or Athār-al-Bilādwa-Akhābār-al-Ībād, Ceylon is mentioned as being famous for its pearls. It also refers to aromatic drugs and spices of the Island. Marco Polo, whose travels extended from Italy to China in the latter half of the thirteenth century, sailed to Ceylon on his way back home and stayed there for a short period. In his account he gives information on valuable gems of Ceylon and also on the mountain of Adam's Peak. Ibn Baṭūṭā visited Ceylon in A.D. 1344 and was a guest of the Āryacakravarti. During his stay in the

country, he went to Adam's Peak and also to some of the ports such as Galle, Dondra and Colombo. His account is of considerable importance, for he deals with some important aspects of the economic conditions in the Island.

Moreover, the missionaries: John of Montecorvino who travelled to China in the middle of the thirteenth century, Friar Jordanus who is believed to have visited India in the first half of the fourteenth century, Friar Odoric who visited some of the Asian countries, including Ceylon, between about 1318 and 1330 A.D. and John De Marignolli who went to China as an emissary of the Pope in A.D. 1342, have recorded their impressions of Ceylon.

The Chinese works Tāo-I-Chih-Lüeh written by Wang-Ta-Yuan (first half of the thirteenth century) and the Chu-Fan-Chi of Chau-ju-Kua (first half of the fourteenth century) who was the inspector of foreign trade in Fu-kien are also valuable sources for the study of Ceylon's trade with other countries.

The accounts of foreign writers have to be utilized with caution. Some of these writers never visited the Island. Writers such as Al-Idrisi and Friar Jordanus based their accounts on information derived from
others. Most of those who visited the Island did not stay long enough to become familiar with the conditions in the country. Their experiences were limited to a few places on the Island. Some of these men wrote their accounts only after the end of their travels, several years after they had seen the places they describe. One cannot expect complete accuracy and precision in accounts which were based on memory. For instance, Marco Polo's experiences were related by him towards the end of his life in a prison and they were written down by another prisoner named Rusticiano.²

In spite of these limitations, accounts of foreigners are of great importance for a study of foreign trade. As will be seen later, these accounts contain valuable references to trade routes, imports and exports of the Island etc.

Coins are also of some importance for a study of foreign trade. From ancient times coins belonging to Roman, Persian, Muslim, Chinese and Indian dynasties have been found in various parts of the Island. Foreign coins found in Ceylon are mostly evidence of direct or indirect trade connections with those countries. Availability of foreign coins in abundance

in different periods and in different sites helps to
determine the vicissitudes of trade and the location
of trading settlements and marts frequented by foreign
traders. However, as coins could be distributed in
several ways, one has to be careful in coming to
conclusions. The provenance and number of the coins,
the legends and symbols on them and their metal content
and fabric are also helpful in ascertaining economic data.

Inscriptions that give information on
foreign trade, though not many, are invaluable. In
this connection, special mention may be made of the
Dondra inscriptions assigned to the reign of Parākramabāhu
II, which contain regulations for the administration
of the seaport nearby,\(^3\) and the Nainativu Tamil
inscription which lays down rules regarding wrecked
cargo vessels.\(^4\)

Sinhalese, Pāli and South Indian literary
sources contain many stray references to foreign trade.
But these references have to be extracted cautiously for
most of the texts are fictional writings. For instance,
the *Saddharmaratnāvaliya* is a collection of stories
based on the *Dhammapadatṭṭhakathā*. The Pāli work *Rasavāhini*

\(^3\) ASCM. VI, pp. 65 - 67.
\(^4\) K. Indrapala, "The Nainativu Tamil Inscriptions
is also a collection of Buddhist stories originating in India and Ceylon. In this type of stories references are made to traders who went abroad, imports and exports, modes of navigation etc. These may reflect the conditions as they existed but their validity has to be ascertained with the aid of other sources.

***

Island of Ceylon, being situated in the middle of the Indian ocean and to the south of the Indian sub-continent was of great importance to foreign traders as it provided good and safe harbours. Therefore, from very early times, Ceylon played the role of a trading centre for foreign merchants who were engaged in transit trade. There also rose a demand in Ceylon for certain commodities that were not available in sufficient quantities. These were imported in exchange for commodities such as gems and certain spices which were produced in abundance and were in demand in foreign markets.

Ceylon was famous for precious stones in the west as well as in the east. In ancient Indian literature it was sometimes called Ratnadīpa. 5 Hiuen-

---

Tsang states that Ceylon was called Pao-Chu or Island of gems. As Yusuf points out, the Arabs called it Jazirat-al-yaqut, the Island of gems. Friar Odoric, writing at the beginning of the fourteenth century, stated that gems were found in a lake near the mountain of Adam's Peak and that the king of Ceylon was believed to have had greater abundance of precious stones than any other monarch on the whole earth. Marignolli, Ibn Batūtā, Sir John Mandaville and Marco Polo allude to the availability of many precious stones in Ceylon. Chau-ju-Kua's Chu-Fan-Chi contains references to the products of Ceylon, such as cat's eyes, red transparent glass, blue and red precious stones etc. In the letter sent through an ambassador by Bhuvanekabāhu I of Yāpahu to the Sultan of Egypt, it was stated that the king of Ceylon possessed a prodigious quantity of pearls and precious stones of every kind. The purpose of the embassy was to encourage direct trade.
relations between Egypt and Ceylon. The context of the letter clearly shows that precious stones were an important export commodity of Ceylon. The Cūlavamsa states that Vijayabāhu I, by sending costly pearls, precious stones and other jewels, made reverence to the 'sacred bodhi tree' in Jambudvīpa.\footnote{CV., LX, 23.} According to the Rājāvaliya he sent precious stones and pearls to Burma as presents.\footnote{Rajāvaliya, ed. B. Gunasekara, p. 41.} Parākramabāhu, when ruling Dakkhinadesa, sent many precious stones by ship for purposes of trade and increased his economic resources.\footnote{CV., LXIX, 33.}

Pearls, as an export commodity, appear together with gems. In the letter sent by Bhuvanekabāhu I to the Sultan of Egypt, Bhuvanekabāhu claims that he possessed large quantities of pearls.\footnote{H.W. Codrington, "A Sinhalese Embassy to Egypt", JRASCB., XXVIII, no. 72, 1919, pp. 82 - 85.} Friar Odoric states that pearls were found near the sea coast of Ceylon.\footnote{Cathey and the Way Thither, ed. Yule, pp. 98 - 99.} The north western coast of the Island was a rich source of pearls. The Cūlavamsa, in its description of the war between Parākramabāhu I and Gajabāhu, refers to Muttākara as a place where Parākramabāhu's fleet went for combat against Gajabāhu's forces.\footnote{CV., LXX, 63 - 64.}
what is meant by Muttākara here āt. probably the pearl banks stretching from the south of Mannar to near Partugal Bay. The Yalppānam Vaipavamālāi refers to a war fought in a much later period for pearl fisheries along the coast of Chilaw. According to Ibn Bāṭtūṭā, the king of Ceylon had a large number of pearls which had been brought from the pearl fishery in his dominion.

18 CV., Tr. P. 292, note 3.
20 The Rehla of Ibn Bāṭtūṭā, ed. Mahdi Hussain, pp. 217 - 218. The following description of a pearl fishery extracted from Wang-Ta Yuan's accounts (Notices of Ceylon in Tao-I-Chih-Lüeh, Tr. by L. Giles, JRASCB., 1920, no. 73, pp. 33 - 34) will give an idea of the manner in which pearl fishery was done. "... On a specially selected day a number of boats with their crews are assembled for the pearl fishery. There are five men as a rule to each boat, of whom two act as oarsmen, while two are told off to work the rope. The fifth man hangs round his neck a bag fitted with a bamboo ring to keep its mouth open, and then, having tied a stone round his waist, he is lowered on the rope line to the bottom of the sea. With his hands he detaches the pearl-oysters from their bed and puts them in the bag. Then he grasps the rope and gives it a pull as a signal for the men in the boat to haul it in, and thus he is drawn up to the surface when he empties his bag of oysters into the boat. As soon as the boats are fully laden, they return to the government depot and are placed under a military guard. After the lapse of a few days when the flesh of the oysters has rotted, the shells are removed and the putrifying flesh is thrown into a sieve, where it is stirred round until the flesh is scoured away, and only the pearls remain. These are again sifted in a very fine meshed sieve, half of them being appropriated by the government, and the other half distributed in equal shares amongst the boatmen."
As Hodivala points out, the trade in elephants between Ceylon and the mainland is mentioned by Greek writers in the third and sixth centuries A.D. According to Muslim writers, Delhi Sultans desired to possess Sailamānī elephants, excellent in war. It is indicated in the letter sent to the court of Egypt by Bhuvanekabāhu I, that elephants were an important export of the Island. Nikitin, the Russian traveller of the fifteenth century writing on Ceylon, stated: "Elephants and ostriches live there and are sold, the

---

22 C.E. Bosworth, The Ghaznavids, 1963, p. 116. Hodivala suggests that the obvious meaning of Sailamānī, Ceylon, may not be meant here, although Ceylon elephants were certainly famed for their courage, but that the reference is rather to the wild elephants found in the Siwalik hills near Thānēsar on the borders of the former United Provinces and the Punjab. Bosworth, Ibid., p. 283, note 55.
23 JRASCB., XXVIII, no. 72, 1919, pp. 82 - 85.
former by the size, the latter by the weight..."24

There are references to suggest that
Ceylon imported elephants while also exporting them.
One of the reasons for Parākramabāhu's campaign against
lower Burma was the plundering by Burmese of some
merchandise which had been sent to Burma from Ceylon
in exchange for elephants.25

24 R.F. Major, (Ed.) India in the Fifteenth Century,
Section on Athanasius Nikitin, p. 20.
Duarte Barbosa gives the following description of
the manner in which elephants were captured. "...
It must be known that they have got other elephants
with which they manage it, and they fasten them
with chains in the mountains and woods where they
are bred, and at the foot and all round a tree near
the elephant they make three or four very large pits,
covered over with slender poles, and they strew
earth on the top, so that nothing appears: and the
wild elephants seeing the female come to her, and
fall into these pits, where they keep them seven or
eight days half-dead of hunger and so many men watch
them by day and night, always speaking to them so as
not to let them sleep, until they tame and render
them domestic, giving them their food with their
hands. And after they have got them broken in and
tame, they take them with strong chains, and by
degrees throw so much earth and branches into the
pit that the elephant gradually rises until he comes
out of the pit, and then they tie him to some tree,
and keep him some days watching, with fire, and men
who always talk to him, and give him food in moder-
ation until they make him domestic and obedient. And
in this way they catch them, male and female, great
and small and sometimes two at once in one pit ..." Bar-
barosa, pp. 167 - 168. Megasthenes and Arrian,
describe similar methods in which elephants were
captured in India. J.W. McCrindle, Ancient India
as described by Megasthenes and Arrian, pp. 90 - 91,
p. 213.

25 CV., LXXVI, 17 - 35.
Chau-Ju-Kua includes elephants among articles exchanged by foreign traders for the products of the Island. C.W. Nicholas was of the opinion that the only object in importing elephants into Ceylon would have been to secure tusked animals, since the Ceylon race had the lowest proportion of tuskers among the Asiatic elephants.

The tusked animals were needed for ceremonial as well as military purposes.

Cinnamon was the most important export commodity of the Island during the time of the Portuguese and Dutch occupation of the coastal areas. But before the twelfth century none of the foreign or indigenous sources mention it as an export from Ceylon. Cinnamon was one of those spices which were in demand in Europe after the Crusades. The earliest foreign reference to cinnamon of Ceylon is found in one of the letters of John of Montecorvino. He states that cinnamon was taken to India from an island close to Mabar. Colonel Yule has correctly identified this island with Ceylon. According to Ibn Baṭūṭā the entire coast of Ceylon was covered with cinnamon sticks washed down by torrents and

26 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
27 Concise History of Ceylon, p. 225.
28 Cathey and the Way Thither, ed. Yule, p. 213.
29 Ibid., p. 213, footnote 3.
deposited on the coast, looking like hills. The inhabitants of Māabar and Malabar took them away without paying for them, but in return for this they made presents of cloth and similar things to the king. This may refer to an exchange of commodities by Indian merchants for cinnamon. Cinnamon is mentioned with many other trade commodities in the letter sent by Bhuvanekabāhu I to the court of Egypt. The Venetian traveller, Nicolo de Conti, wrote in the fifteenth century that cinnamon grew in great abundance in Ceylon. Other than the abovementioned exports, spices such as cardamom, valuable wood, perfumes and aromatic drugs may also be mentioned as exports of the Island in this period. During the Mongol reign in China we hear of occasional despatches by the emperors to Ceylon to collect gems and drugs. According to Chau-Ju-Kua, cardamom and perfumes were among the products of the island of Si-lan. In the letter sent to the court of Egypt by Bhuvanekabāhu, he claimed that he possessed 'brazil wood' and wood which was suitable for

31 H.W. Codrington, "A Sinhalese Embassy to Egypt", JRASCB., XXVIII, no. 72, 1919, pp. 82 - 85.
32 R.F. Major, (Ed.) India in the Fifteenth Century, Section on Nicolo di Conti, p. 7.
33 Cathey and the Way Thither, ed. Yule, p. LXXIII.
34 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
making spears. 35

Most of the exports of the Island were under a royal monopoly. According to the Gaḍalādeniya slab inscription, chiefs of the king had to promise not to trade in elephants, strike coins and dig for precious stones. 36 Abū Zaid, writing in the tenth century, stated that there were men appointed by the king to watch the gem mines. 37 Nicholas correctly points out that mining of gems was a royal monopoly carried out seasonally under the supervision of the king's officers and to protect the monopoly permanent settlement in regions where gems were found was prohibited. 38 However, individuals were allowed to mine for gems on the payment of a fee, but the king had the right of ownership over all gems which exceeded a certain value and weight. According to Ibn Baṭṭūṭā, the custom was that all rubies which exceeded value of a hundred fanams were reserved for the king, while those of lower prices were kept by the finders. 39 Varthēmā, whose travel account can

35 H.W. Codrington, "A Sinhalese Embassy to Egypt", JRASCB., XXVIII, no. 72, 1919, pp. 82 - 85.
36 EZ. IV, no. 3.
37 E. Renaudot, Ancient Accounts of India and China by Two Mohammedan Travellers, p. 83.
38 C.W. Nicholas, "Historical Topography ..." JRASCB., VI, NS, 1959, Special Number pp. 124 - 125.
be dated to the first decade of the sixteenth century, states: "When a merchant wishes to find these jewels (gems), he is obliged first to speak to the king and to purchase a braza of the said land in every direction and purchase it for five ducats. And when he digs the said land a man always remains there on the part of the king. And if any jewel be found which exceeds ten carats, the king claims it for himself and leaves all the rest free."  

