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### SRI JAYAWARDENEPURA; ENHANCING THE LANDSCAPE OF AN HISTORIC CAPITAL.

#### **A** Dissertation

Submitted to the Department of Architecture of the

University of Moratuwa in partial Fulfillment of the

Requirements for the degree of

#### **Master of Science**



#### Landscape design

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This is to declare that dissertation Presented to the University of Moratuwa for the Master of Science degree in Landscape Design has been written by me.

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H.A.P.S. Gunasekara.



### To my Teacher, Mrs. Shirani Balasuriya



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### **ABSTRACT**

The subject of this dissertation concerns the landscape environment within the capital of Sri Jayawardenepura.

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(A verse from salalihini sandesaya)

"Remarkable friend! Know then the royal city Jyawardenepura, where reside preeminent men devoted and full of affection for the Triple Gem and which corners the heavenly city with boundless eternal prosperity and named Jayawardenepura, earned by manifold victories."

Sri Jayawardanapura city has a significant place among the eight capitals of Sri Lanka. It had been a capital for about 150 years and also the place where the last king who ruled the entire country had his seat. The natural geological surrounding in the vicinity of the city was utilized to the maximum capacity, to transform it into a fortress city surrounded by water. The city was originally built by prince Alakeswara during the reign of king Wickramabahu iii (1351-1374) who ruled from Gampola. But king Parakramabahu vi is the ruler who contributed greatly to the city of Kotte being capital of Sri Lanka and where he had his seat.

Unfortunately there is little visible surviving from of this period's landscape and architecture, owing to the fact that the Portuguese seiged destroyed and abandoned in. But the Kotte period is often referred to as the golden era in the Sri Lankan history because it had highly developed socio-economic and cultural standards.

When studying about the Kotte era its literary achievements must be given recognition. Literary success was attained largely due to the efforts of Rev. Totagamuwa Sri Rahula and Rev. Veedagama Maithri, Gira, Mayura, Selalihini, Parevi, Kouvl, Hansa Sandesa are some of the books containing verses which were published. All these speak of the landscape design of the historic capital.

The importance of this study is multiplied by the fact that Sri Jayawardenepura Kotte has once again being declared as the administrative capital of Sri Lanka, since 1983. No doubt, the decision may have been influenced by the fact that it once was also an administrative capital and by being so again the government wished to trade on the idea of going back to its former glory. Therefore it will be prudent for landscape designers, architects and other controlling bodies to evolve a scheme in which it will enable them not to destroy the concept on which Kotte

was built, or important characteristics and features it has cherished. The center of administrative power, the parliament was build in the middle of the Diyawanna Oya after excavating more than 300 acres of the water body. New road net works were built to facilitate rapid commercial and industrial growth. Hence the whole area of Sri Jayawardenepura Kotte is being developed in order to meet the challenge of being the capital with the status of a newly industrial country status in the 21<sup>st</sup> century. Therefore, it has become an important task to investigate the historical city and the kingdom as a whole in order to understand the influences it had in development to meet the 21<sup>st</sup> century needs.

This dissertation is thus directed to collecting data and information about the evolution of the city landscape, and analyzing it with the aim of using it in the future.

Chapter one of the dissertation concerns the historic background of Kotte kingdom. The period covered by this study will be from 1800 to 1950 (150 years of historical development). Chapter two will be the main chapter of this study. In this chapter landscape design and architecture of the Kotte kingdom will be studied in detail. Landscape design, architecture and the existing remains will be described in detail. The third chapter concentrates on the detail of the present capital of Sri Jayawardenepura Kotte and its landscape design.

The final part introduces philosophies, proposals and guidelines to enhance the aesthetics in landscaping the capital of Sri Jayawardenepura. It considers in what way modern designs should affect the present appearance of the town; what kind of open space improvements should be included in a master plan for coping with the city's future expansion; and what control measures should be introduced in order to conserve the historic landscape character of Sri Jayawardenepura yet allowing it to grow.

1

"What is it about historic centers and towns that attract us? What qualities do they have that make us want to walk along their streets and linger in their spaces?

3.20

Possessing buildings, moments, lanes and parks that resonate with memory and tradition.

The scale of their elements is inviting and walking through them, one can discover history in the smallest details.

They give us a vision of another time. The past as embodied in the architectural heritage provides the sort of environment indispensable for a balanced and complete life. It is "a capital of irreplaceable, spiritual, cultural, social and economic value."

European character of the Architectural Heritage.



Plate 1 – The capital of Sri Jayawardenapura Kotte (an aerial photograph)

# INTRODUCTION

### IMPORTANCE OF THE STUDY

(The city of Sri Jayawardenepura)

We see Landscape as perceived in space on the surface of the earth; intuitively we know that it is a space with a degree of permanence, with its own distinct character, either topographical or cultural, and above all a space shared by a group of people.

Landscape is a compound, and its components hark back to that ancient Indo-European idiom, brought out of Asia by migrating peoples thousands of years ago, that became the basis of almost all modern European languages. The first syllable, land, has had a varied career. By the time it reached England it signified earth and soil as well as a portion of the surface of the globe. Land can be taken into consideration not only in terms of soil and topography but in terms of spatial measurements, as a defined portion of a wider area. As far back as we can trace the word, land meant a defined space, one with boundaries, though not necessarily one with fences or walls. The second syllable "scape" is essentially the same as shape. Old English, or Anglo - Saxon, seems to have contained several compound words using this "scape" or its equivalent to indicate collective aspects of the environment. Taken apart in this manner, landscape appears to be an easily understood word; a perceived collection of lands.

Nevertheless the formula Landscape as a composition of man - made spaces on the land is more significant than it first appears. For it says that a Landscape is not a natural feature of the environment but a synthetic space, a man-made system of spaces superimposed on the face of the land, functioning and evolving not according to natural laws but to serve in community. A landscape is thus a space deliberately created to intervene in the process of nature.

The city based on this study has been subjected to a great change from its origin. Its changing phases have now reached a critical point. Therefore, the evolutionary aspect and the Landscape concepts that lie behind it and the human nature responsible for these have to be enquired into deeply. It is not coincidence that much of this Landscape creation took place during a period when the royal gardens and parks and the most magnificent of city complexes were being designed.

The features that have been regarded as essential to the city have made various impressions on the present Landscape. In the scape of visual perception within the Landscape context, this study examines in more detail the elements, which comprise the town's Landscape. It conjures up everything that contributed to the town's overall appearance; the artistic developments of various eras and cultures and the aesthetic values that reconstruct the landscape of the city itself.

Landscape designing reorganizes space for human needs and produces works of art in the truest sense of the term. They produce compositions of man-made or



man-modified space to serve as a background for our collective needs. Therefore the basic theme of this dissertation is concerned with trying to see how certain organizations of space can be identified with certain Royal, Social and religious attitudes in relation to the capital of Sri Jayawardenepura.

Ancient cities like Anuradhapura, Polonnaruwa, Yapahuwa, Jayawardenepura and Kandy were large settlements, widely distributed over the country with communal defences containing streets, buildings and city walls. They varied considerably in size, siting and the nature of their defenses but acted as administrative and cultural centres.



## **BACKGROUND OF THE STUDY**

(Historic development)

3.5

Table I – List of past capitals and their periods.

Items	Name of capital	Buddhist Era	Christian Era
1	Tammenna	1-39	543-505 B.C.
2	Upatissanuwara	39-107	505-437 B.C.
3	Anuradhapura	107-1023	437-479 A.D.
4	Sigiriya	1023-1041	479-479 A.D.
5	Anuradhapura	1041-1325	479-781 A.D.
6	Polonnaruwa	1325-1331	781-787 A.D.
7	Anuradhapura	1331-1390	787-846 A.D.
8	Polonnaruwa	1390-1545	846-1001 A.D.
9	Anuradhapura & Kapugalnuwara	1545-1581	1001-1037 A.D.
10	Ruhuna	15811790	1037-1246 A.D.
11	Dambadeniya	1790-1829	1246-1285 A.D.
12	POlonnaruwa	1829-1831	1285-1287 A.D.
13	Yapahuwa	1831-1841	1287-1298 A.D.
14	Polonnaruwa	1841-1847	1298-1303 A.D.
15	Kurunegala 👗	1847-1891	1303 – 1347A.D.
16	Gampola www.lib.mrt.ac.lk	1891-1954	1347-1470 A.D.
17	Kotte	1954-2086	1410-1542 A.D.
*	Portuguese invasion	2049	1505 A.D.
18	Kandy	2086-2095	1542-1551 A.D.
19	Kotte	2095-2141	1551-1597 A.D.
*	Dutch invasion	2146	1602 A.D.
20	Sitawake	2065-2130	1521-1592 A.D.
21	Kandy	2136-2359	1592-1815 A.D.
*	English Ivasion	2340	1796
22	Colombo	2359- 2537	1815-1983
23	Sri Jayawardenepura Kotte	2527- to date	1983- to date

The first capital of Sri Lanka, as asserted by tradition, was Upatissagama which was a settlement situated about 12 miles North of Anuradhapura, this city which has not been properly identified was founded by a minister of the traditional king, Vijaya, in the 6<sup>th</sup> century, B.C.

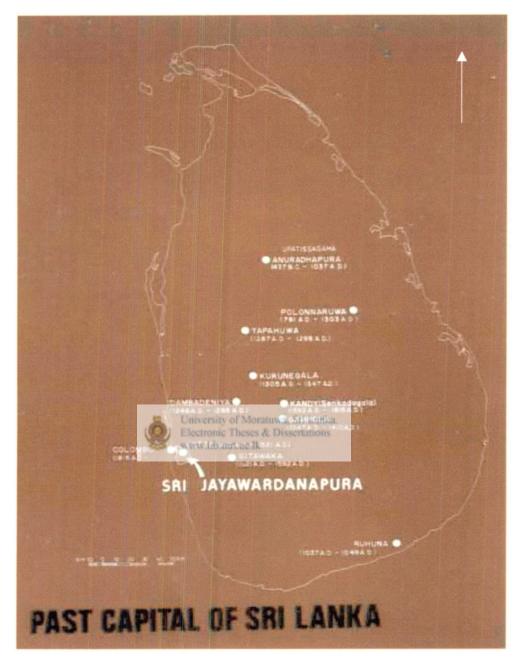


Figure 1: Site of the past capital of Sri Jayawardenepura Based on Article by M.H. Sirisoma – Asst. Commissioner Department of Archaelogy.

The capital was shifted to Anuradhapura by king Pandukabhaya who ascended the throne in the fourth century B.C. from his accession, upto the tenth century A.D. Anuradhapura continued to be the centre of political, religious and cultural

life of the people of Sri Lanka. In the fifth century an attempt was made to shift the capital to Sigiri, some forty miles to the South - east of Anuradhapura.

At Sigiri, on the summit of an almost unscalable rock, was the royal palace with its appurtenant buildings and other ornamental features. The entire western face of the rock had been plastered and painted originally, of which only a few of its beautiful frescoes, remain preserved. These paintings were the subject of the graffiti recorded on the mirror wall along the entrance gallery by the visitors to Sigiri after its abandonment.

To the east of the rock was a walled area apparently serving as a military camp. The ramparts and moats on the western side which surrounded a pleasure garden with ponds and subterranean water channels were on a much grander scale than at Anuradhapura. King Kassapa 1 (5<sup>th</sup> century A.D.) was the creator of Sigiri who dwelt there in a palace in imitation of Alakamanda, the residence of God Kuvera (God of wealth). The city of Sigiri was abandoned after Kassapa's brother Moggalana returned to the previous seat of Kingdom in Anuradhapura.

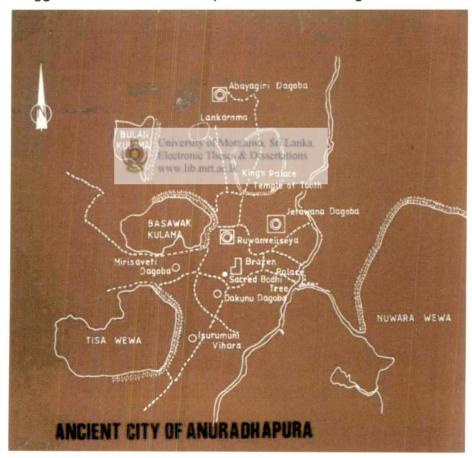


Figure 2: Ancient city of Anuradhapura
Based on Article by M.H. Sirisoma – Asst. Commissioner
Department of Archaeology.

After Anuradhapura, Polonnaruwa ( Pulathiputra in Pali and Pulastipura in sanskrit) became the seat of Singhalese royalty. At first it was a military post that guarded the crossing of the river Mahaveli on the road from Anuradhapura to Rohana, the southern country. It was occasionally used as a royal residence in the seventh to tenth centuries by the kings of Anuradhapura and was the headquarters of the Cholas that invaded Sri Lanka in the first half of the eleventh century.

Vijabahu 1 (11<sup>th</sup> century A.D.); who finally liberated the country from the Chola domination, chose Polonnaruwa as the seat of his government. But, it is king Parakramabahu 1 (12<sup>th</sup> century A.D) who was mainly responsible for the embellishments of the city (See fig:3). He provided the city with a splendid royal palace and shrines for the national religion. King Nissankamalla (12<sup>th</sup> century A.D.) also founded a number of edifices of a religious as well as secular nature of which the remains still impress the visitors to the palace.

Polonnaruwa was also a city with ramparts and other forms of defenses. The rampart wall on the eastern side runs for over a mile from North to South. The embankment of the reservoir Parakrama Samudra, served as the defense of the city on the western side. To the north of the citadel were the monasteries which consisted of shrines of great architectural beauty. Attached to the palace and the monasteries were parks and gardens in which were ornamental ponds and baths.

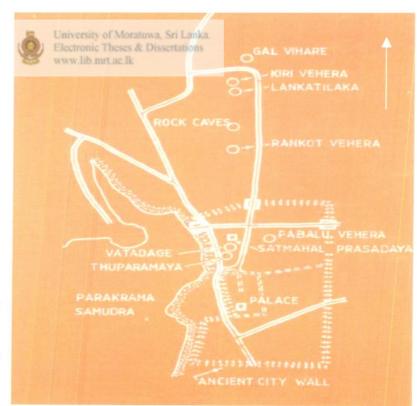


Figure:3 Ancient city of Polonnaruwa Based on Article by M.H. Sirisoma – Asst. Commissioner Department of Archaeology.

Of the cities built by the Singhalese after the fall of Polonnaruwa, that which is most noteworthy is Yapahuwa (see fig.4) of which the military defenses are still in a good state of preservation. It was a Sinhala chieftain called Subha who first made Yapahuwa a stronghold mainly for the purpose of checking the forward march of the forces of Magha who invaded Sri Lanka in the 13<sup>th</sup> century. After the death of King Bhuvanekabahu 1 (13<sup>th</sup> century) who was mainly responsible for the proper embellishments of the fortress city, Yapahuwa was forgotten.

Subsequent periods saw further new capitals being established in Sri Lanka by the ruling monarchy as given in table 1 of the preceding page a detailed description of which falls beyond the scope of this work. However, the ancient city of Sri Jayawardenapura which became Sri Lanka's capital during the periods (1410-1542 A.D.) and (1551 -1597 A.D.) needs special mention here as its location will once again give birth to a new capital for Mother Lanka.

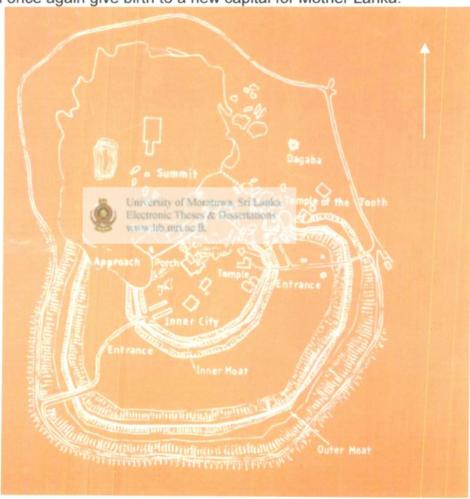


Figure 4: Ancient city of Yapahuwa Based on Article by M.H. Sirisoma – Asst. Commissioner Department of Archaeology.



### **OBJECTIVES OF THE STUDY**

(Opportunities in Landscaping the city)

As the beehive is for bees the city is for human beings. The hexagonal cells of a beehive are the direct result of behavioral patterns of the bees. The structure is meaningful, purposeful, functional and beautiful. It is a system in harmony with Nature, that sustains the life and activities of the bees comfortably, it is a natural structure. So should also be the city landscape and architectural structure.

The city is a composite of built systems and Nature serving human beings while buildings, roads, railways, cars, buses, traffic signals, sign boards, and the like form built systems, green, open spaces, corridors and waterways may be defined as the natural component of the city.

These components must be meaningful both singly and collectively within the city landscape. Then only will the city be meaningful to the user. This meaning can also vary with certain variable parameters like colours, textures, forms, proportions, smells, speeds, time and so on. The layout of a city considered by peoples as being meaningful in an age of horse cart and bullock cart speeds, may not appear meaningful in the same sense in an age of mechanised systems. Narrow cobble - stoned streets designed for horse drawn vehicles, may only lead to confusion and congestion if used unchanged in modern times. The landscape of a city therefore must change. It must be able to change with time. It must change to accommodate the changing needs of man. Only a city landscape that is flexible enough to accommodate such changes will remain meaningful throughout a city's life.

However the city landscape cannot be too flexible, lest it will appears weak and reflect a poor image. A poor image will lead to lack of identity insecurity, confusion and indifference in the people. Poor behavioral patterns will be the result and the city will become a meaningless entity. Therefore the city landscape must also be clearly defined, and supplemental so to instill confidence security and a strong sense of orientation.

The city landscape must also be purposeful. The city's basic purpose is to serve man through his multitude of activities. The component systems designed to serve these activities must serve their purpose effectively. A bus halting place serves a definite purpose. It tells the people where to wait for a bus and tells the driver where to stop for passengers. If the position of the halting place were to change daily not only would this render the transport system meaningless, it would cause annoyance, frustration and also help precipitate antisocial tendencies in the people. A purposeful component has rendered a whole system purposeless and meaningless to the user due to the absence of a clearly defined landscape in the city. Similarly other components intended to serve a definite

purpose in the city must also be purposefully located within a definite landscape structure.

Although natural components like trees, and artificial components like buildings, Sign boards, May when taken individually figure as serving a definite purpose, they must be suitably related in the city landscape to avoid confusion and ambiguity, if they are to be purposeful and meaningful in the city. Therefore interrelationship can render an otherwise purposeful component completely purposeless in an urban complexity. Excitement of a pleasant nature, interest and variety would be in the air when inter-relationships are played effectively.

A city landscape must also be functional. For this, its component systems, must be individually and collectively functional. Inter - relationships such as human beings to moving systems, human being to urban spaces, human being to buildings, moving systems to building moving systems to moving systems, human beings to nature, buildings to nature and so on, must be co-ordinated so as to bring about optimum efficiency and pleasing experiences avoiding time wastes, frustrations and insecurity.

Journey patterns must be simple. One must easily reach one's destinations and proceed with one's activities without getting in each other's way. Hence the landscape design of cities must ensure functional city spaces, functional built forms, and effective land uses. Land must present man with ample opportunities to generate wealth and to sustain his developed human nature.

The city landscape must grow with man. City landscape must uphold the forward march of the human race for a nobler status. That would be the ideal city. That would be the meaningful city. Whereas a city landscape is purposeful, functional and meaningful, it would also be beautiful. A beautiful city would induce beautiful behavioral patterns in the people too. Where a city landscape has meaningfully evolved through the behavioral patterns, activities and life styles of people it will also show identity. While a beautiful composition will stimulate one's mind, a definite identity will instill a sense of pride and a healthy image of the city in the user. The result will be a pleasing experience of a noble city that will ennoble human nature. Sri Lanka's new capital is intended to be such a city.

After a lull of many decades a storm is breaking and the famed "Salalihiniya" is flying sky-high coo-ooing to the people that "Sri jayawardenapura" will be reborn. A new capital on the ancient capital.

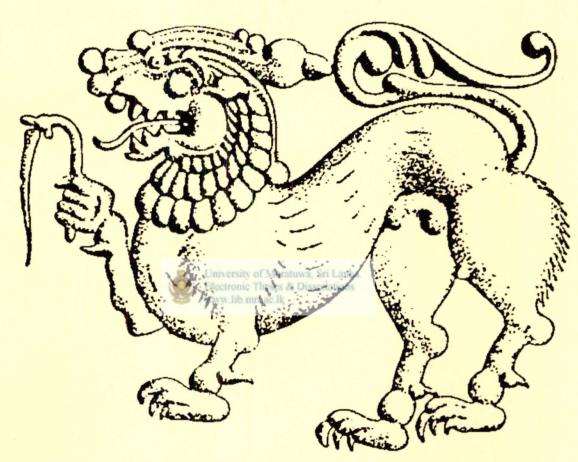


Plate.11- A painting (tiles) of a Kotte Rajamaha Viharaya

# CHAPTER ONE

### 1. HISTORIC BACKGROUND OF KOTTE

(Sri Jayawardenapura)

### 1.1 ORIGIN OF KOTTE

The city was originally built by prince Alakeswara during the period when king Wickramabahu iii (1351 - 1374) ruled the country, having Gampola as the capital.

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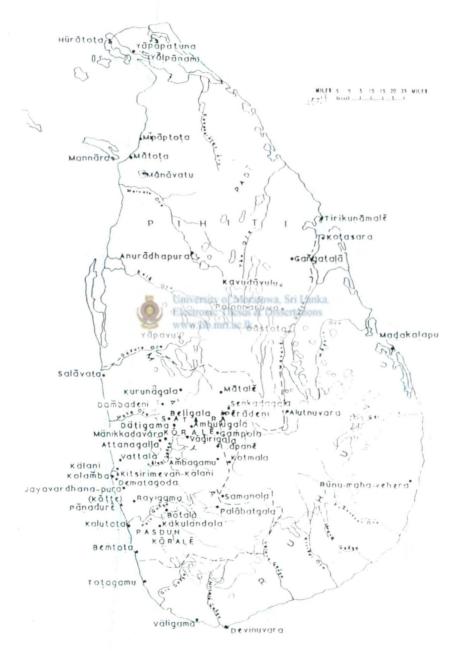


Figure 1.01: Ceylon in Dambadeni, Kurunegala, Gampola and Kotte periods



" Already a town in the middle of the fourteenth century, when it was visited by the traveler De Marigolli (an Italian), Kotte, by the end of the same century, had been partially rebuilt, fortified and named Abhinawa Jayawardanapure, as say the native chronicles, by the Great minister Alakeswara, during the reign of Wickramabahu iii (1356,1357-1370,1371)"

On the southern side of the Kalaniya" runs the Mahawansa "High unto the village of the mighty wood, which contained a large pond, and where in dwelt men of great wisdom and virtue, Alakeswara built the famous ramparts and gates and towers. Thus it is clear that Kotte, was originally a jungle where a village called Darugama was situated. The contemporary history gives detailed reports as follows.

