The decline of the Gupta dynasty a little after the fifth century A.D. triggered a process of political fragmentation in the whole subcontinent. Feudatories and subjugated powers declared their independence and made way for emergence of small kingdoms. It gave rise to a period of rivalry and competition to gain political supremacy. The extent of the kingdoms of early medieval India was flexible and was centered on nuclear areas that became political centres. The different ruling dynasties that gained supremacy after the fall of the Gupta power were the Pushyabhutis of Thanesar, the Maukahris in the Kannauj province, the later Guptas, the Maitrikas of Vallabhi and Sasanka of Bengal (Gauda) and so on. The Deccan and the far South were similarly divided into small kingdoms. The different dynasties that dominated the Deccan and the southernmost states were the Vishnukundins, Kadambas, the Pandyas, Cheras and Cholas. This period has been portrayed by scholars as a period of feudalization of the Indian economy characterized by ‘decline of trade and commerce’. Several aspects related to the feudal order have been debated by scholars (Yadav 1978-9, Mukhia 1981, Sharma 1984, 1987; Chattopadhyaya 1994, 1995). An area-wise study would help us to understand the regional differences in exchange network in the period between the fifth and the eighth century A.D.

Northwestern Region and the Potwar Plateau

Taxila and the entire northwestern region witnessed continued habitation since prehistoric period. In the fifth century A.D. the region was under the White Huns after the fall of the Gupta empire. Cultural material of the post-Gupta period after c.500 A.D. was found at Taxila in the Potwar Plateau and other sites in the NWFP. Other sites are Snaish Gumbat, in the Swat region, Charsadda in the Peshawar valley, Rashakai, in Swabi (Mardan district) and Khakhpa (Rahman 1993; Ali 1994; Taj Ali 1995).

Sitewise Distribution of Manufactured Objects

Chart 1c shows the different raw materials in the region. These were copper, bronze, iron, and gold, silver, carnelian, and garnet, chalcedony, crystal, pearl and lapis lazuli.
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Taxila</th>
<th>Chart 1c NWFP- c.500-750 A.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>trisula, rosettes, bronze fingering</td>
<td>Copper coins, toilet objects, antimony rods, bangles, ear cleaner, hairpin, Bronze fingerring, small bell</td>
</tr>
<tr>
<td>Iron</td>
<td>pickaxe, arrowhead</td>
<td>Iron sickle, arrowheads, nails, rings, ladle, fish hook, needle, chisels</td>
</tr>
<tr>
<td>Gold</td>
<td>beads</td>
<td>Silver coins</td>
</tr>
<tr>
<td>Silver</td>
<td>coins</td>
<td>Semi-Precious stone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crystal, Agate beads, Carnelian, Quartz beads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lapis Lazuli beads</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shell fragment of bangle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ivory small plaque</td>
</tr>
<tr>
<td>Semi-Precious</td>
<td>Carnelian necklace, Garnet beads, Chalcedony, Crystal beads,</td>
<td></td>
</tr>
<tr>
<td>stones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearl</td>
<td>beads</td>
<td></td>
</tr>
<tr>
<td>Lapis Lazuli</td>
<td>beads</td>
<td></td>
</tr>
<tr>
<td>Soapstone</td>
<td>seal</td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td>beads</td>
<td></td>
</tr>
</tbody>
</table>
### Chart 3c
Sindh—Multan c. 500—750 A.D.

<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Jhukar</th>
<th>Tulumba</th>
<th>Mirpur Khas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>coins</td>
<td>coins</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>knives, daggers, chisels, spearhead, scythes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td></td>
<td>case, leaf</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>coins</td>
<td>case</td>
<td></td>
</tr>
<tr>
<td>Shell/Conch</td>
<td></td>
<td>bangles, beads</td>
<td></td>
</tr>
</tbody>
</table>
SITEWISE DISTRIBUTION OF RAW MATERIALS IN NWFP, POTWAR, PLATEAU, BALUCHISTAN AND SINDH
C. 500-750 A.D.
Evidence of Manufacture of Finished Products At Different Sites

Blacksmith's workshop: At Damkot, one of the upper floors of the structural remains was marked by a smith's workshop. The tools and implements were found in association with an open mouthed bowl probably for keeping water for cooling down metal objects after being heated and hammered. A small furnace was found nearby. The workshop is assigned to period V of the Hindu Shahi period of early eighth century A.D. (Rahman: 1968-69: 135).

Character of Sites and Distribution of Manufactured Objects

Taxila was a much renowned city of the historical period. The city was an ancient centre of learning and a seat of political power. The region was under the rule of Mauryas, Saka-Pahlawas, Indo-Seythians, Kushanas, Sassanians, Kidara Kushanas and the Huns. It is represented by three mounds Bhir, Sirsap and Sirsukh. The last city was established at Sirsukh by the Kushana rulers. There are several religious sites scattered within the region with Buddhist remains that flourished between the second and the fifth centuries A.D.

Huien Tsang tells us that about seventh century A.D. there were a thousand monasteries in Gandhara alone. The structural remains of a majority of the monasteries were in ruins and in desolate state (Marshall 1951: 5, 76). The presence of the Huns is also confirmed by their silver coins prior to the rule of Toramana or Mihirkula from the burnt out monasteries at Taxila (Marshall 1951: 76). Marshall reports that the evidence of the vandalism of the White Huns was there in the form of the wreckage of monasteries and stupas and skeletons of the slaughtered lying in the debris. The destruction of the sangharamas has been described by Huien Tsang in his account. In the eighth century, Taxila was included among the feudatories of the Kashmir dynasty (Marshall 1960: 39).

There are a few other religious sites of this period in the northwest, majority of them are associated with Buddhism. At Damkot near Charsada the remains of an earlier stupa was found devastated and ruined dated to the sixth century A.D. The place was possibly abandoned in the days of the White Huns. On the stupa site a thick layer of accumulated debris were deposited. The only find from the debris was that of two
coins of the Hindu Shahi rulers (Rahman 1968-69: 110), 119. At Snaish Gumbat in the Swat region, several coins of the Hindu Shahi period of sixth-seventh century have been found. The debris of the stupa that existed in the Kushana period revealed late Kushana copper coins as well as those of the Hindu Shahi rulers. One silver coin has been recorded, while the rest of them are of copper (Rahman 1993: 42). The bulk of the sculptures from this debris belonged to the post-abandonment period. Rock carvings are known from the site at Dir. These carvings fall in 6th-7th c. A.D. and thus bear out the chief evidence that Gandhara art did not come to an end in the fifth century by the so-called destruction of the White Huns. It continued and evolved new forms until it merged with the art of the Hindu Shahis (Dani, 1968-9: 251). In the Peshawar valley, Charsadda is one of the noted historic sites. The region flourished under the Kushanas; however, it suffered greatly at the time of the Huna invasions. This is reflected in the seventh century A.D. accounts of Huein Tsang (Beal 1884). It has several Buddhist sites dated between the first to the eighth century A.D. It has been designated as the Kushana-Hindu Shahi period (Ali 1994: 95). Ali has observed that there is a great decline in the settlement after the fifth century A.D. This might be because of the disruptions caused by the Huna invasions (Ali 1994: 95). At Shah-ji-ki-Dheri two stupas had carvings on them. Towers were later additions. Sculptures in the form of small terracotta and stucco heads were assigned to this period. Huien Tsang has also reported such finds in his accounts (Hargreaves 1910-11: 27). At Shahri-Bahlol, Aurel Stein (1911-12: 101) has noted the desolate ruins of Buddhist shrines. He also points to the continued use of these shrines for Hindu worship that replaced the Buddhist cult. This continued down to the tenth century A.D. This is proved by the coins of the Hindu Shahis as well as sculptural fragments that are remarkably Hindu. One of them in white marble was a figure of Goddess Laxmi. The shrines yielded coins of Kushanas, little Kushanas but none of the White Huns. This possibly indicates the total desertion of the site (Stein 1911-12: 101, 109). Kashmir-Smast in the NWFP was the only cave temple in the Mardan district. From the masonry and inscription of the Gupta period, the temple could be dated to later half of fifth- sixth century A.D. (Dani 1988: 82). Rashakai, in Swabi (Mardan district) is a Buddhist site and has revealed an enclosure built of diaper masonry. The pieces of art recovered from here suggest that the site was occupied in the sixth century A.D. (Taj Ali 1995:
Khrakhpa in Swabi area is a Buddhist site dated to the fifth- sixh century A.D. where broken pieces of Gandhara sculptures of Buddha have been found (Taj Ali 1995: 105). Despite the savagery of the Huns in the fifth century A.D, Huien Tsang who passed in this region in c.629-645 A.D. had recorded the existence of some thousand of Buddhist monasteries that he came across (Barger and Wright 1985: 41).

The resource usage in this period in Taxila is wide-ranging. Copper, bronze and iron has been used in artifacts such as coins, rosettes, *trisula* and finger ring, pickaxe and arrowhead respectively. Gold beads and silver coins are other artifacts of precious metals. The use of semi-precious stones is mainly as beads but the diversity is notable. The different stones are crystal, chalcedony, carnelian, and garnet. Pearl and lapis lazuli beads are also found. Shell is used as beads.

*Raw Materials Available Within The Sub-Region*

The presence of copper, gold, iron and agate and chalcedony is noted on p. 26 and 27.

*Garnets*

The presence of garnets has been noted on p.168.

*Raw Materials Available Outside The Sub-Region*

The availability of pearls (Tamil Nadu) lapis lazuli (Afghanistan) has been noted on p. 31.

*Epigraphic, Numismatic and Literary Linkages*

The White Huns consolidated their rule in Bactria by the early fifth century A.D. They extended their sway over Kabul valley and then conquered northern Pakistan and ousted the Kidara Kushanas in c.460 A.D. Till c. 530 A.D. the Huns under Mihirkula were the ultimate rulers of the region of Taxila and NWFP (Ancient Pakistan, no.4, 1968-69: 46). The Eran Stone Pillar inscription of Bhanugupta dated to the sixth century A.D. indicates that the Toramana and Huns held sway over Gwalior, Punjab, and Kashmir and added much of Rajasthan and Malwa to their empire (Bhandarkar 1981: 352). This indicated a wide area of influence under the White Huns.
The contact between the NWFP and Taxila with the southern portion of the subcontinent has already been discussed on p. 13-14.

The occupational layers in the post-Gupta period as compared to the earlier periods were not wide in this region. The artifactual yield from the site was moderate. The variety of resource-use is most profound in semi-precious stones. A few resources such as gold, copper, iron and agate and chalcedony varieties of semi-precious stones and garnets were obtained from within the region. Pearls were most likely procured from the far south and lapis lazuli from Afghanistan respectively. No manufacturing activity was reported in this period from the region.

Taxila and NWFP in the post-Gupta period were represented more by the remains in form of architectural ruins than artifactual yield. It indicated a moderate sized habitation in this period. Marshall (1960: 39) opines that the evidence of vandalism and destruction by the Huna rulers possibly rendered a death blow to the affluence of this region from which the prosperous city of Taxila could never recover.

On the basis of our study of resource usage it might be understood that the NWFP was dependent on the neighbouring regions for procurement of few resources. Pearls were possibly procured from south and this contact was in existence since ancient times. The contemporary accounts of Fa-Heisn and Huien Tsang establish the fact that the southern region was accessed for this gem in the seventh-eighth centuries as well.

**Jammu and Kashmir**

The post-Gupta period is marked by the invasion of the Hunas based in the Gandhara region. The Rajatarangini of Kalhana gives a list of kings but none other than Mihirkula, the Huna (6th c. A.D.) described as *Mlecchas* is important in this period (Chakrabarti 1984: 114). The chronicle also mentions that Kashmir came under the rule of Harshvardhana of Ujjain who ruled in the first half of the sixth century A.D. (Sodh 2006: 55). This has not been substantiated by other sources. Following the rule of the Kushanas, the period post sixth century A.D. was ruled by the Kidara Kushanaas followed by the Karkota dynasty (600-855 c. A.D). This period witnessed unprecedented surge in production of sculptures and building activities mostly in
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Gantamulla</th>
<th>Wushkura</th>
<th>Jafar Chak</th>
<th>Ambaran</th>
<th>Semthan</th>
<th>Pir Panjal</th>
<th>Kansipur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze coins</td>
<td>coin</td>
<td>objects</td>
<td>coins, objects</td>
<td>coins</td>
<td>coins</td>
<td>coins</td>
<td>coin</td>
</tr>
<tr>
<td>Iron</td>
<td>objects</td>
<td></td>
<td>nails, hooks, rings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steatite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bead</td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>grinder, dice</td>
</tr>
<tr>
<td>Shell</td>
<td>bangle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>pieces</td>
</tr>
</tbody>
</table>
SITE WISE DISTRIBUTION OF RAW MATERIALS IN JAMMU AND KASHMIR, c. 500-750 A.D.

LEGENDS
Cu - Copper
Fe - Iron
St - Steatite
S - Shell

**Sitewise Distribution of Manufactured Objects**

Chart 2c shows the different raw materials used in the region. These were copper, iron and shell.

**Evidence of Manufacture of Finished Products At Different Sites**

No evidence of manufacture has been noted here.

**Character of Sites and Distribution of Manufactured Objects**

Semthan was an urban settlement of the Kushana period and earlier. In the post-Gupta period excavations exposed a circular road around the township of this period. As stated by Pande and Chattopadhyaya (1987: 335), this was a period of affluence and corresponds to the rule of the Hindu rule in region namely, the Karkota, Utpala and Lohara dynasty. According to Chinese annals it is reported that a king named Tu-lo-pa controlled the route from Kipin to Kashmir between 627-49 A.D. Tu-lo-pa is identified as Dulabhvardhana of Karkota dynasty (Sodhi 2006: 75).