Friar Odoric and Sir John Mandaville state that the king did not take gems for himself but allowed poor people once or twice a year to search in water and take away whatever stones they could find. These statements should not be taken literally and on their face value. It may be that these writers heard of the practice by which individuals obtained permission from the king to search for gems and that they misinterpreted the information.

Pearl fishery, too, was a royal monopoly and was conducted on the same basis as the gem monopoly. According to Wang-Ta-Yuan, pearl finders had to give one half to the king. When Ibn Baṭūṭā went to see the
Iryacakravarti, the king's employees were busy sorting out and classifying the best pearls from the rest.  

Duarte Barbosa, writing in the second decade of the sixteenth century, stated that little pearls belonged to the pearl gatherers and great ones to the king. They paid him a certain fee to obtain his permission to fish, and the king derived an immense income from the pearl monopoly.

The same author informs us that the sale of elephants was also a royal monopoly. In the beginning of the sixteenth century, the king sold them to the merchants of Coromandel (Cholamendal), Vijayanagar (Narsyngua), Malabar, Deccan (Decam) and Cambay.

The Gaḍalādeniya slab inscription, too, indicates that elephant trade was a royal monopoly.

The statement of Ibn Batūtā that the people of Mabar gave to the king gifts of cloth and took away cinnamon from the Island may suggest that the cinnamon trade was also a royal monopoly. Barbosa, writing about two centuries later, stated specifically

---

44 Barbosa, p. 170.
45 Barbosa, pp. 167 - 168.
46 EZ. IV, no. 3.
that cinnamon was a royal monopoly. 48

The profits from foreign trade undertaken by the king formed an important source of revenue. Vijayabāhu I, in order to obtain the wherewithal to equip his forces required for the fight against the Cōlas, sent to Burma valuable products of his territories and in return obtained shiploads of merchandise such as costly cloth, camphor, sandalwood etc. 49 But it was Parākramabāhu who organized trade with foreign countries on a large scale. While Parākramabāhu was ruling Dakkinadesa, he established a separate department named antarangadhura in charge of the territories which produced commodities that were in demand in foreign countries. 50 These were the districts on the sea coast, which produced pearls, the districts containing mines of precious stones, and the Malaya country which yielded elephants and forest produce of various kinds. The valuable merchandise thus collected was sent in ships 51 to be sold abroad. After Parākramabāhu became the sole monarch of Ceylon, the trade with foreign lands was continued. One of the causes for his Burmese campaign

48 Barbōsā, p. 167.
49 CV., LVIII, 8 - 9.
50 CV., LXIX, 27 - 34.
51 CV., LXIX, 33 - 34.
was the unfavourable treatment accorded to his trade agents by the king of Burma.  

Among the imports of the Island, textiles may be mentioned first. The main sources of textiles were China, India and Burma. Many indigenous literary sources including the Sahassavatthupakarana, Jātaka Atuvā Gātapadaya, Cūlavamsa, Saddharmaratnākaraya and Sinhala Bōdhivamsa refer to Činapāta or Chinese cloth. Several Chinese writers have mentioned textiles among the commodities brought to Ceylon from abroad.

Kasī salu or Benares silk is mentioned in the Saddharmaratnāvaliya, Saddharmaratnākaraya and the Dambadeni Asna. B. J. Perera suggests that Cambay exported to Ceylon a special variety of cloth which was called 'cambāya' from the place of origin. Towards the end of the fifteenth century the king of Ceylon presented to some Burmese monks valuable cloth imported

52 CV., LXXVI, 10 - 75.
53 Sahassavatthupakarana, p. 102; Jātaka Atuvā Gātapadaya, p. 30; CV., LXXIII, 84; Sinhala Bōdhivamsa, p. 172.
54 Chau-Ju-Kua, Hirth and Rockhill, pp. 72 - 73; "Notices on Ceylon in Tao-I-Chih-Lüeh", JRASCB., 1920, XXVIII, no. 73, p. 32; JRASCB., XXIV, no. 68, 1915-16, p. 102.
55 SDHRV., 976; Saddharmaratnākaraya, p. 20; Dambadeniasna, p. 5.
from Gujarat. South India was another source from where Ceylon obtained textile goods. The Daladā Sirita and the Saddharmaratnāvaliya refer to cloth imported from the Cōla country.

Costly stuffs probably silk were brought in ships to Ceylon from Burma, together with camphor, sandalwood and other commodities. According to the Kalyāni inscriptions of Burma, the Burmese king sent forty boxes of muslin to the Bhikkhus of Ceylon. From an analysis of the references to the import of textiles to Ceylon, it appears that they were mostly of luxury varieties. According to Māhuān, the Ceylonese bartered pearls and precious stones against coloured taffetas of China and similar commodities. Kasi Salu or Benares silk was also considered a luxury.

The Mānasollāsa, an encyclopaedic work composed by or under the Western Cālukya king Sōmēsvara III (1126 - 1138), in giving a long list of fabrics suitable

---

58 Daldasırita, p. 46; SDHRV., p. 1016.
59 CV., LXVIII, 9.
62 SDHRV., p. 976; Saddharmaratnākaraya, p. 20.
for the use of kings, with their places of origin, mentions textiles of Ceylon origin (Simhaladvīpāja) together with stuffs which came from China. The Rājatarangani mentions that "Sinhalese" cloth was worn by the queen of Kashmir. We have no information to state that Ceylon manufactured textiles of an extraordinary quality. It may be that the Island exported part of its imports for profit or that Indian traders received Chinese cloth in the ports of Ceylon, since those ports played the role of trading centres where foreign merchants could exchange their goods. Some of the Indian writers may have been informed that they were textiles of Ceylon.

Horses were imported to Ceylon from pre-Christian times. Sena and Guttika who usurped the throne from Sūratissa in the second century B.C. were sons of a freighter who brought horses to Ceylon. It is said that during the weak rule of Mahinda V, a horse dealer who had come from India to Ceylon informed the Cōla king about the chaotic conditions prevalent in Ceylon. Chau-Ju-Kua states that horses were imported to Ceylon. The Nainativu

65 MV., XXI, 10.
66 CV., LV, 13.
67 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
Tamil inscription of Parākramabāhu I suggests that foreign vessels came to the ports of Ceylon with horses meant for the king as part of the cargo. According to Geiger, the horses would have been imported from northwestern India where the province of Sindh was famous for its particularly good breed of horses.

Porcelain ware was imported to Ceylon mainly from China. Chinese porcelain has been found during excavations at Tiruketīswaram and Dādigama. The Galle Trilingual slab inscription suggests that precious copper vessels were brought to Ceylon from China. Chau-Ju-Kua states that porcelain ware was exported to Ceylon from China. Sylvan Levi points out that the traders of Ceylon bartered pearls and precious stones against commodities such as Chinese porcelain ware.

A number of pieces of Islamic pottery, too, have been found at Tiruketīswaram. These have not yet been examined by archaeologists. Therefore, presently nothing could be

69 CCFIT., p. 109.
70 ASCAR., 1951, pp. 33 - 34.
71 EZe., III, no. 36.
72 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
74 ASCAR., 1951, p. 33.
said regarding the country of their origin.

Only a few references are available regarding the import of iron, gold, silver and copper or finished products of these metals. Wang-Ta-Yuan mentions jewels, gold, silver and iron cauldrons among the imports of Ceylon.75 Chau-Ju-Kua, too, mentions gold among the imports of the Island.76 The Dambadeni Asna refers to a large variety of swords including gurjara kadu (probably swords from Gujarat), pāndi kadu (swords from Pāndya country), malaya kadu (swords from Malaya?), jāva kadu (swords from Java) and madura kadu (swords from Madura).77 These references may suggest that a certain amount of metals and metal products were imported to Ceylon. But it appears that some metals were found in the Island to a considerable extent. The Butsarana, Gūlavamsa, Saddharmaratnāvaliya, Pūjāvaliya, Sinhala Thūpavamsa and the palm leaf manuscripts, Kurunāgala Vistaraya and Sirilaka Kadayuru Hevat Kādaimpota refer to mines of iron, gold, silver and copper.78 There may be exaggerations in these

---

75 "Notices of Ceylon in Tao-I-Chih-Lüeh by Wang-Ta-Yuan", Tr. from the Chinese by L. Giles, JRASCB., XXVIII, 1920, pp. 31 - 35.
76 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
77 Dambadeni Asna, p. 6.
78 CV., LXVIII, 12; SDHRV., p. 315; PJV., p. 105 - 106; Sinhala Thūpavamsa, pp. 165 - 166; MS. Kurunāgala Vistaraya, foll. 9a; Sirilaka Kadayuru Hevat Kādaimpota, Or. 4964, BM., Foll. 7a.
references but they cannot be disposed of as mere fabrications. When Parākramabāhu re-organized the administration of Dakkhinadesa, he made full use of all the mines where gems and gold were found.79 Copper is said to have been discovered in the reign of Duṭugāmunu at Tambapiṭṭha or Tambaviṭṭi seven yōjanas or twenty-eight gāvutas east of Anurādhapura.80 Writing in 1859 A.D., James Emerson Tennent stated that iron ore could be extracted from the mountains around Adam's Peak.81 Copper is said to have been discovered in the reign of Duṭugāmunu at Tambapiṭṭha or Tambaviṭṭi seven yōjanas or twenty-eight gāvutas east of Anurādhapura.80 Writing in 1859 A.D., James Emerson Tennent stated that iron ore could be extracted from the mountains around Adam's Peak.81

Camphor, saṇdalwood,82 cloves,83 spirits84 and sugar were also imported to Ceylon. It does not appear that camphor was ever produced in Ceylon; it was probably imported from Sumatra.85 According to Barbōsā, sugar was imported from Bengal.86 Sandalwood and cloves were found in Ceylon and alcoholic drinks, especially toddy, were made in Ceylon. Sugar was also manufactured to a considerable extent. Hence it may be inferred that cloves, sandalwood, spirits and sugar of a better quality

79 CV., LXVIII, 12.
80 Sinhala Thūpavamsa, p. 166.
81 Tennent, Ceylon, p. 457.
82 CV., LVIII, 8 - 9; EZ., III, no. 36.
83 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
84 "Notices of Ceylon...", JRASC, XXVIII, 1920, pp. 31 - 35.
85 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 75, n. 9.
86 Barbōsā, p. 167.
were imported to the Island only in limited quantities.

It appears that Ceylon imported rice towards the end of the Anurādhapura period and sometime after the abandonment of Rajarāta, mainly from south India. According to Ibn Khurdadbeh (ninth century) rice was imported to Sarandib from Bābattan in South India.\(^87\) Al-Idrisi (eleventh century) stated that Jīrbatan was a port in South India which was important as an exporting centre of grain and rice to Ceylon.\(^88\) S.M.H. Nainer has identified Jīrbatan or Jurfattan with Srikandapuram, ten miles east of Taliparamba.\(^89\) Even though Vijayabāhu I and Parākramabāhu I made tremendous attempts to improve cultivation in the Island, no source mentions that rice was exported from the Island during the period under discussion. On the contrary, the Cūlavamsa refers to famines, especially during the times of Parākramabāhu II and Bhuvanekabāhu I.\(^90\) This may indicate that there was a general decline of agricultural productivity after the Polonnaruwa period or that a special kind of rice was imported to the Island in very small quantities. According

\(^{87}\) S.M.H. Nainar, Arab Geographer's Knowledge of South India, pp. 25 - 26.
\(^{89}\) S.M.H. Nainar, op. cit., p. 41, F.n. 56.
\(^{90}\) CV., LXXXVII, 1 - 2; LXXX, 43.
to Barbōsā, rice was brought to Ceylon from the Coromandel. Varthēmā states that Ceylon imported rice from the mainland of India. On the evidence of Barbōsā and Varthēmā, one may conclude that agriculture in Ceylon had declined considerably by the sixteenth century.

***

In imports and exports as well as in the inter-oceanic trade between the east and the west, ports of the Island played an important role from ancient times. Before the decline of the civilization of Rajaraṭa, ports in the northern parts of the Island appear to have had a major share in this trade. Ports in the southern parts of the Island rose to prominence especially after the drift to the south-west.

