CHAPTER 1

1. INTRODUCTION

India faces a truly formidable challenge in managing rapid urbanization and the growth problem of its cities. Pressures of rapid growth and years of neglect have severely stressed the condition of Indian cities and towns. This is evident from the innumerable challenges being faced with large areas not serviced by even a minimum of physical and social infrastructure. This has made Indian cities and towns polluted, inefficient and vulnerable to health and other disasters. Cities and towns are the general determinants of the economic well-being of the country. For this, it is imperative that the pressures of new growth are dealt with in a planned manner so that they are more liveable, efficient, and environmentally sustainable. Only then will the rapid pace of economic growth that India is undergoing be sustained and the targets of environmental sustainability of the world achieved. (Shirley Ballaney, 2008)

Historical towns are often an expression of past spontaneous and autonomous growth and embody unique forms. It is usual to treat and remember these towns in relation to their heritage monuments, forgetting that in them there is also a significant architectural, social, economic, cultural variety and richness which contribute to its value. Historical towns, although characterized by the presence of physical elements, are the expression of a rich heritage which gives evidence to the features of past life of the community that has shaped and transformed them in relation to their cultural growth. If stereotype views are ignored, it helps to understand historical heritage, not so much for its artistic value that are always appreciated but for the solutions adopted to meet the community’s needs, often unique to their past history and culture. They are almost always the devices for meeting the social and economic needs rationally and sustainably.

Local communities have always played an important role and their "culture" has been embodied in forms that have created what is now called "identity". Historical towns should not be rebuilt in a manner separated from issues related to past economic and social development of their inhabitants and from all that concerns the territory in which they live and to which they are related and have a sense of belonging. These
towns, beyond their documentary and symbolic value, are characterized by a rich functionality, a result of the interaction of various factors and components, and expression of the collective memory of the town, their specificity and identity. These identify them as a huge reservoir of potential resources in relation to the circumstances and context in their history.

Natural landscape is important for a town to be wholesome and attractive. Many urban environs, although functional, are harsh concrete jungles with uninviting public spaces. Some towns however have managed to counter this by enhancing their sense of identity through their cultural and architectural heritage, open spaces and environmental conservation devices. In recent decades people have become far removed from nature, with technology and science keeping them indoors most of the time. As man becomes more urban, an acute feeling of having become divorced from nature sets in; and a desire to remain close to nature haunts him. This desire will manifest itself in the form of a widespread demand for landscape with natural areas like forests, rivers, hills and the like. Thus there has been a growing interest in picnic, conservation, open space beautification, pollution abatement and a number of other ways to improve the “quality of the urban environment”.

A high-quality public environment can have a significant impact on the economic life of urban centers big and small, and is therefore an essential part of any successful development strategy. As towns increasingly compete with one another to attract investment, the presence of good parks, squares, gardens and other public spaces becomes a vital business and marketing tool: companies are attracted to locations that offer well-designed, well-managed public places and these in turn attract customers, employees and services. In town centers, a pleasant and well-maintained environment increases the number of people visiting retail areas, otherwise known as ‘footfall’. Despite their importance, the public spaces are often taken for granted or neglected and the amount of money invested in their provision and upkeep failed to reflect the vital role they play in people’s lives. The poor management also reveals that even the society continues to belittle public space in all its aspects – streets, squares, parks, gardens, and the wide variety of incidental open places found in towns and cities. Because of a lack of investment and management, they fail to improve the quality of
life of the local people as they could, and should. Indeed, poorly maintained public spaces only worsen the problem of physical and social decline in an area.