Ambaran in Jammu district was the famous site from where terracotta Buddhist heads were recovered. A large monastic complex dated to the sixth-seventh centuries A.D. was revealed near Akhnur and survived till the seventh century A.D. The site was abandoned after that period (IAR 1999-2000: 61). Huna copper coins have been recovered from Ambaran (Mani 2000-01:56). The site had a well established Kushana and post Kushana phase. Subsequently, the post-Gupta phase assigned to sixth-seventh centuries A.D. also showed signs of habitation. Excavations revealed that the monastery located in a large complex had survived in this period too. A lot of additions, alterations and repairs were seen. Walls with only one or two courses of brickbats could be found. Base of a brick pillar, supporting walls, partitions in the structures and the other architectural remains found. Terracotta figurines and gamesmen were found here (Mani 2004: 398). Pandrethan,
another site with Buddhist remains has come to light and was in use as late as seventh century A.D. when Huien Tsang visited the place in 629-45 A.D. The old name was Puranadhishthana. The stupa remains had only a dressed stone wall. A few fragmentary sculptures probably belonging to the seventh century have also been found. The sculptures included life size image of a Bodhisattva, sculptures of Ashta-Matrikas and a carved stone capital (Kak 1971 reprint: 115-116). At Kansipur, in Baramulla district, the last occupational period of the mound yielded pottery of red ware and copper coin of Kashmir dynasty series with the name Bhimagupta was found. Terracotta sling balls and animal figurines were the other finds. No other structures were found (Mani 1999-2000: 17).

A few religious sites in the region are Gantamulla, Wushkura and Jafar Chak. Gantamulla and Wushkura in the Baramulla district were under the Hunas and coins of Toramana (5th-6th c. A.D.) have been found here. An ancient stupa was revealed in excavations at Wushkura. A part of the plinth of an earlier stupa laid on rammed clay bed was also found (IAR 1968-9: 59; 1977-8:79).

Along the Pir Panjal route archaeological evidence related to Huna king Mihirkula has been discovered. A copper coin hoard of Huna rulers is found from the Pir Panjal pass. These coins had writing in classical Brahmi characters and contained names of the Huna rulers (Ahmed 2007: 173).

The objects we find at all the sites are coins of copper. The other artifacts are iron objects in form of nails, hooks and rings from Jafar Chak and Ambaran and shell bangle pieces. A steatite bead has been found from Kansipur.

**Raw Materials Available Within The Sub-Region**

The presence of copper and iron are noted on p.37.

**Steatite:** An occurrence of soapstone is reported from Chilhana Da Dana in the Muzaffarabad District but provided no details regarding it. The descriptions of steatite at Nagri and, especially, at Chinchora in the Doda District give the impression that good quality material might be found at those locations (Law II 2011: 205-7).
Soapstone

In the Kotli District, soapstone deposits in dolomitic rock are reported at Palana and Nawal. In the Zanskar area of Ladakh, “pockets of talc” are reported in ultramafic rock (Varadan 1977: 63).

Raw Materials Available Outside the Sub-Region

SINDH

Shells

Shells are available along the Sindh coastline.

Epigraphic, Numismatic and Literary Linkages

The Huns moved into India from the Oxus region in the fifth century A.D., and conquered several regions of the Gupta empire and beyond. They occupied Gandhara and conquered west India as far as Malwa. As a corroboration of this fact, Huna coins have been recovered from eastern Punjab, Rajasthan and Kashmir (Gupta 1969: 59). Taranatha in his History of Buddhism in India refers to Mihirkula as ‘Hunimanta’. Cousens (1929: 6-7) also notes that around the sixth century A.D. the region of Sindh was under the White Huns. Mounds of Jhukar near Larkana in Sindh, coins of White Huns have been found along with Gupta inscriptions (Ghosh 1999: 7).

The survey revealed several sculptures and Buddhist remains in Jammu and Kashmir from the sixth century A.D. onwards. The artifactual yields in the post-Gupta period were limited. ‘Urban’ sites such as Ambaran and Semthan mostly produced Huna coins and Buddhist remains. The evidence possibly indicates towards the fact that despite the destruction of Buddhist remains by the Huna king Mihirkula, some vestiges of the creed continued till the seventh century. No manufacturing activity was noticed for this period. The raw materials used were copper and iron and steatite which were locally available. Shells were probably procured from the Sindh coastline. The sites were probably abandoned after the seventh century A.D.

Sindh-Baluchistan-Multan

The Sindh province lies in the Lower Indus basin while Multan lies in the southern portion of the Punjab province. The region witnessed the rule of various foreign
## Chart 3 c
Sindh-Multan c.500-750 A.D.

<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Jhukar</th>
<th>Tulumba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>objects, bangles, coins</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>spears, knives, daggers, chisels, scythes</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>coins</td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td>beads</td>
<td></td>
</tr>
</tbody>
</table>
SITEWISE DISTRIBUTION OF RAW MATERIALS IN NWFP, POTWAR, PLATEAU, BALUCHISTAN AND SINDH c. 500-750 A.D.
powers such as the Indo-Greeks, Saka-Pahalawas, the Scythians and Kushanas. It appears that Sindh remained under the influence of Iran as a Sassanian satrap till the rise of the local Rai dynasty. In the sixth century A.D. the region came under the rule of the Huns. The Kura Stone Inscription of Toramana Shahi was found in the Salt Range of Punjab in West Pakistan and is proof of the Huna rule in the region (Dani 1988: 89). The different sites of the region with post-Gupta occupational layers are Jhukar, Mirpur KhasThul Rukan near Moro, Depar Ghangro near Brahmanabad, Tando Muhammed Khan and Jherrick in Sindh (Cousens 1929; 1909-10) and Tulumba in Multan (Mughal 1967: 21-151). Huien Tsang describes Sindh as a region that is abundant in gold, silver and native copper. Also several stupas and sanghas like Jhukar, Mirpur Khas have been reported by him. Similarly he described Multan or Mulastana as thickly populated in the seventh century A.D. Offerings of gems were made by the kings and high families to the ‘Gods’ (Beal 2001: 272; 274).

**Sitewise Distribution of Manufactured Objects**

The chart 3c shows the different raw materials in the region. These were copper, iron, silver and shell.

**Evidence of Manufacture of Finished Products At Different Sites**

*Chert:* A polisher of chert for polishing jewels was found from Jhukar in Larkana, Sindh. A large number of chert flakes and cores were also found. They have been dated to the Indo-Sassanian period (Ghosh 1999: 11).

**Character of Sites and Distribution of Manufactured Objects**

In the sixth century A.D., Makran was at first, part of the domain of the Hindu Rais of Sindh. Huien Tsang describes the region as predominantly Buddhist, though thinly populated (Dani 1988:89). The construction of the caves of Gondrani near ancient ruins of the town Las Bela is essentially Buddhist (Panjwani and Mansukhani 2002: 92). At Mirpur Khas, a Buddhist site in Sindh, many tablets are found that have elongated stupa on them instead of the image of the Buddha arranged in rows. The inscriptions were in the characters of the seventh-eighth centuries A.D. Along with these tablets were found copper coins bearing Arab inscriptions. It is postulated by Cousens (1909-10: 88) that the worship at the stupa continued until the Arab invasions in c. 715 A.D. Huien Tsang in the
seventh century has recorded that there were several hundred *sangharamas* in Sindh; occupied by ten thousand priests and that they studied the little vehicle (Cousens 1909-10: 89). Other stupas of this period are, Thul Rukan near Moro, Depar Ghangro near Brahmanabad, Tando Muhammed Khan and Jherrick seem to have been built at the same time in the early centuries AD and continued up to this period. Sawandi, a great Buddhist establishment, is mentioned in literary sources as being built by the King of Kashmir (Cousens 1929: 105). Chach, author of the *Chachnama* in the seventh century A.D. visited Brahmanabad and commented on the state of ruins of the temple (stupa?) (Cousens 1909-10: 92). Cunningham found moulded carved bricks at Thul Rukan and Shorkot in northeast Multan (Cousens 1909-10: 91-92). Tulumba, an urban site in the Multan region was a well founded city in the Indo-Greek period in the late centuries B.C. and early centuries A.D. and its Buddhist association continued in this period as well.

The objects yielded from the region in the specified period are shell bangles at Tulumba. Jhukar in the Sindh province yielded some iron artifacts such as spears, knives, daggers, chisels and scythes.

*Raw Materials Available Within The Sub-Region*

*Chert:* Lahiri (1992: 28) has noted chert deposits among the limestone terraces south of Rohri in Upper Sindh. These deposits have been noted at Sukkur and in the west-northwest of Kotri and another variety of chert are found throughout Sindh-Kohistan. She further notes that these were initially noted by W.T. Blanford.

*Copper and Iron*

Occurrences in the Baluchistan region have been previously noted on p.44-45.

*Shell*

This is amply available from the Sindh-Baluchistan coastline.

*Raw Materials Available Outside The Sub-Region*

No raw material seems to have been procured from outside the region.

The Sindh-Multan region in the post-Gupta period was much restrained in spread. We come across few sites with cultural material of the period. However, there are quite a
few sites that continued from the earlier periods. This was confined to the Buddhist sites like Manikyala, Mirpur Khas and so on. Working on chert as part of manufacturing activity is noticed in this period at Jhukar and the raw material was locally available. Resource-use was limited to shell and iron which was available within the region. Shells were procured from within the region; iron was probably obtained from the neighbouring NWFP. Overall, the region seems to have been in turmoil in the post-Gupta period.

**Uttarakhand and Himachal Pradesh**

The northern Himalayas in the Kumaon region are included in the Uttarakhand and Himachal Pradesh areas. There are different views about the character of political hegemony in the region. Huien Tsang accounted for twenty Buddhist shrines and Viharas at Kangra where he stayed in c. 631 A.D. He reports that the king of the state was an ally of Harsha of Kannauj (Kaushal 1988: 20-21). However, the post-Gupta period history is more or less shrouded in obscurity. Only stray references around this region are found for the period (Agarwal and Kharakwal 1998:155). The different sites in the post-Gupta period were Virabhadra temple in Rishikesh, Bharat Mandir in Dehra Dun and Sirmour (IAR 1973-74: 29; IAR 1973-74: 29; 1982-83: 96; 1984-85: 147).

**Sitewise Distribution of Manufactured Objects**

Chart 4c shows the different raw materials in the region. These were copper, iron, silver and stone.

**Evidence of Manufacture of Finished Products At Different Sites**

No evidence of manufacture has been noted here.

**Character of Sites and Distribution of Manufactured Objects**

The accounts of Hieun Tsang mention Mayapura close to Hardwar on his journey from Thanesar to the hills. The Brahmapura kingdom was described by Hieun Tsang, the location of which is speculated among scholars. Cunnigham identified it in the Garhwal-Kumaon region (Saklani 1998: 52). Another kingdom that finds mention in accounts of Huien Tsang is Govisana to the south-east (Saklani 1998: 54). Kharakwal in the *Archaeology of the Kumaon region* (1998-99:161-173) has noted that the Katuri dynasty ruled the hills from the 7th-13th c. A.D. and this was the golden period of
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Virbhadra Temple, Rishikesh</th>
<th>BharatMandir</th>
<th>Sirmour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>coins, bangles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>implements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>Gadhaiya coin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td>stone</td>
<td>sculptures</td>
<td></td>
</tr>
</tbody>
</table>
SITE WISE DISTRIBUTION OF RAW MATERIALS IN UTTRAKHAND AND HIMACHAL PRADESH, C. 500-750 A.D.
architectural activity in the region. Brahmaur in Chamba in Himachal is famous for its wooden shrines. The temple of Lakshmana devi of Mahisasurmardini was built in c. 700 A.D. It has a rectangular sanctum preceeded by a pillared mandapa and ornate doorway. Chakrabarti (2006: 463-5) cites these as examples of temple building activity in the Chamba, Garhwal, Kangra and Kulu as areas that reflect on the expansion of artisanal activity in the region. In the Uttarakhand region temple complexes are reported among which Lakhhmandal in DehraDun and Lakulisa temple (c.725-50 A.D.) at Jogeshwar near Almora are well known. The most famous temples date from the eighth century A.D. (Chakrabarti 2006: 463).