Mahātittha on the north-western coast of Ceylon was one of the most ancient ports of Ceylon. It is mentioned in the Mahāvamsa as a landing place during the times of Vijaya. Articles of foreign origin such as Roman pottery and coins have been excavated in the ruins near this port in recent times. These are

91 Barbōsā, p. 167.
92 The Travels of Ludovico de Varthēmā, pp. 191 - 192.
93 MV., VII, 58.
94 ASCAR, 1951, p. 33.
definite evidence to prove that Mahātīttha was a
great commercial port in the early centuries of the
Christian era. This port appears to have continued as
the chief port of Rajaṟaṭa at least up to the middle
of the thirteenth century. The fleet of Parākramabāhu I
started its journey from there to fight against the
Pāṇḍyas. 95 During the civil struggles following the
death of Vijayabāhu I, a warrior named Vīradēva from India
landed at Mahātīttha in the belief that he could bring
Ceylon under his power. 96 The Rasavāhinī indicates that
traders collected various commodities from Mahātīttha
and sold them in the interior. 97 Candrabhāhu, having
collected an army from south India, landed at Mahātīttha
to fight against Parākramabāhu II. 98 However, by the
fifteenth century, Mahātīttha appears to have ceased to
be an important port. The Kōkila Sandesa, written
during the reign of Parākramabāhu VI, in giving a
description of the important places along the western
littoral of the Island does not mention Mahātīttha.

As Nicholas correctly points out, in
Sinhalese literature and inscriptions Mahātīttha is

95 CV., LXXVI, 85.
96 CV., LXI, 36 - 37.
97 Rasavāhinī-Lankādīpuppattivatthūni, p. 128.
98 CV., LXXXVIII, 62 - 63.
called variantly Mahavoṭi, Mahapuṭu, Mahavatu, Mahavatutoṭa, Mahāpaṭana, Mātoṭa and in Tamil, Mātoṭṭam. It was the most important port for vessels coming from south India and there was a strong south Indian element in the population of this port. Besides the ancient temple of Tiruketiswaram, there was another temple named Rājarājaivarattu Mahādēva, so called after the Cōla conqueror Rājarāja in the eleventh century. South Indian elements at Mahātittha seem to have increased considerably in numbers and consequently Mahātittha was used as an invasion base, particularly during the prolonged Cōla conquest in the eleventh century.

Jambukōla, identified with modern Kankasanturāi, was not an important commercial port but was widely used as a port of embarkation and landing in the Anurādhapura period. The Mahāvamsa indicates that a connecting high road ran from Jambukōla to Anurādhapura. However, during the period underdiscussion Jambukōla does not figure prominently among the ports of Ceylon.

On the other hand, Urātoṭa, or modern

---

100 Madras Reports on Epigraphy, 1912-13, p. 67, ins. no. 616.
101 MV., XIX, 25.
Kayts, which was not very significant in the earlier period, attained significance especially during the time of the Polonnaruwa kings. The Nainativu Tamil inscription datable to the reign of Parākramabāhu I, suggests that foreign vessels laden with merchandise arrived at the port of Urāturāi.102 This edict, apart from proclaiming that foreign traders should be given due protection, contains regulations regarding wrecked merchandise.103 The Pūjāvaliya indicates that Hūrātōta was a port where south Indians landed occasionally.104 As Nilakanta Sāstri points out, a Cōla inscription belonging to the eighth year of Rājādhīraja mentions the preparations by Parākramabāhu I at Urāturāi and other ports in north Ceylon for a second invasion of South India and the counter measures taken to thwart the Sinhalese king's plans.105

Even though the port of Gokanna is not mentioned as a centre of great commercial activity106

103 Ibid.
104 Pūjāvaliya, 34th Chapter, ed. Medhankara, p. 8.
106 The Kuṭumbiyāmalai inscription of Vīrapāṇḍya (Inscriptions of the Padukkottai state no. 366) refers to the taxes collected from the sea at Kōnamalāi. This may indicate that seaborne vessels touched at Trincomalee in the 13th century and that it was a trading centre. On the other hand, reference may be to the revenue derived from pearl fishing in the Trincomalee area. The Taksina Kailāsa Purāṇam suggests that pearls were found at Trincomalee (Sri Taksina Kailāsa Purāṇam, ed. Vaittilinga Tecikar, Pointpedro, 1916, Tevaram of Tirukkoṇamalai vv. 1 - 4).
it was a very ancient port of the Island. The Vamsatthapakasini states that Gokanna was the name of the spot where Panduvasadēva landed. A Sanskrit inscription datable to the year 1223 A.D. records the landing of Codagangadēva at Gokanna. The etymological equivalent of Gokanna in Sinhalese is 'Gōna', and the seaport or district of Gōna figures in the wars which Parākramabāhu II waged to wrest Rajarata from Māgha. 'Gōna' is the main element in the Tamil 'Tirukkonamalai' which has been Anglicised as 'Trincomalee'. 'Tiru' means sacred and 'malai', hill, the name thus meaning 'the sacred hill of Kōna'. Like Mahātittha on the western coast, Gokanna appears to have been a centre of Hinduism.

The port from which Parākramabāhu I's expeditionary force set sail for Burma was Pallavavanka. This was identified by Codrington as modern Palvakki four miles north of Kuccaveli. Although the Cūlavamsa reference is the only one made to this port, it can be inferred that this was a port of some importance as it

109 C.W. Nicholas, "Historical Topography ...", JRASCB., N.S. VI, 1959, p. 44.
110 CV., LXXVI, 46.
would not have been used as a base for an invasion if it did not already have facilities for the launching of an invasion.

Madupādapatittha was a landing place occupied by Māgha in the thirteenth century. According to Nicholas, the name may be preserved in modern Illupakāḍavai. Landing places on the north-west or north coast that cannot be identified were Mattikāvatittha, Pulacceri, Bhallatittha and Deberapaṭan. However, these ports were considerably less important in trade than Mahātittha or Urātoṭa.

The ports of the south and south-western coast gradually became significant after the drift of political centres to the south-western regions of the Island. One of the most important ports of the south was Galle. Accounts of foreigners suggest that it had gained prominence at least by the middle of the fourteenth century. Ibn Baṭūṭā states that he journeyed from Dondra

---

113 C.W. Nicholas, "Historical Topography", JRASCB., VI, SN., p. 81.
114 C.W. Nicholas, "Historical Topography", JRASCB., VI, SN., 1959, p. 81.
115 Pujāvaliya, 34th Ch. ed. Medhankara, p. 31; Nikāyasangrahaya, ed. Munidasa Kumaratunga, p. 23.
116 C.W. Nicholas, "Historical Topography ..", JRASCB., NS., VI., SN., 1959, p. 84.
(Dīnuvar) to Galle (Quāli) and that he was treated by a 'mussalman' named Captain Ibrahim at Galle.\textsuperscript{118} This may indicate that Muslim merchants frequented the port of Galle during Baṭūṭā's time. The Galle Trilingual slab inscription\textsuperscript{119} datable to the first few decades of the fifteenth century may indicate that Chinese traders too frequented the port of Galle. This inscription informs us that the Chinese emperor, having heard of the fame of the god Tēnavarāi-Nāyaṇār in Ceylon, sent to him through his envoys various kinds of offerings including gold, silver, silk and saḥdalwood. The inscription is engraved in Chinese as well as in Persian and Tamil. Probably the port of Galle was of considerable importance in the inter-oceanic trade. The Chinese junks that came through the straits of Malacca would have touched at Galle, on the way to Malabar or the African coast. The fact that Galle had been a well established commercial centre by the fifteenth century is attested by the \textit{Tisara Sandēsaya}.\textsuperscript{120}

Dondra was another important commercial port in the south. Ibn Baṭūṭā refers to it as Dīnuvar.\textsuperscript{121}

\begin{footnotes}
\item[119] \textit{EZ.}, III, no. 36.
\item[120] \textit{Tisarasandēsaya}, ed. M. Leelasena, vv. 52 - 55.
\end{footnotes}
II by Paranavitana on paleographic grounds contains regulations to prevent the defrauding of customs duties at the port of Dondra by traders. 122 We also learn from this epigraph that the seaport which existed at Devinuwara was known as Teṇḍirātoṭa. 123 The port of Wāligama too had come into prominence after the abandonment of the dry zone. It is first mentioned in the Cihlavamsa during the reign of Parākramabāhu I as a port where affluent merchants dwelt. 124 The Kalyāṇi inscriptions state that a ship sent by the Burmese king to Ceylon arrived at Wāligama. 125 The Tisara Sandesa indicates that Wāligama had become a very important port about the fifteenth century. 126

Most important port of the Island today, viz. Colombo, was a town largely inhabited by Muslims whose presence can be traced there as far back as 949 A.D. 127 The activities of these merchants are illustrated by the presence of gold coins of almost every Muslim dynasty from the eighth to the fifteenth century in the area lying

122 ASCM., Vol. VI, pp. 63 - 64.
123 Ibid.
124 CV., LXXV, 45.
126 Tisara Sandesa, ed. M. Leelasena, v. 43.
127 C.W. Nicholas, "Historical Topography...", JRASCB., VI, special number, 1959, p. 121.
between Colombo and the Kandyan hills. According to Ibn Baṭūtā, Colombo (Kalanbū) was the greatest 'city' of Serandib. He further states that five hundred Abyssinians lived in Colombo. Very likely Muslim merchants belonging to different countries were established in the port of Colombo during the time of Baṭūtā. According to Wang-Ta-Yuan, there was at times piratical activity in the vicinity of Colombo. The Kalyāni inscriptions, datable to the later part of the fifteenth century, state that a ship sent by the Burmese king with Buddhist monks on board, arrived at Kolomtoṭa. During the period of Arab ascendancy in the Indian Ocean, Colombo became one of the most important ports of the Island. When the Porguguese arrived in Ceylon it was the Island's major port.

With the shifting of political centres to the south-west and the development of the south-western parts of the Island, ports such as Bōruwala, Bentoṭa, Wattala and Chilaw turned to be of some importance in the

---

130 Ibid.
131 "Notices of Ceylon in Tao-I-Chih-Lüeh by Wang-Ta-Yuan (1349 A.D.)", Tr. from Chinese by Lionel Giles, JRASCB., no. 73, 1920, pp. 31 - 35.
Island's trade with foreign countries. John de Marignolli arrived at the port of Perivills in Ceylon. According to the opinion of Colonel Yule, Perivills was the port of Bēruwala. From the account of Marignolli it can be inferred that Bēruwala was a place where Muslims were settled. He states that the administrator at Perivills was Coya-Jānn. This is apparently the name of a Muslim who wielded some influence and power. Salāvata or Chilaw was also an important landing place from the twelfth century onwards. Between 1188 A.D. and 1200 A.D. the Cōlas landed at Salāvattoṭa. The Dambadeni Asna refers to the landing of foreigners at the same port. According to the Nikāya Sangrahaya the Arya Cakravarti had encampments at Colombo, Wattala, Negambo (Mīgamuwa) and Chilaw. Apparently his intention was to control the trade between India and Ceylon and to gain income from these ports.

Material available on the organization of ports is very scarce. An inscription from Dondra datable

\[\text{\textsuperscript{133}}\text{Cathey and the Way Thither, ed. Yule, p. 357.}\]
\[\text{\textsuperscript{134}}\text{Ibid., p. 357, F.N. 3.}\]
\[\text{\textsuperscript{135}}\text{S. Paranavitana, "Three Cōla Invasions not recorded in the Mahāvamsa", JRASCB., XXXI, no. 82, 1929, p. 385}\]
\[\text{\textsuperscript{136}}\text{Dambadeni Asna, p. 3.}\]
\[\text{\textsuperscript{137}}\text{Nikāyasangrahaya, ed. Vēragoda Amaramōli, 1955, Colombo, p. 31.}\]
to the reign of Parākramabāhu II, states that the seaport of Devinuwara was administered by an officer who had the title of Mahapandite. It further indicates that there were guards appointed to watch the port. Customs duties were imposed by Mahapandite and merchants were safeguarded from illegal imports. The same edict states that those coming from foreign countries were not to be allowed to set up places of business without permission, nor should the royal officers accept anything without paying its value in money. According to Cosmas Indicopleustes there were customs officers in the ports of Taprobane in the sixth century A.D. The "andivānija vastu of the Saddharmālankāraya indicates that the king appointed a royal official for the collection of taxes at Mahātittha. We have no evidence to determine the amount charged as customs duties on different kinds of imports and exports. However, the available information suggests that commercial activity in the ports was subjected to strict regulations enforced by the king. As Paranavitana points out, the entry of persons from hostile countries was also closely

139 ASCM., VI, pp. 69 - 70.
141 Saddharmālankāraya, p. 670.
supervised. The Lankātilaka inscription* refer to nine ports (navatotamuna) to which merchants used to come from the eighteen countries. But it is difficult to determine these nine ports and eighteen countries with any degree of precision.

***

Ceylon had commercial contact with north India during this period, but not to the same extent as in the early Anurādhapura period. Benares silk and horses were imported from there to Ceylon. As seen earlier, Ceylon elephants seem to have been imported by Delhi sultans. A few gold fanams dated in the 1st to 5th, 7th, 9th, 10th and 19th years of the eastern Ganga king Anantavarma Cōdaganga (C.A.D. 1075 - 1146) have been found at Hāragama in the Kandy district. These are clear indications for trade relations of Ceylon with eastern India.

However, trade with south India appears to have been more regular than with north India. South Indian merchants belonging to mercantile guilds such as the

144 See above, pp. 221-224.
145 See above, p. 242.
146 CCC., p. 90.
Valaṇjiyār, Nāṇādesi and Nakarattār have frequented Ceylon in the eleventh, twelfth and thirteenth centuries.  

