# Analysis

In the previous chapter, every picture of the locality in each of site has been described and pointing out their features. In this chapter, an attempt has been made to understand and interpret the data in terms of distribution of the sites, type, style, catchment and chronology.

3.1 Distribution of the Sites

i. Site Distribution

The site distribution analysis has been done on the basis of the present of the Malaprabha river channel in the lower reaches; altogether 32 sites (represented by 87 localities) are traced in the areas of both the banks (Map 3.1). Of these sites, 27 (76 localities) are located on the left bank and remaining 5 sites (11 localities) on the right bank of the river (Table 3.1).
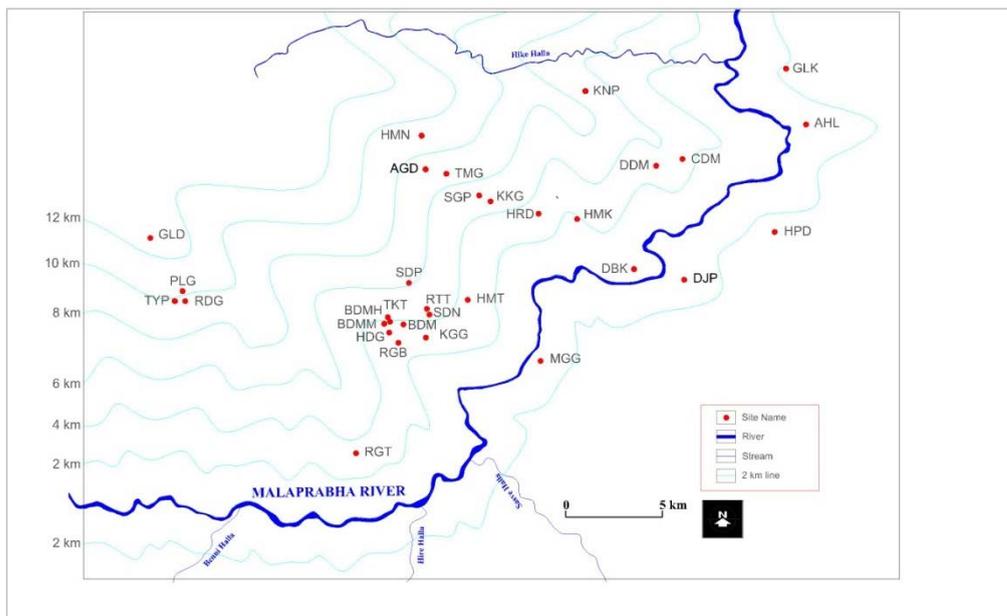
Map 3.1 Distribution of rock art sites in the study area

Along with the rock art sites, numbers of archaeological sites from the Palaeolithic to the Historical stages have been reported in the study area. Thus are

indicating the potential of the study area.

The distance of each of the site has been calculated from the Malaprabha river (Table 3.1 and Map 3.1).

Distance From River (Km)	Left Bank	Right Bank
0- 2	02	03
2- 4	11	02
4- 6	06	-
6- 8	03	-
8- 10	03	-
10- 12	01	-
12- 14	01	-
Total	**27**	**05**

Table 3.1 Site distance from the Malaprabha river

There are 24 sites located within six km of the distance of the river Malaprabha. There are no rock art sites found on the tributaries of the Malaprabha, except Khanapura rock art site which is isolated on the Hike Haḷḷa.

The site distribution pattern; indicate some significant features as follows:

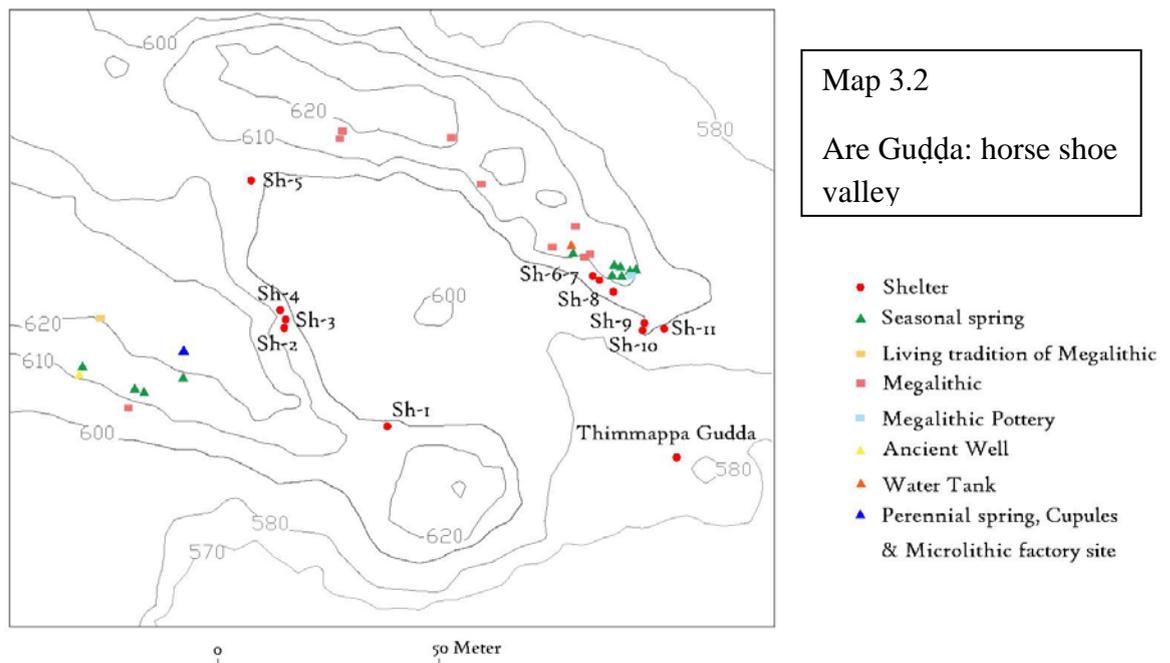a. An Ancient Route
b. Clusters

a. An Ancient Route

There are seven rock art sites (Huligemma Koḷḷa, Hire Guḍḍa, Kendur Kere Gondi, Surgi Phaḍi, Thimmappa Guḍḍa, Are Guḍḍa and Hamsanur), showing nature of linear pattern (Map 3.1.) and these all sites belonging to the Upper Palaeolithic/Mesolithic stage. Within the 12 km of distance all the sites are located and more or less 2 km distance in each site has been observed. The characteristics of these sites are as follows.

i. Rock paintings are on a cliff with minimum height of 30 m from the ground.
ii. These painting seem to have drawn to show the route to the river.

iii. These sites are located on seven hills separated by lowland (presently occupied for cultivation).

The landscape of the entire route is beset with hills and agricultural land alternatively. Such landscape is certainly good for hunting and gathering.

In the route, there is a particular picture that is most unusual of all the pictures, in the *āne phaḍi* of Are Guḍḍa. It is a simple drawing of roughly a trapezium containing thick large dots in three rows, in all eleven dots: five in the top row, five in the middle and one in the bottom row (Plate P31). It could point out the deep valley of horse shoe type or more so trapezium. In 11 shelters, five are in the one wing and six in the opposite wing. But, in this wing 5 shelters are in the upper zone but one is in the lower zone corresponding to the dots of the three rows located within the trapezium. Therefore, the trapezium dots are indicative of location of the shelters in the horse shoe valley (Map 3.2).

Map 3.2

Are Guḍḍa: horse shoe valley

- ● Shelter
- ▲ Seasonal spring
- ▬ Living tradition of Megalithic
- ▬ Megalithic
- ▬ Megalithic Pottery
- ▲ Ancient Well
- ▲ Water Tank
- ▲ Perennial spring, Cupules & Microlithic factory site

b.   **Clusters**

Apart from the ancient route sites, there are two major clusters and isolated sites in the study area.

i.   **Cluster-I**

It is located 10 km away from the left bank of the river Malaprabha. There are 3 sites within 2 km radius. The site of Pillugunḍu has yielded paintings

belonging to the Upper Palaeolithic/Mesolithic as well as the Early Historic stage. Other 2 sites are having the Historical paintings (Ramdevrugunḍu) and engravings (Tayavva Phaḍi). It is also noticed that an un-deciphered inscription at Ramdevrugunḍu site.