The region itself is not very clearly represented for the post-Gupta period from the archaeological point of view. However, smaller sites with pottery and inscriptive evidence indicate that the territory was inhabited during this period. In the Alaknanda valley in the Garhwal Himalayas, a few sites of this period have been noted in explorations. Sites such as, Mana, Tapoban, Reni, Subhaien, Adibadri, Ratura, Ufalda and Naithana and Simli have yielded pottery of red ware ascribed to the post-Gupta period (Khanduri 1994: 45-7). Narayankali is a small town near Almora. Goddess Kali shrine is ascribed to this period. Shiva, Vishnu, Lakulisa and Matrika icons were found here with characteristics of the Katuri dynastic period. Terracotta beads, spindle whorls were also picked up from the site of Narayankali (Kharakwal 1998-99: 169). At Gopeshwar, potsherds of the post-Gupta period have been found along with the Trident inscription which indicates occupation of the site during the post-Gupta period. The region was under Naga rule in this period (Khanduri 1994: 61). At Chadpurgarhi a continuous habitation was noted from the fourth century onwards. A fortress of the Garhwal Rajas is also noted (Khanduri 1994: 46). At Virbhadra Temple in Dehra Dun district, three stages of occupation were found in excavations. The last phase dated 6th-7th c. A.D. has pottery fragments of earlier periods. A marked decline in the pottery technique was noticed (IAR 1973-74: 29). Ratura in Pauri has exposed two phases in excavation. The first is dated second century B.C. to second century A.D. The last phase has a gap of six centuries and was reoccupied in the eighth century A.D. It is dated eighth to twelfth centuries A.D. (IAR 1988-89: 89).
Epigraphs of this time period are also known from the region. The Barahat Trident inscription, Lakhmandal inscription and the Sirohi Gopeshwar inscription of Sarvavarman, a Maukhari king are some such examples. That, the Maukharis attempted to rule this part was evident from the inscription found at Gopeshwar (Khanduri 1994: 61). At Chetri in Himachal, a fifth-sixth centuries A.D. inscription was found. An inscription of Maukhari prince, Meeruvarman of seventh century A.D, has been found from Chamba, Bramhar and Chatrahi (Kaushal 1988: 20; Agarwal and Khararwal 1994:28). Taleshwar copper plates issued by the Paurav-Varman kings in fifth century A.D. are the only direct evidence of this region’s history known so far (Agarwal and Khararwal 1998: 155-7).

The few resources that were used at the sites are commonly available. Silver coins of the local Katuri dynasty were found at Virabhadra Temple, Rishikesh along with Gadhaiya coins (IAR 1973-4: 29). Copper and iron artifacts have been found from Bharat Mandir. The iron implements have not been specified. Stone sculptures are reported from Sirmour (IAR 1984-85: 147).

**Raw Materials Available Within The Sub-Region**

The presence of copper, iron, silver has been noted on p. 49.

**Raw Materials Available Outside The Sub-Region**

No raw materials were procured from outside the sub-region.

The Uttarakhand and Himachal region as understood by our survey in the post-Gupta period was probably inhabited thinly. The absence of manufacturing activity also substantiates this point. There is a need for more intense archaeological investigation in the region. The evidence of habitation has come from smaller sites with find of red ware pottery continued from the previous period. However, the remains in form of structures and artifacts are hard to find. With the minimum use of resources, there was no need for an exchange network to grow. All the resources were locally available possibly making it a self sufficient region from this point of view.
Indo-Gangetic Divide and the Punjab Plains

After the fall of the Gupta suzerainty and until the rise of Harsha of Kannauj, this region was not ruled by any single power. While coins of Toramana (Huna) have been found in the Punjab as proved by the Kura Salt Range inscription; the Nirmand copper plate inscription from Kulu dated to the sixth-seventh century A.D. gives an impression of the region being under the Maukharis of Kannauj. A Prakrit work ‘Gaudaavaho’ of the seventh century by Vakpati narrates military exploits of Yasovarman, the ruler of Malwa into Thanesar and the Himalayas (Antiquities of Himachal 1985: 20-1). The different sites in this region of the post-Gupta periods are, Sunet, Thanesar, Rupar and Agroha (IAR 1983-84: 67; ed. Mani and Saran 2006; IAR 1953-4:7; Srivastava 1999).

Sitewise Distribution Of Manufactured Objects

Chart 5c shows the different raw materials used in the post-Gupta period. These are copper, iron, gold, shell, bone and ivory.

Evidence of Manufacture of Finished Products At Different Sites

No evidence of manufacture of artifacts is noted in this period.

Character of Sites and Distribution of Manufactured Objects

There is not much information regarding the urban sites of the region for the specific period. Some of them are Agroha in the Indo-Gangetic Divide and Rupar (which has a dating from second century B.C. to sixth century A.D) (IAR 1953-4:7). A terracotta sealing in character of fifth-sixth centuries A.D. was found at Rupar along with pottery of red ware (Sharma 1953: 126). Thaneshwar was the capital of the Pushyabhutis under Harshavarman. Bana mentions a defence wall and moat around the palace with two storey dhavalagriha. Excavations revealed a massive palatial building complex comprising several rooms. The site continued to be in use even in the Rajput period (ed. Mani and Saran 2006: 34). The post-Gupta period layers yielded terracotta ritual objects and other artifacts. A fragmentary stone inscription of seventh century is also noted. At Agroha, stratum II yielded pottery including spouted jars and perforated vases and terracotta objects. The structural remains unearthed included solid brick walls and floors (Srivastava...
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Sunet</th>
<th>Thanesar</th>
<th>Rupar</th>
<th>Agroha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td></td>
<td>antimony</td>
<td></td>
<td>coins</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>rod</td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td>axe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td></td>
<td>alloy coin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>unspecified beads</td>
<td>unspecified beads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td>bangles</td>
<td>bangles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivory</td>
<td>bangles</td>
<td>bangles</td>
<td>bangle, needle</td>
<td></td>
</tr>
</tbody>
</table>
MAP-44

SITEWISE DISTRIBUTION OF RAW MATERIALS IN THE INDO-GANGETIC DIVIDE c. 500 - 750 A.D.

LEGEND
Cu-Copper
Fe-Iron
Go-Gold
Shell
I-Ivory
Remains of a stupa have been found at Agroha. The bricks of sixth-seventh centuries A.D. used in the construction have been found along with copper coins (Kesarwani 2001-02: 90). Sunet is a small site of this period as far as information about it is indicative. Period VI (c.600-800 A.D.) at the site is characterised by a large number of 'Kota' coins and dull red slipped pottery. The houses were constructed of preused bricks. Terracotta figurine, balls were the other antiquities recovered from the site (IAR 1983-4: 69).

The resource usage at these sites of the Indo-Gangetic divide and Punjab plains is very scanty. Copper has been used at Thanesar and Agroha as antimony rods and coins. A single iron axe is found from Thanesar. Also a gold alloy coin was recovered from Thanesar. The other unspecified objects are of semi-precious stones, shell bangles, bone and ivory bangles and dice.

Raw Materials Available Within The Sub-Region

Gold

Gold washing is carried on at various places in the upper reaches of most of the rivers (I.G.I Punjab 1908: 77). Practice of gold washing in Punjab is of considerable antiquity. It is washed in Ambala and Patiala districts (Ball 1881: 212).

Ivory

Elephants are available in the forest regions at the foothills of the Himalayas.

Raw Materials Available Outside The Sub-Region

RAJASTHAN

The presence of copper and iron has already been noted on p.30 and 55.

SINDH

Shells

Shells were available along the Sindh coast

Epigraphic, Numismatic and Literary Linkages

The Indo-Gangetic doab and Punjab plains was possibly in contact with Rajasthan in this period as evident from the find of 'Kota' coins from Sunet. The northern and
western part of India in the post-Gupta period was under the influence of the Huns. P.L. Gupta (1969: 59) observes that the Huns invaded India in the fifth century A.D. and marched towards the territories of the Gupta empire. In this process they occupied western India and Malwa. Coins of the Huna ruler Mihirkula has been found from different parts of Rajasthan such as, Sambhar, Jalor, Nagaur, Jhalawar and in the region of Mewar, Marwar, Kota and Jaipur (Hooja 2006: 144). The Eran stone pillar inscription of Bhanugupta dated to the sixth century A.D. indicates that the Toramana and Huns held sway over Gwalior, Punjab and Kashmir and added much of Rajasthan and Malwa to their empire. The Eran inscription of Toramana dated to the fifth century A.D. describes him as the suzerain lord of local kings (Hooja 2006: 142; Bhandarkar 1981: 352). That, Rajasthan or some parts of it were part of the Huna Empire in the fifth century A.D. is therefore not unlikely.

The Indo-Gangetic divide and the Punjab plains in the post-Gupta period had few sites with habitation of this period. The urban sites as Thanesar, Agroha, and Rupar were continuing from the earlier periods and do not yield much archaeological information. Their artifactual repertoire and the non existence of manufacturing activity substantiate this point. The primary interaction of this region during this period was possibly with Rajasthan for procuring copper and iron. Shell was probably procured from Sindh coastline.

**Upper Gangetic Plains**

The Upper Gangetic Plains are known as the Aryavarta. In the post-Gupta period the sites in the Upper Gangetic Plains are Ahichchhatra, Sonkh and Hulaskhera. Besides, a number of smaller sites have come up in explorations.

*Sitewise Distribution Of Manufactured Objects*

Chart 6c shows the different raw materials used in the post-Gupta period. These are copper, silver, agate and schist.

*Evidence of Manufacture of Finished Products At Different Sites*

*Iron:* Iron slag was noted in Period III at Kalli Pachchhim dated between fourth and eighth centuries A.D. (Tewari 1999: 13).
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Ahichchhatra</th>
<th>Hulaskhera</th>
<th>Sahet-Mahet/Sravasti</th>
<th>Kalli Pachchhim</th>
<th>Hulas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>coins, antimony rods</td>
<td>coins</td>
<td>objects</td>
<td>coins</td>
<td>coins</td>
</tr>
<tr>
<td>Iron</td>
<td>spear, arrowheads, nails, rings, hooks, bangles</td>
<td>objects</td>
<td>slag</td>
<td>objects</td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>objects</td>
<td>coins</td>
<td>coins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>coins</td>
<td>coins</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Agate, Chalcedony beads, Crystal beads</td>
<td>unspecified beads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td></td>
<td></td>
<td></td>
<td>stone sculpture</td>
<td></td>
</tr>
<tr>
<td>Faience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td>bangles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivory</td>
<td>game pieces</td>
<td>bangles</td>
<td></td>
<td></td>
<td>scale</td>
</tr>
</tbody>
</table>
Character of Sites and Distribution of Manufactured Objects

The two urban sites of the region are Ahichchhatra and Hulaskhera. Ahichchhatra was the capital of Panchala according to the *Mahabharata*. The settlements here ranged from 300 B.C to 1100 A.D. (Sharma 1953: 140). Chakrabarti (2006: 460) has noted a sixth century temple at Ahichchhatra near Bareily as part of the temple building activity since the Gupta period onwards. Excavations at Sonkh in the Mathura district revealed that from the level 15 onwards, of early medieval phases were a picture of destruction and decay, according to Hartel (1993: 71). The ruins were mainly fragments of uncovered walls. Some structures showed reuse of the bricks and structures that were partly rebuilt. Grey stone reliefs are attributed to this period depicting deities for domestic worship. Pottery of this period shows no distinct datable features except the decoration of black painted stripes, swans and peacocks. The pottery and fragments of sherds were red ware in shape of vessels, jars and bowls (Hartel 1993: 71, 75, 87). Sahet-Maheth in Baharaich district yielded grey stone sculpture of seventh century A.D. (Marshall 1910-11: 18). At Sravasti, excavations revealed rudimentary house complexes of Gupta-post-Gupta period with masonry work. Terracotta figurines, moulds, seals and sealing were also found (IAR 2001-02: 275). Excavations in Kalli Pachchhim in the Lucknow district exposed period IV dated 4th -8th c. A.D. The strata yielded red ware, terracotta figurines, and iron slag and animal bones. A rammed mud floor was found. The floor was marked by burnt patches and a small pit besides the potsherds was found (Tewari 1999: 13, 23). Kauris were found at this level indicating that they were either used as medium of exchange or worn as ornament (Tewari 1999: 136). Tewari and Srivastava (1995-96: 72) reported the yield of soft stone potteries like lid, dishes and copper bowls from Musanagar near Kanpur dated to the post-Gupta period.

The resource-use at these two sites is varied though not profuse. Most artifacts have been recovered from Hulaskhera. It is a smaller site than Ahichchhatra. Copper and iron has been used at Hulaskhera, Hulas, Kalli Pachchhim and Sravasti. They are mostly in the form of coins and antimony rods, and spearheads, arrowheads, hooks, bangles, nails and rings. Gold objects have been found at Ahichchhatra but have been left unspecified. Silver coins have been recovered from Hulaskhera and Sravasti. Amongst semi-precious stones agate, chalcedony, crystal beads along with faience has
been used as beads. Other materials used are shell as bangles, ivory as bangles and comb and bone as arrowheads and awls from both the sites.

On the surface, at Lakhmapur in the Hardoi-Kannauj sector, was a rich concentration of brickbats. It may be assumed on this basis that it was an impressive structural site. On this basis, we would infer it to be a large monastic site in the post-Gupta period when Kannauj was in its heyday (Chakrabarti 2007: 51). A few sites were noted in explorations in the Saharanpur district. These were Kanarikhera, Saphaw which yielded red ware of Gupta as well as early medieval period. Goulolakhera and Ghuswari in the Sadar tehsil yielded red ware along with brickbats of the Gupta-early medieval period (IAR 2001-02: 255, 257). Manwan-Dih in Sidhauri tehsil has produced a layer dated fourth-seventh century A.D. The remains here show the reuse of bricks in this period (HemRaj 1994-95: 41).

**Raw Materials Available Within The Sub-Region**

The presence of agate, gold and ivory has been previously noted on p.62-63.

**Raw Materials Available Outside The Sub-Region**

**RAJASTHAN**

The presence of copper, iron, silver, chalcedony, crystal and faience has been noted on p. 30,55,110.

**SINDH**

*Shell*

The Sindh coastline was the possible source of shells.