"Finding it expedient that enemies to the country and to the religion be kept at a distance. (Alakeswara) selected for the site of a city the village named Darugama, situated not far from the harbor of Colombo, in the middle of a lake, and well protected by a surrounding body of water fall, .... Under the supervision of these officers he caused a great moat, very broad and fearfully steep like a precipice, to be sunk round Darugama, and as a solid defense, a wall of stone to be erected bordering the moat. He had the space at the head of this wall decorated like unto a creation of Visvakarma, and protected it by fixing in proper places Idangini, Pulimugan, Bhumyantattu Attala and Vattavettam. He thus caused the fortress famous as new Jayawardanapura to be built on the top of the great rampart of that city. He had built separate temples for the protection of the four quarters, dedicated to the four guardian deities, Kinireli, Upulvan, Saman Boksel, Vibishana, Skanda Kumara, to whom is entrusted the welfare of Sri Lanka..., and he caused the city to overflow with abundant prosperity and a teeming population and in the inner city he stationed himself surrounded by his great armies of Sinhala and Tamils, lions of bravery .. "2

After the assumption of definite rule by Sri Parakramabahu vi (inauguration 1414, 15 A.D.) Jayawardanapura Kotte gradually attained the zenith of its glory during that monarch's long reign. Parakramabahu vi of Kotte, who reigned long and proud in the 'City of Victory 'spear - heading a renaissance in a Lanka driven to decadence after the disunity and turmoil that prevailed when the kingdom of Polonnaruwa was destroyed by Magha the invader, 300 years before.

Therefore it is evident that origin of Kotte came as an answer to invasions from the north and as a means of protection against the powerful ruler of northern Sri Lanka, Arya Chakrawarthie. The natural topography surrounding of the original "Darugama" was recognized and utilized to the maximum capacity to transform it into a fortress city surrounded by water and marshy land. The City of Kotte was chosen in the fourteenth and fifteenth centuries as it was an area of high ground surrounded almost on all sides by marshy land. Most of the time sites for cities were selected with natural barriers such as rocks or lakes and where there were

no such things artificial features such as moats were made. A search for a strategic location suitable for a safe place closer to Colombo resulted in the finding of the village called Darugama which was surrounded by water or rather marshy lands from all three sides. It is apparent provisions were made for the protection of the city from its inception.

Alakeswara built Kotte, and a moat and a wall there drawn around it. He provided it with troops and quantities of arms, and constructed dykes round the fortress so as to flood the country in the event of an invasion. He built moats and tanks to serve as reservoirs and land in large supply of salt, coconut and paddy to stand a protracted siege.

#### 1.2 THE PERIOD OF THE SINHALA KINGS

The ancient city of Kotte is full of historic interest.King Wickramabahu iii 's minister Alakeswara fortified the city in the 14<sup>th</sup> century. In the year 1406 A.D. a Chinese Admiral, Chang Ho, arrived in Colombo with a fleet of 62 ships and a large military escort, and with the connivance of Alakeswara, who was anxious to ascend the throne, captured the monarch Vijayabahu vi at Kotte, and carried him off to China. Thereafter, Alakeswara devoted his entire energies to converting the fortress into a large and beautiful city prior to getting himself formerly installed as king. However the priest and people would not permit a traitor to ascend the throne. On the day fixed for his enthronement Alakeswara was murdered, and the youthful son of the king was crowned in his stead as king Sri Parakramabahu vi (1410-1468 A.D). This King was the greatest of the kings who ruled at Kotte. He brought the entire island under his sway. He was a great patron of literature. After his demise the famous prince Sapumal, who won the Jaffna Kingdom, overthrew the ruler after some time of civil war and ascended the throne as Bhuvanekabahu iii.

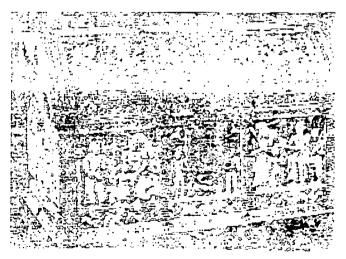


Figure 1.02: A painting of a mangusa (box), came to the power of Don Juan Dharmapala

"For a century and a half Kotte continued to be the capital, until at the stress and storm of 30 or more years of civil war between that rio fainant Don Juan Dharmapala, and the puissant Rajasinhe i, it suffered at least four if not more, sieges - all raised with the aid of the Portuguese."

### 1.3 ARRIVAL OF PORTUGUESE AND THEIR INFLUENCE

Jayawardanapura Kotte was the Sinhalese capital when the Portuguese, the first European nation to gain ascendancy in this island, set foot on our shores in 1505.

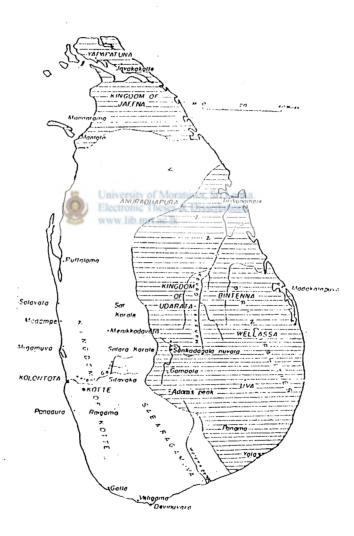


Figure 1.03: Political map of Island of Ceylon in 1505.

"The historical episodes of the Parangi (Portuguese) being conducted in 1505. The actual route they traversed is a matter of conjecture. What the Sinhalese king's courtiers did not know was that the Portuguese ambassadors had previously agreed not to go beyond the hearing of the ship's cannon which was fired at regular intervals, and a whole range of audibility had been predetermined."

An account of the first Portuguese embassy to the court of Vira Parakramabahu iii gives us another graphic description.

"The ambassador Da Yo De Souza and his team were conducted to the palace on elephants through a devious route. The ambassador was received by the king in the audience hall of the palace."

Portuguese influence in the court of Kotte was significant thereafter. Kings at Kotte had to seek the assistance of the Portuguese to defend their Kingdom from the other Sinhalese rulers who sought the throne vigorously. The Portuguese presence and their influence was these fare greatly felt not only in matters of state but in the architecture and the buildings that came afterwards, as well in the king kingdom of Kotte. The first Roman Catholic Church built in Ceylon was at Kotte in 1523 A.D., by a great religious Portuguese officer named Andrade, whose services king Bhuwanekabahu vii (1523-1551 A.D.) had engaged for the purpose of training his Sinhalese soldiers in European methods of warfare.

"Though exact statistics for the whole of the Portuguese territory in Sri Lanka are not available, the data which Rev. Father Don Peter has pieced together from various sources show that over a hundred churches and schools were established by the Portuguese all over the maritime region. In the kingdom of Kotte alone there had been 54 churches by the end of the Sixteenth Century."

It is said that in Kotte city alone 12 churches were built by Franciscan priests. Among the remains of the Portuguese time the only remaining artifact found today is the bell hung in the 'Kaymans Gate' at Pattah.

It originally adorned the church of st Francis, one of the several Catholic churches that existed in the royal city of Sri Jayawardanapura Kotte, in the sixteenth century Don Juan Dharmapala gave every encouragement to the Portuguese in promoting their religion. This prince on ascending the throne in 1556, gave Roman catholic missionaries every assistance in building churches, chapels, schools and orphanages at various mission stations throughout his Kingdom.

### 1.4 THE DEMISE OF KOTTE

The Portuguese were instrumental in razing the city of Kotte, to the ground.

" The final sieges of over four months, vigorously conducted by Rajasingha in person, reduced the defenders to the greatest straits. The last forty days were days of cruel hunger, in which they ate nothing but herbs, and even those failed some days."

Kotte as a capital ceased to exist from 1565 A.D. when it was finally abandoned, with the forcible removal, to Colombo by the Portuguese, of the Sinhalese normal ruler, Don Juan Dharmapala. After the death of their infamous de facto and de jure king, he left his Kingdom and the sovereign Lanka to the king of Portugal, by a last will.

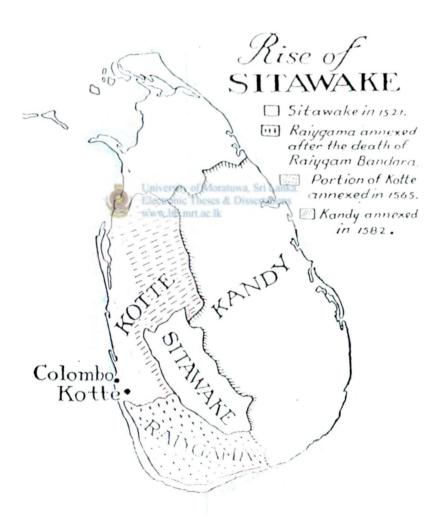


Figure 1.04: Kingdom of Sri Lanka at the end of 15<sup>th</sup> century (Source: Ceylon under western rule)



The Territory of Kotte, which passed into the effective control of the Portuguese was only what they actually held by force of arms. It consisted of the littoral strip from Puttalam to the Walawe, from the seacoast to the fringe of the central highlands. This tract was divided into four Disawanis, excluding Colombo, which was a royal city with the rights and privileges and administration of a Portuguese cidade with a chamber of elected members, judges and alderman for its civil administration. The four Disawanis were Matara, Sabaragamuwa, the four and seven Korales. All four began from outside the walls of Colombo. When Kotte was abandoned by the Portugese in 1565 the king and his court moved to Colombo, which thereafter became deserted and was covered up by the wilderness.

### 1.5 THE DUTCH TIME

The Dutch seized Colombo and on the twelfth May 1656 accepted the capitulation of that city, the seventh article of which guaranteed the Roman Catholics full and entire religious liberty, but only a few days later they expelled the priests, desecrated the churches, destroyed the beautiful educational establishment, and on nineteenth September 1658, proclaimed the notorious law which forbade, under pain of death, the giving of shelter to any Roman Catholic priest.

"Churches were destroyed and the only survival today is the bell which hangs on the Kaymans Gate belfry ..... It was found amidst the ruins of palaces and churches when the Dutch reoccupied Kotte, and was set up by the Dutch at the foot of the Wolwendhal hill. It was used for different purposes to call worshipers to prayer to mark the closing of the castle gates and as a curfew bell to put out the lights for the night."

University of Moratuwa, Sri Lanka.

During the Dutch rule (1640 - 1796) the spiritual interests of Kotte and neighborhood were not neglected. Kotte with six adjacent villages, formed a parish, having its own pastor, supported by the government, and superintended by a Dutch Presbyterian clergyman. It had its large and substantial church in Etul Kotte, on the site where the C.M.S. girls school now stands, The Dutch minister attended periodically from Colombo to perform religious rites and to examine the school.

On April 23, 1721 there is reference to a property being gifted by a deed of gift to the new by built native reformed church at Kotte, a certain garden, his property in the hamlet Etul Kotte ......., this church was expressly commenced to be built about a year ago .Thus it proves Dutch activities in Kotte area, not the capital in the Dutch tile, and the activities area to a lesser degree. The churches referred to or their remains are not to be seen today.

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#### 1.6 THE TRANSFER OF POWER TO THE BRITISH

The transfer of Government to the British in 1796 produced a great change. Evangalization was 1 set aside. The churches and schools including those of Kotta, were abandoned and allowed to fall into decay, and the people reformed to Buddhism and its companion faiths.

" Education in Ceylon had sunk to a very low level at the time the British took over the government from the Dutch in 1795." 10.

Hence the revival of education especially in Kotte area with the placement of Kotta Missionary station in Kotte and the Buddhist revival in the 1840's which resulted in destroying Kotte period temples like Kotte Raja Maha Viharaya, Papiliyane Sunethradevi Pirivena (See Fig:1.05) and Siri Parakumba Pirivena being reestablished These will be looked into in detail in the forthcoming chapters.

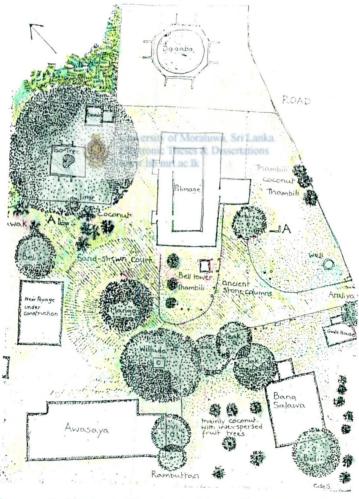


Fig: 1.05 – Lay-out plan sunethradevi piriven Raja Maha Viharaya Source: Archt. C.J. de seram

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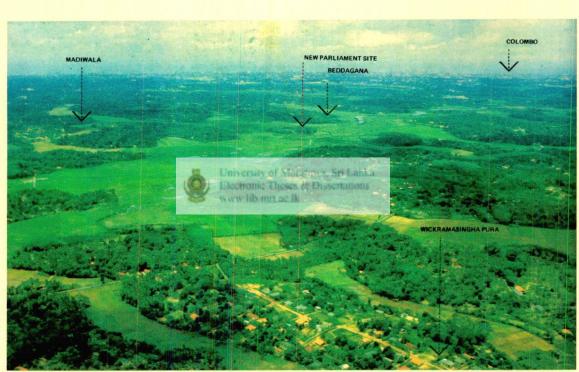


Plate 111- The area of Sri Jayawardenapura Kotte (an aerial photograph before new capital)

# **CHAPTER TWO**

# 2. HISTORICAL LANDSCAPE OF THE KINGDOM OF KOTTE

## 2.1 THE CITY PLAN AND ARCHITECTURE OF ANCIENT KOTTE 2. 1.1 FORTIFICATIONS OF THE CITY OF KOTTE.

About the fortifications of the city of Kotte in the sixteenth century an all too brief account is given by De Couto.

"The city of Cotta is of a circular form, and is situated as it were in an island, entirely surrounded by a fair sized river, which can only be crossed by boat. It will be some 2000 paces in circumference, and has no access to the outer world except by a passage like mans neck, which would be some 50 paces in width. This defile our people had fortified with a valuation of thick walls at each end, and two walls besides that ran across this defile. One outside, and the other nearer in, and the passage was called Prea Cotta (Pita Kotta). Here is also over the river a bridge, which they call the pass of Ambola, which goes towards Colombo, which our people make use of, and from Cota to Colombo will be a large and a half. There is another pass, which they call that of mosquito, and two others, in which our people had made their tranqueiras and provided them with everything."

Although this kind of description may be found, about the city of Kotte, there is not a single detailed ancient map showing details of the city. However scholars like Douglas D. Ranasinghe after much research have identified the city of Kotte by way of a conjectural map. (See fig: 2.01) Among the fairly detailed map of Sri Lanka's ancient fortress cities, only one could be found of Kotte, that also does not give much of a detail. It is both strange and unfortunate, that of the fairly numerous plans of the towns of Ceylon left by Portuguese and Dutch writers not one of Kotte has come to light.

The map at the Netherlands Archives shows Kotte city with its ramparts boundary, with a bastion built inside an inner moat projecting outwards on the vulnerable southern side of the city. It is important due to the fact that all the other areas are covered by water or marshy land and this is the only area where there is land access. There is another bastion-like complicated arrangement, definitely a defensive one, towards the side to Colombo which is Welikada or Walukakanda. No doubt the equipping and positioning of these defensive points (bastion) would have strengthened the inner city which with stood many a sieges. The significance of positioning these bastions at entry or exit points was that entry or exit of anybody could not be possible without establishing identity.

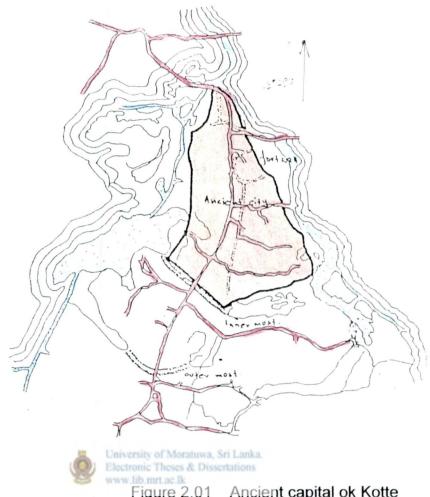


Figure 2.01 Ancient capital ok Kotte

The city was adequately protected on the north, west and east by the meandering Diyawanna oya, it's treacherous marshes teaming with alligators. The ramparts and inner moat was constructed to link up with the Diyawanna oya and protected the vulnerable southern side of the city.

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(A Verse from Salalihini Sandesa)

<sup>&</sup>quot; Adorned with rows of red lotuses with the beauty of golden swans, With long single folds like diffused clouds, With wrinkles like the waves, the River Juwannah resembled the silk dress constantly wron by the city Maiden Cotta."

දිගවන්න - The stream of water that encircled the city of Kotte served as a good fortification to the town. The same stream may be seen even today. Of course the golden lotuses have been replaced by stagnant heaps of mud. The golden swans have yielded place to the dark tortoises. Now it is known as Juvannave.

The selection of 'Darugama' as a fortress city was a significant step in ancient city planning in Sri Lanka. Full advantage had been taken by Alakeswara, of is natural features artificial provision of certain earlier cities. A moat was necessary only from the south side of the city which was also small in extent Other sides were covered by water courses.

"It must be mentioned that two other fortifications were on the Thalangama road, about a mile and half from Kotte, called purana Amuna (old anicut) and Kuda Amuna (Small anicut). The strategy was to release the impounded waters when enemy attack was imminent and flood the outlying areas around the city."<sup>2</sup>



Figure 2.02 Land use map of capital of Kotte

The Rajavaliya relates how the great minister Alakeswara, to break the power of Arya Chakrawarthei, raised the walls of Kotte threw up massive dams (amunu) to keep back the water, and laying in a supply of provisions to stand a long seige, ... ended up by flooding the country round the city by opening the sluices. These ancient embankments which remain to the present day on the Thalangama road, about a mile and half from Kotte, are called purana Amuna (old dam) and Kuda Amuna (small dam) respectively.

The lower end of the ramparts reveal that its construction was, like the fortification, built in two tiers. The lower portion constructed upto about the water line with an assortment of Cabok (Laterite) stones of varying size and shape, and the upper in large dressed literati blocks neatly joined. Look out towers were built. A terrace 10 feet in width runs between the two embankments which is a rampart walk, intended for sentinels posted on guard duty.

The fortress was properly made with entrances carefully chosen, as follows:

- On the south the passage at the wall at Pita Kotte
- On the north the pass of the Ambola (Ambolama at welikada junction)
- The pass of the mosquito (mosquito infected ferry)
- The pass in front of the islet of challenges (place of demand of sentry for identification)
- The pass of Andre Fernandez.
- The pass of mainotory (Rajamaldeniya mission raod)

The entire fortress was made out of Laterite.

## 2.1.2. ANCIENT STREETS OF KOTTE

According to Rajawaliya, Parakramabahu vi embellished the capital with fine stone buildings, palaces and a range of monasteries, he opened up streets and fortified the citadel with a girdle of ramparts, and gave afternoon to the basic needs of the city.

Scholars have identified ancient some of the streets which are still existing. One such street is the street running parallel to the now Kotte road cutting perpendicularly the roads running perpendicular to Kotte road, starting from where the palace was and from the Alakeswara road up to the Rampart road and

ending there. There probably would have been a pass (entry or exit point) at the point where the road meets the cakbook rampart. This identification is confirmed by the map prepared by Mr.Douglas Ranasinghe.

There are several other roads running out of the city identified by scholars.

" The historical episode of Parangi (Portuguese) being conducted in 1505 from Colomboalong a devious route to the Kotte capital, is familiar to many. " පරංගියා කෝට්ටේ ගියා " However the actual route they traversed was a matter of conjecture. Some belive that they came through Kirillapone (Kirulapane 'where the palace turret can be seen') across Kandawatta, Nawala (Nana-wala ' where the royal elephants were bathed') Past Nugegoda junction (then known as Divulgasmula handiya) where they were ferried across to Mirihana. The alternate route from the ferry was along the Jambugasmulla roadway to Papiliyana and Bevila (Udahamulla), to Vijayarama, and hence to Mirihana and Kotte."

Thus some of the roads leading to Kotte at the time were identifiable that way. It is (Mirihana's) later claim for survival because of the fact that through it ran an unerringly straight road linking Kotte with the ancient temples of Papiliyana which suffered Portuguese vandalism. This road passed through Gangodawilla (the reclaimed waterway) in which there remains the well known Subadrarama Buddhist temple (the gift of Subadra Devi queen of Bhuvenikabahu iii). Beyond Papiliyana along this same road, was the renowned temple of Bellanwilla. Coins of the Kotte period are unearthed from time to time along this Mirihana roadway. A vast concourse of people might have traversed it at a certain period, and it is likely to have throbbed with activity, especially during the festivals at Bellanwilla.

There can be little doubt that when in 1551 king Bhuvenikabahu was accidently shot by a Portuguese soldier, and all roads leading out of Kotte capital were seized on the orders of the viceroy, Mirihana with its numerous branch roads, would have come under strict surveillance. (Ribeiro's Histoire Fatalidade de Celilo)

Thus the road linking Kotte, through Mirihana upto Papiliyana and beyond upto Bellanwila, namely now the Aththidiya road and Bellanthota road are identifiable as roads leading in and out of Kotte.

#### 2.1.3. ANCIENT INLAND WATERWAYS OF KOTTE

Kotte city which was founded amongst water bodies and marshy lands, was famous for its inland water ways. It is understood that inland water ways were a necessity at that time as protection as well as transport (of goods) carried out on inland waterways.

"Some scholars assert that Sinhala kings initiated the first navigation cuts in the Kotte and Raigama areas, but although earlier Sinhala engineers developed the technology of trens-basin canals for irrigation purposes it is not known whether or not these skills came down to the Kotte era."

During this period, Mirihana and Nugegoda were separated by a wide expanse of marsh and bog which quickened on the western bank into a fast meandering stream to allow boats to ply through. This placed Nugegoda on the 'shipping route' which the Dutch later converted into a canal joining Colombo with Panadura and Kaluthara. The canal is still there, though you will have to look for it in the trickle of water which flows from the Gangodawila (Ganga - goda- wila. 'reclaimed river') highland in the broad covered ditch running parallel to the road in plenty, and the marsh stretched from the present road junction and bus station to the escarpment that flanks one end of Pagoda (Depava - goda. Place of desolate streams running beside the foot paths)

A ferry boat system is likely to have joined Nugegoda to Mirihana and Kotte, and the temporary hutments of the boatmen very probably gave Palawatte it's name.