ii.   Cluster-II

The cluster-II is located 3 to 6 km distance from the river. There are 10 sites (comprised of 33 localities), located within the 4 km radius and they are Ranganātha Guḍḍa-Bādāmi, Horagina Durgamma Guḍi, Bādāmi, Taṭakoṭi, Bādāmi-ASI Museum Complex, Bādāmi-North-eastern hill, Siḍla Phaḍi, Rāmathirtha, Siti Ḍoṇe and Kannergavi Guḍḍa. All these rock art sites represent the Upper Palaeolithic/Mesolithic to the Historical period. It is noteworthy, without any gap. The landscape of this area is suitable for the hunting and gathering with the presence of many perennial pot holes, springs, seasonal springs and streams.

3.2   Natural Water Sources

Water is the most important need for human and also animal. The Malaprabha is the perennial river which is a main water source in the study area. Apart from the river, there are many natural water sources available at varying and reasonable distances e.g. perennial and seasonal spring, lake, tank and stream (Table 3.2). Most of the localities are having water sources nearby i.e. within the distance of 100 m.

Table 3.2 Natural water source	Sprigs		Streams	Lake	Tank
	Perennial	Seasonal			
	26	24	03	01	01

3.3   Elevation of the sites

From the natural ground level of surrounding area and location of the rock art sites suggesting the utility of the landscape. In study area, 58 localities are situated on the 0- 60 m height from the ground level and remaining are above the 60 m height (Table 3.3).

Elevation (In meter)	0-20	20-40	40-60	60-80	80-100	100-120
Shelter	15	11	09	04	01	03
Cliff	04	05	07	01	03	01
Bolder	03	-	-	-	-	-
Bedrock	03	-	01	-	-	-
Total	**25**	**16**	**17**	**5**	**4**	**4**

Table 3.3 Elevation of the rock art sites from the natural surface

People used to climb such heights for the hunting and gathering. After reaching such height certainly they can get a view of the landscape for the subsistence. Even today, the present day hunters use to climb such height for hunting. In view of this point, in the past also they had selected such localities for depicting the rock art pictures during their leisure time.

3.4 Depiction of the pictures

The pictures are executed on the wall, ceiling, cliff, boulders and bedrock (Table 3.3). But, the pictures on the wall are most common and the remaining, at the other parts. This is natural because it is easy to draw a picture on the wall. Generally, ceilings are at high level. Obviously, it is too difficult for executing such pictures (e.g. Plate P24, P25, P30).

However, there are rock paintings on the middle part of steep cliff, very difficult to reach (e.g. Plate P65, P66, P67, P68, P69). The picture depicted cliffs are more located at minimum 30 m height from the natural ground level. The wild animals of earliest stage are more common e.g. deer, antelope, boar, rhinoceros, wolf, bison, cat, hyena. These all are depicted in red-ochre and more are in linear style except few. Among the human figures; 'Bādāmi Style of human figures' appear especially in this series e.g. at Hire Guḍḍa (Plate P26), and Hamsanur (Plate P33). Usually, the engravings are scarce on the bedrock; perhaps the creators did not like that art being treaded upon by people or animals.

All the Pictures are studied on the basis of their type, style, appearance and individual.

a. Type

The rock art is divided into two types i.e. pictograph and petroglyph. According to the sub type of the picture distribution in localities have been tabulated below (Table 3.4).

Table 3.4 Sub type-wise picture distribution

Type	Localities	Type	Localities
Painting	48	Painting, Engraving & Cupule	02
Engraving	13	Painting & Cupule	11
Bruising	01	Engraving & Bruising	02
Cupule	05	Engraving, Bruising & Cupule	02
Painting & Engraving	03		
Total	87		

The pictographs are reported from the all part of the study area. The paintings are found most of the localities (Table 3.4), these represent without any gap of cultural stage from the Upper Palaeolithic/Mesolithic to the Historical period. But, petroglyphs are not found in the Upper Palaeolithic/Mesolithic stages of the rock art pictures. Bruising are rare in the study area e.g. at RanganāthaGuḍḍa-Taminhal (e.g. Plate P50) and Kannergavi Guḍḍa (Plate P51, P52). Among the eleven engraving sites; some are belonging to the Iron Age (i.e. RanganāthaGuḍḍa-Taminhal, Taṭakoṭi (Plate P56) and Hire Guḍḍa (B207) but, remaining is of the Historical period. Cupules appear on all kinds of rock surface i.e. sandstone, granite and basalt in the fourteen sites have been noticed in the study area.