These traders travelled to and from India. We hear of one Sevaggattevan, a Valaṇjiyār of south Ceylon, who set up an image of Pārvatī in a South Indian temple. The fact that the two earliest and most renowned Siva temples of Ceylon are to be found in the ancient ports of Mahātīththā and Gōkanna may suggest that South Indian traders established temporary settlements in the ports of Ceylon. Many Pāṇḍya coins have been excavated in various places of the Island including Tiruketīswaram in the neighbourhood of Māntoṭa. The existence of some Kongu and Cēra coins of the eleventh and twelfth centuries in Ceylon also shows that there was a brisk trade between south India and Ceylon during this period. Barbōsā stated in the sixteenth century that the merchants of Coromandel, Vijayanagar, Malabar, Daquem and Cambaya went to Ceylon and bought elephants from the king of Ceylon.

South Indian traders not only carried on

147 See Chapter V. pp. 175-180.
148 See Chapter V. pp. 177-178.
149 ARE Madras, 1914 – 15, p. 41, no. 405.
150 See above pp. 231-232.
151 CCC., p. 86.
152 CCC., pp. 89 – 90.
trade between India and Ceylon, but also acted as intermediaries in selling the products of Ceylon to other countries. In the letter sent by Bhuvanekabahu I to the Sultan of Egypt, it is indicated that most of the products of Ceylon were taken to Egypt by Banian merchants.\textsuperscript{154} According to the Tao-Chih-Lüeh, pearls were brought to Jurfattan in south India from Ti-san-Shiang (Gulf of Mannar?) and were sold to the Chinese merchants. When a boat came (from Ti-san-Shiang) to sell (directly) to the Chinese, its profits were insignificant.\textsuperscript{155} Rockhill assumes that Jurfattan traders were in the habit of under-selling pearls if the traders of Ceylon tried to deal directly with the Chinese.\textsuperscript{156}

With the rise and spread of Islam in the sixth and the seventh centuries A.D., Muslims wrested the trade of the Indian ocean from the Persians. From about the eighth century A.D. until the arrival of the Portuguese these Muslims, mainly Arabs, were the predominant traders in eastern seas. They traded with the west as well as the

\begin{footnotes}
\item[154] H.W. Codrington, "A Sinhalese Embassy to Egypt", JRASCB., XXVIII, no. 72, 1919, pp. 82 - 85.
\item[156] Ibid.
\end{footnotes}
east and carried the commodities of countries such as Ceylon to different parts of the world. By the eighth century they had established settlements at Canton which they called Khanfu in China. The importance of the Muslim settlement in Canton in the ninth century may be gauged by the fact that one of the Mussalmāns was appointed by the Chinese authorities to maintain order among his coreligionists and administer the law of Islam.

Gold and silver coins of almost every Muslim dynasty from the eighth to the fifteenth century, in particular those of the twelfth and thirteenth centuries, have been found in Ceylon in the area lying between Colombo and the Kandyan hills. Muslim coins found in Ceylon include the thirteenth century coins of the Abbāsid dynasty (of Baghdad), eleventh century coins of Fatimid dynasty (of Alexandria), twelfth century coins of Muwahhid dynasty (of north Africa), twelfth century coins minted in Alexandria and Cairo, thirteenth century coins of Persian Mongols, kings of the Yemen and the Delhi Sultans.

In the reign of Parākramabāhu I, the Yavanas are mentioned.

---

158 Ibid., p. 16.
160 CCC., pp. 158 - 160.
as having brought presents to the king. It was during the twelfth and the thirteenth centuries that the Muslims attained the highest level of their commercial prosperity and political influence.

By the thirteenth and the fourteenth centuries Muslims dominated the ports of Ceylon such as Colombo, Bēruwala, Chilaw and Wāligama. It is not easy to determine precisely whether these Muslims were of Arab or Indian origin. According to Barbōsā, many Malabar 'Moors' came to live in the island of Ceylon on account of its being luxuriant and healthy. The Muslims of India too were of diverse origins. Vasco De Gama writes about foreign and native 'Moors' of Calicut. Elsewhere he speaks of two distinct groups, 'Moors' and 'white Moors'. Probably the latter were the descendants of the Turks, Arabs, Persians etc. Barbōsā states that Muslim population of Deccan spoke Arabic, Persian and 'Dacani' languages. There were also Muslims who descended from Hindu converts in India.

161 CV., LXXVI, 264.
162 See above, pp. 233-237.
163 Barbōsā, p. 167.
166 Barbōsā, p. 77.
There were two principal routes to the west, one leading from Aden, through the Red Sea to Alexandria, the other by way of the emporium of Hormuz up the Persian Gulf.

The main entrepot on the west coast of south India was Quilon, from where two main routes to the east bifurcated. One passed across the Gulf of Mannar to the mouth of the Ganges and the other skirted the island of 'Serandip' via the Nicobars on to Kalah (Kedah) up the Malay peninsula. 167

The Chinese first began to cross the Indian Ocean in their own ships about the beginning of the Christian era. 168 It is stated that the king of Ceylon (shen) sent an embassy to China bearing ivory, buffaloes and humped oxen in 97 A.D. In 120 A.D. a similar embassy was sent. 169 By the fifth century Ceylon was in direct touch with China. Envoys were sent to the eastern Chin dynasty at the beginning of the 405 - 419 period and to the Liu-Sung dynasty in 428, 429 and 435 A.D. 170 In the sixth century Cosmas referred to ships which brought silk to Ceylon from 'Tzinista' (China). 171 John M. Seneviratna points

---

170 O.W. Wolters, Early Indonesian Commerce, p. 81.
out on the evidence of Chinese sources that Ceylon sent 'tributes' and envoys to China at various intervals between 97 A.D. and 762 A.D. 172 Foreign countries sent 'tributes' to China because they wanted trade and imperial presents. 173

It does not appear that there were regular contacts between China and Ceylon from the mid-eighth century A.D. till the mid-tenth century. Afterwards, trade between China and the west was revived and consequently there were close connections between the two countries during the Sung and southern Sung periods of China. Chinese coins belonging to almost every emperor from 976 A.D. to 1265 A.D. have been found at Polonnaruwa and Yāpahuwa. 174 Chinese coins were also found at Anurādhapura, Kurunāgala, Alutwāwa in the Mātale district, Nindavūr, Kurukkalmaḍam and Kalmunai in the eastern province and at Talaimannar. 175 Sherds of Chinese were also have been found at Polonnaruwa, Panduwasūnawarā and Dādīgama. 176 In the thirteenth and fourteenth centuries three separate envoys were sent to Ceylon by Chinese emperors to obtain the Alms Bowl of the

175  CCC., p. 166.
Ceylon appears to have maintained trade relations with Burma at least from the time of Vijayabāhu I. According to the Cūlavamsa, Vijayabāhu sent to the 'Rāmaṇa' king many people and costly treasures and in return obtained various stuffs, camphor, sandalwood and other commodities. One of the reasons why Parākramabāhu I invaded lower Burma was the bad treatment accorded to traders of Ceylon by the Burmese. The Cūlavamsa account of this invasion indicates that previously there had been long standing relations with Burma and Ceylon. During Vijayabāhu II's time there seem to have been cordial relations between Burma and Ceylon. He concluded a friendly treaty with the king of Arimaddana. The Kalyāni inscriptions suggest that close relations between Ceylon and Burma were maintained at the end of the fifteenth century.

Ceylon's trade with Malacca and some of the islands of South East Asia is suggested by certain scanty

178 CV., LVIII, 8 - 10.
180 CV., LXXVI, 10 - 25.
181 CV., LXXX, 6 - 7.
references. According to Wang-Ta-Yuan, Ceylon imported tin from the Straits. Barbosa, writing in the beginning of the sixteenth century, included Malacca in the list of countries that sent out ships to buy the products of Ceylon. A reference found in the Chu-Fan-Chi of Chau-Ju-Kua indicates that Ceylon paid tribute to San-Fo-Tsi i.e. the Sumatranese kingdom of Srivijaya. It is unlikely that Ceylon was a tributary kingdom of Sumatra. Probably presents were sent from Ceylon to encourage trade contacts between the two countries.

Much of the inter-oceanic trade was carried on by means of barter. Vijayabahu I sent the products of his own country in exchange for merchandise of Burma. As indicated by Ibn Batūţā, the traders of Mabar and Malabar exchanged cloth and other products for cinnamon of Ceylon. To a certain extent coins and precious metals of fixed weight standards also served as media of exchange. The Cūlavamsa states that the elephants of Burma usually cost 100 to 1000 nikkhas.

183 "Notices of Ceylon in Tao-Chih-Lüeh", JRASCB., XXVIII, no. 72, 1920, p. 32.
184 Barbosa, p. 170.
185 Chau-Ju-Kua, ed. Hirth and Rockhill, p. 73.
187 CV., LVIII, 8 – 10.
188 See above, p. 215-216.
189 CV., LXXVI, 18 – 19.
According to Fei-Hsin, the Chinese used gold and copper coins, blue and white porcelain ware, coloured satin and silk gauzes in trading with Ceylon.\textsuperscript{190}

***

Navigation played an important role in foreign trade and other external contacts. After Vijayabāhu's victory over the Colās, the king made preparations at two sea ports to embark an expeditionary force against the Colā kingdom.\textsuperscript{191} The Ārañjī records a naval battle fought by the forces of Parākramabāhu I against those of Gajabāhu.\textsuperscript{192} In the account of Parākramabāhu's invasion of lower Burma and South India, there are indications that Ceylon possessed a considerable number of ships in his time. In one instance, it is stated that ships were built near the coast of Ceylon to prepare for the expedition against Burma.\textsuperscript{193} A Colā epigraph of A.D. 1178 confirms that ships were built at the ports of Ceylon. These ships would have been used for purposes of

\textsuperscript{190} K.A. Nilakanta Sastri, \textit{Foreign Notices of South India}, p. 296.
\textsuperscript{191} CV., LX, 34 - 36.
\textsuperscript{192} CV., LXX, 60 - 65; 91 - 92.
\textsuperscript{193} CV., LXXVI, 44 - 46.
trade during times of peace. According to Ibn Baṭūṭā, the Aryacakravarti owned ships and traded with foreign countries. But, as stated elsewhere, the Muslims, the South Indians and the Chinese were the predominant communities who carried the trade in the Indian ocean.

Seafarers had to face various hazards in their journeys. The course of the voyage was to a large extent determined by the time and strength of the wind. Besides, there were the perils that could be caused by dangerous fish and currents. On the evidence of Chinese writers, Rockhill writes about the dangers which seafarers had to face from jagged rocks near the port of Colombo.

Apart from the hazards imposed by the sea, there was danger from pirates. The P'ing-Chou-K'o-t'an states: "... Traders say that it is only when the vessel is large and the number of men considerable that they dare to put to sea, for over-seas there are numerous robbers and they plunder." Marco Polo informs us about the atrocities of pirates. If a ship was driven by

---

195 See above, pp.240-245.
bad weather into some port other than that to which it was bound, it was mostly plundered. 199 According to Abd-Er-Razzak of the fifteenth century, this practice was in vogue in all ports except Calicut. 200

Mariners had to depend on the sun, moon and stars to find the route of their journey. According to Chinese accounts, mariners knew the configuration of the coasts and at night they steered by the stars and in day time by the sun. 201 In some of the countries lying along the sea coast there were pillars near the sea which were lighted at night to guide the mariners. 202

It was customary on ships which sailed out of sight of land to keep birds on board by which they used to send messages to land. This custom appears to have been a very old one with the sailors of India as it is mentioned in Buddhist works dating from the fifth century B.C. 203

By the twelfth century, navigation had made considerable progress owing principally to the

---

202 Ibid., p. 13.
203 Ibid., p. 28.
application made of the compass — or the south-pointing needle as it was called by the Chinese. In the opinion of Hirth and Rockhill, the earliest mention of this instrument being used for navigation is probably in the account of the P'ing-Chou-K'o-t'an of the eleventh century.²⁰⁴ But how wide its use was is difficult to determine.

²⁰⁴ Ibid., pp. 28 - 29; Max Weber states that the magnetic needle and mariner's compass were applied as early as the third and fourth centuries in China. Max Weber, General Economic History, Illinois, 1950, p. 200.
Chapter VII

REVENUE AND TAXATION

The king derived a considerable part of his revenue from taxes. One fundamental conception of authorities on ancient Hindu polity was that taxes were the king's dues for the protection he afforded to his subjects. Gautama justifies the king's levy of taxes on the ground that he is charged with the duty of protecting the subjects. According to Vishnu a kshatriya should protect the world and receive due reward in the form of taxes.

This direct relation between taxation and protection would not have been unknown in Ceylon from ancient times. The institution of kingship in the Island was influenced to a considerable extent by the ideas of the Buddhist canon and the Indian literature.

---

3. Some of the kings in the fourth to tenth centuries bore the title of Budadasa (Buddhadasa) indicating that they wished to be known as devoted followers of the Buddhist faith. (EZ.I, no. 2; EZ.IV, no. 13; UHC., I, pt. II, p. 364) An inscription of the tenth century states that only a Bödhisatava, i.e. a future Buddha, would become a king of Ceylon (EZ.I, no. 20). The Galpota inscription of Nissanka Malla echoes the Manusmrti in declaring that though kings appear in human form, they are divinities and must therefore be regarded as gods. It further states that the appearance of an impartial king should be welcomed as the appearance of the Buddha (EZ.II, no. 17). According to the Culavamsa, prince Paräkramabähü was taught Buddhist scriptures and works of Kauṭilya and others (CV., LXIV, 2-3).
U.N. Ghoshal, in the versions of the origin of kingship occurring in the Buddhist canon, *Arthasastra* and the *Mahābhārata* the payment of certain specific taxes by the people and the protection by the king are practically conceived as the two sides of the original contract between the ruler and the subjects.  