India is one of the oldest civilizations of the world with a kaleidoscopic variety and a rich cultural heritage. It has achieved multi-faceted socio-economic progress since independence and has become largely self-sufficient in agricultural production, the tenth most industrialized country in the world and the sixth nation to have sent scientific equipment into outer space to conduct research for the ultimate benefit of mankind (Surinder Bagha, 2014). Being a country with values like ‘Atithi Devo Bhava’ now needs to become a tourist hub. Tourism has its impact on practically every section of society, be it poor or rich and acts as an instrument of economic growth and sustainable human development, with a contribution of 6.23 percent to the National GDP and providing 8.78 percent of the employment to the total population (Surinder Bagha, 2014). It is an important source of foreign exchange generating about 100 billion USD in 2008 with expected 9.4 percent annual growth rate. It also helps in preservation of places of historical importance by declaring them as heritage sites. Tourism tends to encourage the development of multi-use infrastructure that benefits the host community.

In the last few decades the awareness and desire to visit historical and heritage sites around the world among all the social classes have led to boost the so-called cultural tourism, which appears as an important developmental device for historical towns. On the one hand, large and small towns become the natural destination of thematic and historical-cultural trips and give answer to the demand generated just by free time - both for the daily, intra-week, annual and life time type of cycle. On the other hand, there is often a high risk that the phenomenon can cause exogenous changes or damage that tends to destroy or suffocate such venues, under the pressure of the contingent visiting masses.

1.1 DEFINITIONS
1.1.1 Form: Form is the shape, visual appearance, or configuration of an object.

1.1.2 Natural Form: A natural form is the original form of an object in nature. For example, a flower in the garden unpicked is in its natural form. A natural form is
when something grows or develops in nature. Another example says that Crystals are natural forms because they are formed only in nature. (http://wiki.answers.com)

1.1.3 **Built Form:** Built form is referred as the external three-dimensional outline, appearance or configuration of something. It also refers to the shape, function and configuration of buildings as well as their relationship to streets and open spaces. Form and its complementary niche, space, constitute primary elements of architecture. The reciprocal relationship is essential, given the intention of architecture to provide internal sheltered space for human occupation. Both form and space are given shape and scale in the design process. In addition, the placement of a building (form) in relation to its immediate site and neighbouring buildings is another crucial aspect of this form/space relationship. Just as internal space is created by voids in building form, exterior space can be defined or loosely defined by the building form as well. Building form defines the space that shelters our interior human activity and the negative space, the void between building forms, shapes our outside activities in the built environment. (http://www.wbdg.org/resources/form.php)

1.1.4 **Small Town:** The 2011 Census of India defines towns of two types viz., statutory town and Census town. Statutory town is defined as *all places with a municipality, corporation, Cantonment Board etc.* Whereas, Census town is defined based on the places that satisfy the following criteria:

- A minimum population of 5,000;
- At least 75 per cent of male working population engaged in non-agricultural pursuits; and
- A density of population of at least 400 per km$^2$. (1,000 per sq. mile).

All the Statutory towns, Census towns and Outgrowths are considered as urban settlements. (http://mhupa.gov.in/w_new/Summary UDPFI.pdf)

According to Urban Development Plans Formulation and Implementation (UDPFI), guidelines small town refers to a town with the population less than 50,000 in plain areas and less than 20,000 in hilly areas.
The first true towns are sometimes considered large settlements where the inhabitants were no longer simply farmers of the surrounding area, but began to take on specialized occupations, and where trade, food storage and power were centralized. (https://en.wikipedia.org/wiki/City).

1.1.5 Monuments: The Ancient Monuments and Archaeological Sites and Remains Act, 1958 (www.asi.nic.in/asi_monuments.asp) defines an ‘Ancient Monument’ as follows: Ancient Monument means any structure, erection or monument, or any tumulus or place of interment, or any cave, rock-sculpture, inscription or monolith which is of historical, archaeological or artistic interest and which has been in existence for not less than 100 years and includes; Remains of an ancient monument, Site of an ancient monument, Such portion of land adjoining the site of an ancient monument as may be required for fencing or covering in or otherwise preserving such monument, the means of access to, and convenient inspection of, an ancient monument.

The Archaeological Survey of India (ASI) under the provisions of the AMASR Act, 1958 protects monuments, sites and remains of national importance by giving a two-months’ notice for inviting objections, if any in this regard. After the specified two-month’s period, and after scrutinizing the objections, if any, received in this regard, the ASI makes decision to bring a monument under its protection.