"The old stone inn or ambalama in Nugegoda (at the gateway to Mirihana) which stood almost at the junction of the present town, was demolished about 15 years ago. This was the resting place for travelers who were not able to cross the ferry before nightfall. The floor level of the ambalama stood at almost 4 feet above the surrounding terrain. Floods were not unknown, and protection had to be afforded from straying crocodiles."

The above quotations give a detailed description of the inland waterway systems of Kotte area in the Sinhala kings period.



1.WATCH ROOM, 2.DEVALE, 3.ADIKARAM MANSION,4.KANUGAHA,5.TREASURY-STORE PLACE,6.TEMPAL OF THE TOOTH RELIC,7.TEMPLE (SRI RAHULA), 8.PALACE, 9.DANCINE HALLS, 10.MEDICINE HALL, 11.AMBALAMA, 12. FIVE STOREY MANSION, 13.TOMS OF ALAKESHWARA, 14.GRANITE ROYAL STAGE, 15.BAHIRAWA POND, 16.BATTLE TRAINING GROUND, 17.SARAS WATHIE MANDAPA, 18.CAVE, 19.OUTSIDE POND, 20.PRISON, 21.ARMY BARRACKS, 22.SANGARAJA MONASTERY, 23.VIHARA POYEGE, 24.RAYAL GARDENS, 25.PANA MADUWA, 26.VEHERA HILL, 27.KOTU VEHERA, 28.INNER MOAT, 29.OUTER MOAT, 30.DIYAWANNA OYA AND MARSH, 31.PERAKUMBA PIRIVENA, 32.SACRED PREMISES OF THE RAJAMAHA VIHARAYA, 33.TUNNEL(UMAGA)

Figure 2.03 - Plan of Sri Jayawardenepura ancient city

# 2.2. TEXUAL EVIDENS AND VISUAL PERCEPTION OF KOTTE SINHALA KINGDOM

## 2.2.1 MOATS AND RAMPARTS (කොටු බැම්ම)

සමනොළ මුහුල මහ සමුදුර මෙවුල්	බර
සුලකළ පුවල ලකඟන සිරි යොවුන්	වර
තරකළ විසල් වාසල් යතුරු මෙනු	වර
බැඳ හළ රුවන් තන පට කියලිය	පවුර
(A yeros from Calalibini Candosa)	

(A verse from Salalihini Sandesa)

" The rampart round the city is like a golden band with the large city gate as its buckle, worn in her youth by the beautiful maiden Lanka, whose knot of hair is Adam's peak and whose waist - band is the mighty ocean."

සමනොළ

-The Samanthakuta Parvatha which is Adam's Peak of the present day is the abode of the God Sumana (Saman). It is a sacred spot of the Hindus, Muslims and Buddhists. Annually thousands of devotees flock to the summit where is supposed to be found the foot-print of Badulla. The others believe that the foot-print is that of their God. On very clear mornings its peak may be viewed from Colombo, rising up to heaven like a blue cone. Hence the comparison to the knot of hair.

The ramparts run from east to west along the water's edge at right angles to the cross ramparts of the old city. They were built with laterite blocks measuring 26 x16, from the base of he ditch up to the coping on the wall and plastered with a brown colored paste of much durability unlike the cement of the present day.

They were well fortified with " idongini" ( iron spikes), "Pulimugam", Nadasala " ( snares), "bhumi – yantattu ( caltrops) , "Attala" ( towers ), "attavetta" ( pitfalls) constructed at intervals and " marasi" ( wooden stakes ) On the summit of the great wall there were four Davales for the protection of the four sides, dedicated to each of the four great God – Kings, protectors of the four quarters of Lanka.



Existing
situation of
Rampart

30

They were, 'Kihireli Upulvan, Saman Boksel, Vibhisana and Kanda Kumara'. The kings maintained them continuously with every description of music including drum and pipe and dancing and singing.

These ramparts are 8" x 30" in height and breadth respectively. When the annual procession of the sacred Tooth Relic was held in Esala with the patronage of the kings; dancers, tom-tom beaters followed by gaily bedecked elephants, two deep with a double file of men, women and children in procession, chieftains, the "Diyawadan Nilame" his retinue of 'Kariya Karannas' and the Tooth Relic on a richly caparisoned tusker, wound their way on the top of the lighted ramparts.

At present the ramparts do not stand more than a foot or two excepting at a few places along the Ramparts road and at Angampitiya where they are preserved to a height of about 4 feet. It is a historical fact that during the Portuguese, Dutch and the British periods the large 'Kabook' bricks of the ramparts and other buldings in ancient Kotte, were removed by contractors for the construction of public, military and private buildings in Colombo fort, Pettain, Hulftosdorp, etc.....

## 2.2.2 THE ALAKESWARA POKUNA

The bathing pond was situated within the land know as Maliga Watta. Tradition says that it was the Queen's bath within the Queen and her ladies – in – waiting resorted to for their ablutions. The stone steps leading to it were excavated and disposed of for building houses that came up on the site.

#### 2.2.3 THE BOWL

A large granite vessel discovered in the bed of the Queen's Bath was lifted up and taken away by the P.W.D. to adorn the court yard of the Supreme count at Hulftsdrop. The bowl is 35" high and 48" in diameter at the rim. It bears a frieze of lotus petal curving around the circumference. Two beautifully carved handles in the ornamental 'Makara' design are on two sides on the rim of the bowl.

A similar vessel of smaller dimensions was taken to Queen's House by the then governor, Sir George Anderson and Sir Henry gave word to remove these two bowls from the above mentioned places and bring them to a safe place, but it is not known still where the bowl is lying now.

#### 2.2.4 THE DALADA MALIGAWA

ලොවැ විහිද සුදු පැහැ සඳ රැසෙවි සැදි දෙන නොමද සිථි සහ මොක් සැපනි සැදි ලද මුනිද දම් කඳ පහස මන බැදි වඳු දළද හිමි හෙමහල් පහය රැදි

(A verse from Salalihini Sandesa)

"Proceed directly to the three- storied place where lies the worshipful. Tooth Relic which spreads over the world the white rays resembling the light of the moon which has freely bestowed the happiness of heaven and Nibbana and which felt the touch of all tenable laws, and worship there too"

ceς - During the time of the composition of this poem the Tooth Relic was at Kotte, the history of the Tooth Relic could be got from the Pali Dathawansa. This is believed to be the right canine tooth of the Buddha, that was brought to Ceylon by Princess Hemamali.

The Tooth Relic had changed its abode many times during periods of foreign aggression and civil strife. When Kote was fortified by Alakeswara and the seat of government brought to the new capital, the relic was reverently received by its new monarch, Prakramabahu vi, on its arrival from Gampola housed it in a beautiful three storied edifice erected by him in he palace premises in 1412 A.D. Here it reposed undisturbed for nearly a century until the arrival of the Portuguese when it was removed to the Delgamuwa Vihara in Sabaragamuwa.

In a copper Sannasa issued by Bhuwanekabahu vii, the village of Mampe in the Salpite Korale, was dedicated for the upkeep of the Temple known also as Mampe Rala, and his descendants, the dons, were empowered with the exclusive right to collect the levies and use the revenue for the support of the temple.

The temple of the Tooth Relic was demolished by the Portuguese. Not one stone was left upon another, Its place, was constructed a Roman Catholic church and the site is to this day known as Palliyawatta.

During the Dutch occupation, the church was demolished and the material removed for building their church at Wolfedhal. The bell which served the church constructed by the Portuguese was removed and installed at Kayamans gate also known as "Crocodile Gate".

## 2.2.5 THE PAS - MAL - PAYA OR THE KINGS PALACE

ගතරන් කොතින් දිලිහෙන මිනි රැස් විනි දු පවතින් ලෙලෙන පල අග මුතු ලැල් සිනි දූ ෙ සඳකැන් මිනෙන් බැඳ යුතු බිතු පෙළින් රු දූ වතැනින් ගොසින් සැණෙකින් රජ විමන් ව දු

(A verse from Salalihini sandesa)

"Start from the temple home of the Holy Tooth and soon enter the royal palace whose mightly walls are built with crystal glistening like moon beams whose balconies are decorated with delicate pearl festoons waved by the gentle breezes, whose tops are resplendent with golden spires nicely set with dazzling gems."

മോത -The minarets or spires of the gable roofed houses, the common Architectural designs of Royal palaces showed the presence of gable peaks, balconies, jeweled minarets, soon.

මුතුලැල' - Around the peaks were hung strings of pearls that resembled an open parasol. These were decorations peculiar to royal mansions.

University of Moratuwa, Sri Lanka,

കുമ്പത് මത - The moonstone is especially noted for its coolness. Hence houses built out of such stones would be extremely cool. Only the rich could afford to build walls out of such a stone. It is believed that when this stone is held under the rays of the moon little drops of dew are formed beneath. It is called "Chandrakanthipasana"

The royal palace of Prakramabahu vi was situated in the land still known a Pas – Mal – Paya Watta. "The Garden of the five storied palace". The Sandesa poems give a graphic description of its beauty and splendor. Two carved, almost perfect, granite pillars at the entrance to the Parakumba Pirivena (see fig: 2.05) are perhaps the only remains of the palace. Fragments of some carved pillars and small portions of the Makara Thorana found on an inspection of the site by an officer of the Archeological Department, initiated by Mr. E.W Perera when a private individual was excavating the foundations and disposing the material, were collected and dispatched to the Museum. In he course of the excavation two stone images of Hindu Deities and glazed tiles were unearthed. These findings are presently in Storage at the museum of Kotte.



Figure 2.05: Parakumba Pirivena

The construction of the Palace is described in the Annual Report of the Archeological Commissioner of 1909 and is as follows;

It is very difficult to describe the building or to say what it was and to give the position of the entrance. Judging from the carved stones and Kabook bricks, I think it was a Vihara and that the roof was supported by octagonal carved pillars like those of the Magul Maduwa in Kandy. Dissertations

The walls were built of Kabook bricks, plastered with lime mortar 1 ½ to 2 thick. The main entrance was probably once under a carved Makara Thorana. A piece left shows the Makara with a lotus flower and buds hanging from its mouth. The door and window frames were ornamented with lions, peacocks and lotus wreaths. Although in fragments, it is worth while securing these carved stones. There are many be yet more carved stones to be found, if the center part is excavated. The ruin is not sufficiently excavated to measure accurately, but I would put its dimensions at about 10 feet by 50 feet. It is an oblong building.

In identifying the ruin Mr. E.W. Perera commented in the same report, "It is one of the ruins in Maligawatha mentioned in the appendix to my Alakeswara paper. It is popularly known as the site of the place of Don Juan Dharamapala., My own view is that it is the Magul Maduwa of Sri Parakarambahu vi described in detail in contemporary poems. The stone Makara Thorana is very likely identical with the one descried in the Sandesaya under the shadow of which Parakaramabahu vi was enthroned on a lofty throne spread with white silk beneath the white Parasol with its ivory knob and silver handle".



Another description of the palace and the Royal ornaments may be found in Mr Paul E. Pieris' Ceylon; the Portuguese Era book which says:

"In accordance with the Sinhala customs the Audience took place by candle light. The ambassador was escorted through the gaily decorated city within the narrow gates of the Chitra Kuta Mandape in front of the Sumangala Prasada, the massive door frames of which, elaborately carved in stone, invited more than a passing glance of admiration. Within the large hall was hung with the richest fabrics of Persia, while lamps and torches resting on silver stands served to relieve the somber gloom. The crouching figures of the numerous courtiers filled the greater portion of the hall, while on either site were two rows of Mudaliyars in rich attire, withier naked swords by their sides and shields on their arms. Right under he great Makara thorana of stone and overshadowed by the white chatra of dominion rose the lion throne of ivory on six stages covered with cloth and gold. Seated thereon was king Dharma Parakramabahu, the Chakrawarthi lord of Lanka.

A white cabaiya covered the upper portion of his body, while on his head there rested a crown shaded with gems and large pearls, and falling in two over his shoulders. Round his waist was wrapped a cloth worked with silver. This reached to his feet which were protected by sandals, glittering with rubies. A profusion of rubies, diamonds and emeralds covered his fingers and weighed down his cars till they nearly reached the shoulders..." <sup>7</sup> In a later chapter in the same book, the following took place inside the Pas- Mal- Paya is being described.

"One day at noon, as the king appeared at a window in the Pasmahal Paya which he was occupying he was shot through the head by the mulatto named Antonio de Barcelos, and fell mortally wounded; a scene of great confusion followed, but all the remedies which were applied were of no avail and he expired within three hours" 8

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The Royal Palace is being described as a mansion of five stories with its pinnacle a sight of grandeur to the villagers in the environment of Kotte. A few yards west of the Sangaraja Monastry where now a row of houses has been built, there is a hollow ground which probably is the site of the pond used exclusively by the royal family. Beautifully designed tiles, well polished clay slabs and old coins" "Masuran" of Parakramabhu's period, presumably from the royal bath annexed to the palace has been found. A house has been built at this site filling up a major part leaving hardly any trace of it.

Considering the distance from the Royal Palace, The Temple of the Tooth Relic and the monastery, one could easily judge that the temple had been built close to the palace for the security of the Relic.

## 2.2.6 THE RAJA MAHA VIHARAYA.

The Rajamaha Viharaya in Pita Kotte was constructed by Sri Parakramabhu vi about the year 1415 A.D and endowed with considerable lands for its upkeep.

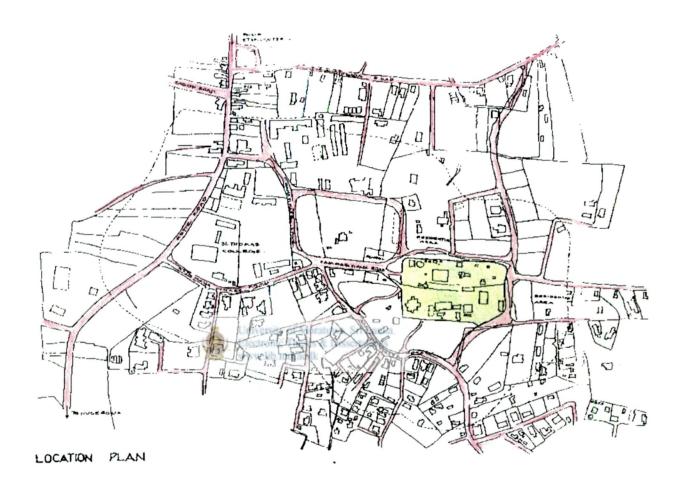


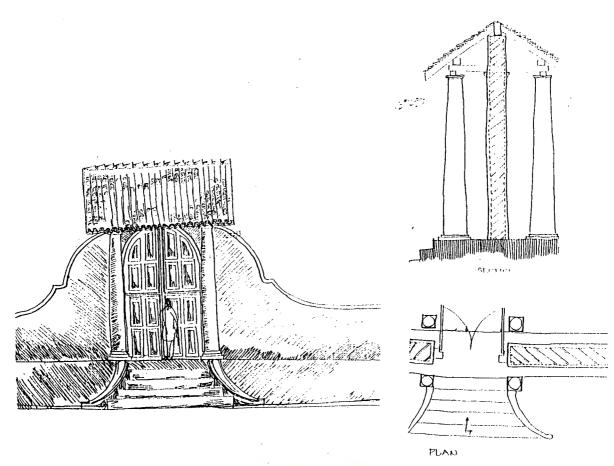
Figure 2.06 - Showing Rajamahavihara pita Kotte and the immediate environment around it.

Under the Portuguese rule the temple was reduced to ruins and for nearly one and half cenuries the place was under jungle. The Chaitiya and the four devales dedicated to Gods Vishun, Kataragama, Saman and Vibhisana have been reconstructed but the shrines have lost their charm and historical character which distinguish ancient places of worship in the hands of religious enthusiasts who conceived that the replacing of the old shrine by a new one quite different in

architecture, was the highest form of devotion to its God. The Ven. Pelane Buddharakkita Tero is accredited with the restoration of th vihare and its appurtenances in 1813.



Figure 2.07 – Lay-out Plan Kotte Raja Maha Viharaya Source : Sajad Kausar



University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

Figure: 2.08 – Old Gateway – Kotte Raja Maha Viharaya

(conjectuval)

According to information given by

Archt : Ashley de Vos & Archt : L.K. Karunarathne

## 2.2.7 WEHERAKANDA

Nevertheless, the name Weherakanda itself and further the existence of two stupas and the indication of a pilgrimage is adequate evidence to dispel and establish the fact that the site is none other but a place of Buddhist worship.

In 1949, the Archeological Department excavated this site and conserved this as an archeological reserve. The two stupas of which the diameter of one is 30 feet measuring 97 feet east to west 53 feet North to south and 5 ½ feet in height. Two flight of steps give access to the platform on the north and west. On the platform in addition to the "stupas" here is at its north-west corner an unsubstantial and irregularly built shrine. The little remains of it except steps facing south through a porch of 4 feet square. The length of the shrine less the

porch is 22 feet and its breadth is 12 feet 2 ½ inches. On the eastern site of the wall is a recess at a distance of 14 feet the Archeological Department has so far not identified these ruins, however there is the belief that this site was an old monastery. The extent of the land declared as an Archeological reserve is 2 ½ acres.



Figure 2.09 - Weherakanda Dagaba and its surrounding

## 2.2.8 THE AMBALAMA

මල් දම් සුවඳ දුම් දුන් සොඳ වරල සි නි කල් ගිම් නිවා සැහුතෙව සහලස ර සසිනි කොල්ලම් ගසින් නිල් ඉවුරැති පාකුණසිනි වල්ලම්බලම දැක යා ගත් සහ තො සිනි (A verse from Salalihini Sandesa)

"Friend, having seen the forest retreat (Val - Ambalama) by the side of the pond, with its banks green with Kollan trees where the maidens whose braids of hair were with fumes of in cense, and adorned with garlands of flowers, bathe and cool themselves with glad heart wend they way from there."

කොල්ලම් ගස - A tree growing along the banks of lakes. Its leaves are very thick. Hence the dark green colour produced by the thick growth of leaves.

ତ୍ତି ଫ୍ରିଉତ୍ତ - A resting place among the sandy tracks of the forest. This was at a spot between Talangama and Walpola. The name 'Walpola' itself may be a corrupted from a "Wal - Ambalama" This was near Kotikawaththa.



Figure 2.10: Gal Ambalama at Pita Kotte Junetion

There were other two ambalamas in the outskirts of the city at Pita Kotte and Welikada junctions. They served as resting places to wayfarers on their journey to the city and temple. The Gal ambalama at Pita Kotte comprises of a hall 15 feet by 20 feet with the roof supported on 10 ornamented granite pillars. The roof has undergone renovation and the original tiles replaced with those of recent manufacture. The half – wall enclosure is a construction of later date.

The Ambalama at Welikada was a Kabook construction. It was situated at the entrance to an important passuon the road to the city. De couta in his description of the fortifications refers to this Ambalama in this way "There is also over the river a bridge which they call the pass or Ambola (Ambalama) which goes towards Colombo which our people make use of ......" With no authority responsible for the maintenance of this Ambalama, it fell into ruin. A hotel now occupies the site.

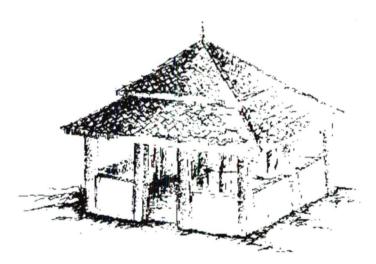


Figure 2.11: The correct way to conserve Gal Ambalama (Conjectural)

#### 2.2.9 SRI RAHULA MONASTERY

It is believed that the king Parakramabahu vi builte a special monastery on the prmises of the present Etul Kotte cemetery which is a part of the ancient "Maligawatte"

During the Portuguese period the 'Dalada Mligawa' and the 'Sir Rahula Monastery' were razed to the ground and a Roman Catholic Church was built on the foundations of the 'Dalada Maligawa' and the other had probably been gifted by the king. Dharampala to the Franciecan priests which came to be known as "Palliye watte" During the Dutch period part of this land was converted to a cemetery which exists to the present.

### 2.2.10 MUSEUM EXHIBITS

A few relics of the Kotte period which have laid in storage are on display in the Colombo Musemu.

- 1. A carved stone for rubbing sandalwood from Rayigama.
- 2. A stone filter from the site of Alakeswra Wasala, Etul Kotte.
- A circular stone pressonic Theses & Dissertations
- 4. Unique Terracotta pipes of a subterranean water supply system to the site brought to light at Kanuwatta Etul Kotte.
- A clay mask.
- Copper box for holding talismans.
- 7. Clay coin moulds used in making he "Lion Coins" of Parakramabahu vi from Beddagana, Pita kotte.
- 8. Copper Plate Sannasa of Vijayabahu vii from Kadirana.
- Copper Plate Sannasa of Bhuvanekabuhu vii from Mabimagama Kelaniya.
- 10. Carved stone frieze depicting dances in a procession from Horana.
- 11. Stone carving of a lively foreign depicting a perahera composed of dancers, horses, elephants, etc (from Kotte 1500 A.D.)
- 12. Remnant ( stone seat) of the Makara Thorana of Parakramabhu's palace at Kotte.



### 2.2.11 ROAD SIDE

මග නිලමින් නා දෙඹ නී	පියල
පිය සලමින් මල ගෙහි කෙළ රෙනින	වල
තතුඩ ලමින් බිඳ විලිකුන් මියුරු	පල
ඉසුඹු ලමින් යා සඳ දඹ පඳුරු	වල

(A verse from Salalihini Sandesa)

"Oh Selalihiniya, having flapped thy wings over-filled with the pollen of flowers of Na, Domba, Bakmi (Ni) and Mora (Piyala) that make verdant the roadside, pierce with thy beak and enjoy the ripe fruit, having rested amidst the Jambo groves, set off."

- This is a large tree bearing beautiful white flowers full of fragrance. The golden pollen dust is found in plenty in this flower.
- e Another huge tree of the forest. The flowers of this are not so fragrant as those of Na. But the flower bears much pollen dust.
- න Bakmi another of the giant trees of the forest. Its fruits are very sweet.
- 8∞e A fairly big tree of the forest. The fruits are very sweet.
- The Jambu tree is of two kinds. One is the large tree with white bell shaped fruits. The other is the small tree with small crimsom fruits.



Figure 2.12-Road side landscaping ancient capital

### 2.2.12 FADDY FIELDS

සලා දුලා පියොවුරු හඹර රෝන් රත සුලා නිලා උපුලන් ලා ගෙනැ කන ත කලා පිලා නොවැ ඇල්ගෙව් කෙළින ඉත බලා පලා යව අස්වනු ගුරුළු කෙත

(A verse from Salalihini Sandesa)

"Travel onward when thou hast seen the prosperous paddy fields called "Gurulu Ketha" where the corn-reaping maindens sport in friendly manner hindered by no quarrels, with breasts sprinkled with the golden pollen of lotuses and decking their lobes with the bud of the blue lilies."