The pictographs are found all over the study area from one end to the other. But the petroglyphs are found in the eastern part. However, some of that extend into pictograph area in the west Tāyyavva Phaḍi site as well. Therefore, the region is an overlap; the significance of this distribution pattern has to be ascertained. It signifies either the movement of people from one area to the other or suggests that the settlements of different communities were coming from outside. This has to be ascertained when their habitation sites are explored and excavated. Such communities maybe having particular tradition of rock art: pictographs or petroglyphs.

b. Style

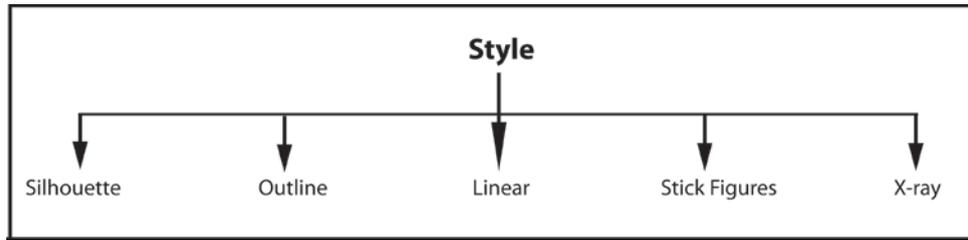In the study area following picture styles have been noticed (Fig. A02).

Fig. A02 Styles of rock art pictures in the study area

c. Nature of Appearance

The pictures are classified on the basis of their appearance i.e. individual figures, dyad, cluster, panel and scenes (Fig A03).
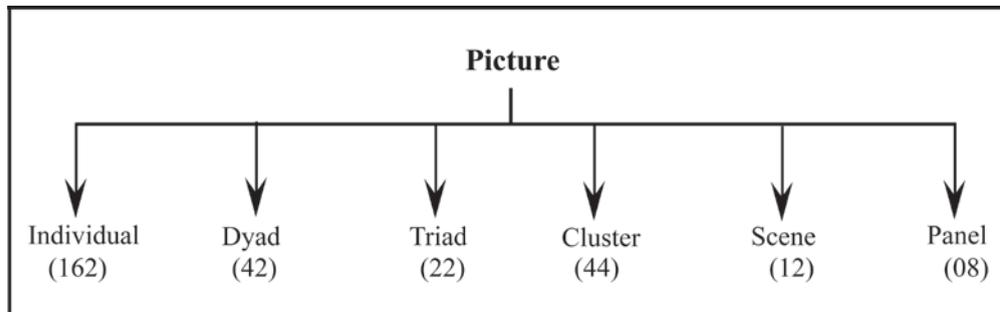

Fig. A03 Classification of the pictures on basis of their appear

The depictions of individual pictures are having maximum numbers (162). Eight panels (e.g. Plate P23, P31, P42, P44, P47a, P70) have been noticed, these all belonging to the Early Historical period. Beside this, 12 scenes have been noticed from the Upper Palaeolithic/Mesolithic, Neolithic and Iron Age stage (e.g. Plate P24, P54, P67)

d. Independent Figures

For the analysis of the pictures depiction has been counted independently and that has been classified into the six categories (Table 3.5).