A monument is a type of structure that was explicitly created to commemorate a person or important event, or which has become important to a social group as a part of their remembrance of historic times or cultural heritage, or as an example of historic architecture. (https://en.wikipedia.org/wiki/Monument).

1.1.6 Tourism: According to United Nations World Tourism Organisation tourism is defined as "Tourism comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.

Tourism is different from travel. In order for tourism to happen, there must be a displacement: an individual has to travel, using any type of means of transportation
(he might even travel on foot: nowadays, it is often the case for poorer societies, and happens even in more developed ones, and concerns pilgrims, hikers). But all travel is not tourism.

Three criteria are used simultaneously in order to characterize a trip as belonging to tourism. The displacement must be such that:

- It involves a displacement outside the usual environment:
- Type of purpose: the travel must occur for any purpose different from being remunerated from within the place visited: the previous limits, where tourism was restricted to recreation and visiting family and friends are now expanded to include a vast array of purposes;
- Duration: only a maximal duration is mentioned, not a minimal. Tourism displacement can be with or without an overnight stay.

(http://www.tugberkugurlu.com/archive/definintion-of-tourism-unwto-definition-of-tourism)

Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which imply tourism expenditure (www.media.unwto.org/en/content/understanding-tourism-basic-glossary).

As such, tourism has implications on the economy, on the natural and built environment, on the local population at the destination and on the tourists themselves. Due to these multiple impacts, the wide range and variety of production factors required producing those goods and services acquired by visitors, and the wide spectrum of stakeholders involved or affected by tourism, there is a need for a holistic approach to tourism development, management and monitoring. This approach is strongly recommended in order to formulate and implement national and local tourism policies as well as the necessary international agreements or other processes in respect of tourism.
Tourism is travel for recreation, leisure, religious, family or business purposes, usually for a limited duration. Tourism is commonly associated with international travel, but may also refer to travel to another place within the same country. The World Tourism Organization defines tourists as people “traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes” William F. Theobald (https://en.wikipedia.org/?title=Tourism.) suggested that "etymologically, the word tour is derived from the Latin, 'tornare' and the Greek, 'tornos', meaning 'a lathe or circle; movement around a central point or axis'. This meaning has changed in modern English to represent 'one's turn'. The suffix –ism is defined as 'an action or process; typical behaviour or quality', while the suffix, –ist denotes 'one who performs a given action'. When the word tour and the suffixes –ism and –ist are combined, they suggest the action of moving in a circle. Describing a circle implies returning to one's starting point, so a tour is a round-trip journey, i.e. the act of leaving and ultimately returning to the original starting point. Therefore, one who takes such a journey can be called a tourist.” (https://en.wikipedia.org/?title=Tourism.)

1.2 STUDY AREA

Srirangapatna, the name of this historical town is derived from a thousand year old temple dedicated to Lord Sriranganatha which dominates the town making it one of the most important Vaishnavite centres of pilgrimage in South India. The town is renowned for its seemingly impregnable fort associated with the great ruler Tippe Sultan. There are innumerable monuments that are of national, state and local importance which adds up to the character of the town. Distinguished ruling dynasties like the Gangas, Hoysalas and Vijayanagar Kings, The Wodeyars of Mysore and Hyder Ali and Tippe have left their indelible imprint on the cultural legacy of this town. Religion has played a major role in the history of the town with the contributions of both Hindu and Muslim rulers. The glory of rulers is manifest in the magnificent structures like temples, palaces, royal buildings, forts, gates, mosques, tombs etc. These buildings not only functioned as religious places but also acted as cultural centers and on occasions supported the economy of the town. Besides being a pilgrimage center, it has seen countless battles, some of which have almost destroyed the foundations of its massive fort wall, that still stand as a testament to the greatness of Srirangapatna’s glorious past. The town is steeped in history with its rich historical,
cultural, religious, architectural heritage and even in respect of scientific and technological achievements. As a mark of this recognition, in 2005, the state government notified Srirangapatna and other towns viz. Mysore, Bijapur, Bidar, Gulbarga and Kittur as heritage towns.

