CHAPTER II

HISTORICAL AND SETTLEMENT GEOGRAPHY OF SOUTHERN KARNATAKA

A) PHYSICAL AND ECONOMIC GEOGRAPHY OF SOUTHERN KARNATAKA

Three geographic regions may be distinguished in the area under study:

1. The Malnad (Hill country)
2. The semi-Malnad (an intermediate zone)
3. The Southern Maidan (The plains)

(I) THE MALNAD - This is the mainly forested, hilly country lying to the East of the Ghats' edge and west of the boundary marked by the sharp change from a gently rolling open plateau to more, hilly, tree-clad country. The width of the Malnad varies greatly since both the deeply dissected Ghats' edge and the eastern margin have many curves and flexures. The normal range is between 48 and 60 km, but it is only 5 km at Sakleshpura where the headwaters of the Netravati have cut the ghats' edge back and are about to capture the waters of Hémavati.

The Malnad south of the Birur-Bhatkal line is higher than in the north, being predominantly upraised above the main plateau level. The hills in the Southern Malnad reach 900-1200 m in considerable areas as compared to average heights of 600-900 m in the Northern Malnad. In the south, erosion by west-flowing rivers into the higher country has been sharper and deeper than in the north producing spectacular gorges and ridges west of Mercara (Coorg district). Even the east-flowing rivers, e.g. the Kaveri flow in rather narrow valleys and cut into steep-sided often conical hills.

The Malnad is characteristically a region of high rainfall, with a peak in July under south-west monsoon conditions. There is a contrast, however, between the western parts which commonly receive more than 250 cm and the eastern parts, the leeward side, which in certain areas receive below 100 cm between May and October. As a result, the traditional
Malnad rice and spice economy is seldom subjected to crop failure in the west but commonly in the east.

The mean monthly temperature varies between 20 °C and 25 °C all the year round being slightly cooler than the coastal region owing to altitude.

The Malnad particularly on the lower slopes of the Western Ghats is thickly forested. Here, in the wet, evergreen zone, tall hardwoods predominate. The Middle Zone of the Malnad contains teak, rose-wood and laurelwood. On the eastern margins are the intermittent remnants of the zone of frequent occurrence of sandalwood, an area of tropical, moist, deciduous forests. Bamboo clumps are common on margins of streams. Some of the bamboo cover may be a legacy of shifting cultivation practices.

The Malnad economy is hinged on small one-crop, rain-fed terraced paddy fields. Reliable rainfall ensures adequate returns save on the Eastern Margins in years of inadequate or irregular precipitation. In many parts of the Malnad area betel leaves, pepper and cardamom are also grown in addition to the subsistence crop. The forests serve both as a source of leaf-manure and as pasturage for cattle, particularly buffaloes which are found in large numbers.

(II) THE SEMI-MALNAD:- This runs north to south along the entire length of Karnataka State immediately to the east of the Malnad proper. In terms of configuration, the semi-Malnad is the Maidan for undulating high plains predominate. But the proportion of woodland and many features of climate and agricultural economy offer conditions intermediate between the true Malnad and the true Maidan. The width of the semi-Malnad varies between 30 and 60 km and approaches the latter limit in the area south of Mysore city.

Typically the semi-Malnad is a rolling plateau, a little more dissected than the Maidan. The more dissected relief permits tank irrigation.

The southern portions of the semi-Malnad are, on the average higher, in the range of 800-900 m than the northern portions which stand at an average height of 600 m.
Around Chikmagalur the semi-Malnad reaches a height of over 1000 m. The landscape includes deciduous forests but there are areas of almost continuous occupation by tank country as in the Yagachi basin between Belur and Chikmagalur (several settlements in this area date to the 9th century AD). Such tank country resembles that of the main part of the southern Maidan, but has an appearance of more luxurious growth and the hill slopes are tree-clad in contrast to the bare granite or tumbled boulders common in most parts of the southern Maidan.

The semi-Malnad has red soils for the most part. In the western parts of Mysore district a distinctive belt of brown clay soils exist. Under moderate conditions of rainfall and in areas newly leared of forest cover these have considerable depth. On the drier margin and given flat ground, a soil similar to the black cotton soil of the Northern Maidan develops from these brown clay soils.

The semi-Malnad enjoys a rainfall ranging between 50 and 90 cm between May and October, with peaks in May (significant in the extreme south, under the influence of pre-southwest monsoon conditions), in July (under the influence of the south-west monsoons) and in October (under retreating south-west monsoon conditions).

The broad pattern of seasonal temperature rhythm is similar to that of the coastal region and the Malnad ranging between 20 C and the 30 C.

Rice is the most important crop of the semi-Malnad but ragi and jōla are also grown to a considerable extent. Spices are also grown. Pulses and oilseeds are other important crops. The southern part of the semi-Malnad shows affinity with the kār-rāgi-oil seeds-pulses area of the south-western maidān, south of Mysore.

Hassan district in particular, and the semi-Malnad in general, is marked by high densities of cattle population. In this respect too, it is a continuation of the southern Maidān.

(III) THE SOUTHERN MAIDĀN.- The configuration of the southern Maidān is of a rolling plateau relieved by boulder-crowned granite hills. It is framed by high ground in
the shape of the letter H. The western leg of this letter is the eastern edge of the Malnad, at the height of 900-1000 m. The eastern leg is the line of charnockite or granite hills from the Bilirangan Hills south of Kollegal measuring up to 1700 m, northwards through Ramanagaram to Madhugiri and Pavagada (1000-1200 m), which merge in the northwest with the ore-bearing hills of the Dharwar series. The crossbar of the letter H is the clearly identifiable belt of high ground at 900 m between Ramanagaram and Hole Narsipur. The southern part of the letter H encloses the main part of the Kaveri basin though the crossbar does not form the watershed between the Tungabhadra and the Kaveri. The Northern bay of the letter H contains much plateau surface at the heights of 600-700 m which drains partly to the south to the Kaveri and partly to the north to the Vedavati-Tungabhadra. This low ground is broken by important sets of minerals bearing ridges, mainly in the Dharwar series but composed of granite in places. One series of interrupted ridges run from Chiknayakanakallu (Tumkur district) to near Davangere (Chitradurga district) to the Dambal Hills in the Northern Maidan. Another set of ridges runs from near Krishnarajapete (Mandya district) to sweep Northwestwards out of the southern maiden at Honnali (Shimoga district). East of the letter H, the 900 m plateau surface is seen in the highest parts of Bangalore. It is continued in the north in the raised rim formed by 2 systems of north-south gneissic hills. The first runs from Gudivada to near Chikballapura (Kolar district) and the second runs due south with interruptions from east of Bagepallli almost to the State boundary in Bangarpet taluk (Kolar district), forming important masses of boulder-strewn hills west of Chintaman, of Kolar town, and of Bangarpet. North of Nandi, there is a sharp break of slope to the middle Penner basin. To the east and south of the maidan, the plateau surfaces are being actively and sharply dissected by tributaries of the main rivers at low levels in the plains of Andhra Pradesh and Tamil Nadu - the Palar and the Ponnaiyar.

The southern Maidan is a region of cool and equable temperatures ranging from 10 C - 20 C in winter and 20 C and 30 C in summer. The rainfall is sparse and variable ranging between 50 cm and 90 cm with a main peak in October and a subsidiary peak in May. The early May peak is of importance to agriculture since an early "Kär" crop of rāgi and jowar is sown with the early rains. In the eastern parts of the southern Maidan however, the main crop is grown in July and the May peak is insignificant. There the October peak under retreating south-west monsoon conditions is the principal peak. The
western fringes of the southern Maidan have a rainfall regime similar to the semi-Malnad with peaks in May and July, the latter being more important. It enjoys reliable rainfall and has a high proportion of irrigated land depending on minor tanks, which even out minor fluctuations in rainfall.

The broad vegetation zones covering the southern Maidan are tropical thorns over the central and eastern parts and tropical dry deciduous forests in the southern and western parts. The distribution of forests of all types shows a strong concentration on ridges and residual hills above the main plateau surfaces. Shrubs exist mainly on the broad flat plateau tops and are used as rough pastures. East of the ridges between Kanakapura and Tumkur and further east from Bagapalli to Bangarpet these shrubs cover over half the total area.

The southern Maidan has predominantly red soils which vary greatly in texture and mineral content. The soils vary according to topography, with poor gravelly soils in the area of residual hills and the boulders in the east; immature forest soils, coarse, but with some humus in the better clad hills of the west. The scrubby plateau tops have generally coarse, sandy or gravelly soils overgrazed, eroded and poor in humus. These are generally black and fertile on first clearance but lose fertility very rapidly. Mixed red and black soils occur in the north-central areas and in the southern parts of this region. Their distribution coincides with flat areas within or near the margins of the drier rainfall regions.

The proportion of uncultivated to sown lands is very high commonly 50% but going up to 90% in Pavagada, Gubbi (Tumkur district) and Kollegal (Mysore district). Pasture lands account for about half the uncultivated lands. Dry fields account for the greater part of cultivated lands and are used largely for growing ragi over most of the region usually intersown with a line of mixed fodder jowar along with pulses. Wet lands are used for the main crop, paddy, or for sugarcane. Tank-fed or well irrigated gardens yield coconut, areca, betelvines, pepper, etc.

Given the high proportion of pasture lands, livestock densities are strikingly high in the southern Maidan. They are concentrated in the areas adjacent to the semi-Malnad and in the south-central and eastern parts. It is perhaps related to the greater demand for
plough teams on the red soil. Greater availability of pasturage and a long tradition of stock-breeding are other factors accounting for high stock densities. Sheep and goats account for a large part of the livestock of southern Maidān, particularly in the southern parts. In places, they outnumber cattle in stock units.

B) POLITICO-GEOGRAPHICAL UNITS

The epigraphic record for our region mentions numerous politico-geographical units. These references have been enumerated chronologically in Appendix I.

The seminal work of Subbarayalu on the nāḍu in the Cōla dominions*1 have raised several issues for discussion:

(i) The location of a nāḍu vis-a-vis water courses.
(ii) Relationship between the area of a unit and the existence of reliable sources of irrigation.
(iii) Does the first reference to a new unit imply its recent creation?
(iv) The nature of a nāḍu - whether a peasant agrarian unit or an administrative unit?

In addition to these, our sources raise a further issue. A glance at Appendix I clearly reveals a change in the nomenclature of macro-units of territorial organization in the eighth century. While the inscriptions of the earlier period refer to these units as rāṣṭra, viṣaya and deśa, those of a later period use the term nāḍu with a numerical suffix in the majority of cases. This change is all the more striking in the case of such units as Pumrāṣṭra*2 which came to be designated as Punnāḍu-6000*3 or the Sindhuthaya rāṣṭra*4

*3 EC III (new ed) Nj 129; EC IV (new ed) Ch 115. *4 EC VI (old ed) Kd 162
which is replaced by references to Sinda nādu-8000,*5 or Marugāre rāṣṭra*6 which came to be known as Marugāre nādu-300.*7 The significance of numerical suffixes and the causes of this change in nomenclature will also be studied.

Identification and mapping of the nādu in Cōlamandalam and in Naṇuvilnādu led Subbarayalu to the conclusion that nādu did not have natural boundaries in the majority of cases. Only the major perennial rivers—the Kāvēri and the Penner formed boundaries to the nādu abutting them. All other minor rivers and distributaries had nādu lying on both banks.*8

The area of the nādu varied from twenty five square kilometres to 768 square kilometres. In most cases the bigger nādu are found in relatively less fertile territory and on the fringe of inhabited space in both Cōlamandalam and Naṇuvilnādu. Fertility and irrigation conditions also determined the number of villages it contained. The deltaic nādu thus had a larger number of villages than those higher up the Kāvēri river.*9

In the area under study identification and location of nādu is more difficult than in the Kāvēri delta since few settlements are referred to in the inscriptions and of these many are unidentifiable. Wherever evidence permits, however, it would seem that the basic characteristics of nādu in southern Karnata were similar to those in the Cōla dominions.

The boundaries of Pumrāṣṭra in the sixth century AD seem ill-defined. The Māmbalḷi copper plates describe it as being "adorned by the Kāvēri and Kapini rivers, with forests lining the banks of the two rivers which included plantain, areca-nut, coconut and panasa trees, and sugar cane and betel vines". *10 From this it would appear that this unit

*5 ASMAR 1920, p.24.
*6 K.V.Ramesh, Inscriptions of the Western Gangas, pub by ICHR, New Delhi, 1984, No.16.
*7 Ibid, No.61
*8 Y.Subbarayalu, op.cit.,p.22.  
*9 Ibid, pp 21-22
*10 EC IV (new ed) Yl 167.
lay athwart both the Kāvēri and Kapini rivers. Pumrāṣṭra continued to exist albeit with a new name Punnāḍu-6000 in the eighth, ninth and tenth centuries. However ninth century records indicate that a sub-unit, Ėdenāḍu had come into existence. *11 This seems to have included settlements on the right bank of the Kabbani river in the Nanjanagūḍu and Chāmrājnagar taluks. Similarly Ėdettore ēnadu-1000 seems to have been located on the left bank of the Kabbani although we have hardly any references to settlements included in this unit. This conclusion has been reached on the basis of the provenance of inscriptions referring to this unit*12. A smaller unit which was also possibly located on the left bank of the Kabbāṇi in the tenth century, is Adirāṇu-12 centred around Adirāṇu (modern Hadināru, Nanjanagūḍ taluk, Mysore district)*13

The Kāvēri forms the southern boundary of the Baḍagare nāḍu 300 unit to which we have references from the eighth century onwards. This unit included settlements to the north of the Kāvēri in the Tirumakūḍal Narsipur and Malavalli taluks.*14 Early in the eleventh century we have references to Īḍai nāḍu which had the Kāvēri river as its boundary to the north and encompassed the south-eastern parts of Tirumakūḍal Narsipur taluk.*15

On the other hand, in the Yagachi valley settlements in the Devalige-70 unit were located on both banks of the river and its tributary streams.*16 Similarly in Āsandi nāḍ the river Vēdavatī did not mark a boundary since Arakeṇe and Kalikaṭṭi were situated to the west of the river while Āsandi itself was located on the east bank.*17

*11 EC III (new ed) Nj 278; EC I (new ed), No. 1; EC III (new ed) Nj 239, 294; EC IV (new ed) Ch 114.
*12 EC V (new ed) My 183, EC III (new ed) Nj 193, 192, 201
*13 EC III (new ed) Nj 197.
*14 EC V (new ed) TN 120; EC VII (new ed) MI 120.
*15 EC V (new ed) TN 230, 227, 233, 229
*16 EC VI (old ed) Cm 42, Appendix I, No. 51
*17 EC XV (rev ed) Ak 215
Burton Stein suggests that the reason why only major perennial rivers constituted boundaries for nāḍus and not the lesser streams or rivers was that only the flow of the former was reliable enough to preclude joint management of irrigation. In other words, inter-village co-operation was necessary for the proper husbanding of water resources in the case of seasonal rivers and streams. This was not so for perennial rivers. In his opinion, this feature emphasizes the agrarian character of the nāḍu.*18

While available evidence from early medieval southern Karnataka appears to support Subbarayalu's conclusions about the nāḍu's relation to natural features such as rivers, his other suggestion with respect to the area and density of the nāḍu varying in proportion to the availability of sources of irrigation cannot be tested owing to inadequate evidence. In some cases, such as Eṇḍanāḍu-70 settlements to which we have references do seem closely clustered*19. Even here, however, it is not possible to trace the boundaries of the nāḍu save the northern one which was formed by the Kabbāṇi river. In most cases, we have references to only one or two settlements included in a nāḍu which makes it impossible to estimate the area and density of settlement.

Subbarayalu has assumed in his study that the first reference to a nāḍu may be taken as an approximate date of its creation. He has, however, admitted the possibility of bias introduced by the vagaries in the availability of epigraphic evidence. He suggests that the smaller number of records available for the period prior to AD 1000 may account partly, for the small number of units known to us for that period in Cōḷamāḍalam, while for AD 1000-1014 alone, thirty-six new units are referred to principally in the Thanjavūr inscription of Rājarāja I which has detailed geographical information. On the other hand, he accounts for the slow rate of growth of new units for AD 1050-1300 in Cōḷamāḍalam by suggesting that population density had reached saturation point for the conditions then existing. For the same period, we have evidence of new units coming up in less fertile regions.*20

*19 Infra, fn 21  
*20 Y. Subbarayalu, op. cit., p. 21.
Stein thinks Subbarayalu's view as doubtful. The tempo of agrarian expansion suggested by Subbarayalu is unacceptable to him in the absence of evidence for sustained population growth, immigration or of adoption of new technology. Stein, therefore, suggests that the majority of units, referred to in the Cōla records were in existence during the period of Rājarāja I. New references, in his opinion, indicate not a new creation but a new recognition of Cōla overlordship.*21 In our opinion, however, it seems implausible that any unit within Cōlamanḍalam the heartland of the Cōla empire should have remained independent of Cōla overlordship, particularly in the period of Rājarāja I and Rājendra I when Cōla military might was its peak.

In southern Karnaṭaka we have references to few units prior to the eighth century. After that we have references to an increasing number of territorial units. This is partly due to the availability of inscriptions. The majority of the lithic inscriptions which contain copious geographical information are easier to locate and date from the eighth century onwards. Prior to that, we have for the most part only copper plate records in which geographical information is sparse and far more difficult to locate. A certain degree of continuity is discernible in the post eighth century period. Many of the units such as Pumrāṣṭra*22, Sinda viṣaya*23, Marugare viṣaya*24 and Kuvalāla viṣaya*25 continued to exist though with the nādu suffix. The change consists in these cases mainly in the references to sub-units such as Eḍenādu-70 *26 in Punnādu-6000, Tagare-70*27 and Maṇale-āke-300*28 in Sinda nādu- 8000, Eḍediṇde-70*29 in Marugare nādu-300 and Agali-12 *30 in Kuvalāla nādu-300.

*21 B. Stein, op. cit., p 98.

*22 EC IV (new ed) YI 167; EC III (new ed) Nj 129,278, etc.

*23 EC VI (old ed) Kd 162; Mg 36; ASMAR 1920, p 24.

*24 ASMAR 1916, p 34-35; EC V (new ed) Kn 49, etc.

*25 K. V. Ramesh, op. cit., No. 157, EC X (old ed) Mb 255,80, Sp 57 etc.

*26 EC III (new ed) Nj 278, EC I (new ed) No. 1


*29 EC V (new ed) Kn 49 *30 ASMAR 1926, p 87-88, No.100
We also have new units mentioned in the post-eighth century records. This is the case with Baḍagare nāḍu-300*31, Eḍetṭore-nāḍ-1000*32, Aridāke-70*33 Karegādu-70*34 and Āsandi nāḍ*35 which are mentioned for the first time in eighth century records; Kongalnāḍu-8000,*36 Beddoregare*37, Sīgenāḍu,*38 Māmguḍī nāḍu*39 Toṛenāḍ*40, Erenāḍ*41 Nugu nāḍ*42 and Bayal nāḍ*43 which are first referred to in ninth century epigraphs; and Kōṭu nāḍ*44, Adirāṇu-12*45, Kuppa nāḍ,*46 Kundūr nāḍ,*47, Kalkali nāḍ*48 and Maṇḍali nāḍ*49 which seem to emerge in the tenth century.

With the available evidence it is not possible to gauge whether the emergence of new sub-units within older territorial divisions was owing to an administrative reorganisation or the emergence of new clusters of settlements in the larger, older units. The two are not mutually exclusive since the emergence of new settlements would necessitate reorganisation. This involves the question of the nature of a unit which shall be further discussed below.

*31 EC V (new ed) TN 120, EC VII (new ed) Ml 122, 50, etc.
*32 EC V (new ed) My 183; EC III (new ed) Nj 192, 193, 201.
*33 EC III (new ed) Mg 90          *34 EC III (new ed) Nj 147.
*35 EC VI (old ed) Kd 145, 141.
*36 EC III (new ed) Nj 385,       EC VI (new ed) Kr 20
*37 EC I (new ed) No. 96, 98.     *38 EC IV (new ed) Ch 385
*41 ASMAR 1922-23, No. 4, p. 40.
*42 EC III (new ed) Hg 5, 58.
*43 EC III (new ed) Hg 23, Gu 219, Hg 110, 142
*44 EC V (new ed) TN 57.          *45 EC III (new ed) Nj 197
*46 EC IV (new ed) Pp 133          *47 EC VII (new ed) Md 67
*48 EC V (old ed) Cn 267, 262.
Adopting the assumption made by Subbarayalu it would seem that the period from the eighth century onwards saw the steady expansion of agriculture and opening of new tracts to settlement. As we shall see later, new village settlements were continually emerging, particularly in the Kaveri valley with its abundant water resources. It is unclear to what extent this had occurred in the period prior to the eighth century owing to the paucity of epigraphic evidence. At all events although the vagaries of the source material might mislead us, Burton Stein's suggestion that new references to units indicate acceptance of the suzerainty of the dominant political power of the region is inadmissible for our region. Unlike the Cōla dominions, the political situation in southern Karnāṭaka was always fluid. Ganga control over Gangavādi 96,000 was overthrown at least once in the beginning of the ninth century and was frequently threatened thereafter by military expeditions of the powers of Northern Karnāṭaka. Similarly, although Banavāsi-12,000 was under the overlordship of the Kadambas, the Cālukyas and Rāṣṭrakūṭas successively, the feudatory who ruled this unit changed fairly rapidly. In the reign of Gōvinda III for instance, the Māvali inscriptions reveal that at least three individuals ruled this nādu, Madanāgarasar, Efeyammarasar and Rājāditya Pallava Nōlamba. We also have references to feudatories who ruled only a part of Banavāsi-12000. This is the case with Kaliviṭara as who is stated to have ruled a part (bhāga) of Banavāsi-12,000 in an inscription from Cikka Cāvūṭi. Even when a claim is made for authority over the whole nādu, the sāmanta may have held only a part of the unit in actual fact. This is clear from two other inscriptions of the same year as the Cikka Cāvūṭi record. The Kakkarasi inscription states that Mahāsāmantādhipati Trikundapuravārēśvara Māciyarasa was ruling as king (arasa) over the 12,000 country from Eđenāḍ.

*49(a) Infra, Section C (I) p3. fn 191  
*50 Infra Chapter III, Section B.  
*51 EC VII (old ed) Sk 264,29,176; EC VIII (old ed) Sb 523  
*52 EC VII (old ed) Sk 10,154; EC VIII (old ed) Sa 79, Sb 15,571,411.  
*53 ASMAR 1941, No.29,p 191-92; EC VIII (old ed) Sb 1,9,10 etc.  
*54 EC VIII (old ed) Sb 1.  
*56 Ibid, Sb 10, also Sb 22 from Manamane.  
*57 EC VIII (old ed) Sb 240 of AD 954.  
*58 EC VIII (old ed) Sb 474 of AD 954.
Similarly the Beṭṭadakūrali inscription also from AD 954 refers to the rule of Javanaisāmi over Bana(vā)si nāḍi. As the Kirugupise inscription of AD 959 makes clear, Māciyarasa’s rule extended only over Edeṇāḍi-70 although he had claimed to rule the whole of Banavāsi-12,000 in the earlier inscription. Similarly, the Jambeḷḷi inscription of AD 972-73 refer to the rule of Śāntivarmarasar over the 12,000 country, while the two Bennūr inscriptions of the same year mention Caṭṭayya as the ruler of the Kingdom of Banavāsi-12,000 under the overlordship of Kakkaladēva. We also have references to territorial units without any mention made of the overlord. This is the case with an inscription from Sosale (T.Narsipur taluk, Mysore district) which merely mentions Vaḍakare nāḍu-300 and its ruler Vikramādiya-arasa. This probably belongs to a period when the Rāśṭrakūṭas were attempting to supplant the Gangas from Gāṅgavāḍi. It seems therefore that the references to territorial units in inscriptions did not depend on their recognition of the dominant political power in the region at that period at least in so far as southern Kārṇaṭaka is concerned. We may follow Subbarayalu in his assumption that the date of the first reference to a new nāḍu is fairly close to that of its fresh emergence. It is however, necessary to recollect that the inscriptive record is far from complete and has numerous lacunae. The scope for error is therefore considerable.

