The State of Karnataka forms the south–western portion of the Indian Peninsula. Physiographically it has three distinct units:

1. The coastal area bordering the Arabian Sea.
2. The central mountainous region, and
3. The Eastern Plateau.

As far as geographical features are concerned, the eastern plateau region shows a rolling topography. The streams traverse the varied geological formations. Archaean, Cuddapahs (Kaladgis) and Deccan Traps have greatly influenced their Valley forms. Typologically the lower Paleolithic cultures by and large display late or advanced Acheulian forms. This is particularly the case in the Kaladgi area of north Karnataka. i.e. the (Malaprabha –Ghataprabha Basins). There are several Palaeolithic sites in the Kaladgi Basin like Badami, Khyad and Mensagi areas of the Malaprabha River, where many tools have been unearthed from the streambed.

Beginning with the prehistoric past and moving ahead with times through several long centuries, the fertile land of Karnataka has played a prominent part in developing the culture and heritage of Indian history. Thus the historicity of Karnataka may be dated back to 60 -70 lakhs years. The rich heritage of Karnataka seen in field of art, architecture,

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1 Joshi, R.V. (1955) : Pleistocene Studies in the Malaprabha Basin, Karnataka University Press, Dharward,
literature, language and religion, has in no way been less important than those in the
contemporary neighboring kingdoms around her in the past.

Between AD 325 – 1686 A.D., Karnataka was ruled by Kings of Satavahana,
Kadamba, Ganga, Chalukyas of Badami, Rastrakutas, Chalukyas of Kalyana, Yadavas of
Devagiri, Hoysalas, the Vijayanagara rulers and their contemporaries – Bahamani Sultans,
Adil Shahis of Bijapur, Wodeyars of Mysore, Hyder and Tipu. These dynasties have been
responsible in creating the strongholds with well fortified walls around their capital cities
and sub capital cities keeping in view protection using the arms and armours within the
forts to protect queens, treasury, wealth, women, children, palace and the administrative
centre.

Several kings of the dynasties of early Karnataka proved their prowess by winning
many decisive battles in the neighboring regions. Frequent battles necessitated building of
forts, equipped with vigilant soldiers and arms to protect their capital cities, like Paithan or
Pratishthana of Satavahana, Banavasi or Vyjayanti of Kadambas, Badami or Vatapi of
Chalukyas, Rashtrakutas of Manyakhet or Malkhed., Doorasamudra of Hoysalas, Hampi of
Vijayanagara, Bjiapur of Adil shahis, so also Tipu Sultan, the Nayakas, Palegaras etc. to
name a few. The defence architectural creations within and outside their capital places
came up due to such political compulsions. Forts were basic element for administration.
These various dynasties have left epigraphs as evidence of their active role in political,
economic, social and ecclesiastical spheres. However, these epigraphs throw light on
various aspects of culture particularly religion and architecture, and less on defence
architecture like forts, ramparts, etc.
In ancient period, the geographical and geological aspects were conducive for flourish of various kingdoms. In fact this should not be lost sight of while understanding the political and other aspects of cultural development especially history of defence system in early Karnataka. The defence system in Karnataka has a continuous and unbroken history right from the period of Ashoka up to modern times. The Forts of Karnataka are hundreds in number. Forts have undergone structural changes by renovations and several additions, from time to time.

Some of the early historic cultural centres identified have been Sannati, Halasi, Vadagaon, Pattadakal, Aihole, Badami, Pikihal, Kurugodu, Maski, Brahmagiri, Hallur, Balligave, Chandravalli, Kuntibetta, Hemmige and T. Narasipura. All these sites have shown different antiquities of the early historic culture either as a single site or in combination. What really constitutes the early historic culture in all its aspects may be understood from the chart below.

