CHAPTER 1

The Kingdom of Vijayanagara

1.1 The historiography of Vijayanagara

The following discussion provides a brief introduction to recent reinterpretations of the social and political events of the Vijayanagara period.

In the last ten years there has been a rigorous re-examination of the traditional views concerning the foundation, character and growth of Vijayanagra. A more complete, though polemic, historiography is now being constructed upon the work of Stein (1980), Breckenridge (1985), Kulke (1985) and Ludden (1985) in an attempt to devise a more satisfactory interpretation of the fragmentary literary and epigraphical evidence available for the period A.D. 1336-1565. Stein (1980) in particular has gone a long way towards explaining, or at least clarifying, some of the discrepancies which are contained in the traditional history of Vijayanagara. The conflict between the concept of dharmic ideology as a guiding movement for the Vijayanagara state and the presence of Muslims at the capital, the frequent use of Muslim mercenaries and the attacks on other Hindu kingdoms had received little attention prior to Stein's investigation into Vijayanagara statecraft (1980). It is, however, important not to underestimate the role of early writers in the establishment of facts.

According to the new interpreters, the early writers of Vijayanagara's history (Sewell 1900; Longhurst 1917) sought to find in the evidence available to them, social and political manifestations which mirrored those seen in contemporary Europe. It is not therefore surprising to find Vijayanagara described as a powerful, centralised empire with a heavily populated capital. These assumptions are essentially reliant on the back projection of

European terminologies and social and political constructs. Once established, this view of Vijayanagara history was enshrined in the work of Sastri (1950) and others who propagated the notion of a 'Golden Age'. Ludden (1985:6) discusses this phenomenon in his study of Tirunelveli peasant history. The influence of nationalistic ideology is criticised by Stein in his essay, 'The State and Agrarian Order' (1975).

The work of Stein has initiated a re-appraisal of the accepted social and political history of Vijayanagara which recognises the relationship between the state and the economy. The rejection of the unitary, centralised state as a model for the political arrangements of medieval South India, has been of profound importance in this redefinition. The extant literary and epigraphical data relating to the Vijayanagara period makes better sense in the context of a social and political framework less rigid than that proposed by Sastri (1950), Mahalingam (1951, 1955) and Thapar (1981).

Perhaps Stein's most important contribution to the study of South Indian social and political organisation is the rejection of the widely held belief in the static and uniform nature of conditions (1975:68). Traditionally, the Vijayanagara period has been viewed as one of conservatism and stagnation. This is directly contradicted by the physical evidence which suggests religious and racial tolerance, eclecticism in art and building styles and political volatility. The acceptance of a more flexible approach to the problem of Vijayanagara's social and political history will undoubtedly lead to the construction of a more successful framework for a study of this period.

The redefinition of the state in the context of Vijayanagara has not, however, moved on from the 'segmentary model', culled by Stein from the work of Southall in East Africa. Stein (1980:264) states:

In order to consider a better model of political arrangements in medieval South Indian states than the existing one, it is necessary to recognise that there are many kinds of states, of which the unitary, centralised state is but one. It is, however, precisely that one which most South Indian historians assume to have been normative during the medieval period, and except when the king was weak or the kingdoms troubled by natural disasters or invasions, these historians claim to have existed.

Stein correctly recognises the deficiencies of a rigid unitary model as a definition of political order in medieval South India, but his segmentary paradigm, whilst replacing the inflexible concept of the unitary state, is dependent on the operation of a strong centre. Ludden (1985:69-71) in his examination of Nāyaka political organisation follows Stein's association of a 'hierarchy of authority' with strong urban centres. Ludden connects the investment of large amounts of revenue in the construction of defensive precautions and the elaboration of cult temples with an increase in centralised authority. A political manifestation of the sort proposed by Ludden for the Nāyaka period would necessitate a complex bureaucratic structure (especially for the keeping of records and communication), for which there is no evidence.

Chander (1987:18-19) has found the segmentary state a convenient model from which to begin a new appraisal of political patterns in the Hyderabad region, but recognises its limitations as a rigid paradigm. He rejects the notion that a strong, or at least a dominant, centre was the necessary pivot of a regional political order, or that its centre was co-equal with the state (Chander 1987:48). In the development of his argument relating to the dual character of territorial sovereignty in the segmentary state, Stein fails to delineate the extent of the state domain. Stein accepts that political power is divided between the centre and peripheral foci of administration who each exercise actual political control over a part, or segment, of the

political system encompassed by the state (1980: 274). However, no attempt is made to explain how a strong political centre, dominating the segmentary pyramid, successfully distinguishes itself through the manipulation of ritual supremacy from other peripheral units. This problem is addressed in greater detail in section 1.5.

Stein has argued that large urban centres in South India grew up around important cult temples which were already in existence (1980:246), and that such urban activity brought with it craft specialisation and extra-local trade (1980:481). At Vijayanagara, temple complexes of extra-local importance essentially postdate the foundation of the capital. The Virūpākṣa temple at Hampi was a site of some ritual importance before A.D. 1336, but achieved great pilgrimage status only after the massive investment of gifted cash by Vijayanagara kings and nāyakas. The association of a royal capital with a tirtha may be interpreted as a conscious attempt by Vijayanagara kings to generate spatial and social identity.

This investigation considers the dynamics of resources a crucial determinant in the sphere of South Indian social and political development. Chander (1987:16-17) has discussed the political importance of resources for the pre-colonial Hyderabad region. The availability of population and agricultural land shaped the character and growth of Vijayanagara as a political entity, a factor which has been ignored by many scholars. Ludden (1985:18-26) provides an excellent appraisal of the resources of the Tirunelveli region, and includes a detailed discussion of population and settlement patterns. The analysis is flawed, however, by his failure to appreciate the scarcity of resources in the Medieval period.

Previous research suggests that the military campaigns of the Vijayanagara kings represented either wars of conquest intended to extend the spatial area under direct political control or raids into lucrative areas designed to finance military expenditure. These military invasions or raids may represent a more complex strategy than hitherto envisaged, related to the inherent shortage of resources discussed above.

The attraction of population densities to political centres remained the primary concern of South Indian kings. This issue has been examined by Richards (1933:235-237). The

visible defence of urban centres and their hinterlands represents one way in which a king may depict his kingdom as 'strong' and thus lure population groups away from other centres of attraction. The coercion of demographic units was not a viable option in a period of high mobility and migration. Ludden (1985:13,72) suggests that legitimate state coercion developed in the colonial period and only reached fruition under the British colonial regime.

The defence of scarce resources against attacks from other political units remained a matter of considerable importance for South Indian kings. The destruction of other ritual/political centres would act as a temporary means of curbing the expansionist tendencies of rival kingdoms (Chander 1987:17,37).