In Kannada as in Tamil, the word nāḍu has the generic sense of “a cultivated, planted country” in opposition to kādu, a forest. From this Subbarayalu concludes that a nāḍu was basically an agrarian region - a grouping of agricultural settlements whose formation was influenced by natural factors conducive to agriculture such as soils, topography, availability of moisture, etc.

Although in origin an agrarian unit, the nāḍu was also the basis for administration. Subbarayalu however argues against the view that they were artificial divisions created by

*59 EC VIII (old ed) Sb 202.  *60 Ibid, Sb 501
*61 Ibid, Sb 44.  *62 Ibid, Sb 454, 457
*63 EC V (new ed) TN 120.
the ruler to facilitate administration. The lack of uniformity in the area of the unit as well as the fact that water courses did not form the boundary of units militates against such a possibility in his opinion. *65

Subbarayalu suggests also that "each nādu was basically a cohesive group of people tied together by marriage and blood relationships; the so called chief villages forming the core of each group in the beginning". This explains, in his opinion, many modern caste and communal subdivisions which are for the most part territorial in origin. *66

The nādu has also been taken to be a territorial assembly which functioned within the territorial unit of the same name. It was constituted perhaps by the representatives of each of the villages within the unit or by the more influential residents of the unit. In Tamil copper plate records the nātār figure as one of the groups to whom the royal communication was addressed. But it was they who received the royal communication and proclaimed the grant after fixing the boundaries of the granted land. In other words, their endorsement to the grant was essential. The other groups to whom the grant was addressed were the representatives of the brahmadeya, devadāna and the nagaram settlements. Hence it would seem that the nātār chiefly drawn from among the urar (or the assembly of the ur) of the concerned nādu. *67

Stein drew on Subbarayalu's work to reach his own conclusions: "During almost the entire time of the great Cōḷas from around AD 1000 to 1200—the 550 nādu of the macro-region were the primary loci of agrarian society. While each of them constituted an almost self-sufficient ethno-agrarian micro-region, and while most pre-dated the establishment of the imperial Cōḷa state, all were linked together as parts of a great kingdom. What linked them was their common recognition of the Cōḷa king, the imitation by local chiefs of some of the royal styles of those kings especially their support of brahmanical institutions, brahmadeyas and temples devoted to the worship of vedic gods,

*65 Ibid, p 30,33.  
*66 Ibid, p.36.  
*67 Ibid, p 36.
and by the occasional massing of military resources of a number of nāḍus for predatory or defensive warfare. Each nāḍu was segmental part of a single, unified conception of Hindu Kingship, each constituted a basic bloc of which the realm was composed.*68

On the basis of the differences among these nāḍus in terms of their internal organisation and links with other units, Stein distinguishes

(i) "Central" nāḍus, characterized by elaborate social hierarchy, wealthy and populous agricultural and mercantile settlements and proximity to royal authority. Even here, however, royal authority had only a ritual sovereignty over the nāḍus*69.

(ii) "Intermediate" nāḍus located for the most part in the interior upland which lacked reliable sources of moisture for agriculture, social hierarchy was not as elaborate here as in the central nāḍus owing to the lack of reliable income to support elaborate royal or religious institutions. They were also characterized by less durable linkages with neighbouring nāḍus as compared to "central" nāḍus owing to horizontal segmentation among sub castes and clans and sparse population. They were also more easily detachable from allegiance to the overlord owing to distance from the sphere of the overlord and proximity to alternate centres of power.*70

(iii) "Peripheral" nāḍus situated in those areas least hospitable to sedentary agriculture or even to mixed agricultural and pastoral activities. Such nāḍus lacked both vertical segmentation or hierarchy and horizontal segmentation and displayed strong "tribal" characteristics. Their external dynastic linkage was weak and they were mostly ruled by strong chiefs.*71

Both Subbarayalu and Stein thus seem to consider nāḍus as primarily agrarian rather than administrative units. For Stein the nāḍus were so basic to the social, economic and political order that royal authority is rendered more or less redundant. Nāḍu chiefs, notables and officials ordered the social and political universe of the early medieval period, acknowledging only the ritual sovereignty of the central dynasty.

*68 B.Stein, op.cit.,p.133-134.
*70 Ibid, p.136
*71 Ibid, p.138,140
The agrarian character of the territorial units in southern Karnāṭaka seems fairly clear in a number of cases. We have referred earlier to their relationship to natural features such as streams which in the opinion of both Stein and Subbarayalu emphasizes the agrarian character of the nāḍu.*72 Many of the units are named after the earliest settlement in the cluster. Such for instance is the case with Kuvalāḷa viṣaya which was grouped around Kuvalāḷa*73 (modern Kōlār) the earliest power centre of the Gangas.*74 Similarly the Keregōḍu nāḍu viṣaya was probably constituted around the village of Keregōḍu, the reference point for neighbouring settlements.*75 Karbappu nāḍ-1000 which is mentioned in an eighth century record from Maṇḍya district*76 was centred around Karbappu- the small hill at Šravaṇabelgola which had become a centre for adopting the sanyasana*77 vow among the Jainas by this time. Āsandi nāḍ was a unit of which Āsandi (Kadur taluk, Chikmagalur district) was the centre.*78 Stein has suggested that the earliest core settlement in a nāḍu did not enjoy pre-eminence over later settlements included therein*79 and this seems to be the case here for Āsandi nāḍ was ruled by Ēramma, the servant (āj) of Vijayāditya, the son of Śripuruṣa Ganga, from Cannavūr.

While the agrarian character of these territorial units is thus fairly clear, the political factors shaping them must not be ignored. The ruling lineage often gave its name to the territory. The earliest core of the Ganga kingdom in the Kōlār and Bangalore districts*80

*72 Supra, pp 11–13
*75 EC VII (new ed) Md 35, EC XVI (rev.ed) Gb 75, vide Appendix I, Nos.69,70
*76 EC VII (new ed) Md 14, Appendix I.,No.95
*79 B.Stein, op cit.,p.105.
*80 Infra, Chapter III, Sections A & B.
came to be designated as Ganga-6000 in the eighth century. When the NoJambas entrenched themselves there in the ninth and the tenth centuries the area came to be known as the NoJambavadi-32,000. The Ganga kingdom as a whole was designated Gangavadi-96,000, or the 96,000 country. In AD 976-77 when the Gangas were beleaguered by the Cālukyas and their territory probably diminished under Cālukyan pressure Gangavadi is assigned merely a suffix of 32,000. Likewise the Keregalar plates of the fifth century refer to Sēndraka viśaya as do the Tagare plates of the sixth century. In both cases, the unit was possibly named after the Sēndraka lineage, although no Sēndraka chief is mentioned in either inscription. However a seventh century record from Baligāmi (Shikarpur taluk, Shimoga district) refers to Pogilli Sēndraka mahārāja who is said to be ruling Nāyarakhaṇḍa and Jeļugēr-ālge. It is possible that this lineage was displaced from its original principality in the Ėassan-Chikmagalūr districts by the Gangas and the Kadambas. At all events the Sēndraka viśaya is not referred to after the seventh century.

We have seen earlier that even when Banavāsi-12,000 was divided among two or three feudatories at a time it retained its identity as a unit and is mentioned in the epigraphic record. In Kolar on the other hand, when political fragmentation reached its apogee in the ninth and tenth centuries, nādu units cease to be mentioned by and large, in the inscriptions. Evidently the domains of the local rulers which was the most significant point of reference for the local record-keepers, did not coincide with the nādu unit. Under Cōla suzerainty, the old nādu units once again find mention. This would indicate that the nādus retained their corporate identity even during the period of political fragmentation.

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*81 eg EC X (old ed) Mb 80; vide Appendix I, Nos.100-111
*82 EC X (old ed) Sp 59 of the 10th to 11th centuries; vide Appendix I Nos.,146-148.
*83 EC V (new ed) Kn 48 of the 8th century; EC X (old ed) Kl 79 of the 9th century.
*84 EC IV (new ed) Pp 133. *85 EC VIII (new ed) Hn 10
*86 ASMAR 1918, p.35-36 *87 EC VII (old ed) Sk 154.
*88 Vide Appendix I Nos.47-49. *89 Infra, Chapter IV, Section B.
We have referred earlier to the change in the nomenclature of territorial units. This coincides in large measure with the spurt in lithic, vernacular inscriptions. Thus ना, the vernacular word, came to replace the sanskrit term विशया. The post-eighth century use of the term विशया occurs in copper plate inscriptions which continued to be in Sanskrit.*90 Moreover, the units came to be given numerical suffixes on a regular basis. This was not unknown even in the earlier period. Thus the Keregalur plates of the fifth century assign the numerical suffix of 8000 to वल्लावी विशया.*91 What these numerical suffixes stood for has been a subject of controversy for a long time. Rice*92 had suggested that they stood for the revenue yield of a division, computed in cash terms.*93 However, this would imply the existence of a strong cash economy for which we have no evidence.*94 Another view holds that the suffixes represented the population or the number of fighting men of the division. However, this would make no sense in the case of the smaller suffixes of less than a hundred for which we have numerous references in inscriptions.*95

The most reasonable view is that it stands for the number of villages included in the division. For smaller units, we have epigraphic evidence to corroborate this view. The Bēgūr inscription of Ereyapparasa grants the division of बेरंपुर-१२ to Iruga the son of Nāgattara, as Kalnad.*96 The twelve villages in the division, inclusive of बेरंपुर are listed in the inscription.*97.

*90 eg. the Sāligrāma copper plates of Rācamalla I of AD 819, EC V (new ed) Kn 49,1.109; Appendix I No.19
*91 EC VIII (new ed) Hn 10, Appendix I, No.48
*93 K.V. Ramesh, op cit., No.64, and EC I (new ed) No.97, indicate that taxes were computed partly in kind and partly in cash.
*94 B.D. Chattopadhyaya, Coins and Currency systems of south India, New Delhi 1977, pp 44-48, 118-119, assigns extant Gaṅga coins to the post-tenth century period.
*95 Vide Appendix I, Nos.103,170 etc.
*96 EC IX (old ed) Bn 83.
*97 Appendix I No.169.
Similarly, the Bandalike inscription of A.D. 902 mentions Mahāsāmanta Lōkāteyarasa as governing 31,102 villages (bāda), comprising Banavāsi 12000, Palasige 12000, Manyakhe9a 6000, Kolanu 30, Lōkapura 12 and Toregare 60.*97(a)

In the case of larger suffixes there certainly appears to be an element of exaggeration. As D.C. Sircar points out, Gaṅgavādi could scarcely have contained more than a fraction of 96,000 villages in that period.*98 Another suggestion with respect to large suffixes is that nādus were ascribed the number 1000 and thus Gaṅgavādi comprised 96 nādus. This is not borne out by Gaṅga records. Several units such as Nirggunda nādu,*99 Baḍagare nādu,*100 Kuvalāla nādu,*101 etc., were assigned the suffix of 300, while others such as Edettore nād*102 had a suffix of a 1000, Sinda nād*103 had 8000 and Punnādu had 6000.*104 Until further evidence is available, we can only assume that these numerical suffixes which stood for villages were highly exaggerated figures. Given that the dominions of feudatories were expressed in these terms, this is scarcely surprising. Inflated claims were particularly common as we have seen in the case of Banavāsi-12,000.*105

Stein has suggested another possible explanation for the smaller numerical suffixes to the place names, i.e., that they refer to the peasant household units of the okkalu who originally conquered or colonized a locality.*106 They might then have continued to refer to themselves as a corporate unit by a conventional number based on that event. He cites Dikshit in this connection who had suggested that the numbers affixed to village assemblies denoted the number of families which had originally established the village and corporately preserved their ascendancy by the use of a numerical title.*107

*99 Vide Appendix I, Nos.71-73
*100 Ibid, Nos 81-85
*102 Ibid, Nos 96-99.
*103 Ibid, No.54.
*104 Ibid, Nos 61,64.
*105 Supra, p 17.
*106 B. Stein, op.cit., p.129.
*107 G.S. Dikshit, Local Self-government in Medieval Karnataka, Dharwad 1964, p.75.
This might be a valid explanation for the numbers assigned to the corporate groups whether of a settlement or of a nādu.*108 But our inscriptions distinguish the numerical suffixes of a nādu from those of a corporate group.*109 Moreover, in at least one instance, that of Beddōregare in Coorg, we have references to no less than three corporate groups in the unit Beddōregare itself has no numerical suffix. But if Stein's suggestion is valid, it would be unclear whether Beddōregare was to be assigned the suffix of 70 after the seventy (Elvadinvar) of Beddōregare, of Eight after the okkal (Entokkal) or 500 after the group of the Five Hundred (Maymūrvarum?) In addition the Bīlyūr inscription which mentions the unit of Beddōregare also refers to the Male Sāsirvaru (Male one thousand) and the Five Dāmarigas.*110 While the Peggūr inscription refers to the Four Malepas (Nālvar Maleparu).*111

We do not have much evidence for the nādu as a corporate body of the landholders of the nādu as in Tamil Nadu. Of the three epigraphic references from this region, two belong definitely to the period of Cōla overlordship over this region when doubtless many Cōla practices and institutions were introduced into Gangavādi.*112 The earliest reference comes from an undated fragmentary inscription palaeographically assignable to the tenth century from Tirumakūḍu (T.Narsipur taluk, Mysore district). This epigraph apparently records a grant by the Nānadeśis whose praśasti is incorporated in the inscription, and the nādu. The details of the grant and of the donee are now lost.*113 Likewise, the Kemmasandra inscription of the reign of Rājarājadēva, dated AD 1001 records the grant of land (bhūmi) at Sattivangala to Cāvaṇḍayya by Dādanāyaka Śrīdharayya, the Nāḷgāvūnda Sinda gāvūnda and the Nādu.*114 However, the inscription introduces an element of confusion by adding that Mārayya and Puṇīseyamma were the

*108 EC IV (new ed) YI 138, EC VII (old ed), Sk 47,177, etc.
*110 EC I (new ed) No 96.  
*111 Ibid, No.98
*112 Infra, Chapter IV, section B.
*113 EC V (new ed) TN 25.
*114 EC IX (old ed) Ht 111.
It is possible that the grant was initiated by these individuals but authorized by the Dandanaśayaka, the Nālsāvunda and the nādu. The third and most significant reference comes from the Śuddēnāḥaḷi inscription (Kōlār taluk, district) of AD 1017-18. This records that the nāttōm of Kaivāra nādu bound themselves to give one goat to Cāmūṇḍēsvāri, the goddess of Jayangondasōla caturvēdi mānḍalam, the guardian deity of the nādu every Tuesday.*115 Another inscription from the same place directs the collector of taxes (jrai tandugira) Koyiramān, to recover a fine of five Kālaṇjus of gold for every goat not supplied. Further, if the gāmunda of the ūr or nādu failed to supply the goat(s) they were to be fined a hundred Kālaṇjus of gold. The king, Rājendrā Cōla is designated the guardian of the charity.*116 It is not clear whether the fine for non-compliance was decreed by the nāttōm or by the king nor to whom the revenue from the fine accrued. The nādu assembly thus was empowered to (i) make grants (ii) decree contributions from the inhabitants of the nādu for a common purpose. It seems to have developed under Cōla influence in southern Karnataka and its composition is unclear from available evidence.

In southern Karnataka corporate bodies appear to have played a more significant role at the level of the individual settlement rather than at the nādu level. We have references to Mahājanaś*117 (the corporate body of the brahmana agrahāras) to bodies of the okkal (the Entokkal of Coorg*118 or Ayvattokkal of Mysore*119) of traders (the Tuviyāl sresthi group*120 the Manigrāma,*121 Nānādēśi*122 and Vīra Bananju*123

*117 EC I (new ed) No 96
*118 EC I (new ed) Ch 136, 155
*119 Ibid, K.V. Ramesh, op. cit., No 11
*120 Ibid, K.V. Ramesh, op. cit., No 11
*122 EC III (new ed) Hg 59.
groups), and of the gāvūṇdās, (Pannirvar gāvūṇḍagalu)*124. Many corporate groups are denoted merely by their numerical title such as the Twelve*125, the Twenty*126, Forty,*127 the Thousand*128, etc. The composition of such groups is unclear. A ninth century record from Vijayapura indicates that the local corporate group, the "Twelve" of Kṛṇupēṇagāra could control the okkal. After the consent of the local rulers Maṇaleyarasa and Raṇapāra had been obtained, the Twelve had to be paid gold to enable the legal settlement of the okkal there.*129 Clearly the Twelve of Kṛṇupēṇagāra enjoyed superior rights over the land there and could hold sway over the tenant population. It is possible that the Twelve were gāvūṇdās but the silence of the inscription makes it difficult to reach a definite conclusion. At all events, corporate bodies such as the Twelve of Kṛṇupēṇagāra seem to have been closely associated with local chiefs in administration.*130 They figure as donors*131 and witnesses to grants*132 in several records. They were also recipients of gifts*133 and tax remissions.*134 They appear to have participated in the development of irrigational facilities for which they received grants of bittuvāṭa.*135 The role of such corporate bodies in the early medieval polity of southern Karṇāṭaka will be further dealt with in the next chapter.*136

*125 EC III (new ed) Nj 187, EC IV (new ed) Ch 82, 147, 347, Ko 10 etc.
*126 EC IV (new ed) Yl 138.
*127 EC VII (new ed) Mu 57, EC X (old ed) Kl 11
*128 EC VI (old ed) Cm 95; EC VII (old ed) Sk 45(b), etc.
*129 EC V (new ed) TN 146.
*130 EC III (new ed) Nj 282, 294, etc.
*131 EC IV (new ed) Ch 141; EC V (new ed) Kn 41, EC III (new ed) Gu 92, etc.
*133 EC V (new ed) TN 207,200, etc.
*134 EC IV (new ed) Yl 138, EC V (new ed) TN 145, etc.
*135 EC X (old ed) Bp 4.
*136 Vide Chapter IV sections D, E.
Burton Stein has pointed out that in southern Karnataka locality governance was vested not with the corporate group of the nættar but with chieftains bearing the title of gāvunda, prabhu or Pergade with the word nāḍ prefixed thereto. These chiefs in his opinion, enjoyed perquisites of dues and land.*137

Epigraphic evidence indicates that headship (gāvunda) was exercised at two levels that of the individual settlement (ūr) and the nāḍu. Thus we have references to both ārgāvundas and nāḍugāvundas. Ārgāvundas could rise to the position of nāḍgāvundas.*138 and sometimes hold the two positions concurrently. *139 Kings could confer the position of nāḍugāvundas on the successors of heroes as a reward for military service.*140 But, by and large, these positions were heritable at least by the tenth century.*141 As Stein holds they enjoy perquisites of dues and land.*142 The functions and responsibilities of the nāḍugāvundas will be taken up in a subsequent chapter.*143

In contrast to the Nāḷgāvundas the Pergades do not appear to be generally associated with the chieftaincy of a nāḍu. By the eighth century they enjoyed authority over villages. By the tenth century this association had been strengthened and we have numerous references to Pergades holding abhyantara siddhi rights over villages.*144

*137 B. Stein, op.cit.,p.110.
*138 EC IX (old ed) Cp 135 and Cp 129
*139 ASMAR 1929 No.78, p.150
*140 EC III (new ed) Hg 5, EC VIII (new ed) Ag 105.vide Chapter IV, Section E, Service Assignments, p. 37
*141 EC VII (old ed) Sk 219.
*142 ASMAR 1929, No.78,p.150 refers to a nadugavunda holding the living (balige) of Balligame along with the Nadugavundu of Jidduralge - 70
*143 Infra, Chapter IV,Section D.
*144 Infra Chapter IV, Section C(I).
References to Pergades ruling nādus are scarce*145 and in most cases such pergades enjoyed a higher rank holding the additional title of Mahāmātya.*146 We have only one reference in our sources to a Nāḍ Pergade. This comes from the Kannatūr inscription (Ālūr taluk, Hassan district) of AD 1025. This mentions Nāḍ Pergade Dāsayya of Cōlayūr among the witnesses to the Patta bandha ceremony of a gāvunda of Kannatūr who was bestowed the sēṭṭivāṭṭa by a chief bearing the title of Maleparādītya (the sun among Malepas).*147

In sum Nāḍus appear to be primarily agrarian units which were used by the rulers as administrative units as well. In Karnāṭaka we do not have much evidence for corporate bodies at the nādu level. Instead Nāḍu chieftaincies prevailed, with Nālgavundas holding sway over a nādu and participating in the political developments of the period in their region. On the other hand, Pergades, who have also been associated with nādu chieftaincy by some scholars, appear more frequently in inscriptions as the rulers of villages. Some of them, however, held a higher rank and may have held sway over an entire nādu. Prabhus in contrast appear either as administrators or an informally constituted body of notables to demarcate boundaries of granted land or to witness a grant. Gāmigas were either village headmen or substantial landlords who perhaps constituted a corporate group at the nādu level and undertook its defence.*148

*145 ASMAR 1926, No. 100, pp. 87-88 of c. AD 800 and EC VII (old ed) Sk 179 of AD 997.

*146 Infra Chapter IV, Section C(I).

*147 EC VIII (new ed) A1 8.

*148 Infra Chapter IV, Section C(III) & (IV)
C. VILLAGE LAYOUT

The sources for this study are entirely epigraphical. Copper plate inscriptions recording grants of villages often give details of boundaries. As we shall see below, these indicate that villages were largely bounded by natural features such as rivers, streams, water channels, hills and rocks. Lithic and copper plate inscriptions recording grants of land give us some information regarding the layout of the village, of fields, tanks, irrigation channels and temples. Details of ownership of land, the soil and crops grown thereon are often included. Numerous lithic records register the fact of the excavation of new tanks or wells and grants for their maintenance. We have but few references, however to streets and houses and these are insufficient to derive a clear picture of the habitations. We have no information also as to whether houses were grouped according to the occupation and social status of the inhabitants.