<table>
<thead>
<tr>
<th>Name of the sites</th>
<th>Archeological Remains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandravalli</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Brahmagiri</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Banavasi</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Sannati</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Sannati</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Vadagaon</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Pikihal</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Hallur</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>T. Narasipura</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Hemmige</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Maski</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Kuntibetta</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Balligave</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
<tr>
<td>Pattadakal</td>
<td>RKP,RKP,RKP,RKP,RKP</td>
</tr>
</tbody>
</table>

SC (RKP: Russet Coated Kaolin Painted ware; SC: Satavahana Coins; BS: Brick structures; CP: Contemporary Pottery; TF: Terracotta Figurines; RW: Rouletted Ware; IP: Inscribed Pottery)
CHAPTER – II: HISTORY OF DEFENCE SYSTEM IN EARLY KARNATAKA

From the given chart it becomes clear that the early historic culture in Karnataka was of mature phase. „With strong defence architecture going back to this period, it may even be suggested as the beginning of urbanization in the area."

Referring to historic period, one can trace the definite beginning of the History of Karnataka; from the period of Mauryas or i.e. precisely to the third century B.C., when Mauryan Emperor “Devanama Priya Priyadarsi Ashoka” held sway over some of the northern parts of Karnataka. Ten minor Rock Edicts and Four Major Rock Edits belonging to the period of Ashoka have been found at Chitadurga, Bellary, Raichur and Gulbarga Districts, viz ; at Siddapur, Brahmagiri, Jettingaramesvara, Maski, Koppal, Nittur, Udayegolla, and Suvarnagiri. This southern province was said to have been the boundary of his empire extending in the Deccan. Mauryas were succeeded by the Satavahanas that is

Fig. 2.1 : Ashokan Inscription in Karnataka (Maski)

Source: travelblogspot of Karnataka.com

from 300 BC to the beginnings to the Christian era, in Karnataka. Practically there appears to be no fortifications activity as such during these periods.

**Satavahana fortification**

That the Northern parts of Karnataka had come under the control of Satahavahanas is evident from the fact that Satavahana coins have been discovered at Wadagaon Madhavapura, Banavasi, Sannathi, Harangeri, Aihole. Their inscriptions have been found at Banavasi, Vasana, and Sannathi etc. They held the administration of the Deccan for about four centuries (BC first century – AD Third century). Pratishtana (Paithan in Maharashtra) was the capital of their Empire.

The Satavahanas rose to power in South India and extended their empire, which included present Andhra Pradesh, Karnataka, and Maharashtra up to Vindhyas in the north. During Satavahana rule, Karnataka witnessed the growth of forts and fortifications in and around their territories for the first time. *Pliny* mentions of an eastern Deccan possessing thirty walled cities with huge army, social, urban life of India and their trade activities. Ancient Karnataka had many trading centres, and small exchange centers. The large markets were in towns. An inscription found at Vasana, (a village on the borders of Naragunda taluk Gadag district) in Prakrit language, which belongs to the period of Vasistiputra Sri Pulomayi, refers to the construction of a Shiva temple by Chandra, a devotee of Shiva. The Excavations at Wadagaon Madavapur, in Belgaum district, reveals

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that it was a centre of trade and commerce during Satavahana period. However, we do not find any inscription mentioning of fort construction in Karnataka. There were many centres where Semi-precious stones were sold. Also South India provided spices, gold, precious stones and pearls, together with sandalwood and ebony as exports goods. Buddhist sources refer to long distance routes being regularly frequented, from Shravasti to Pratishthana. The most exciting discovery of Satavahana rule is the site of Sannati in Gulbarga district, situated on the left bank of the river Bhima. Sannati has three important ancient sites, two of them were habitation sites and the third a stupa site. The habitation sites have been completely damaged by constant ploughing for centuries. However, they are replete with antiquities, such as terracotta’s and beads. One of the sites has a fortification along the river bank. The fort is constructed with large sized bricks typical of the Satavahanas period. Even a large number of Satavahana antiquities have been found in Banavasi; including coins and an inscription of Vasishiputra Sri Pulumayi. But even this inscription does not indicate any political significance over the area. But considering the political activities of the Satavahanas in the area around Banavasi, it becomes clear that Banavasi was included in the Satavhana kingdom. In Karnataka Madhavapura near Belgaum District which was first discovered by Panchamukhi R. S. traces few of the

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7 Ibid p235-236
9 This inscription was edited by A.V Narasimha Murty and H.R Raghunatha Bhat in Studies in Indian Epigraphy, Vol.1, PP-34-39
fortification walls of Satavahana period have been found. A. Sundara in his work \(^{10}\) has
done a detail study on Madavapura of Satavahana period.