Hindu works on polity also prescribe the amount of taxes that should be taken from the people by the king. According to *Vasistha Dharmaśūtra* the king who rules the subjects justly shall take one sixth of the crops. The *Baudhāyana Dharmaśūtra* enjoins the king to protect the subjects with the sixth part as his share. The *Vishnu Smrti* also lays down this amount as one sixth. According to the *Mānava Dharmaśāstra* the king is justified in demanding one-fourth of the produce instead of the usual one-sixth during emergencies. The *Arthasastra* prescribes the normal amount as one sixth (*sadbhāga*) of the produce.

5. *Vasistha Dharmaśūtra*, I, 42, in S.B.E., XIV, 1882, p. 8
Similar theoretical beliefs regarding taxation seem to have prevailed in Ceylon as well. In the Butsarana the equitable levy on the produce of the soil is given as one-sixth.\textsuperscript{10} Shortly after the accession of Vijayabāhu I, the king is said to have directed his officials to collect taxes in accordance with the customs and traditions (yathā 
Māyam karam ganhitum yōjēsi).\textsuperscript{11} The Pūjāvaliya indicates that taxes were to be exacted according to dharma.\textsuperscript{12} It is possible that dharma in this context corresponded to rājadharma referred to in Indian texts such as the Arthasāstra and the Mānava Dharmasāstra. The references in the Gūlavamsa\textsuperscript{13} suggest that the Arthasāstra and the Mānava Dharmasāstra were known and studied in Ceylon during the Polonnaruwa period. The Kandavuru Sirīta states that kings should exact taxes without oppressing people, as a bee who sucks honey from a flower.\textsuperscript{14} The author of the Kandavuru Sirīta seems to have been influenced by the text of Manu, for Manu states that just as the leech, the calf and the bee take their food little by little, thus should the king take the annual taxes from his kingdom.\textsuperscript{15}

\begin{itemize}
\item \textsuperscript{10}Butsarana, p. 281
\item \textsuperscript{11}CV., LXIX, 12
\item \textsuperscript{12}PJV., p. 685
\item \textsuperscript{13}CV., LXIV, 2–3; LXXX, 9
\item \textsuperscript{14}Sinhala Sāhitya Lipi, p. 66
\item \textsuperscript{15}Manusmṛti, VII, 129 in S.B.E., vol. XXV, 1886, p. 236
\end{itemize}
In practice, however, the amount of the produce collected in the form of taxes was not uniform in all periods and in all localities of the Island. While certain rulers relieved the people of burdensome taxes others were extortionate in their demands. During the period of fratricidal wars, in between the reigns of Vijayabahu I and Parakramabahu I, Vikramabahu I and Mitta's sons oppressed the people with heavy taxes. According to the chronicler "...In their insatiability and money lust they squeezed out the whole people as sugar cane in a sugar mill by levying excessive taxes." The chronicler also accuses them of causing evil to their subjects by levying arbitrary taxes (abaddhakara). Nissankamalla, in some of his inscriptions, indicates that former kings had oppressed the people by inordinate exactions. Perhaps he was referring to Parakramabahu I in this instance. The demands of Parakramabahu's military adventures and ambitious building programmes may have resulted in a levy above the traditional rates.

16. CV.;Tr.LXI, 53
17. CV.; LXXIII, 3
18. EZ.II, p. 131, p. 135
Nissankamalla claims to have followed a lenient policy with regard to taxation. He remitted taxes on *chena* lands and the tax called *pisamburuvata*. Moreover, he abolished the tax on paddy fields which had newly been brought under cultivation (*val kotā gat ket aya*). In some of his inscriptions he claims to have remitted taxes for five years while some other inscriptions state that he did so for seven years.

***

The general Pāli terms used for taxes are *bali* and *kara*. In the Sinhalese texts *Daladā Sirīta*, *Kankhāvitarani Pīṭapota*, *Dhampiyā Atuvā Gātāpadaya*, *Pūjāvalīya* and the *Aṭadāsannaya* taxes are denoted by the terms such as *aya panduru, karavuvara, bali, kara* and *aya*. The *Kāsthavāhana*

19. see below, pp. 260-267.
20. EZ.II, no. 15, p. 93. A similar practice was prevalent in South India during the thirteenth, fourteenth and fifteenth centuries. An inscription from Bangalore datable to 1379 A.D. records that a reclaimed land was exempted from taxes for a period of two years. Krishnādēvarāya exempted taxes from such land for nine years. (A. Appadurai, *Economic Conditions in Southern India*, vol. I, p. 190).
22. EZ.V, pt. III, no. 43; This is not the first time that we hear of abolition of taxes by a king. The *Rājaratnākaraya* states that king Bhatiya remitted taxes from the people (*Rājaratnā karaya*, ed. P. N. Tissera, p. 15). According to the *Rājavaliya*, king Mahadalaya also did the same (*Rājavaliya*, ed. W. Pemānda, p. 43).
23. CV., LIX, 13; LXI, 53-70; LXVIII, 54-56
24. The term *bali* frequently occurs in Vedic texts according to which it was used to denote taxes as well as tribute, (U. N. Ghoshal, *Contributions to the Hindu Revenue System*, pp. 3-10). Both terms *kara* and *bali* occur in the *Arthasastra*.
story of the *saddharmaratnavaliya* uses the term *sungam*. \(^{26}\)

The *Rajaratanakaraya* and the *Rajavaliya* denote the taxes by the term *ayabedu*. \(^{27}\)

The Ruwanmal *Nighanduwa* states that the term *aya badu* was synonymous with *bali, badu, kam* and *kara*. \(^{28}\)

Inscriptions use the terms *aya*, \(^{29}\) *karavuvara* \(^{30}\) and *badu*. \(^{31}\)

In this connection it may be pointed out that the term *aya* was also used to denote revenue or income.

Land tax was the most important tax of the kingdom. It was exacted from different categories of cultivation. Of these, tax levied on paddy fields may be mentioned first. Nissankamalla in some of his inscriptions such as the Galpota inscription and Wanduruppe slab inscription states that tax should not be levied exceeding one *amuna* and three *pālas* in grain and six *akas* of *mandaran* in cash per *amuna* sowing extent of land of the uppermost grade; one *amuna* and two *pālas* in grain and four *akas* of *mandaran* in cash per an *amuna* sowing extent of land of the middle grade and one *amuna* and one *pāla* in grain and three *akas* of *mandaran* in cash per an *amuna* sowing extent.

---

26. *SDHRV.*, p. 473
28. *Ruvanmal Nighanduwa*, p. 65
29. *EZ. I*, no. 9; *EZ. III*, no. 27; *ASCMI*, VI, pp. 66-68
30. *EZ. III*, no. 32
of land of the poor grade. Some scholars have taken these references as pertaining to land tax in general. But it would be more precise if these are interpreted as taxes on paddy fields. Nissankamalla, in the same inscriptions and in many others states that he abolished taxes on chena lands. Moreover, if there was any tax on plantations such as those of coconut and arecanut it is difficult to believe that those taxes were also assessed and exacted in the same manner as tax on paddy fields.

The evidence of the inscriptions referred to above indicates that paddy fields were taxed according to their fertility and that this tax was exacted partly in kind and partly in cash.

32. EZ. II, p. 105, p. 117, p. 285; EZ. V, pt. III, no. 4. In the Epigraphia Zeylanica volumes the phrases mandaran sāka (sa aka), mandaran sataraka (satara aka) and mandaran tunaka (tun aka) have been translated as six mandaran, four mandaran and three mandaran (EZ. II, p. 105, p. 285). Mandaran according to Forbes signifies "a fine paid by a cultivator to a proprietor of land on receiving it for cultivation" (Quoted in EZ. I, p. 133, note 2). But the Ummagga jatakaya suggests that mādha ratran or mandaran was the term used to denote pure gold. (e ranata nila karshāpana yay kiyati. En satara akek mādha ratran ya. Satara akek pas loya-i.e. That gold is known as nila karshāpana. It (nilakarshāpana) consisted of four akas of mādha ratran and four akas of five kinds of metals.- (Ummagga jatakaya, p. 126). Aka was a measure of weight. See chapter V and also CCC, p. 191)

33. D. M. De. Z. Wickramasinghe, EZ. II, p. 105
34. EZ. II, p. 285; EZ., V, pt. III, no. 4
One of the earliest references to land tax in the Jaffna area is found in an inscription of Rājarāja I. It contains a record of certain grants made by Rājarāja I to the Tanjore temple from land in Kōṭṭiyāram. According to this edict land tax was paid partly in kind and partly in cash in the Jaffna district as well.

Evidence is lacking as to whether the type of taxation adopted by Nissankamalla was continued by subsequent rulers without change. Paranavītana states: "The absence in our period of a class of rentiers corresponding to the pāṭṭaladdan of the late Anurādhapura period is thus explained. The reference in the Pūjavālī to agriculturists at times cultivating a paddy field of which the entire harvest belonged to the lord indicates that this practice of the king or the lord receiving the total produce of an allotment instead of the share of the produce of the whole village was in vogue in the Dambadeni period. This view cannot be proved conclusively. There is no reference to a 'class' of rentiers even during the 'Polonnaruwa period'. But Nissankamalla's inscriptions clearly indicate that there was the land tax during the Polonnaruwa period. The passage which Paranavitana quotes

35.SII.,vol.II,pt.IV,no.92,see also ALTR.,p.53
36.UHC.I,pt.II,p.741
37.EZ.II,p.77,p.105,p.285
from the Pūjāvaliya does not specifically refer to the king's lands. It merely states that after the harvest was gathered the cultivator had to pay one half, one third or the full amount to the owner of the land according to the terms of his tenure. 38 The phrase which suggests the last mentioned practice, balapu vi nam hāmama vi himiyanta duna mānava, implies that certain farmers cultivated fields which were owned by others for payments other than the share of the produce. 39

The Pūjāvaliya itself informs us that royal officials went to collect taxes due from the people. 40 The Saddharmaratnāvaliya suggests that the king collected annual taxes from the people. 41 These could be references to the land tax, though it is not mentioned specifically. The Lakdivuvidhiya, an ola manuscript, the original of which may go back to the fourteenth century 42 states that kings fix the amount of the tax (aya panduru) from the inhabitants of the country by ascertaining how much the full sowing extents of their plots of land and by examining the four registers (satara lēkam balā). 43 The Saman Devale Sannasa of the Kotte period refers to me gamvala badu da pali da

38. PJV., p. 355
39. see chapter IV, pp. 153-156
40. Pūjāvaliya, 34th chapter, ed. Medhankara, p. 31
41. SDHRV., p. 68
42. ALTR., p. 29
43. MS. Lakdivividhiya, OR. 6606 (42), B.M., folio 9b-10
marāla da niyama vū gam panduru<sup>44</sup> the baddas (tax), the fines death duties and fixed gampanduru of these villages. In this document me gamvala badu could be the land tax for some of the other taxes are mentioned specifically. This evidence suggests the existence of the land tax during the thirteenth, fourteenth and fifteenth centuries.

Nissankamalla claims to have abolished taxes on chena land for all time. This suggests that prior to his reign there was a levy on the produce of the chena lands. This tax is referred to as seen katusara aya,<sup>45</sup> seen kotagat tānā aya,<sup>46</sup> kāti aya or kāti ada<sup>47</sup> and ketu kanaba aya<sup>48</sup>. Unfortunately no evidence is available to determine the amount levied as tax from the produce of chenas. However, Nissankamalla's abolition of this tax would have given a great impetus to chena cultivation. After his reign till the end of the period under discussion tax on chena lands is not referred to in any of the sources.

<sup>44</sup>Sabaragamuwe Pārani Liyavili, ed. Kirialle Gnānawimala, 1942, Colombo, p. 43
<sup>45</sup>EZ.II, p. 105
<sup>46</sup>EZ.V, pt. III, no. 42
<sup>47</sup>EZ.II, p. 77, p. 87, pp. 138-139, p. 285
<sup>48</sup>EZ.I, no. 9
According to Paranavitana, the *kolavel-aya* mentioned in the Galpāta vihāra inscription seems to have been a tax on gardens, similar to the *vatubadda* of later times.\(^{49}\) However, another inference also could be drawn from this inscription. It refers to certain plots of land donated by an officer named Kahambalkulu Mindalnā and his family to the Galpāta monastery. Of these, there were certain plots of land in which *kolavel aya* was donated to the monastery. These plots had earlier been enjoyed by the donors in hereditary succession. The phrase *apa sī parapurāva valandā ā...kumburu hā mehi pol puvak ātulu vū kolavel aya*\(^{50}\) may suggest that owners donated the fields and income (*aya*) of plantations such as coconut and arecanut. If this interpretation is accepted it is difficult to agree that *kolavel-aya* was a tax levied on gardens by the king. If the first interpretation is acceptable it would mean that the king had previously commuted his share of tax from the said land to Kahambalkulu Mindalnā and his family to be enjoyed in succession and that subsequently they donated their right to the monastery.