ඇල්ගෙවි

- The maidens who lived in the fields where paddy was grown. They looked after the fields. During their leisure hours they sported in the fields with their friends.

......

ගුරුළුකෙත

- Now this place is called බුරුල්ලකෙත or ගුරුල්ල කෙත It must have been a famous field that was cultivated. The yield must have been very good.

අවට සුපිපි සපු දුනුකේ සල හඩන තැනින් තැන විලිකුළු කිර	ලාන ලාන
පැසි නැම් කරල් රත් හාල් සහ	ලාන
වඩින මැනවි මහවෙල මැද	ලාන

(A verse from Salalihini Sandesa)

"Proceed through the large field called weralana with its drooping ears of Rath-Hel (Red paddy) and encircled by a ring of blossoming Champaka, Dunuke and Hora trees (Sarala) where the wild fowls and goes are the givers of sweet songs."

සලළාන

- The sarala, or Hora tree is one of Ceylon.

විලිකුළු

-The kadamba bird or the wild goose may be the bird alluded to.

කි්රලාන

- The Kirala is a bird that is very anxious about its young ones. It builds its nest in fields of corn or grass. Throughout the night you could hear its cry. The belief is that is sleeps in the nest with its legs pointed towards heaven so that it might safeguard the young ones even if the sky were to fall.

රත්තැල්

-The red grains of corn that are extremely fragrant when cooked. It is some what rarely grown now.

වෙරලාන

- The great field was near the temple of Kelaniya. It may be the present day වැරැල්ලාන (Werellana).

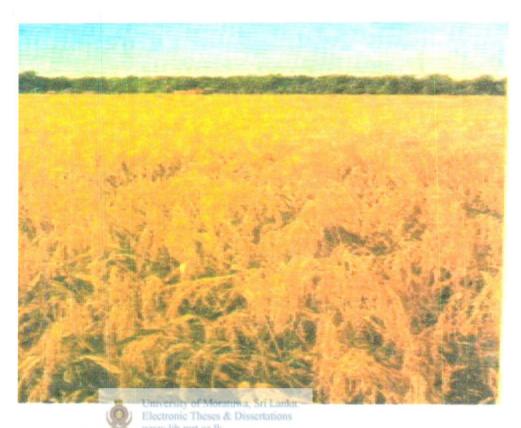


Figure 2.13 Faddy field as a open area

## 2.2.13 BANK OF KELANI RIVER

සල් සපු කීණ දෙඹ රෑ රඟ නා	මිදෙලි
පුල් එරහැඳි හෝ පලු මි අඹ	පළොලි
පොල් පුවකිඥ රඹ මල බුලත සලි	මලි
නිල් ගන සා සෙවනලු දෙතෙර	මනකලි
ගවසා සුපුල් කඩුපුල් මල් නිල්	වරල
සලසා උකුළු වට රසදුල මිනි	මෙවුල
සකසා දෙතන හර සඳුනෙත් කර	සිහිල
දෙපසා ඉසින නිල් පැහැ නෙත දිගු	පුළුල
මන හර නා මෙනෙවිය හිඳ ලවැලි	පිට
ගෙන මිණි වෙණ තත් නියඟින් මැද	රුවට
කණහෙව කියන බුදුගුණ ගී මියුරු	කොට
සැනහෙව කැළණි ගඟ බඩ මද කලක්	සිට

(A verses from Salalihini Sandesa)

"Either bank of Kelani River is pleasing on account of the shade of the thick green branches and verdant hue of the Sal, Camphor, Keena, Domba, Raranga, Na, Mideland the blossoming Asala, Hopala Mora, Mee-Amba, (sweet mangoes), folol, Coconut, Arecanut, sugarcane, Plantain, Malaya-Betel creepers, Imbul trees, where also upon the white sands Charming Naga maidens, cooling their breasts with pearls and unguents and adorning their long blue hair with lotus Flowers of the Naga world and wearing girdles of gems round their waists play upon gem set veenas (harps), vibrating the strings with the tips of their nails to the accompaniment of sweet songs and hymns sung in praise of the Blessed one, rest here listening for sometime."

කඩුපල්

-A species of lilies supposed to be found in heaven. These are favourite flowers of the Nagas who worship the Buddha with them. The other flowers of heaven are parijata, Mandara.

## 2.3.14. FOREST

 වන සිරි පියුම් රා බඳ රන බරණ
 යුරු

 වට සිරි සුපුල් දුනුකේ මල් මුරුත
 තුරු

 බිතු පිරි වැරැ ඔලු පුලැඹුල වල
 තුඹුරු

 තිමසරි සිහිල් දිය හෙබ දැක යන්
 මිතුරු

 (A verse from Salalihini Sandesa)

"Friend, Proceed, having seen the deep cool waters on which there are the Olu, Manel and other kinds of Lotuses by beautiful flowering Dunuke surrounded with Muruta trees, like the golden dress set with rubies worn by the maiden-like forest."

-Padmaraga is a species of red gems like a Lotus in colour. It is known as the topaz.

දුනුකේ -A kind of tree growing in fairly marshy soil.

මුරුත -Another species of trees growing in marshy forests.

-This is a species of lily having scentless white flowers. It is smaller than an uppala nor has it so many petals.

පෙති -This expanse of water may be the pond at Kolonnawa.

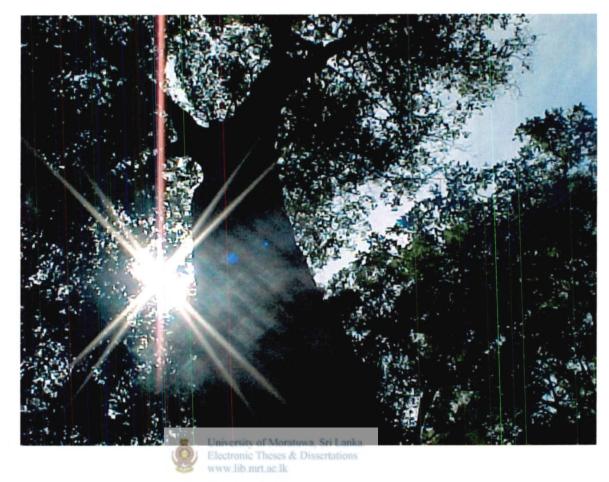


Figure 2.14 - Natural forest area of ancient capital

## 2.2.15 MAHASEN DEVARAJAPAJA

(Mahasen Dev Madura)

ගනේ මිණි බැබලි කිරණෙවි සත පාය රනේ යටගැ සැවිලිඳු දද ගළ පාය අනේ ලකර කළ පුරැ අප නරි පාය පෙනේ දකුණැ මහසෙන් දෙවි රද පාය

( A serse form Salalihini Sandesa )

" To the south thou wilt behold the mighty building of God Mahasen ( the Kataragama God), a building gaily decorated with waving flags bearing the sigh of cocks tied to the tops of golden staves, set with precious gems thick as the rays of the powerful sun."

දිත් රද පිණිස සර පියුමැයි නැමැති ලොළ ගත් සිය අතින් කොහි නැහැ මෙර සිදුරු ක ළ ගත් තෙද රැසෙවි මහසෙන් දෙවිරද සුදු ළ සිත් සහතොයින් නම දුවූ දෙනුව මන හෙ ළ

( A Verse form parevi Sandesa )

"....With joyous mind bow down and offer the tribute of your heart to the God-King, Mahasen, refulgent in the blaze of glory, acquired what time he seized the spear against the titan king, Pathma Asura and Piercing him, transfixed Mount Meru ......."

The place of God Mahasen (Kataragama God), was a splendid edifice admired by everyone. It was situated in the southern side within the city. A description of it is given as a ball form which issued rays flashing through the gems and the banners of the Lord of the fowl (embiem) fluttering on the golden handles.

The site of the Mahasen Devale is on the top of the hill where the "Ihala Walauwa" is, adjoining the residence of the late Mr.E.w.Perera. Quite close to the parapet wall which runs alongside the Kotte main road and within the garden, there are two granite columns a good part of which are buried rather deep. These indicate the place where the 'Punawa' Sacred Vessel was kept. A few decades back an attempt was made to unroot them by an elephant, but failed and in the course of which a part of one of the columns broke. It is now standing to a side.

## 2.3 THE ESTABLISHMENT AND GROWTH OF THE CITY OF KOTTE IN THE COLONIAL PERICOID.

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#### 2.3.1 THE FATE OF THE RAMPART

After the Portuguese abandoned the city, thought it was not completely deserted, most people left the city. It is said that the Dutch later came to Kotte and did some religious work and they even removed a bell – fry from ruins of a church and placed it in a Colombo church built by them ( Keymans gate)

In 1822 the valuable comments: S. Lambrick.

"He visited kotte, once the residence of Sinhala royalty, but which had declined in property, and had a population of between 3000 and 4000 at the time of his visit" <sup>9</sup>

Thus it proves after the desertion of Kotte, there had been a gradual reoccupation since Dutch time In 1909, H.C. P Bell says, "Kotte now virtually a suburb of Colombo, is situated about six miles inland. It is a thriving place once more" But this gradual re-occupation occurred in the areas where original structured of Sri Jayawardenapura stood. As he re - occupation gained momentum, the disappearance of the remaining ruins also increased. The jungle which enveloped the earlier cities protected what remained of mans hand work in those places, while the men had their habitations on the sides of the later cities obliterated in great measure the evidence of the artistic achievements of their ancestors or processors. Nowhere has this been carried out with greater thoroughness than at Jayawardenapura or Kotte, which was the Singhalese capital when the Portuguese, the first European nation to gain ascendancy in this island, set foot conies shores.

The graphic description of the re-establishment of Kotte is given in the Archaeological Survey of Ceylon. It is evident that the material most commonly used in ancient Kotte, the literate was removed from ruins and re-used for construction purpose. The fate of the rampart which defended the city of Kotte so vigorously is also given.

Surviving the stress of storm and siege of five centuries, still the trace of the massive walls built of huge blocks of Cabok stand out clear round the old Singhales fort. But at the place where the wall had been best preserved in height and massive proportion it was ruthlessly torn down by a modern purchaser of the land, and two rows of coconut plants take up the ground once occupied by the ancient rampart. Huge slabs have been removed one by one until even the trace of it has disappeared entirely in some parts. Unless immediate steps are taken

to arrest further ravages, there will in a few years be but the faintest traces of it left. Thus it is clear the new city which was re- established, grew beyond the ramparts, he expansion was not limited due to the rampart and in the process it destroyed the rampart, excepting in few places.

## 2.3.2 MODERN STREET PATTERN AND ITS LINK WITH THE OLD

In the colonial period especially in the British period it is clear that new streets grew due to the occupation of plots in the areas once chief structures of Jayawardanapura Kotte stood. But it is also possible some of the original ancient roads were also preserved and the new street pattern merged with the old one. One such street identified by Schdares is the road running parallel to the present Kotte road, which runs from Alakeswara Mawatha up to the Rampart road, cutting perpendicularly by-roads running inland from the main Kotte road, in the process. Another such road is the present highway connecting Mirihana and Kotte with Papiliyana.

Its (Mirihana) later claim for survival is because of the fact that through it ran an unerringly straight gravel road linking Kotte with ancient temples of Papiliyana, which suffered the force of the Portuguese vandalism. This road passed through Gangodawilla, in which there remains the well known Subadrarama Buddhist temple. Beyond Papiliyana along this same road was the renowned temple of Bellanwilla. The coins of Kotte period are unearthed from time to time along this Mirihana road way. A vast concourse of people might have traversed it at a certain period, and it is likely to have throbbed with activity, especially during the festivals in Bellanwila. This road at present is identifiable as Aththidiya road and Bellanthota road. There had been several by roads developed in the British period, Which bear, names of some significant ruins of the Kotte period. A striking factor is the new Kotte road was laid almost parallel to the ancient road running from the palace downwards up to Rampart road and all the branch roads which branch- out perpendicularly from the main Kotte road, cross remaining part of the ancient road. Some of the branch roads which could be identified by its name are.

- Alekeswara Mawatha the road leading to Alakeswara tomb.
- Rampart road the road running towards the Rampart.
- Palace road the road leading to ancient palace
- Ferry road
   Mission road
   the road leading to the ferry.
   the road leading to Christian Missionary college

which is one of the main buildings initiated during the British period.

## 2.3.3. EVOLUTION OF INLAND WATERWAY SYSTEM OF KOTTE.

Kotte which was founded amidst waterways and marshes was always famous for its inland waterways. What the Sinhala Kings did by providing sluices to flood the outing country in an event of an invasion by opening the sluices, at the Thalangama road ( Kuda Amuna and Purana Amuna) etc. are examples of Sinhala period waterways of at Kotte. It is also said excerpt from one side all the other ways to Kotte city was surrounded by water and nobody could cross without the use of a boat.

It appears what Sinhala Kings initiated Portuguese and Dutch improved on as a means of transport and flood protection apart from the initial protection of the city given. The Dutch are more famous for the development of inland waterways, as their country was under the level of the sea, and they brought many of the skills here to make use of, although the Portuguese also started some waterways systems. Therefore it may be attributed to a colonial influence in the city plan of Kotte, as the Dutch used their skills to improve the waterways. There is also evidence that the Portuguese took the first initiative to introduce man made water ways or canals for the purpose of transport. They started a net work of canals in the Colombo area leading towards Handala in the North, and linking the Bolgodalake in the South to the Kotte lake. The Dutch governor Van Imhoff in his memoirs refers to an old Portuguese waterway which flowed from the lake of Nadimala to .... the river or stream of Kotte.

It is possible the Portuguese who were an interracial - al power in the court of Kotte, with the permission of the king of Kotte carried - out some improvement to the canal systems to develop the transport, in order to serve the main purpose of their stay here, That is trade and where the smooth movement of goods was important. "In the south of Colombo once again the Portuguese are credited with a canal from Kotte, to Bolgoda lake. This was restored and improved by the Dutch governor Van Imhoff who also planned a short and direct water way from Kotte to Nadimala Via Gangodawila, and commenced work on it, but it was never completed."

In spite of these few completed projects, it lies to the credit of the Dutch that they developed a continuous internal waterway system stretching from Kalpitiya in the north to Kalutara in the south. Thus colonial influence on the plan of Kotte city is evident when Kotte was under the Dutch rule after the Portuguese had left.

The British realized the importance of waterways for transport in the nineteenth century, as well as for flood protection and continued to maintain them and also make additions and innovations.

"Layards folly, linking the Kotte - Kirullapone - Nadimala canal to the sea at Wellawatte was intended to be a flood out let of the Kalany ganga. It earned the name Layards Folly, (After C.P.Layard G.A, Western Province at that time, who conceived it) because though it was built to drain away flood water, the canal bed was much higher than the flooded area. This was subsequently deepened and has performed the useful function of flood protection and draining away of rain water." <sup>11</sup>

There is much documented evidence that Padda boats were used as a means of transport, in the inland waterways of Kotte area. Early records show that Rev. Samual Lambrick CMS missionary traveled by padda boat from Colombo along the expansive waters of Beira lake, which was connected to the historic Diyawanna Oya..... landed near the hillock adjoining the placid waters of the lake, covered with lush green vegetation, would have no doubt provided him the ideal environment with the scenic beauty and the calmness to set up the first English school in Sri Lanka. Soon after taking possession of Thotupala Kanaththa Mr.Lambrick wrote to the CMS, Cotta has a water communication with Colombo, by means of a canal connecting the Kalany with the Kalutara and the Panadura rivers, there is also a bridle road with wooden bridges over two branches of the canal, but in the rainy season this road is frequently impassable. It is a sufficient distant from Colombo to avoid the evils connected with a large town.

Thus it is clear in the Kotte area the water transport played a key role in transporting people and goods in British period as well. Because of marshes and waterways in and around Kotte area, which is located in the wet zone of Sri Lanka which comes under heavy south-west monsoon rains, may have been flooded many a times according to the information available.

With the coming of the British and the departure of the Dutch this water way came to be gradually used more for drainage purpose than for transport. The result was that over a period of nearly one and a half centuries of British rule waterways finally fell in to disuse and became badly silted and neglected.

<sup>&</sup>quot;Under the influence of competition from a new railway line and later from a parallel road, the transport function of the canal gradually diminished and around 1950 had come to a complete stop. Since then transport equipment (barges) and the operating skills gradually disappeared." 12

This silt and negligence was there until quite recently, when after the declaration of Sri Jayawardenapura as new administrative capital of Sri Lanka, the parliamentary complex was built, after cleaning and clearing as well as expanding the waterways and the lakes in the Kotte area. Despite all this Kotte is still vulnerable to floods, especially it became a problem quite recently when parliament building was inundated during a heavy shower in 1992.

## 2.3.4 IMPACT ON THE CITY OF KOTTE DUE TO THE KELANY: VALLEY RAILWAY LINE.

The Kelany valley railway line was completed on 18<sup>th</sup> April, 1912, and traffic commenced to Rathnapura Via Nugegoda. It is understood that the positioning of Nugegoda railway station was decided after an argument to place it at Borella - Kotte road linked the throbbing and busy city of Mirihana. The Colombo, to Mirihana long before the Kelani valley line was conceived, or the High level road was planned in fact when the narrow gauge railway was subsequently taken up for serious consideration, following the vehement and vociferous demand of the Kelani valley planters, Mirihana was to be the site for a railway station. But however following results of bitter dialogue. Nugegoda was subsequently chosen for the railway extension. Thus because of the positioning of the railway station at Nugegoda, it is apparent that it triggered off a new era of development for Nugegoda. The blocking of the old Dutch canal in the vicinity of Gangodawila, and the reclaiming of the Dutch era swamps, made Nugegoda a very attractive residential area, which was further heightened with the laying of the high level road. Soon there was a migration of retired government servants and other persons to this new suburb.

Therefore it is evident that the placing of the railway station and the high level road will give it the capacity to over develop, compared to Kotte. The railway line from Colombo to Yatiyantota begin at Maradana junction. The line upon leaving Colombo travels to the Golf links and to south until the 1<sup>st</sup> station, Nugegoda which is reached at the sixth mile. Nugegoda is in the center of a cluster of well-populated villages of which was once the famous principality of Cotta's chief. Although Cotta was the seat of Kings in the 15<sup>th</sup> and 16<sup>th</sup> centuries, when the whole country was sub-divided in to petty states, the remains of historical interest are too obscure to detain the visitor. The chief institutions in the district is the missionary society, which dates from the year 1818.

The manufactures consist of pottery and pillow-lace, which the villagers may be seen making in the shade of their palm thatched verandahs. Both may be purchased at surprisingly small prices.

The agricultural products are cinnamon, the various palms and garden vegetables, tons of which are sent by rail to the Colombo market."

The above quotation gives a clear picture of the scene in Kotte, Nugegoda, in the British period that time with small villages engaging in cinnamon, vegetable and various palm plantation and pillow and lace marking.





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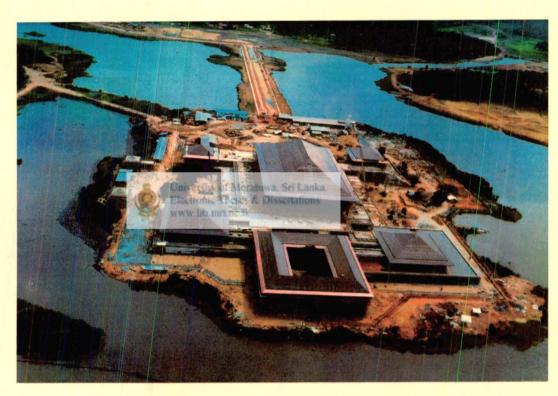


Plate 1v - The under construction of new Parliament

## **CHAPTER THREE**

## 3. DESIGN OF SRI JAYAWARDANEPURA AS A NEW CAPITAL.

## 3.1 THE CITY PLAN OF SRI JAYAWARDANAPURA AS A NEW CAPITAL'S IN THE 21<sup>st</sup> CENTURY.

Sri Jayawardenapura emerged to be the new Administrative capital with Colombo growing out of proportions with it's dual role of administrative and commercial capital. The presence of the port ensured the importance of Colombo as the commercial capital, while the legislative and administrative institution in the city led to an unhealthy concentration of activities in the metropolis.

Sri Jayawardenapura, because of its cultural significance and the potential for development; the availability of basic infra- structure and land for house building, and the capacity for the provision of all facilities and services required for a growing administrative city: was selected for the new Administrative capital of Sri Lanka.

#### 3:1.1 LOCATION OF THE NEW CAPITAL

Selection of the location for the new city has been based on the following factors:-

- 1. Historic importance, as the ancient kingdom of Sri Lanka that fell to the Portuguese. The location also assumes great importance as a place of much success which enabled Sri Lanka to attain its zenith of glory under one rule during its early history.
- 2. Close proximity of the project area to the city of Colombo presenting the following advantages.
  - (a) Possibility of accruing the benefits of the island's main sea-port and the Commercial activities.
  - (b) Possibility of transferring from the city of Colombo those administrative functions which have no strong linkages with the harbor and commercial activities to suitable locations outside the city without adversely disturbing their inter linkages and commuter journey patterns.
  - (c) Possibility of maintaining those administrative functions having strong linkages with harbor and Commercial activities, in a suitable location within the city of Colombo.
  - (d) Possibility of developing efficient communication systems directly inter - connecting the New administrative locations, simplifying the journey patterns.
- 3. Due to the ample availability of undeveloped and under developed lands within the project area, the possibility of providing housing for the employees in close proximity to the Administrative complexes, reducing travel distance.