Small revenue returns from the attenuated core zone and nominally subordinate local kings and nāyakas outside this area would be supplemented by the removal of portable wealth from the territory of other political centres (Ludden 1985:27). Military action served also to establish the concept of the 'domain' (Chander 1987:19). Through active campaigning outside the 'sarcar' land or core zone, Vijayanagara kings delimited the extent of their own territory and established within it 'domain homogeneity'.

It may be postulated that Vijayanagara as an urban centre was located in the only remaining area of agricultural and political potential not already defended by an existing political unit. This picture of political containment is diametrically opposed to the traditional view of Vijayanagara as an extensive and monolithic state standing against the southward movement of Muslim power. Although formulated for a later period, Chander's definition of political and economic capitals in the Hyderabad region correlates well with the picture of Vijayanagara as politically contained:

Zamindars and nawabs were concerned, in practice, with the maintenance of a loyal community in a productive domain in the context of external hostility and pressure (1987:19).

The problem of defining the extent of Vijayanagara political power is addressed more thoroughly in section 1.5. In conclusion, the re-examination of the spatial distribution and

relative chronologies of Vijayanagara epigraphs throughout South India for evidence of direct/sustained political control, remains as a line of profitable future inquiry. Two epigraphs of the early sixteenth century A.D. record the movement of population away from areas where tax demands were excessively high. In A.D. 1501 a group of Ramnad farmers sold their land and moved away in response to unreasonable taxation (Sewell 1932:234). An inscription of A.D. 1514 records the revision of taxes in South Arcot, following the abandonment of agricultural land by peasant farmers (Sewell 1932:239).

1.2 The historical background

This brief introductory background to the history of Vijayanagara, is intended as a framework into which more complex social and cultural data can be fitted, thus summarising available information, old and new, for the period A.D. 1336-1565.

In the early part of the fourteenth century A.D., the failure of the Delhi Sultanate to maintain authority in the area south of the Vindhya mountains resulted in the formation of a number of new kingdom. On the orders of Sultan Alā-ud-dīn Khalji (A.D. 1296-1316), Malik Kāfūr led his army deep into the south in A.D. 1310 and forcibly installed Muslim governors to administer these territories (Briggs 1908:i.373-375; Longhurst 1917:9; Sastri 1950:i.44-45). Thapar (1981:321,323) has argued that the power vacuum created by the return of Kāfūr and his army to Delhi in 1311 had two major effects. Firstly, a power struggle developed between the new Muslim governors, some of whom rebelled against the Sultanate's authority. Secondly, the established political order of the south was revitalised by the Sultanate's expansionist policies. This situation proved favourable for the emergence of new political entities.

By the time Sultan Muhammad-bin Tughlak (A.D. 1325-1351) ascended the throne, the threat to the Sultanate's authority in the south had become so serious that the Sultan himself was forced to lead an army into the Deccan. In A.D. 1326, Bahā-ud-dīn Gurshāsp, the Governor of Sagar, rebelled against the Sultan, his cousin,

and was defeated in battle (Briggs 1908:i.418; Sastri 1950:ii.50; Sherwani 1953:18). Gurshāsp fled for protection to the king of Kampli, and Muhammad-bin Tughlak responded by laying siege to the fortified town of Kampli itself, which he proceeded to capture by force in A.D. 1327 (Sewell 1900:17; Briggs 1908:i.418-419; Sastri 1950:ii.51). The Governor of Sagar escaped with his life, but was handed over to the Sultan by the Hoysala King, Vīra Ballāla III, who feared that Muhammad might turn his attention towards his own kingdom further south.

The reduction of Kampli would not be important if it were not for two brothers, Harihara and Bukka, the sons of Sangama, who surrendered during the siege. Traditional accounts hold that these two Telugu noblemen returned to Delhi with the army of the Sultanate, where they were converted to the Muslim faith. When Malik Muhammad, the Muslim Governor of Kampli, found himself unable to control the area, Sultan Muhammad-bin Tughlak sent Harihara and Bukka to replace him (Sastri 1950:ii.122; Devakunjari 1970:6). In A.D. 1336, Harihara and Bukka renounced their adopted faith and rebelled against the Sultanate, founding their own kingdom. This traditional account of the foundation of Vijayanagara has been re-examined by Kulke (1985), who proposes, on the basis of epigraphical data, an indigenous origin for Harihara and Bukka.

Literary accounts suggest that the capital of this new kingdom was located at Hampi, 16 km. to the west of Kampli, on the south bank of the Tungabhadrā river. This site and the area directly to the south became known as Vijayanagara, the 'City of Victory', giving its name to the political entity Harihara and Bukka were to forge.

In A.D. 1336, with the help of the Madhavācarya Vidyāraṇya, a powerful local Brahman, Harihara was declared vice-regent of the Śaivite deity Virūpākṣa (Sewell 1900: 18-23; Longhurst 1917:10; Sastri 1950: ii.122; Devakunjari 1970:6-7). Madhavācarya Vidyāraṇya was a celebrated scholar, the brother of Sāyaṇa the commentator on the *Rigveda*, and himself author of several works on Vedānta. This association of a royal personage with a powerful cult deity must be compared to that of Anaṇgabhīmadeva III in Orissa (Panda 1985:89). the traditional interpretation of the literary

and epigraphical evidences suggests that Harihara and Bukka, in a relatively short space of time, consolidated their authority over a large area of territory using both military and peaceful means, the extent of their actual power remains unknown. It is likely, however, that the disintegration of the old Hoysala kingdom further south and the general dissatisfaction with the imposition of a Muslim ruling class in South India considerably aided the two brothers in their task.

The inability of the Delhi Sultanate to control the Deccan during the latter part of Muhammadbin Tughlak's reign encouraged the emergence of another powerful kingdom. In A.D. 1347 Abul Muzaffar Alā-ud-dīn was proclaimed King of the Deccan, thus founding the Bahmanī kingdom (Briggs 1908:i.440; ii.290-291; Sastri 1950:ii.109; Sherwani 1953:36-37). The expansion of this new Muslim kingdom was checked, firstly, by the growth of Vijayanagara with whom it waged internecine war for possession of the Raichur Doab, and secondly, by the reorganisation of the kingdom of Warangal in Telingana (Sastri 1950:ii.122; Sherwani 1953:23; Panda 1985:88-96). Further south, Jalal-ud-din Ahsan Shah, the Governor of Ma'bar, established the Madura Sultanate in A.D. 1333 at considerable cost to the old Hovsala kingdom (Sastri 1950:ii.53; Sherwani 1953:222; Ludden 1985:44). During the reign of Bukka (A.D. 1343-1379), Kumāra Kampaņa successfully annexed the Madura Sultanate for Vijayanagara in A.D. 1365 (Sastri 1950:ii.123; Watson 1964: 102-104; Devakunjari 1970:7; Rajasekhara 1985: 103-104). However, this part of the old Pandya kingdom was never brought under direct political control by Vijayanagara (Stein 1980:393; Ludden 1985:44).