Srirangapatna is a class III town with a town municipal council having a population of 25,061 as per the 2011 census. It is a taluk headquarters in the Mandya District of Karnataka State. It is an island town built around 894 AD on the Bangalore-Mysore highway encircled by the river Cauvery. The town is located at 12.41° N 76.7° E and has an average elevation of 679 meters on the Deccan Plateau with an area of 10.93m². Srirangapatna is renowned for its seemingly impregnable fort, guarding the great ruler and the capital town of Tippu Sultan. The stately forts and domes of Srirangapatna and Bijapur uphold Karnataka’s historical architectural and cultural heritage.

The historical and heritage town, Srirangapatna has innumerable monuments that are of National and State importance. These monuments are recognized and protected by the Archaeological Survey of India and the State Archaeology Department which are located in the Local Planning Area (LPA) of the town. The monuments have been included in the tentative list of World Heritage sites by the UNESCO (http://whc.unesco.org/en/tentativelists/5895/).

1.3 NEED FOR THE STUDY
The million plus cities by their sheer demographic and geographic dimensions, economic significance, and magnitude of problems, tower over the rest of the rural and urban world and grab nearly all the resources and attention of policy-makers. The disparity in infrastructure between large and small urban areas has always been prevalent and the gap is expected to widen in the years to come. Small and medium towns have an important role to play in the life and development of the rural hinterland. One of the findings of the Census 2001 is the relatively modest number of small towns (less than 20,000 inhabitants) as compared to the number of villages with inadequacy of their economic resource and activity base to serve, do not absorb the surplus rural population from their hinterland. This situation, described as ‘under-urbanization’, characterizing the small and medium towns is indeed an impediment.
Access to improved living standards and amenities such as provision of skill training, higher education, healthcare services, creating demand for rural produce and communication if provided, small towns can contribute many human resource inputs to the surrounding rural areas.

The town, Srirangapatna once noted for its historical importance and character has undergone major changes. There was no major damage, except those due to the contingencies of nature. Until the town became a tourist attraction, there was little developmental intervention. However, in the last one and a half decades, the growth of tourism has put considerable pressure on space causing several adverse changes in the town. Over the years, the ever increasing developmental pressure and neglect/misuse of monuments and their environs has resulted in degeneration. The mushrooming of modern buildings amidst the fabric of the historic town has not only affected the visual condition but also has altered the social and behavioral elements that defined its urban character. It has been observed that fort area is facing tremendous pressure from commercialization and overcrowding. In addition to this, inadequate infrastructure services, parking facilities, narrowness of roads etc. lead to traffic congestion and cluttered pedestrian movement. Commercial interests dominate in the fort area of the town where many monuments exist.

Today, the earlier historic character and charm of the town are getting undermined due to unplanned growth and encroachments. The beauty and character of natural and built forms have come to be gradually wiped out without any compunction or feeling of loss; and development is led by increased demand and land value. To bring about a balance between historical monuments and commercial interests, development has to be planned and executed suitably to preserve the character and overall historical ambience of the town. Ancient monuments, historic remains and sites, elements of culture and tradition should not to be lost in the process of development and have to be preserved for the future generations. In fact, the town needs to be looked at as a whole and growth permitted in a carefully planned manner. Developmental work did in bits and pieces without well thought out priorities will not do any good to conservation.
Srirangapatna has been declared a heritage town by the Government of Karnataka in 2005. Considering the international value for heritage and its structures, the town with numerous historic and heritage monuments has high potential to become a tourist hub. Right now the town’s resources both natural and built forms are utilized without any wholesome managerial intervention. The river Cauvery is considered sacred among the pilgrims and the public in the region and the town surrounded by the river Cauvery has scope for the development along the water front. The development and management of the river front will not only give a facelift to the town but also helps to preserve the natural setting and biodiversity of the town. This in turn paves the way to reduce pollution leading to sustainability.