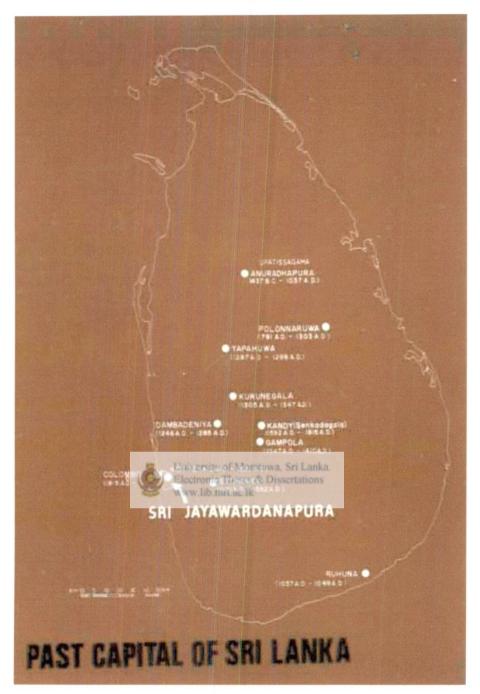


Figure 3.01 Location of Sri Jayawardenepura

### CITY BOUNDARIES

- North River Kelani
- East Low-lying belt to the east of Malabe and Kottawa townships.
- South Low-lying belt to the south of Kottawa and Werahera township (Weras Ganga)
- West Low-lying belt to the west of Rajagiriya, Nawala, and Nugegoda townships (Heen Ela)

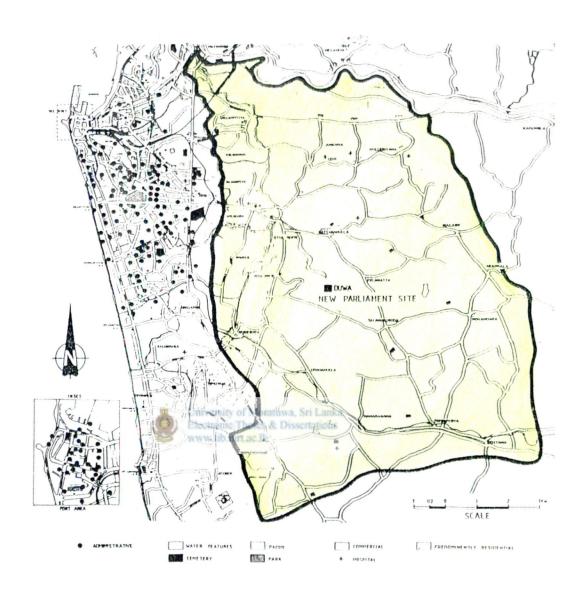


Figure 3.02 Location of the new capital

## **GEOGRAPHIC FEATURES**

- The area forms a catchments representative of a basin
- Around 800 Ha (2000 Acres) are low-lying marshes. Some areas reaching even below sea level.
- Highest elevation is about 40.00 meters (150ft) above mean sea level.
- Annual average rain fall of the area is 94.31"
- Annual average temperature is 80.5 F

#### 3.1.2 LOCATION OF THE NEW PARLIAMENT COMPLEX

A small island to the east of the ancient kindom has been selected for the location of the new parliament; said to be on the recommendation of a French Team and a Sri Lankan Team, who had carried out Pre-feasibility studies on its location. The island had served as a pleasure garden of the ancient king's:

The new parliamentary complex is designed to be the nucleus of the new capital. The lake is made to surround it form a pedestrian prescient. The north-South avenue crossing the lake is the ceremonial approach to the new parliamentary complex.

The new parliamentary complex at the center of the lake is the "crown" of the proposed "cultural Grove" on the vicinity of the lake front in the inner city. A bridge at the Southern end forms a service and security access and also links the new parliamentary complex with the state Drive No.4,6

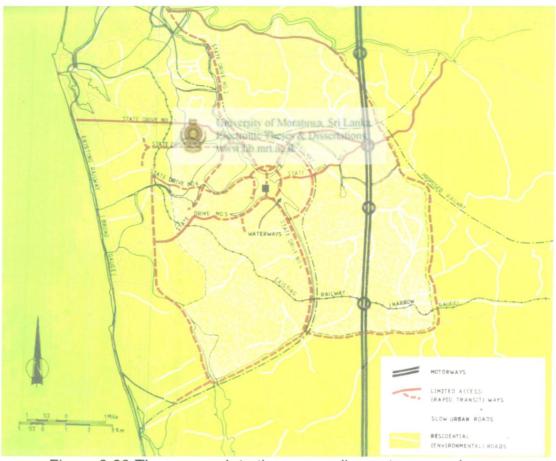


Figure 3.03:The approach to the new parliamentary complex



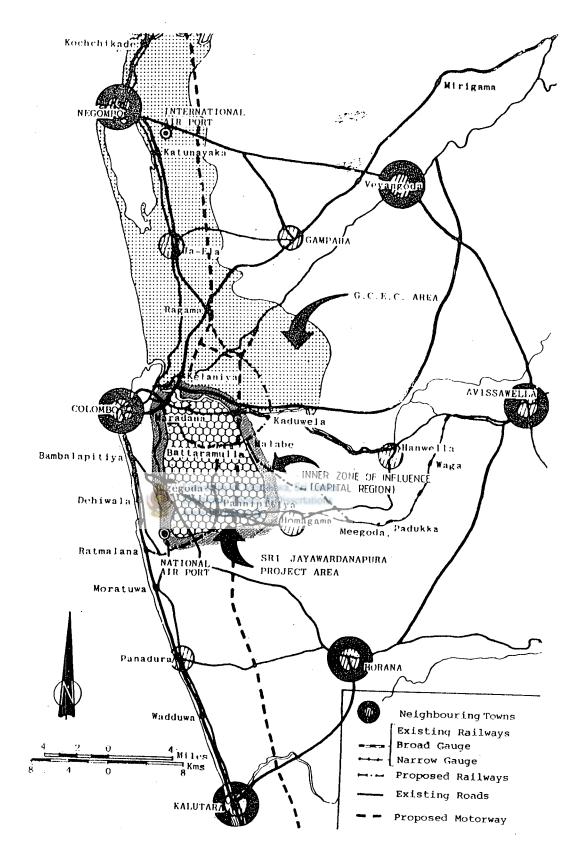


Figure 3.04 Regional location of Sri Jayawardenepur

#### 3.1.3 LOCATIONS OF ADMINISTRATIVE COMPLEXES

The sites at Battaramulla and Pelawatte being within the town centres, enjoy the benefits of the existing infrastructure, and are suitable for immediate development. They are placed within a distance of 2.4 Km (1 1/2 miles) from the new Parliament.

The third at Depanama where a large extent of land has been indentified needs new Communication linkages. It has been earmarked for those functions requiring nurseries, laboratories, large storage and transportation yards.

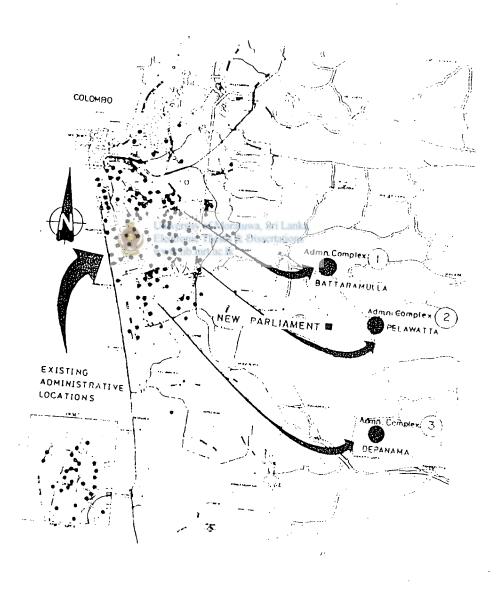
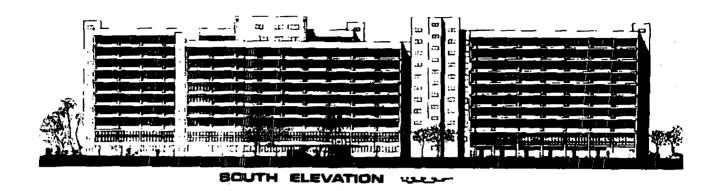


Figure 3.05 Relocation of administrative complexes



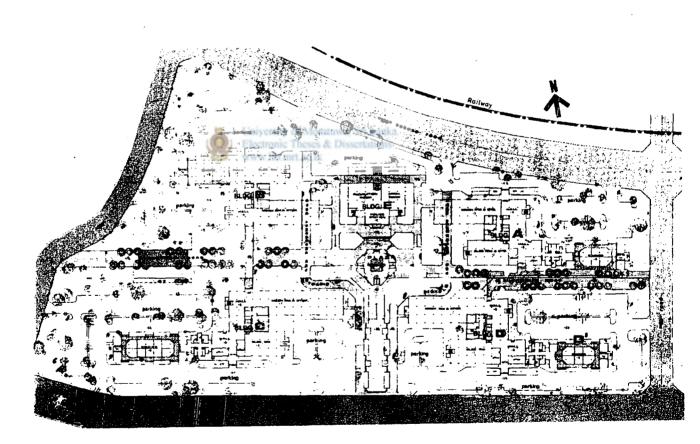
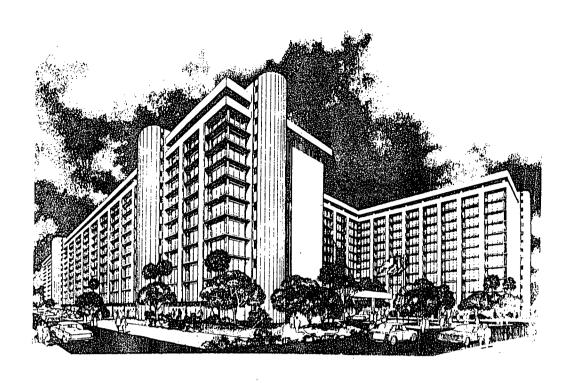


Figure 3.06 – Administrative complex at Battaramulla



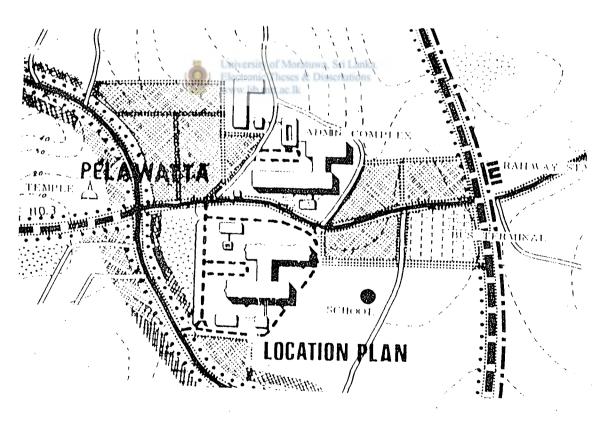
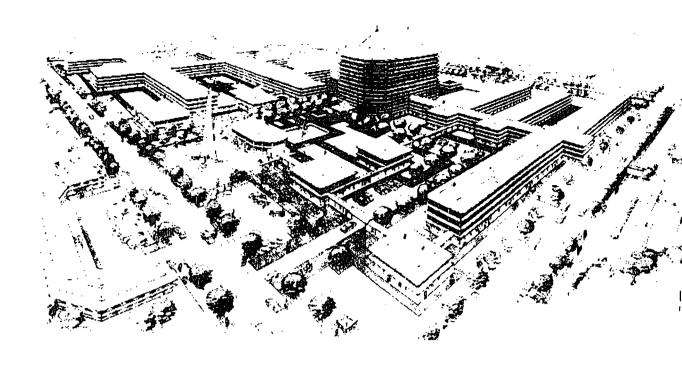


Figure 3.07 – Administrative complex at Pelawatta



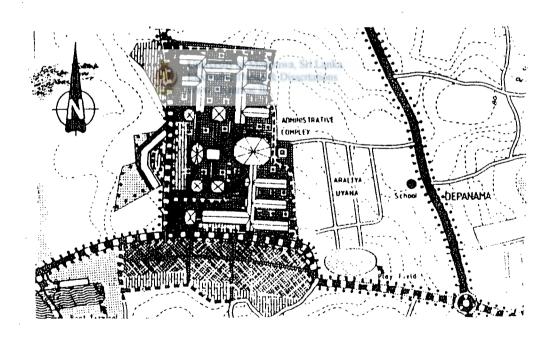


Figure 3.08 – Administrative complex at Depanama/Pannipitiya

# 3.2 LANDSCAPE DESIGN OF SRI JAYAWARDENAPURA AS A NEW CAPITAL IN THE 21<sup>st</sup> CENTURY.

#### 3.2.1. CONCEPT AND PHILOSOPHY OF NEW CAPITAL

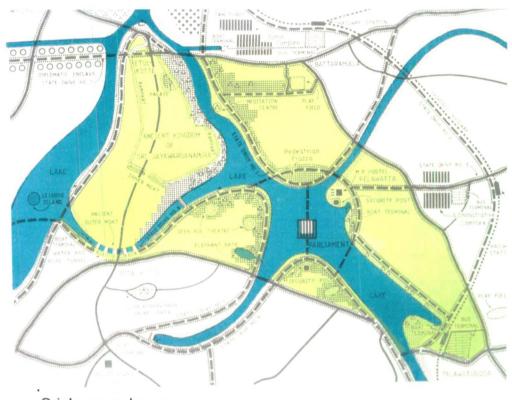
- ❖ To create a natural and stimulating environment in the city by achieving a harmonic balance between Built Systems and Nature.
- ❖ To use the geographical and topographical features of the new capital to the optimum, so as to create a unique city having a definite identity.
- ❖ To transform approximately one third of around a third of the marshes into a lake by dredging and reclaiming of the balance marshes.
- To developed of the new parliamentary and administrative complexes.
- To create of green belts and parklands along all water ways and ample playing fields to create a stimulation and natural environment in the city.
- ❖ To provide of a pedestrians cultural grove within the city to highlight and encourage the growth of our heritage.

#### 3.2.2 THE LAY OUT OF SRI JAYAWARDENAPURA

Sri Jayawardenapura is surrounded by the five regional towns of Negombo, Veyangoda, Avissawella, Horana, and Kalutara situated to the North, North East, South East and South on a radius of approximately 50 km. The new capital is proposed to be linked to the regional towns through a new system of road transportation.

Sri Jayawardenapura is to be divided into two zones consisting of the inner (the core) city and the outer city, in its layout.





Sri Jayawardenepura

# 3.2.2.1. DESIGN OF THE SRI JAYAWARDENAPURA CITY AND ITS CLATIONSHIP TO ANCIENT CITY PLANNING OF ANURADHAPURA

# DESIGN OF THE SRI JAYAWARDENAPURA CITY.

A green belt will encircle the city.(See fig. 3.10)

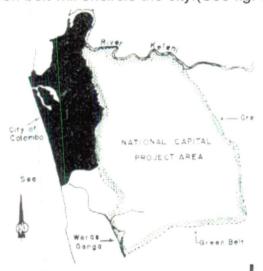


Figure 3.10 - City with outer green Belt.

Several water bodies will be created within it. The winding waterways will skirt the hills and pass through the valleys to the North, East, South and the West to end up in the River Kelani, Weras Ganga and the sea.

Designed for storm-water retention, transportation, sporting and for beautification, these waterways will add identity to the Capital. The waterways will be lined with beautifully landscape parklands for leisure activities. (See fig. 3.11)

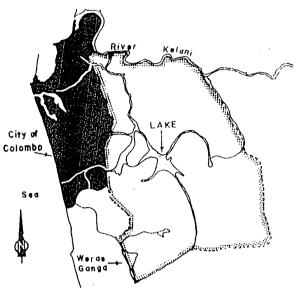


Figure 3.11 - waterways and outer green belt.

A new parliament will emerge as the nucleus of the New Capital. A magnificent lake will surround it. From a pedestrian precinct majestic North- South avenue crossing the lake will ceremonially approach the new parliamentary complex. (See fig. 3.12)

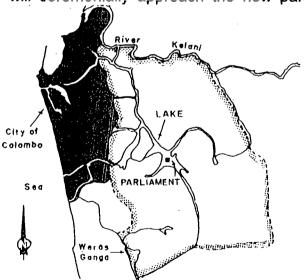


Figure 3.12 - New parliament, waterways and outer green belt. Three Administrative Complexes standing sentinel to the North, East and South will surround it. So the new Administrative center will take position in the New city. (See fig. 3.13)

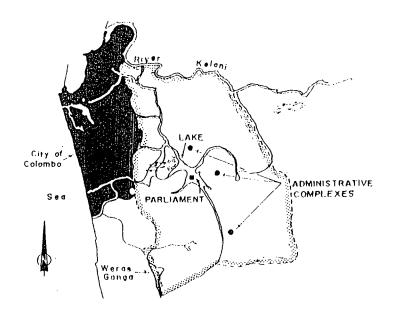
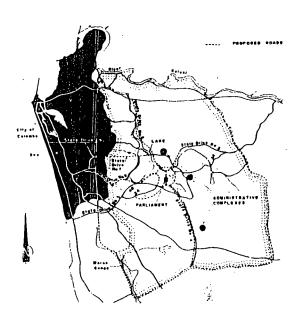


Figure 3.13 - New administrative crntres waterways and outer green belt.

Seven state drives will converge on the centre of the city from the North, East, South and West intercepted by three ring roads. The innermost will encircle the parliament island, beyond the waters. The existing roads via EtulKotte, Battaramulla, Pelawatta, Talawatugoda, Madiwala and Pita-Kotte will form the intermediate ring road. The outer- most will be a new road skirting the outer green belt that will link with the Baseline Road to the West of the City and a river drive to the North. (see fig. 3.14) versity of Moralium, Sri Lanka.



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Figure 3.14 - Administrative centers linked to 7 state drives and ring Roads.

A new broad gauge railway will interlink the administrative complexes and the commercial capital of Colombo. The railway will form a loop with the city Coastal line, joining it at Kolonnawa and Ratmalana to the North and the South. The loop will also link Rathmalana Airport as the city's National Airport. (See fig.3.15) There will also be a rapid transit vehicular way running parallel to the railway. The railway will extend to the North and the East in the future. The highways, railways and waterways will form a three-pronged transportation system serving the city.

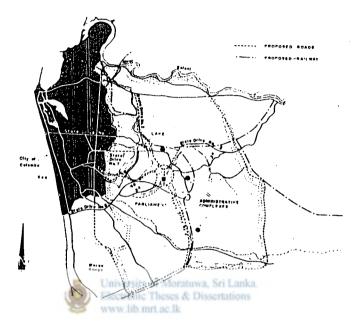


Figure 3.15 - Administrative centres linked to new road and rail network.

#### DESIGN OF ANURADHAPURA

Ancient cities of Sri Lanka were generally sited around agricultural settlements. They were also founded at seaports and at strategic locations as fortress cities. The city of Anuradhapura formed a classic example of one based on agricultural settlements. "Thambapanni" ("Thammenna") was a city built at a seaport by king Vijaya where he landed by ship with his fellowmen. Sigiriya and Sri Jayawardenapura (Kotte) were fortress cities built for defense purposes.

#### CITY PLANNING OF ANURADHAPURA

The followers of Vijaya who migrated to the interior founded this city around the sth century B.C. They dammed the valleys to collect water that flowed into the river, into several irrigation tanks and cultivated the precious low grounds. It was around these cultivations that the settlers built their huts and lived in

communities. This marked the first phase of development of the city, (see fig. 3.16) The next phase evidenced in Anuradhapura saw the development of a central area for barter and trade (a practice still maintained in the traditional weekly "pola"). This phase was characteristic of any ancient city like Rome or London. Adequate control over the little township was exercised by a chieftain

from the community.

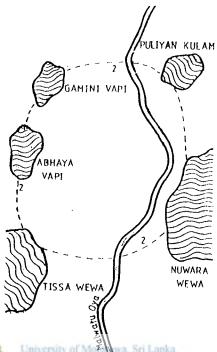


Figure 3.16 - Agricultural communities 500 B.C. Anuradhapura

The weekly "Pola" developed into a more sophisticated and organized trading centre for the city with more regular shops on a simple street pattern. The city centre was fortified by a wall. At Anuradhapura the walled city was only about 1/2 mile square. The agricultural lands were left out side the enclosure. (see fig.

3.17)

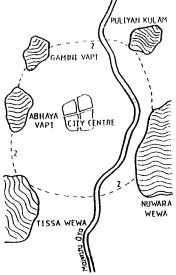


Figure 3.17 - Development of city centre 400 B.C. Anuradhapura.

The next phase of development at Anuradhapura took place with the introduction of Buddhism and the royal patronage extended to it by the monarchy in the 3<sup>rd</sup> century B.C. The Buddhist influence brought about the development of a ring of Viharas (Monasteries) external to the trade area on available high ground that were unused for agricultural purposes.



Figure 3.18 - Development of inner ging of Mahaviharas - 200 B.C. Anuradhapura

The ring of Maha Viharas were located between the city walls and agricultural community with its reservoirs and paddy fields. An extreme outer ring of forest monasteries subsequently added to the city during the 7<sup>th</sup> and 8<sup>th</sup> centuries. This phase of development saw the culmination of city planning in ancient Sri Lanka. (see fig. 3.19)

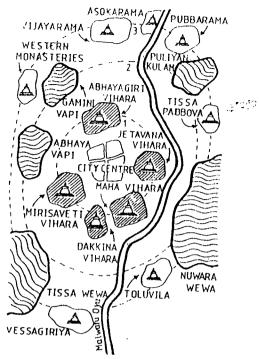


Figure 3.19 - Development of putter ring of forest monasteries - 700 A.D. Anuradhapura

The ruling monarchy made no provision for religious establishments within the walled city, the only exceptions being the monuments that contained the sacred relics of Lord Buddha which with time acquired certain regal conventions. The Tooth and the Bowl relics of Lord Buddha were together regarded as the palladium of sovereignty. A common alms - hall was provided by the king at the center of the city for all sects of monks to have their mid-day meal. The city plan thus developed into an admirable composition of functional units based on economic, religious and social activities, the skyline adorned with crowning stupors. Sprawling green paddy fields inter-spared with water bodies, and lush green parks on a simple street pattern held a reposing natural environment of utmost simplicity and organic beauty.

### 3.2.2.2 THE INNER (THE CORE) CITY

The core of the new capital surrounded by the intermediate ring road, passing through the townships of Ethul-Kotte, Battaramulla, Pelawatta, Thalawathugoda, Madiwela and Pita-Kotte is designated the "Indigenous Park". It is designed to highlight and promote the growth of indigenous arts and crafts and indigenous planting and landscaping to result in a truly national environment. "It will form the Nation's identity and the city's pride. It will be her head and bosom." The following are the characteristics and key features of the Indigenous park:

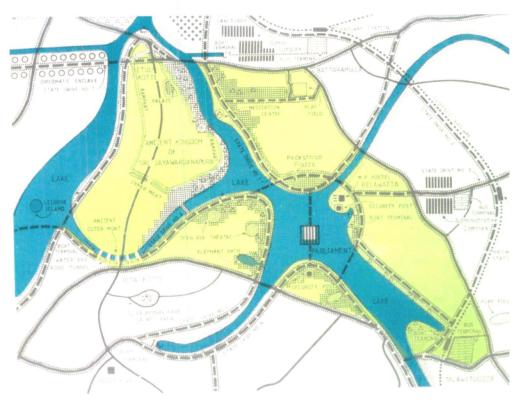


Figure 3.20 The inner city

- (a) A lake with a water tunnel at Pita Kotte for leisure and sporting activities.

  University of Moratuwa, Sri Lanka.

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- (b) A linear parkland along the lake, a crown reservation, 50 feet wide from the lake front.