**Epigraphic, Numismatic and Literary Linkages**

The Upper Gangetic plains had possible links with Rajasthan for resource procurement. Rajasthan in this period was divided into different principalities ruled by various clans and their chiefs such as the Mori dynasty in southeast Rajasthan, the Guhilas of Mewar in the seventh century; the Aulikaras of Mandsor extended their rule over Chittorgarh region as a fragmentary inscription found here mentions the governor of Mandsour and Madhyamika during Yasodharman’s reign (Hooja 2006: 144, 145, 149). The use of feudatory titles in the inscriptions of Guhila clan of Mewar
and Udaipur indicates that they may have owed homage to king Harshavardhana of Thaneshwar and Kannauj (Hooja 2006: 159). Upinder Singh points out that some of the subordinate rulers who used feudatory titles like samanta, mahasamanta used the Harsha era of c.606 A.D. in their inscriptions (Singh 2009: 562). Several inscriptions of Harsha Era were found at different places in Rajasthan. These were found at Bharatpur, Alwar, Dungarpur, Udaipur and Jaipur (Sircar 1965: 295-6). That the region of Rajasthan was under influence of Harsha is further strengthened by the prevalence of Harsh era there in the seventh century (Goyal 2006: 223). Harsha carried several military campaigns and was victorious against the ruler of Sindh in the northwest and Vallabhi in Gujarat in the west. The Narmada was the southern boundary of his empire (Singh 2009: 562). It might be conjectured that the influence of Harsha was as far as Sindh and included portions of Rajasthan-Gujarat as well.

The Upper Gangetic Plains had a moderate spread during the post-Gupta age as understood on the basis of available archaeological information. The sites were surely less in number and were not particularly large urban sites except Ahichchhatra, and Hulaskhera, Sonkh and Sahet-Maheth/ Sravasti. The amount of artifacts recovered was moderate. The structures revealed through excavations and explorations were in dilapidated state. Traces of habitation could be seen in specific pockets, such as the Buddhist settlements of Sravasti and Sahet-Mahet. Ahichchhatra and Hulaskhera were possibly the larger sites of this period. Most other settlements were small sites, a cluster of them seen in the Saharanpur district. Evidence of manufacturing activity comes from a small site of Kalli Pachchhim in Lucknow district in the form of iron slag. The region used few resources which were probably obtained from neighbouring regions. Resources such as copper, iron, silver, chalcedony, faience were possibly procured from neighbouring Rajasthan and crystal from Uttarakhand to its north. Shells were probably obtained from the Sindh coastline.

**Middle Gangetic Plains**

The Middle Gangetic Plains is a region rich in history. It is the land where Buddhism took birth and was witness to the formation of early kingdoms from mahajanapadas to the Gupta period. From the end of fifth century onwards, Magadha became the epicentre of political feuds. Several smaller dynasties vied for control over the region.
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Maner</th>
<th>Rajghat</th>
<th>Apsad</th>
<th>Antichak</th>
<th>Jaipurgarh</th>
<th>Sringleverpura</th>
<th>Taradilh</th>
<th>Saran</th>
<th>Nalanda</th>
<th>Bhita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>antimony rods</td>
<td>coins</td>
<td>Bronze bangles</td>
<td>Bronze figure, copper coin</td>
<td>Bronze images</td>
<td>coins</td>
<td>bangles, arrowheads</td>
<td>Bronze images</td>
<td>Copper plates</td>
<td>pendant, finger ring</td>
</tr>
<tr>
<td>Iron</td>
<td>objects, nails</td>
<td>nails</td>
<td>chisel, nail</td>
<td>objects</td>
<td></td>
<td></td>
<td>nails</td>
<td>knife, blade, inkpot, rod</td>
<td></td>
<td>hand anvil, dagger blade, arrow head</td>
</tr>
<tr>
<td></td>
<td>spearheads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Crystal beads</td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td>beads</td>
<td></td>
<td>Buddha head</td>
<td>beads</td>
<td>Steatite pots</td>
<td>Steatite seal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bangle</td>
<td>cowries</td>
<td></td>
</tr>
</tbody>
</table>
### Chart 7c (continued)

<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Agiabir</th>
<th>Chirand</th>
<th>Sultanganj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>antimony rods, objects</td>
<td>bangles, armlet</td>
<td>Bronze images</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brass</td>
<td></td>
<td>bangles</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>nail, spearhead, objects</td>
<td>coins, disc, beads,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>wire rings</td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td></td>
<td>Crystal, Agate beads</td>
<td></td>
</tr>
<tr>
<td>Semi-Precious</td>
<td>Agate, Quartz beads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td>Chert beads</td>
<td>Basalt sculptures</td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td></td>
<td>bangle piece</td>
<td></td>
</tr>
</tbody>
</table>
These were the later Guptas, the Maukharis, the Gaudas of Bengal and the Palas towards the eighth century A.D. The different sites of the post-Gupta period are Maner, Chirand, Bhita, Taradih, Oriup, Nalanda, Saran, and Antichak, Jaipurgarh.

Sitewise Distribution Of Manufactured Objects

Chart 7c shows the different raw materials used in the post-Gupta period. These are copper, bronze, iron, gold, silver, crystal, steatite, shell and bone.

Evidence of Manufacture of Finished Products At Different Sites

Iron: Pipes for smelting metal and slag were found at Oriup in Bhagalpur district in the post-Gupta levels (IAR 1966-7: 7). Khatilwar on the bank of the Loni river, has a sloping structural mound of presumably post-Gupta period where traces of iron slag on the surface were found (Chakrabarti 2001: 261).

Character of Sites and Distribution of Manufactured Objects

The urban sites in the middle Gangetic plains in the post-Gupta period are Rajghat, Chirand, Vaishali and Bhita. These sites have been of great importance during the Mauryan and Kushana times and were important urban centres. Period IV at Rajghat dated c.300-700 A.D. revealed regular plan of houses separated by roads and lanes. Ringwells and soakage pits were replaced with burnt brick drains, the traces of a public well was also found. A structural complex known as a 'warehouse' was exposed and was made of burnt bricks. From the evidence of this period at Rajghat, Chakrabarti (2006: 350) has observed that there was no decline in structural activity in this period which continued up to the 700 A.D.

Fa-Hein who visited India in the early fifth century A.D. has left an account of Kausambi and mentions a monastery called the Garden of Gosira (Gositarama) where Buddha once dwelt (Sharma 1949-50: 7-8). A seal of Toramana has been found at the monastery site. Another sealing refers to ‘Huna raja’. A seal of Mihirkula has also been found at Kausambi (Thaplyal 1972:61-62). Excavation exposed the remains of a rampart that was continually heightened till the Huna rulers destroyed the whole complex. The monastery came to an end with the Huna invasion (Ghosh 1990: 212). Numerous sculptures,
Buddhist and Jaina have been recovered from Rajgir which are assigned a date between sixth and eleventh centuries A.D. (Brajmohan Kumar 1987: 72). Aktha in Varanasi district had a long antiquity from the period of the Mauryas. The region passed on successfully under the domain of the Guptas, Maukharis and Ghadavalas as observed by Altekar (Jayswal 2009: 1). Period IV at Aktha was dated c. 300-700 A.D. The site is characterized by brick structures and other artifacts as gold coins and sealing of Gupta rulers were found (Jayswal 2009: 9). At Chirand the excavators have noted a conspicuous absence of the Gupta level. According to them the site seems to have been deserted after period IV (c. 200 BC-300 A.D). It showed signs of rehabilitation only in the Period V (c. 700-1200 A.D.) in the Pala period. Black stone sculptural pieces of the Pala period were found from this level. Five structural remains of this period were exposed. Terracotta gamesmen and pottery were found. (Verma 2007: 14, 16, 17, 26). Vaishali, a prosperous city at the time of the Buddha was described by Huien Tsang in the 7th century A.D. as lying in ruins; a sculpture of Kartikeya from Basarh has come to light dated to the Pala period in seventh century A.D. (Dilip Kumar 1986: 37, 65).

The resource-use at these urban sites is moderate. Copper has been used at all the three sites in the form of coins, armlet, copper plates, and pendants and antimony rods. Three pieces of brass bangles have been found from Chirand in the Pala layers. Iron artifacts are found at Bhita. The artifacts are blades, arrowheads, knife, dagger, blade and inkpot. Debased gold coins of Kalachuri dynasty belonging to Srimad Gangayadeva were found in a miniature pot from Chirand. Other objects of gold were disc, bead, wire rings, and alloyed silver ornaments (Verma 2007: 143). Among semi-precious stones, only a few crystal beads are found from Nalanda and Chirand. Other raw materials used are steatite pots and shell bangles.

The second tier of small settlements includes Maner, Oriup, Apsadh, Antichak, Jaipurgarh and Saran (IAR 1985-86: 12; 1981-82: 11; 1982-83: 16; 1966-67: 6-7; 1981-82: 67; 1975-76: 7, 75; Roy 1985-86: 29). At Sultanganj, a Buddha image of bronze dated to the seventh century A.D. has been recovered. These have been found in the ruins of a Buddhist monastery (Chakrabarti 2006: 442). The resource-use at these sites is similar to those of the urban sites. Copper antimony rods and coins are found at Maner and Antichak. The other sites in this category are Apsadh, Antichak,
Jaipur, and Saran has yielded bronze images. A gold ring and a silver ear ornament were recovered from Maner. Asapur in the vicinity of Tilmanpur in Kashi-Rajghat sector is a small settlement. It yielded a Surya image and architectural pieces. On stylistic considerations, the site could be dated to the post-Gupta period. All other carvings at this site were half finished or broken. Jayswal (2009: 14-15) observes that perhaps these were carved at the site and were supplied to some other sites.

Some of the explored sites in the region are Sarai Jodh Rai near Damdama where the remains are pottery and traces of structures of the post-Gupta periods structural mound. At Dhanot in Banaras-Allahabad sector, pottery and traces of kilns were found. Also exposed were mud floors with post holes of post-Gupta period; Bihar, a village on the bank of a large tal and a minor river Bakulahi from where the pottery evidence and sculptural fragments clearly show the chronological spread between early centuries A.D. and tenth-twelfth centuries A.D. One such sculptural fragment can be dated in the sixth-seventh centuries A.D. Cunningham calls this site by the local name of Tusaran-Bihar. The most visible ruins at Unchhhdih belongs to the post-Gupta period, sculptures of the post-Gupta stage seventh century A.D. onwards lie around the modern village of Bihar (Chakrabarti 2001: 257,258,260,261,264,230,232,217, 164-5,169).

The religious sites of the region are Janwan, northwest of Ballia, the general impression of being a Buddhist monastery dated to the post-Gupta period, Atrauli, a mound of post-Gupta period is a temple or stupa site. Madhuban is a small structural mound of the post-Gupta phase from where an inscription of the seventh century was found. Sahiya to east of Bhagalpur is a site of a Buddhist monastery has a large mound. Apart from miscellaneous sculptural fragments, one noticed a sandstone Surya image of seventh century A.D. Patharghatta in the Sahibganj-Bhagalpur sector has a standing Vishnu figure, with four separate scenes. It is dated to the sixth century A.D. Mandar Hill is famous for an inscription of the seventh century of ‘later Gupta king’ Adityasen (Chakrabarti 2001: 257,258,260,261,264,230,232,217, 164-5,169). Garhwa is a modern village which dates back to the post-Gupta period. Here, major architectural and sculptural remains are seen as a massive temple complex with a number of structures has been unearthed. These are dated between the Gupta and the eleventh-twelfth
centuries A.D. Mankameshwar is another site outlining the Vindhyas that produced painted rock shelters along with inscriptions of Gupta period and later period (Chakrabarti 2005: 70).

Taradih which is the mound on which the Mahabodhi temple stands and Sringaverpura which is believed to have derived its name from the sage Rishyasringa who supposedly has his ashram here (Lal 1993: 11). The continuation of temple building from the Gupta period is witnessed in the post-Gupta period also. The Mundeshwari temple in Bhabua has an octagonal sanctum with rectangular hall and dates to the seventh century A.D. A terraced brick and stucco temples dated to the sixth-seventh centuries are from Apsasad near Nawadah (Chakrabarti 2006: 460).

Nalanda was among the earliest centres for learning in the first millennium AD. At Nalanda, the corner towers have sculpted figures of the Buddha and Bodhisattvas in stucco along with the terraced structure of a stupa and pradakshina path. They are all representative of late and post-Gupta art and architecture (Mani 2008: 21). Huien Tsang reported to have seen a high copper image of Buddha raised by Purnavarman of sixth century AD (C. Mani 2008: 4). During the reign of Harsha, the royal patronage to Nalanda monastery was visible in the accounts of the foreign travelers. The king is known to have described himself as the servant of the Nalanda monks and build a monastery in brass for them (c. Mani 2008: 5). Even Huien Tsang has given a long list of monasteries that he had found at Nalanda. This is substantiated by the archaeological evidence. Excavations revealed a large area that exposed many monasteries, stupas, shrines and temples (c. Mani 2008: 15). Excavations at Juafardih located southwest of Nalanda revealed stupa remains and burnt bricks. The stupa was encased with brick masonry set in mud mortar. Period III is assigned a long chronology. The site yielded remains of Sunga, Kushana, and Gupta and post-Gupta periods. Pottery of red ware, black and red ware, terracotta figurines, beads, hopscotches, gamesmen, crucibles, and querns were reported. The deposit over the mud stupa of this period contained material which ranged from second century BC to seventh-eighth century A.D. (Saran, Nikoshey, Nayan, Tiwari, Arif and Saxena 2008: 62-9). Excavation at Agiabir revealed habitation remains of Period V belonging to Gupta-post-Gupta periods. Some walls of the preceding period were constructed of reused bricks. The brick paved floors were found in good condition. The structural activity and other finds
show that the area was used as a religious complex. Interestingly, a community kitchen was noted for this period. Besides, red ware ceramic industry included storage jars, inkpot, lids, and bowls and miniature vessels (Singh 2004: 42-43; Tripathi and Upadhyay 2009: 54)).