I) BOUNDARIES: The Hireshakuna copper plates*176 are among the earliest to include details of village boundaries. This inscription records the grant of Kadalkalani grāma together with Vāsuka kṣetra. This included lands bounded on the south by an asvattha tree, a hill (parvata madhyam), Karvelli kṣetra mūla, and a water course (adaka patha); to the west the Peṇa river and the Pallavakeṇḍi village, to the north the water course, thence the Kadailkūra Mūlakṣetra and Kadakoramūla, finally ending in the meeting point of the two water courses (adaka sangama)*177. The Halliger copper plates of Śivamāra I dated AD 713 records the grant of Pallavataṃka grāma as a brahmadeya.*178 This village was newly constituted and comprised Koḍūgoṇe and Beḷkeṇe villages to the south of the river Kīliṇe and Beppampāl and Paṇuṣepatī to its north. This was done after the construction of a bridge (sēṭubandha) across the river Kīliṇe.*179 The boundaries of the newly constituted

*176 EC VIII (old ed) Sb 33. of the sixth century.
*177 Ibid, L1.8-12.
*178 EC VII (new ed) Md 35.
*179 Ibid, L1.35-37.
village are specified as follows: "On the east the stone heap of the Kirukonind tank in the Kadavakkal on the highway running along the Kilina river, on the south, the eastern side of the Peggonind tank along the Iggare river; and the river itself, the western boundary is the Velkeere tank, proceeding further towards Beppampal and Peralgoji; on the north (the boundaries are) the streamlet Neserupalla, the village. Selivepale, the tanks Kirubaliyur keere and Nidubatthakeere along with its gulf".*180

The Baradur Grant charter of Sriputra, dated AD 725 registers the grant of the village Baradur in Tegattur vishaya to Bana Sarma a resident of Vatapi.*181 The charter includes an abbreviated description of the village boundaries. It appears to be bounded on all sides by streams: to the east the Dutumubur palla, to the south the Paradagep palla, to the west the Kamuntegupala and to the north the Gojtegere palla.*182

The Hullahahalli plates of Sriputra Ganga record the grant of Kovajavatu village to three brahmaapras after dividing it into three portions.*183 The boundaries of this village were as follows: "On the east the Padari tree of the Ojagere tank; proceeding thus and joining the tank; proceeding along the big water course (pervalla) towards the west, the huge tamarind tree (pervumuse) in the south, the main hillock (tale moraede), the Bedirkere tank and the pool named Modajemoquvu; in the west the canal of the Velgojala tank (velgola kalam) and the river (toke); in the north, the Kadavigere tank, proceeding thus, the localities (?) named Manjat tone and Balojbe, the hillock (moraadi) named Soral, proceeding thus, the heap called Bappigaira kuppe, the locality named Balojbe, joining the Padari tree".*184

We have an interesting instance of the same village being granted twice. The Devanur plates of Stambha Ranavaloka dated AD 808 grant the village Badaepuppe in

*184 Ibid, p.245, ll.46-50
Punnāda Eḍeṇād visaya to the Śrīvijaya vasati at Tālavaṇa nagara.*185 The same village is also the object of grant of the Mercara plates of Avinīta which are dated AD 466 but are in characters of the ninth century and are clearly spurious.*186 While in the first case the grant was entrusted to Vardhamāna guru of Śirmmaḷage gurugāpa of the Koḍakundāṅavaya, in the second the trustee was Candaṇandi bhaṭṭāraka of Deśiga gaṇa and Koḍakundāṅavaya. In both cases the grant was for the Śrīvijaya Jīnālaya of Tālavaṇanagara. It is possible that the Jīnālaya came under the control of Deśiga gaṇa after being dominated by the Śirmmaḷage gurugāpa and the spurious grant was produced in order to legitimize this change of guard. Alternatively the earlier charter was lost and a new one concocted to retain hold over the Badaṇeguppe village.*187

The boundary details appear to indicate that the Mercara plates are later than the Devanūr plates. The Devanūr plates describe Badaṇeguppe's boundaries as follows: "To the north Ponarpuli (twin tamarind trees); to the north-west the Badaṇeguppe, on the south-east as one proceeds, the Kāgani tank; on the south, the spurge thicket, the balkāni tree, the row of numerous medicinal herbs running westwards; the Koḷevandgāl at the trijunction of Badaṇeguppe, Koḷagāra and Muttagi, proceeding south-westwards, the Kaṭhaka tree; on the west the Pelduldil tree, the banyan tree belonging to Śānteṛeti, the stream bed (torevalla); proceeding northwards, the row of medicinal herbs (bahūṃlikāpani), the Jambupadi tank, the tamarind tree (cīṇa vrksa), the nerggila clump (gumpu) at the trijunction of Badaṇeguppe, Muttagi, Koḷeyanūr, Mammasūr, and Niḍuvelunge; the village Gajasale on the north,

*185 EC III (new ed) Nj 278
*186 EC I (new ed) No.1. The contents and language of the record clearly point to its being of a later period than it purports to belong. Introduction, p x-xi
*187 Ibid.
*189 EC I (new ed) No 1, L1 18-19
the red rock (Kembare moqadi) below the Kayga stone heap, proceeding eastwards, the row of medicinal herbs, the banyan tree in the locality called Kaḍapaṭṭigāla; on the north-east, the tank at the trijunction of Badaṇeguppe, Dāsanūr and Pol̤a, the tamarind tree in the locality (?) called Koḍīgaṭṭi, on the east the boundaries meet on the Kemtarāmulu mound."*190 This seems to indicate that in the course of the ninth century, the area around Badaṇeguppe came to be settled on a large scale since we have references to villages, trees and herbs absent in the Devanāru copper plates. Such large scale settlement would explain the references to new nadu units in inscriptions of the eighth, ninth and tenth centuries.

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A similar reference to neighbouring villages is found in the Mysore copper plates of Cāgi Permāḍi,*192 assignable on palaeographic grounds to the eleventh century. This records the grant of Kaḍekola village as Kalnad (grant in appreciation of valour or military service).*193 The boundaries of Kaḍekola are described thus: "Going in the southern direction of the trijunction of Kaḍekola, Khāravūra and Paidage; going towards the east of the trijunction of Kaḍekola, Khāravūra and Taṭḍeya, going towards the north of the white hillock (bejmoqadi) and the trijunction of Kaḍekola, Pēruveṇu and Taṭḍeya, going to the west of Pasarekallupalla (stream) towards the west of the banyan tree (āladamara) to the north of Kalloḍagegre (tank) and the trijunction of Kaḍekola, Pēruveṇu and Mariyase, going towards the north of the heap of stones (Kalkuppe) to the east of the stream (pallā) upto Nirile, thence towards the north of the junction of Kaḍekola and Mariyase, going to the west of the southern side of the tank (kere) turning towards the west of the Kaḍavipāḍikaṭṭigere (tank) and the trijunction of Kaḍekola, Mariyase and Paṭṭal; to the south, going towards the south of the stone to the west of the stream Sūḍīḷperiyabelungu; going to the south of the trijunction of

*191 Supra, Section B, p 16
*192 EC V (new ed) My 102.
*193 Infra, Chapter IV Section E, Service Assignments.
Kađekola, Paṭṭal and Peydage, to the east of Taṇḍilagadāpu (?) going to the Pupuse (tamarind) tree. Near the Asagapole (Washerman's stream), Kirūbüḍu(?) and the trijunction of Kađekola, Paidage and Khāravūra where the boundary joins the starting point."*194

The reference to the Washerman's stream in the boundary details is significant. It implies that different occupational groups had access to different sources of water in the village. This surmise is further strengthened by the Perjjarangi Grant charter of Racamalla I of AD 819. This registers the grant of Perjjarangi village situated in Ededine-70 in Marugare viṣaya as a brahmādeva to Nāgadēva Bhāṭṭa of Bhāradvāja lineage (kula).*195 The boundaries of Perjjarangi were thus determined: "The north-eastern boundary the extreme southern end of Gāmaguḍa tank; the eastern boundary, the extreme western end of the goldsmith's (svayapakara) tank; at some distance comes the eastern corner of the Śīgegēre tank, then the edge of the Washerman's tank (rajakatattaka); then the canal from the Mahākāmra tank (kulysatata); then the western end of the Vaikoṭa tank; then the southern end of the Toṇḍiģēre tank; then at some distance the southern end of Niḍugāṭti; then the Sinnapāṣhāna boulder and near it the great banyan tree; then the southern end of Naukkigēre; then the southern end of the Tenandākageṛe; then Piliyal (?); then the western portion of the Sirikkigaṛega tank; then the boundary of three villages formed by the aśvattha tree; then the southern end of the Nallūr tank; then the southern part of the Māдавāḍi tank then the southern part of the Kōmara tank; then the tamarind tree named Mahāmadhu; thus it is bounded."*196

In all the cases studied above, the boundaries comprised rivers, streams, tanks, hillocks and hills, trees and shrubs. In the Gaḷiģekere plates of Raṇavikramayya

*194 EC V (new ed) My 102. Ll.6-22 of the villages mentioned in this record only Kađekola and Mariyase survive today.
*195 EC V (new ed) K1 49. Ll. 103-111.
*196 Ibid, Ll.112-120.
Ereyanga I Ganga, we have a reference to a house and street forming the boundary of Kolanelluru village which was granted to a brāhmaṇa Parapadi Bhaṭṭa of Ārida gōṭra. However, just prior to the description of the boundaries, the inscription states that the extent of land granted was twenty gandugas. This causes some confusion since it is unclear whether the area of Kolanelluru as a whole was twenty gandugas or land to that extent within the village was granted. If the latter alternative holds good, it would mean that the boundary details relate only to a part of the village. The land thus granted was bounded to the east by the river (tor), to the south by the house (māda) of Bhaṭṭa and the big lane (peroni), the tanks of Tenandakagara and Permugagere, to the north the Kirumāgni stream (pervalla), Vederakara, a big thicket (pērōṇi) on the bund (ēri) of Śālattakāḍu. Pageantevara, gosanatane(?) and the tank Kondindagara to the south of Pervatte, a thicket (ōlvē), to the west a fence (vavēli) is joined with the big gulf (gollī) at the beginning of the oozing land (peljoge), to the north the boundary is joined by the big gulf to the Kāveri.

Excepting the southern boundary which was formed by the residence of the Bhaṭṭa evidently an individual of importance given his title and the reference to his house (māda) and the big street (perōṇi), the other details follow the pattern already witnessed in earlier grants.

As the records indicate then villages seem in the majority of cases to have been bound by such natural features as rivers, streams, hillocks and hills. In addition in

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*197 EC V (new ed) Kn 105.
*198 Ibid, ll 72-73.
*199 D.C. Sircar's I.E.G. states that Khanduga was a land measure of 64,000 square yards of dry land and 19,000 square yards of wet land—which would be approximately equivalent to 15 acres. Twenty Khandugas could therefore well be the area of an entire village.
*200 EC V (new ed) Kn 105, ll 73-77.
*201 F. Kittel, A Kannada-English Dictionary, q v Māda: a large building or a storeyed house.
the maidān and semi malnāḍ regions to which the villages described above belonged, the construction of tanks and channels for irrigation provided additional landmarks. Trees, shrubs and thickets too were used as boundary markers. In certain areas such as Edénd-70 or in the plains north of the Kabbāni where the villages appear to be closely clustered as the Mercara and the Mysore copper plates indicate, the neighbouring villages are included among the boundary details. We also gather the impression that habitations were not situated near the outskirts of the village. But the data base is too inadequate for generalization.

(II) FIELD LAYOUT: Several records, both copper plate and lithic, specify details of the location of granted land. The Bīrūr copper plate inscription of Viṣṇuvarma Kadamba of the fifth century AD is among the earliest to give us some information on the location of granted land. However, it is unclear whether the land thus described belonged to any village. The inscription records the grant of Ankataṭāka grāma in Sindhuthaya rāṣṭra together with a hundred nivarttanas of land located between (or inclusive of) the Nandapadapatha (road) and the bridge (Śētubandha) over Ḍvīpēśaka river.*203 It would seem that the hundred nivarttanās were not at any rate, a part of Ankataṭāka grāma. The boundaries of the village are not specified.

The Hosakōte plates of Aবinitā which record grants of land to the Jaina temple established by Simhaviṣṇu's mother provide us with greater details of the field layout.*204 The grants included

(i) seven Khandukāvāpas*205 of land including the wet fields of the śramanas*206 below the great tank (mahātaṭāka).

*202 Granite boulder heaps are a common sight in the southern maidān vide section A. This would explain frequent references to hillocks and stone heaps.

*203 EC VI (old ed) Kd 162, II 20-22

*204 K V Ramesh, op.cit., No 14 of the close of the fifth century.

*205 D C Sircar, I E G q v Khandukāvāpa, area of land required for sowing one Khapduka measure of seed grains.
(ii) In the centre of the village (Madiya bhāgē) five Khandukāvāpas of field (kṣetra) and one garden land (totta) for growing sugar cane (īkṣu niṣpana-kṣamam).

(iii) One Khandukāvāpa in the southern part of the village.

(iv) Twelve Khandukāvāpas of forest land (āranyaka) to the north of the village.

All these lands were situated at Palliūru village in Korikunda bhoga. The interesting aspect of this grant is the precise location of lands which were granted. It would seem that fields were evenly spread out over the area of the village. The great tank of Palliūru was a significant land mark. It is also interesting to note that the grants included some land which belonged to the śramāṇas. Does this imply resumption of lands by the king? The grant of forest land is also noteworthy. It is indicative of (i) the expansion of arable land and (ii) the erosion of common rights of pasture in the forest lands.*207

The Mallohalji plates likewise record the grant of twelve Khandugas of rice (vṝhi) lands below the tank at Meluru as brahmadēya.*208 The Nandi copper plates of Mādhavavarman palaeographically assignable to the eighth century also grant ten Khandugas of land below the tank at Pērpūṣūru in Morasa nāḍu to Gatti śarma of Koṇḍinda goṭra.*209 Tanks are also the landmarks in the case of some of the lands granted to the Lōkatilaka Jinabhavana constructed at the instance of Kundācci, the queen of Paramagūla Prithuvi Nirṛgundarāja on the northern side of Śripura.*210 These were

(i) grant of ten Khandugas of land below Duṣṭu samudra (tank);
(ii) two Khandugas of paddy field (kalāṇi) under the Kamaragāṭṭu (dam) in the plain fields (bayalul) of Śripura;

*206 Ibid, q.v. śramaṇa, a Buddhist or a Jaina monk; here possibly the latter

*207 R. S. Sharma, "How Feudal was Indian Feudalism" in H. Mukhia and T. J. Byres (ed) Feudalism and Non-European societies, p.


*209 Ibid, No.3.

*210 EC VII (new ed) Ng 149. of AD 776 ll 55-58.
(iii) six khandugas under the Perggere tank, and
(iv) twenty khandugas of cultivable (bede) land between the Erepuļigere (tank) and Koyilgoṭṭa.*211

It is thus clear that tanks were important landmarks in the village and the location of fields were most often specified in relation to them. Many other instances can be cited in this connection. An inscription from Māvali (Sorab taluk, Shimoga district) records the grant of one mattar*212 of land for the maintenance of Gōļiyakeге (tank). The granted land was situated to the south of the southern outlet (kōdi) of Muvvelakeге (tank).*213

The Tallapalli inscription (Bowringpet taluk, Kōlār district) also of the eighth century records the grant of thirty Kōlas*214 of paddy field (kalani) under the Tāmarakaṭṭu sluice (tumbu) of the western tank of Pelpāduvu to Bolva Ganga gāmunda as kālād.*215

Similarly, a tenth century record from Tālagunda (Shikārpur taluk, Shimoga district) registers the construction of a tank and the grant for a perpetual lamp (nandādīpa) for the deity of five mattals of garden land (toṭṭa) below the tank.*216 An inscription from Oṭūr (Sorab taluk, Shimoga district) records the grant of a two mattal field below the Nōśigagolā (pond) for a temple constructed by Pergade Nākiyayya who was ruling Cittarāṭe Oṭūr.*217

The Kampalapura inscription (Piriyapaṭṭana taluk, Mysore district) of the ninth century records the grant of two khandugas of paddy land (nelmannu) situated below Maltikeге (tank).*218 Similarly, a fragmentary inscription from Honnūr (Yelandur taluk, Mysore district) registers the grant of five gulas of cultivable wet land (bede galde) in

*211 Ibid, ll. 65-69.
*212 D.C. Sircar, I.E.G., q.v. Mattar a land measure, same as nivarttana, which varied from age to age. q.v., nivarttana.
*213 ASMAR 1941 No.29, p.191-92 of the eighth century.
*216 EC VII (old ed) Sk 322 of AD 935-36.
(or below) the tank of Ponnavayya's elder for Ponnavayya who died in a cattleraid (tumudol)\textsuperscript{219} Thus locating granted land in relation to tanks was a common practice.

Water channels or canals are also referred to in the epigraphic record. The Kumsi inscription (Sorab taluk, Shimoga district) of AD 931 records the grant of one mattal paddy land (battava palde) situated between two canals or water conduits (pane eradu) leading off the big canal (piriya pane)\textsuperscript{220} Likewise, the Doḍḍahomma inscription (Nanjanagudi taluk, Mysore district) of AD 977 refers to the main channel (berugalu) from the lower bund (kili) of Baḍikege. It would seem that the channel itself had been granted in this case.\textsuperscript{221}

Natural streams (palla) were also significant landmarks. We have seen above that they often marked village boundaries. Even within the village they could be used to demarcate fields. In a ninth century record from Marase (Mysore taluk, district) land on raised ground or hillock (temaru) situated to the north of the stream (palla) was granted for Bhagavati set up by Bijāyitaṇḍa at Mariyase.\textsuperscript{222} The land too was probably situated at Mariyase though it is not so specified. A eleventh century record from Maruru (Hunsur taluk, Mysore taluk) mentions four gaṇḍugas of wet land in or near the stream (palla) for a hero Ipagoḍa, who died in a cattle raid.\textsuperscript{223} An inscription from Kalkunda (Nanjangudi taluk, Mysore district) records the grant of land situated on the sand bank and bounded by the Kalapavanapali (embankment). This seems to have been situated on the banks of a stream though the epigraph does not specifically state so.\textsuperscript{224}

All these were instances of fields located roughly in terms of a major land mark

\begin{itemize}
\item \textsuperscript{219} EC IV (new ed) Yl 14
\item \textsuperscript{220} EC VIII (old ed) Sb 83
\item \textsuperscript{222} EC V (new ed) My 186
\item \textsuperscript{224} EC III (new ed) Nj 253 of the end of the tenth century
\end{itemize}
such as tanks, their channels, natural streams, hillocks, etc. Several inscriptions offer more complete details of field boundaries. The Marūru inscription (Arkalgūḍ taluk, Hassan district) of the ninth century registers the grant of several fields to Akhaṇḍa bhaṭāra as vidyādāna by Taddayya. *225 The grants consisted of

(i) Five Khandugas of battavāl (enclosed rice lands)*226 bounded on the east by the large channel (penbaykal); on the south by a mound (temare); on the west by a big mound (peldevare) and on the north by the channel (bāy kāl) of Naragavallā.

(ii) Three khandugas and five gulas of wet land in the sedimentary soil (Kadagōḍina nīrmappu)*227 to the east of the Arakere tank. It was bounded on the east by a channel (bāy kāl), on the south by a mound (tevanu) on the west by a stream (palla) and on the north by a big mound in the large field (pēvayalallī peddevaru)

(iii) A garden (tonṭa) in the sedimentary soil to the north of Kōsigagere (tank).

We thus get a picture of lands within a village crisscrossed by tank channels and streams with mounds and hillocks forming additional landmarks to distinguish one field from another. In addition to such features, temples too were used as landmarks within the fields of a village. Thus the Kumsi grama inscription of AD 950 registers the gift of some land to the north of the Koppa basadi. *228 The details of the land, its extent and quality are not given, however. Similarly the Nandigunda inscription of AD 1021 (Nanjanagudu taluk, Mysore district) records of one pāli (raised ground) situated to the north of the temple.*229

We have several references to forts (kōte) in villages from Shimoga district. The earliest references come from hero-stones of the eighth and early ninth centuries. The

*225 EC VIII (new ed) Ag 28.
*226 Kittel, op cit., suggests that batta could be the tadbhava form of bhatta, while vāl might be the same as vāl-circle or circumference. However, the editors of EC VIII (new ed) explain battavāl as rice lands.
*227 I follow the translation provided by the Epigraphia Carnatica (new ed).
*228 EC VII (old ed) Sh 114, 129-30
*229 EC III (new ed) Nj 201.
Māvali inscription of Gōvindara Ballaha (Gōvinda III Rāṣṭrākūṭa) records the seizure of Vasavūr köte, in the course of which some hero perished.*230 Another record from the same place and period mentioned an assault on Pergumji köte. *231 While an epigraph from Induvalļi records the death of an inhabitant of that village in liberating Vasavur köte from invaders who had come from Golliga nāḍ.*232 None of these inscriptions, however, mention cultivated fields located in the vicinity of the fort. This is found in the Hecce inscription (Sorab taluk) of AD 939 two forts are referred to in the course of the description of granted lands. The inscription records grants made for the Srikanthesvara temple which included (i) the rent-free (talaṃrtī) land situated to the south of the Köte and in the Kallakaveya polage (field); and (ii) a sejje gadde (wet land) situated in front of the Vāmana pa köte.*233

Field locations were also specified in terms of the land owned by other individuals. Thus the Dēvarahaḷī copper plates of Śripuruṣa include a grant of garden land (tonṭa) which was situated to the west of the field of Duṇḍu gāmupḍa.*234 Similarly, the Melagani inscription (Mūḷbāḡāl taluk, Kōḷār district) of AD 767 records a grant of one Khapūga and five gulas of rice land (kalani) above the wet lands of Canna, to Maduregile Vella śarman.*235 A Taḍimālingi inscription (T.Narsipur taluk, Mysore district) of the early eleventh century which registers the sale of lands at Irugaiyanpaṭi, a hamlet of a brahmadeva settlement, Marudūr, locates one of the plots of land in terms of temple lands and the gift land of a washerman (Yavgan kuḍangai) which formed respectively the eastern and southern boundaries. The western and northern boundaries were constituted by tank channels (vāyakkāl).*236 We may, in conclusion, turn to the Śirālakoppa inscription (Shikārpur taluk, Shimoga district) of AD 1019.*237 This records several grants for the Mūlästhana Nandikēśvaradēva and

*230 EC VIII (old ed) Sb 1.
*232 Ibid, Sb 542.
*234 EC VII (new ed) Ng 149, 166.
*236 EC V (new ed) TN 227.

*231 Ibid, Sb 10

*233 EC VIII (old ed) Sb 476
*235 EC X (old ed) Mb 80
*237 EC VII (old ed) Sk 125
for Caturmukhadeva. The shrine of Caturmukhadeva was bound to that of Mūlasthāna Nandikēśvaradēva, (pratibaddha) *238

The details of the location of granted lands exemplify most of the points discussed above. The donations consisted of:

(i) Twelve mattals of wet land (gadde) in the Konabayalu (open space or field) situated in the south-western part of the pura.*239

(ii) One mattar field to the south of the southern stream (palla). This field was bound by a stream on the west also*240

(iii) One mattar field to the north of the above field. Its boundaries: on the south the southern stream (palla) to the north Kariyakere's northern outlet (kōdi); to the east, the pond (kōla) below the next field*241

(iv) Two mattars of wet land in the open space (baval) beside the land belonging to the deity (dēvarabhūmi)*242

(v) Thirty units of flower garden situated to the north of the temple*243

(vi) Two mattars of areca (adake) garden (topta) below the tank (kereya kelaganā)*244

(vii) Near the northern outlet of the tank referred to above, and to the south of the Halljīdala kere a flower garden (pūdonta) of fifty units.*245 These grants were for the Mūlasthāna Nandikēśvara temple. For Caturmukhadeva the donated lands were as follows:-

(i) One mattar land to the east of the tank of the earlier talavṛtti holders (Mumnaḍava talavṛttiyya kere).*246

(ii) Forty units of flower garden (pūdontakam) around (the shrine of) Kamnayya Tumānadēvar.*247

(iii) Forty units of garden land to the west of Bāljigolā and to the north of Bādumbe.*248

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*238 Ibid, II 35-36.
*240 Ibid, I 29-30
*242 Ibid, I 31-32.
*244 Ibid, I 34.
*246 Ibid, I 36
*248 Ibid, I 40
Apart from cultivable fields, we have references to waste land and to pastures. Their locations within the village, vis-a-vis other features of the agrarian landscape are not specified. Thus, for instance the Dévarahalj copper plates of Śripuruṣa includes the grant of one Khanduga of village waste land (ür pālu) of the village Paḷeya Eṇnallūr.*249 Similarly, the Hōsur plates (Gauribidanūr taluk, Kōlār district) of Śripuruṣa, of AD 762-63 registers the grant of waste land (ürpāl) of the extent of being sown with thirty kuḍabas, situated in the villages Eḻangūṭalūr, Māṇiyācigūṭalūr, Paṟuvi and Śripuram.*250 The earliest definite reference to pasture land comes from an eighth century inscription at Vastāre (Chikmagalur taluk, district) which records the grant of pasalam (pasture land).*251 The details of the donor and donee are both absent since the inscription is fragmentary. An inscription from the close of the ninth century at Kalkunda (Nanjanagūḍ taluk, Mysore district) also records the grant of a pasture situated west of Beḷavakāle (a water channel) to (the deity) Nārāyaṇasvāmī.*252

The Kuḷagāna copper plates of Sivamāra Ganga*253 refer, in the opinion of Shama Sastry, to the grant of a garden (totta) for the maintenance of cattle belonging to the deity - (dēvara paśu) of the Caityālaya at Kellipūṣur.*254 This interpretation has been accepted by B.R. Gopal et al., the editors of the latest edition of the Epigraphia Carnatica. K.V. Ramesh, however offers an alternative interpretation that is a literal rendering of the inscriptive reference, i.e., that the cattle were sold to purchase the garden.*255 This seems more acceptable. Another doubtful reference to a grazing land occurs in the Saraguru copper plates of the eighth century which records the grant of one aḍuvu to an individual named Nindigunda, at Mardūr by the Mahājanaś of Keśugola. B.R. Gopal et al have suggested that aḍuvu was probably a grazing land.*256

*254 ASMAR 1925, pp 90-92.
*255 K.V. Ramesh, op. cit., p 139, fn 2. The line in question reads
"dēvarapāṣu goṭṭondu toṭṭam kopṭattu...", 1,26.
The Kumbadalalahalli virgal (Hosakote taluk, Bangalore district) of the close of the ninth century also includes a grant of ten Kolas of adivu to Anileya's son and Nelmalla Annamma's son-in-law (Aliya) for rescuing cattle (tiruvan ikkisi). *257 Although it is possible that adivu was pasture land, there is no concrete evidence to support the suggestion.