Table 3.5 Independent depiction of the pictures

Animals	Humans	Deity	Flora	Objects	Designs	Total
294	295	07	07	156	63	823

288

There are total 823 pictures depictions have been noticed in the study area. Animal (294) and human (295) figures are shown numerically more or less equal. The depiction of various designs (65), objects (156) and flora (7) has been noticed so far (Table 3.5).

i.   Animal figures

The depiction of animals in rock art is indicates human-animal relationships in the past. Animal picture depiction is most common in the rock art. In the study area total 294 animals depiction are noticed. For these depictions scientific classification has been made; as follow (Fig. A04).
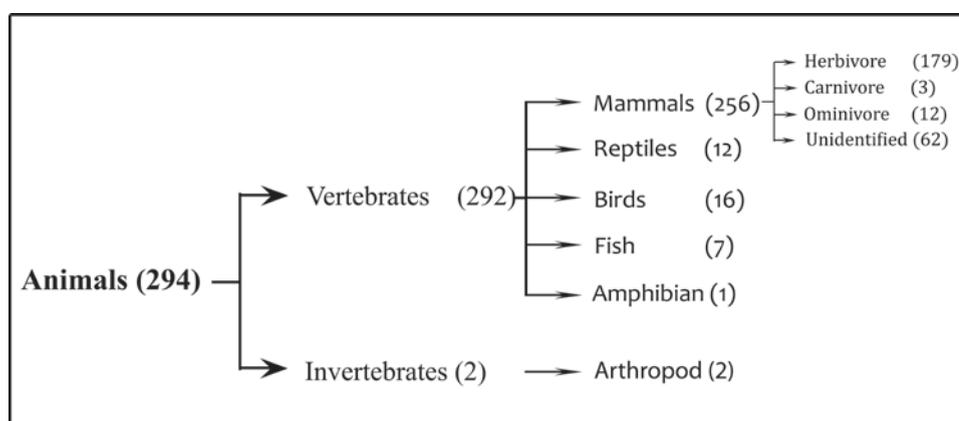

Fig. A04 Depiction of animals in the study area

Thirty-four categories of animals are identified in the study area, thus indicating the existence of animals in profusion and varieties in the area. According to the classification of the depiction of animal species has been done (Table 3.6).

Table 3.6 Category of the depiction of the animals in the study area

Mammals	Reptiles	Arthropods	Fish	Birds	Amphibian	**Total**
22	03	02	01	05	01	**34**

Investigator has noticed many wild animals during his field work e.g. spotted hyena, fox, wolf, wild boar, deer, porcupine, monitor lizard, rabbit, wild mouse, wild cock, and snakes. In the study area depiction of wild animals is more in the Upper Palaeolithic/Mesolithic period. In the later stages frequency is very low. On the other hand domestic animals are totally absent in the Upper Palaeolithic/Mesolithic stage. The depiction of domestic as well as protected animals (cattle, horse, and elephant) is more common in Historical period.

I. Mammals

There are 256 depictions of mammals are noticed in the study area (Plate A04). Most of the mammals are identified.

a. Identified mammals (194)

Identified mammals are classified on the basis of their food habit.

i. Herbivore

Table 3.7

Herbivore animals

Sambar	28	Donkey	03
Spotted deer	05	Camel	01
Antelope	06	Rhinoceros	01
Wild Boar	27	Giraffe	03
Bison (gaur)	08	Elephant	06
Cattle	77	Horse	12
Goat	02	**Total**	**179**

Sambar (*Cervus unicolor*) – The deer is the most commonly depicted animal in Indian rock art and in the present study area also. (B008, B052, B0140, B183, B188, B208, B228, B230, B237, B251, B266, B316). The deer is depicted both in painting (22) and engraving (2). Most of the deer (17) pictures are in linear style and the X-ray style depiction of deer is observed at Huligemma Koḷḷa (Plate P67), Hire Guḍḍa (B205).

Spotted deer *(Axis axis)* **-** Spotted deer is reported from Bādāmi North-eastern hill (Plate P25) and Thimmappa Guḍḍa (Plate Plate P30, B236). They all are belonging to the Upper Palaeolithic/Mesolithic stage.

Antelope (*Antilope cervicapra*) – Antelope is also known as blackbuck. Six antelope depictions are noticed (B011, B070, B135, B204, B238, B266). They all are belongs to the Upper Palaeolithic/Mesolithic stage.

Wild Boar (*Sus scrofa*) – This animal is always depicted in an aggressive form. Boars are shown frequently in the rock art of the Indian subcontinent in general and they dominant in the Vindhyan range. In the present study area twenty seven depictions are noticed (B001, B002, B013, B052, B054, B055, B140,

B141, B149, B193, B237, B281, B306). They are prominent in linear style (21) and in the X-ray style (6) figures are noticed. They are found in Horagina Durgamma Guḍi in bi-chrome (Plate P65), Kannergavi Guḍḍa (B149), Hire Guḍḍa (Plate P26) and Hamsanur (Plate P33). The depictions of these animals are belonging to the Upper Palaeolithic/Mesolithic stage.