**Kadambas**- Karnataka's first Kannada Dynasty were the Kadambas. They ruled Karnataka
between 325 – 590 AD. Mayurasarma was the founder of this dynasty, who made
Banavasi, or Vaijaynti his capital, Banavasi is also known as Banavase and Banaavashi and
is situated in Sirsi taluk of Uttara Kannada district of Karnataka. The whole of Banavasi
area is an ancient site of religious importance. This strategically is located and the acute
circular bend of the river Varada, made it a naturally important city with a fortified wall
around it. But today the fort walls are in ruined state. Banavasi is bound on all sides by the
villages namely Bhashi, Linganamatti, Narur, Hallikoppa, Thigani, Kadagod and Ajarani.\(^{11}\)
The village itself is small and can be divided as village, Kote and Pete.\(^{12}\) It is surrounded
by cultivated lands on the northern, southern and western sides. The whole region has a
thick mantle of evergreen forest grown on the thick soil, with stone not easily available
mud is used extensively. Bricks have been used partially for the purpose of increasing the
strength. The Fort is built on the left bank of the river Varada, where the river flows in a
zig zag way thus providing considerable protection on the southern side. The fort is in an
oval shape which includes the moat, gateways, etc. Many parts of the fort wall, appear to
have reconstructed and renovated under Chutus, early Satavahanas, early Kadambas and
later Kadambas. The advantage in having the fort next to river was that the water could be
taken directly from the river to the surrounding moat.

Prakashan, Delhi.

\(^{11}\) Narasimha Murthy.A.V. (1997): Excavations at Banavasi, Directorate of Archaeology and Museums, Mysore.P-1

\(^{12}\) Ibid p-2
Now tracing the fortification in and around Badami or in Bagalkote district we don’t find any fortification of Satavahana period. Their empire was extended from western coast up to river Malaprabha, but it is very difficult to say whether they ruled over Badami or today’s Bagalkote District. But in the neighboring district of Belgaum we have Jain Basadi built by Mrugeshvarma and at Halasi with inscriptive evidence and we have found two armed Narashima and Ganapathi made of mud. Even in Pattadakal is found an idol of a Tirtankara Moorthi. We have evidence that, few monuments belong to Kadamba dynasty is found at Aihole, Pattadakal. At Pattadakal in front of Sangameshwara temple and left of Jaina Narayana Gudi we can find pre Chalukyan ruined two Brick temples, and same way we can find at Aihole, Ambigara Gudi and Sangameshwara temple at Pattadakal. Even Kadambas have fortified wall in their capital and other cities like, Vaijanti (Banavasi) Pulasika (Halsi in Belgaum District) and Uchchasingi in Bellary District.

After the decline of the kadambas, the Chalukyas of Badami occupied the area and Banavasi became one of their provinces. They appointed their feudatories to administer the Banavasi area. Chalukyan king Vinayaditya’s daughter Kunkuma Mahadevi was married to Alupa prince Chitavahana and he was appointed as the governor of Banavasi.13

Fig. 2.2. Banavasi fort: (courtesy: S. K Joshi: Defence Architecture in Early Karnataka)