While our sources give us considerable information on the layout of fields, the details available are insufficient for a complete picture. The following conclusions may be drawn from the available data:

(i) Tanks were the most important landmarks in the rural landscape and fields were most often located in relation to them.

(ii) Tank channels (baikkal) and streams (palla) were other features used to demarcate one field from another, as also hillocks and mounds (temaru).

(iii) We also have references to open fields (baval) within which lands were granted. It is unclear, however, whether these were similar to the open fields of the agrarian system of medieval Europe. *258 We also appear to have a reference to an enclosed field. *259

(iv) Apart from tanks, streams and channels, temples and forts too were landmarks in terms of which field locations were pinpointed.

(v) References to waste lands, forest lands and pastures are also available, though their location vis-a-vis the cultivated fields not specified. The grants of such lands to individual beneficiaries would point to the erosion of common rights within the village.

*256 EC III (new ed) Hg 90, ll 36-37, also vide p 816, Translations.
*257 EC IX (old ed) Ht 110.
*259 EC III (new ed) Nj 239 of the tenth century grants Mutte to a temple. Kittel, op.cit., explains Mutte as a verb, to enclose and ere as soil of a dark colour, black soil.
(III) STREET LAYOUT:

References to streets and houses are few and far between in our records and in only one of these can the details of the layout be glimpsed. The Hosakote plates of Avintha Ganga are one of the earliest epigraphs to mention a house which was situated in this case, in the vicinity of the temple (devayata sannikṣṭam ēkam veśma) which was granted for the Jaina temple constructed by the Pallava queen mother.*260 The Kulagana plates of Sivamāra I Ganga of the early eighth century mention a house site (Manettāna) which was among the objects granted to the Caiṭya at Kellipūsūr. However the location of this house site is not specified.*261 An eighth century record from Ālgōdu (T.Narsipur taluk, Mysore district) also refers to a house (mane).*262 But this inscription is too fragmentary to make sense. A more detailed reference occurs in the Devaraha!i copper plates which record the grant of one house (māṣamane) and thirty-one house sites (manetāna) in Devangēri in the northern and western corners of Śrīpura.*263 Dēvangēri (street) extended apparently on the northern and western sides of settlement. It is unclear whether it surrounded a temple from which it derived its name. At all events, the house and house sites were granted to the Jinabhavana and its trustee, Vimalacandrācārya of the Mūlagāna Nandisangha, Eregītūrgaṇa and Pulikalgaccha.*264

The Gajigekere copper plates of Ereyanga Raṇavikramayya and its reference to the big street (perōni) and the house (māda) of the bhatāra*265 have been mentioned earlier in the discussion of the boundary details.*266 It would seem that this important street and habitation were located on the outskirts of the village forming its southern boundary.

*260 K.V.Ramesh, op.cit.,No.14, ll 29-30
*261 EC IV (new ed) Ch 347
*262 EC V (new ed) TN 307, 17.
*263 EC VII (new ed) Ng 149 1.69-70
*264 Ibid, ll 45-50.
*265 EC V (new ed) Kn 105 of the ninth century 1.73.
*266 Supra, Section C (I), p.34
A tenth century record from Tāyūru *267 (Nanjanagūḍ taluk, Mysore district) mentions Matigūr's Bāḷuvalgērī (street) and its odeva (lord, chief, leader).*268 whose wife's death by the rite of sanyasana is then recorded. Would this imply that each street or locality had its chief or leader?

A reference to an Eastern street (Mūḍagērī) comes from the Kalkunda inscription (Nanjanagūḍ taluk) of the close of the tenth century. This records the construction of a temple by an individual belonging to the Mūḍagērī and grants thereto by his sons.*269 This would suggest that the street was a discrete social unit within a village and residence there constituted part of an individual's identity. Unfortunately our sources do not throw any light on whether occupational and caste groups tended to reside in separate localities which were then named after the group as in Tamil Nadu.*270 However in view of the fact that different occupational groups had access to different water sources as we have seen earlier, *270(a) it is probable that they resided in separate localities also. While the record in consideration does suggest that streets were aligned to the cardinal points, it does not tell us whether there was a central reference point in street alignment.

We turn finally to the Sirālakoppa inscription*271 which was referred to earlier.*272 In addition to grants of land this records grants of certain streets also: (i) Two kēris (streets) on the southern side of Nandikeśvara temple stretching to the east and two kēris to the east of these, stretching to the south.*273

*267 EC III (new ed) Nj 211.
*270 N. Karashima, "Village Communities: Myth or Reality" in idem, South Indian History and Society; studies from Inscriptions AD 850-1800, Delhi, 1984, p. 46-47.
*270(a) Supra, Section C(I) p 33
*271 EC VII (old ed) Sk 125.
*272 Supra, section (II) p 41
*273 EC VII (old ed) Sk 125 1.33-34.
(ii) In the southern part (tenkana bhaga) of the temple of Caturmukha deva, two streets (eraду keri) stretching from the north-west near Ni9ugoja (pond) to the south-east to the Main Road (Rajavidhi) and two streets to the west of the temple stretching from the north-west corner (bаyabyada kоnа) eastwards to the Balligola (pond).*274

At Sirалakoppa at least, the streets discussed above were clearly aligned around temples, although the direction of alignment in the second case is not very clear. The reference to streets in the southern part of the temple might indicate that the temple complex included streets and lanes within its ambit. Another significant feature mentioned in this record is the rajavidhi*275. As in the case of the Pеrоnи referred to in the Galigekere copper plates it was possibly the street on which the houses of the chief(s) and other important persons were located.

The limited evidence at our disposal makes generalization impossible. However, it would seem that in at least one case streets were aligned around temples to the cardinal directions. The directional layout is also indicated in two other cases. A street appears, too, to have been a discrete social and perhaps a political unit as well to judge from the reference to the chief of a keri. But it is not clear whether the individuals residing in a particular street also shared an occupational or caste identity, though it is very likely to be the case.

(IV) HAMLETS:-
We have numerous epigraphic references to hamlets (palli), the majority of which occur in inscriptions of the Mysore district. This is primarily due to the abundance of epigraphic material from Mysore. Moreover, a dispersed settlement pattern is characteristic of both the maidan and the malnad.

*275 F.Kittel, op.cit.,q.v. rajavidhi - the main or principal road
In Jaina canonical works such as the Uttarādhyayana sūtra, pālliś connoted a tribal village. *276 This is also the case with the earliest Kannada literary works. Thus, the Vaddārādhane, a Jaina work of c.AD 920 mentions a Bēḍa hamlet (Bēḍa vallī).*277 Bēḍas were a tribe of forest people living by the chase.*278 Another reference to a Bēḍa hamlet (Bēḍara pāllī) comes from the Cāvundaṛāya purāṇa which mentions a brahmaṇa joining a hunter (vyāḍha) named Kāḷaka who dwelt in the Bēḍa hamlet in a cattle raid (tuṛuvaṃ koṇḍallī) on Vinītanagara.*279 In Pampa’s Vikramārjunavijayam (henceforth Pampa Bhārata) of c.AD 940, the Pāṇḍavas are amused at the peculiarities of dress, speech and manners of the rustic inhabitants of small villages*280 (Kāḷūrgal). This is in contrast to the respect shown by them to the Mahājanaś of the Mahāgrāhāras. These rustic settlements are also differentiated in the Pampa Bhārata from the bāḍa which signified a town or a village.*281 Though the term pāḷiś is absent here, perhaps these kāḷūrgal were also tribal villages and thus the peculiarities of the dress and customs (naḍeyuḍeya nuḍiya muḍiya gāṃpinge)*282 of its inhabitants excited comment and amusement of the refined and cultured elite. This association of hamlets with tribal settlements is not generally brought out in our epigraphic sources.

*276 Cited in K.M. Shrimali, Agrarian structure in Central India and the Northern Deccan, Delhi 1987., p 23


*278 F.Kittel, op.cit., q.v. Bēḍa.l

*279 B.S. Kulkarni (ed) Trisasthi Laksana Mahāpurāṇa (henceforth Cāvundaṛāya purāṇam), Dharwad 1975 p 331 ,of c AD 980.

*280 F.Kittel, op.cit., q.v Kāḷūr

*281 D.C. Sircar, I.E.G, q.v Bāḍa.

The earliest epigraphic reference to a pāḷī comes from the Talakāḍ inscription of the first regnal year of Śripuṣa (T.Narsiṇpur taluk, Mysore district). It registers the grant of a pāḷī to the Twenty-five of Talakāḍ by Paramakūla's son Arakeśī at the request of Sindarasa, Manasija and Devasathiarasa. The location of this hamlet is not specified.*283

Another inscription of Śripuṣa Ganga, dated AD 791 from Basavaṭṭi (Chāmrājnagar taluk, Mysore district) mentions Ārmeḷeyapāḷī, which was possibly a shepherds' settlement, a Kuripatti. Alternatively a kuripatti was situated close by. The record registers the grant of two Khandugas of land and taxes on land (Mannadere) in perpetuity and the remission of taxes on shepherds (Kurimbadere) in favour of Kurimba gāvunda and Kaṭakkaya.*284 In the story of Dharmaghoṣa bhaṭṭa in the Vaddārādhane, we have a reference to a turupatti (a cowherds' settlement). The cowherds were apparently nomadic since the two monks in the story reach the turupatti in quest of alms only to find it deserted. The cowherds had moved elsewhere.*285 The shepherds in the Basavaṭṭi inscription however appear to have settled down more or less permanently as a tax on land was also levied. The process of social differentiation also was underway for the headman (gavurṭa) of the shepherds (kurimba) received grants of land and the proceeds of taxation.*286

The Koṭṭimba Grant charter of AD 799 of yuvarāja Mārasimha registers the grant of the village Ālūr together with its hamlet Vāydeūt in Kuruvāle viṣaya as a brahmādeva. Here the hamlet appears to be attached to a larger village. The social composition of Vāydeūt is not specified in the record.*287

*283 EC V (new ed) TN 207
*284 EC IV (new ed) Ch 126.
*285 D.L Narasimhachar (ed), op.cit.,p 147,148
*286 Infra, Chapter IV Sections D  *287 K.V Ramesh, op.cit.,No 50
We have numerous inscriptions which record grants of pañjis to individuals or temples. Thus, a fragmentary inscription from Kalkunda (Nanjangūḍ taluk, Mysore district) of the ninth century mentions a pañjī which was probably the object of a grant to a deity or a brāhmaṇa. The name of the hamlet and its location are not specified. Similarly, the Bēḍakūru inscription (Maddagiri taluk, Tumkur district) of the late ninth century records the gift of land and the ownership (sāmya) of a pañjī for the maintenance of a tank (kērē godage). A kalnad' grant of (Ka)ppa(ha)ḷḷi in Guḷdapāḍi is recorded in the Doḍdhahunḍi inscription (T.Narsipur taluk, Mysore district). The donee was a Manemaga of Nītimārgra Ereyanga I who followed his master in death in AD 870.

The Biliyūru inscription of Satyavākya Rācamalla II (Coorg district) of AD 888 registers the grant of twelve hamlets of Bīḷūr, the income of which amounted to eighty gadyānas of gold and 800 units of paddy to Sarvaṇandī bhatārā for the maintenance of the Satyavākya Jīnālaya at Penḍkaḍānga. The reference to no less than twelve hamlets of a single village highlights the extremely scattered settlement pattern characteristic of the Malnad.

The Hoḷalavāḍi inscription (Nanjangūḍ taluk, Mysore district) ascribable to the tenth century on palaeographical grounds registers the grant of ten Kolagas of land in a pañjī (Paḷḷiyalu) to a hero who sacrificed himself. Once again the location of the hamlet is not specified.

A tenth century record from Mangala (Chāmrājanagar taluk, Mysore district) registers some grant concerning twelve pañjis to the gavunda of Mangala. Unfortunately the details of the grant as well as the location of the hamlets are now lost.

This difficulty is not presented by the Toḍḍāvāḍi inscription (Gundlupet taluk, Mysore district) of AD 975, which records the death of Ayapayya who belonged to the hamlet (pañjī) of Toḍḍāvāḍi. Similarly, the Taḍḍālingi inscriptions (T.Narsipur...

*294 EC III (new ed) Gu 59
taluk, Mysore district) of the early eleventh century refer to the hamlets of Māyilangai in Īrāvikuḷa Māṇikkaviṇṇagār Āḻvār. The hamlet was situated to the south of the land sold, and was separated from it by a stone set up to mark the land boundary.*295 In the second case, Irugaiyappalli, the hamlet of the brahmādeya, Marudūr, was situated below the big tank of Marudūr. The granted lands were situated at Irugaiyappalli.*296 In this case also the donee was the temple of Iravikula māṇikka viṇṇagār Āḻvār, i.e., the Janārdana temple at Īadimālīngi. Finally, we have the eleventh century Chittavaḷj inscription (Chikmāgalūr taluk, district) which records the grant of two kulās of rice and ghee (koppa?) from the hamlet (palli) to the Jiviteśvara temple at Chittavaḷji. Once again, the location of the hamlet is not specified.*297

Our inscriptions then do not bring out the association of pallis with tribal settlements, except in the case of Ārmeiyapalli, which is mentioned in eighth century Basavaṭṭi inscription as a Kuripatti, or a shepherds settlement. However the fact that the majority of inscriptions referring to pallis record their grant to an individual or a temple or a brahmādeya might indicate a process of acculturation whereby the tribals were brought in touch with and subordination to the ruling elite. The spread of agrarian settlements over space chiefly as a result of tank construction might be another cause of the emergence of a new hamlet which was then considered subsidiary to the larger settlement and part of it. Such a process is highlighted by B.D.Chaṭṭopadhyaya in his study of twelfth century Kalikāṭṭi.*298

*295 EC V (new ed) TN 230.
*296 EC V (new ed) TN 227. Details of the granted lands are discussed above, Section C (III).
*297 EC VI (old ed) Cm 95. The editor, B.L.Rice is of the opinion that the hamlets were eight in number but this does not seem to be borne out by the text of the inscription.
*298 B.D.Chaṭṭopadhyaya, op.cit., p. 99-100. Biṭṭēnahalli was established in AD 1208-09 after the construction of two new tanks by Hoḍeyya Biṭṭēya.
(V) IRRIGATION

We have seen earlier that tanks were major landmarks in the agrarian landscape. The excavation of new tanks, the repair of old damaged ones and grants for tank maintenance were major preoccupations of the ruling elite. This is brought out clearly in the Pampa Bhārāta wherein the Pañḍavas on their way to Vāranāvata from Hastināpura repaired old tanks and made grants for their maintenance.*299 This is reflected in the epigraphic record as well. Thus the Gaṭṭavāḍi plates of Nītimārga Ereyanga II of AD 904 (Nanjanāgūḍ taluk) records the creation of a new village, Śivayyamangala by a brāhmaṇa Śivāryya around a large tank (Mahātataka) excavated by him and fed by waters from three small rivulets (ksudra naditraya) called Bidirina, Pulivalla and Māvamma flowing from the great forest (Mahārāṇya) Mangali.*300 This new village was thereupon granted by Ereyanga II, on the orders of Rācamalla II to Śivāryya himself as brahmādeya.*301 Among the boundary details of the village, we have a reference to Gaḷakkerę constructed by the queen (arasiyu Kaṭṭida keçe).*302 If the brāhmaṇa Śivāryya is identical with the donee of the Kerehaḷḷi plates of the same monarch, it would seem that he was a military vassal who maintained a thousand elephants for his sovereign in the Konga nāḍu viṣaya.*303 Similarly the Bētamangala inscription (Bowringpet taluk, Kōlār district) of c.AD 950 records that Vaṭumba śikhāmaṇi Vikramāditya Tiruvayya repaired the big tank (piriyakere) of Vijayādityamangala on the orders of his overlord Irava Nōḷambādirāja Nulpayya. To see that it remained strong in perpetuity he granted the bittukaṭṭa (grant for tank maintenance) to the Five Hundred Mahājanas of Kayvāra. The right of bittukaṭṭa in this case is said to include the limits of the Mahāgrāma Vijayādityamangala as well as the four limits of Kapāḷanūr and Manayūr.*304 It is interesting to note that the corporate body of another village was given the rights over another village for the

*299 Pampa Bharata II 97 vacana; "alligallig-ōdeda Keṛegam alidāyatanakkam dhanaṁanittu jīrṇoddhāramgālam māḍisuttim".

*300 EC III (new ed) Nj 402, II 76-78


*302 Ibid, I 92.

*303 EC IV (new ed) Ch 354, I 74-76

*304 EC X (old ed) Bp 4.
maintenance of a tank there. The reason why this was done is not clear. Another noteworthy feature of the Betamanga inscription is the surrender of rights over Kannanūr and Manayūr as well as Vijayādītya mangala for the maintenance of the tank. Would this imply that the great tank irrigated lands of Kannanūr and Manayūr also?

The role of the members of the upper echelons of the ruling class is also brought out by the Nerilage inscription (Arsikere taluk, Hassan district) of AD 971-72. This records the grant of bittuvatta by Cāgiyabbarasi to an individual named Būtuga who was also the recipient of the village Nerilage as kalnād for his father’s feats in the war against the Nālambas.*305 Similarly, Pergade Puliyamma who is described as being "Mahāmātya-guna-sampanna", constructed a tank at Tālagunda, apparently since it is recorded in an inscription of that place.*306 Another Pergade Veleyamma had a well dug at Īṭūr.*307

The Bēvūr inscription (Channapatna taluk, Bangalore district) of AD 985 records a grant for the repair of the tank of Bēmpūr by Pergade Sankayya with the permission of Manalēra, evidently the local lord.*308 Likewise, an inscription from Jambhaḷāli (Sorab taluk, Shimoga district) of AD 972-73 records the construction of two temples and a tank by Sandhivigrahi Kannayya.*309

Apart from rulers, feudatories and officials, we have references to construction of tanks and other irrigation works by Mahājanas, gāvundas, setṭis, and even artisans. We have already referred to the Betamanga inscription which records the grant of bittukatta to the Five Hundred Mahājanas of Kayvāra.*310 Similarly, the Karadīhāḷī inscription (Shikārpur taluk, Shimoga district) of AD 1011 records the digging of a well by a brāhmaṇa of Gautama gotra in order to restore a grant of land made for a temple.*311 The land had suffered owing to lack of water. The donor

*309 EC VIII (old ed) Sb 44. *310 Supra,p,fn 304.
*311 EC VII (old ed) Sk 287, II 13-16.
was probably a Mahājana of the Śālipura agrahāra. The Nellūru inscription of AD 1013 (Sorab taluk) records that Ammaṇa gāvunda’s brother-in-law (bhāva - sister’s husband) Muddayya had a well dug. *312 Likewise the Rāmpura inscription (Channapāṭha taluk, Bangalore district) of AD 1004 records that Māca gāvunda, the son of Būvi Selbayya had a tank constructed and a sluice set up for which he received the grant of bīttuvaṭṭa.*313

The Agara inscription (Bangalore taluk,district) of the ninth century*314 provides us with an instance of an ur-odeya constructing irrigation works. Sirimayya the son of Irugamayya, the Iruvuliyūr odea of Nāgatara lineage*315 had sluices erected for two tanks (tūmbar ikkisi) and constructed a third tank to the east. He received bīttuvaṭṭa for all three tanks.

A ninth century inscription from Ālattūru (Gundlupet taluk, Mysore district) records that Kariya Gangi ṣetti had a tank excavated (kēṭeyagaḷiṣida) at Muḷcanūr.*316

The Koḍakani inscription (Sorab taluk) of AD 1015*317 gives us an instance of a pond constructed by an artisan Caṭṭōja the son of Arjuna Kammāra*318 (a blacksmith) in memory of his father who died rescuing the cattle of his village.

As the inscriptions cited above clearly reveal, tanks were not the only sources of irrigation. We have references to ponds (kola), wells (bhāvi) and to dams (katta). The references to wells come chiefly from Shimoga district. We have already cited some of the records referring to the digging of wells. Another instance is provided by the Belāgi inscription (Sorab taluk) which records that Koṣigara Koṭeyamma who

*312 EC VIII (old ed) Sb 47. *313 S.Settar, ASMAR 1908, A study, vol II,p.57
*314 EC IX (old ed) Bn 79.
*315 Infra, Chapter II Section B. Non kin vassals of other lineages.
*316 EC III (new ed) Gu 36. *317 EC VIII (old ed) Sb 16
*318 F.Kittel, op.cit.,q.v. Kammāra.
was ruling Gōsahasra (Gōsahasram āldam) made a grant of gold to the mahājanas of Elase and had a well dug.*319

The land details given in the Devarahalli copper plates of Śripuruṣa had a reference to a dam (kaṭṭa).*320 Another inscription from the Maṇḍya district at Rāmpura (Shrīrangapatana taluk) of the close of the ninth century records the construction of a dam (Kattam kaṭṭuvudakke) at Taḷenēri and a grant for its maintenance to Śrīkēṣiga who had the dam constructed.*321

We have frequently mentioned bittuvaṭṭa, or grants for the maintenance of tanks in the foregoing discussion. The Indian Epigraphical Glossary explains it as "a portion of the produce derived from the lands irrigated by a tank or wet lands irrigated by a tank, granted to the person who built the tank or repaired it".*322 Although the term is not employed in the Rāmpura inscription, the grant made for the maintenance of the dam constructed by Śrīkēṣiga affirms that tax yield of lands irrigated by the dam (in this case) were granted.