On the death of Harihara in A.D. 1343, Bukka succeeded to the throne and during his reign the influence and prestige of Vijayanagara steadily grew. Indeed, it was during the reign of Bukka that the emergent Hindu kingdom first clashed with the Bahmanī Sultanate under Alāud-dīn Bahman Shah (Sewell 1900:30; Briggs 1908:ii.294; Sastri 1950:ii.123; Sherwani 1953:61). Thus a pattern of conflict between the two kingdoms was established, oscillations of power in the Raichur Doab characterising the period.

Harihara and Bukka were the first two kings of what has come to be known as the Sangama dynasty (Sewell 1900:404). From epigraphical sources it is clear that at least seven more kings followed them before the usurpation of Narasimha in A.D. 1490. This marked the beginning of the second, Saluva dynasty (Sewell 1900:107-113; Sastri 1950:ii.126-127). With the conquest of the Madura Sultanate in A.D. 1365. the kings of Vijayanagara laid claim to all the territory south of the Krsna river, from coast to coast. However, the military campaigns of Vijayanagara were not always successful and the city itself was besieged by the Bahmanī Sultanate on four occasions; by Muhammad I in A.D. 1366 (Sewell 1900:38; Briggs 1908:ii.316); Mujāhid in A.D. 1376 (Sewell 1900:41-43; Briggs 1908:ii, 333-334); Fīrūz in A.D. 1406 (Sewell 1900:59; Briggs 1908:ii.383), and by Ahmad I in A.D. 1423 (Sewell 1900:69; Briggs 1908:ii.404).

The Kingdom of Vijayanagara reached its apogee during the reign of Kṛṣṇadeva Rāya (A.D. 1509-1530). The king waged war successfully in the Raichur Doab against Ismail 'Adil Shāh of Bijāpur (Sewell 1900:138-160; Briggs 1908:iii.48-50; Sastri 1950:ii.129) and in the east against the kingdom of Orissa (Sewell 1900:130-132; Sastri 1950:ii.129). In addition to his military conquests, Krsnadeva Rāya also undertook a substantial programme of building and structural alteration in the city itself (Rajasekhara 1985:107-108). A number of public buildings and temples were initiated or modified. Major water supply features were also constructed to provide a supplementary water supply to the greater metropolitan area. The town of Hospet, situated to the southwest of the city, represents a suburban extension to the capital, called Nāgalāpura. This too was constructed by Kṛṣṇadeva Rāya, presumably to house additional population (Sewell 1900:162; Longhurst 1917:19; Devakunjari 1970:9, 68-69).

It was during the reign of Kṛṣṇadeva Rāya that the Portuguese first established themselves on the west coast of India, under Francisco de Almeida (Sastri 1950:ii.149). By skilful diplomacy and military force, they came to dominate the lucrative horse trade with Vijayanagara, providing cavalry mounts for the Hindu nobles (Stein 1980:400-402). The Vijayanagara armies also employed Portuguese mercenaries, using

them to good effect at the siege of Raichur in A.D. 1520 (Sewell 1900:343-345; Sastri 1950:ii.129; Stein 1980:402-403).

Although the reign of Kṛṣṇadeva Rāya marked a golden period in the history of Vijayanagara, it is perhaps ironic that the seeds of decay were also planted at this time. The King's military success in the Raichur Doab can largely be attributed to the fragmentation of political power in the Deccan. At the end of the fifteenth century A.D., the Bahmanī Sultanate had broken up resulting in the formation of the five successor states; Ahmadnagar, Berar, Bīdar, Bījāpur and Golkoṇḍa (Sastri 1950:ii.120). Kṛṣṇadeva Rāya's crushing defeat of the state of Bījāpur in A.D. 1520 forced the Muslim kingdoms of the Deccan to consider the possibility of uniting to destroy a common enemy (Sewell 1900:155).

Kṛṣṇadeva Rāya died in A.D. 1529. A power struggle ensued, heralding a period of political unrest (Sewell 1900:165; Sastri 1950:ii.165). The throne of Vijayanagara eventually passed to Kṛṣṇadeva Rāya's cousin, Achyuta Rāya (A.D. 1530-1542), and subsequently to Rāma Rāya (A.D. 1542-1565), under whom on 23rd January 1565 the army of Vijayanagara was defeated by the combined forces of the Muslim succession states near Talikota (Sewell 1900:196-205; Briggs 1908:iii. 246-249; Longhurst 1917: 23-24; Sastri 1950:ii. 133-134; Devakunjari 1970:10). The rout of the Hindu army left the city of Vijayanagara without military protection, and it was not long before its inevitable destruction came.

Sewell (1900:208) rather romantically says of this:

Never perhaps in the history of the world has such havoc been wrought, and wrought so suddenly, on so splendid a city; teeming with a wealthy and industrious population in the full plenitude of prosperity one day, and on the next seized, pillaged, and reduced to ruins, amid scenes of savage massacre and horrors beggaring description.

Sewell's description of this event does little to explain the immediate social and political consequences of Vijayanagara's destruction as a sacral-symbolic centre.

It is reported that the nobles who survived the battle fled to Penugonda in the east, where an attempt was made to resurrect what remained of the existing political order (Sastri 1950:ii.135). The city was abandoned as a royal capital, the population that it had contained dispersed, leaving communities in isolated parts of the settlement, such as Kamalāpuram and Hampi. The inhabitants of these villages continue to farm the agricultural zones in and around the city, including some areas within the walled enclosures of the 'royal centre'. It remains unclear how the political order of the areas outside the core zone of political domination was effected by the demise of the urban settlement. We suggest that the established political milieu was little changed by the passing of Vijayanagara as a sacral-symbolic centre.

1.3 Foreign and indigenous literary accounts

A summary glance through the corpus of available literature on Vijayanagara will indicate that archaeological and historical research has drawn heavily from contemporary written accounts and compiled histories. These works were collected together for the first time by Sewell who included extracts from them in *A Forgotten Empire* (1900). Sewell concentrated on the accounts of two Portuguese travellers, Domingos Paes and Fernao Nuniz, who provide lengthy and detailed descriptions of the city and its inhabitants. These accounts also contain records of daily life and dynastic histories compiled in the first half of the sixteenth century A.D.

References to Vijayanagara are to be found in the works of other contemporary European and Arab writers. Translations are provided by Major (1857), Winter Jones (1863) and Dames (1918). A chronology of the contemporary accounts may be constructed as follows:

	Date	Nationality
Ibn Batuta	c. 1340	Moroccan
Nicolo di Conti	c. 1420	Italian
Abd-er-Razzak	c. 1442	Persian
Ludvico di Varthema	c. 1504	Italian
Duarte Barbosa	c. 1510	Portuguese
Domingo Paes	c. 1520	Portuguese
Fernao Nuniz	c. 1535	Portuguese
Caesaro Federici	c. 1567	Italian

A very general account of the city is provided

by the Russian traveller, Athanasius Nikitin, who was travelling in India during A.D. 1470. However, he probably came no nearer to Vijayanagara than Gulbarga.