Gangas of Talkad - The Gangas ruled as sovereign dynasty in Gangavadi, the region of the present Kolar, Myosre, Bangalore, Mandya, Ramanagara and Tumkur districts, from 350 to 550 A.D. They continued to rule as the subordinates of the Chalukyas of Badami, and
later of the Rashtrakutas, till the end of 10th century. Initially they were ruling from Kolar and later shifted to Talakadu. Manne in Nelamgala taluk in Bangalore district was also their capital for some time. Inscriptions are the chief source of information about the dynasty. Their territory extended from Ujjain in North to Rameshwaram in South. But temples of the Ganga times speak of talented Stapatis or architects, sculptors and stone quarriers. Kolar, Talakadu, Mankund, Manne, Begur near Bangalore, Nagawara, Narsamangala, Kirtipura (Kittur in Myosre district) Nandi, Shravanabelagola, Hebbur, Kudalur etc, were flourishing commercial centres. Merchants and craftsmen had their guilds. There were village and town assemblies. Pittangere had 12 Praje Bavundas in about 500 A.D., who were the elderly peasants. Talakadu had an Assembly of 25, Parur of 72 and Gattavadi 70. Agraharaas had assemblies of the Mahajanas. There were Talavara or watchman in every village. Major cities like Talakadu had an official called Pattnaswami, who looked after the village, maintained roads and choultries. Guilds of potters, bamboo workers, oil mongers and people of other professions were also functioning. The State maintained a standing army and there was also feudal tax. Gajasahani or commanders of the elephant corps and Thuragasahani or Ashvadhyaksha, head of the cavalry find a mention. The best example of Ganga fort is near Bangalore at a place called Begur. It’s a mud fort. Because of rain and natural calamities, there is no proper protection for this fort now and as such it is in ruins. There are gateways in eastern direction and near both the gateways are found mud Bastions. The fort is in circular shape. Totally there are 12 Bastion. The fort is spread over 3 acres of land. Moat around the fort is of 15 feet width

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15 Ibid, P -48
and 10 feet in depth. This fort has two ancient temples dedicated to lord Venugopla and Ishwara. However there are no traces of forts in other places as there is no evidence of remains of any fort.

**Chalukyas of Badami**

Badami Chalukyas ruled over Karnataka and successfully directed the politics of South India from A.D 540 to 757 AD. Their cultural contribution to the history of Karnataka is immense. They were the first dynasty that united Karnataka under single rule. They ruled over an extensive region that extended from the Cauveri to the Narmada, and held sway over, large parts of modern states of Karnataka, Maharashtra, Goa and parts of Gujarat, Madhyapradesh, Odisha, Andhra Pradesh, Telangana, and parts of Tamil Nadu. Chalukyan army had earned the name and fame as „Karnataka balam Ajeyam”. Their military encounter with Harshavardhana of Kannauj, and his defeat in the hand of Pulakeshi II taking the title „Dakshinapatheswara” is well known. Chinese traveler Huen –Tsiang and Arab historian Tabari have throw some light about the dynasty. They say that Chalukayan army had elephants, cavalry, and infantry and speak of hundreds of elephants in army. These animals were intoxicated with liquor before being sent for war. The Chalukyas also had a strong navy. It was with the help of a strong fleet that Mangalesha could reduce Revatidwipa and Pulakeshin II could take Puri in Odisha. Reference to Vijayaskandhavaras of military camps is found in many records.

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17 Devarakonda Reddy : personal interaction on 28/9/2014, Bangalore
The mighty army of the Chalukyas was famous as „Karnatabala” and is praised as invincible. The country was divided into Maharashtrakas or great provinces, and they were again divided into Rashtrakas, also known as Mandalas. Vishayas or a district was the next unit; Bhoga was smallest unit which was a group of villages. Members of the royal family were appointed as governors over imperial provinces, including women like Vijayanka and Lokamahadevi.

Badami, their capital, situated in Bagalkote district is blessed with spectacular natural scenery in the Deccan. It possesses the most interesting architectural remains within the confines of the old Chalukyan territories. Badami is located in a deep wide steep gorge amidst vast mighty red sandstone hill range the Kaladgi series. In the wide valley is a natural pond called Agastya Tirta. Ptolemy in 150 AD refers to Badami, Aihole and Pattadakal as places of commercial importance. Thus religiously, economically and also from strategic point of view Badami had qualified itself to become the capital of a kingdom. Pulakeshi I had realized fully well all these aspects and therefore, must have made it as the capital and built a fort.