The rates of taxes paid for each ārāṇi of land irrigated by the waters of the dam were as follows: One-tenth (pattondi) in the first year, one-seventh (ṭeḷalavi) in the second year and one-fifth thereafter (aydāḷavi).*323 Similarly, the Basavapura inscription (Channarāyaṇapatana taluk, Hassan district) of the tenth century records the grant of pattondi (one-tenth tax) for every ganḍuga sown by the gurūgūg as a gift for the tank of Uttama gavunḍa. This is also termed a bittuvaṭṭa.*324 Likewise, the Śālur inscription of Krṣṇa II (Shikārprur taluk, Shimoga district) of AD 903 records the construction of a tank (Keṭeyumam Kaṭṭisi) by Kaṭṭamāran and the grant of nirvari (water cess) for its maintenance. The cess was levied at the rate of one

*319 ASMAR 1929, No.78, p.150
*320 EC VII (new ed) Ng 149, supra Section C (II), p. 36-37.
*321 EC VI (new ed) Sr 85.
*322 D.C. Sircar, I.E.G, q.v. bittuvaṭṭa.
*323 EC VI (new ed) Sr 85.
*324 EC V (old ed) Cn 251
Khanduga per mattar of cultivable land.*325 A more ambiguous reference comes from the Sōmasamudra inscription (Chāmrañagar taluk, Mysore district) of AD 993. This records the construction of a tank by Ammaḍi gavunda, son of Bijāyita gavunda of Kṣiruvusuvūr by taking one-tenth (dassiva) of share (bhāga) of land belonging to Nōḷambēya gavunda, as bittuvaṭṭa.*326

However we have explicit references to land, as opposed to share in the produce of land being granted. The Bēḷūr inscription (Maṇḍya taluk, district) of AD 997 records inter alia, the construction of a tank, its bund (Kereya mālakkam...kattēyam kaṭṭisi) and setting up of a sluice (tūṁbanikkisi) and the grant of one kolaga of land as bittuvatta (Kerege kolaga māṇṇu bittuvaṭṭamumam biṭṭar)*327 An inscription from Haḷe Būdanūr (Maṇḍya taluk, district) records the construction of a tank by Sōvīrāsi bhāṭṭārāka and the grant of several kolagas of land by the gavundas of Būdanūr as bittuvaṭṭa.*328 Likewise, an inscription from Karinele (Shikārpur taluk) of AD 1029 records the grant of one maṭṭar for the tank of Karinele.*329 A fragmentary tenth century record from Beḷatūrū (Heggadevanakōṭe taluk, Mysore district) appears to register the grant of ten khandugas of land for a tank as bittuvaṭṭa. The tank was probably constructed by Būtuga Kongaṇī.*330 We have referred earlier to the Bētamangala inscription which records the grant of Vijayaḍityamangala as well as Kanṭañūr and Manayūr as bittuvaṭṭa.*331

*325 EC VII (old ed) Sk 284. 1.5-6 "Kaṭṭam paḍisalisalendu Koṭṭudu pala nīrvariyoḷ beleva māṇṇullanitarōḷ mattal-gorkhanḍuga geydu koṭṭudu".
*326 EC IV (new ed) Ch 404.II 6-9 "Ammaḍi gavundam Nōḷambēya gavunda bhāga dassiva bhāgam goṇḍu kereya kaṭṭisidam 'idara bittuvaṭṭa."
*328 EC VII (new ed) Md 54 of AD 1024.
*331 EC X (old ed) Bp 4., supra, p.51 f.n 304.
A record from Bilugunda (Nāgamangāla taluk, Mandya district) of the close of the ninth century registers the grant of wet lands (gadde) inclusive of devabhōga lands as bittuvatta for the tank of Kīfiya Belgunda.*332 The reference to devabhōga lands might imply that a share of the produce and not land per se was granted. Another ambiguous reference comes from a tenth century inscription from Kārya (Nanjanagud taluk). This registers the grant of bittuvatta for two tanks constructed by Nāgavarma. A grant of four gandugas as koḍagi (gift, grant) is also recorded.*333 It is not clear whether this koḍagi was the substance of the bittuvatta. This difficulty does not arise in the case of the Bedakuru inscription of the late ninth century which recorded the grant of a palli as keregodage (gift for tank).*334

In sum we may say that grants for the maintenance of tanks included both land and shares of the produce of the land irrigated by the tank. The donees were those who had constructed the tank; indeed the tank was apparently owned by them. This seems indicated by the Māvali inscription of the eighth century (Sorab taluk). This refers to the tank of Korakoḍa Koṇṇinda in the course of the description of the battle of Vasavūr Kōte.*335

Although we have numerous references to tank construction, our inscriptions are silent on the technical aspect of tank construction. In contrast, Pandyan inscriptions of the seventh, eighth and ninth centuries mention both the materials and techniques used in tank construction. By the ninth century granite was beginning to replace mud and laterite in the construction of bunds, sluices, wells, troughs, etc., in the Pandyan territory. Major improvements in technique such as the use of chiselled blocks of stone instead of rubble and of a string-line to set the stone precisely are also recorded in their inscriptions.*336

It is possible that similar developments in technology took place in southern Karnataka as well. Sluices made of stone are in evidence from the ninth century onwards.\(^\text{337}\)

Tank construction was an activity undertaken by the ruling elite of every level from kings, queens and feudatories down to the local landed elite such as the gāvundas and Mahājana\(\text{s}.\) We have even some references to construction of irrigation works by artisans. That tank construction was a major factor in agrarian expansion was clearly recognized.

Apart from construction, grants of produce of land and of land itself were made to individuals who constructed tanks for the maintenance of the tank, again by the rulers. A graduated increase in taxation on newly irrigated lands seems to denote a desire on the part of the rulers to convert dry lands to wet lands which clearly had higher yields.

(VI) SOILS:
We have a few references to the soil of the granted lands in our records. The earliest such reference comes from the Narasimharājapura plates of Śivamāra II. This records the grant of black soil land to the Cediya of Tallar by Viṭṭarasa of Kadamba lineage who held the chiefdom (erettana) of Sinda nāḍu 8000. and was ruling Tagare nāḍ-70. The location of the black soil land (Karimāniya) and the extent of the granted land have not been specified.\(^\text{338}\)

A tenth century inscription from Nagarale (Nanjanagud taluk; Mysore district) records the grant of enclosed black soil (Muttēra)\(^\text{339}\) to a temple at Nagarala.\(^\text{340}\)


\(^{338}\) K. V. Ramesh, op. cit., No.85. He interprets Karimāniya (l 2,6) as standing for Kariman, black soil. The inscription is of the ninth century.

\(^{339}\) F. Kittel, op. cit., q.v. muttēra- black soil.
The Doḍḍahomma inscription of AD 977 of Satyavākyā Rācamalla IV Ganga records several grants for a temple of Bhālāri, Mahādēva, Bhagavaṭi and the other deities situated at Piriyaholma. The donors were the Twelve (Pannirvaru) of Piriyaholma and Ayyapagāvundā. The grants included one of a red soil field (Kebbayum). It is unclear whether this was the same as the field situated to the north-east of the Cikkesvara temple.*341 Lastly, we have a tenth century inscription from Bāgāli (Chamrajnagar taluk, Mysore district) which records the grant of (i) four measures of red soil (Kebbeyamaṇu) at Bályūr,*342 (ii) the dark red soil (ḍvendreya maṇu) at Sindakāla.*343 for a temple at Bálgaliyūr. It is interesting to note that these red soil fields are distinguished from the twelve wet paddy fields (Panneraṇga gaḍde nīrmaṇum).*344 Would this imply that red soil lands were preferred for dry cultivation?

We have mentioned the presence of mixed black and red soils in the southern parts of the southern maidān in the study of the physical geography of this region.*345 All our references, save the one in the Narasimharājapura plates are assignable to the area to the south of the Kabbāni in the Nanjanagūḍu and Chāmrājnagar taluks, which fall in this zone of mixed soils.

(VII) LAND CATEGORIES AND CROPS:
Broadly speaking our sources refer to three categories of land: wet, dry and garden. The majority of records which specify the category to which the granted lands belonged mention wet and garden lands. We also have numerous references to crops grown. Here again references to paddy outnumber the rest.

We have only two certain references to dry lands. These come from the Taḍimālingi inscriptions (T. Narsipur taluk, Mysore district) of the early eleventh

*340 EC III (new ed) Nj 239.
*341 Ibid, Nj 294. L.1.9-10 give details of the granted field(s).
*342 EC IV (new ed) Ch 114, l.11
*343 Ibid, l.12
*344 Ibid, l.13.
*345 Supra, section A.
century. The first record of the reign of Rājarāja I Cōla registers the sale of dry (punṣey) and wet (napṣey) lands included within specified boundaries in the village of Māyilangai to the deity Iravikula māṇikka vinnṭagar ālvār.*346 The second record of roughly the same period registers the sale of one and a half vēlis of dry (punṣey) lands in hamlet Irugaiyanpaḷli of the brahmadeyya settlement Marudūr to the same deity for temple services.*347

Apart from this the implicit distinction made in the Bāgali inscription between the red soil field and wet lands might point to the fact that these fields were dry lands.*348 It is, however, difficult to argue that absence of specification of land category would imply that the land in question was a dry field.

We have several references to cultivable lands. The Śalūr inscription of the ninth century records the grant of one mattar of cultivable land (bele mattal) by Śrī Māra, the son of Pubba gāmiga of Tenkavaḷi and Mālengi gāmigitti.*349 Similarly, the Kumsi inscription (Sorab taluk) of the early tenth century records the grant of one bede mattal by Kēśigarājayamalla gōsāsi.*350 However, an inscription from Kalkūpi (Mālavalli taluk, Māṇḍya district) of the close of the tenth century mentions cultivable wet land (bede gadde).*351 It is possible, but not necessary, that the first two instances of grants of cultivable land related to dry lands.

The Narasimharājapura plate of Śivamāra II Ganga registers the grant, inter alia of six khaṇḍuḷaṇās of cultivable land (bede manṇum) under the Dēvigeṟē tank by Vidyāsākti arasa to the Cēdiya of Mūlijavalli.*352 The location of the land below the

*346 EC V (new ed) TN 230.
*347 Ibid, TN 227. Details of the granted land are discussed in Section C (II). p 40
*348 EC IV (new ed) Ch 114, supra, p 58
*349 EC VII (old ed) Sk 283.
*350 EC VIII (old ed) Sb 91.
*351 EC VII (new ed) Ml 147.
*352 K. V. Ramesh, op. cit., No 86, l. 2-6, "Dēvigeṟēya keḷage ārugaṇḍuḷagam vedemanṇum".
tank strongly favours the possibility that it was a wet rather than a dry land. This is clarified by the Honnuru inscription (Yelanduru taluk, Mysore district) of the tenth century which records the grant of five gulás of cultivable wet land (bede galde) below the tank of Ponnnavaya’s elder (Piriya) for a cattle raider. *353

Gadde or galde was the term most often used for a wet land. Kittel explains it as a field, especially a paddy field. *354 Our inscriptions reveal that wet lands were used chiefly for cultivation of paddy. But we do have references to the cultivation of other crops as well. The Hrribidanúr inscription (Gauribidanúr taluk, Kolar district) of c AD 880 records the grant of ten (?)padi Kolas of wet land (galde) as brahmadeya. *355 Similarly, the Kumsi inscription (Sorab taluk) of AD 931 records the grant of one mattal of wet land for paddy cultivation situated between two canals (pāna battava edavari galdagim) leading off a major water conduit (piriya pāneyol). *356

The Kundúr inscription (Hassan taluk, district) of the close of the tenth century records several grants of cash which was then invested in specified units of paddy or in paddy lands (akki galdege). *357

However rice was not the only crop grown on wet lands as the Hecce inscription (Sorab taluk) of AD 939 reveals. This records the grant of a sejjegadde. *358 Seje is a tall stout kind of grass cultivated for its grain. *359

The term kalani which is synonymous with gadde *360 has been used in the Kulagāna copper plates of Śivamāra I Ganga; it records the grant of two Kalanis (Kalanium eraçu), for the Čēdiya at Kellipūṣūr. *361 K.V Ramesh translates it as two

*353 FC IV (new ed) Yl 14.
*354 F. Kittel, op cit., q v. gadde
*355 FC X (old ed) Gd 5.
*356 FC VIII (old ed) Sb 83.
*357 FC V (old ed) Hn 38.
*358 FC VIII (old ed) Sb 476, 1.16
*359 F. Kittel, op cit., q v. sejje
*360 F. Kittel, op cit., q v. gadde.
*361 FC IV (new ed) Ch 347, 1.18
pieces of paddy fields.*362 Inscriptions from Kōlar use the term *kaḷaṇī* rather than *gadde* to denote paddy lands. Thus the Hulikunda inscription (Bowringpet taluk, Kolar district) of the mid-eighth century records the grant of four *gulas* of paddy land (*kaḷaṇī*).*363 The Nekkundi inscription (Chintāmanī taluk, Kōlar district) records a grant of five *gulas* of *kaḷaṇī* for a hero who died in a cattle raid.*364

The terms *nīr maṇṇu* or *nīr pāṇya* have also been used in the epigraphic record to denote wet lands. Thus a tenth century inscription from Chikmagalūr records the grant of 200 units of wet land (*nīr pāṇya*) to Permādi gāvūṇḍa of Kiriyanuguli.*365 Likewise an inscription from Maddūrū (Yelandur taluk, Mysore district) registers the grant of ten *khandugas* of wet land (*nīr maṇṇu*) in Origāla by the thousand brāhmaṇas of Māldūr for a temple constructed by Pollayya.*366 The Kempanapura inscription (Chamrajnagar taluk, Mysore district) of AD 991 records the grant of (i) two *khandugas* of wet land (*nīr maṇṇu*) at Kiri Hērūr; (ii) ten *khandugas* of wet land (*nīr maṇṇu*) at Nallīgunda together with a garden (*tōja*) for the repairs of a temple and for feeding ascetics by Poleyya of Kellūr.*367

We had referred earlier to the Marūru inscription (Arkalgūḍ taluk, Hassan district) in the discussion of field layout. This record registers the grant of three *khandugas* and five *gulas* of wet land in the sedimentary soil to the east of Arakere (tank) (*Kaḍagōḍina nīrmaṇṇu*).*368 Another reference to the sedimentary soil (*kaḍegōḍu*) comes from the Mūḍupāḷya inscription (Māgadi taluk, Bangalore district) of AD 968 which registers the

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*363 *EC* X (old ed) Bp 48  
*364 Ibid., ct 36. of c. AD 880  
*365 *EC* VI (old ed) Cm 3 F. Kittel, op. cit. pāṇya—a farm or landed estate.  
*366 *EC* IV (new ed) Yl 40 of AD 982.  
*367 *EC* IV (new ed) Ch 145.  
*368 *EC* VIII (new ed) Ag 28
grant of one Khanduga in the big wet land (peggalde) in the sedimentary soil to the east of the temple tank (dēvara keṣeyya muḍana kāḍegodina).*369  A tenth century inscription from Basavanahalli (T.Narsipur taluk, Mysore district) records the gift of two khandugas of wet land (nir mannu) and two of maḍuvina mannu.*370 K.V.Ramesh translates the latter as land by the side of the tank (maḍu)*371  It is possible that maḍuvinamannya is similar to kadalodu, i.e., the reference here is to the sedimentary soil by the side of tanks. If so, such soil was used for paddy cultivation. If the area covered by such land was insufficient then it could be used for coconut or areca plantations.

Another special category of land to which we have reference in our epigraphic record is makki. Kittel explains makki as "rice land above the level of the valley, which is to be watered and produces a crop of luxuriant growth."*372  The sole inscriptive reference to makki comes from Őtůr (Sorab taluk). This records the grants of (i) two mattsarias below Nōsiga goḷa and (ii) two mattsaris in makki for the temple (dēgula) constructed by Pergade Nākiyayya.*373  Other grants of (i) one mattle in kaluvina makki and (ii) some land in areyamakki were made for the deity Keśavāditya set up by Pōleyanna's wife Gombabbe.*374  Gombabbe's temple appears to have received lands in stony ground.*375

Several inscriptions mention bhattada mannu (paddy lands). Thus the eighth century Bechirākh Mārēnahaljī inscription (Hosakōte taluk, Bangalore district) records the grant inter alia, of thirty gulas of paddy land (battam) to Śripuruṣa

*369 EC IX (old ed) Ma 75.  
*370 EC V (new ed) TN 320.  
*371 K.V.Ramesh, op.cit., p.322. Kittel however explains maḍu as a deep place in a pool or river, q.v. maḍu. Would this imply that maḍuvinamannya is land in the dried up tank bed?  
*372 F.Kittel, op.cit., q.v. Makki.  
*373 EC VIII (old ed) Sb 70, l.12-13.  
*375 F.Kittel, op.cit., q.v. Kalu - a stone; q.v. are (4) a stone; a rock, a slab.
Similarly, the Elkuru inscription (Chamrajnagar taluk, Mysore district) of the ninth century registers the grant of one *gula* of paddy land (*Mappu bhattamum*) for an individual who excavated a tank.*377 Another ninth century record from Madalavadi (Chamrajnagar taluk) records a grant of a hundred units of paddy lands (*bhattada mappu*) for Vējemaļalpācari.*378 The Kampalapura inscription (Piriyapāṭṭana taluk, Mysore district)*379 registers a grant of two khapdugas of rice lands (*nelmappu*) below Mālīikeçe. Likewise, the Malali inscription (Heggaḍedēvanakoṭe taluk, Mysore district) of the tenth century records the grant of 200 units of paddy lands (*battada mappu*) for a hero who distinguished himself in battle.*381 The Ereyūru inscription (Guṇḍlūpēṭ taluk) also of the tenth century registers a grant of 200 (īnluru) units of paddy lands at Sirivatangālā.*382 The Nagarale inscription (Nanjanagud taluk) records a grant *inter alia*, of ten kolagas of paddy.*383 It is unclear whether this was a grant of land or of paddy in kind.

An inscription from Dēvarahalli (Gundlupet taluk) of the eighth century records the grant of a field (*pola*) wherein paddy (*nellu*) and pāṇḍi could be grown.*384 We have no information with respect to pāṇḍi. The fact that paddy was grown in the field in question would indicate that it was a wet land.

Apart from references to paddy lands we have numerous inscriptions which record grants of rice in kind, husked and unhusked. The Magudilu inscription of Sivamara Ganga (Heggaḍedēvanakote taluk)*385 and the Mūdahalli inscriptions (Nanjanaguddu taluk)*386 record the grant of a sollage (a measure of capacity) of nellakki (husked and unhusked rice).

*376 EC IX (old ed) Ht 86.  
*377 EC IV (new ed) Ch 87.  
*378 Ibid, Ch 304.  
*379 Ibid, Pp 117  
*380 F. Kittel, op cit., q v nel, paddy, rice in husk.  
*381 EC III (new ed) Hg 110.  
*382 Ibid, Gu 171.  
*383 Ibid, Nj 241.  
*384 Ibid, Gu 207, 1-7-8.  
*385 Ibid, Hg 156 of the eighth century.  
*386 Ibid, Nj 192, 193
All these grants were for the deity of Vēdirū. A highly damaged inscription from Varuṇa (Mysore taluk, district) records a grant of a similar kind although in this case the detail of the donor and donee are missing.*387 The Nelamane inscription (Shrīrangapattāṇa taluk, Maṇḍya district) of the late ninth century records the grant of a sollage of white rice (beḷiyakki).*388 Here too the details of the donee and donor are absent. The Śige inscription (Hassan taluk, district) of the close of the ninth century records the grant of a padi or rice (akki) probably for a deceased hero.*389

In many cases grants of paddy or rice in kind were made in addition to grants of land. Such is the case with the Doḍḍahomma inscription of AD 977*390 (Nanjanagud taluk). Apart from grants of land*391 ten kolas of paddy too was granted. Similarly, the Bāgali inscription (Chamrajnagar taluk, Mysore district) referred to earlier, grants some rice for the festival (parbadakki) in addition to wet lands and red soil fields.*392 The Chittavaḷḷi inscription (Chikmagalūr taluk, district) of c.AD 1025 registers the grant of two kulas of paddy (bhatta) in addition to two villages and the income from the tolls (sunka) of Uppaḷḷi for a temple.*393

From the large number of references to wet lands, paddy lands and to paddy as well as records for the construction of new tanks, it would seem that wet land cultivation of paddy was the mainstay of the economy. Certainly wet lands were preferred as grants to temples and brāhmaṇas as well as to secular donees and in secular transactions. This is indicated for instance by the Kundūr inscription of the close of the tenth century, (Hāssan taluk, district) which records several gifts of cash sums which were then invested in specified units of uncooked paddy (beḷyada bhatta) and in

*389 EC VIII (new ed) Hn 62, Kittel op.cit.,q.v.padi-a measure of capacity equal to half a seer.
*392 EC IV (new ed) Ch 114, l 16 *393 EC VI (old ed) Cm 95 L1 15-16, ll 9-10.
rice fields (akki galde). *394 A similar instance is provided by Uppavaḷḷi inscription of AD 959 (Chikmagalūr taluk, district) which records the payment of five hundred units of paddy (ayṇūru bhattamam) by Pattanda of Ammāḷe to Haviga of Uppavaḷḷi. *395

References to crops other than paddy are scarce. An early reference to millet (śyāmaka)*396 comes from the Melekōṭe plates of Mādhava II (Talakāḍ branch). This records the grant of

(i) five khandukā vāpas of land to the west of the clothiers field and north-west of their śyāmaka field*397,

(ii) eighteen khandukā vāpas of land yielding crops of śyāmaka grain*398 and

(iii) twelve khandukā vāpas of land yielding śyāmaka grain to the north of the highway. *399

Another reference to millet comes from an interesting record of the ninth century from Gattavadi (Nanjanagud taluk).*400 This, in the opinion of B.R.Gopal et.al. registers the grant of a fallow millet field (paravariya jōlada kēy) *401 after its conversion to a fertile paddy field. (Kambalada *402 eda keysi). That it was a millet field is certain. Its conversion however is not indubitable. The record seems to indicate, rather, the employment of hired labour on the field in question. The inscription does not specify the category of land. The Hosakōṭe plates of Avinita (Hosakōṭe taluk, Bangalore district) of the beginning of the sixth century, which record grants to the Jina temple constructed by the the Pallava queen mother includes a reference to a garden land for growing sugar cane (śivu niśpādana kṣamam toṭṭa kṣētra).*403

*394 EC V (old ed) Hn 38. *395 EC VI (old ed) Cm 42.

*396 M.Monier-Williams, A Sanskrit-English Disctionary, q v śyāmaka, a kind of cultivated millet.

*397 K.V.Ramesh, op.cit., No.11,17.


*400 EC III (new ed) Nj 313

*401 F.Kittel, op.cit., q.v. Jōla a generic name for several species of millet.

*402 Ibid, q.v. Kambalā - daily hire or wages

*403 K.V.Ramesh, op cit., No.14,129.
The Māmballi copper plates too mention ikṣu (sugarcane) as one of the crops grown in Pumrastra.*404 The other crops grown in that unit are specified as follows: paddy (vṛihi), wheat (gōdhūma), barely (yava), pulses (raḍaka), etc. Fruits such as plantains (kadalī), areca nut (krāmuka) and coconut (nālikēra) were also cultivated.*405

A plantain garden is mentioned in the Meḍutambihalli inscription (Kōḷār taluk, district) of the ninth century. Seven tūmbus (a land measure) of plantain garden (bāle ṭoṭṭa) were granted to the odeyas of Nallattūr as a brahmādēya with all exemptions (sarvabāḍha parihāra)*406

A coconut grove is mentioned as one of the objects granted for the basadi constructed by Srīvarmayya by Ayyappa Nommayya. Another garden on the eastern bank of the river is also mentioned as the object of grant for the basadi at Kannamangala in the Narsāpur plates of AD 902 (Kōḷār taluk, district) but the fruits grown therein are not specified in this case.*407

Lithic records do not by and large specify what was grown in garden lands. The Širālakoppa inscription which has been cited earlier,*408 is one of the few exceptions. This records grants of

(i) two mattars of areca garden (adake toṭṭa);
(ii) thirty units of flower garden to the north of the temple;
(iii) a flower garden of fifty units;
(iv) a flower garden of forty units; and
(v) forty units of garden land.*409

*404 EC IV (new ed) YI 167.
*407 EC X (old ed) Kl 90.
*408 Vide supra, Section C (II) and (III), pp. 41, 45-46
*409 EC VII (old ed) Sk 125.
An inscription from Vijayapura (T.Narsipur taluk) of the sixth regnal year of Rājendrā I Cōla (i.e., AD 1017-18) refers to a flower garden (varavana) raised by Bēdiyanna, probably at Kuruvennaagara (modern Vijayapura).*410

The other early references to garden lands (totta) come from the Kulagāna copper plates of Śivamāra I Ganga. These record the grants of:
(i) A garden land (totta) given by Pallavelarasar.*411
(ii) a totta given by Kaṇṇamman of Gaṇenādu.*412
(iii) a totta from Māragoṭēra,*413 and
(iv) a totta purchased after selling the cattle belonging to the deity.*414

However, we have no information as to whether these were flower or fruit gardens.