Antichak is the Buddhist monastic site of Vikramasila established by the Pala king Dharmapala in eighth century A.D. The site exposes a stupa area set within a monastic enclosure and several other structures. The main features are a shrine and monastery with 208 monastic cells (Chakrabarti 2001: 164; 2006: 467).

The resource-use at these sites shows the use of copper coins and antimony rods; shell bangles from Taradih. Iron artifacts are found at Nalanda. Among semi-precious stones, a few crystal beads are found from Nalanda.

**Raw Materials Available Within The Sub-Region**

The presence of gold, lead, ivory and tin has been noted on p.74,196.

**Lead and Silver**

**Bhagalpur division:** Lead ores are recorded from Gouripur mine, Dudi Jor, Karda, Gonora, Kejurea and Khureekar (Ball 1881: 290).

**Monghyr District:** Galena containing small percentage of silver is known to occur near Kharakpur Hills, Chakai Pargana (Ball 1881:290).

**Raw Materials Available Outside The Sub-Region**

The presence of iron, soapstone, semi-precious stones as quartz, chalcedony and agate (Chotanagpur Plateau) has been noted on p. 76.

**CENTRAL INDIAN HIGHLANDS**

**Crystal**

Crystals are available among other semi-precious stones in the bed of the Narmada River at Bheraghat (Srivastava 1968: 23).

**LOWER GANGETIC PLAINS**

**Shell**

The Bengal coastline was the nearest source of shells.
The Maukhari dynasty of Kanauj conquered Magadha at the time of Sarvavarman who defeated the Later Gupta king Mahasanghika in sixth century A.D. The Haraha inscription of Isanavarman (c. 554 A.D) refers to his victory over Andhras, Sulikas and Gaudas. The Andhra adversary was possibly the Vishnukundin King Madhavavarman I (Sinha 1977:112; Raychaudhury 1996: 531). The Maukhari dynasty of Magadha is known to have a friendly relation with the Somavasi rulers of Mahakoshala. The Sirpur inscription of Sivagupta, the King of Mahakoshal refers to Suryavarman (brother of Sarvavarman Maukharī) as *nrpa* and an ally (Sinha 1977: 118). Sarvavarman was the overlord of Kalanjār region and probably held the fort of Asirgarh. The extension of the rule of Maukhari dynasty to south of the Vindhyas is thus attested by the Asirgarh copper seal of Maukharī ruler Sarvavarman found at Asirgarh in East Nimar district in the Central India (Sircar 1983, Vol II: 213; Sinha 1977: 118-19). The connection between the Middle Gangetic Plains and the Central India in the post-Gupta period is not improbable if the reach of the Maukharī dynasty went as far as Vishnukundin kingdom in Andhra.

The Chotanagpur plateau was linked to the middle Gangetic plains and is known through the find of copper cast coins known as 'Puri-Kusana coins of fourth to sixth century A.D. in Singhbhum district where a hoard was discovered on the Rakha hill (Bhengra 2007: 157). Also sculptural representations of *Sapta Matrikas* stylistically belonging to the pre-Pala period of sixth-seventh centuries A.D. were found from Sarikela in Singhbhum (Bhengra 2007: 76). The fact that the Vikramsila monastery was established in the Anga region at Antichak between Bhagalpur and Rajmahal hills in the Pala period makes it more probable that the Chotanagpur plateau was within the sphere of the Gangetic belt.

The link with the lower Gangetic plains is substantiated through the well known fact in history that Harshavardhana of Kanauj marched against Sasanka the ruler of Bengal (Gaudaa) and conquered it. The region was jointly conquered by Bhaskarvarman of Kamrupa and Harsha of Kanauj. The Nidhanpur copper plates of Bhaskaravarman substantiate the fact that the king of Kamarupa (Assam) accepted Harsha’s suzerainty and ruled Gaudaa (Bengal) in the sixth-seventh century A.D. (Choudhury 1985: 76-8). Further, the rule of Sasanka (ruler of Bengal in the post-Gupta period) is known to
have extended his influence up to the middle Gangetic plains. The Rohtasgarh stone seal of Mahasamanta Sasankadeva, king of Karnasuvarna (Gauda) is evidence of this extent (Sahai 1983: 61). It is a matter of debate as to whose feudatory Sasanka, the Gauda king was. It is understood by Devahuti (Sinha 1977: 132) that Sasanka was possibly a feudatory of Jayanaga who had conquered Magadha.

The Middle Gangetic Plains in the post-Gupta period has a mix of several settlements. Rajghat, Kausambi and Aktha have produced some archaeological remains of the post-Gupta period. The region has a number of religious-urban sites as Taradih, Antichak (Vikramasila monastery) and Nalanda. Others are mostly smaller sites. The artifactual find are moderate. It is rather at the smaller sites that we find gold and silver artifacts. Several urban sites appear in ruins in the aftermath of Huna invasions as described by the Chinese travelers. However sites such as Nalanda and Chirand and Aktha in archaeological perspective give a glimpse of their flourishing state in the seventh century onwards.

There is some manufacturing activity noted in Oriup in Bhagalpur district, but the large number of artifacts associated with such sites is missing. Nor are there any waste products noted at that site. The resource procurement during the post-Gupta period was probably done mostly from within the region. Resources such as gold, copper, tin, silver were available within. The only resources obtained from outside were silver and crystals from the Central Indian Highlands region and shell from the Bengal coastline.

**Lower Gangetic Plains and the Chotanagpur Plateau**

The north Bengal region known as Pundravardhana (modern Mahasthangarh) was a prominent ancient administrative division from the Mauryan times. A part of this unit was Kotivarsha, identified with the site of Bangarh in west Dinajpur district. On the basis of excavations it has been postulated that at least four sites in this region remained in occupation in the post-Gupta period. Huien Tsang describes Karnasuvarna (Murshidabad district) and Tamralipti as places inhabited by ‘rich’ people. He notes that articles of value and gems are collected in abundance here (Book X, Beal 2001: 201). Some of the sites that were continuing from pre Gupta age are Chandraketugarh, Rajbaridanga, Paharpur, Baigram, Bangarh and Mahanad (Chakrabarti, Goswami and Chattopadhyay 1994; Das 1968; Dikshit 1999; Goswami 1948; Majumdar 1934-35: 43).
### Chart 8c
Bengal and Chotanagpur Plateau—c. 500–750 A.D.

<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Chandraketugarh</th>
<th>Rajbaridanga</th>
<th>Bangarh</th>
<th>Baranagar</th>
<th>Paharpur</th>
<th>Mahasthan</th>
<th>Mainamati</th>
<th>Salban Vihara</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>Bronze rings, bangle pieces, Bronze images, plates</td>
<td>Copper plates, bangles, rings, antimony rods</td>
<td>Bronze images</td>
<td>coins, vase, bangles, rings</td>
<td></td>
<td></td>
<td>plates, utensils, dishes, lotas, pots, spoons, Bronze images, relic caskets, earrings, fingering, bangles</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>objects, nails, spoons, chisels, arrowheads</td>
<td>implements, nails, chisel, awl, knife, dagger, spearhead sword</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>nails, chain links, hooks, sickels, knife blades, daggers, tools</td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>plate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>coins, ornaments</td>
<td>coins, rings</td>
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<tr>
<td>Silver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>coins, ornaments</td>
<td>coin</td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Carnelian beads</td>
<td>Agate, Crystal beads</td>
<td></td>
<td>Carnelian, Agate beads, Crystal, Jasper beads</td>
<td>Carnelian, Chalcedony, Crystal beads</td>
<td></td>
<td></td>
<td>unspecified beads</td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td>Sandstone figure, Basalt figure</td>
<td></td>
<td></td>
<td>grinding stone, grain jars, pestle</td>
<td></td>
<td></td>
<td></td>
<td>images</td>
</tr>
<tr>
<td>Shell</td>
<td>bangle fragments</td>
<td>bangles</td>
<td></td>
<td></td>
<td></td>
<td>lamp, vessels</td>
<td></td>
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<tr>
<td>Ivory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>stick, awls</td>
</tr>
<tr>
<td>Raw Materials</td>
<td>Chakhar</td>
<td>Bahiri</td>
<td></td>
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<tr>
<td>Iron</td>
<td></td>
<td>slag</td>
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<td></td>
</tr>
<tr>
<td>Gold</td>
<td>coin</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious</td>
<td>Agate, Crystal beads,</td>
<td>Carnelian, Quartz beads</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>stone</td>
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</tbody>
</table>
Sitewise Distribution of Raw Materials

The range of raw materials used during the post-Gupta period displayed in chart 8c are, copper, iron, gold, silver, carnelian, jasper, agate, crystal, chalcedony, sandstone, shell and bone.

Evidence of Manufacture of Finished Products at Different Sites

Iron: A broken perforated bottom of a smelting furnace with remnants of slag in its inside and a broken nozzle made for furnace were found at Paharpur (Chandra and Dikshit 1930-34:122).

Copper: Copper slag heaps was found along with Puri-Kushana copper coins surrounding the site of Rakha Hill in Singhbhum district. The site lies in close proximity to ancient copper workings. Coins found here were not trimmed in the edges and lends support to the possibility that the locality was a mint. However, no coin moulds were found at the site (Bhengra 2007: 158).

Character of Sites and the Distribution of Manufactured Objects

The urban sites in the region with post-Gupta settlements are, Bangarh, Rajbaridanga, Mainamati, Paharpur and Chandraketugarh. Mahasthangarh in the Bagura district has been identified with the ancient city of Pundravardhana. The copper plate of the Gupta, Pala-Sena records mention Pundravardhana as an important administrative division (Chakrabarti 1992: 50). The fortification is divided into two stages, Gupta and Pala periods. Structures revealed in excavation belong from the Gupta period to eleventh century A.D. (Sharma 1953: 157). The building remains excavated within a massive enclosure wall shows four periods between the late Gupta and Muslim periods (Chakrabarti 1992: 50, 93). There are numerous mounds in the vicinity of Mahasthangarh. The brick structures in the mounds chronologically belong to the sixth-seventh centuries A.D. roughly between the Gupta-post-Gupta periods. One such site is Lakshmindarer Medh. A number of terracotta plaques show Gupta influence on them (Chakrabarti 1992: 97, 106). Dikshit (1928-29: 92) observes that bricks and houses at Mahasthan were in dilapidated condition from c. 650-750 A.D. Huien Tsang has left an account of Pundravardhana as thickly populated where many reknowned priests of Eastern India resided (Bk X, Beal 2001 reprint: 195). Stucco heads of fifth-sixth century
A.D were found from Mahanad in Hoogly district (Majumdar 1934-35: 43). The copper plate inscription discovered at Damodarpur indicates that the Gupta rulers were the overlords of north Bengal. In the sixth century A.D. also the scions of the family continued to rule the region (Goswami 1948: 2). The Pala period was a prosperous time for the city as is inferred from the finds of the rampart wall. Large houses were constructed as a general practice (Goswami 1948: 1, 2, 8). A unique lotus shaped small tank at the centre originally covered with a pillared canopy was found and dated to the Pala period (Sharma 1953: 155). Kotalipara in Faridpur area has an antiquity dating back to sixth century A.D. as known from coins and inscriptive evidence. A large mud fortification was also found with a moat (Chakrabarti 1992: 158). Chandraketugarh revealed occupational remains of a fortified township in the post-Gupta period. Bahiri in the Birbhum district has yielded a few beads of semi-precious stones from the stratum dated to 4th-6th c. A.D. (Chakrabarti and Jamal Hasan 1982: 113, 120). Samatata-Harikela located in Bangladesh appears as a term in the records of the Chinese travelers of seventh century A.D. Huien Tsang describes it as a region where there were many Buddhist monasteries. Devaparvata was the capital of Samatata (Chakrabarti 1992: 25). Mangalkot in Burdwan district yielded a large number of terracotta images of Gupta-late-Gupta style (Chakrabarti 1992: 151). Tildah in Midnapur district also yielded terracotta figurines of Gupta-post-Gupta period (IAR 1954-55: 23).

Excavation at Pakhanna in the Bankura district has revealed an important urban centre of early historic period. In the post-Gupta period level the site yielded a circular kiln. Below this was a burnt mud wall of semi-circular form with profuse charcoal. The pottery was a mixture of red ware, black ware and buff ware. Terracotta female figurines with three tier head gear were found. The site possibly continued to survive as an important urban centre from the third century BC to seventh-eighth century A.D. (Datta 2008: 108).

The resource-use at the urban centres is impressive. Copper, iron and bronze has been variously used. Some of the artifacts are rings, images of bronze; copper is used as coins, plates, ear rings, finger rings, spoons relic caskets. Iron artifacts are mostly from Mainamati. They are in the form of nails, hooks, sickles, knife and blades. Gold plate and coins are only from Mahasthangarh and Mainamati. Silver coins and ornaments are also
from Mainamati. Most of the beads in semi-precious stones are recovered from the urban sites. The varieties are agate, carnelian, crystal, jasper and chalcedony. Sandstone images are sporadic finds. The other resource-used is shell for bangles.