Gaur (*Bibos gaurus*) –Gaur is also known Indian bison. There are 9 depictions of the gaur (e.g. Plate P67, Plate P71). All those are drawn in red-ochre colour.

Cattle (*Bos indicus*) – The cattle are most common depiction in the rock art. The subject matter of cattle is depicted highly naturalistic way. The depiction of cattle is more frequent (77) compared to other animals. They are totally absent in the Upper Palaeolithic/Mesolithic stage. Among the cattle; the evidence of cattle is culturally from the Neolithic (e.g. Plate P37, Plate P38, Plate P41, Plate P51), Iron Age (e.g. Plate P53 Plate P54) and the Historical stage (B014, B086).

Goat (*Capra hircus*) – The depiction of the goat is found from two sites i.e. Pillugunḍu (B002) and Siḍla Phaḍi (B135); both are in red-ochre.

Donkey (*Equus asinus*) – The donkey is one of useful animals in transportation and in subsistence of human. There are only three depictions are found in two sites at Kannergavi Guḍḍa (Plate P66) and Hire Guḍḍa (Plate P68), all three depictions are in red-ochre and perhaps of early stage.

Camel (*Camelus dromedarius*) –The depiction of the camel in engraving is found at Ranganātha Guḍḍa (Plate P55). The camel probably reported first time in the south Indian context.

Rhinoceros (*Rhinoceros unicornis*) – The depiction of the rhinoceros is rare in rock art of south India. The depiction of the rhinoceros is found only at Hire Guḍḍa (Plate P27). It is shown with single horn. There are two rows of three squares of varying dimensions on the body of the animal probably indicating the surface features of the thick skin of the animal. The rhino appears with other prehistoric pictures like wild boar, gaur and human figures (see B193, B199).

Giraffe (*Giraffa camelopardis*) – The depiction of giraffe is reported at Pillugunḍu (B002c), Ranganātha Guḍḍa (B052zf) and Horagina Duggamma Guḍi (B055)

sites. Perhaps this is the first evidence of giraffe depiction in Peninsular India.

Elephant (*Elephas maximus*) – The depictions of wild elephants are absent in the study area. They appear in the Historical stage. Total Six depictions are found from two sites i.e. Bādāmi ASI Museum Complex (B100) and Huligemma Koḷḷa. They all are depicted in engravings and belonging to the Bādāmi Chalukyan period. An unusual depiction of an elephant and bull (*gaja-vrishabha*) conjoined animal reported (B101, B186) and it indicates a harmonious relationship of the animals. It is an artistic motif of the period.

Horse (*Equus caballus*) – The horse depiction is noticed at Pillugunḍu (B002), Taṭakoṭi (B078, B083), Doḍḍa Joger Phaḍi (B171, B171), and Are Guḍḍa (Plate P43). At Doḍḍa Joger Phaḍi site the horse is depicted in unique way. The first rider is facing towards the right and the second rider is shown in side profile (Plate P45). Both the horses are shown with an oval shaped circle and a series of short strokes along the outline of the body (B172). And a group of people: two horse riders, one playing on a musical instrument; another holding an object in the right hand and the left raised up almost horizontally; the front lower part of horse rider there is an oval shaped circle with frill all along the border and by the right side of the horse (B172). Horse and human beings are so common in the Historical period.

ii. Carnivores

Tiger (*Panthera tigris*) – There are two depictions of tiger at Thimmappa Guḍḍa in red-ochre (B236) and Bādāmi ASI Museum Complex in engraving (B097). The first depiction of tiger is shown along with a spotted deer, which is shown as upside down; it is shown as attacking the deer. The engraved tiger is shown with a set of oblique lines. On the top of the engraved tiger, there is one human head is also shown. This incomplete engraved figure is of the Early Historic period.