There are two natural hills - Northern hill and Southern hill called as Bhavana Bande and Ranamandala respectively. The north hill forms a natural watch tower. The top of the hill is intensively flat and hence is not easily accessible. There are many narrow deep natural passages with steep sides of rock. There are many zig-zags and any one who is unfamiliar with the topography of the hill would easily get lost or confused. Pulakeshi I was very clever in selecting this hill top for erecting the fort, as it is mentioned in cliff
inscription\textsuperscript{18} about the construction of fort which as an unconquerable fortress from the top as well as bottom. A fort wall has been raised along the edge of the flat surface of the high hill. Therefore the plan of the fort is irregularly polygonal. There are five entrances for this fort.

Early Bastions of Pulakeshi period are square and rectangle in shape. As it is a Giridurga and comparatively less in height. Outer fort appears to be circular in shape but it’s naturally built around the northern hill it’s a cluster of big boulders. It has gaps or crevices between stone joints which are filled by rubble packing. The stones are arranged on the edges making two faces leaving a hollow portion inside, filled with core of earth and rubble. Another structure which draws our attention is the use of large and medium sized blocks of red sand stone in the lower course of the wall and smaller ones in the upper courses.

The fort on the north hill has undergone renovation and reconstruction. There are lots of changes which can be observed. Fort wall on the western side next to circular Tipu’s bastion, towards left, in the same fort wall with loop holes in the fort wall with small gap in between. The western parapet wall differs in design; it has been skillfully filled with minimum fortification with maximum utilization of natural resources. Within the fort area are several remains of ruined buildings, temples, fallen pieces of sculptures, Tank and natural pond. A Dargah belonging to a later period can also be seen here. As it’s a Giridurga we don’t find Moat around the fort. This fort has been built on the edge of the hill. As we move further toward the entrance V. We find three Circular Barrel-like

\textsuperscript{18} El. Vol no XXVII, PP.4-9
structures; these are believed to be the granary. According to U.S. Moorty, these granaries are of later period. The interior of these granaries are deeper from the ground level outside, with strong circular stone foundation.

According to the survey undertaken, the entire fortification length is about nearly 1 K.M (937 meters) and the thickness of the wall is 1.20 meters. There are artificially built tank on northern part of fort and 3 small ponds, its cluster of boulders, to move above these boulders they have connected these boulders with stone slabs. Thus Badami alone as even today we can find two slabs.

Fig. 2.3 : Four Fortification at Badami

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19 U.S. Moorthi: personal interview at 3 days International workshop on Material culture, 11-13 April 2014, calibration with University of Exeter and NIAS, Bangalore, Jain University, at workshop on Material culture, Bangalore
Badami alone has four forts of different period

1. Pulakeshi fort of 6th century

2. Rastrakuta fort of 10 century

3. Vijayanagar fort of 14 century

4. Tipu fort of 18 century

Other than Badami we find Badami Chalukyan forts at Aihole, Pattadakal, Alampur, Huli, Incala, and Halasi.

**Halasi:** It is situated in Kanapur taluk of Belguam district. Ancient Palasika or Halasi is mentioned in Kadamba king Mrugeshaverma’s copper plate inscription Halasi was under their control (500 A.D.). We can trace the mud fort in ruin state. A. Sudara has traced that there must be a Palace area near the mound of soil nearby. Later this place was occupied by Pulakeshi-I. Later on it was under Chalukyan Administration. To the west of Halasi we find a place called „Rama Teerta” where we find Rama temple surrounding this temple. We find fort stone remains here and there. According to S.K Joshi this fort must have been renovated during Chalukyan Period.