The different small settlements in the region are Atghara, Baranagar, Baigram, Kandaran and Salban Vihar. Atghara northeast of Baruipur was a small urban settlement. Habitation here continued from the Mauryan period to the tenth-twelfth centuries A.D. (Chakrabarti, Goswami and Chattopadhyay 1994: 148). Kandaran in the Malda district has general occupational levels from early historic period to tenth-twelfth centuries A.D. (Chakrabarti and Chattopadhyay 1992: 137). At Dehband in west Dinajpur a major mound spread over three hundred in diameter had bricks of Gupta-post-Gupta period. These were unfortunately looted. Images of deities are also reported locally (Chakrabarti and Chattopadhyay 1992: 141). Bhitarargh in Dinajpur district has ruins of a mud fort. The size of bricks found depicts remains of pre-Muslim period (Chakrabarti 1992: 144). The resource-use is limited at these sites. However bronze images, gold and silver coins are found here. Nimgachi in Pabna district has exposed fifty mounds in all. They produced Gupta coins and terracotta plaques and belong to a slightly later date (Chakrabarti 1992: 157). Goswami Khanda in Burdwan district had exposed Gupta-post-Gupta habitation remains (Thakur 1980-81: 141). Gold coin of Sasanka was found in Chakhar of Barisal district (Banik 2006-07: 132).

The religious sites of this period include Rajbaridanga in Murshidabad district which was locally known as Raja-Karna’s palace. The site in the post-Gupta period was an urban-religious centre. It is postulated by the excavator that the site was in successive occupation from the second-third centuries A.D. to the twelfth-thirteenth centuries A.D. Ornamented stucco heads of the fifth-sixth centuries A.D. were recovered from here (Das 1968: 8, 42-43). In the post-Gupta layer, an area was found to contain a solid deposit of burnt grains. This area was probably part of a granary (Chakrabarti 1993: 42-3). Also terracotta seals and sealing bearing Raktamrittika legends (5th-6th to 8th-9th c. A.D.) lends support to the identification of the Raktamritika monastery of Huien Tsang’s accounts with the present site of Rajbaridanga (IAR 1972-3: 38). The excavations at the site of Raktamariika reveal the monastery in a flourishing condition in the seventh century A.D. (Chakrabarti 1992: 69). Thakur (1980-81: 141) observes
that the post-Gupta phase was structurally rich in terms of their remains. Among the terracotta seals and sealings, there is a seal with Pallava script of 7th-8th c. A.D. engraved on it (IAR 1968-69: 43). Paharpur situated amidst alluvial plain of north Bengal was an equally important administrative unit during the Gupta period. Epigraphs dating from the mid fifth to late sixth century A.D. indicate that Gupta rule continued in this region with the provincial governor stationed at Pundravardhana. Stone sculptures recovered from the main temple at Paharpur distinctly represent the tradition of the later Gupta period (Dikshit 1999: 17, 37). Paharpur has ruins of the Buddhist temple and monastery of Somapura founded by Dharmapala (c. 770-815 A.D) (Sharma 1953: 155).

At Bahiri east of Bolpur no pottery was recovered. However, the mound is dated to Gupta-post-Gupta period (Nag and Chakravarti 1978-79: 118-119). Period III (c. 4th-6th A.D.) here exposed a two meter wide foundation wall with off-sets belonging possibly to Buddhist monastic complex was found (Chakrabarti 1993: 182). At Beluti, a large mound alignment of burnt bricks was visible after excavations. It was possibly a Buddhist monastic building dated to the Gupta-post-Gupta period (Chakrabarti 1993: 183). Chakrabarti observes (1992: 44) that the historical understanding of this period is dominated by inscriptions, coins, sculptures and terracotta and few artifactual examples. The above survey reiterates this very observation.

The use of different resources can be seen at the religious sites. Bronze images are found at Rajbaridanga, copper vase, bangles and rings are found at Paharpur, gold plate is exclusively found at Rajbaridanga. Agate, crystal and jasper beads have been found here.

The history and archaeology of the Chotanagpur Plateau in the post-Gupta period is very obscure. Only stray archaeological references are available which date mostly from eighth century onwards. Sasanka, the Gauda king is known to have settled in south Bihar after being ousted by Harsha from north Bengal. Varunika became his capital known as Baruna. Under Pala rulers, Buddhism continued to flourish in the Vajrayana form (Bhengra 2007: 52-53). Sites associated with Buddhism in the Dhanbad district are, Dalmi and Buddhapanpur. Here, T. Bloch visited several places with Buddhist remains datable to the tenth century (Bhengra 2007: 52). Sarikala, an important township in Singhbhum district has yielded seven images of divine mother (Sapta Matrikas). These acquired distinct attributes in the Gupta period and stylistically belong to the pre-Pala
period of sixth-seventh centuries A.D. (Bhengra 2007: 74-6). Benisagar also in the
Singhbhum district has produced a figure of Karttikeya carved out of rough sandstone
dated to the post-Gupta period (Bhengra 2007: 84).

In the Hazaribagh-Giridh region, at Koluha Pahar the inscription of Later Gupta king
Vishnugupta of seventh-eighth centuries A.D. was found (Chakrabarti 1993: 39). In
the Ranchi-Hazaribagh region, stage VI roughly corresponded to Gupta-post-Gupta
periods. Close to this region, Champa in south Bihar, in Period III (c. 5th-9th A.D.)
yielded terracotta sealing with Pala characters. The archaeological sequence here
indicates a continued occupation from black and red ware phase to early medieval

Raw Materials Available Within The Sub-Region

The presence of copper, iron, gold, and shell has been noted on p. 85 and 86,89.

Tin

Deposits are present in Purulia district at Belamut- Chhendapathar, Jabarban and
Kuilapal (Babu 1994: 36). Mines are also present near Giridih coal fields in the
Chotanagpur plateau (Babu 1994: 36).

Hazaribagh district: Alluvial tin is reported from Hazaribagh (I.G.I. Bengal 1909:
81). Deposits are found at Nurungo, Semritanar, Pihra and Chappatana in Hazaribagh
Old mines are situated adjacent to the village Nurungo (Babu 1994: 36).

Semi-precious stones

The presence of quartz, crystal, jasper, agate, chalcedony and silver has been noted on
p.79.

Raw Materials Available Outside The Sub-Region

MIDDLE GANGETIC PLAINS

Sandstone

This was known to have been worked extensively at Kaimur ranges at Chunar,
Mirzapur, Parbatpur and Sheorajpur (Ball 1881: 540). J.C. Brown (1936: 158) has
observed that Mirzapur, Chunar and elsewhere in the United Provinces have deposits
of sandstone and have been worked for a long time.
Epigraphic, Numismatic and Literary Linkages

Huien Tsang’s account tells us that Sasanka ruled the entire forest region from Midnapur in Bengal to Surguja in Madhya Pradesh which was included in his kingdom (Bhengra 2007: 55). The Rohtasgarh stone seal of Mahasamanta Sasankadeva (c. 619-637 A.D.), king of Karnasuvarna (Gauda) is evidence of this extent (Sahai 1983: 61). It is a matter of debate as to whose feudatory Sasanka, the Gauda king was. Roychoudhury (1996: 537) observes that in the early eighth century A.D, a Gauda king possibly Jayanaga occupied the throne of Magadha.

The Harshacharita of Bana clearly relates the hostility between the Gauda king Sasanka on one hand and Harsha of Kannauj and Bhaskaravarman of Kamarupa on the other. It is not improbable that the Middle Gangetic Plains was within reach of the Bengal region in the light of the political developments in the post-Gupta period.

There were quite a few urban centres in this region. Rajbaridanga (Murshidabad district), Goswamikhanda (Burdwan district) and Baigram (Dinajpur district) and Chandraketugarh had rich structural remains in the post-Gupta habitation. Mangalkot, Bahiri, Mahasthangarh are the other urban sites of this region. Manufacturing activity in the region is noted in the form of iron smelting activity at Paharpur and evidence of a mint for copper coins at Singhbhum district in the vicinity of ancient copper workings has been noted. Several small sites have also surfaced with habitation or artifacts from the post-Gupta period. The artifactual repertoire is abundant in the region. A few resources were obtained from within such as copper, iron, shell, tin, bone and ivory. Other resources as varieties of semi-precious stones such as quartz, crystal, jasper, agate and chalcedony were probably available in the Chotanagpur Plateau. The Kaimur range in the Mirzapur district in the Middle Gangetic Plains were the nearest source for sandstones.

On the whole, the Lower Gangetic Plains in the post-Gupta period was an important region in this period. The archaeological representation is mostly in form of sculptures, sealing and inscriptions. The architectural and structural remains are not too forthcoming except description of Buddhist viharas from literary sources and travel accounts.
Northeast India

The northeast comprises the Brahmaputra valley formed by a continuation of the eastern Himalayas extending from the easternmost tip of upper Assam to the west of Dhubri on the border of present Bangladesh (Singh 1971: 303). The northeast region also comprises the present states of Nagaland, Manipur, Tripura, Meghalaya and Arunachal Pradesh. After the downfall of the mighty Gupta Empire, the Varman dynasty was the most prominent ruling power in this region. They ruled upto the seventh century A.D. Literary sources as Huien Tsang's account and Harshacarita of Bana corroborate the account of the Kamarupa rulers and their alliance with Harshavardhana. The study of the inscriptional evidence between c. 5th-13th A.D by Lahiri (1991) help us in understanding the historical process in early medieval Brahmaputra valley and its peripheral regions. Archaeologically, there is an unfortunate dearth of information that reveals the chronological development of this region. The few sites that we come across are Ambari, Sekta, Vadagokugiri (Chakrabarti 2006; Sharma 1994; Sharma 1993).

Sitewise Distribution of Manufactured Objects

The different raw materials used in the region have been elaborated on Chart 9c. They are copper, bronze, iron, gold and carnelian

Character of Sites and Distribution of Manufactured Objects

The epigraphic evidence from the Brahmaputra valley based on the study by Lahiri (1991) has brought to light the presence of urban centres in the region between the c.5th-13th A.D. The use of certain terms within the epigraphs denotes the urban centres or royal capitals. These are 'skandhavara', 'pura', and 'nagara' that were interchangable. Also the study shows how the Asamese cities of this period mainly Pragjyotishpura or modern Guwahati and Harupesvara or modern Tezpur were essentially political power centres. Both these places were commercial and religious places of this period (Chakrabarti 2006: 437).

The archaeological information from the region is not profuse. A few sites are known through excavations and explorations. Dah Pavatiya in Tezpur is famous for temple of seventh century A.D. It is a stone built temple dated c.600 A.D. The evidence of a
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Tripura</th>
<th>Borvita</th>
<th>Sekta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td></td>
<td></td>
<td>Bronze bangles, nose ring,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ear ring</td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td></td>
<td>knife/dagger, scythe, harpoon,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>spearhead</td>
</tr>
<tr>
<td>Gold</td>
<td>coin</td>
<td>coins</td>
<td>Carnelian bead</td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SITEWISE DISTRIBUTION OF RAW MATERIALS IN THE NORTHEAST INDIA

LEGENDS
Cu-Copper
Fe-Iron
Bo-Bronze
Go- Gold
+-Shell

c. 500-750 A.D.
decorated door frame from the temple gives a glimpse of the Gupta art in the post-Gupta period as well (Chakrabarti 2006: 322, 460; eds. Tripathi, Agam Prasad and Awasthi 2003: 862). Ambari in Assam between seventh and tenth centuries A.D yielded in the early phase a large number of brick structures mixed with tiles, clay, drainpipes and stone blocks. A thick boundary wall of brick was found along with paved drains covered by stone slabs. A buff creamy pottery made of kaolin clay was the distinctive pottery from the site (Chakrabarti 2006: 438). Period VII at Sekta in Manipur is assigned to the post-Gupta period. Ceramic evidence from the site showed that habitation continued from period I to VII. The pottery was mainly red ware with long necked bulbous jars and spouted vessels (Sharma 1994: 27-8). Vadagokugiri in Meghalaya was a Buddhist stupa site from the beginning of the Christian era. It was an ancient capital town flourishing with a number of temples. The site was enclosed by a brick rampart and a moat along the outer fortification. Nalbari, the adjoining village, has ruins of two brick temples. Excavations revealed a continuity of occupation from a date prior to the Christian era. However, no metal or stone antiquities from the site are known (Sharma 1993: 12, 25). The region has been mentioned by Huien Tsang in 643 A.D. as under Bhaskara. It is observed by Sharma (1993: 81) that the antiquity of the site goes back to the early seventh century. Dubarani in Golaghat district of Assam has revealed the ground plan of a brick temple of c.700 A.D. The mounds and brick walls along with a pradakshina patha have been exposed in excavations (IAR 2001-02: 14). Dubarani in Golaghat district of Assam reported a group of brick mounds with a single culture. Digging exposed the plan of a temple of brick with pradakshina patha and inner chamber. Stylistically and structurally the temple ground plan was dated 700 A.D (IAR 2001-02: 14). A number of bricks within a Vishnu temple complex was exposed and is stylistically dated c.700-800 A.D (IAR 2001-02: 20).