Lion (*Panthera leo*) – The depiction of lion is not found in the prehistoric pictures. But, the lion in black from Siḍla Phaḍi (B128); such depiction generally found in the Vijayanagara composite pillar. It appears with a mythical slanting mermaid (?) figure in white.

iii. Omnivore

Table 3.8 Omnivore animal	Wild Cat	Hyena	Wolf	Wild Dog	Dog	Fox	**Total**
	02	01	01	02	05	01	12

Wild Cat (*Felis silvestris*) – The Wild cat is depicted with a nude human at Hire Guḍḍa (B202) in red-ochre.

Striped Hyena (*Hyaena hyaena*) – The striped hyena has been reported at Huligemma Kolla (Plate P67 or B188). Perhaps this is the only evidence of striped hyena in the rock art of the Indian subcontinent.

Wolf (*Canis lupus pallipes*) – Only one depiction of the wolf has been noticed and it is shown in the position of howling (B188).

Wild Dog (*Cuon alpinus*) – The two wild dogs are depicted at Huligemma Koḷḷa. One is engraved (B185) and the other one is painted in red-ochre (B189).

Dog (*Canis familiaris*) – There is an evidence of dog at Pilluguṇḍu (B010), Ranganatha Guḍḍa (Plate P50), Bādāmi Museum Complex (B103), Kannergavi Guḍḍa (Plate P51), Doḍḍa Joger Phaḍi (B175). The depiction of such pictures is from the Neolithic to Historical period.

Fox (*Vulpes bengalensis*) – Fox (?) looking at the plant is painted in red-ochre (B253). This is the only evidence of fox from the study area.

b. Unidentified mammals (62)

Sixty two mammals are yet to be identified.

II. Reptiles

Tortoise (*Testudinidae*) – There are four depiction of tortoise reported at Ranganatha Guḍḍa-Bādāmi (B052zh), Are Guḍḍa (B237), Huli Phaḍi (B294) and Ranganātha Guḍḍa-Taminhaḷ (B036). Three tortoises are in painting and one is engraved.

Crocodile (*Crocodylinae*) – Two depictions of crocodile are found at Hire Guḍḍa (Plate P68) and Are Guḍḍa (B265). The crocodile is reported less in number in Indian rock art.

Serpent (*Serpentes*) – There is a few naturalistic depictions of serpents found at Pillugunḍu (B002p) and Siḍla Phaḍi (B129).

III. Birds (Aves)

In the study area, birds such as ostrich, peacock, duck and crane birds are depicted as follows.

Ostrich (*Struthiocamelus*) – The depiction of ostrich is found along with other prehistoric paintings like rhombus from Kendur Kere Gondi site (Plate P28 or B215).So far there is no evidence of ostrich in any form in South India. But, it has been reported in the form of egg-shell pieces, beads, etc. from few sites at Patne in Maharastra (Sali1984), Khaperkeda in Madhya Pradesh, Katoati in Rajasthan (Blinkhom *et al.* 2014) etc.

Peacock (*Pavo cristatus*) – Three depictions of peacock are reported at Bādāmi ASI Museum Complex and Are Guḍḍa. Two are in engraving (B096, B099) and one is in painting (B258).

Duck (*Anas platyrhynchos*) – Two Ducks are noticed in the study area (B096, B129).

Crane (*Gruidae*) – The depiction of crane catching a fish, along with five fishes are noticed (Plate P40).

IV. Amphibian

Frog (*Anura*) – The frog is shown in a naturalistic style in red-ochre at Kendur Kere Gondi (B218).

Fish – seven depictions of fish has been observed at Bādāmi ASI Museum Complex (B109), Huligemma Kolla (B190) and a crane catching a fish along with five fishes in white colour is found at Huli Phaḍi (Plate P40).

V. Arthropod

Millipede (*Diplopoda*) – Only one depiction of the millipede noticed at Kannergavi Guḍḍa (Plate P66). It is remarkable because so far such evidence not found in rock art.

Crab (*Brachyura*) – The depiction of crab (B287) is engraved at Khanapura SP site.

II. Human Figures

A total of 295 human figure depictions have been observed from the study area (Table 3.9). Out of these only 12 figures of in petroglyph and rest are in pictographs.