The character and value of the accounts is mixed. Often recorded in written form after the traveller had returned to his native land, they are not without confusions and irrelevancies. However, these eclectic collections of recorded observations, reported knowledge, local customs, history and personal comment contain invaluable data for a study of the period A.D. 1336-1565.

Previous research has ignored the problems of political bias, exaggeration and poetic licence in the contemporary accounts. Passages relating to the size of Vijayanagara and its population have not been subjected to critical analysis. The use of select extracts from contemporary accounts by scholars has reaffirmed accepted assumptions regarding the city's extent, character and influence. We propose to make critical use of contemporary accounts as a source of data for water management at the site.

To date, the full potential of the literary accounts has remained unrealised, as the information contained in them has been utilised mainly for descriptive purposes. Sewell (1900). Longhurst (1917) and Devakunjari (1970) have attempted to identify structures at the site using contemporary descriptions of Vijayanagara with little success. Nevertheless, some attempts have been made to examine this material in a more imaginative and constructive manner. Stein (1980) has made a study of Vijayanagara social structure and kingship using contemporary references to the Mahānavamī festival. Following Stein, Fritz et al. (1984) have provided some interesting structuralist interpretations of the surviving remains at the site.

The history of the Bījāpur kings compiled from thirty-four standard contemporary histories by the Persian, Mahomed Kasim Ferishta (b. A.D. 1570), provides data relating to the political history of Vijayanagara. Briggs (1908) furnishes us with a translation of this work. The value of Ferishta's document, though politically biased against Vijayanagara, cannot be underestimated as many of the standard texts used in its compilation have now vanished.

In addition to the contemporary accounts

and later histories, there are other literary works which provide information pertaining to Vijayanagara. Several poetic compositions of the Medieval period are of importance in this respect. These include the Madhurāvijayam (Rajasekhara 1985:13) by Gangadevī, wife of Kumāra Kampaṇa (fourteenth century A.D.) and the Āmuktamālyada (Rajasekhara 1985:29) ascribed to King Kṛṣṇadeva Rāya (sixteenth century A.D.).

The officials of the East India Company and later the British colonial administration have left us with detailed information concerning revenue, agriculture, population, geography and local history in South India in published and manuscript form. The Bellary Gazetteers of 1872 and 1904, compiled by Kelsall and Francis respectively, provide a wealth of diverse information. Much of the information contained in these works is of crucial importance to an understanding of pre-colonial conditions in the area. Colonial administrators had always sought to record information pertaining to the areas which were under their control, even if it was only to more efficiently extricate lucrative, agricultural revenue returns.

It is necessary here to indicate the importance of archival material to this study. The ancient irrigation systems of Bellary district fell under the jurisdiction of the Public Works Department of the Madras Presidency. This body methodically recorded the restoration and replacement of water features. The records of the Public Works Department have proved of invaluable assistance in understanding the complex changes made to medieval water features from 1846 to 1956. Parliamentary returns for the Public Works Department of the Madras Presidency have also yielded important information pertaining to the management of water in Bellary district.

1.4 Inscriptions near and at Vijayanagara

The published epigraphical record at the site may be divided into two categories: pre-Vijayanagara inscriptions and inscriptions of the period A.D. 1336-1565. The eleven pre-1336 epigraphs represent a confusing picture of settlement at the site prior to the foundation of Vijayanagara. They are located in only four areas:

- 1. The environs of the Virūpāksa temple (2).
- 2. Hemakutam hill (1).
- 3. Anegundi (3).
- 4. Enclosure IV in the 'royal centre' (5).

Two inscriptions of the late twelfth and early thirteenth centuries A.D. indicate religious activity around the much elaborated Virūpāksa temple complex which was formerly the site of a sacred tīrtha dedicated to Pampā (Rajasekhara 1985:101-102, 117). An undated epigraph in the Prasanna Virūpākṣa temple on Hemakutam hill refers to the erection of a temple by Vīra Kampilirāya, the chief of Kampli, and may be ascribed to the closing years of the pre-Vijayanagara period (Rajasekhara 1985:117). Three pre-Vijayanagara inscriptions are reported at Anegundi. Two Jain inscriptions date between the tenth and thirteenth centuries A.D., whilst the third records a land grant made by a Cālukya king in the tenth century A.D. (Shama Sastry 1917:285-291).

More interesting are the five pre-1336 inscriptions discovered in enclosure IV of the 'Royal Centre'. The oldest and most intriguing of these inscriptions is a first or second century A.D. fragment on white limestone recording a religious donation (probably Buddhist) in Prākrit (IAR 1975-6:20, 62). It reads:

Tarasa putasa dānam

The inscription may be associated with the five limestone Buddhist relief panels recently recovered by the Archaeological Survey of India from behind the 'Hundred-pillared Hall' (IVb/ 1). These fine panels, thought to have originated from Amarāvati or Nagārjunakonda, are tentatively dated by the present writer to the second or third century A.D. Two inscriptions of Krsnadeva Rāya record gifts to the Amareśvara temple at Amarāvati in A.D. 1515 (Sewell 1932:240; VR 1919:ii., Guntur,632,638; ARSIE 1892:266, 272). Although it is unlikely that the architectural fragments dating from the second or third century A.D. came to Vijayanagara before A.D. 1336, the removal of Buddhist pieces from Amarāvati by Krsnadeva Rāya must remain a possibility worthy of consideration. Two stele inscriptions were uncovered during the 1975/6 excavations (IAR 1975-6:20,62). Both were dated A.D. 1076, corresponding to the reign of Vikramaditya Cālukya VI, and had been reused as building material during the Vijayanagara period. The more complete of the two referred to the donation of coins to two scholars by Someśvara Bhattopādhyāya, a dandanāyaka of the king. The two remaining early epigraphs are dated to the second half of the eleventh century A.D. (Devakunjari 1970:31,62; Rajasekhara 1985:117) and indicate Hindu and Jain activity in this area of the site. No complete structures, of a date contemporary with these early inscriptions, survive. However, the numerous chlorite architectural fragments, which litter enclosure IV and were apparently reused in the Vijayanagara period, date to the pre-A.D. 1336 period of site occupation.

It is perhaps worth noting here that two Asokan edicts in Brahmi have been found in the adjacent district of Raichur at Koppal and Maski (Allchin 1954:77,82), indicating that some Buddhist activity was concentrated in the general area of Vijayanagara during the closing centuries of the pre-Christian era. A third Asokan edict, dated 258 B.C., is reported by Francis on the banks of the Chinna Hagari river (1904:26-27).

There are a small number of inscriptions which refer directly to the construction, modification and maintenance of water supply features. These inscriptions have received little attention to date outside specialised epigraphical publications.