A successful town is the one which is characterized by streets, parks and open spaces that are clean, safe and attractive that local people are proud of and want to spend their time in. The wasted spaces developed in the past and present have been a witness to wasted opportunities – opportunities that, if seized, would have the power to dramatically improve the quality of life of the people.

1.4 AIMS AND OBJECTIVES
The main aim is to appreciate and record the rich historical, architectural, social and cultural values of the town and to configure them as a huge reservoir of potential resources in the overall development of the town.

The Specific Objectives are:
- to study the growth and development of Srirangapatna town;
- to identify the natural and built forms and study their existing condition in the study area;
- to identify potentials for physical development towards a desired image that is consistent with the social-economic, cultural and heritage values of the town; and
- to suggest the planning measures for the development of natural and built forms and to improve tourism related activities of the town.
1.5 METHODOLOGY

The study has been carried out in the historical town of Srirangapatna. The research work commences with reviewing literature on natural and built forms and their influence on the development of the town. The necessary information is collected through relevant sources, available with documents and authorities concerned. Tourism, as an activity that impacts people and places where it occurs, has always been present in Srirangapatna. But it is in the last few years that this activity has been gaining significant importance and consequently, tourism’s positive and negative impacts have begun to be felt in the town and have influenced its development. These impacts are studied and the potential of tourism is used as the generator of socio-economic development of the town.

The various factors which are contributing to the degradation of the town are studied through primary survey. The primary sources consist of personal visits and through field visual survey. Secondary information is obtained from various sources including technical papers, reports, website articles, planning documents and other written and printed materials. The developments along the river Cauvery is proposed by perusing the relevant case studies and documents. Also, the various ways to transform towns and cities through place making; and public spaces are studied through case studies and are recorded. The developmental measures proposed for the town are evolved based on the SWOT analysis and TOWS matrix.

1.6 SCOPE AND LIMITATIONS

The monuments that are recognized and protected by the Archaeological Survey of India and the State Archaeology Department that bring international value to the town are studied and other tourist attractions in and around the town are also highlighted. The study is focused on planning for natural and built forms by retaining its character that contributes for the enrichment of heritage and its significance of the small town Srirangapatna.

The scope of the present study is to bring out the relationship between natural form and built form by integrating the development of the town with the natural and principal element of the town, the river Cauvery. In this context, the appropriate location for the river front development is proposed by considering the physical,
social, cultural and environmental aspects of the town. The town with numerous monuments and the heritage tag is visited by both domestic and international tourists. The adverse impact of tourism on the monuments and the town in general is documented. Also, the quality of life in a town is palpable through the available quality of public spaces. The major tourist attraction of the town is the Srirangapatna temple and the Fort and the available space near these built forms is proposed to use as public spaces.

The study has been limited to the local planning area of the town. The study is designed to give planning and developmental proposals and also to integrate this to ensure aesthetic quality of the town. The measures suggested in the present study may be a guiding tool for the preparation of the Master plan of the town. However, conservation measures and architectural design of the proposals are beyond the scope of the present study.

1.7 ORGANISATION OF THESIS
The thesis has been organized into six chapters. The description of each chapter is presented.

Chapter 1 Introduction: This chapter comprises a brief introduction of the challenges faced by the Indian cities and towns in managing rapid urbanization and their growth problems. It highlights the importance of historical towns in relation to their heritage monuments along with the significant architectural, social, economic, cultural variety and richness which contribute to its value. It also states that natural landscape is important for a town to be wholesome and attractive and a high-quality public environment can have a significant impact on the economic life of urban centers big or small, and is therefore an essential part of any successful development strategy. The background of the study area is narrated with reference to the town’s history with its rich historical, cultural, religious, architectural heritage and even in respect of scientific and technological achievements. The aims and objectives of the work have been stated. The methodology used in the work and scope and limitations of the study is been described.
Chapter 2 Review of Literature: This Chapter outlines the review of literature. Efforts have been made to study the available literature on the historical towns, natural and built forms and their role in the development of towns and its relevance in planning. The attempt has been made to access and review the literature from sources including available books, articles in journals, government reports, newspaper articles and related websites concerning the study.