	Pictograph	Petroglyph	Total
Male	19	04	23
Female	13	01	14
Unidentified	251	07	258
Total	283	12	**295**

Table 3.9 Classification of gender

These all figures are divided on the basis of their style.

- **Badami Style of Human Figures**

A typical depiction of human with beard, eyes, and hairs on the head are noteworthy features of the study area. These styles of figures are found from 4 sites at Ranganātha Guḍḍa –Bādāmi (Plate P23), Bādāmi (B068), Hire Guḍḍa (B193, B201 B202, B205) and Hamsanur (Plate P33) sites. Such style is unique features of the study area; therefore it is labeled as "Prehistoric Bādāmi style of human figures".

- **'S' shape**

'S' shape type of figures reported at Surgi Phaḍi ((B226), Thimappa Guḍḍa (Plate P29).

- **Stick figure**

Stick figures are noticed in many sites (e.g. B002d, B002f, B052d, B052i,

B164, B241).

- **Nude figure**

The depiction of the nude type human figures is found in the study area (Plate P39). Such types of depiction are found from the eastern part of Karnataka and Kurnool region of Andhra Pradesh.

The human figures have been depicted as standing in row with hand in hand at Are Guḍḍa (B257). Such figures are also seen in many other rock art sites in other parts of the country. The proportion of human figures is the largest amongst the rock paintings of Ranganatha Guḍḍa (Plate P23), Thimmappa Guḍḍa (PlateP29) and Hamsanur (Plate P33). Human figures engaged in leisure activities from Dodda Joger Phaḍi (B170), Are Guḍḍa (B273) is noteworthy. A few of the compositions have sexual association. A picture of two male figures one behind the other; one of them having his private part erect behind an animal (horse?) and some graffiti on the back and the body of the animal. The other male is having his organ erect (B078).

The depiction of the human figures are in silhouette (120); stick figures (72); linear (54); outline (39); partially silhouette and linear (1), partially silhouette and outline (7) method was used. There are 196 in red-ochre; 32 in white and remaining are in black and yellow colour.

- ❖ **Gender**

Identification of human sex is challenging in the rock art. An attempt has been made to observe some of the features to identify the sex of human being.

a. **Male**

There are twenty three male figures (B0052c, B057, B078, B125, B145, B146, B193, B202, B205, B281, B282) have been identified. Of these five figures appear to be of the Upper Palaeolithic/Mesolithic stage and three belonging to the Neolithic–Chalcolithic stage and reaming are of the Early Historical stage.

b. **Female**

All together 14 female figures have been identified. The depiction of female figures in the Upper Palaeolithic/Mesolithic stage and noticed at Ranganātha Guḍḍa – Bādāmi (Plate P23) and Hamsanur (Plate P33) sites. Nine figures belong to the Early Historical period.

c. Unidentified Human figures

Among the 295 human figures only 37 are indentified their gender but 258 are yet to be identified.

III. Deity

Seven deities have been noticed and these belong to the Historical and Late historical stage from some of these sites (e.g. B015, B017, B098, B162 B170).

IV. Objects

There are 156 objects depicted in rock art e.g. weapons, shield, sword, musical instruments, ornaments. In the study area, the objects are more in number during Historical period.

V. Flora

There are 7 depiction of flora has been observed so far in the study area. But these are all belonging to the Historical period.

VI. Designs

Perhaps, the designs were used in connection with some tradition of belief for curing certain diseases especially with regard to cattle and also for curing the mental disorder of humans. Rarely plant depictions are found in the pictures.

3.5 Colour

Red-ochre is dominant colour among the colours which were available in the rock art pictures in the study area and remaining colours i.e. white, black and green.

- **Bi-chrome**

Application of bi-chrome is seen in four pictures such as wild boar in red-ochre and white colour (Plate P65) and human figure and cattle in red-ochre and green (B167), human in red-ochre and white (B277) and rhombus in red-ochre and white (Plate P36).

3.6   Present Condition

Out of the pictures in 87 localities about 45% are in good condition and the remaining are damaged owing to

a. Burning and cooking activities
b. Seepage of rain water
c. Unusual happenings such as birds' constructing nest over the pictures
d. Tree branches on the painted wall
e. Activities of local people