At Munirabad, on the left bank of the Tungabhadrā river, 5 km. north of Hospet, an inscription of Vikramaditya Cālukya VI dated A.D. 1088, was found inside one of a group of early temples. The epigraph is written in Sanskrit and Kannada. It refers to the gift of the village of Huligi (modern name Munirabad) to Chauvedi-Āditya-Bhaṭṭa by Traiļokyamalla-Āhavamalla Someśvara I, the father of Vikramaditya VI. The village and its lands were improved by the construction of an irrigation canal and a network of sub-canals taking off from the Tungabhadrā and paid for by Chauvedi-Āditya-Bhaṭṭa.

Quickly surveying the banks of the Tungabhadrā river and seeing them charming, Chauvedi-Bhatta founded this canal to flourish as long as the sun, moon, earth, stars and the famous Meru (mountain)

last, with its limbs (i.e., sub canals) like threads drawn out (after) cutting asunder the stalk of a lotus, and presented it (to the people); so that, lo, the mass of plantain trees growing there (has been) increased/satiated (with the supply of water) (HAS 1922:10).

The village was subsequently given to the Brahmins. The inscription is incised on a stele and celebrates this occasion. It is housed in the Someśvara temple, one of five small Śiva shrines located on the left bank of the river. The inscription is important for two reasons. Firstly, it associates the legendary settlement of Kishkindhā with the old fort at Anegundi. Secondly, it refers to the construction of the irrigation canal 1.5 km. to the south of the village during the eleventh century A.D. This canal is in current use and is known locally as the Premogal channel. It may be observed, therefore, that the use of irrigational technology was well established in this area in the eleventh century A.D. and was recognised as a method of realising agricultural potential in the context of permanent settlement. Further, this inscription indicates that landowners, in this case a man associated with the Calukyan royal family, accepted a measure of responsibility in providing basic subsistence requirements for their dependent tenants.

There is considerable evidence for an occupation of this region during the Cālukya period. A Cālukya inscription of the tenth century A.D., which records the granting of land near Hampi, is located near Anegundi. It reads:

Åhvanalladeva of the Cālukya dynasty, by Pampe on the southern bank of the Tungabhadrā river, ... made a land grant to his prime minister Maṇṇamayya (Shama Sastry 1917:290).

One of the minor capitals of the Cālukya monarch Jayasimha II (A.D. 1018-1042), called Pottalakere, seems be have been located on the site of the modern Danāyakanakere, southwest of Hospet (Francis 1904:29). The Kannada word 'kere' means tank and it is frequently added to the names of settlements which possess such devices. Today Danāyakanakere is provided with a large, modified, catchment drainage tank

of Medieval design. The identification of Pottalakere with Danāyakanakere is, therefore, of considerable importance as it indicated that a bunded kere or catchment drainage tank existed at Danāyakanakere before the Vijayanagara period. An inscription at Kogali dated A.D. 1064 indicates that Kampli was the capital (nelevidu) of the Calukyan King, Visnuvardhana Vijayaditya (Francis 1904:29). The Tamil poem Kalingattu Parani indicates that Vīra-Rājendra Cola set up a pillar of victory at Kampli to mark a successful military campaign during the eleventh century A.D. (Kanasabhai Pillai 1890:331,339). This evidence strongly suggests that the area which later formed the greater metropolitan region of Vijayanagara was also earlier the zone in which several Cālukyan capitals and settlements were located. More than this, these earlier settlements depended upon irrigational technology (riverfed canal systems and large catchment drainage tanks) to support their agricultural hinterlands.

During the 1987/8 field season, two unpublished epigraphs directly related to water management at the site were brought to the attention of the author. The first inscription, located about 1 km. east of the Matanga Parvatam bridges on the Turtha canal, refers to the breaking of a boulder by an engineer in order to facilitate the passage of water eastwards along the canal. The second inscription is carved on a boulder just upstream of the main Turtha anicut (one of six such devices, arranged in a line), 2 km. west of Hampi and contains a reference to the Śaivite deity Virūpākṣa. Both these inscriptions are discussed in greater detail in sections 4.4 and 4.5.6

Before the completion of the Tungabhadrā Dam in the 1950s, the existence of an epigraph dated A.D. 1521 and recording the construction of an anicut at Vallabhāpuram was reported by several authors (Kelsall 1872:231; Francis 1904:38; Venkayya 1906:210). The weir lay some 12 km. upstream of Mālāpuram and supplied the Basavanna canal. This inscription is now lost.

Epigraphs from the Vijayanagara period are predominantly religious in character, recording dedications and donations from royalty, powerful nāyakas, wealthy individuals and groups of individuals to temples and shrines. These records also contain political, dynastic and social

information. It is important to note that to date, relatively few inscriptions, perhaps no more than one hundred, have been found at Vijayanagara. Those that survive, in Sanskrit, Kannada and Telugu, do not represent an impressive or consistent record of patronage to religious institutions. While many epigraphs remain undiscovered, one might expect a greater number and spatial distribution of inscriptions for a city that was occupied for 229 years. Ludden (1985:70) has discussed the dearth of inscriptions for the Nāyaka kings at Madurai.

Inscriptional material provides chronologies for most of the major religious complexes and a number of the smaller temples at Vijayanagara. Unfortunately, these epigraphs do not provide a means of dating secular structural remains at the site, as they are found on buildings which represent a totally separate architectural style to that found in secular constructions. Though separate and quite distinct, these two building styles are contemporaneous. However, there are a small number of inscriptions which make reference to secular structures. Examples include the bridge across the Tungabhadra, built in A.D. 1383 (Devakunjari 1970:61), the octagonal well near Malpannagudi, built in A.D. 1412 (Devakunjari 1970:71; Rajasekhara 1985:117), and Achyutarāyapete or Achyutāpura, the suburban extension to the city built by King Achyuta Rāya in A.D. 1534 (Devakunjari 1970:60; Rajasekhara 1985:119).

Recent field survey at the site has located inscriptions incised on large boulders within the urban settlement (Nagaraja Rao 1983:39-40). These short epigraphs record the names of watchtowers or 'bastions', which served particular quarters of the city as lookout posts. None of the inscriptions are dated, although they do provide contemporary labels for parts of the site that were previously unknown.

During the course of this investigation, reference will be made to the inscriptions cited above which provide information relating to water management during the Cālukya and Vijayanagara periods.

1.5 Vijayanagara kingship and social structure

The recent researches of Stein (1980), Breckenridge (1985) and Ludden (1985) have done much to dispel the notion of Vijayanagara social structure and conditions remaining in an unchanging stasis. The picture of social and cultural stagnation propagated in the work of Sastri (1950) and Thapar (1981) can no longer be maintained in the light of these recent studies (see section 1.1). The following is intended as a brief discussion of Vijayanagara kingship and social structure, with particular reference to social organisation and responsibility. This examination is considered essential by the author, for the more coherent understanding of the relationship between resources and management in the Vijayanagara period.