Chapter 3 Study area–Srirangapatna: This chapter highlights the study area, Srirangapatna town with a brief mythological and historical background followed by the outline of the growth and development of the town. The description of all the monuments which are recognized and protected by both Archaeological Survey of India and State Archaeology Department are given. The physical setting, economic profile, urban characteristics and infrastructure of the town are also presented. The highlights of the major growth changes of the town during various periods and the demographic profile are also briefed.

Chapter 4 Natural Forms and Built Forms: This Chapter begins with the brief introduction of waterfront as an urban public open space with natural and cultural systems and which acts as an important location for tourism and the paragon of city development. The various Waterfront development initiatives that have been undertaken successfully in many places across the world and that are increasingly being attempted in India as well are indicated. The Sabarmati River Front Development at Ahmedabad and Singapore River Waterfront Development at Singapore are taken as valuable inputs and presented as case studies. There is a description of importance of public space for a town or a city and the multiple challenges presented by the public spaces themselves. The various ways to transform cities through Placemaking and public spaces have been discussed and for each a case study has been presented therein. The emerging types of tourism to take advantage of the emerging markets and the changing demand of the tourism industry have been stated elaborately. A brief description of the destination development as an emerging theme in tourism and the most essential facilities to be considered in the destination development are also stated. An insight to the tourism profile of Karnataka, Mandya and Srirangapatna is presented and with due consideration to improve the quality and quantity of tourism infrastructure at tourist destination the methodology for evaluating
the available carrying capacity for the tourist destinations is illustrated and the tourism carrying capacity of Srirangapatna is identified.

Chapter 5 Analysis and Inferences: The various stages of development of Srirangapatna town since 9th century to till date is presented and there is an attempt to evaluate the Heritage Monuments recognized by the Archaeological Survey Of India and the State Archaeology Department. The evaluation procedure is discussed in detail and the evaluation of the monuments is carried out to identify their significance and to prioritize the action plan in phase wise. Also, the impact of the recent developments on the natural and built forms of the town are discussed and illustrated in the form of damages to various structures and monuments due to natural and human forces and encroachment. The SWOT analysis is carried out to identify the inherent potential of the town and TOWS Alternative Matrix is developed and thereby Final Action Items are derived using TOWS Matrix.

Chapter 6 Conclusions, Suggestions and Recommendations: The concluding Chapter of this research work highlights that the monuments are the most precious built forms in the town with heritage value that brings the town an international value. These monuments though recognized and protected by the Archaeological Survey of India and State Archaeology Department still needs attention from the concerned authorities and the public. The conservation and maintenance of these monuments with the integration of the developmental measures will be a holistic approach as the development of the town cannot be thought of without the monuments. In the last one and a half decades, the growth of tourism has put enormous pressure on space causing several undesirable changes in its character. These developments are not only making loss of the historic and heritage features but also a well-defined urban form is changing for the worse.

Srirangapatna with its long river front area, rich built and natural environment and diversity of cultures, ethnics and history, represents a great opportunity for waterfront development as a strategy to enhance investment for social, commercial and recreational projects. In the present work an attempt has been made to propose the location for the Waterfront Development.
Srirangapatna has a good ability to develop a unique public space environment based on its rich diversity of cultures, ethnics and history. The public spaces can be the vessel of interface among local people, and between local with tourists for exchanging ideas and cultures. This will increase the familiarity and linkages between the city and its people whether they are local or tourists. Thus in the present work, the space near the Obelisk monument is recommended for the development as public space.

With due consideration to preserve the town’s Historic, Cultural, Religious, Architectural and Aesthetic significance the suggestions are dealt in four headings namely; Historical/Heritage, Tourism, Infrastructure and Policy. The suggestions presented in this Chapter are based on the overall study and SWOT analysis for the development of Srirangapatna town.