The Pala School of art that flourished in the early medieval period can be seen at Arunachal, Assam, Tripura, Bangladesh, Bengal and Bihar. Several rock-cut images are reported from the Brahmaputra valley at Kamakshaya Temple area and Tezpur, Urvashi Island, Pancha Pandava in Guwahati and Suryapahar area in Goalpara district (Chauley 2007: 8). Suryapahar in Goalpara district of Assam has exposed several terracotta plaques of Sri that depict the influence of Gupta period art forms on local art style (eds. Tripathi, Agam Prasad and Awasthi 2003: 864). The cultural wealth of ancient Tripura has been studied by G.C. Chauley (2007) who highlighted a number of evidences from the early
They are found scattered in the form of mounds of stupa, temples, coins and sculptures in bronze, stone and terracotta (Chauley 2007: 20). Unakoti in north Tripura has colossal rock cut panels of Hindu divinity. Colossal Siva sculptures and those of other Hindu deities are reported from the site dated to eighth-ninth centuries A.D. The archaeological and artistic remains at Unakoti establish that the site flourished in the post-Gupta period (Chauley 2007: 38, 70). Ancient Tripura was known as Sukshma desh or Kirata bhumi. Pillak in south Tripura has large mounds containing stupa and temples and sculptures. It was a famous Buddhist site of the seventh century. Huien Tsang reported twenty Buddhist monasteries in the region of Pundravardhana, and north Bengal. Silver coins of seventh-eighth centuries A.D. with the legend 'Piraka' are found from the site (Chauley 2007: 20, 38). One such mound at Pillak is known as Thakurani tilla and has exposed pottery from post-Gupta period onwards dated sixth-eighth centuries A.D. (Chauley 2004-05: 199).

Coins of the pre-Ahom Assam are found from Paglatek in the south bank of the Brahmaputra. These are imitation of Gupta gold coins that were in use in the seventh century and later. Same type of coins has often been found from Tripura and Bangladesh and contains the name of rulers who flourished after Sasanka (c.600-25 A.D) (ed. Barpujari 1990: 56; Choudhury 1985: 203).

The resource-use is minimal at the limited sites in the northeast region. Copper nose and ear ring are found at Sekta in Manipur. Bronze bangles are also found from Sekta. Other metal artifacts were also recovered from Sekta. These were iron used as spearhead, harpoon, knife/dagger and scythe. Gold coins were recovered from Tripura and Borvita (Assam). A carnelian bead with deep circular groove was found from Sekta of this period.

**Raw Materials Available Within The Sub-Region**

The availability of copper, iron has been noted on p. 89, 90.

**Gold**

Tributaries of the Brahmaputra such as the Subansri, Lohit, and Dihang have auriferous placers which have been worked in the past. These have yielded auriferous sands from which gold was recovered (Gopendra Kumar 1997:208; Ziauddin and Narayanswami 1974:128).
Tin

Tin is available in the calc-silicate rocks and granitoids belonging to Pre-Cambrian Chungthang formation. The ore is available in north Bengal district at Singhik-Chungthang, Chungthang-Lachen Mumsang; west Sikkim at Chitre (Babu 1994: 62). Tin is also available in the quartzites, phyllite slaty shales, mica shistose rocks of Migi formation. The ore is available at lower Subansri district in the Ranga valley (Babu 1994: 62).

Raw Materials Available Outside The Sub-Region

GUJARAT

Carnelian

Ample resources are available in Rajpipla in Gujarat. Its occurrence has been noted on p.110. This has also been discussed on p.116-17.

Epigraphic, Numismatic and Literary Linkages

Sharma (1993:2) has suggested that carnelian beads were brought by traders from Kutch to Nagaland since ancient times. The custom of every Naga married woman to adorn themselves with carnelian beads is probably the strongest indicator of this exchange.

The northeast was not an isolated part of the subcontinent as revealed by our study. The influence of Gupta art form in the rock-cut images at Kamakhaya temple area, Suryapahar, Tejpur in Assam (Chauley 2007:8), and reference to rulers in the Davaka (Nowgong, Assam) and Kamrupa as pratyanta nrpati in the Allahabad inscription of Samudragupta (Sharma 1978: 15) indicates that the northeastern region was possibly within the fold of the Gangetic plains. In the post-Gupta phase Yasodharman of the Aulikara dynasty in Malwa carved out a vast Empire that included Lauhitya in the northeast to the western ocean and from Himalayas in the north to mountain Mahendra in the south (Choudhary1983: 135). The Mandsaur Pillar inscription of Yasodharman of Malwa (c.525-35 A.D) glorifies his digvijaya upto the Lohitya (Brahmaputra valley). This possibly indicates that movement of men and resources from the western most regions to the the northeast of the subcontinent. It is therefore not unlikely that the northeast accessed resources from west India.

The northeast on the whole flourished in the sixth century A.D. in the post-Gupta period. The sites that have been discussed above such as Dah Parvatiya in Tezpur,
Sekta in Manipur, and Unakoti in Tripura and so on have mostly yielded architectural remains of stupas and temples and sculptural representations in bronze, stone and terracotta. Most of these cultural evidences were heavily influenced by the Gupta art form. However the archaeological landscape is still hazy for the region. The artifactual repertoire of the entire northeast is limited and has been found from very few sites. Most of the sites do not yield anything more than architectural or sculptural remains. Resources such as copper iron and gold were locally available. The possible procurement of carnelian from the Kutch region in the west substantiates the fact that region was not an isolated entity and was part of the subcontinent as a whole.

**Orissa**

Archaeologically, the region is dotted with several Buddhist sites and a few early historic town sites. These include Sisupalgarh, Jaugada and Dhauli. Ratnagiri, Udayagiri, Lalitagiri stand out among the Buddhist sites which flourished during this period. Sporadic finds of artifacts and structural remains are nevertheless found at some places. Ruins of an old temple of seventh century A.D. are seen at Dhauli and Bankadagarh in Puri district (IAR 1962-3: 17; 1979-80: 55). The three sites in the Orissa region with post-Gupta cultural material are Manikapatna, and Mauza Behrampur. There are smaller sites which have cultural material from the post-Gupta period.

**Sitewise Distribution of Manufactured Objects**

Chart 10 c shows the raw materials used in this sub-region. They are bronze, iron, gold, silver, steatite and bone.

**Evidence of Manufacture of Finished Products At Different Sites**

Iron: Iron slag was found in the post-Gupta levels at Maraguda valley in the Nuapada district (ed. Basa and Mohanty 2000: 424).

**Character of Sites and Distribution of Manufactured Objects**

Manikapatna was an ancient sea port and yielded Roman amphorae from early historic levels. The site was in continuous occupation from the first century A.D. onwards (Pradhan, Mohanty and Mishra 1995-96: 121). From the layer of period I (second century BC to fifth-sixth century A.D.) thirteen terracotta ring wells were exposed. The excavation revealed the periphery of a habitation site along with numerous potsherds
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Mauza Behrampur</th>
<th>Ratnagiri</th>
<th>Manikapatana</th>
<th>Nehna</th>
<th>Maraguda</th>
<th>Lalitagiri</th>
<th>Udaygiri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze images</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td>harpoon, spearhead, fishhooks, beads</td>
<td></td>
<td></td>
<td>clamp, slag, beads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>necklace, pieces</td>
<td>bead, coin</td>
<td>coins, fanam</td>
<td>coins</td>
<td>casket</td>
<td>casket</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steatite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>casket</td>
</tr>
</tbody>
</table>
MAP-49

SITEWISE DISTRIBUTION OF RAW MATERIALS IN ORISSA

C. 500-750 A.D.

LEGEND

Cu-Copper
Fe-Iron
Go-Gold
St-Steatite
including knobbed ware (ed. Basa and Mohanty 2000: 480). At Dhauli in Puri district, the remains of an old temple of seventh century A.D. were found (IAR 1962-63: 17). Nehna in Kalahandi district yielded numismatic evidence of several post-Gupta regional dynasties. These were the coins of Sarabhapuriya dynasty who ruled South Kosala from fifth to eighth century A.D. A copper plate inscription of this period was also recovered. Kalachuri coins and a gold fanam of the Ganga dynasty were also found (ed. Basa and Mohanty 2000: 421). Asurgarh in Phulbani district, a circular brick structure possibly belonging to a stage of temple construction of fifth-sixth century A.D. was found. It was surrounded by a moat and had gates on all four sides.

The most number of finds are from Manikapatna. Gold coins are reported from Nehna. Semi-precious stone beads were found from Manikapatna. Iron artifacts are in the form of harpoons, spearheads, fish hooks and beads were also found at the above site.

Among the smaller sites, a temple complex of sixth century A.D. was discovered in Bankadagarh in Puri district. The temple-complex was panchayatana in plan. A large number of sculptures were also discovered. The site was possibly the capital of the Sailodbhava dynasty (IAR 1979-80: 60). Budhigarh in Madanpur village has an extensive mound. The artifactual evidence from the site indicates that it was occupied from the early historic to the late medieval period (ed. Pal 2001: 20). Traces of brick walls were noticed during excavations at Budhigarh (Basa and Mohanty 2000: 423). A gold necklace and pieces have been found at Mauza Behrampur (Cuttack district) in this period. In Maraguda valley in Nuapada district, Kalachuri and Sarabhapuriya coins, beads and iron slag and clamps were found (ed. Basa and Mohanty 2000: 424). Sarabhapuriya coins were also found from the site of Komna, an important early historic site (Basa and Mohanty 2000: 424).

Ratnagiri in Cuttack district stands out as a religious site of the region. Huien Tsang visited Orissa in c.639 A.D. and noted that Buddhism was in a flourishing condition. Excavations revealed an impressive stupa surrounded by an overwhelmingly large number of stupas of all dimensions, monasteries and smaller votive stupas. Buddhist establishments here dated from the fifth to the thirteenth century A.D. Ratnagiri did not flourish much till the seventh century A.D. This was partly due to the uncertain political situation owing to the fall of the Gupta dynasty (Mitra 1981:17). Taranath’s
History of Buddhism (1608 AD) informs us that the monastery was built by Gupta king Narasimha Gupta Baladitya of early sixth century A.D. in the eastern kingdom of Odivisa (ed. Pal 2001: 28). The Mahavihara is identified on the basis of much sealing bearing the name Ratnagiri Mahavihara. Finds include relics of bones, and terracotta plaques and beads (ed. Pal 2001: 28, 43). The stupa seems to have undergone several phases of restoration. Remains of two quadrangular monasteries were traced at Ratnagiri (Chakrabarti 2006: 467).

Excavation at Udayagiri revealed two brick storeyed monasteries dated eighth to ninth century A.D. with a large courtyard. It was surrounded by cells where there is a massive stone sculpture of Buddha seated in padmasana (Chakrabarti 2006: 465). Remains of a gateway to the monastery were impressive and the figure of Buddha are major features. The gates were composed of three heavy rectangular blocks of stone. A good number of sculptures and architectural fragments with were unearthed at Udayagiri were dated to the eighth century (Bandopadhyay 2007: 5, 59). The Madhavapura monastery at Udayagiri is dated to the seventh-eighth century (ed. Basa and Mohanty 2000: 500). Lalitagiri was another well known Buddhist establishment of this period. Stone paved circumambulatory path and a fourfold reliquary was discovered on the east side. It contained caskets of different materials (ed. Pal 2001: 33). A large number of Buddhist sculptures, votive stupas and sculptural representation of the Buddha were also found. Terracotta seals and sealings and miniature figures of Avalokiteshwara and votive stupas were found as well (ed. Basa and Mohanty 2000: 450). Ceramics of fourth to sixth centuries A.D. were found including red polished and slipped ware, grey ware and black and red ware (ed. Basa and Mohanty 2000: 460).

The region is dotted with several Buddhist remains, many of them are reported from different parts. These are Balasore, Mayurbhanj, Jajpur, Phulbani, Jagatisinghpur, Cuttack, Khurda, Puri districts and so on (Bandhopadhya 2007: 10). Jayarampur in Balasore district in the sixth century revealed the remains of a Buddhist establishment which was reduced to a mound. From this a metal statue of Buddha, a stone image of a goddess and a copper plate inscription of sixth century were revealed (ed. Pal 2001: 28). From the accouts of Huien Tsang it was known
that another Buddhist centre of Pushpagiri existed in the Odra country. It has not been identified satisfactorily (ed. Pal 2001: 29). Other centres which saw extensive building activity in this period were Khadipada in Balasore district. It was near to the capital of the Bhaumakara rulers of Jajpur town. Buddhist images of stone, monastery made of stone blocks, and several other standing and monolithic figures were discovered (ed. Pal 2001: 31). During the rule of the Bhaumakaras flourished Solapur known as the Salonapur monastery opposite Jajpur town. The mounds had several Buddhist structures and sculptures. The establishment was settled from an earlier period as; it was mentioned in the Ratnagiti copper plate charter of Somavasi ruler (ed. Pal 2001: 31). Other important Buddhist remains were found at Kulangiri, Rameshwar and so on (Chakrabarti 1998: 110-111).

The resource-use at the several Buddhist establishments was limited. Bronze images of Buddha were reported from Udaygiri. Iron was found in the form of harpoon, spearhead, beads, and clamp. Slag was found from Maraguda valley and Manikapatna. Precious metals as gold and silver were mostly found in form of coin and casket from Ratnagiri, Nehana, Lalitagiri and the latter from Lalitagiri. Silver casket was also found at Lalitagiri. Semi-precious stones beads were not reported from any other site except Manikapatna. However, the raw materials have not been specified. A steatite casket was reported from Lalitagiri.

**Raw Materials Available Within The Sub-Region**

The presence of gold and iron has been noted on p. 94 and 95.

**Tin**

Tin is available in Mundaguda- Mittiguda, Mohopodar, and SalimiVedur palli in Koraput district. Cassiterite mineralization is done in area around Mundaguda village in Koraput district (Babu 1994: 38).