**Huli:** Huli is a small village in Saudatti taluk of Belguam district. We find a huge lake towards north. We also find ancient hill fort in ruin state. On architectural basis, we can trace that, it belongs to Chalukyan period probably and it was an administrative centre. There are many Chalukyan temples nearby Huli Lake. Later these temples were developed
by Kalyani Chalukyas. In 1674, again this Huli fort was renovated during Chatrapati Shivaji time.20

**Inchala:** Inchala is in Belguam district. We find early Chalukyan temples here. To protect these temples we find a civilian fort around temples which have been renovated.21 Aihole, Badami, Mahakuta, and Alampur forts have been discussed in length in 3rd and 4th chapter along with diagram and line drawings based on actual measurements, supplemented by Photographs.

The Chalukyan devotion to the religious art and architecture is great Because of that we find hundreds of temples built by them at Aihole, Badami, Pattadakal and Mahakoota. Around the temple and the whole habitation we find a fort. By the middle of 8th century the power of Chalukyas declined. By the middle of 8th Century the Power of Chalukyas went into the hands of Dantidurga of Rastrakutas dynasty.

**The Rastrakutas**

From 757 AD for almost two and a quarter centuries, the Rastrakutas directed the destinies of the political and cultural life of the people of the Deccan. The Rastrakutas established their capital initially at Pratishtanapura (Paithan in Maharastra). Later Manyaketa or Malkhed which is situated in Chitapur Taluk at Gulbarga District in Karnataka became the capital. The rulers were very enlightened and noteworthy. Among them are Amoghavarsha-I, Dhrurva, Govinda III, Indra, Krishna III. They were genius in civil architecture.

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21 Ibid;
We find a fort on the left bank of the river Kagina. The craftsman and engineers were not only famous for building fort and fortification but also were well versed in carving out the monolithic shrines at Ellora and the caves at Elephanta. Their period also witnessed a steady increase in the construction of temples and Basadis. Many of the rulers
were active patrons of literature, art and architecture. Under them fine arts like dancing and painting also furnished. As Malkhed is located in peninsula and is surrounded by waters on three sides, it has considerably a natural defensive character. Probably this made the rulers to select it for their capital. Malkhed was subjected to a series of unspeakable destructions by the Cholas and later by the Muslims during the Sultanate and Moghul periods. The fort is built in the area closely surrounded by the rivulet on the east and south of the Kagina River on western side.

Naturally the river plays an important role in defensive mechanism from western, southern and the eastern side. The moat fulfills the need on the remaining part. The outer fort is irregularly polygonal in shape. The plan is semicircular with many rectangular bastions. Around outer walls there are around 39 Bastions, the wall is 3 meters and the wall rises to a height of 5 to 6 meters height near Bastions. But major portion wall is in ruins. During the rule of Mohammad I of Bahamanis, the fort must have been built with considerable modification by renovating the earlier fort. Within the fort we find Jumma Masjid and Kali Masjid. We can also find a peculiar structure inside. It’s just like bottle in Shape, wide at bottom and very narrow upwards.

Fig. 2.6: Ruins of Malkhed Fort
The top of the fort at the exterior edge is provided with many battement typical of Indo-Islamic style. The main entrance looking east wards has two bastions at the front and two in the middle, narrowing the space of entry. Further we have entrance I, II and III, later passage leads to two streets one leading to Juma Masjid and another path leads to Kali-Masjid.
The Rastrakutas fort of Malkhed consists of the complex, the palace area, mansion the temple, broken Hindu god”s sculpture, and few cannons of medieval period, which are not at all maintained. The Rastrakutas Empire came to an end in 973 AD during the rule of King Karka-II. The next powerful rulers of Karnataka were called Later Chalukyas.

**Chalukyas of Kalyana -The** imperial traditions initiated by the Chalukyas of Badami in Karnataka were continued by Chalukyas of Kalyana. This period of the Chalukyas of Kalyana was a period of cultural efflorescence. Tailapa- I was the first ruler who recaptured their lost power from the hands of Rastrakutas. Their capital at Kalyana (now known as Basavakalyana in Bidar District) is a doab region between Krishna and Thungabadra River. They have also built forts at Morkhid, Kalyana, Mangalavada (now in Maharashtra), and Lakkundi.