When studying political conditions at Vijayanagara the importance of water supply cannot be overestimated. Although temples and powerful individuals invested in the construction of tanks for villages, the extensive water supply systems necessary to supply the metropolitan area of Vijayanagara remained the responsibility of the king. In the semi-arid environment, the patronage of hydraulic construction projects was the key to increasing economic potential by the successful manipulation of resources.

As indicated by Stein (1980), the emergence of Vijayanagara represented a series of new developments in social and political organisation. These changes are most clearly visible in the sphere of agriculture. Although the nādu, an assembly representing several villages, remained the basic building block of agricultural organisation (Stein 1980:90-91; Ludden 1985:35), it was in a reduced or fragmented form. Throughout the period prior to the foundation of Vijayanagara, traditional village assemblies remained responsible for the collective management of land and land use, as well as irrigation, dispute settlement, taxation and temple gift allocation. Brahman settlements (brahmadevas) regulated by their sabhas, or assemblies, became powerful agents of land control, acting as mediating agencies for temple investments (Ludden 1985:40). Stein (1980:413) has indicated that by the fifteenth century A.D., the donation of gifts to brahmans was replaced by the patronage of cult temples.

During the Vijayanagara period, ambitious individuals, in particular amaranāyakas, assumed the responsibility for agricultural management, replacing the autonomous village assemblies as the primary, or dominant, agents of land control

(Breckenridge 1985:42-43; Stein 1985:81). The penetration of outsiders into the South Indian macro-region, Telugu warriors (or nāyakas) with dependent followers (Stein 1980:418), resulted in the reorganisation of resources. Further, there developed an increasing spatial complexity related to the breakdown of territoriality and localised ethnicity. To this picture may be added the complication of the two-fold division of non-brahman caste members into the valangai (right-hand) and iḍangai (left-hand) groupings, a process which began in the Cola period (Stein 1980:469-488).

Social reorganisation dictated changes in land tenure, which had previously been organised around the vellanvagai (ordinary) and brahmadeya (special) distinction (Stein 1980:419). This period witnessed the development of a three-fold tenurial division based upon the amara (military service), bhandārvāda (crown) and mānya (tax free) grants (Stein 1980:420). A discussion of the controversy surrounding the ownership of land rather than the income derived from it, and the character of the amaram or military tenure, is beyond the scope of this investigation. It is sufficient to note that the epigraphical evidence from which information regarding agricultural organisation is derived, remains ambiguous in relation to both of the issues cited above.

The growth of a class of supra-local warriors, or nāyakas, in the fourteenth century A.D. (Stein 1980:397; Ludden 1985:45) marks the beginning of dramatic changes in the organisation of social and political order in South India. The integration and incorporation of micro-regions, related to an increase in the movement of population, the intensification/expansion of agriculture and the growth of intra- and extra-local trade, resulted in the demise of local institutions such as the nāḍu and brahmadeya (Stein 1980:408; Menon 1986:30).

The nāyakas of the Vijayanagara period may be seen to replace existing institutions as agents of social control. Nāyakas legitimised their right to power through the patronage of religious centres (Ludden 1985:46). Stein has argued that nāyakas became a new, intermediary level of authority within a changed, but nonetheless recognisable, segmentary state (1980:409). This position was based on the use of superior, military

technology (i.e. the horse and firearms). It is assumed that the 'strong military centre', in this case Vijayanagara, was able to curb the aspirations of quasi-independent chiefs when they threatened the structure of the segmentary state. Opposition to usurpations of power by subordinate chiefs, or nāyakas, is seen by Stein as the response of a unit that is at the top of the segmentary pyramid. Although hegemony is maintained by manipulation of ritual supremacy, instability resulting from the decentralisation of political power was checked by direct military action. The economic implications of this inherent instability are not discussed. Stein's paradigm for South Indian statecraft demands that the 'centre' is always presumed to be militarily stronger than other subordinate political units and never threatened by internal disorder (1980:410).

We suggest a rather different explanation for the use of direct military action by Vijayanagara against local kings, or nāyakas, which depends on a constant state of political flux and dynamic economic activity. This situation would be characterised by independent political 'centres' vying for limited demographic and agricultural resources. A 'centre' in the context of this discussion may be defined as a basic political building block, perhaps synonymous with a kingdom. It would represent an agglomeration of demographic, mercantile and agricultural resources located in a large urban settlement and its surrounding hinterland. The urban settlement would house a king and his followers, though not a large bureaucracy. Political 'centres' would all be fairly equal in terms of military and political influence. Their location would coincide with productive agricultural zones, the order of which would be located in riverine and deltaic tracts. Vijayanagara would represent one such 'centre' and would be allied to other 'centres' by a complex network of alliances. Direct military action against another kingdom or 'centre' would then represent a more complex phenomenon than the checking of a subordinate kingdom's aspirations to hegemony (see section 1.1).

Stein (1980:410) has proposed that the tensions between the Vijayanagara state and the intermediary level of Telugu nāyakas were resolved by the intervention and active

involvement of brahmans in administration and politics. Brahmans, as direct agents of the king, served as commanders of fortresses, which were economically supported by bhaṇḍāravāda or crown villages (Stein 1980:411-414). They also acted as military commanders, giving dignity, prestige and legitimation to political control. The tensions ascribed by Stein to the imposition of an intermediary level of political control, do not necessarily infer a condition of instability, requiring the participation of powerful brahmans in the workings of the state apparatus. Rather, they suggest, in our view, a positive stimulus to state formation.

Stein presumes brahmans to be loyal to the dominant 'centre' of the segmentary pyramid and its principal figure, the king himself. However, brahmans were powerful landowners in their own right. They received wealth as gifts, including land, from nāyakas and merchants as well as from the king. This suggests that brahmans could afford to be somewhat politic in their allegiances, a possibility not considered by Stein.

Temples legitimised the political dominance of patrons. However, the wealth collected and redistributed by temples, as cash or land, needed to be protected by an agent of political control. The relationship of powerful nāyakas, of which the Vijayanagara king was one, and religious institutions may be viewed as one of symbiosis. The patronage of temples by local magnates ensured:

- the generation of legitimacy for the maintenance of political power;
- the development of agricultural tracts through the reallocation of gifted cash to land improvement projects;
- 3. the attraction of scarce population.

In return, local rulers protected temples from military attack and furnished them with lavish gifts. Royal patronage undoubtedly increased the status of a temple, attracting pilgrimage. This provided a valuable source of revenue for temples. That large cult centres received patronage from more than one and sometimes many political leaders (including Vijayanagara kings) suggests that political dominance was achieved with differing measures of success by competing individuals. Although the

Vijayanagara period witnessed considerable agricultural expansion in spatial terms, the need to attract and protect scarce population remained the most pertinent problem for political units headed by ambitious individuals.