50. *EZ*. IV, no. 25
According to Codrington, taxes on gardens are mentioned in the tenth century Mihintale tablets and in the Daladāge inscription. The Mihintale tablets, which record certain proclamations of Mahinda IV, state that one-third of the produce of trees and plants of Kiribamhapav (garden) shall be appropriated by the Mihintale monastery. This may suggest that the king commuted the taxes on the above mentioned garden, which amounted to one-third of the produce, to the monastery. The Daladāge inscription published in the Epigraphia Zeylanica is partly damaged. Therefore it cannot be read properly and it is rather difficult to base conclusions on the undamaged sections alone.

Apart from the land tax, taxes on trade formed an important part of the king's revenue. Customs duties were charged on imports and exports. The Dondra inscription datable to the reign of Parākramabōhu II, states that the port of Devinuwara was administered by an officer who had the title mahapandite and that customs duties were imposed by him. According to Cosmas Indicopleustes there were customs officers in the ports of Taprobane in the sixth century A.D. The Nandivānija story of the Saddharmālankāra

51. AITR. , p. 42
52. EZ. I , no . 7
53. See chapter II, pp. 42-43.
54. EZ. I , no . 8
55. ASCM. VI , pp. 66-70
56. The Christian Topography of Cosmas, ed. J. W. McCrindle, p. 368
57. Saddharmālankāraya, p. 670
indicates that the king appointed a royal official for the collection of taxes at Mahātittha. But we have no evidence to ascertain the amount charged as customs dues on different kinds of imports and exports.

The Baddulla inscription of the tenth century A.D. states that toll duties were not to be levied on merchandise that was merely being transported through the market place at Hōpiṭigama. It further states that goods liable to toll duties (suvat) were not to be sold at unauthorised places. This suggests that toll duties were levied only on certain kinds of trade commodities at the market of Hōpiṭigama in the tenth century A.D.

Similarly toll dues may have been charged on merchandise at market places and at various other toll gates (kādavat) during the period under review. When there was more than one kingdom in the Island toll-gates should have been set up on the boundaries of each kingdom. But unfortunately there is no sufficient material to discuss this subject in detail.  

58. EZ. V, pt. II, no. 16
59. see also chapter V, pp. 172-173
The term sutvat or sungam was used to indicate toll duties. But it has to be pointed out that the term sungam denoted tax in general as well. According to Ariyapala, this term seems to have come into Sinhalese from Tamil. The Sanskrit form is sulka which means tax, toll or customs duties. The Sinhalese form of this word is sun or suk; Tamil sungam and Pali sunka. Another form used in Sinhalese is sut as in sutvat.  

The king seems to have derived considerable revenue from irrigation works. Farmers had to pay a stipulated amount for their share of water. This payment was called dakapati until the beginning of the seventh century A.D. and was paid not only to the king but was also collected by private 'owners' of small reservoirs. During the period under discussion there are no references to the payment of water dues to individual 'owners' of reservoirs and canals. In the ninth and tenth centuries the payment for the share of water made to the king was called diyabedum. It was termed diyadada in the Polonnaruwa period. A slab inscription of Nissankamalla refers to Tungabhadra canal from which water rates were not levied, (diyadada nudun Tungabhadra āla). This inscription records certain land grants made to an officer named Vijaya

60. SMC, p.134  
62. See chapter III, pp.83-85  
63. EZ.I, pp.167-70; p.171, note 1; p.199, note 8  
64. EZ.V, pt.II, no.17, p.204
by Nissankamalla and Tungabhadrā Āla is referred to as a boundary of a donated piece of land. It would have been the normal practice to levy dues on irrigation canals and reservoirs. However, the amount charged as water dues is not known.

Nissankamalla in several of his inscriptions, claims to have abolished the laying of an impost called *pisāmburuvata* or *visaṃburuvata*. This suggests that prior to his reign there was a levy denoted by these terms. According to D.M.De.Z.Wickramasinghe this was apparently a tax on fallow or barren land. Since this levy was associated with great reservoirs (*mahāvātāna*) this view cannot be maintained. In the Wanduruppe slab inscription of Nissankamalla it is stated that the *pisāmburuvata* levied from *mahāvātāna* (*mahāvātānīna gānā pisāmburuvata*) was abolished by him. Godakumbure renders the term *mahāvātānīna* as 'from the great tanks'. According to him, what is implied in the inscription is a tax levied on the reservoirs or the areas served by them. He further states that the *pisāmburuvata* may have been a tax levied on fishing in the reservoirs. As Nissankamalla refers to

---

66. EZ.II, p.117, note 11
67. EZ.V, pt. III, no.42
68. EZ.V, pt. III, no.42, p.429
69. Ibid.,
tax on land separately in the same inscriptions in which
the terms pisamburuvata and visamburuvata occur, the
pisamburuvata or visamburuvata cannot be a tax levied from
the area irrigated by the great reservoirs. Thus it must
have been either a water tax or a tax levied on fishing in
great reservoirs.

Paranavitana suggests that pisamburuvata
or visamburuvata was the king's share of the fish caught
in irrigation reservoirs. In some of the inscriptions
Nissankamalla claims that he bestowed freedom from fear
on living beings in the jungle and on the fish in great
reservoirs. Therefore one can point out that if the
visamburuvata was a tax levied on fishing in reservoirs its
abolition would have encouraged fishing in them. This does
not agree with Nissankamalla's claim that he gave freedom
to living beings in the reservoirs. However, it is possible
that the statements in the inscriptions regarding giving
freedom to animals and fish were included as mere panegyric
phrases to eulogise Nissankamalla. If they are not mere
panegyric phrases the term pisamburuvata or visamburuvata
would have indicated a levy charged on using the water of
reservoirs.

70. EZ.II,no.15;EZ.V,pt.III,no.4
71. In southern India at this time a levy charged on fishing
in reservoirs was called pasipāṭṭam or mānpāṭṭam (A.Appa
72. UHC.I, pt.II, p.548
73. EZ.II, no.14;no.18;no.21;no.22;no.23;no.24;no.25;no.27
The terms isran, masran and dāvasran occur in the *Daladasitita*. The *Pūjāvaliya* also refers to two of these terms isran and masran. These terms cannot be explained with any degree of precision. The *Jātaka Aṭūvā Gāṭapadaya* describes the term hisran as hisakata massak duna mānāvay nātahot metek ran duna mānāvay kiyā minisun atin gannā hisran, which suggests that the king levied a tax of a massa or a certain amount of gold upon each individual. Codrington equates isran with the āngabadda of the 'Portuguese period'.

The terms masran and dāvasran could be literally rendered into English as 'levies exacted monthly' and 'levies exacted daily'. Codrington has rendered them as 'month money' and 'day money'. According to Hindu works on polity, artisans and craftesmen paid their contributions to the king in two forms: first in the form of service and second in the form of tax in cash. Gautama and Manu state that one day's work every month should be done for the king by artisans. Vishnu states that artisans, manual labourers and Śūdras should do work for the king for a day in each month. According to Vasistha, artisans had to pay a monthly tax. Similarly masran in Ceylon may

---

74. *Daladasitita*, p. 52
75. *Pūjāvaliya*, p. 22; p. 685
76. *Jātaka Aṭūvā Gāṭapadaya*, p. 12
77. *ALTR.*, p. 47
78. *ALTR.*, p. 37
have been a monthly payment made by artisans and craftsmen.

The term \textit{davasran} is more difficult to explain. Levies exacted daily in the form of toll dues, customs dues etc. may have been denoted by this term. However, it has to be emphasized that these explanations are given as only tentative ones.

The tenth century Mihintale tablets of Mahinda IV, which contain certain proclamations of the king, state that the house tax of \textit{Saṅgvalla (Saṅgvallehi gekuli)} was granted to the monastery at Mihintale.\textsuperscript{82} \textit{Saṅgvalla} in the inscription is a proper name referring to an area. It suggests that the taxes levied on houses at \textit{Saṅgvalla} were commuted to the monastery by the king. The Lankātilaka inscription of Bhuvanekabāhu IV (1341-1351) indicates that the levy on houses of a certain area, which were exacted at the rate of one \textit{panam} from each house, was commuted to the Lankātilaka monastery by the king.\textsuperscript{83} Thus it appears that a tax on houses was levied in the tenth century and in the fourteenth century A.D. Even though there are no other references to this levy, it may be presumed from the evidence of these two records that the house tax was regularly levied in our period.

\textsuperscript{80} Vishnu, III, 32 in S.B.E., vol. VII, 1880, p. 17
\textsuperscript{81} Vasistha, XIX, 28 in S.B.E., vol. XIV, 1882, p. 99
\textsuperscript{82} EZ.I, no. 7
\textsuperscript{83} S. Paranavitana, "Lankātilaka Inscriptions", UCR., 1960, pp. 5-6
Apparently village authorities were entrusted with the collection of taxes due to the king from each village. The Kapuruvaḍu oya pillar inscription of Gajabāhu II, indicates that the royal officers went to villages annually to collect taxes. The Cūlavamsa refers to officers who went to collects royal dues from various villages during the time of Parākramabāhu II. Probably taxes were collected by each village headman and were delivered to the royal officers during their annual tours. The Saddharmaratnāvaliya too states that taxes were collected annually (rata totavalin havurudu noikmava badda nanvannā sēma).

In the seaports the collection of taxes was one of the responsibilities of the officers in charge of the port. The Saddharmālankāraya refers to an officer who was assigned the duty of collecting taxes and administering the port of Mahātittha. Similarly in the market places there were officers who were appointed to collect toll dues.

84. EZ., V, pt. III, no. 38
85. ČV., LXXXVII, 50
86. SDHRV., p. 85
87. Saddharmālankāraya, p. 670
In this connection reference may be made to the commutation of taxes by the king to individuals and institutions. A considerable number of this type of grants imply that the king in such cases allowed the grantee to deal directly with the peasants. Probably the grantees were expected to make their own arrangements to collect revenue. The king on his part commanded the inhabitants to pay the grantee what they had paid to him till the time of the grant.

Parākramabāhu I seems to have adopted a stern policy regarding taxes. He is known to have issued orders as to the way in which the officers appointed over the various districts of the Island should collect without loss the taxes levied on each district.\(^{89}\) This could mean that he appointed officers in each district to supervise the collection of taxes in villages.

Under certain weaker rulers the collection of tax appears to have been ineffective. According to the Cūlavamsa, as Mahinda V was of very weak character the peasants did not deliver him his share of the produce and he was unable to remunerate his troops satisfactorily.\(^ {90}\) During the reign of Vikramabāhu people dwelling in districts such as Samantakūṭa refrained from paying taxes.\(^ {91}\)

---

\(^{88}\) see chapter II, pp. 42-43.
\(^{89}\) CV., LXXIV, 18-19
\(^{90}\) CV., LIV, 3-4
\(^{91}\) CV., LXI, 70
Records of the ninth and tenth centuries refer to the term *Patta*.\(^{92}\) According to Paranavitana, the term *patta* is derived from Sanskrit *pāthya* which denotes the instrument of lease. He suggests that there was a class of middlemen who farmed the revenues due from the tenant on behalf of the lord.\(^{93}\) But this system of revenue farming does not seem to have been established for the term *patta* does not occur in the inscriptions later than the tenth century A.D.\(^{94}\)

There were other sources of royal revenue apart from those hitherto discussed. Judicial fines would have brought a certain amount of income to the treasury. Fines were generally denoted by the term *dada*.\(^{95}\) *Dada* is derived from Sanskrit *danda* which means fine or punishment. In most of the instances where fines are referred to it is indicated that they were to be paid in cash.\(^{96}\)

*The Uttarōliya vastu* in the *Saddharmālankārāraya* refers to a woman who was frightened by another for enjoying a treasure trove that she had found. The setting of the story is in a place called

\(^{92}\) EZ.I, no. 4; no. 7; EZ.V, pt. I, no. 10
\(^{93}\) EZ.V, pt. I, pp. 127-128
\(^{94}\) S. Paranavitana, EZ.V, pt. I, p. 128
\(^{95}\) Pujāvaliya, chs. 12 to 16, ed. D. E. Hettiarachchi, p. 73; SDHRV., p. 326; EZ.V, pt. I, no. 1, p. 20; Atadāsannaya, p. 103; Jātaka Atuva Gātapadaya, p. 235
\(^{96}\) Jātaka Atuva Gātapadaya, p. 235; Atadāsannaya, p. 103; Pujāvaliya, chs. 12 to 16, ed. D. E. Hettiarachchi, p. 73; EZ.I, no. 6
Uttaroli in Rajarata. The second woman questions the first
nidāna nam rajadaruvan santaka bava nodanuda- don't you
know that treasure troves belonged to the king?.97 The
stories in the Rasavāhinī and Saddharmālankārava too
indicate that treasure troves belonged to the king.98
Hindu treatises on polity contain various details on the
king's rights over treasure troves. But similar details
are lacking in the literature and inscriptions of Ceylon.
One should therefore consider the possibility that the
references in the texts mentioned above are either based
upon Indian stories not necessarily relevant to Ceylon,
or reflect practices that may have been from time to time
introduced by kings on the basis of Indian texts.

Lost or 'ownerless' property, too,
belonged to the king. According to the Pūjāvaliya the
king was to take any 'ownerless' property- aswāmika bhānda
nam rāja santakaya.99 The Ummaggajātakaya too contains a
similar idea( himiyan māti vastu nam rajjuruvanta pāminenn-
āya ).100 As Ghoshal points out this theory is profounded

97. Saddharmālankārava, p. 436
98. Rasavāhinī-Lankadīpuppattivatthūni, p. 21; Saddharmaratnā-
kārava, p. 455
99. PJV., p. 395
100. Ummaggajātakaya, p. 34
by Indian law books such as those of Vasistha, Gautama, 
Brhaspati, Baudhāyana and Manu. These texts give details 
on what amount should be given to a finder of lost and 
'ownerless' property, how long should the king protect 
such property till a claim is made by somebody, how much 
should be taken by the king if a claim is made etc. Similar details are not found in the literature of Ceylon.