The park land on two levels, incorporate paved pedestrian walks, children's and adult's play grounds, out-door seating and rest huts etc. and it is confined to planting off indigenous species only. Dens for meditation, placed hidden by the landscape in appropriate settings. The green belt is to help relieve the city stress by quartering

(c) A cultural grove merge with the parkland all round the parliament within the Indigenous park. The cultural grove extends from Etul-Kotte, across the ancient ramparts to the outer city limits of the old capital of Jayawardenapura. From this point, the cultural grove is maintained over the lake, encircling the new parliamentary complex, skirting Baddegana, Madiwela, Thelawatugoda and Pelawatta, upto the end at Battaramulla opposite the point of commencement.

life to a leisurely pace.

The cultural grove is to provide an opportunity for enjoying rich variety of indigenous cultural activities. It contains open air theatres, oriental arts and crafts, museums and their activity centers, national libraries, elephant baths, history museums for national heroes and other cultural activities. Low rise, traditional style buildings are proposed to house these activities and to merge with the natural landscape. "The cultural Grove will thus form the Nation's Treasure Grove"

(d) The nucleus of the inner city contains the all important new parliamentary complex, state residences for members of parliament, security units and a pedestrian piazza facing the new parliamentary complex.

The ceremonial access to the new parliamentary complex springs from the pedestrian piazza state 1,3 and 6 are the direct approaches to the pedestrian piazza. The piazza is to take the form of an open air theatre rising into semicircular tiers at the rear as seating for "spectators"

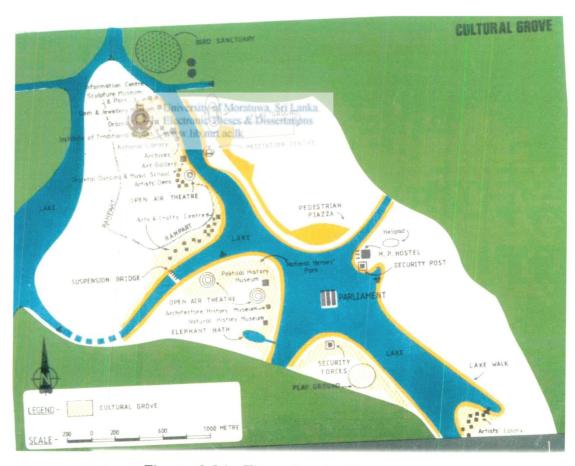


Figure 3.21 - The cultural grove

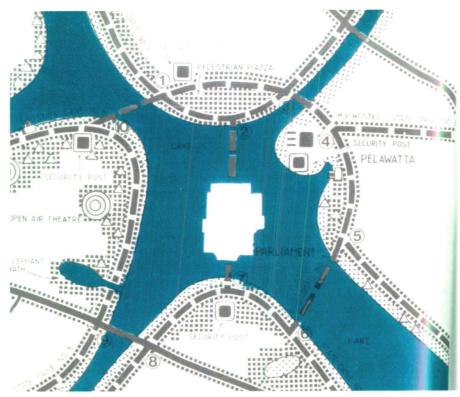


Figure 3.22 - The pedestrian piazza



# 3.2.2.3. THE OUTER CITY OF SRI JAYAWARDENAPURA KOTTE

The outer city is predominantly residential. The main employment centers of the city are located here. Some of the characteristics and key features of the outer city are as follows;

- (a) The state sector and administrative functions not strongly linked to the activities of the commercial capital of Colombo are located in three concentrated administrative complexes. These are at Battaramulla, Pelawatta and Depanama / Pannipitiya.
- (b) The diplomatic missions occupy the area along the state drive No.7 from Etul-Kotte to the Bandaranaike Memorial International Conference Hall.
- (c) An international sports stadium to the north of the Indigenous park (a possible location) with wide access.
- (d) The National Police Headquarters along the state drive No.5 within the existing Police premises at Mirihana.
- (e) The thousand bed general hospital is on a hill top site at Thalapathpitiya to the South of the Indigenous park.
- (f) The open university to all is on state drive No.6 on the western region of the outer city.

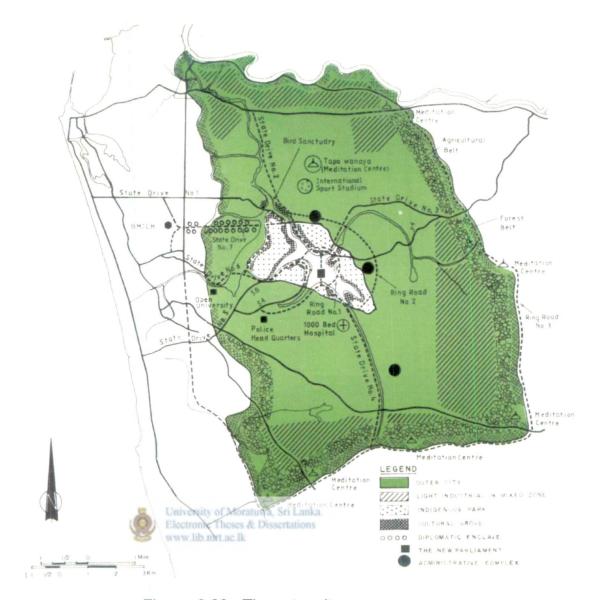


Figure 3.23 - The outer city

# 3.3 VISUAL PERCEPTION AND ENVIRONMENT OF THE CITY AND ITS RELATIONSHIP TO LANDSCAPE

#### 3.3.1. HIGHWAY LANDSCAPING AND LAKE WALKS.

The 'soft' landscape of the city will be representative of Sri Lanka's varied and luxuriant tropical flora, native and exotic species.

Formal avenues of majestic palms, Mara trees and Angsana (<u>Pterocarpus indicus</u>) the stately owila, the beautiful Pihibiya (<u>Pilicium decipiens</u>) and Kohomba will guide you towards the Parliamentary complex, with its ceremonial approach road bordered by Ehela - trees the most glorious avenue of all. The sequence will be punctuated at junctions and bridges by ornamental road islands, and by clusters of colourfull, flowering trees such as the native Pinkblossomed cassia, trees with striking foliage such as the Kottamba (<u>Terminalia catappa</u>) or unique specimens such as Sal (<u>Couroupita guianensts</u>) Na (<u>Mesua ferrea</u>)

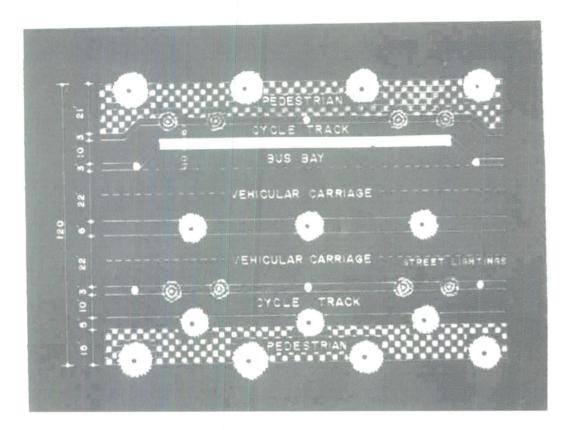


Figure 3.24 - Typical plan of highways



Figure 3.26 - Section through lake drive

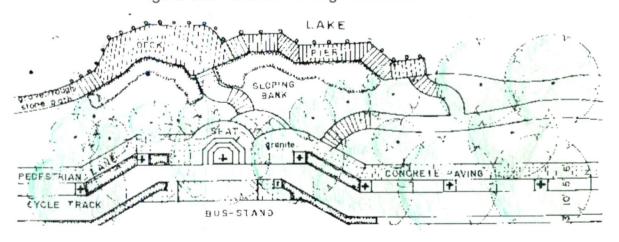


Figure 3.27 – Part plan of lake walks



Figure 3.29 Section through lake front



Figure 3.28- Part plan of indigenous park

#### The Mara Avenue

The Mara avenue was be mainly planted with <u>Peltoporum inerme</u> will be in rich golden yellow bloom for many months at the beginning of the year. Then the

Rain trees (<u>Enterolobium saman</u>) will unfold their pink powder - puff flowers, (Delonix repia) flame. And always, the spreading branches with their delicate pinnate foliage will shade you well.(See fig:2.28)

The Royal- Palm Avenue (oreodoxareqa) be a fitting portal to the new city. Its verges bordering the roads will offer cool, shady walkways and rest areas, amidst Mara, Araliya (Plumeria species), Oleander (Nerium odorum), Bamboo, and Kobolila or Maila (Bauhinia sp). Where the verge slopes down to lake or canaledge, typical waterside planting, such as Murutha, Diyaratmal, Kumbuk, Kaduru, Bamboo and Ratmal and features such as timber piers will be used, to realize fully both the visual and functional potential of the city's ramifying water network (See fig:2.28) If the famed Selalihiniya which flew over the ancient kingdom could return, he would rejoice to see again the trees mentioned in the poem which immortalised him -especially the Erahendi (Cassia fistula) bordering the ceremonial drive itself.

All highways will have suitable planting on either side. The central dividers of all dual carriageways will have informal or formal hedge type planting of species such as the shoe flower (<u>Hibiscus</u>), Ceylon Myrtle (<u>Rhyllanthus myrtifolius</u>), Peacock flower (<u>Caesalpinia pulcherrma</u>) colourful crotons (<u>Codiaeum vars</u>) and <u>Acalypha</u>.

The indigenous zone will help to preserve and display our native flora, while using their varied aesthetic and functional qualities to suit different locations. In the cultural grove, indigenous fruit trees such as wal-Del, Divul and Veralu, will find their place, as well our noble forest trees such as Sarala, Doon, Burutha, (Satin wood) and Ebony, and Palms such as Kithul, Puwak, Thal and Indi. Local stone and timber of different textures and colours will be put to imaginative use in interesting landscape features.

The following species will have special use:

The Kohomba or margosa - tree (Azadirachta indica)

The tree will have widespread use in the indigenous zone, particularly for advance planting and instant effect, because of its proven excellence as a semi-mature transplant in addition to its graceful – green foliage, and cool, dappled shade. It is native to Sri Lanka India and Malayasiya.

#### The Kohomba Avenue

Leading towards the ceremonial approach will be one of the most beautiful sections of the highway, with its rows of cool green Kohomba trees and its waterside verges abloom with purple and pink - flowered varieties of Murutha.





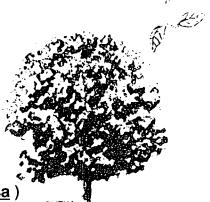
#### Graceful phihimbiya trees

With their fern like evergreen foliage will transform the stretch of road between the turnoff to parliament and Battaramulla junction, into a shady avenue, and Sudu-jdda will adorn the central divider.



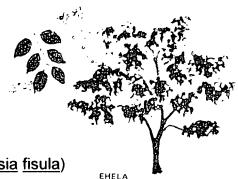
#### Owila (Polyalthia longifolia)

native to Sri Lanka and Tanjore, make excellent formal avenue trees by virtue of this hardiness, straight stem and dense symmetrical (Somewhat Conical) canopy, and attractive foliage (drooping, long, glossy, Wavy - margined leaves). The cultivated variety 'Pendula' commonly called 'Indian willow' is more popular in our towns and is useful where a tall, columnar tree with pendulous foliage is needed but it is not a shade - giver.



#### Murutha or Queen Flower (Lagerstroemia Spociosa)

Native of Sri Lanka, India, Malayasia and China grows wild on river banks of the lower wet - zone hills, and will be more widely used for urban planting in the low and mid - country wet zone. Its spreading crown gives shade while its erect bunches of mauve or pink flowers are its crowning glory for many months, usually from April to July.



Esala, Ehala, Erahendi or Indian Laburnum (cassia fisula)

Which is native to Sri Lanka, India and Burma and grows wild in our dry zone forests takes pride of place in the ceremonial approach. Its long flowering season and it's pendulous clusters of dainty flowers varying from bright yellow to creamy whit in colour in addition to it's cultural significance, makes it indispensable as a special feature. Semi -mature Ehela trees will be carefully selected and transplanted to their positions along the pavements of the ceremonial approach road.

## Puwak or Arecanut (Areca catechu) Moranus Sri Landa

Which has long been cultivated for its 'nuts' (seeds) which, slich, form an essential ingredients of the "Betel - chew "relished by many people. An erect, slender plant about 40 to 80 feet tall, its flowers and fruits are borne for below the leaves, on the trunk. It is vary ornamental especially when grown in clumps.



#### Hora (Dipterocarpus zeylanicus),

evergreen forests of our wet zone, growing to a height of 160 feet, with a straight majestic trunk and few branches. It will be extensively planted in urban forest

patches in the cultural grove, and the nature park, with its natural " associates " Na and Dun.



#### Sudu - idda ( Wrightia zeylanica )

Is a large shrub native to Sri Lanka, with glossy ornamental foliage and numerous delicate white flowers ( Usually scattered prettily on the bush ) very suitable where a massed flowering effect is desired. Its ability tolerate difficult roadside conditions and to with stand pruning makes it invaluable for high - way verges and dividers, and road islands.



#### Ranawara (Cassia auriculata)

Native to Sri Lanka and peninsular India, flourishes in bush, bearing erect racenes of golden yellow flowers usually in February and March. Its potential as a ornamental will be exploited in the indigenous zone.

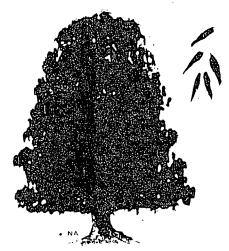


#### Una (Bambusa vulgaris)

Our indigenous bamboo, makes graceful clumps on many of our river and stream banks.

Artistic green streaks on the Yellow stems almost makes one feel that an artist has wielded his paint - brush here - yet it is simply the ingenious work of nature again.



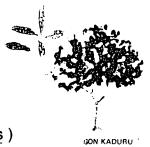


#### The Na tree (Mesua ferrea),

Is a native of Sri Lanka, India, Malayasia and the Andamans. Its drooping foliage, large white fragrant flowers (in April and May ), its colourful tender leaves (Shades of pink, green and near whit), and its Symmetrical conical habit make it outstanding as a formal avenue tree. Mesua thwaitessi, the endemic form (Sri Lanka only) is a smaller species with brilliant red leaves and large flowers.



Native to Sri Lanka, India and Malayasia is a small tree, typical of stream sides in the low country and it does well in parks and gardens in the low and mid - country wet - zone. Its spreading and weeping habit, ornamental olive - green leaves, and rounded clusters of tiny orange -red flowers will make it a very attractive feature singly or in groups, in parks or ' green verges' in the city, especially for the lake and canal banks.



### Gon Kaduru ( Cerbera manghas )

Ever so common in hedgerows and near streams in our low - country paddy fields, is native leaves on a twisted trunk, and its year - round fragrant white

flowers, in addition to its ability to withstand periodic water - logging, make it an immediate choice for canal and lake edges in the new city.



#### The Kitul palm (Cariyota urens)

Grows well in the low and mid - country wet zone and is cultivated for the sap from its tender infloresence which is made into a drink, treacle or irregular croun of arching fronds and drooping triangular dark green leaflets, and pendulous inflorescences which develop into bunches of red berries.

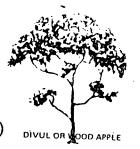


#### Mussaenda frondosa

The indigenous single petal led form of the much cultivated multi-petal led pink, white or red mussaendas, is attractive in its own right. The white "petal" is actually on enlarged sepal which attracts insects for pollination, the rest of the flower being inconspicuous.

#### Crossandra infundibuliformis

Is a small native shrub excellent for ground cover planting " en masse " or in ornamental beds and borders. There are salmon yellow - orange flowering varieties.



#### Divul or Wood Apple (Feronia elephantum)

Is native to our dry zone found in jungly - glades. About 20 to 30 feet night, it is known and stiff beared, with a rounded top. The 2 1/2 inches globose fruit atttracts elephants who digest the edible pulp and excrete the lard sell and seeds with their faeces, thus aiding dispersal.

#### 3.3.2 BIRD SANCTURY

This centrally located 50 - acre site will be transformed into a bird sanctuary by excavating ponds, making small islands and sloping banks, retaining some marshy areas, and introductions vegetation (including dead tree - trunk) and rockeries to create habitats for a wide variedly of bird life. A network of raised walkways, rustic bridges, piers and viewing platforms (at various levels) will enable visitors to study the fauna and flora without disturbing them. A bird Museum and Library will complement the practical experience of the sanctuary, whilt outdoor-studies carefully integrated into the landscape, will facilitate on the-spot Nature Art.



Figure 3.29 Lay out plan of bird sanctuary

Weedy, lotus - covered ponds with grassy banks will encourage waders and shore - birds such as the Pan - Kukula (Jacana ), Kirala (Red - Wattled lapwing), Ran - Watuwa (Asiatic Golden Plover) and Kaswatuwa (pintail snipe).

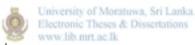
Swampy environs with puddles of water amidst clumps of tangled bushes and grass- tussocks will host the beautiful Raja-Watuwa ( Painted snipe ) while extensive reed - beds will provided ideal nesting and feeding grounds for numerous Rails, ( ranes, Waterhen, Coota, Storks, Egrets, Herons and Ibises, such as Kiri-meti Korawakka ( Blue - breasted banded Rail ), punchi Korawakka ( Ballions crake), Korawakka ( White - breasted waterhen ), Walikukula ( Watercock), Kitta ( Purple coot), Karawala Koka ( Eastern Purple Heron ) and



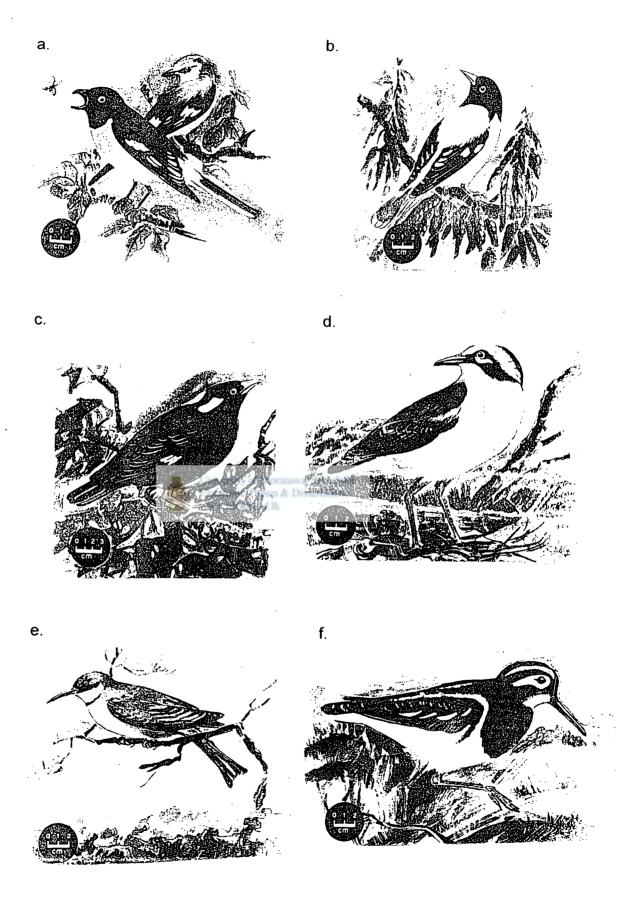
Kana Koka (Pond Heron). Larger stretches of open water will attract swimmers such as the seruwa (Whistling Teal and related species) and Diya - Seruwa (Little Grebe) Well stocked fish - ponds with rocky, tree - lined banks, should satisfy the Diyakawa (Indian shag cormorants) and a range of gorge - ous pilihuduwa (King fisher) as well as the common Bakamoona (Fish - owl)

Wooded patches on higher ground will include very tall trees like Hora to draw tall - forest lovers such as the Gini - Kurulla (Orange Minivet) and Sela - lihiniya (grackle) as well as Banyan, Sapu, Bo, Nuga, Ma-dun, Palms, Guava and other fruit trees to attract the Koha (Kole), Kaodetta (Grey Hornbill), Girawa (parakeet), Kerella (Woodpecker), Bata - goya (pigeon) and Kobeiya (Dove) and the strictly arboreal Kaha-Kurulla (Black - headed oriole) and Kottoruwa (Barbets)

The leaf - strewn ' forest - floor' will hopefully host that attractive migrant, the Avichchiya (Indian pitta) whilst scrub marging should house many other species such as the Kalu-polkichcha ( Celon Black Robin ). Nector - secreting flowering shrubs such as Hibiscus, will doubtlessly attract the suttikka, (Sun - birds and flower - peckers ), while shrubberies and copses even in the vicinity of buildings and other ' human influences ' will not fail to attract the Konda - Kurulla ( Red - vented bulbul), Weekurulla ( Munia ) Mal - Kurulla ( White - Eye ), Mynah, Polkichcha (Southern Magpie - Robin ) and the lovely Redi - hora ( Paradise fly char ).



- a. Orange Minivet
- b. Bylack Headed Oriole
- c. Ceylon Grackle
- d. Indian Pitta
- e. Chestnut Headed Bee-Eater
- f. Painted Snipe
- g. Paradise Fly Capcher
- h. Pheasant Tailed Jacana
- i. Purple Coot
- j. Red Wattled Latwing



h. g. i.