The expansion of agriculture during the Vijayanagara period has been discussed by Stein (1980), Breckenridge (1985), and Ludden (1985). It is clear that the movement of peoples in possession of new agricultural technologies and practices significantly increased the productive power of existing agricultural tracts (Ludden 1985:51), and made it possible to settle in areas away from the deltaic and riverine zones (Stein 1980:429; Breckenridge 1985:42-43; Ludden 1985:46). These developments are directly linked to the increased use of irrigational technology funded by wealthy individuals and the redistribution of gifted wealth by religious institutions. There is considerable evidence for preVijayanagara water management in Bellary and Raichur districts (see section 4.2). Direct investment in large scale irrigation projects by Vijayanagara kings, contributed to the realisation of the full potentialities of the 'productive agricultural core zone'.

The fourteenth to sixteenth centuries A.D. represented a period of increased extra-local movement and social mobility (Stein 1980:368; Breckenridge 1985:43-47; Ludden 1985:42). This development is closely related to changes in social organisation and land control. The increasing complexity of social stratification, which resulted from the movement of linguistic and ethnic groups into new domains, was complicated by the existence of communities not tied to settled agriculture. Chander (1987:25-26) has elucidated the important role that these pastoralist, mobile groups and hill and forest groups played in the social and economic organisation of the Hyderabad region.

The Vijayanagara period witnessed a steady increase of intra- and extra-local trade, culminating in the Portuguese intervention of the early sixteenth century A.D. This event marked the beginning of direct European involvement in the social, economic and political order of South Asia. The growth of trade in the period A.D. 1336-1565 involved two distinct developments. Firstly, the expansion of intra-local trade networks linked established

productive core zones to mobile groups outside these areas. Mobile groups, particularly those from forest tracts, supplied rare goods in small quantities for internal consumption and export. Chander (1987:25) has suggested that groups outside settled agriculture, were at least as numerous, and economically as dominant as the settled agriculturalists. The political and economic influence of these mobile groups, in the light of this assertion, cannot be underestimated. Previous research has not considered the vital role played by these groups. Secondly, there is plentiful evidence to indicate that complex patterns of extra-local and foreign trade emerged in this period. The lucrative practice of taxing high value trade goods in transit is assumed to have provided a major revenue source for all kingdoms in South India, particularly Vijayanagara. The 'strong centre' of the unitary and segmentary state models has been viewed as essential in the attraction and protection of long distance trade. In our view, since trade remains in the hands of mobile traders, it would be attracted to wealthy 'centres' of consumption which offered favourable mercantile terms. The economic growth of a 'centre' would thus rely on the encouragement of trade.

We suggest that the accumulation of wealth by non-mobile, high status groups depended on the attraction of scarce population. This ensured that a workforce for an agricultural base, capable of supporting a defensible urban settlement was maintained. Wealth from agricultural revenue returns and military raids was concentrated in urban settlements. It attracted extra-local and foreign trade, providing an additional source of revenue. Thus, we suggest that important urban settlements existed in a finely balanced equilibrium, controlled by a number of primary and secondary factors.

Stein has suggested that the purchase of arms and payment of mercenary soldiers was financed by commerce (1980:79). The great augmentation in military activity, attributed by Stein (1985:79) to the increasing pressure exerted by the expansion of Hindu and particularly Muslim kingdoms, is here viewed as the result of an increased competition for scarce resources. The intrusion of a Muslim ruling class, eager to establish kingdoms in South India.

changed the social and political order by increasing the demand for resources. Military growth may be considered wasteful in terms of the amount of people required to take part, who might otherwise be engaged in agricultural activities.

The importance of religious institutions as centres of socio-economic exchange has been mentioned above. An increase in temple building and expansion was made possible by patronage from groups and individuals. The predominantly royal gifts of the Cola and Pallava periods were replaced by mixed patronage. Kings, nobles, nāyakas and merchants all donated gifted wealth (Thomas1985:16-20).

Religious centres attracted population and established complex patterns of social and economic redistribution (Breckenridge 1985:55-63; Ludden 1985:33-34). By the fourteenth century A.D., temples had developed significant regional importance. They linked disjointed social groupings by investing gifted cash in agricultural projects and creating exchange networks (Stein 1980:428-429; Breckenridge 1985:54-55; Ludden 1985:31,33). Large temples employed hundreds of specialists and general service employees, who ensured the smooth running of the shrine as a centre of worship, pilgrimage, education, and socio-economic exchange. Considerable cash and land wealth was amassed by religious institutions, indicating that they were important agents of social and economic control in periods of resource scarcity.

Thomas (1985:16-20) has argued that an increase in temple building and modification is indicative of political instability. Considerable military activity and political reorganisation occurred in the Vijayanagara period. However, it was by no means an era of economic or cultural stagnation. Chander (1987:50) has suggested that a situation of conflict was indicative of dynamic economic activity in political core areas. Accepted assumptions regarding the nature of political conditions must be subjected to critical analysis. The replacement of the monolithic state by Stein's segmentary paradigm as an explanation of South Indian political order has left a number of problems unresolved. If political order was based on 'centres' with subordinate foci, how did a 'strong centre' maintain its monopoly of ritual

supremacy? In addition to this, how did the dynamics of resources affect South Indian statecraft?

The fourteenth to sixteenth centuries A.D. can be viewed as a period of great change and adaption brought about by external and internal stimuli. An increased competition for scarce resources resulted from the incursion of powerful new outsiders, as both Muslim and Hindu were keen to assume the position of a ruling class. The attraction and maintenance of population, essential for establishment of an urban centre, outside the traditional 'productive core zones' (i.e., riverine and deltaic areas) necessitated the need for a more skilful presentation of the ruler's personality. Thus the importance of personal charisma cannot be underestimated.

Ludden (1985:68) has discussed nāyaka charisma for the period following the decline of Vijayanagara. He suggests that nāyaka charisma rose from the ritual supremacy of their capital and from the patronage of temples and brahmans (1985:68). The success of nāyaka power play depends partially on the use of personality and locality charisma. This hypothesis may go some way to explaining how ritual supremacy was conceded to only one 'centre', through character and site presentation and royal recognition of social and political responsibility.

However, the nature of the 'centre' requires further discussion. Stein has argued that ritual supremacy was held by a 'strong centre' which dominated the segmentary pyramid (1980:269). The 'centre' was universally recognised by peripheral foci which retained their own essential characteristics as separate units (1980:272-275). He writes:

It is not an accident of preservation that the historical record of Vijayanagara kinship should exist in temple inscriptions. It was here that the civil, as against the military aspect of kingly rule was most clearly realised (1980:481).

The state apparatus of ritual supremacy is not elucidated. Religious institutions are seen as the means by which a disparate society was integrated. In one sense this assertion is correct.

Temple complexes, in their role as centres of redistribution, linked diverse linguistic and racial elements in exchange networks. However, these networks did not represent or correspond with political order, which may be presumed to have remained in a state of constant flux.