The fort of Kalyana Chalukya was modified from time to time. Kalyana was very prominent city from 10 century to 13 century (975-1290 A.D.). It played a politically important role in the history of medieval Deccan. They contributed original fort layout and major fortification activities using Hindu pattern. Later period with external incursions these witnessed a substantial alterations and modifications with Islamic style. Later Kalyana remained as the capital of the Kalachuris. With the invasion of Malik-Kafur in 1310A.D.It went into the hands of Muslims. Kalyana remained a small headquarter of Muslim feudatories of the Tughlaks, the Barid Shahis, the Mughals, the Marathas and the Nizams of Hyderabad.

This fort is not clearly visible from the ground level, but only from a distance of one and a half kilometers away. The fort is located at the lowest level in relation to the
surrounding area. This area has been very carefully selected, for it is not easily visible from distance. Fort of Kalyana consists of three concentric irregular fort-walls constructed and reconstructed in different periods. Innermost was of the Sultanate of Munhall period; and the outermost was probably of the later part of post Mughal period. The fort is almost oval in plan, which includes twelve circular bastions at regular intervals and some bastions are at unequal distances. Special features here are that bastions have only a parapet wall, and at the top of the bastions, in the centre place is a metal gun on the pivot. On the exterior side of the fort-walls is a moat of 30 m and 10mt deep. We find guard room from entrance I to entrance VI. Here we find a wooden door armoured with iron spikes for the entrance III. Other than this we find, magazines, pillared guardrooms, seven entrances, and Palace complex also known as Raj- Mahal.

**Hoysalas of Dwarasamudra**

The Hoysala dynasty ruled over Karnataka with Belur and Halibidu as their capital. They ruled from 11 century to 14th Century A.D. The important rulers were Vinayaditya, the Ballala-I, Vishnuvardhana, Narasimha-I, Ballala-II, Narasimha-II and Ballala-III. Very few forts belong to their dynasty.

We can mention about Halebidu fort which is in ruin state. It is situated in Belur Taluk of Hassan District. This fort consists of few surrounding villages like Bennegudda, Doorasamudra etc. Because of negligence today very few parts of fort can be seen here and there. The fort has been built with Black stone. Within the fort premises we have
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Hoysaleshwara temple, Kedareshwara temple, Jaina Basadis, Veerabadra Temple, Panchalingeshwara Temples and Nageshwara temple.

Vijayanagara Kingdom -Vijayanagar Empire was founded by Hari Hara & Bukkaraya in 1336 AD, under the able guidance of Sri Vidyaranya. Major parts of South India were ruled by them. Empire was very strong in its army wing like infantry, cavalry and elephantry, Vijayanagar ruler’s contribution in the form of Art, Dance, Music, Architecture, and Literature is great. They were equally good in religious and civil architecture. Vidyaranya directed the building of a city near Pampa- Kshetra and called it as ‘Vidyanagara in honor of the sage. As Hampi is located in a most rugged and hilly areas on the right bank of the Tungabhadra, at a strategic place. Taking into consideration of this suitable place of hills and valleys, it was effortlessly defensive in nature.

![Gateway of Hampi Fort, Hampi](image_url)