Figure 3.30 Some birds of bird sanctuary area

### Reference:

- 1) Worthington, T.B. Ceylon Tree, the Colombo Apotheceries co. Ltd., Colombo, 1959
- 2) The Sri Lanka Forester, Forest Department of Sri Lanka, Vol. IX, 1974
- 3) Fernando S. N.U. , the natural vegetation of Ceylon, Lake house Ltd. ,Colombo
- 4) Ranasinhe, Douglas, Kotte that was, 1969





Plate v - The new parliament as a nucleus of new capital

# CHAPTER FOUR

# 4. PRESENT CAPITAL OF SRI JAYAWARDENAPURA KOTTE

# 4.1 EXISTING SITUATION OF SRI JAYAWARDANAPURA KOTTE

### 4.1.1 POPULATION AND POPULATION DENSITY

Year	Density persons/ha
1981	59
1994	66
2001	72
2010	84
2015	90

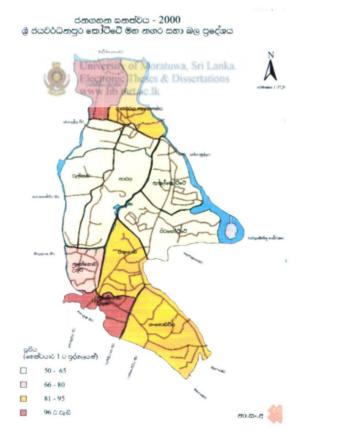


Figure 4.01 Population Density



# 4.1.2. LAND USE PATTERN -2000

	1	Extent (ha)
Residential	993.7	54.8%
Commercial	68.1	4.0%
Industrial	11.9	0.7%
Road & Transport	122.6	7.2%
Industrial & Administration	98.8	5.8%
Recreational & open area	18.7	1.1%
Water	131	7.7%
Marshy Land	230	13.5%
Other	88	5.2%



Figure 4.02 - Land use pattern

## 4.1.3 ROAD AND TRANSPORT

Length of roads A class Roads 32km

Roads Maintained by Sri Jayawardenapura Kotte 68km

Railway line 4km

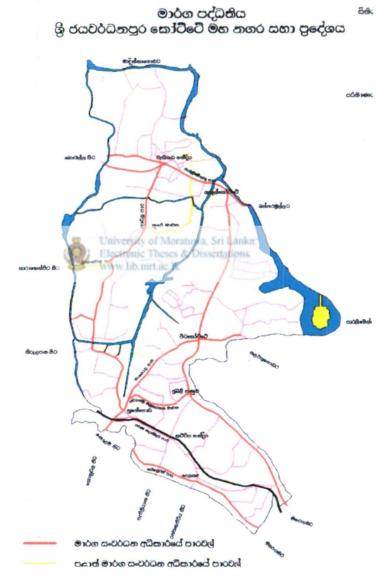


Figure 4.03 Road and Transport

# 4.1.4 SOCIAL INFRASTRUCTURE - EDUCATION

No. of Schools	18
Teacher pupil student	25.7
Floor area per student	19.4
National Schools	03
Higher Educational Institute	01
Pre schools	57



Figure 4.04 Social Infrastructure

# 4.1.5. RECREATION AND OPEN AREA

Children's Playground	11
Playground	06
Reading hall	04
Open Theaters	01
Film Halls	02

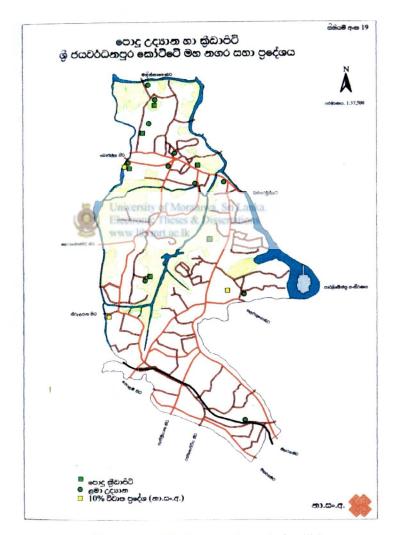


Figure. 4.05 Recreational facilities

#### 4.1.6 SOLID WASTE DISPOSAL AND ENVIRONMENT

Garbage Disposal

150 tons per day

**Dumping sites** 

Lack of dumping site

# 4.1.7 EXISTING INSTITUTIONAL SITUATION AS A PART OF ADMINISTRATIVE CAPITAL

No. of Employment - 3450
No. of Administrative Institutions - 20
No. of Administrative activities located Battaramulla,

Maharagama P.S. area - 46

#### 4.1.8 ECONOMY

## 4.2 PRESENT HAPHAZARD DEVELOPMENT PROPOSALS OF THE CITY OF SRI JAYAWARDENAPURA - KOTTE

## 4.2.1 PROPOSED MASTER PLAN FOR SRI JAYAWARDENAPURA KOTTE

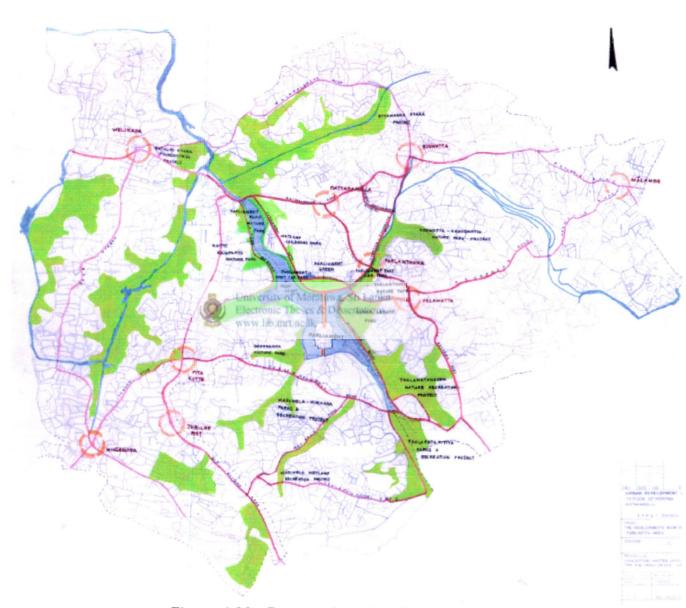


Figure 4.06 - Proposed master plan

#### **ROAD PROPOSALS**

- Improvements to Rajagiriya and Beddagana junction.
- Improvements to alternative roads in nugegoda
- From Etul Kotte to Baseline road.
- From Nawala temple road to Ananda Balika Mawatha.
- Extension of lake drive to Kirimandala Mawatha.
- Railway and bus service.

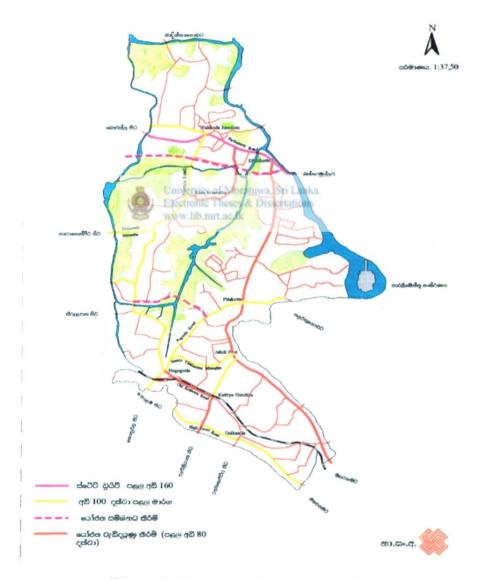


Figure 4.07 proposed road Network.

#### IMPROVEMENTS TO RAJAGIRIYA AND BUTHGAMUWA JUNCTION

- Relocation of Existing traders.
- Re-arrange the Religious place.
- Expansion of Existing roads.

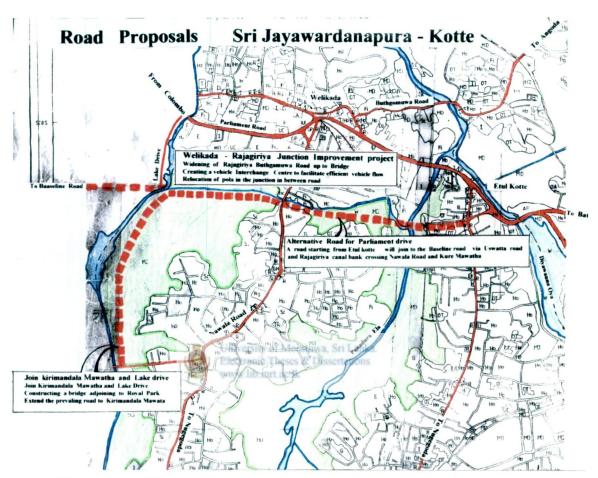


Figure 4.08: Road proposals Sri Jayawardenapura Kotte

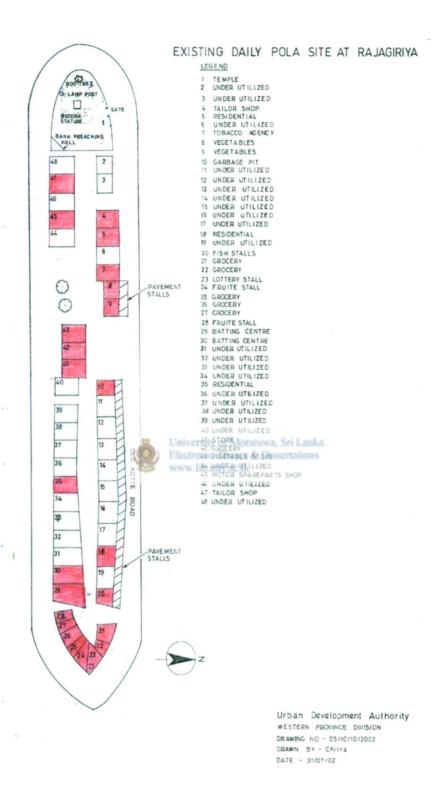


Figure 4.09: Relocation of Daily market at Rajagiriya

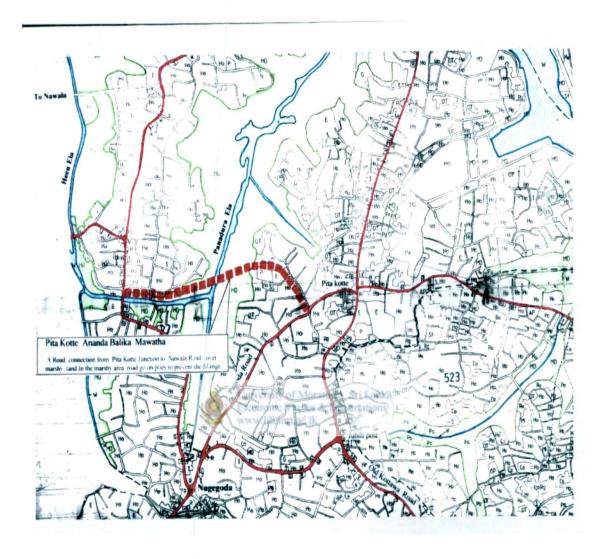


Figure 4.10 : Ananda Balika Mawatha - Pita Kotte

# HOUSING DEVELOPMENT

- Middle Income Housing Development
- Development Undeserved settlement

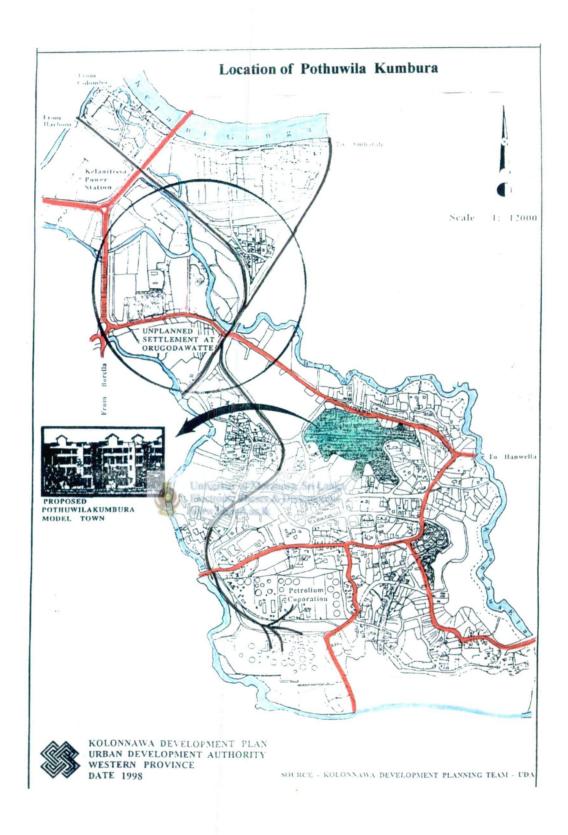


Figure 4.11: Housing Development Location at Potuwila Kumbura in Kollonnawa

# IMPROVEMENT OF RECREATIONAL FACILITIES

# 1. BEDDAGANA DEVELOPMENT PROJECT. CONSERVATION OF RAMPART

- Rehabilitation & conservation of the Ancient Rampart.
- Nature park development project
- Storm water Drainage plan.
- · Conservation of the wild life sanctuary

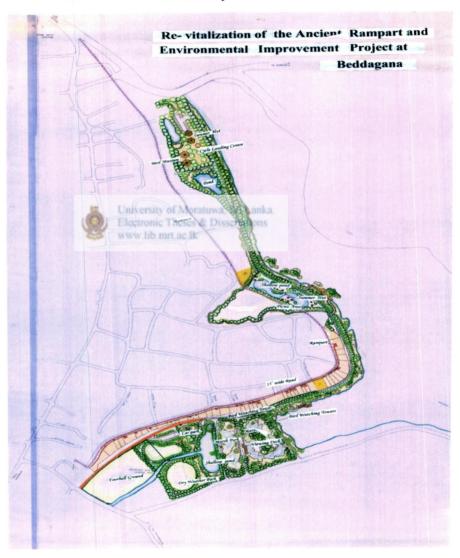


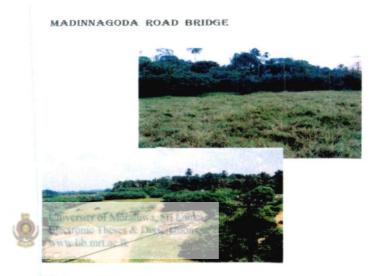
Figure 4.12: Conservation area of Rampart

# Project Activities:-

- Foot Ball playground
- Linear parks with foot path
- Bicycle Lanes
- Botanical gardens with center parks
- Cultural education aquatic museum
- car parks

### 2 Madinnagoda Road Bridge

(Environment Improvement Project)



POTENTIAL DEVELOPMENT
RESTAURANT ON STILTS
JETTY FOR BOAT RIDES &BOAT ACCESS
CAR PARK ON A FILLED AREA ABOVE HIGH FLOOD LEVEL
REST ROOM AND TOILETS ALSO ON A FILLED PATCH

Figure 4.13 : Madinnagoda Road Bridge



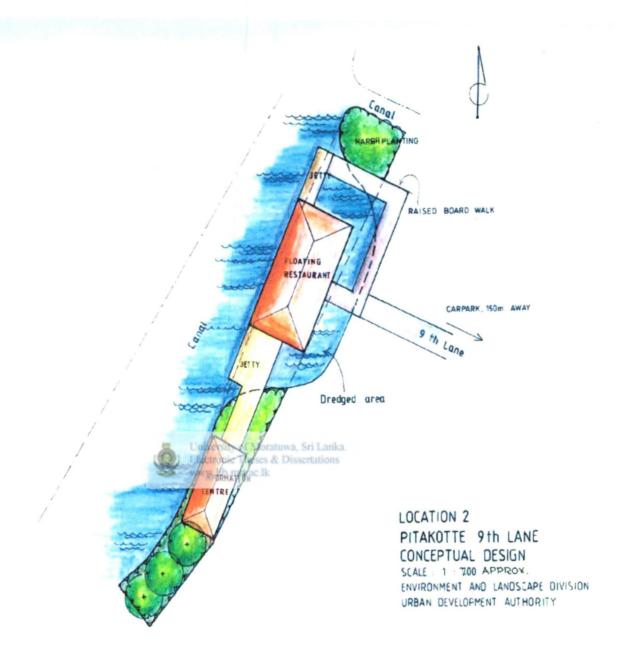


Figure 4.14 : Pita Kotte 9<sup>th</sup> Lane Potential Development

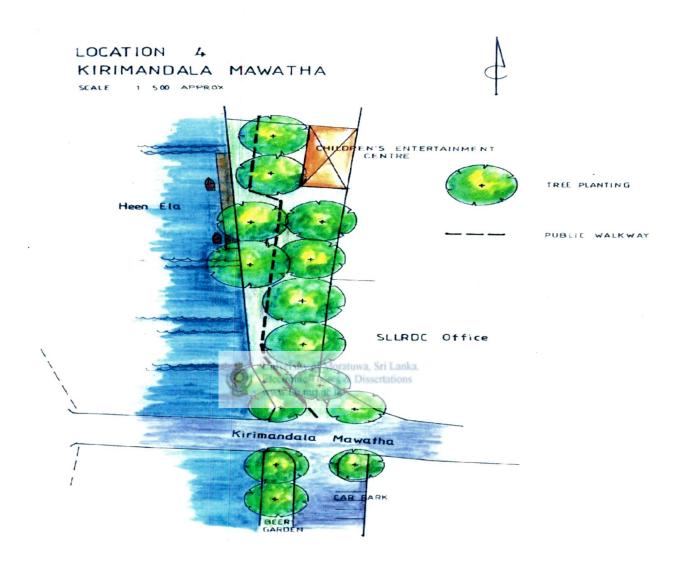


Figure 4.15: Potential Development at Kirimandala Mawatha

#### 4.3 WHAT HAS HAPPENED OF NEW CITY NOW

### **ENVIRONMENT CONDITION OF NEW CITY**

The city of Sri Jayawardanapura can be introduced as an area composed of several wetlands. According to the present land use, about 230 ha remains as wet lands. The boundaries for this marsh are either side of the canel (Diywanna Oya) of Kotte Nawala east (Welikada, Nugegoda) road, Jayawardanapura Aveneu north, Ethul Kotte, Western part and extend towards certain parts of Heen Ela.

There was a very conspicuous change in the amount of marsh lands along with the decision to bring the parliament complex to the capital of Sri Jayawardanapura Kotte. When constructing the parliament complex, the present land was filled up and developed and the area surrounding it was made a reservoir. The jungle cover with marsh lands around the reservoir was able to preserve the excess rain water. There was a habit of using marshy lands as garbage dumps among the urban community, till recently. As a result, these lands were used to build houses, after filling them, and dump garbage for a long time. Because of this, the present marsh lands are in the category of most threatened ecosystems, out of other such systems.

Basically, three main uses from the wet lands and surrounding areas can be identified: They are,

- 01. They retain the excess water during heavy rain falls and act as temporary reservoirs. Thus they prevent the surrounding areas from the threat of flood.
- 02. They also perform the function of retaining dirty waste water released by the people living around, in the absence of an effective water drainage system.
- 03. At present, wetlands are being filled up without any restriction and these places are used mostly to construct housing complexes and commercial complexes.

The wetlands in Kotte city are dwindling due to lack of proper management. One of the negative consequences of this is that some places in the city already threatened by flood.

#### 4.3.1 FAUNA

Sri Jayawardanapura Kotte municipality area can be cited as an area of high bio diversity. It has been reported that here are 115 varieties of species and most are reported to be in shrubs and abandoned paddy field. In addition to this, some animal species are limited to area carrying sedges and reeds.

Filled up lands act as temporary marshes during the rainy season and they become temporary habitats for specials bird species (migratory and local) Sandpiper Plover takes a dominant place among the common birds in this area.

Table 2 : EIA Report of Diyawanna Uyana

Туре	No. of Species	Endemic	Introduced	Migratory
Butterflies	12	-	-	-
Fishes	17	02	03	-
Amphibians	08	- `	_	-
Reptiles	07	01	_	-
Birds	64	-	_	07
Mammals	07	-	-	-
Total	115	03	03	07



#### 4.3.2 FLORA

Marshes can be considered as sites nourished due to salutation and accumulation of organic matter.

Such sites are intermediates of dry and wet lands and they are much suitable for the growth of seeds and plants, as the soil is rich in organic matter.

As a result, by now, the marsh lands show an intense plant diversity. Their diversity provides important sites for breeding, shelter and food for birds and other animals. But these places have been cleaned and used for various developmental purposes without any control. Lands used for paddy cultivation have been abandoned and these lands are covered with shuts and thickets. There are three common plant species in such lands.

- 01. Annona glabra
- 02. Cebera manghas
- 03. Lantana camara

In addition, the following sites can be identified.

- 01. Marsh lands
- 02. Water ways with aquatic plants.
- 03. Filled up lands

#### 4.3.3. MARSH LANDS.

Marsh lands perform important functions such as,

- Accumulating sites of silt and organic
- Places of retaining nutrients
- Places of disposing poisonous wastes
- places of retaining excess rain water

As a result of these functions, marsh lands perform excellent task of purification of running water.

Further, in the marshes of this area, basically plants such as <u>Cyprus</u> spp., <u>Rhyncospora Corymbosa</u> can be found and various grasses and plants can be seen in recently abandoned paddy fields. The plant <u>Annona glabra</u> is dominant among the plant species that can be found in those fields and they have grown near water. This plant transforms the marshy lands in to dry lands fatly.

# 4.3.4 AQUATIC COMMUNITY.

About 12% of the land area of the Kotte municipality area is separated for canal ways and the total length of the canal system is about 34km. Large scale fishing as a means of living in this area is prohibited. About 5-6 people engage in fishing on the Ethul Kotte Bridge at a small scale using fishing nets. The fish caught here is sold on the spot at either side of the road.

In open canal ways, the dominant aquatic plant <u>Eichornia crossipes</u> has spread and it can be found in sub anal ways. <u>Nymphea pubescerce</u> has grown in very deep places in canals. (The distribution of this aquatic plant depends on the depth of the cancel, salinity of water and the nutrients of the water.)

The maintenance of a large area of this canal system is carelessly abandoned and I many canal ways, the banks have collapsed. In densely populated urban areas, careless dumping of garbage and sewage can be seen very of ten. Low income people build their temporary dwellings on either the deterioration of the canal way. To correct this grave condition, the canal ways must be repaired, the canal system must be cleaned. Many places in the canal ways are covered with a very harmful aquatic plant named Silvinia molasta. This plant blocks the flow of

water and the stagnant water is polluted. These condition affect the health of the people living around the canal way.

# 4.3.5 IDENTIFIED ENVIRONMENTAL PROBLEMS.

- The unplanned building of drains, canal ways, roads ect. Leads to the contraction of the habitats of animals living in this area and as a result, some animal species may extinct.
- The destruction of green cover leads to the decrease of bio diversity and certain species of animals may desert these areas.

The government or any other institution has not taken any step to prevent this destruction of the environment, and as a result, there is a threat of extinction fauna and flora species from this area. Therefore Kotte Municipal council, the environmental significance of the marshy lands and the surrounding environment, and act in a way not to hamper the significance.

#### SUCCESS AND FAILIURS NEW CITY

### 441 SUCCESS

The density of Population, when compared, is in a Low rate. The population density in the jurisdiction of town councils of Kotte in 1994 was 66.2 individuals per hectare. By the year 2000 and 2010, it was 72.4 and 84 respectively. The population was 193 and 268 per hectare, in 1994 and 2010 respectively.

The location of the marshy and watery areas which are not used for development (21% amount of land which scan be used for recreation is the marshy and watery lands)

It should be and attractive residential backgrounds in connection will the habitat Land for industries has a less demand and there is a possibility of using these lands for presidential purposes. The suitable space which can be used for the development of Sports is in the adjoining areas (Parliament stadium) These should be a road network connecting the other towns. The roads in a grade lead to this.

- Parliament Road
- II. High-ievel Road

Should be a main junction which connects Kotte, Colombo and Bathtaramulla. The highway use in a good condition for bausput or vehicles. It has a high degree of bio diversity. Town of Kotte mostly a residential area but it's not an industrialized session and therefore it has use pollution. The ability of easy approach to Colombo town (the distance between Nugegoda and Colombo is 10 K.M., from RaJagiriya to Colombo 8 K.M.) The places such as the Golf ground, Parliament Stadium and Diyawanna Park which Connected to the town area, Provide Sports and recreation.