In the case of the wealth of a deceased person the malāra or death duty was taken by the king at least from the fourteenth century onwards. The Gadalādeniya slab inscription of Sēnasammata Vikramabāhu states: "should there be no owner for the heriot of any one who shall have fallen in warfare and in the elephant hunt, (this heriot) shall be offered for the restoration of vibhāres which are out of repair". This suggests that the king could stipulate what should be done to the property of a deceased person. Even if there were inheritors for the property of a dead person a stipulated amount seems to have been charged as death duty. In the Dādigama inscription of Bhuvanekabāhu VI, it is stated "of one malāra half shall be left to the owner" (inheritor).

---

102. Ibid., pp. 112-117
103. E.Z. IV, no. 2
104. E.Z. III, no. 29
The word *malāra* most probably is derived from Sanskrit *mrtā* 'dead' and *hāra* 'what is taken', and would etymologically mean 'what is taken from persons who have died'. According to the works on ancient Hindu polity the king is to seize the property in the absence of any heirs. But exception was made in favour of Brāhmaṇas whose property devolves in such a case upon the community of learned Brāhmaṇas.

The king also derived income from his own lands and monopolies over certain trade commodities. The sources of revenue under these two categories are discussed elsewhere.

---

The *Cūlavamsa*, inscriptions and literary works throw light on several aspects of revenue administration. Various official titles such as *bhandārapotthakin*, *ādipotthakin*, *mūlapotthakin* and *jīvitapotthakin* are mentioned in the *Cūlavamsa*. According to Geiger all these titles were synonymous and they were used to denote one and the same office. Geiger's arguments may be summarized as follows:

---

105. S. Paranavitana, *EZ.* III, p. 285
107. *see chapter II, pp. 51-52.
109. *CV., LXXII, 182, 196*
110. *CV., LXXII, 27, 160*
111. *CV., LXXV, 139-140*
112. *CV., LXXII, 161-162; 173-174; LXXIV, 90*
113. *Cūlavamsa*, *Tr.* vol. I, p. xxix
The term potthakin designates an officer in charge of keeping accounts. The title bhandarapothakan is borne by an officer of Parākramabāhu I, Kitti by name. But the same Kitti is described also as ādipothakan. Therefore bhandarapotthakin and ādipothakan are the same, and the latter term means simply first or highest potthakin. The same meaning is also attached to mālapothakan which is the title of Māna, another officer of Parākramabāhu I. The term jīvapotthakin also has the same meaning. Kitti is designated by this title as well.¹¹⁴

One reason Geiger advances in support of his contention is that Kitti is referred to by at least three of these titles. But as Ariyapala has correctly pointed out, it is difficult to establish that the Kittis referred to in several instances all denoted the same person. The Cūlavamsa in describing the battles of Parākramabāhu I against rulers of Rajaraṭa and Rohana, refers to more than one who bore the same title e.g. jīvapotthakin Sukha, jīvapotthakin Kitti, jīvapotthakin Mandin, Kesadhātu Buddha, Kesadhātu Rakkha, adhikārin Kitti, damilādhikārin Rakkha, Mahālekha Rakkha, Sankhanāyaka Rakkha, bhandarapotthakin Kitti, bhandarapotthakin Bhūta, ādipothakan Kitti, dandanāyaka Kitti.¹¹⁶ In the opinion of Ariyapala the ādipothakan Kitti

¹¹⁴ Ibid.,
¹¹⁵ BMC, pp. 108-109
¹¹⁶ CV, LXI; 173-174; LXXXII, 1, 2, 5, 21, 27, 37, 41, 84, 85, 138, 160, 162, 182, 198, 206, 207, 232, 265; LXXIV, 72, 89, 90, 110, 119, 136-7,
does not appear to be identical with *bhandərapotthakin* Kitti.\(^{117}\) The *Cūlavamsa* clearly suggests that there were more Kittis than one associated with the campaigns of Parākramabahu I, for it mentions two Kittis: *adhikārin* Kitti and *jīvitapotthakin* Kitti in the same place.\(^{118}\) They were sent to Dīghavāpi by the king. Moreover, there is a possibility that one person held more than one office or title. Hence it cannot be proved that all the terms *bhandərapotthakin*, *jīvitapotthakin*, *mūlapotthakin* and *ādipotthakin* denoted one office only.

The term *pottakā* is obviously derived from Sanskrit *pustaka* which means 'book'. Therefore, *potthakin* may have been an officer who kept accounts or records. *Bhandāra* or *bhāndāra* is used in several instances to denote the treasury.\(^{119}\) *Bhandərapotthakin* may therefore be interpreted as keepers of the accounts in the treasury. An inscription of *Nissankamalla* found near *Vānāla* in Polonnaruwa too refers to *bhandərapotun*.\(^{120}\) The term *jīvita* means life, existence, subsistence, maintenance and livelihood. *Jīvitapotthakin* therefore may have designated an officer who kept records of *divel* grants or wages. According to

\(^{117}\) SMC., p. 108  
\(^{118}\) CV., LXXIV, 90  
\(^{119}\) EZ. IV, no. 33; PJV., p. 64; p. 689; SDHRV., p. 220; p. 609  
\(^{120}\) EZ. III, no. 11, pp. 149-152
Paranavitana an unpublished inscription dated in the fiftieth year of Vijayabahu I, refers to an officer who had the designation of *divel pot karana*, which means keeping the records of *divel* grants. This office similar to that of *jīvitapotthakin*.

As Ariyapala points out both terms ḍādi and mūla could mean chief, first or principal. Therefore these two terms may indicate the chief of the *potthakins*. If these two terms were used in this sense then the two titles may be considered identical. The term mūla may also mean money. In that case the title *mūlapotthakin* could be a general term used for a keeper of accounts concerning money matters. The term *mudalpotun* occurs in the fifteenth century Pāpiliyāna inscription.

There were several officers who held the designation *bhandarapotthakin*. The *Cūlavamsa* refers to at least two different individuals under Parākramabahu I who held this office contemporaneously. They were *bhandarapotthakin Bhūta* and *bhandarapotthakin Kitti*. Similarly there were at least three officers who held the designation *jīvitapotthakin* during the same period.

---

121. UGC, I, pt. II, p. 543
122. SMC, p. 109
124. *CV*, LXXII, 796
125. *CV*, LXXII, 182
They were jīvapatthakīn Mandin, jīvapatthakīn Sukha and jīvapatthakīn Kittī. These titles seem to have been in vogue during the reign of Nissankamalla, too, for one of his inscriptions refers to bhandaṟapatun. The Ruvanvāli Sā slab inscription of Queen Kalyāṇawatī too refers to the title bhandaṟapatā.

Apart from the supervision of the accounts of the treasury, the administration of the treasury was also in the hands of the bhandaṟapatthakīn. The Ruvanvāli Sā slab inscription informs us that a certain Vijayānāvan who had the designation bhandaṟapatā had administered the treasury of many kings including that of Parākramabāhu I. The Dhampiya Āṭuvā Gātapadaya renders the Pāli term bhandaṟagārikaṇāṇam as bhandaṟa potaṇatūṃ.

The chief treasurer is denoted by different terms in various sources. The Dambadeni Asna refers to him as bandāraṇāyaṇa. The Elu Attanagalu Vamsaya uses the term bhandaṟagārnaṇa. The Kandavuru Sirīta uses two different terms bhandaṱraṇāyaṇa and mudal nāyaṇa. According to Paranavitana "...perhaps the mudal nāyaṇa dealt with matters relating to money, while the bhandaṙaraṇāyaṇa concerned himself with stores."

126.CV.,LXXII,161-162
127.CV.,LXX,173-174
128.IV.,LXXIV,90
129.II.,no.71
130.IV.,no.33
131.Ibid.,
132.Dhampiya Āṭuvā Gātapadaya,p.160
133.Dambadeni Asna,p.5
134.Elu Attanagaluvamsaya,ed.M.Kumaranatunga,p.14
Reference is made to bhandāgārika āmati, minister in charge of the treasury in the Jātaka Atuvā Gātapadaya and ayakāmi āmati, minister in charge of revenue in the Sinhala Bōdhivamsa. There is no way of ascertaining whether these two titles were applied to the same officer who bore the titles bhandāranāyaka, bandāranāyaka and bhandāgāranāyaka or whether they were ministers who were above the treasury officers. The balance of probability seems to be in favour of the second supposition.

Parākramabāhu I, when he was ruling Dakkhinadesa, placed two chief ministers each at the head of financial and military administration. They were called mahāmātyas. Further he appointed two ganakāmaccas each in charge of one half of the territory under the king. According to Paranavitana they were apparently concerned with the collection and administration of the revenue.

---

136. UHC. I, pt. II, pp. 733-734
137. Jātaka Atuvā Gātapadaya, p. 7
138. Sinhala Bōdhivamsa, p. 4
139. CV., LXIX, 27-33
140. CV., LXIX, 30
141. UHC. I, pt. II, p. 544
CONCLUSION

The foregoing study suggests that society in Ceylon during the period under review was mainly an agrarian society. Taxes were mostly paid in kind. The payments made in kind were naturally results of the agrarian economy. The volume of trade in agricultural produce was limited and the non-agricultural groups were comparatively small and consisted mainly of the clergy, the nobility and mercenaries. Most of these groups too held cultivable land under different forms of tenure and received at least a part of the produce from the land.

The division of labour in society was largely determined by the caste system and each caste group concentrated its efforts on the specialization of a particular vocation. But vocational specialization did not preclude anybody from taking to agriculture as a supplementary or an alternative source of livelihood. The system of caste duties, however, provided an institutional framework through which members of different castes were brought into relationships with one another and as a result they could exchange their products without an intermediary trader. Therefore, only a limited quantity of the products of caste groups entered the market. In this 'closed economy' production
and consumption of the village were largely taken care of by the inhabitants of the village itself.

Certainly there were few places like Māntāi where an important section of the population made a living outside agriculture, especially trade. But trade within the country was conducted only on a small scale. This was mainly due to the lack of developed communication methods.

The idea that the king was the sole proprietor of land has to be modified in the light of this discussion. The concept of ownership as it exists in present day Ceylon is a modern one introduced by the Roman Dutch law. Therefore, one cannot speak of 'land ownership' in ancient Ceylon without defining the term. If the 'right to alienate land', not that of alienating tax or revenue, is taken as the criterion of ownership, the view that the king was the sole owner of land cannot be maintained. The theory of the king's absolute ownership of land seems to have been largely based on rhetorical usages, such as bhūpati, bhūpāla and vathimi. Moreover, there is no mention of the consent of the king being made a condition precedent to alienation of land by individuals in any of the land grants. There are
also instances to show that the king bought property for donation. However, the king had rights over jungle land and abandoned and 'ownerless property'. He also could confiscate property of those who committed crimes.

According to the system known as rājakāriya, the king could command the labour of the subjects for public works such as the construction or repair of roads, bridges, canals and reservoirs. The subjects had to perform rājakāriya mainly in or around their villages under normal circumstances. But in times of war and in other exceptional circumstances, they were expected to serve anywhere.

Reservoir based irrigation system was the mainstay of paddy cultivation in the dry zone. Therefore, properly defined rules and regulations were indispensable for the maintenance of irrigation works and for the distribution of water. The farmer's share of water was termed diyamura and he had to make a certain payment to the king or to the village authorities to obtain water. This payment was termed diyadaka.

If the statistics provided by the Kurunagala Vistaraya are of any guide, during the thirteenth and fourteenth centuries, probably 2.7 per cent of the total land area
of the Island was used for paddy cultivation. This is only two fifths of the area of cultivated paddy in present day Ceylon. Paddy fields were taxed according to the sowing extent and fertility of the soil.

Gems, pearls and elephants were the chief exports of the Island. Cinnamon seems to have been exported mainly after the beginning of the fourteenth century. Most of these exports were under a royal monopoly. Textiles, horses and porcelain were the chief imports. Transit trade in the Indian Ocean was carried on mainly by the Muslims, Chinese and the south Indians.

The gradual breakdown of the reservoir system of Rajarata and the shift of the political centre to the south west after the Polonnaruwa period, resulted in some changes in the economic pattern and organization of the Sinhalese kingdom. In the sphere of trade, ports of the south and south western parts of the Island became more prominent. However, in the absence of any statistics, the extent of the growth of trade cannot be determined. In the sphere of agriculture, coconut plantations increased in the south western parts of the Island. The breakdown of the reservoir system obviously resulted in the decline of the paddy cultivation.
Thus some aspects of the economic life of Ceylon were undergoing gradual changes during the period dealt with in this study, while some of the earlier economic institutions continued to survive without much change.