*Fig. 2.8: Gateway of Hampi Fort, Hampi*

*Source: www.millionlittlestiches.blogspot*
Filling gaps in between the huge rocks and hillocks which spread almost around the entire environs of Vijayanagara city were bridged with solid mass of stone walls that served as a framework of the impregnable defence wall system. The hills around Hampi are of granite of brown and grey to rich golden brown colors or red mixed brown. They have huge rocks and boulders weighing hundreds of tons. Fort references have been made by many foreign travelers or visitors like Nicolo-conti, Abdul Razak, Duarte Barbosa, and Nuniz. They refer about the fort, fort walls, gateways etc. There are many gateways to Vijayanagar like Kampli gateway, Sundur gateway, Hospet gateway, Kamalpura gateway, Mallapura gateway; Citadel area today is completely extant. Only some parts of this fort are now extant near kamalapuram and Kadirampuram. The fort plan is roughly oval shape which is extended towards east and west side. The thickness of the wall is about 6 m which is very thick. The core of the wall is made up of mud and pebbles. Special feature of Vijayanagar walls is that, high walls have built around important buildings, like mansion, private royal buildings like Ranga Mahal etc. There are huge gates around fort in different direction like Penugonda gate, domed gate, Bhima gate, Dakhani gate which is southern part of fort. The Talar Ghatta Gate, and Pan-Supari gate. Other Civil architectural monuments like defence wall, watch towers, canal, fort, fortification, tank etc. and even structural temples can be seen all over South India. But after Talikote Battle in 1565, the last rulers Tirumala and Venkata went to Penugonda in Andhra Pradesh along with huge wealth. They left behind glorian city Hampi unattended which was burnt and destroyed.

The Adil Shahis of Bijapur (1490-1686) - Due to internal disputes the Bahamani’s divided into 5 groups. Among them Yusuf Adil Shah, ruled from 1490-1510, made Bijapur
as centre for all his activities. They were contemporary rivals of Vijayanagar Empire. As Vijayanagar rulers were well advance in arms and armory Adil Shahis built one of the strongest forts in South India. It is almost in circular or semicircular shape. The whole fort diameter is more than 10 km. The height of the fort is about 20 feet. There are 5 gateways to this fort around it is a moat which is very deep. The fort has semi circular bastions, numbering 60 on the exterior at regular intervals. The fort wall including the bastions is made of ashlar masonry. Burj meaning Bastion or watch towers in Persian language are also found at regular intervals. To the north, there are main six gateways:

1. Macca Gate
2. Shahapur Gate
3. Bahamani Gate
4. Allapur Gate
5. Fateh Gate and
6. Diddi Gate.

Fig. 2.9: Parts of Bijapur Fort Wall

Source: www.tripadvisor.in
Each gate has distinctive features. They are internally connected to centre of the city by roads. In addition to these gates, essentially protective devices, there are three bastions, namely, 1. Malik-e Maidan gun Bastion. 2. Ali Burj and 3. Landa Quasab gun bastion.

Devanahalli fort - Devanahalli belongs to Bangalore rural district. It was under Palyagara from 16th century to 18th century. Later Hyder Ali captured Devanahalli and merged it with Mysore. The fort is in oval shape, there are 13 Bastions in circular shape. This fort is similar to southern fort of Badami. Field work done here at Devanahalli helped to understand the patterns of Tipu's time, Bastion, loophole, majority of architectural features are similar to Badami fort of Tipu.
Manjarabad Fort-Manjabad fort is a „vanadurga” surrounded by forest and beautiful landscape the fort is situated in Sakleshpura Taluk, Hassan District. The special feature of this fort is that it is in star shape. It is the only fort in star shape in Karnataka. Tipu Sultan
built this fort in 1792. This fort has been built by using stone on top and they have also used brick and cement (gare). The Gateways and entrance have beautiful arches and columns. Here also we find underground Magazine to store Arms and ammunition and around fort we find Moat. Since it is surrounded by forest it is very difficult to access.

Fig. 2.13 : Satellite picture of Manjirabad Fort

Source: www.googleearth.com

Fig. 2.14 : Interior of Manjirabad Fort, Sakleshpur

Source: www.holidayiq.com
Thus from the time of Mauryas to Tipu that is from 3rd century to the 18th Century AD almost a period of two thousand years witnessed the rise and fall of many dynasties. All the capitals and the sub capitals of dynasties are located in various districts of Karnataka. Effort in this chapter was to trace the growth of defence mechanism in Karnataka under various dynasties.