Temple patronage by kings is traditionally seen as a method of affirming royal authority outside the zone of direct influence. Yet, cult centres did not provide legitimation of the king alone. Large temples contain epigraphs which record donations from powerful nāyakas and local kings. It may be more useful to interpret royal patronage as an attempt to influence or manipulate the established pattern of economic organisation inside the 'political core zone'. The injection of cash into powerful 'centres' of attraction, ensuring the maintenance of social magnetism, benefited both king and temple. Such action served also to win the support of influential though politic brahmans, in whose hands lay the machinery of economic redistribution.

This enquiry does not accept that the temple epigraphs represent positive evidence for Vijayanagara sovereignty. In areas outside the 'productive agricultural core zone', which supported the urban settlement, inscriptional material records brief military occupations and religious gifts. It is not possible at this juncture to provide a satisfactory measurement of Vijayanagara's direct political influence in spatial terms. Previous research has taken epigraphical distribution as an accurate guide to the extent of Vijayanagara's domain. In this discussion, reference has been made to two separate, though linked, definitions of Vijayanagara's physical extent: 'political core zone' and 'productive agricultural core zone.' The former may be taken to represent the nuclear area from which the urban centre received at least nominal military and political support from local kings and nāyakas. The latter represents the agricultural lands under the direct political and military control of the urban centre, which provided revenue taxable by the king personally. Both these definitions describe areas far smaller than previous accounts have suggested.

The social networks forged by religious institutions are largely to be viewed as an apolitical phenomenon, by which limited resources were transported, transformed and organised. Vijayanagara kings vied with other kings and nāyakas for theoretical dominance of resources outside their direct jurisdiction by the injection of gifted cash into religious centres. Cash of this sort was derived from land tax, trade tax and military raids. The attraction of population to the 'productive agricultural core zones' remained the primary concern of South Indian kingdoms. We suggest that this was partly achieved through the presentation of the capital.

If one discards the concept of the 'strong centre' in favour of a weaker, more nebulous 'centre' or kingdom as the pivot of social and political order, it is possible to envisage its function as threefold; the attraction, maintenance and protection of resources. The *Ārthaśāstra* makes it quite clear that the king must recognise the importance of resources:

Which is better of the two, the tract of land with forts or that which is thickly populated? The latter is better; for that which is thickly populated is a kingdom in all its senses. What can depopulated country like a barren cow be productive of (Shama Sastry 1951:325).

The manipulation of ritual supremacy may then be considered as one of several mechanisms that provide the king and his 'centre' with charisma.

The management of resources through a skilled presentation of charisma would require a number of other mechanisms, symbolic and practical:

- 1. Maintenance of dharma by the king.
- The ritual association of the king with mythical figures and localities imbued with religious importance.
- The buttressing of limited political power by the creation of elaborate and expensive power symbols. The greatest concentration of these power symbols would be located within a city in which the charismatic ruler would reside.
- The provision of physical benefits for the attracted populace, these would include irrigation works, military protection and the support of cult centres. It was important for the king to remain closely

associated with temple complexes through patronage, particularly those which controlled extensive networks of redistribution. The provision of benefits for the settled population may be considered the primary responsibility of a charismatic king.

- Displays of military strength, including military raids, military displays and elaborate fortifications (especially in the city).
- 6. Establishment and maintenance of 'domain' and 'community' by legitimation rituals, consensus building devices and incorporating legends (Chander 1987:6). The movement of the king and his entourage around the 'political core zone' was a method by which the 'domain' was delineated.

The hypothetical situation cited above is reliant on the existence of four general conditions. Firstly, a political order consisting of 'weak centres' of power dominating attenuated hinterlands of agricultural activity (the 'productive agricultural core zone'). Units would form loose alliances in complex patterns relating to resource distribution. The indefinite spatial growth of kingdoms would be restricted by the availability of population to defend the 'domain', though limited expansion would be possible through the exploitation of rivalries between local units. A monopoly of superior military means, including foreign mercenaries, firearms and cavalry, was the key to successful defence of the 'productive agricultural core zone', domination of the 'political core zone' and the attraction of population.

Secondly, agricultural revenue would represent a secondary source of state income. Trade tax and portable wealth derived from raids into the territory of other rival kingdoms would provide the primary source of income Agricultural wealth may be presumed to have remained in the control of the religious institutions, who continued to operate as centres of socio-economic exchange. A large body of population would remain outside the sphere of political control, following a pastoralist life-style.

Thirdly, social mobility and racial and religious tolerance amongst settled populations, especially

in urban settlements. This condition is particularly evident in the physical remains at Vijayanagara, which are religiously and culturally eclectic. Duarte Barbosa, a sixteenth century A.D. visitor to the city, states:

... the king allows such freedom that every man may come and go and live according to his own creed without suffering any annoyance and without enquiry (Dames 1918:202).

Finally, a fragmentation of political power and the absence of a centralised bureaucratic 'centre' capable of collecting tax returns outside the 'productive agricultural core zone'. This condition suggests that the existence of charismatic kingship demands a decentralisation of power. The operation of a 'weak centre' does not necessitate a large bureaucracy, as the extent of direct political control remains localised. The important buildings of the 'royal centre' at Vijayanagara may be presumed not to have housed a large administrative staff responsible for the direction of government affairs, but rather the personal retinue of the king. Administrative power would remain delegated to nāyakas capable of enforcing tax demands and maintaining personal armies within the 'political core zone' (Chander 1987:18-19). A king dominating a successful 'productive agricultural core zone' would satisfy himself with the nominal allegiance of navakas outside this area and respectful epigraphical references made by them in important cult temples. The primary function of the urban centre remained the attraction of resources (especially population and trade) through the presentation of personality and site charisma. The agricultural self-sufficiency of Vijayanagara as an urban centre suggests that regional order and stability had very little to do with the involuted operation of the sacral-symbolic core. Barbosa states:

In the city as well there are palaces after the same fashion, wherein dwell the great Lords and Governors thereof (Dames 1918:202).

It would appear that the urban centre housed the king and his immediate followers, on whom the ruler relied for personal support. This passage suggests that the king's authority did The Irrigation and Water Supply Systems of Vijayanagara

not extend indefinitely from the site, and probably no further than the 'productive agricultural core zone'.

In conclusion, the proposed paradigm for Vijayanagara statecraft, with a political order based on many attenuated 'centres' of power competing for scarce resources, would result in the creation of internal and external tensions. These tensions may be seen as inherently destructive. The most dangerous external stress factors would be the emergence of alternative

'centres' of attraction, capable of offensive and defensive military action. The destruction of a successful, rival 'centre' would satisfy a practical and an ideological function for Vijayanagara's competitors. Internal pressures would develop between the king and nāyakas within the 'political core zone', inevitably leading to usurpation and intrigue for which there is evidence in the historical record. Offensive or defensive military action would tend to distract attention away from internal disorder of this sort (Chander 1987:42).