An eighth century reference comes from the Homma inscription (Chāmrājnagar taluk) of Śrīpuraṇa, which records the sale and grant of the northern and southern portions (khandam) of the garden of merchant(s) (vāniga totta) to the Vinitśvara temple.*415 We do not know whether the land had originally been owned by an individual or by a corporate group of merchants. Nor does the inscription specify what was grown in this garden or its price.

The tenth century Gaṇiganūr inscription (Yelandīr taluk, Mysore district) records the grant of a piece of garden land (totta khanda) to the east of Arotoṭa to the deity Ādityabhāṭṭara, by Elabbe.*416 Āra toṭa was probably a garden of Āra trees (Barringtonia acutangala gaertn).*417

*410 EC V (new ed) TN 142.
*411 EC IV (new ed) Ch 347, 18 18 *412 Ibid, 119.
*413 Ibid, II 25-26
*414 Ibid, 126, also supra, section C (II), p. 412, fn 254.
*417 F.Kittel, op.cit.,q.v. ara (2).
We have two possible references to flower gardens in two inscriptions of the early eleventh century. The Nītre inscription (Gundlupet taluk, Mysore district) of AD 1009 registers the grant of five gōlas of pumbola for the deity Ādityadēva. Pumbola has been interpreted as flower garden by B.R. Gopal et al.*418 Similarly the Beḷatūru inscription of AD 1020 records the grant of five gūlas of pumbola for a renovated Śiva temple of Beḷatūru (Heggadeśvanakōṭe taluk).*419

In sum, we have but scant references to dry lands. The lack of specification of the category of granted lands cannot be taken as evidence that they were dry lands. The majority of references in our records are to wet lands, for most part, paddy lands. We also find millets, sejje and sugarcane among the crops mentioned. Among fruits grown we have references to plantains, areca and coconut plantations. Flower gardens were also often granted to temples.

*419 Ibid, Hg 58.
D) PASTORALISM and MIXED FARMING

We have seen earlier that all the geographical regions included in the area under study, i.e., the Malnad, the semi-malnad and the southern Maidan are marked by high densities of cattle population owing to the easy availability of pasturage. This seems to have been the case for the early medieval period as well. Epigraphic references to cattle raids, cowherds and shepherds point to the widespread prevalence of a pastoral economy in this region. Evidence for mixed farming is also available as we shall see below.

(I) REFERENCES TO COWHERDS AND SHEPHERDS:

References to cowherds are chiefly available from the Shimoga district. Several Shimoga inscriptions refer to gōsahasra and its vernacular derivatives gōsāsa and gōsāsi. The Bełagi inscription (Sorab taluk, Shimoga district) of AD 964 mentions Kōṭeyamma who is said to be ruling Gōsahasram. Another inscription from the same place refers once again to Kōṭeyamman and styles him gōsāsi. His elder sister Akkanabbe is described as a gōyiti (cowherdess). This would indicate that the terms gōsahasra or gōsāsi indicated a person owning a large herd numbering a thousand cows. The Sāsaravalli inscriptions (Shikāpur taluk) of AD 1001-02 mention Äycanṭha Gāvunda gōsāsa of Sasagavalli who had a temple constructed (jari dēgula maḍisidam). The editor explains gōsāsa as one who either owns a thousand cows, has gifted a thousand cows or fought in defence of cattle.

The gift of a thousand cows is registered in several records. An eighth century inscription from Māvali (Sorab taluk) records the grant of a thousand cows (gōsahasram pradarum) by Āridara Pōleyamma of Maileyā grāma together with eight bele mattals of land. The Kumsi inscription of AD 910 records a similar grant to the Thousand of Kumbise by their magatin (servant or tenant) Kēśiga Rājayamalla.

*420 supra, Section A, p 7, 9
*421 ASMAR 1929, No. 78, p. 150.
*422 Ibid, No. 79, p. 152
*423 The number may well be an exaggeration.
*424 ASMAR 1942, No 61, p 190-192.
*425 Ibid, p. 192
*426 EC VIII (old ed) Sb 9.
*427 Ibid, Sb 91.
*428 F. Kittel, op. cit., q.v. Maga.
Other references to ḡōṣā / ḡōṣā / ḡōṣahāra occur in two records from Ṭūr dated AD 940*429 and from the Kiruğunise inscription of AD 959 *430. The purport of these records is not altogether clear. While one of the Ṭūr inscriptions seems to record the death of a ḡōṣā in battle, *431 the Kiruğunise inscription probably registers the grant of a thousand cows. Finally we have the Gāmagrāma inscription (Shikārpur taluk, Shimoga district) of AD 1021 which records the death of Lokayya in whose honour a thousand cows and five units of land were granted (paroḵṣa ḡōṣāi bhūmi 5).*432

Thus it appears that the term ḡōṣā/ḡōṣā indicates in some cases the owner of a large herd and in others the gift of a thousand cows. The number thousand is possibly exaggerated. But in any case it points to the existence of large herds of cattle in this area.

The Hecce inscription of AD 939 (Sorab taluk, Shimoga district) records several grants by Kaṭakada ṣoṇa Caṭṭayaya dēva of Banavāse in the presence of Mahāsāmāntāḍhipati Mācīga of Māṭīra vamśa, who was ruling Banavāsi at the time to the Śṛīkaṇṭhēśvara temple *433. Gōva is the taḍbhava form of ḡōpa a cowherd. *434 The Pampa Bhārata refers to it in Śisūpāla's dismissal of Kṛṣṇa as a mere cowherd, unworthy of first worship in a conclave of kings (paccane pasiya ḡoṇānai).*435 The Indian Epigraphical Glossary suggests two other functions of a ḡōpa—one as a watchman and the other as an official in charge of the royal cattle *436. Both are borne out by literary works. One of the stories of the Vaddārādhane mentions Vīrapūṇa who is said to be the watchman (kāvu) of the royal cattle (arasara ḡōmanḍalām).*437 Similarly the Pampa Bhārata refers to Sahadeva's appointment as Gōmanḍalāḍhyaṅkṣa by Vīrat, when he appeared in the guise of a ḡōpāla. *438

*429 EC VIII (old ed) Sb 75.77. *430 Ibid, Sb 501
*431 Ibid, Sb 77 *432 EC VII (old ed) Sk 9,1 11.
*433 EC VIII (old ed) Sb 476 *434 F. Kittel, op cit., q v ḡoṇa ḡōpa.
*435 Pampa Bhārata VI.52. *436 D. C. Sircar, I.E.G., q v ḡōpa.
*437 Vaddārādhane, op cit., p 66 *438 Pampa Bhārata VIII.54 vacana
In the case of Caṭṭayyaḍēva he appears to have been an officer charged with the herds of a Kataka (camp or capital). Since he is specifically stated to belong to Banavasi, the capital of Banavasi nād-12,000, the term Kataka must perhaps be taken in the latter meaning here. However, a twelfth century virgal uses Kaṭakaka gōva to denote protector of a camp.

A virgal from Balla (Mūḷbāgal taluk, Kōlar district) of c.AD 780*440 records the death of a turuvalla (cowherd)*441 Uvalan together with an unnamed turuvālti (cowherdess)*442 in defence of the cattle of Balla which were being carried off by Karapuran the son of Raṇamukha Duṭṭa. The cowherd (or his dependents) received five gulas of fields yielding one rice crop (‘or kalamum’).*443 Uvalan appears to have been the cowherd of Balla village and of far lower status than Caṭṭayyaḍēva who appears to have been an officer of high rank. An inscription from Haḍe Bogadi (Mysore taluk, district) of the early eleventh century*444 has a passing reference to a turuvāla*445 (a possessor of cows), Ciyalayya by name. He was one among numerous witnesses belonging to various occupations who were present at the ceremony wherein the title of Goggiyacāri was conferred on Jōbācāri’s son by Goggi gāvunda.*446 Another reference to a possessor of cows (?turuvālama)*447 comes from the Tinnilli virgal (Srīnivaspur taluk, Kōlar district) of c.AD 880,*448 which records the death of Pottalgagi, a turuvālama probably in defence of cattle in the cattle raid by Śrī Kandiyya. The deceased hero received one khanduga of rice land (kalanī) and five gulas of waste land (pālu).

We have only one reference to a shepherd in the Basavaṭṭi inscription (Chamrajnagar taluk, Mysore district)*449 which has been mentioned earlier.*450 This registers the grant of two khandugas of land and taxes on land (mannadere) as well as the remission of taxes on shepherds (Kurimbadere) in favour of Kurimba gāvunda (a chief
among shepherds?) *451 and Kaṭakaya. A kuripatti (sheep fold or shepherds hamlet)*452 at or near Ārmeleyapalli is also referred to in the Basavaṭṭi inscription. The Kaṇnatūr inscription (Alur taluk, Hassan district) of AD 1025 has a passing reference to a kurivalli, possibly a shepherds' hamlet.*453 But we have no certain evidence. The inscription records the tying of the settiṇaṭṭa on the gavunda of Kaṇnatūr. Among the numerous witnesses on the occasion we find Māca gavunda of Kurivalli.

Thus we have a few references to owners of herds of cattle, chiefly from Shimoga district and one each from the Mysore and Kolar districts. Two references to cowherds are also available. We have but two references to shepherds and their hamlets of which one is suspect. A more complete picture of the pastoral economy of the region in the early medieval period can be obtained by a study of the distribution of cattle raid hero stones.

(II) CATTLE RAIDS: Cattle raids together with destructive raids on villages (ūr-aliṇu) and assaults on women (pendir-udeyulcal) are frequently recorded in inscriptions. A combination of all these is found in the Köogōḍu inscription (Bēḷūr taluk, Ĥassan district) of the early eleventh century. This records the death of Mācayya, the nephew of Šivāra gavulśa of Köogōḍu in a raid on their village by Gaṇḍara Dumma Kaṭayya, general of Nitimahārāja. The raid is characterized as ūr-aliṇu, tāy-udeyulcal (assault on mothers) and turugol (cattle raid).*454 These are mentioned by Ranna in his Sāhasabhimavijayam of c. AD 990 (henceforward Gadāyuddham) as among the chief occasions for a hero to display his prowess.*455

*451 F. Kittel, op. cit., q.v. gavunda
*452 Ibid., q.v. kurpi (3)
*453 EC VIII (new ed) Al 8.
*454 ASMAR 1939, No 36, p 143-144.
*455 R V Kulkarni (ed and transl) Sāhasabhimavijayam. Published by the Kannada Sāhitya Parisat, Bangalore 1985, II 24.
Cattle raids have been related to the prevailing militarism of the age.*456 Indeed, in some cases they appear to have been motivated primarily by political factors. Such was undoubtedly the case with the uttara and dakśina gōgrahaṇa episodes in the Pampa Bhārata. Pampa has given a stirring account of the spirit of the defenders in the course of the description of the cattle raid.*457 Similarly, inscriptions from Guquve (Sorab taluk, Shimoga district) of AD 1032 record the death of several heroes in a cattle raid by the Kadamba chief Ṣāntayyādeva on Guquve in retaliation for an attack on the fort (kōje) of Banavāsē.*458 A ninth century hero stone (virgaḷ) from Challapura (Arsikere taluk, Hassan district) refers to a cattle raid on Kellangere in the course of a war over Sindhamma nāḍ (Sindhamma nāḍa bavaraḍolu).*459

In the majority of cases, however, the context of a cattle raid appears to have been purely local. In some cases our records mention Bēḍa inroads. The forest and hill-dwelling Bēḍas were a constant menace to the settled populations of the plains and valleys.*460 The Bēḍas are generally associated with cattle raids as is indicated by the Cāvundarāyapurāṇa in which the cattle of Vīṇītanagara are carried off by Kālaka a hunter dwelling in a Bēḍa hamlet, in association with a fallen brāhmaṇa.*461 Inscriptions from Beṭṭadakurali (Sorab taluk) record two cattle raids by Bēḍas in AD 954 and AD 964.*462 The Cikkacāvutī virgaḷ records the death of Piriya Attiya gāvāṇḍa of Kaccavikoḷa in defence of cattle which were being driven away by the Bēḍas.*463 Other Bēḍa inroads are recorded in an inscription from Kambadahalli (Nāgamangala taluk, Mandya district) of AD 979*464 and three from Nallur*465 (Alur taluk, Hassān district) of AD 985.

*457 Pampa Bhārata VIII 95
*458 EC VIII (old ed) Sb 60-63
*459 EC V (old ed) Ak 99
*461 Cāvundarāyapurāṇa op cit, p 331
*462 EC VIII (old ed) Sb 202,203
*463 Ibid, Sb 240
*464 EC VII (new ed) Ng 34
*465 EC VIII (new ed) Al 35-37
But these were not cattle raids. The Kambadahalli inscription records the abduction of the women of Bindiganavale by the Bedas and the Nallur inscriptions an iūr alīvu.

Apart from raids by Bedas we have several references to cattle raids by inhabitants of neighbouring villages. Thus the Kurubele inscription (Bowringpet taluk, Kōlār district) of c.AD 890 records the death of Marangal odeva Kandamayya and Namagandhila Gāṇḍayya in a cattle raid.*466 The settlement which was raided is not mentioned however.

Similarly the Nekkundi inscription (Chintāmaṇi taluk, Kōlār district) of the same period records the death of a gāvunda in a cattle raid and the grant of five gūlas of paddy land (kalāṇi) by the king (aras).*467 Here again, the place which was raided as well as the settlement to which the raider belonged are not specified. In the Bammobodahalli inscription (Ānekal taluk, Bangalore district) of the close of the ninth century a cattle raid on Kādambūr is recorded in which Mangala Bīvaṇṇa a servant (ālvu) of Nāgattara died. The cattle raid was led by Nāgadeva.*468 We are not told whence the raiders came.

In contrast, the Bharangi virgal (Sorab taluk) of AD 957 records a cattle raid on Kānnasoge (in Shikarpur taluk) by Pēbbā gāmunda of Bārangi.*469 An individual named Baisarīkaṇva Muddaṇṇa attacked him as he fled with the cattle, fought and died. Similarly, the Niḍuvani inscription of AD 970 (Hole Narsipur taluk, Hāssan district) records a cattle raid on Niḍuvani by Keṇca gāvunda of Bidirāka (in the same taluk).*470 A virgal from Nāgamangala (Māṇḍya district) records the death of Tanadakayya the gāvunda of Iḍūgūr in a cattle raid (turugōlo) on Ādityapaṭṭi.*471 The Cinakurali inscription (Pāṇḍavapura taluk, Māṇḍya district) of AD 1011 records a raid by Tūruvakaṇṇa of Cikavangala on a cattle pen (tupuvalaga). The cattle were rescued by Nāgayya.*472 A similar attack on a cattle stall (Kottaga)*473 is referred to in an inscription from Laksmaṇapura (Heggadē dēvanakōte taluk, Mysore district) of AD 1030. The cattle lifter was Śāntayya, the father-in-law (Māva) of Taṭṭala Ėca gāvunda.

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*466 EC X (old ed) Bp 64.  
*468 EC IX (old ed) An 73.  
*470 EC VIII (new ed) HN 130.  
*472 EC VI (new ed) Ppu 51.  
*467 EC X (old ed) Ct 36.  
*469 EC VIII (old ed) Sb 326.  
*471 EC VII (new ed) Ng 12.  
He was attacked and the cattle rescued by Binnāṇḍi who fell after the skirmish.\textsuperscript{474}

The examples cited above would suggest that, it was the gāvundaś who most often undertook both cattle raids and defence. The impression is further strengthened by other epigraphic references. The Kaṭṭemanunganahalli inscription (Heggaḍedēvanakōte taluk) of the ninth century records the death of Rāma, the son of Permāṇḍi gāvunda, while engaged in the rescue of the cattle of Kottamangala which were carried off by the Bayalnādān in the course of a battle (vīraga).\textsuperscript{475} The Iggali inscription of the ninth century (Nanjanagūḍ taluk, Mysore district) records the rescue of the cattle of Iggaliyūr by three gāvundaś, Adhikārī gāvunda, Carama gāvunda and Śivaya gāvunda.\textsuperscript{476} The Kūrgal inscription (Piriyapañṭṭana taluk, Mysore district) of the tenth century records the death of a gāvunda of Kūrgallu in a cattle raid (turugōl).\textsuperscript{477} While an early eleventh century virgāl from Kittūr (Piriyapañṭṭana taluk) records the death of a son of Bijaya gāvunda of Kittūr in a similar raid.\textsuperscript{478} A tenth century record from Ereyūr (Guṇḍlupēṭ taluk, Mysore district) refers to the rescue of the cattle of Eraūr by Kādi gāvunda.\textsuperscript{479} The Arakēre inscription (Shimogā taluk, district) records the death of Beṭūga the younger brother of Māragāvunda of Kēre in a cattle raid.\textsuperscript{480} Lastly we have the Māvinakēre inscription of the tenth century (Nāgamangala taluk, Maṇḍya district) which records the death of Rājayya, son of Gangi gāvunda in rescuing cattle (turuvan ikkisi).\textsuperscript{481}

Although references to cattle raids by gāvundaś outnumber the rest, it was not a practice restricted to them. We have some references to merchants (sēttis) and artisans (ācāri, Kammāraōja) engaged in cattle raids or in rescue of cattle. This shows that cattle were maintained by all classes of people in this period. Two records from Ālattūru (Guṇḍlupēṭ taluk, Mysore district) of the ninth century refer to a cattle raid by a group of merchants led by Ammanāṣeṭṭi on Atṭi, probably in Cōla nāl where they had gone for trade (Paradu pōgi).\textsuperscript{482}

\textsuperscript{474} EC III (new ed) Hg 98. \textsuperscript{475} Ibid, Hg 5. \textsuperscript{476} EC III (new ed) Nj 205. \textsuperscript{477} EC IV (new ed) Pp 28. \textsuperscript{478} Ibid, Pp 144. \textsuperscript{479} EC III (new ed) Gu 171. \textsuperscript{480} EC VII (old ed) Sh 22. \textsuperscript{481} EC VII (new ed) Ng 128. \textsuperscript{482} EC III (new ed) Gu 36,37.
It is unclear why the merchants should have engaged in a cattle raid. It is possible that they traded in cattle and the action they undertook was defensive rather than offensive. However, the term turugāl is generally used to denote an offensive action while turuvam magulci and turuvan ikkisi are used to denote a defensive or rescue operation. The use of the former in this case might point to the fact that the merchants were raiders.

Two other records referring to cattle raids (turugāl) by traders come from Elevāla (Sōrab taluk, Shimoga district) dated AD 1013. They record the death of two setūs of Midiyapallaga. The place which they raided is not mentioned.*484 Two other virgals from Mudaloda (Gauribidanur taluk, Kōlār district) of c. AD 930 record the death of two setūs in a cattle raid. Neither the name of the raided settlement nor the place to which the setūs belonged is specified.*485 The Bēchirākh Jakkasandra inscription (Dodda Ballāpura taluk, Bangalore district) of the close of the tenth century records the death of Cabbi setū the son of Dhālaga Kōvara Basava setū in defence of the cattle of Kadalvāgilu which were being carried off by Karagadi Sandimalla.*486 An inscription from Međutambihālli (Kōlār taluk, district) of the early ninth century records the tying of a patta on the son of Balimindana setū for his prowess in a cattle raid and the grant of five guillas of paddy land in some āru (peasant settlement). The cattle raid was on Puttur.*487 It is not quite clear whether the setū was a raider or a defender.

However the term setū is used to denote not only traders and bankers but also certain men practising industries such as oil pressing.*488 This is brought out by the Haralakunte virgal of AD 966 (Kōlār taluk)*489 which records the death of Gange setū the son of Perundāli setū of the Gāniga (oil millers)*490 community in a cattle raid by Kālasyare Paṇatiya.

*483 Turuvan ikkisi in EC IX (old ed) Ht 110, Dv 42, DB 9, EC X (old ed) Mb 261, 203, Bp 48, Sd 59 etc. and “Turuvan magulci” in EC III (new ed) Gu 50, 171. Hg 98, 5. EC VII (new ed) Ng 128, Mi 147 etc. are the usual terms indicating death in defence of cattle.

*484 EC VIII (old ed) Sb 385, 386. *485 EC X (old ed) Gd 85, 86


Gange Setti seems to be a defender. Thus although we have several references to Settis engaged in capturing or rescuing cattle only one such instance related unambiguously to traders. As the Kanakuru inscription bears witness, the title Setti could be conferred on Gavundas as well.*491 The Haralakunte virgal points to Ganigas and men of other communities bearing this title. It is unclear whether the many instances of Settis which have been cited above really related to traders or to men of other occupations.

The Civali inscription (T.Narsipur taluk, Mysore district) of the tenth century is the first available record to refer to the possession of cattle by artisans. The wording of the record is ambiguous but it seems to register the rescue of the cattle of Jobacari and Dasimacari of Kalkuni by Gavares acari. No cattle raid is specifically mentioned.*492 The other record comes from Kojakanip (Sorab taluk, Shimoga district) and is dated AD 1015.*493 It appears to record a cattle raid (tunu pariye) by the servants (?pari)*494 of Cattayya deva. The cattle were rescued by Arjuna Kammara (a blacksmith).*495 A grant of sixty kammas (a land measure)*496 of land was made in his memory, while his son Cattaja set up the memorial stone. An oja is an artificer—a carpenter, blacksmith or goldsmith.*497 Here it probably stands for a blacksmith.

The evidence reviewed so far would indicate that cattle raids were a frequent occurrence throughout the area under study. The surprising exception is the Chikmagalur district which does not yield a single reference to cattle raids. In most cases these were purely local events with the inhabitants of a village lifting the cattle of a neighbouring settlement. In others we have tribals making inroads to settled tracts to carry off their cattle.