***
### SELECT BIBLIOGRAPHY

#### PĀLI AND SANSKRIT LITERARY SOURCES

<table>
<thead>
<tr>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthasāstra of Kautilya</td>
<td>Tr. R. Shamasastri, Mysore, 1923.</td>
</tr>
<tr>
<td>Cūlavamsa</td>
<td>Tr. W. Geiger, from the German into English by C. Mabel Rickmers, 2 parts, Colombo, 1953.</td>
</tr>
<tr>
<td>Dhammapadāṭṭhakathā (Buddhist Legends)</td>
<td>Tr. by E. W. Burlingame, 3 Vols., Harvard University Press, 1921.</td>
</tr>
<tr>
<td>Jinakālamālī</td>
<td>ed. A.P. Buddadatta, Colombo, 1956</td>
</tr>
<tr>
<td>Mahābodhivamsa</td>
<td>ed. F. Sobhita, Colombo, 1890.</td>
</tr>
<tr>
<td>Mūlasikkhā</td>
<td>ed. S. Gānindha, Galle, 1837.</td>
</tr>
<tr>
<td>SINHALESE LITERARY SOURCES</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Rasavāhinī</strong></td>
<td>ed. Saranatissa, Colombo, B.E. 2434.</td>
</tr>
<tr>
<td><strong>Rgveda</strong></td>
<td>Translation and Notes by H. H. Wilson</td>
</tr>
<tr>
<td><strong>Sahassavatthropakarana</strong></td>
<td>Vols. III, IV, Poona, 1926, 1927.</td>
</tr>
<tr>
<td><strong>Sīhalavatthropakarana</strong></td>
<td>ed. Devarakkhita, Colombo, 1914.</td>
</tr>
<tr>
<td><strong>Vimativinōdinī</strong></td>
<td>Beratuduwe Dhammadasatissa, Colombo, 1935.</td>
</tr>
<tr>
<td><strong>Butsarana</strong></td>
<td>ed. Labugama Lankananda, Colombo, 1923.</td>
</tr>
</tbody>
</table>
Dhātuvaṃsa ed. Gintota Dhammakkanda, Dodanduwa, 1890.

Sannaya

Nahābodhivamsa Gātapada ed. Dharmakirtisiri Dhammārāma,
Muvadevdā Vivaranaya ed. Munidasa Kumaratunga, Colombo,
B.E. 2508.
<table>
<thead>
<tr>
<th>Manuscript Title</th>
<th>Ed.</th>
<th>Place</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farsiya Panas Jātakapota</td>
<td>ed. Munidasa Appuhamy and Abeywardana Appuhamy, Pt. II, Jinalankara Press</td>
<td>Colombo</td>
<td>1921</td>
</tr>
<tr>
<td>Pūjāvaliya</td>
<td>Chapter XXXIV, ed. Mabopitiye Medhankara, Colombo, 1932.</td>
<td>Colombo</td>
<td>1932</td>
</tr>
<tr>
<td>Rājāvalī</td>
<td>ed. B. Gunasekara, 2 parts, Colombo, 1900, 1911.</td>
<td>Colombo</td>
<td>1900, 1911</td>
</tr>
<tr>
<td>Title</td>
<td>Editor</td>
<td>Location</td>
<td>Date(s)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------</td>
<td>-------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Ummaggajātakaya</td>
<td>ed. K. Paññasara</td>
<td>Colombo,</td>
<td>1929.</td>
</tr>
<tr>
<td>Visuddhimārgasannaya</td>
<td>8 parts, pts. I - V, ed. M.</td>
<td>Dhammaratana,</td>
<td>Colombo 1890 - 1917;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pt. VI, ed. Galle Sumanasara,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Colombo, 1926; pts. VII and VIII,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ed. Vaboda Sangharatana, Homagama,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1946 - 48.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Homagama,</td>
<td></td>
</tr>
</tbody>
</table>
Yogaratnakaraya

Tamil Literary Sources


Kailavamalai ed. with summary of contents in English C.V. Jambulingam, Madras, 1939.


Foreign Accounts

Duarte Barbosa, Tr. by Henry E.J. Stamley, A Description of the Hakluyt Society, London, Coast of East Africa M.DCCC.LXVI.

and Malabar in the

beginning of the

Sixteenth Century

Chau-Ju-Kua Translated from the Chinese and annotated by Frederic Hirth and W.W. Rockhill, St. Petersburg, 1911.


Monk
The Rehla of Ibn Baṭūṭā

The Travels of Sir John Mandaville

The Travels of Marco Polo

The Book of Ser Marco Polo

The Travels of Ludovico Di Varthema

A Journal of the First Voyage of Vasco De Gama

Three Voyages of Vasco De Gama

MANUSCRIPTS

Kurunāgala Vistaraya

Lakdivuvidhiya

Navapāṭala Sangraha

Sirilaka Kadayuru Hevat Kadaim-pota

Yāpānuwara Vistaraya

Tr. E. J. Ravenstein, Hakluyt Society, London, M.DCCC.XCVIII.
Tr. H.E.J. Stanley, London, M.DCCC.LXIX.

B.M., OR. 5042.
B.M., OR. 6606 (42).
B.M., Stowe OR. 28.
B.M., OR. 4964.

B.M., OR. 5042, folios 14b - 18a.
EPIGRAPHIC AND ARCHAEOLOGICAL SOURCES

Ancient Inscriptions of Ceylon

Annual Reports on South Indian Epigraphy

Archaeological Survey of Ceylon, Annual Reports

Ceylon Journal of Science, Section G

Epigraphia Indica

Epigraphia Carnatica

Epigraphia Zeylanica

Memoirs of the Archaeological Survey of Ceylon

South Indian Inscriptions (Madras)

MODERN WORKS

Abeysinghe, T.B.H.

Appadurai, A.

Ariyapala, M.B.

ed. E. Muler, 2 Vols.

1913, 1914, 1915.
1849, 1892, 1908,
1929, 1931, 1932,
I & II, 1928 - 1933.
III (1894 - 95),
XVIII (1925 - 1926),
XXVIII (1949 - 50),
VII (1902), VIII (1904)
I - V (1904 - 1965).
I - VI, 1924 - 1953.

II, III, IV.


Economic Conditions in Southern India, 2 Vols.
Madras, 1936.

Society in Mediaeval Ceylon, Colombo, 1956.
Arunachalam, S.  
The History of the Pearl Fishery of the Tamil Coast, Annamalainagar, 1952.

Bath Sligher Van, B.H.  

Beal Samuel (ed.)  

Bloch Marc  

Bosworth, C.E.  
The Ghaznavids, Their Empire in Afghanistan and Eastern Iran, Edinburgh, 1963.

Brohier, R.L.  
Tamankaduwa District and the Alahara Ninneriya Canal, Colombo, 1941.

Buddadatta, A.P.  
Kalyānī Silālipi, Colombo, 1924.

Burrows, S.M.  
Buried Cities of Ceylon, 3rd edition, Colombo, 1899.

Clark, C. and Haswell, M.  
The Economics of Subsistence Agriculture, New York, 1964.

Codrington, H.W.  

Ceylon Coins and Currency, Colombo, 1924.
Cook, Elsie K.  

Coomaraswamy, A.K.  

Ellawala Hemarama  

Dalton, George (ed.)  

Elliot, H.M.  

Farmer, B.H.  
The History of India as told by its own Historians, Vol. I, London, 1867.

Frykenberg, R.C. (ed.)  

Geerts, C.  
Land Control and Social Structure in Indian History, University of Wisconsin Press, 1969.

Geiger, Wilhelm  

Ghoshal, U.N.  
Culture of Ceylon in Mediaeval Times, ed. by Heinz Bechert, Wiesbaden, 1960.

Contributions to the History of the
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gopal, K.K.</td>
<td>Hindu Revenue System, University of Calcutta, 1929.</td>
</tr>
<tr>
<td>Chau<del>Ju</del>Kua, his work on the Chinese and Arab Trade in the twelfth and thirteenth centuries, St. Petersburg, 1911.</td>
<td></td>
</tr>
<tr>
<td>Indrapala, K.</td>
<td>Dravidian Settlements in Ceylon and the Beginnings of the Kingdom of</td>
</tr>
</tbody>
</table>


Major, R.F. India in the Fifteenth Century, Being a collection of narratives of voyages to India, Hakluyt Society, London, M.DCCC.LVII.

Majumdar, R.C. (ed.) The Struggle for Empire, Bombay, 1957.


McCrindle, J.W.  
Ancient India as Described by 
Megasthenes and Arrian, London, 1877.

Mendis, G.C.  
The Early History of Ceylon, 11th 
impression, Calcutta, 1954.

Nainar, S.M.H.  
Arab Geographers Knowledge of Southern 
India, Madras, 1942.

Nanawimala, K. (ed.)  
Saparagamuwe Pārani Liyawili, Colombo, 
1942.

Nicholas, C.W. and 
Paranavitana S.  
A Concise History of Ceylon, Colombo, 
1962.

Nilakantasastri, K.A.  
Foreign Notices of South India, 
Madras, 1939,

Obeysekara Gananath  
The Colas, 2 Vols., Madras, 1935,1937,
The Pandyan Kingdom, London, 1929.

Paranavitana, S.  
Land Tenure in Village Ceylon, 

Parker, H.  

Perera, L.S.  
Institutions of Ceylon from 
Inscriptions, PhD thesis, University 
of Ceylon, 1949.

Phear, John B.  
The Aryan Village in India and Ceylon 
London, 1889.
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Publisher</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rasanayagam Mudaliyar</td>
<td>Ancient Jaffna, Madras, 1926.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renaudott, E. (ed.)</td>
<td>Ancient Accounts of India and China by Two Mohammedan Travellers, London, M.DCCXXXIII.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ryan Bryce</td>
<td>Caste in Modern Ceylon, Rutgers University Press, New Brunswick, 1953.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Yalman Nur  Under the Bo Tree, Studies in caste, kinship and marriage in the interior of Ceylon, California, 1967.

ARTICLES IN PERIODICALS


"Report on the Kegalle District", Ceylon Sessional Papers, XIX, Colombo, 1892.
Brohier, R.L.


Burrows, S.M.

"A Year's work at Polonnaruwa", JRASCB., X, no. 34, (1837), pp. 46 - 75.

Codrington, H.W.


"Viyat pat Atāganaya", JRASCB., XXXI, no. 82, (1929), pp. 398 - 399.


Duyvendak, J.J.L.  "The True Dates of the Chinese
<p>| Giles, Lionel | &quot;Army and war in Medieval Ceylon&quot;, <em>IHQ.</em>, XIV, (1938), pp. 511 - 531. |
| Gray, A. | &quot;Ibn Batūtā in the Maldives and Ceylon&quot;, <em>JRASCB.</em>, Extra number, (1882), pp. 1 - 60 |</p>
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
</table>
| Modder, F.H.          | "Ancient Cities and Temples in the
97 - 114; Panduwasnuwara, XIV, no.
"Sinhalese Weights and Measures",
JRASC., XII, no. 43, (1892), pp.
173 - 203.
"Kurunāgala Vistaraya with notes on
Kurunāgala—ancient and modern",
35 - 57.
"The Ruin of Ancient Ceylon", Journal
of Asian Studies, XVI, no. 2, (1957),
pp. 181 - 200.
"Professions and Occupations of the
Early Sinhalese Kingdom", JRASC.,
"Historical Topography of Ancient
and Medieval Ceylon", JRASC., N.S.
Special number, VI, 1959, pp. 1-197.
"Additions and Amendments to the
Historical Topography of Ancient
Ceylon", JRASC., N.S., VII, (1961),
pp. 224 - 230.
Nilakantasastri, K. A.


Opler, E. Morris


Paranavitana, S.

"The Ancient Names and Builder of the Padaviya and Naccaduwa Tanks", UCR., XVI, nos. 3 and 4, (1958), pp. 70 - 77.

"Three Cola Invasions of Ceylon not recorded in the Mahāvamsa", JRASCB., XXXI, no. 82, (1929), pp. 384 - 387.


"Lankatilaka Inscriptions", UCR.,
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Journal/Book</th>
<th>Volume</th>
<th>Issue/No.</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranavitana, S.</td>
<td>&quot;Some Regulations concerning Village Irrigation Works in Ancient Ceylon&quot;</td>
<td>CJHSS</td>
<td>XVIII</td>
<td>nos. 1 and 2, (January 1960)</td>
<td>1 - 45</td>
</tr>
<tr>
<td>Parker, H.</td>
<td>&quot;Report on Archaeological Discoveries at Tissamaharama&quot;</td>
<td>JRASCB</td>
<td>VIII</td>
<td>no. 27</td>
<td>94 - 191</td>
</tr>
<tr>
<td></td>
<td>&quot;Report on the Proposed Daduruoya Project&quot;</td>
<td>Ceylon Sessional Papers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peiris, Paul E.</td>
<td>&quot;Sinhalese Coins in Jaffna&quot;</td>
<td>JRASCB</td>
<td>XXVI</td>
<td>no. 70</td>
<td>104 ff</td>
</tr>
<tr>
<td>Perera, B.J.</td>
<td>&quot;The Foreign Trade and Commerce of Ancient Ceylon&quot;</td>
<td>CHJ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(in 4 parts):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pt. I, CHJ., no. 2, (1951)</td>
<td></td>
<td></td>
<td></td>
<td>109 - 119</td>
</tr>
<tr>
<td></td>
<td>Pt. II, CHJ., no. 3, (1952)</td>
<td></td>
<td></td>
<td></td>
<td>192 - 204</td>
</tr>
<tr>
<td></td>
<td>Pt. III, CHJ., no. 4, (1952)</td>
<td></td>
<td></td>
<td></td>
<td>301 - 320</td>
</tr>
<tr>
<td></td>
<td>Pt. IV, CHJ., nos. 1 &amp; 2, (1952),pp. 14 -22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perera, L.S.</td>
<td>&quot;Proprietary and Tenurial Rights in Ancient Ceylon&quot;</td>
<td>CJHSS</td>
<td>II</td>
<td>no. 1</td>
<td>1 - 36</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>