#### 4.4.2. FAILURES

The livelihood of the amount, 8865 out of the population is in "shelters" will use facilities and accommodations will less privileges). The increase of hut dwellers will in the town area of Sri Jayawardenepura is due to the certain developments of Colombo town. The constant threat of flood of the Valleys of the Kelani and Diyawanna Oya. The increasing tendency due to felling the marshy lands (by now 43% of marshy lands has already been filled). Lack of Appropriate Lands which can be use for Sports. No proper drainage system. The traffic congestion on the high-level road and the parliament road due to playing of innumerous motor vehicles. Lack of alternatives for main thranysfanes Insufficient efficiency in the got Railway. Lack of sub ways connected to Nawala and Pita kotte Highways. No alternations for Nugegoda Stanly Thilakarathana Mawatha. No development of Kruse Mawatha in keeping will the development process. Parking of motor vehicles on main highways. The structure of provincial narrow lanes in the residential areas. Day to day increases of the use private vehicles. No case for the wastes cast by the families that have low income. No final proper discharge of garbage. No suitable long term dumping ground for the removal of garbage. Possibility of spreading the infections deaseses (found patients infested will 10 different deases in 2000). Inadequate space increase the facilities for recreation.

# 4.5 ENHANCES AND CONTEXT OF NEW CITY FOR MODERN DESIGN

#### 4.5.1 ENHANCES

The declaration of Sri Jayawardanepura as the administration tows in Sri Lanka Situated near Colombo town council which is the commercial capital in Sri Lanka Situated near Colombo town council which is the commercial capital in Sri Lanka. The ability of connecting Colombo, Kotte and Fast improving suburb

areas. There is a system of ways enabling to keep contact with the province and it is in a highway junction. Nugegoda as a main exchange by bus and train service. Ability of electrification of railways. Ability of concentrate much of vertical development process rather than horizontal development. Availability of a proper system of following down the natural waters (Ketani is connected by Kotte Marshy, Heenela and Diyawanna oya). Usage of natural water systems for recreational activities. Marshy lands canals can be used for entertainment (watering birds rowing boats). Making facilities using available marshy lands and watery lands. The majority of people living in this area are highly educated. Therefore it is easy to make them aware of managing solid things.

#### 4.5.2 CONTEXT

Insufficient high land for development in comparison to marshy areas. (21% of the total land in the area is marshy and watery lands.). Declaration of a high security zone. Jest because of the location of the parliament. Lack of good management will regard to filling the marshy lands. (Illegal land fillings). No adequate amount of land for sports. The aggravating problems of social, Health and environment are due to the constant flood in the residential areas where these are less privileged people. No proper derange of water system not activated at the provincial level. The land affairs on the leading roads are done without any control. The vehicle congestion occurs improperly. Land filling without a proper plan. flood threats due to heavy rains. The water flowing from the dumping grounds pollutes underground and surface flowing water.

#### 4.3 PHILOSOPHIES PROPOSALS AND GUIDELINES

Perth capital of western is a city with a fine waterfront. According to the city planners of Perth, "Nature works cyclically to maintain a balance between the various system components, when this natural balance is interrupted, by the activities of man, environment costs. Monetary, system and social can occur.

A prime-example for comparison of urban forms would be the impact on stream and river catchments or vulnerable sea beach eco- system. This also implies a concern for the long term health of global system. Considering the above I recommend not to affect the long term health of global system by introducing intensified built-up developments in ecologically sensitive areas. Such as Recreational Zone' proposed by the Sri Jayawardenepura-Kotte Development Plan. It is proposed to re-zone two broad stretches of lake-front land, open space for tourism and Recreation as a long-term measure, and at last work on an all-encompassing landscape master plan for the capital has begun.

Outdoor recreation facilities in Sri Jayawardenepura-Kotte area should include both active and passive outdoor recreation. If possible, outdoor facilities should be associated with indoor recreation facilities. For example indoor sports centers, centers for leisure art, music, drama and hobbies, community centers, libraries and other buildings providing such facilities. Natural and cultural amenity precipitations- such as viewpoints and special landscape features/sites. Eg:- waterways, water bodies, marsh land, vegetation of significance, and artifacts of landscape, architectural, archeological or historical value should be evaluated and integrated into the public outdoor recreation space system as for as possible. There should be a "Hierarchy of park" emphasizing walking distance criteria as well as space requirement criteria to rationalize locations, sizes and service areas of different orders/ levels of parks, and this concept should be combined with the "Nesting" concept in spatial lanning: the service area of a higher order park should include the service area of a number of lower order parks, all orders/ levels being needed because of the different range of facilities they provide at determining quantities of land set apart for those use in any given area.

One of the historical places (Military barracks) of Singapore (like Kotte) is used for recreation (Fort Canning Park) with conservation using modern landscape approaches.

#### ABOUT THE PARK,

Previously known as Central Park, this 19-ha "hill of history" was the residence of Sri Stamford Raffles who also established his gouernment house on this hill in 1819. Visitors to fort Canning Park can find a number of relics reflecting the past glory of this place. Keramat Iskander Shah, venerated by Muslims and believed to be the ancient tomb of the last Malay king, stood at the foot of the hill.

Monuments of interest found here such as the Fort Gate and the Gothic archway have been preserved for the enjoyment of visitors.

Representing Fort Canning Military past are features such as the 19<sup>th</sup> century Fort Gate and the underground operations rooms (bunkers)of the Fort East Command Centre. Here, in this "Bettle Box" was where Lt-Gen Percival made the decision to surrender to the Japanese in 1942. All these attrat are linked together in the "19<sup>th</sup> century walk of History" trail. Interpretative plaques and signboard: installed along this trail gives visitors a better understanding of the key historical features of the park.

Fort Canning Center, the imposing 65 year old restored military barracks, now provides a major cultural venue and residence for Singapore's modern performing arts companies, Singapore Dance Theater and Theatre works.

Audiences enjoy regular theatrical performances at the intimate, 100-seat Block Box theatre

Another historical building is the former Singapore command and college. This building has been refurbished into the city's only Cou Club in the park the Fort Canning Country Club. A special landscaping attraction in the form of a spice Garden offers a small replica of Raffles' Origin 19-ha experimental and botanical garden. Spices, such as couve cinnamon, are planted here to recreate the setting.

function halls, outdoor performance areas, drink machines, Facilities restaurant. Activities - bird watching, dining history trails, trekking, picnics, indoor and outdoor functions.

Using texual evidence and visual perception of Kotte fort, we can design a recreational park in the Kotte kingdom with special landscaping attraction.

### PUBLIC OUTDOOR RECREATION SPACE STANDARDS

Local parks - 2 to 2.5 acres per 1000 persons. Distric parks - 2.5 to 3.5 areas per 1000 persons, City parks - 1.75 to 2.0 acres per 1000 persons,

The suggested quideline based on population was that 5 to 7 acres of land per 1000 population unit should be devoted to recreational facilities of which 2.0 to 2.5 acres per 1000 people may be committed to local/ neighborhood (micro- level) parks and playgrounds, while the remaining recreational land may be allotted to city parks, playing felds and picnic grounds, etc. at the city level (meso and macro levels). Using the above minimum standards of 5 acres per 1000 persons, 2 acres per 1000 would be for localized and 3 acres per 1000 for more centralized facilities. It was also proposed that approximately half the total recreational area in a city should be for active recreational area the other half for gardens and other comparatively passive recreational uses but this is a rather impractical distinction since, for the spectators there was no guideline regarding inclusion or exclusion of space occupied by water bodies and waterways.

These standards have to be adapted for capital according to the prevailing conditions, the potential and the real needs. In UK as mentioned earlier, 7 acres per 1000 population has been a norm. In parts of the USA the over all standard is as much as 10-15 acres. In Sri Lanka a much lower standard than even 5 acres per 1000 persons might have to be adopted, out of which some parts would be localized and some parts centralized. The obsolute minimum worked out at the UDA workshop mentioned above was 3.5 acres, ie 1.4 ha per 1000 persons.



#### **VEGETATION / TREES**

Vegetation types identify with the soil type, climatic conditions and the topography of the Sri Jayawardenepura- Kotte region. Thus the nature of the vegetation indicates modified soils, influenced climatic conditions and affected geographical conditions within the area. There is written evidence that the Sandesa were kept solely as forest reserves during the time of the Sinhala kings since they were the catchments areas for the major rivers and streams. Later the natural vegetation or the virgin forest has been changed mixed vegetation with exotic species. It is not good landscape approach to natural geomorphologic condition and natural cycles (water cycle, CO<sub>2</sub> cycle, N<sub>2</sub> cycle,...etc.) Therefore I selected some native vegetation for future soft landscape of Sri Jayawardenepura – Kotte area.

### TREES LARGE (17'-150')

	SINHALA
1. Meuclea orientalis	<b>බක්</b> ම්
2. Madhuca langifolia	මි
3. Chloroxylon swietenia	බු <b>රු</b> ත
4. Calophyllum inophyllum versity of Moratuwa, Sri Lanka.	<b>©€</b> ®
5. Syzygium cumini Electronic Theses & Dissertations	ම) ද ං
6. Manilkara hexandra	පළු
7. Gorallia brachita	දෙව්ට
8. Melia dubia	ලුණු මිදෙල්ල
9. Alstonia schlaris	රුක් අත්තන
10. Ficus fergusoni	නුග
11. <u>Terminalia belerica</u>	බුළු
12. Gossapinus malabaricus	කටු ඉඹුල්
13. <u>Mangifera zyylanica</u>	අැටඹ
14. Vitex pinnata	මිල්ල
15. Berrya cordifolia	හල්ම්ල්ල
16. Artocarpus nobilis	වල් දෙල්
17. Sterculia foetida	<b>තෙලඹු</b>
18. <u>Macaranga pelitata</u>	කැන්ද.
19. Polyalthia longifolia	<b>ඔ</b> විල ්
20. Adenanthera pavonina	මදටිය
21. Bambusa vulgaris	කහඋණ
22. Stereospermum suaveolens	පලොල්
23. Mesua ferrer	නා
24. <u>Dipterocarpus</u> zeylanicus	හොර

# TREES MEDIUM (40'-70')

1.	Elacocappus serratus	මෙර <b>ළු</b>
2.	Erithrina indica	කටු එරඩු
3.	Caryota urens	කිතුල්
4.	Gemilina arborea	ඇත් දෙමට
5.	Picicium decipiums	පිහිඹිය
6.	Eayea stylosa	<u> යු</u> වඳ
7.	Lagerstroemia speciosa	මුරුත
8.	Garcinia cambogia	ගොරක
9.	Schleichera oleosa	කෝන්
10.	Ficus glomerata	අට්ටික්කා
11.	Azadirachta indica	කොහොඹ
12.	Terminalia arjuna	කුඹුක්
13.	Horsefieldia iriyaghedi	<b>රුක්මල්</b>
14.	Aporosa lindteyana	කැබැල්ල
15.	Horsefieldia irya	<b>ඊරි</b> ග

# TREES SMALL (20'-40')

14. 15. 16. 17. 18.	Barringtonia racemosa Averrhoa carambola Nyctanthes arbor-tristis Santalum album Murraya paniculata Ganthium coromandelium Trema orientale Sadindus trifoliatus Neolitsea involucrate	බෙලි දිවුල් ලුණුවරන කහට මයිල අනු මිල්ල අන්කෙන්ද දියමිදෙල්ල කාමරංගා සේපාලිකා සුදුහදුන් ඇටීටේරියා කැල ගැඹුඹ ගස්පෙනෙල දවුල් කුරුඳු
		_
	Flacourtia inermis	<u>උ</u> ගුරුස්ස
	Vitex negundo	නික
22.	Symplocos spicata	<u>බොම්බි</u>
23.	Buchannia angustifolia	කිරිපළු

24. <u>Groxylum indicum</u> කොට්ල්ල 25. <u>Grewia microcosm</u> කොහුකිරීල්ල 26. <u>Wormia triquetra</u> දියපර

### SHRUBS (BELOW 20')

**රත්මල්** 1. Ixora coccinea අත්තන 2. Datura metel දෙමට 3. Gmelina asiatica වැටකෙයියා 4. Pandanas sp. 5. Mussaenda frondosa මුයන්ඩා කපු කිනිස්ස 6. Hibiscus abelmoschus 7. Hurraya koenigii 8. Wrightia antidysenterica ඉද්ද 9. Syzygium aromaticum පනුදුම් 10. Tabarnaemontana coranaria වතුසුද්ද කොරකහ 11. Memecylon angustifolium වදකහ 12. Acorus calamus 13. Euphobia antiquorum ද.ලක් 14. Ochlandra stridula බටලි හිඹුටු 15. Salacia reticulate University of Moratuwa, Sri Lanka. කරඹ 16. Carissa spinarum Electronic Theses & Dissertations www.lib.mrt.ac.lk <u>දී</u>යරත්මල් 17. Saraca reticulate 18. Cassia auriculata රනවරා 19. Wrightia zeylanica සුදු ඉද්ද ගොන් කදරු 20. Cerbera manghas

# PLANTS GROWING IN MARSHY PLACES CREEPERS

1. Erianthus arundinaceus
2. Phizophoras sp. කිරල
3. Hanguana malayana ඉඳුරු
4. Blyxa anbertii දියතවරිය
5. Alocasia sp. අලකොල
6. Nemthaea lotus
7. Nymphae astellata දියමානල්
8. Crinum zeylanicum

#### **CREEPERS**

- 1. Bryonopsis laciniosa
- 2. Abrus precatoris
- 3. Gloriosa superba
- 4. Asparagus racemosus
- 5. Cryptolepis bunchanani
- 6. Calamus rotang

ූ\*්්් කෙඹිනි

කෙම්වැල්

**ඔ**ලිඳ

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**නාතවාරිය** 

වල් රැක්කත්තන

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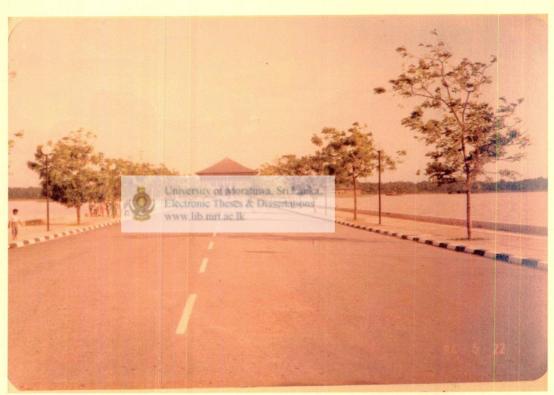


Plate vi - Ceremonial Road of Parliament in 1984

# CONCLUSIONS

#### CONCLUSION

The civilization of Sri Lanka up to 1500 A.D. was influenced by India. The early Singhalese and Tamils came from India. Buddhism and Hinduism were brought from that country and the people who came to Sri Lanka lived more or lass the type of life had been living in India.

When it is considered the fortress (kingdom of Sri Jayawardenepura) landscape and architecture of Sri Lanka before 15<sup>th</sup> century, Sri Lankans were shrewd and practical and they had their own methods and styles of constructing fortresses. They were influenced by the knowledge concerning Indian fortresses, fortifications and theories of the early period. They gained this knowledge through Indian silpa shastra and from their encestors who were well versed in the Indian art of constructing fortresses. The Sri Lankans utilized such knowledge to develop their own styles and method and Therefore, the main features of their fortresses were similar to those of the fortresses designed in India.

During the time of posperity of Polonnaruwa, enough resources were available to designed fortresses and citadels for defense. The kings of that period gave the first place to the agricultural stability as well as the administration.

After shifting the capitals to the Sri Jayawardenapura due to the foreign invasions, the resources of the kings were limited and they duilt fortresses utilizing the natural barriers (Diyawanna Oya , Marsh area) available at the sites and the materials (Kabok to built rampart ) obtained from the surroundings.

These fortresses were designed at the "macro-level" as centres of "Fall back" for the army rather than an launching pads for attacks. The interiors of these fortresses reflect the importance attached to the kings personal safety flea sure and to the safety of the Tooth Relic. Their less attention went with the agriculture, hence it began to detetiorate.

With the arrival of the Protuguese in 1505 A.D. a now influence is brought to bear on our civilization. The Portuguese being European people naturally brought a European civilization to Sri Lanka and from 1500 A.D.onward our island came under European influence.

So the colonial fortresses were built over Sri Lanka with the influence of European fortresses landscape architecture. The site selection, and usage of materials were same as the Medieval Sinhalese fortresses, but were designed at their native countries. Sometimes they brought materials from their native



countries to built fortresses. These fortresses were mainly built for the safety of their were houses because Europeans were the traders of the world.

As a results of European invasions the agricultural based civilization had transferred in to a trade based civilization. Hense every thing of the country depend on the Europeans. The Catholicism and the Christianity deep rooted among the citizens of Sri Lanka as a result of the benefits which Christians and catholists had been given. The Portuguese influence to the fortresses landscape architecture rarely can be seen today but the Dutch influence is prominent. However the occupation of the maritime provinces of Sri Lanka by the Dutch from 1658 to 1796 and the consequent Portuguese influence on Sri lankan's economy, culture, and in all aspects, were transferred into Dutch. There is no doubt that the Dutch influence of nearly 150 years in this country has left its impression not only in the Dutch monuments, buildings, architecture, landscape, canals, furniture, low, religion and language but also in the daily lives of our people even today.

It is apparent by this study of re-establishment and growth of Kotte in the British period some important factors contributing to the development of a city could be understood. Purely because of the closeness to the commercial capital Colombo, Kotte become a accessible sub- urban area. With the presence of beautiful Diyawanna Oya, and other water bodies and lush green habitations give ideal conditions for a residential city. As a result, where ones stood the ancient structures of a Sinhalese monarchy were vantonly destroyed to take possession. There is no doubt that who found interesting artifacts in private land they occupy did not inform the relevant authorities, fearing of confiscation of their land bought with hard earned money. Lack if regulation to acquire historically important plots of land on the part of the archaeology department also resulted in Kotte's glorious past being buried underneath its soil.

In 1909 archaeology commissioner sums up in his report,

"Unless the government is prepared to acquire much land, now planted and occupied, at prohibitive cost, the archaeological commissioner is powerless. To take action further than that prescribed by treasure trove ordinance (no 17 1887 for securing isolated antiquities, which Privet owners may from time to time dig up in their properties; no one is likely to offer his land freely for such excavations, as the government might consider desirable in the interest of Archaeology". As the inability of the government at that time remaining ruins of Kotte would not be saved. This could be attributed to that at that tine the rulers were foreigners and not locals. Because the government allowed —reoccupation of Kotte the new town began to grew. In the process components of old ruins were to built these new structures.

As Kotte was built amongst water and marshes their were swamps and marshes in and around most part of the outer city area; but they could not found to the

fact that most of the lands were filled and reclaimed due to high land price. His in has resulted in Colombo being vulnerable to floods as there is no place for water to seep through. Another significant factory unearthed in this study is the rapid development of Nugegoda in comparison to Kotte. "The Borella Kotte road linked the throbbing and busy city of Colombo, to Mirihana long before the Kelani-valley line was conceived, or the High Level road was planned. In fact when gauge rail is subsequently taken up for serious consideration, following the vehement and vociferous demand of the K-V planters, Mirihana was to be the site for the railway station. But however following the results of bitter dialogue, Nugegoda was subsequently chosen for new railway extension. The blocking of the old Dutch canal in the vicinity of Gangodawila and the reclaiming of the Dutch -era swamps, made Nugegoda a very attractive residential area, which was further heightened with the laying of High Level road. Soon there was migration of retired government servants and other people to this new suburb". 2 Thus it is clear how Nugegoda outgrew Kotte to come to the present state of things are.

It is heartening to see when the administrative capital is found an old concept on which was Kotte founded is utilized. That is having a continuous water body or a marsh around the fortress. In the new parliament this concept is activated although the weight is more for the aesthetic side of having a water body around. But the protective aspect of the concept could also used an so attacker could reach through water to parliament without being identified. Because of clearing and cleaning up of maeshes around the Kotte area as a result parliament complex have eased the inland waterway and flood protection situation in Colombo. But still recently it showed it is also vulnerable by even getting parliament building flooded during a heavy shower. This could also be said the Gal Ambalama at the Pita Kotte junction. The scholars assets that it has been wrongly conserved probably during the colonial period, as structure with two rows of pillars suggest a two slope roof. Original building was square in plan and had a Kutagara roof.

The sad truth today is that much of results colonial landscape. Has been wiper out by the super of Colombo. Under this situation conservation must take control. Conservation brings protection and little or no change to the historic areas and leaves the concerned areas alone, except for those activities needed to counterbalance the unavoidable influence of man. But at the broader level a historical landscape initiative can be used to enlist the historical imagination both by preserving actual cultural landscapes and by raising the level of our discourse about the history of the land change and continuity, interpretation, management and maintenance, and significance in history. These are the broader questions that we should ask ourselves about any landscape preservation project. It also emphasizes the point that the organization and land patterns are the most important considerations, followed by the character defining features: topography, vegetation, circulation, water features, and structures, site furnishing and objects within the capital of Sri Jayawardenepura-Kotte.

But the field of landscape needs to begin this at the other end at which the areas of natural elements have been destroyed. It is here that the capital needs a proper landscape master plan to confront all the destructive effects and bring what is pleasing to the eye and possibly to the ear, that fits the soil and surface structure and helps to conserve and stimulate the natural processes.

The present capital of Sri J ajawardenepura- Kotte has claimed that the entire marshy lands within the capital should be treated as open spaces and thus will protect them from getting filled except the reservation, parks, playgrounds and forests. Its other concerns are limited to the cemetries, which seems insufficient to cope with the new pressures. Ian MC Harg points out that Nature performs a number of valuable functions for man, and does it free. The forests of the "upland sponge", for example helps moderate floods.

The ground water table stores water for us to drink. Prime soils produce food for us to eat. Marshes provide spawning grounds for fish and wildlife. But when men make their development plans, unfortunately, they pay little attention to these functions and they obliterate what they should protect.... "Marshes seem made to be filled, streams to be culverted, rivers to be dammed, farms subdivided, forests felled, flood plains occupied, and wildlife eradicated".

To weave together a host of seemingly disparate elements the forest reserves, the local parks, the spaces of cluster subdivision, the edges of linear right of ways and the sum of there can make a very effective whole. All natural links, forests, rivers, velleys exist as natural elements and man- made links, the rights of way of rail roads, waste lands, empty lots, dumps, all kinds of derelict lands that may be reclaimed to be used in making the links.

Maximum effects could be drown from the edges of the open spaces for they have more perimeters cherished by people most often and intensively: and from the visual aspects of open spaces adding aesthetics. A final measure is to look on the landscape as basic infrastructure, as basic to the town as main drainage and roads. All these measures collaboratively used to tie the Nature in and around the urban area on a generous scale.

Even in our sophisticated cities, with transport, technology and modernism, we are still is need of contact with Nature. Therefore all these acquisitions should be tied together with the landscape approach to achieve a beir balance of the man made within Nature.

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