*491 EC VIII (old ed) Al 8, supra, p 72 fn 453
*492 EC V (new ed) TN 294 II 5-11 "Kalkupiya Jobacariya Dasimacariya tuunu Gavares acari tuuvam..."
*493 EC VIII (old ed) Sb 16
*494 "Pari" by itself does not make sense in this context. Here it probably stands for parikara-attendants or retinue. F. Kittel, op cit., q v pari parikara
*495 Ibid, q v kammara.
Cattle raid hero stones certainly point on the one hand to the prevalent militarism and lawlessness of the age.*498 But they also indicate the importance of the pastoral elements in the economy of the region. Cattle must have been sufficiently valuable economic assets for the gāvandas, setis and acāris to have risked life and limb to increase their livestock by capturing the herds of the neighbouring village or to defend the cattle of their own. Kollār district yields three references to the capture of buffaloes as well.*499

This is not to deny that in many cases cattle raids served as a provocation to war or the opening gambit in a battle as we have seen above. That cattle were valuable economic assets is also indicated by references to taxes on clarified butter (tuppadere). A ninth century inscription from Īsvarāhālli (Chikmagalur taluk, district) records the remission of the tolls on clarified butter in perpetuity (tuppamān ellakālakam bitṭam). There is a reference to bāniga bāliga in the inscription, which R. Shama Sastry interpreted as a group of merchants to whom remission was granted.*500 Similarly, the Kuṇce inscription (Hoše Narsipur taluk, Hassan district) records the grant to the Mahājanas of Kuṇce of the income from the taxes on clarified butter (tuppadere)*501. A tax on clarified butter is also mentioned in the Kumisi inscription (Sorab taluk) of AD 931. The context is unclear, however, since the inscription is fragmentary. In addition to the tax on clarified butter the record registers grants of land.*502 The Chittavaḷḷi temple was possibly granted imposts on clarified butter along with villages in an inscription dated AD 1025 (Chikmagalur taluk, district).*503

*496 D.C.Sircar, I.E.G q.v. kamma - A land measure equal to a hundredth of a mattar or nivartana.
*497 F.Kittel, op. cit., q.v. oja.
*498 S.Settar and M.M.Kalaburgi, op. cit., p.28.
*499 ASMAR 1930, No. 12, p 137, EC X (old ed) Bp 47 and Sd 39.
*500 ASMAR 1922-23, No. 4, p.40.
*501 EC VIII (new ed) HN 97. of c.AD 873.
*502 EC VIII (old ed) Sb 83.
*503 EC VI (old ed) Cm 95, 117-18 refers to soppa which was possibly an orthographical mistake for tuppa.
The Kyatanahalli inscription (Pāṇḍavapura taluk, Māṇḍya district) assignable to the close of the ninth century or the beginning of the tenth century AD records a grant in kind of a sollage of white rice (beliyakki) and of clarified butter (tuppa) for Kella basadi in addition to forced labour (bitti).*504

Apart from taxes on clarified butter and its grant in kind an inscription of the seventh century from Kigga (Koppa taluk, Chikmagalur district) records the grants of taxes (vari) in kind of paddy and cow's milk (Kavileyapālu) to a temple at Kilga.*505 Another seventh century record from Kigga registers the grant of cows and land also for a temple at Kilga (gō mannu)*506 Similarly, the Hebbaṭa inscription (Srinivaspur taluk, Kōlār district) of c. AD 900 records the grant of good quality (aggala) cows (turu) to a hero who apparently perished in defence of the cattle of Perbhāṭa (Modern Hebbaṭa) by the gurava (Saiva monk) Bhāvaśiva who was ruling the kingdom of tapas.*507

The evidence available for our region, of the existence of large herds, of frequent cattle raids undertaken particularly by the gavundas references to cowherds and shepherds, and finally of taxes and imposts on milk and milk products would argue for the vital role played by pastoralism in the economy of the region. This, in part, was a product of the geography of the region. The availability of abundant pasturage for cattle and sheep as well as large acreages of uncultivable lands contributed to the importance of cattle and sheep rearing. While the construction of tanks did win more lands for agriculture, at no time did agriculture altogether dominate and outstrip cattle rearing at least during the period under study. Mixed farming did prevail, however, as we shall see below.

*504 EC VI (new ed) Ppu 16.
*505 EC VI (old ed) Kp 37.
*507 EC X (old ed) Sp 29.
(III) EVIDENCE FOR MIXED FARMING:

We have cited several instances of land being granted together with cattle herds as well as lands being granted for heroes who fought and perished in a cattle raid. Thus, for instance, the eighth century Hulikunda virgal (Bowringpet taluk, Kolar district) records the grant of four gulas of paddy land (kalani) for Nāgadēva who died in defence of cattle by Miļígeyarasu and Attāni.*508 Kaliyaṇa whose death in a cattle raid is recorded in a ninth century inscription from Toremāvu (Nanjanagūḍ taluk, Mysore district) received five gulas of cultivable land at Maṇālī.*509 Āṇileya's son received five gulas of paddy land (kalani) and ten kolas of āḍuvu (pasture?) for rescuing cattle (tuvan ikkisi) from Ajayapalla gorava.*510 Similarly, Kāḍīgāvunda of Eraūr who died in defence of the cattle of his village received two hundred (ilmūn?) units of paddy land (bhattada mannu) at Sirivantagāla.*511 Likewise Ponnavavaya who died fighting in a cattle raid (tuvu) received five gulas of land below the tank of his elder.*512 The gavunda of Kūrgal who fell in a cattle raid (tuvu) received three gandugas of land as kalnad.l! from Ereyappa II Ganga.*513 IpaGOnda who apparently rescued the cattle of Maravūr received four gandugas of wet land beside the stream (palla valde).*514

We have at least one instance of a village granted in appreciation of the valour exhibited in defence of cattle. This comes from the Iggali inscription of the ninth century (Nanjanagūḍ taluk) which registers the grant of Māḍigere as valita (estate) for Adhikāri gavunda, Carama gavunda and Sivaya gavunda who protected the cattle of Iggaliyūr.*515

*510 EC IX (old ed) Ht 110 of the end of the ninth century.
*511 EC III (new ed) Gu 171 of the tenth century.
*512 EC IV (new ed) Yl 14 of the tenth century.
*513 EC IV (new ed) Pp 28 of the close of the ninth or beginning of the tenth century.
*514 EC IV (new ed) Hs 5. of the eleventh century.
*515 EC III (new ed) Nj 205.
That the economy of the region was based on a combination of cattle rearing and agriculture is also borne out by the grants of land and villages by Kaṭakada gōva\textsuperscript{516} Cattayadēva recorded in the Hecce inscription.\textsuperscript{517} Similarly, Viśapūrṇa, the watchman of the king’s cattle in the Vaddāradhane was granted ten cows from the king’s herd and three thousand Khandugas of paddy as his perquisite. ("ārasa...tanna gōmanḍaladoḷ agolliduvappa pattu payanumam mūsāsira gaṇḍuga bhatturumam pramāṇam mādi koṭṭa").\textsuperscript{518} The grants of taxes on land and two Khandugas of land to Kūrimba gāvunda in the Basavaṭṭi inscription\textsuperscript{519} reinforces the point.

Agriculture and cattle or sheep-rearing thus do not appear to have been mutually exclusive. We have no evidence for pastoral nomads. It is possible that the tribals, the Beḍas belonged to this category. But beyond their predatory cattle raids we have no evidence to support this contention. Derrett suggests that they raised crops precariously wherever uneven ground and rare security permitted. ‘They hunted beasts of the forest sold sandal and other timber to the merchants and often raided outlying farms and villages carrying off women, cows and draught cattle.’\textsuperscript{520} Among settled populations, agriculture and pastoralism went hand in hand. Cattle herds were possessed by the gāvundas, the upper stratum of the peasantry to judge from a reference to a gōsāsa gāvunda and from their frequent participation in cattle raids. Ownership of cattle herds was not restricted to the gāvundas. Artisans and merchants too possessed cattle and trade in cattle and milk products might perhaps be posited.

\textsuperscript{516} supra, section D(I)
\textsuperscript{517} EC VIII (old ed) Sb 476.
\textsuperscript{518} Vaddāradhane op.cit., p.66.
\textsuperscript{519} EC IV (new ed) Ch 126.
\textsuperscript{520} J.D.M. Derrett, op.cit., p.9.
SECTION E: URBAN CENTRES

(I) DEFINING URBANISM

Definitions of urbanism usually specify a set of economic, social and morphological criteria, following Gordon Childe. Such criteria generally include a large population chiefly engaged in non-agricultural occupations particularly trade and manufacture, monumental buildings, a ruling elite drawing surplus from the countryside, and a bureaucracy. Urban centres also function as centres of exchange and consequently markets are a major characteristic in most definitions offered.*521

In other cases, morphological criteria are stressed. Bradley, in his study of urbanization in Anglo-Norman Ireland uses such features as walls, castles, bridges, cathedrals, etc., in addition to the holding of a market and possessing a street plan with houses and associated plots.*522 As Graham points out such a system leads to problems of weighting and arbitrary combination of disparate elements. Moreover, such systems of definition isolate the bigger urban centres but are ineffective at the lower end of the urban hierarchy, to which the majority of the settlements characterised as urban belonged, but where the small peasant town merged into the village. Graham thus stresses the rural-urban continuum and the fact that an element of intuition is inseparable from all schemes of definition.*523

Rodney Hilton too appears to lay stress on the rural-urban continuum. In his study of the West Midlands society in the thirteenth century, he describes a four-tier urban hierarchy. This ranges from London with a large population of about 50,000 and its participation in international trade; to provincial capitals such as York and Bristol with populations in the range of 10,000 to 20,000; to country towns, port and textile towns.


*523 Ibid, p 175.
such as Beverley and Coventry with populations in the range of 2000 to 4000 and finally on
the lowest rung, a large number of small market towns which served as an outlet for
agricultural producers to sell their grain, livestock and dairy produce and buy manufactured
goods in metal, textiles and other products. Many of these market towns were
indistinguishable from large villages. However, at the same time he says that "the
primary, real meaning of urban status, the separation from the rural hinterland" lay in "the
specialization in non-agricultural occupations, the presence of merchants and artisans
and...the existence of a market."

The same emphasis on the presence of crafts and money-based exchange as the
principal characteristics of urban centres is found in R.S. Sharma's work on urban decay in
the early medieval period. In his opinion, while the agrarian surplus derived from the
hinterland is vital for the town's existence, merely a settlement of non-agriculturists cannot
be regarded as an urban centre. To this effect he cites evidence from Mayamata and
Manasara, texts on architecture which define a nigama as inhabited by people of all classes
and numerous artisans. Similarly, Kaiyāta, an eleventh-century grammarian is quoted to
the effect that a nagara was considered to be a settlement surrounded by a wall and a moat
and marked by the prevalence of the laws and customs of the guilds of artisans and
merchants. It is interesting to note that Sri Lankan sources of the ancient period also
defined a city as a settlement characterized by the twin features of circumvallation and
commerce. Commercial centres without protective circumvallation were not considered
cities but merely called commercial villages (nigama) or settlements of merchants
(Vañijagāma).

*526 R.S. Sharma, Urban Decay in India, AD 300-AD 1000, New Delhi, 1987, p.5.
*527 Ibid.
*528 R.A.L.H. Gunawardana, "Anurādhapura: ritual power and resistance in a
precolonial South Asian City" in D. Miller, M. Rowlands and C. Tilley (ed)
In contrast to Sharma, G. Erdosy considers the administrative function of urban centres as of primary importance. He defines urban centres as "the containers of those institutions that are required for the maintenance of increasingly complex and inequalitarian societies." Consequently, as urbanization proceeds apace, institutions of social control are aggregated in a restricted number of settlements. This facilitates their supervision and control by the emerging ruling elite of society.*529 The earliest urban centres, in his opinion, did not differ much from the villages; what characterized them as urban centres was their ability to attract the surplus of the producers of the hinterland. After considerable accumulation of resources over time they came, in his opinion, to assume a more durable monumental aspect with diverse functions-economic and ideological in addition to the administrative. Thus, mature urban centres are characterized by difference in function according to the predominance of one of the three aspects. Over time, most tend to develop an increasingly economic bias and become the pivots of a redistributive economic system. He thus tends to distinguish*530 the early "ceremonial centre" from the mature urban centre.

While Carter too envisages a link between the emergence of the urban centre and the territorial, class based state, he views an urban centre as "a form of social organization based on occupational specialization and social stratification of a territorially based population which has acquired a formal corporate identity."*531 This is vague since the nature of occupational specialization is not specified. The definition could as well be applied to many a rural settlement in early medieval Southern Karnataka which had "formal corporate identity" as well.*532

*531 H. Carter, op.cit, p 3.
*532 Supra, Section B, p.25-26
A general comprehensive definition is offered by A. Ghosh. He suggests that the distinctive features of urban centres were "a population denser than in the rural areas and settled in a restricted area; only a limited part of its area, if at all, is utilized for agricultural purposes; a population predominantly non-agricultural in occupation and dependent on rural areas for supplies of food and raw materials which necessitates the presence of merchants to supply citizens with the necessities of life."*533 He suggests that urban centres may have specialized functions some being merely political or administrative centres, other centres of trade and commerce and still others religious centres.

Gunawardana in his study of Anurādhapura points out that this city combined all these functions. In addition to being a political centre it was a city of monasteries and as a result, a centre of religious and intellectual activity. It was the centre of ritual for the entire island. At the same time the city was also an institutional expression of the power of the king and the ruling elite as a whole, with its separation of zones, fortifications, impressive residences within the inner city and the massive gates. The city with its hinterland was also a model for irrigation development and agriculture based on higher technology. It was a seat of men with interests in irrigation property. This last feature, in Gunawardana's opinion sets apart Anurādhapura and similar cities of Asia from their counterparts in other parts of the world.*534 In the light of these definitions, we turn to the sources throwing light on urban centres in the region and period under study.

(II) DESCRIPTIONS OF TOWNS IN LITERARY WORKS:
Kannada literary works of the tenth century give fairly stereotyped descriptions of towns (polal). In most cases they commence by setting the town in the country to which it belonged. Thus most stories and substories of the Vāḍḍārādhane commence in the set form: "In this Jambūdvipa's Bharata Kṣetra, in the country (nāḍ) named (for instance) Puravardhana, there is a town (polal) named Kauṇḍini nagara which is ruled by..."*535

*535 Vāḍḍārādhane op. cit., p. 117.
Similarly, Pampa sets Hastināpura in the nādu or visaya known as Kurujāṅgaṇa which is first described, before Hastināpura "the capital (rajadhāni), a moon in the locks of Hara, i.e., the kingdom of Kurujāṅgaṇa" *536 is described.

The salient features of Hastināpura seem to have been the artificial hills of gold (Kanaka krataka giriga_), gardens filled with fruit-laden trees and creepers, and numerous ponds in the outer part of the town (porapola_), streets filled with elephants and horses, in the inner part of the town (olape) surrounded by walls of gold (Kanakaśāladim), temples, the shops of merchants rivalling the house of Kubera himself ('Dhanada bhavanam enipa siriya baccaraṇaṅgaṃ'), the prostitutes street (sulegeri) and the royal palaces (bhūmpala bhavana) and treasury filled with all wares (samasta vastu bhuvana)*537 The description of Ēkacakrapura follows along the same lines but with certain differences. In the first place, it is not described as the capital of any kingdom. It appears to have been an urban centre on a lower rung of the urban hierarchy. In addition to artificial hills (kṛtaka giri) and gardens (nandana) we have a reference to paddy fields as well (gandha sāli). Within the fort (konteyol) protected by a wide trench ('jaladiyenipaga rūpa') were situated various temples (devagrha), shops filled with precious stones ('pañcaratunadole negeda pasara'), and merchants (parada) surpassing Kubera himself *538 The total lack of reference to the palace and treasury would support the contention that Ēkacakrapura was primarily a religious and commercial centre and not a politico-administrative centre.

Systematic descriptions of this kind are not available for other towns mentioned in this work. Varanavata is designated a town (polalu) as well, but it is not described save for a general verse denoting its prosperity. The houses were washed with water perfumed with musk (Kattūriya sanaṇa nir), decorated with designs made with pearls (bidu muttina rangavalli) and silken flags (dugulada gudi).*539 It is possible that, we have here an urban centre barely distinguishable from a village.

*536 Pampa Bharata I. 51, vacana.  
*537 Ibid, I. 58.  
*538 Ibid, III. 22.  
*539 Ibid, III. 2.
Although Dvāraka too is not described systematically the references to palaces,*540 to streets through which the procession passed*541 and finally to the sūlegēri*542 would place the city on par with Hastināpura.

References to towns abound in the Vaddāradhane, but systematic descriptions such as the Pampa Bhārata affords are not available. However, the salient features of a town are briefly enumerated in the story of Bhadrabāhu bhaṭāra wherein Candragupta perceives the magical city within the forest. This had majestic buildings and storied houses (‘dhavalarangagālum neleya mādamgālam’), temples (dēvalaya), a sūlegēri, and streets filled with men, elephants and horses.*543 In the story of Vidyucciona we have references to the palace, to the houses of diamond merchants (baccara), cloth merchants (dūṣigar), officials (niyōgi), feudatories (sāmanta) and courtesans (sūle). The courtesans’ corner (sūlegēri) is also mentioned.*544 The Vaddāradhane also refers to the grain market in the city to which the inhabitants of the neighbouring villages came to sell their grain in story of Sukumārasvāmi, in the description of the elaborate fraud undertaken by Vaināyaka and his confederates. They used false measures and stored the stolen grain in a subterranean apartment (nelamane). Their deception was detected by the īrgamūnda of Kauśala who came to Campanāagara to sell paddy (bhatta).*545

The Vaddāradhane refers to the whole range of settlement categories-grāma, nagara, khēda, kharvāda, madamba, pattāna and dhopāmukha, in describing the peregrinations of the Jaina monks. This is a formulaic reference, occurring each time a Jaina monk or nun is mentioned.*546 These terms are probably reflections of an earlier period of urban affl orescence. As Erdosy points out terms for urban settlements proliferate in the sources of the Mauryan period and thereafter.
He suggests that such terms can now be classified as administrative or economic centres although the two functions were often combined as in the fortified towns described in the *Arthasastra*. Among terms for administrative centres, Erdosy includes dronamukha and Kharvatika while *pattana* together with *Panyaputabhêdana* (inland trading post) and *nigama* (trading centre) are included in the second category.\(^{547}\)

Thus descriptions of towns in the *Pampa Bhārata* seem to indicate a functional specialization with Hastināpura and Dvāraka being primarily seats of political authority. References to merchants and their shops are available even for such centres. Ekacakrapura seems to be an economic centre only. The reference to paddy fields in the outer parts of the town is also significant. This brings to mind Gunawardana's characterization of Anurādhapura and other Asian cities as seats of individuals with interest in irrigation development as a result of which the city's hinterland became a model for the development of agriculture and irrigation. The inner part of the city was probably walled in and fortified in both cases. The difference between the two lies principally in the lack of reference to palaces at Ekacakrapura. Vāraṇāvata though termed a town is not described and seems hardly distinguishable from a village.\(^{548}\)

The *Vaddārādhane* records many features of urbanism. The monumental aspect of the city with its palaces of the royalty, feudatories and of merchants is much emphasized. Apart from this we have specific references to occupational specialization, to diamond dealers and cloth merchants for instance. We also have clear indications of the mobilization of the surplus of the rural hinterland in the reference to the grain market to which rural producers brought their product for sale. The same conclusion can be drawn from the *Pampa Bhārata*’s reference to the treasury at Hastināpura.

\(^{547}\) G.Erdosy, "Origin of cities in the Ganga valley", loc.cit.,p.92

\(^{548}\) We do not have references to merchants or artisans. On the other hand its rural character is equally unclear for there is no indication that the inhabitants were chiefly engaged in agriculture.
Many of the details provided by literary works are purely fanciful. The artificial hills of gold and golden walls at Hastināpura are obviously imaginary. References to palaces of seven storeys or more in the Vaddārādhane may be similarly dismissed.

Although we have references to houses and palaces in literary works, no clear picture of the street layout emerges. The only street or locality repeatedly mentioned is the sūlegeri. Although it is said to be frequented by the towns folk, (purajana viṭa)*549, the courtesans appear to be part of the royal household (pendavāsada sūle)*550 and we also have references to courtesans, repairing to the royal palace.*551

(III) EPIGRAPHIC REFERENCES TO URBAN CENTRES:

Distinguishing urban centres in epigraphic references is rendered difficult by the fact that settlement details are rather scanty. Often urban centres can be distinguished only from the term used for it. This is the case, for instance with Kirumuṇḍanīri nagara mentioned in the Keregalūr plates of Mādhava II (Talakāḍ branch) of the fifth century (Hāssan taluk,district).*552 One-tenth share (bhaga) of this settlement included within Devaṅge viṣaya was granted to brāhmaṇas.*553 The term nagara applied to Kirumuṇḍanīri is clearly distinguished from grāma which is used for five villages in Vaḷḷāvi viṣaya which were also granted as brahmādeva *554 It is unclear whether the one-tenth share related to taxes and, if so, whether the taxes were levied in kind or in cash.*555 The Keregalūr copper plates also record the foundation of Sangamapura in Sēndraka viṣaya by the king (Sēndraka viṣaye Samgamaparam sthāpayitva)*556

*549 Pampa Bhārata, I.58,IV.79 vacana.
*550 Vaddārādhane, op.cit.,p 124, Pampa Bhārata III.48 vacana.
*551 Pampa Bhārata IV.49 vacana.
*555 N.Karashima suggests in his study of village communities that settlements, for which revenue was assessed in cash only, were probably urban in character;op.cit.,p.53.
*556 EC VIII (new ed) Hn 10, I.15.
The urban character of this settlement is even more unclear than in the case of Kirumundānīrī nagara. It is restricted to the use of the term pura which is generally applicable to towns. There are references in the Keregalur plates to the Manigrāma šrenī*557 (probably the itinerant trade guild of that name) as also to the Tuviyāl šreṣṭhi group.*558 Both the Manigrāma šrenī and the Tuviyāl šreṣṭhi figure among the witnesses and point to the existence of trade in this period. The two guilds are however not clearly associated with the urban centres.

The Mysore copper plates of the fifth century refer in passing to Girinagara. It was situated to the south of Kaṇḍasāla grāma which was granted as brahmadeya by Mādhava I Ganga. Here apart from the nagara suffix we have no positive proof for the urban character of this settlement.*559 Another fifth century reference to an urban centre comes from the Birūr copper plates of Viṣṇuvarma Kadamba.*560 This mentions Vaijayanti, the ornament of Karṇāṭa desa and adorned with eighteen maṇḍapikas. These were probably customs houses where tolls were levied on incoming goods.*561 This would indicate that Vaijayanti (or Banavāsī) was a major trade centre in the fifth century.

Banavāsī was a settlement dating back to the Sātavāhana period. Excavations reveal it to have been a fortified settlement. It remained under occupation even under the Kadambas whose capital it was, as the Birūr copper plates so clearly state.*562 Banavāsī retained its importance throughout the early medieval period. The Sorab copper plates of Vinayāditya Čākuṇya refers to Banavāsī and its nagara - the corporate body, which figured among the witnesses to the grant of Sālivoge grāma situated to the north-east of Banavāsī nagara to a brahmana by the monarch.*563

*557 Ibid, 121 *558 Ibid, 1.28
*559 EC V (new ed) My 103 *560 EC VI (old ed) Kd 162, II 10-11
*562 R S Sharma Urban Decay loc.cit, p.86 *563 EC VIII (old ed) Sb 571.
A supplementary grant however records that Sālivoge was given to one Deveri, the son of Śāntapa by Basanta kumāra the son-in-law (āliya) of Āneśeṭī (seti?) of Banavāsi.*564 In spite of the confusion created by the double grant the urban character of Banavāsi emerges clearly enough from this record of AD 692. The term nagara is used both as a terminological suffix and for the corporate body of Banavāsi. Apart from this the reference to the seti (a merchant?) would appear to satisfy every criterion for defining a town.

That Banavāsi was a fortified settlement is clear not only from excavations but also from the epigraphic record. The Guduve virgals of AD 1030 which register deaths in a cattle raid mention the fort (kōte) of Banavāsi.*565 Banavāsi continued to be the capital of the Banavāsi nād-12000. Although the feudatories ruling this unit changed fairly rapidly,*566 the political importance of Banavāsi did not diminish. It was apparently recognized as a kataka (camp or capital) *567 as the Hecce inscription of AD 939 would show.*568 In contrast to the other urban centres dating back to the fifth century, Banavāsi continued to exist as an urban centre throughout the early medieval period. It retained at least its political role. We have no clear evidence to prove that it was an economic centre after the seventh century.

On the other hand, Kōlār or Kuvalāla, the earliest centre of power of the Gangas does not show any signs of its urban character initially. The Chaluvanahalāji plates of Mādhava II (Talakāḍ branch) of the fifth century register the grant of three pieces of wet land below the tank at Kuvalāla.*569 Even the suffixes of nagara or pura are not applied here. Kuvalāla cannot be distinguished from a rural settlement at this stage. By the seventh century, Kuvalāla or Kōlāla came to acquire the suffix of pura. The Bēdirur Grant charter of Bhūvikrama of AD 634 was issued from Kōlālapura and registers the grant of Bēdirur village in Hodāli viṣaya to Vikramāditya gāvunda the lord of Kōlāla viṣaya.*570 But apart from the pura suffix and the fact that Kōlāla was the capital of the viṣaya by the same name, we have no other evidence to support its urban character.

*564 Ibid, ll 27-30 *565 EC VIII (old ed) Sb 60,61,62. *566 Supra, Section B, pp.16-17
*567 Supra, section D, p.71, fn.439 *568 EC VIII (old ed) Sb 476.
Throughout the ninth and tenth centuries lithic inscriptions styled the Ganga kings "the boon lord of Kuvalalapura" (Kuvalalapuravarēsvara)*571 in token of their ancient association with the area. At this time the Gangas do not appear to have exercised effective control over this region. We have no evidence as to the development of the settlement from our records.

Cōḷa records from Kōḷār attest to the fact that by AD 1000 at least Kōḷār had become a religious centre. The Kōḷāramma temple and its associated shrines belong either to the late Ganga period or were constructed by the Cōḷas.*572 The temple received the grant of the village Aṟaiyūr in the same nāḍu with all exemptions (sarovabdāhāparihāra) in AD 1006-7.*573 Another inscription records the grant of the village PasaiṆāl in Kuvajāla nāḍu for the goddess Piṭāriyar (Kōḷāramma) at Kuvajāla.*574 A third record, dated c. AD 1024 registers the grant of Pākkam... in Kuvajāla nāḍu*575 while an inscription of c. AD 1028 records the grant of Piragamapalli. All these donations resulted in the temple of Kōḷāramma at Kōḷār accumulating a vast agrarian surplus drawn from the villages of the nāḍu. If the ability to attract the surplus of the rural hinterland is the major criterion for distinguishing an urban centre then Kōḷār would qualify as one at least in the early eleventh century. But we have no evidence of the presence of artisans and merchants there.

Tārekāṭ or Tāḷavaṇanagara situated on the left bank of the Kāveri (T.Narsipur taluk, Mysore district) was an urban centre which probably started off as a seat of political authority. The earliest nucleus of Ganga power in the western region (comprising the modern districts of Mysore,Mandya,Hassan,Coorg,Chikmagalur and Shimoga) was established in this area by Harivarma Ganga.*576

*571 EC X (old ed) Kl 79, Gd 4, ASMAR 1925,No.86, pp 74-75 etc.
*572 ASMAR 1935, pp 44 ff.
*573 EC X (old ed) Kl 106 (b)
*574 Ibid, Kl 112 (a).
*575 Ibid, Kl 106 (c)
*576 Infra Chapter III, Section B.
The Kāḍlūr plates of Harivarma although dated in the Saka (?) year 188 is ascribable to the ninth century. This refers to the king residing at Tāḷaṇaṇapura.\textsuperscript{577} There is no reference to a Vijayaskandhāvāra as in the case of the Hāḷługere copper plates of Śivanāra I dated AD 713-14 which record the grant of Pallavatāka a newly constituted village by the king as a brahmadeva while he was residing at the victorious camp at Tāḷaṇaṇapura.\textsuperscript{578} Apart from the suffix pura applied to it we have no other evidence for the urban character of the settlement.

An inscription from Talakāḍ of AD 725 of Śiripuruṣa Ganga's reign refers to the settlement as Taṛekāḍ and apparently registers the grant of a hamlet (pallil viṭṭu) to the Twentyfive of Taṛekāḍ ('Taṛekāḍa ippatayvarkkam') at the request of Sindarasar, Devasatti arasa and Manasija by Arakēsi, the son of Paramagūla.\textsuperscript{579} This record gives us no clue whatsoever to its urban character. No terminological suffix is present. We have no indication that the Twenty-five were a mercantile or artisanal guild. It possibly was a royal residence going by the reference to numerous chieftains, but this is not specifically stated. Its urban character is to be deduced merely from the suffix of pura given to it in the Hāḷługere copper plates. Assuming then, its urban status, the grant of a hamlet would indicate its control over the country side. A similar situation has been described for Gōpagiri by Chattopadhaya.\textsuperscript{580}

The Dēvanur copper plates of Kambharāja Raṇāvalōka dated AD 808 gives us further details on Tāḷakāḍ. They record the grant of Badaṇeguppe village for Vijaya Vasati (a Jīnalaya) consecrated at Tāḷaṇaṇanagara. The grant was made by Kambha at the request of Śankaragaṇṭha, his son while he was residing at the victorious camp at Tāḷaṇaṇanagara.\textsuperscript{581} This record reaffirms the status of Tāḷaṇaṇanagara as a royal centre.

\textsuperscript{577} KV Ramesh, op.cit., No. 41 14 "Tāḷaṇaṇapuram adhivasati".  
\textsuperscript{578} EC VII (new ed) Md 35.1 35 "Tāḷaṇaṇapuram adhivasati Vijayaskandhāvāre".  
\textsuperscript{579} EC V (new ed) TN 207.  
\textsuperscript{580} B D Chattopadhaya, "Trade and Urban centres...." loc.cit., p. 210  
\textsuperscript{581} EC III (new ed) Nj 278 II.53-59.
Temples situated here began to receive grants of villages for their maintenance reinforcing the control exercised over the countryside by the urban centre and resulting in the accumulation of the surplus of the hinterland there. Similar evidence is presented by the spurious Mercara plates of Avinīṭa Ganga which once again records the grant of Badaṅeguppe village to the same Jaina shrine at Tāḷavāṇanagāra.*582 An additional grant of twelve Khandaugas of land below Piriyakēre (tank) at Pogarigele is also recorded in this inscription.*583

By the tenth century Tārakāḍ appears to have had another corporate body, the Mahānagara apart from the Twenty-five. These two corporate groups, together with Pāṭṭanjavanasaṃtara Mancayya invested some money (dravya) in a tank for which they received a bittuvāḍa.*584 The reference to the Mahānagara and to the official (?) Pāṭṭanjavanasaṃtara might possibly indicate that Tārakāḍ had grown into a trading centre (pattana)*585 with the status of a Mahānagara. The cash investment possibly points in the same direction. The thrust of the record once more, is on control of the rural hinterland and involvement in agricultural development. We may recollect that Anurādhapura was likewise a seat of owners of irrigation property, a feature which Gunawardana opines was characteristic of South Asian cities generally.*586

In the Cōla period Tārakāḍ came to be renamed Rājarājapuram. We have a solitary reference to it in a late tenth century record from Talakāḍ. Unfortunately the inscription is fragmentary and consequently the details of the gift registered therein are now lost. One of the signatories to the gift was an individual from Rājarājapuram.*587

*582 EC I, (new ed) No.1. ll. 15-18. Also vide supra, section C.
*583 Ibid, ll. 20-22.
*584 EC V (new ed) TN 200 of AD 935.
*585 G. Erdosy, "Origin of cities. "loc cit.,p.93 explains pattana as a port. Here perhaps it might be taken as an inland trading centre.
Evidence for the urban character of Tarekād, then, is to be drawn principally from the terminological suffix of pura or nagara. It appears to have been a site of Vijayaskandhāvāras in the eighth and ninth centuries. This by itself does not mean the settlement was urban. The Sorab copper plates mention that at the time of the grant, Vinayāditya Čalukya was residing at a Vijayaskandhāvāra situated at Citrasēdu grāma in Toramara viśaya.*588 Talakād's status as an urban centre is therefore not derived from the presence of Vijayaskandhāvāras. We have evidence for a corporate body, the Twenty-five from the early eighth century while another body, the Mahānagara had come into existence by the tenth century. The composition of both these groups is unknown. Available evidence indicates their involvement not in commerce or manufacture but in agriculture and irrigation. Reference to the Mahānagara at Tarekād might indicate that it had a position analogous to that of Kāncimānagara. Kānci owed its pre-eminence in this period to the fact that it was the seat of political authority, a religious centre with numerous Śaiva and Vaiṣṇava temples, and a centre of commerce and textile production.*589 The mānagara suffix probably relates to the last aspect, indicating that Kānci stood at the apex of a network of exchange centres, the nagarams.*590 In the case of Tarekād, we have evidence to indicate that it was a royal centre (though not the only one) as well as a religious centre. References to Jaina shrines have already been cited. A survey of surviving temples at Talakād suggests that the Patañjēśvara temple and some of the Panḍalingēśvara shrines date back to the tenth century, while the Maralēśvara temple is an early Cōla structure.*591 The grants to Jaina shrines were entrusted to Jaina monks. This may indicate the presence of Jaina monastic establishments here. We have no hard evidence to suggest that Tarekād was a commercial centre save the terms Mahānagara and paṭṭana occurring in the tenth century record cited above.

*588 EC VIII (old ed) Sb 571. of AD 692.
*589 R.Champakalakshmi, "Urbanization in Medieval Tamil Nadu" in R.Thapar, and S Bhattacharya (ed) Situating Indian History, Delhi, 1986, p 44.
*590 Ibid, p 45. This is Hall's suggestion. Evidence for a systematic network is not available for the pre-tenth century period. Kānci owed its mānagara status to state sponsorship.
If then, an urban centre be taken, after Erdosy, as an administrative node garnering resources from the countryside, Taṛekāḍ or Taḷavaṇanagara would qualify as one. If we emphasise trade and manufacture as a yardstick, Taṛekāḍ's status is unclear. However the presence of the Mahānagara guild and the official Paṭṭanavasantara would support its identification as an urban centre.

Maṭṭe (Nelmangala taluk, Bangalore district) was another settlement which developed into a royal centre in the eighth and ninth centuries. The Jāvali plates of AD 750-51 which record the grant of Bēlpūr village are one of the earliest to mention Maṭṭe. Here it is described as a grāma which was the site of a vijayaskandhāvāra where the king was resident at the time of the grant.*592 However, the Koṇḍajji agrahāra plates which purportedly belong to the seventh (year ?) of Śrīpuruṣa assign Maṭṭe an urban status by referring to it as Mānyapura. Once again it was the site of the royal camp.*593 Unfortunately we are not told whether the grant is spurious or not. Assuming that it was genuine one would have to conclude that Maṭṭe was on the threshold of urbanization in the mid-eighth century and its status was not altogether clear.

All later references to Maṭṭe are unanimous in assigning it the status of a town. It was probably a favourite royal residence in the eighth century. Thus the Hōsūr plates of AD 762-63 were also issued from the Vijayaskandhāvāra situated at Mānyanagara.*594

While all references to Maṭṭe so far mentioned it merely as a site of a royal camp, the Maṭṭe plates of Yuvarāja Mārasimha, dated AD 798 indicates that it was developing into a religious centre in addition to being a royal residence. This charter records the construction of a Jaina shrine at Mānyanagara by the sāmanta sēṇādhipati Śrīvijaya and the grant of

(i) Kuṛuvakkūr village in Mānyā viṣaya;
(ii) three Khandugas of paddy fields under the tank of Perjiāḍī;
(iii) three Khandugas of paddy fields under the tank of Balamangala,

*592 EC VI (old ed) Mg 36
*593 EC XVI (rev ed) Gb 75.
*594 K.V. Ramesh, op. cit., No. 45.
(iv) one garden under the tank of Maṇṇeyalar (inhabitants of Maṇṇe?), and
(v) six khandugas each under the Seregere and Keregere tanks.* 595

Like Taṭekāḍ then Maṇṇe too was acquiring control over the rural hinterland through the temples situated within its precincts. Also significant is the reference to the tank of the Maṇṇeyalar. Does this refer to the corporate body of its inhabitants? We have no clear evidence to support this, but it is probable. If so, it would bear out Gunawardana’s suggestion about the involvement of citizens in irrigation development.

Maṇṇe’s continuing status as a royal residence is brought out by the Kottimba charter which records the grant of Kottimba grāma in Māṇya viṣaya, Ālur with its hamlet Vaydeūt in Kuṟuvāle viṣaya and of some lands below the tank of PaṆuvi in PaṆuvi viṣaya as a brahmaṇadeśa by Yuvarāja Mārasimha while he was residing at Māṇyapura* 596 It was apparently the administrative centre of Māṇya viṣaya or Maṇṇe nāḍ-300. This unit is not only mentioned in the Kottimba grant charter but also in the Maṇṇe plates of Rācamalla I of AD 828 which records the grant of Doḍḍavāḍi village as a devabhoga for the goddess Kiḻṭāvaveti bhāṭāri at Doḍḍavāḍi in Māṇya viṣaya.* 597 The Mūḍlupāḷya inscription of AD 968 also mentions Maṇṇe nāḍ-300. The nāḷavūṇḍa of this unit, Gangagacca set up a temple Daḍigēśvara, in honour of his son Daḍiga who died in an attack on the village. Some lands were granted for the temple. Neither the location of the shrine nor the village to which Daḍiga belonged is specified.* 598

The epigraphs mentioning Māṇya viṣaya or Maṇṇe nāḍ-300 do not mention Maṇṇe or Māṇyapura itself. The last available epigraphic reference to Maṇṇe itself comes from the Chikka Sārangi inscription (Tumkūr taluk, district) of AD 903. This would indicate that Maṇṇe was now under the control of the Rāstrakūṭas since

*595 EC IX (old ed) Nl 60
*596 K.V.Ramesh, op.cit.,No 50. of AD 799.
*598 EC X (old ed) Ma 75.
Rāṣṭrakūta Kṛṣṇa II's subordinate Pracanda daṇḍanāyaka Śrī Dāmapaiya was stationed at Maṇḍe as the Daṇḍanāyaka for the entire south. ("tenkaṇa diśāvarkkella daṇḍanāyakanāgī Maṇḍeyol ire").*599 While the Chikka Sārangi inscription appears to attest to the continuing political importance of Maṇḍe its urban character is not clearly indicated herein.

Maṇḍe then emerged as an urban centre in the mid eighth century owing to continuing royal residence there. It was also the centre of a politico-geographical unit. By the end of the eighth century we have evidence for the existence of temples there. But apart from these and the use of the suffix pura we have no definite evidence to indicate its urban character. After the ninth century even the use of the suffix pura appears to have been discontinued leaving us uncertain of the character of Maṇḍe.

Situated on the right bank of a tributary of Vēḍāvati river, Āsandi was the central settlement of Āsandi nāḍī from the eighth century onwards.*600 An eighth century record from Āsandi records that the nāḍī was being ruled by Vijayāditya a son of Śrīpuruṣa, while his servant (āl), Eṟamma ruled Āsandi from Channavūr. Eṟamma set up a twining fence ("orvaḷa ney niṟisida") around Āsandi at the request of the Fifty-two (Ayvadimbar), the nakara and the sēni (śrēṇi?)*601 Like Tārkekaḍ, thus, Āsandi had two corporate bodies—the Fifty-two and the nakara. In addition, the presence of a guild sēni (śrēṇi?) is also attested to. The term nakara possibly indicates that Āsandi served as the marketing centre of the nāḍu as suggested by Hall for Tamil Nāḍu.*602

By the tenth century Āsandi appears to have developed into a religious centre as well. A tenth century nisidhi record from Siddagānahalli (a neighbouring village) records the death of a Jaina nun of the Navilūr gana by the adoption of a ritual vow, at Āsandi's Mūlāsthāna basadi.*603

*599 EC XVI (rev ed) TM 78.
*600 Vide Appendix I, Nos. 122 - 125
*601 EC VI (old ed) Kd 145.
*602 K.R.Hall, Trade and statecraft in the Age of the Cōḷas, New Delhi, 1980, p 87 ff.
*603 EC VI (old ed) Kd 159
The pitfalls of the evidence provided by terminological suffixes is indicated by inscriptions from Vijayapura (T.Narsipur taluk, Mysore district). A ninth century record registers the payment of some gold (pon) for the legal settlement of tenants (okkal). The gold was given to the Twelve of Kīrupēnagāra (modern Vijayapura). Apart from the settlement of tenants the inscription records the grant of twenty-five Khandugas of land and the sluice of a tank (dharma tumbu). In spite of the cash transaction, the presence of a corporate body and the suffix nagara, we get the impression that the settlement was chiefly agricultural. It is possible that the nagara suffix indicates the presence of a marketing centre here. It is also possible that the nagara formed an enclave within the predominantly agrarian site as was the case with Manalūr and its suburb Nigarilī sōlapuram in the Cōla period.  

An early eleventh century inscription this place refers to the houses of gāvundas and pergades as well as a land grant for developing a flower garden. Referring back to the descriptions of urban centres in literary works the details available from this record do not preclude the urban status of Kīrupēnagāra.

An inscription from Kumasi (Shimoga taluk,district) of AD 950 refers to Kombasipolalu. Polalu is a term for town most often used in literary works of the period. The present inscription records the construction of a Jaina shrine (Jināgha) by Lokkiyabbe of Pombuccha at Kombasī polalu. It also registers several grants for Jinābhiseka by gaudas and setis, of camphor (?ghanavanna) and conchshell (?kambuka). From these details it would appear that Kombasī was a commercial and religious centre.

A royal centre, Rājapōjalī situated in Māgali nāḍ is mentioned in an inscription from Āraṇī (Nāجامangala taluk, Māṇḍya district) of AD 972 as the residence of the Ganga king Nōlambakulāntaka Mārasimha II. No further details of the town are available.

*604 EC V (new ed) TN 146.  * 604 (a) Vide Appendix II Nos. 110 - 112
*605 EC V (new ed) TN 142  *606 EC VII (old ed) Sh 114.
Another royal residence is mentioned in the Bāragūr inscription (Sira taluk, Tumkur district) of AD 878. This records that Mahendrādhirāja of the Nōlamba lineage had encamped at Bāragūr ('bīḍa biṭṭalli'). Being a staunch Saiva (parama Māyēśvara) he offered his own palace ('tanna aramaneyane nivedisi') for the establishment of a Śiva temple named Mahendrēśvara after him, at Bāragūr. While the phrase bīḍa biṭṭalli used in the inscription would imply that the Nōlamba's presence there was temporary, the existence of a palace there would indicate a greater degree of permanence. The inscription goes on to record the grant of Nāndūr in Sire nāḍ for the maintenance and conduct of worship at the temple. The grant was entrusted to Dinakara Sōmahāṭārara of Gauhagōtra. All this would indicate that Bāragūr, initially a royal centre was becoming transformed into a religious centre with a temple and monastic complex. An inscription from Hēmāvati of the same period refers once more to Bāragūr as the site of royal encampment and goes on to state that Bāragūr was the fief of his queen Bija (ya) mahādēvi. Some land at Bāragūr were granted to a shrine, possibly a basādi, whose location is not specified.

A third inscription from Bāragūr again stresses its character as a religious centre. This record dated AD 919 from Bāragūr registers grants for two temples at the Mulasthāna of Bāragūr which were entrusted to Vimalamati bhaṭārara of the eastern (mūḍaṇa) maṭha (monastery). The grants consisted of thirty gulas of wet land below the Piriyakeēre (tank) and the temple (dēgula) at Bāragūr itself. We also have a reference to Muṭṭadakeēre (tank) in the south-western part of Bāragūr which was constructed by Nāraṇabbe the mother of queen Nāgiyabbe.

*607 EC VII (new ed) Ng 99.
*608 F. Kittel, op cit., q.v. bīḍa - a halting place, a habitation an abode, a residence; Bīḍa bīḍu - to encamp.
*609 EC XII (old ed) Si 38.
*610 EC XII (old ed) Si 24 of c. AD 880.
*611 Ibid, Si 39 of AD 919.
Available evidence then indicates that Bāragūr was developing into a religious centre of some importance by the tenth century. It possibly continued to be the site of a palace complex as well. The tenth century inscription from Bāragūr shows that irrigation works and cultivable lands existed within the bounds of the settlement. We have no evidence whatsoever for the presence of mercantile or artisanal groups there. Its urban character is therefore in doubt.

The growth of trade and commerce in the Cōla period led to the emergence of new urban centres. Māyilangai (Taḍimālingi, T.Narsipur taluk, Mysore district) is a case in point. A record of the reign of Rājarāja I indicates its rural character registering the sale of dry and wet lands in the village, for the temple of Iravikulamāṇikka viṇṇagar āḻvār situated there, by the gāmunḍas.612 By the fourth regnal year of Rājendra I Māyilangai was designated as Jananāṭhapuram. An inscription of that year (AD 1015-16)613 registers the gift of two mādai (a gold coin)614 for the celebration of a festival, for the same deity. The cash grant was entrusted to the nagarattār of Jananāṭhapuram, who undertook to supply three pidis of oil daily for the temple. A similar grant is registered in another inscription of Rājendra I’s tenth regnal year. A gift of ten kalanjus of gold was entrusted to the nagarattār who were to supply paddy daily to the person rearing the flower garden of the temple out of the interest on the gold.615 Cash transactions had become common even earlier as the Talakāṭ and Vijayapura records testify. Even the Taḍimālingi inscription of Rājarāja I records the sale of lands worth a hundred kalanjus of gold. With the emergence of the nagaram of Jananāṭhapuram, the nagarattār (members of the nagaram) appear to have replaced the gāmunḍas as the pivot of the local society and its economy.

The factors promoting the transformation of Māyilangai into an urban centre are not clear. It is possible that the temple and its cult requirements provided one of the catalysts for this transformation.

The role of the temple in promoting trade is suggested by the Suttūr inscription of AD 1032. The Suttūr or Srōtriya (Nanjanagud taluk, Mysore district) was a brahmadesa settlement. The inscription in question records the establishment of the temples of Isana Isvaramudaiyar and Mulasdamudaiyar, the latter caused to be constructed by Guplabbe, wife of Mārayya Setti of Srōtriya.*617 Several grants of land*618 and of levies of grain and cotton on the tenants (okkal)*619 were made to these temples as well as to the shrine of Srōtriya ravve by the local merchants, among others. One of these donors is named Pūvina Setti, of the matha to the east of Isana Isvaramudaiyar.*620 It is possible that he supplied flowers (pu) for the temple and matha. In addition to local merchants, the samaya (assembly - here a group of merchants?) including the members of the Nānādēsi guild invested wealth (dhaṇa) in wet lands, gardens (areve?) and oil for a perpetual lamp.*621

The details of the grants place Srōtriya clearly in the rural category. However, references to merchants both local and supralocal would indicate that Srōtriya was drawn into the network of trade and commerce, probably owing to the temples and monastic institutions situated there. Taken all in all, Srōtriya was evidently on the threshold of urbanization in this period.

Thus epigraphic sources indicate a partial urbanization in the period under review. Banavasi was probably an urban centre all through the period - a survival of the early historic era. Other centres such as Asandi, and Tālavāṇanagara show a slow development, political and religious factors rather than commercial probably account for their growth. From the tenth century onwards the growth of trade seems to have accelerated the emergence of urban centres. The conquest of the region by the Cōlas, in particular, drew the region into the supralocal trade network and promoted urbanization. The conscious role played by the Cōlas in this process shall be taken up later.*622

*622 Infra, Chapter V, Section B
Inscriptions give us no clue as to the physical form of the urban centres. Literary descriptions may be taken as supplying the gap. Fortifications are attested to in only two cases—Banavasi and Asandi. Temples and houses are mentioned in most cases. But no clear street plan emerges. The pre-eminence of the capital is suggested by several references in inscriptions to rulers as the "boon lords of the city" (puravarēśvara). Kōlāla was apparently the town par excellence of the Ganga kingdom since Ganga kings are repeatedly referred to as "Kōlāla puravarēśvara.*623 Similarly Maṇalēra is styled Valabhipuravarēśvara in the Ātakūr inscription*624, while Maciga was Trikundapuravarēśvara, a title of the scions of the Māturavaṇāsī.*625 This may perhaps be related to the standard references to the nādu and city available from the Vaddārādhanē. The capital city was the domain of the ruler, the centre of the realm.

Thus literary works and epigraphic references may be considered supplementary in some respects. The overall picture they present is of the urban centre as the administrative centre of the kingdom which gradually developed with growing trade and commerce into a centre of trade. Manufacture and artisanal activity is in comparison, neglected by our sources. References to artisans come chiefly from rural contexts. Temples and monasteries were, in addition to administration and trade, factors of importance in the growth of urban centres.

*623 Supra, fn.571.


*625 EC VII (old ed) Sb 476.