**Copper**

Copper mineralizations occur at Mayurbhanj at Kesarpur, Dudhiasal and Madansahi and Sambalpur district at Adash. The chief mineral ore is pyrite, pyrhotite and chalopyrite (Wadia 1966: 128).
Lead

Lead occurs at Sargipalli deposit in Sundargarh district in Dhumholi area. The common primary minerals of the deposit are galena, chalcopyrite and sphalerite (Wadia 1966: 117).

Steatite

Good exposures of talc and steatite occur in south east of Mayurbhanj in Udala and Nilagiri in Balasore district, Kalimola and Gupteshwar in Koraput district. Medium quality steatite is found near Rebana in Kondujhar district (Behuria 1990: 76).

Raw Materials Available Outside The Sub-Region

No raw material was procured from outside the region. Orissa in the post-Gupta period was a well spread out in habitation during the period. We have literary descriptions of flourishing sites such as Ratnagiri; the artifactual finds do not corroborate it. The architectural remains from several such Buddhist sites indicate a well established network throughout the region. The limited raw materials used were obtained from within the sub-region and no exchange network with other regions was required. The manufacturing industry is seen at a small site of Maraguda valley in the Nuapada district in form of iron slag. The exchange network displays a self-sufficient and closed economy in the post-Gupta period. However, the presence of regional dynasties of neighbouring regions is clearly evident. The recovery of a large number of coins of the Sarabhapuriya dynasty who were rulers of South Kosala region in this period is evidence of this. In this light, the region could never be understood as a closed unit, at least politically.

Gujarat

Gujarat has been of utmost importance for its proximity to the coastal region. Ports such as Barygaza have played a significant role in India’s maritime trade with the west. In the period between the fifth and the eighth century A.D., one of the ruling dynasties here was that of Maitrikas of Valabhi. Huien Tsang describes the establishments at Valabhi and Saurashtra as rich and the people as “wealthy”. He noted that rare and valuable products of different countries were stored here (Book XI, Beal, 2001- 266,269). The different sites in the region were Broach, Nagar,
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Broach</th>
<th>Nagara</th>
<th>Valabhi</th>
<th>Doodheres</th>
<th>Timbarva</th>
<th>Dwarka</th>
<th>Devnimori</th>
<th>Karvan</th>
<th>Hathab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>finger ring, nails, lid, bowls, bar, rods</td>
<td></td>
<td></td>
<td></td>
<td>antimony rods</td>
<td>Bronze bell</td>
<td>coins</td>
<td>coins</td>
<td>coins</td>
</tr>
<tr>
<td>Iron</td>
<td>objects, nails, knives, spearhead, dagger, arrowheads, chisel, spike</td>
<td>wire, nail, fragment of blade</td>
<td></td>
<td></td>
<td>arrowheads, scissors, hook, spearhead, rings, knives, daggers, sickle, door chain, chisel</td>
<td>nails, bolts</td>
<td>slags</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>ear studs</td>
<td></td>
<td></td>
<td></td>
<td>coins</td>
<td></td>
<td></td>
<td>jewellery</td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td></td>
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<td></td>
<td>ring</td>
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<tr>
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<td>beads</td>
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<td>Ruby, Diamond ring</td>
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Chart 11c (continued)

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<td>sickle</td>
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<tr>
<td>Shell</td>
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Sitewise Distribution Of Manufactured Objects

Chart 11c shows the different raw materials used in the post-Gupta period. These are copper, iron, lead, gold, silver, chalcedony, agate, carnelian, jasper, jade, lapis lazuli, sandstone, granite, steatite, shell, and bone.

Evidence of Manufacture of Finished Products At Different Sites

Chank: It was used at Nagara for producing numerous beads and ornaments. There were waste products of slices and stems of chank at all levels. These indicate a flourishing chank industry at Nagara (Mehta 1968: 130-2).

Iron: Slag was found on the surface of period III at Hathab in Bhavnagar district dated to the Maitraka period (IAR 2001-02: 48).

Character of Sites and Distribution of Manufactured Objects

Nagara in the Gulf of Cambay in the Kaira district was an important urban centre on the coastal plain. It participation in the westerly trade of India is evident from the find of Roman amphorae there (Mehta 1968: 17). Ghosh (1989: 298) observed that, after the eighth-ninth century the site began to shrink. The structural remains of the period comprised mud floorings, a wall of brick-bats and a large hearth (IAR 1963-64: 19). Timbarva in Baroda district was a town near the ancient township of Karvan. Pottery seems to be the only means of establishing chronology here. Pottery found in the post-Gupta period was painted red burnished ware with design in black over white background. On this basis the red slipped ware associated with the early medieval period has been dated to c.600-1000 A.D. No culture later than this period has been found here. It possibly indicated that the site was deserted by the end of tenth-eleventh centuries A.D (Mehta 1955: 3-4). Other antiquities include terracotta beads, iron nail, wire, antimony rod (Ghosh 1991: 440). Dwarka is one of the most important Vaishnava centres in India. The first clear historical reference is found in an inscription dated 574 A.D. which describes Dwarka as the capital of western coast of Saurashtra (Ansari and Mate 1966: 23). Pottery was mainly found in the excavations and the quantity was much more in Period III (c.7th-8th AD) than the early historical
periods. The antiquities include terracotta stoppers and tile pieces. The period has given evidence of successive superimposed stone structures (Ghosh 1991: 133). Excavation exposed a lapse of a few centuries between the early historical period and the later stage dated to the seventh century A.D. Fragments of wall-moulding and finials were found in this stratum (IAR 1962-63: 20). Vadnagar in Mehsana district revealed in excavations a continuous sequence of three periods from c. 200 BC to 1000AD. Stratum II dated c. 200-600 A.D yielded red polished ware (Patel and Rajesh 2006-07: 94). Period III dated c. 600-1000A.D yielded a distinctive coarse red slipped ware painted with black designs (Ghosh 1991: 456). Amreli in Saurashtra revealed occupational deposits from first century BC to eighth century AD. A seal of Siladitya has been found here (Rao 1966: 11; Ghosh 1991: 19). As reported by Patel and Rajesh (2006-07: 90), Amreli yielded the highest number of red polished ware from early historic period levels dated from the first to seventh centuries A.D. Hathab in Bhavnagar district yielded material evidence of the existence of a buried city datable from the fourth century B.C to sixth century A.D. Period III here was dated to the Maitraka period. It yielded slags, terracotta figurines, domestic utensils, coins and other antiquities. A gold signet ring was a significant discovery (IAR 2001-02: 48).

The religious sites in the region are many. Devnimori in the Sabarkantha district was the site of a large Buddhist establishment with a stupa and monastery. The stupa in the later stage of occupation dated to early late-Kshatrapa-early Gupta period was in a dilapidated condition. The second phase of the stupa was marked by haphazard restoration of walls. Similarly in the monastery, the last phase was one of deterioration; the use of broken bricks was common. However, other structures exposed were dated till about the sixth century A.D (IAR 1959-60: 29). A number of Indo-Sassanian coins were recovered from Devnimori (Patel and Rajesh 2006-07: 90). Valabhi was the famous capital of the Maitrikas who ruled here following the Gupta rule. The excavations revealed a continuous habitation deposit from the early historical period to the seventh-eight centuries A.D without a break. A few sherds of black and red ware encountered from the disturbed trenches at the lower levels of Period II. A mud rampart was also found provided with heavy brick revetments. Terracotta objects such as flesh dabbers, beads and a chaturmukha linga of sixth-seventh centuries A.D were some of the antiquities found in this layer. There was possibly a break from the previous period to the medieval period (IAR 1959-60: 27). An old monastery
associated with the name of Bhattaraka, the feudatory of the Maitraka rulers is mentioned in their grants dated c. 567 A.D. Small Buddha heads and images, terracotta tablets called ‘Dharmagutikas’ inscribed on them are found at Valabhi (Dutt 1988: 224). Prabhas Patan in Sorath district had occupational deposits up to the Kshatrapa-Gupta levels. The mounds were abandoned after that except for one used as a medieval temple (IAR 1956-57: 21). Period V is assigned to first century B.C to sixth century A.D here. Red polished ware was reported here (Patel and Rajesh 2006-07: 93).

The small sites of the period include Doodheres in Surendranagar district. Silver coins of Valabhi rulers of sixth-seventh centuries A.D were found here (IAR 1997-8: 214). Tarsang in district Panch Mahals had layers dated from early centuries of Christian era to medieval times. The antiquities have not been elaborated (IAR 1977-78: 29). Karwan in Vadodara district itself yielded copper coins of Kshatrapa and Maitraka rulers and red polished ware. The site was inhabited from second century to eighth century A.D (Patel and Rajesh 2006-07: 92; IAR 1974-75: 23). A terracotta seal inscribed in Brahmi characters on stone was found dated to the seventh-eighth century A.D (IAR 1975-76: 22). Shamjaji in Sabarkantha district had stratum III dated to c. 400-1000 A.D. The site exposed hearths and structures of this period along with other antiquities (Patel and Rajesh 2006-07: 93). The Saurashtra-Kathiawar peninsula has remains of early temples of sixth-seventh centuries A.D. About one hundred of them are known and have small structures with few decorations. One such temple is the old Siva temple of Gop dated mid-sixth century A.D which stands on high platform and has an undecorated doorway (Chakrabarti 2006: 462). Champaner in Panchmahal district had an antiquity from the early historical period. Copper plate inscription of Maitraka ruler Dhruvasena II (653 AD) and silver coins are found from here. No structural remains are reported from this period (Sonawane 2009: 69).

The resource usage is vast and impressive mainly at Nagara in Kaira district. Copper artifacts are quite a few in numbers. They are nails, bowls, lids, rods, finger ring and bar. Similarly iron artifacts are also substantial. They are in the form of nails, knives, daggers, spearheads, arrowhead, chisel and spikes. Lead ear studs are found at Nagara. Whereas gold and silver has not been used at all. Lapis lazuli beads are found at Nagara. The other beads of semi-precious stones are in different materials. They are...
chalcedony, jasper, carnelian, agate and jade. The use of ordinary stones such as sandstone and granite are in the form of mullers and querns. Steatite beads are also found only at this site. Shell bangles, beads and kohl sticks are the other artifacts from Nagara. The other urban areas show a very poor artifactual yield. Broach has produced artifacts such as jasper images and at Valabhi we find the only gold article in the form of a ring. Doodheres and Champaner have yielded silver coins.

**Raw Materials Available Within The Sub-Region**

The presence of semi-precious stone and shell has already been noted. (p. 116-17).

**Jasper**

Jaspers could come from the village of Tankara in Morvi about twenty miles north of Rajkot. (Ball 1881: 509)

**Iron**

Low grade iron laterite iron-ore occurs as small pallets and nuggets northwest of Char and to south of Narmada river. Trap flows are noticed at about two kilometers northwest of Chhelana in Amreli district (Patel 1972: 16).

**Jamnagar district:** Iron-ore also occurs at Mota, Asota, Khamalia, Modpar and Ranpar in the (Patel 1970: 31).

**Kutch district:** Ferruginous laterites containing 20-40% iron-ore occurs in Bhachau, Lunwas, Dudhai and Matano Madh in Kutch district (Patel 1971: 25).

**Copper**

Rupwati mine in Kathiawar has native copper. Oxide minerals of copper were used at the site of Rangpur during 1800 B.C. (Biswas 1996:325). Copper ore occurs at Banaskantha district (Wadia 1966: 127).

**Gold**

The presence of gold has already been discussed on p.116.

**Galena**

It is noticed in two small lenses of quartz occurring near Brahmapuri in Sabarkantha district (Rajyagor 1974: 18).
**Steatite**

Asbestos and steatite are found in Aravalli metasediments. The main occurrences are at Kundol valley at Devnimori, Isri and Kundol (Rajyagor 1974: 18).

**Sandstone**

Lahiri (1992:107) has noted the occurrence of granite-gnesis and sansstone in Rajkot, Junagarh, Panchmahals and Surendranagar districts.

**Sabarkantha district:** Himatnagar sandstone is an important deposit. Sandstone quaries are located in Parbada, Ilol, Berna, Kanknol, Bhetali, Malsa and Vadali in the district (Rajyagor 1974:19).

**Raw Materials Available Outside The Sub-Region**

The presence of silver and lead (Rajasthan), and lapis lazuli (Afghanistan) and Jade (Turkestan) has already been noted. (p., 109, 31)

**KARNATAKA**

**Ruby**

Ruby and sapphire corundum is common occurrence in Karnataka and is explored near Budipadya in Mysore district, Mandya, Tumkur district. Kadamane and Melkoppa near Sringeri in Chikmagalur district also have these stones (Radhakrishnan 1996: 205).

**CENTRAL INDIA**

**Diamond**

Diamond bearing areas in Central India are, Panna, Charkhari, Bijawar, Ajoygarh, Kothi, Pathar, Kachar, barunda and Chobepur areas in the Gondwana rocks (Banerjee 1992: 379).

**Epigraphic, Numismatic and Literary Linkages**

The link between Gujarat and Karnataka can be establish on the basis of the Aihole inscription of Pulakesin II (c. 609-610 A.D) of the Chalukya dynasty (rulers in the Karnataka region) records his military conquests. As a corroboration of this observation, several inscriptions of early Chalukya rulers have been found throughout Maharashtra, Gujarat, Andhra as well as Tamil Nadu. The inscriptions from Gujarat
include, Kaira grant of Vijayaraya, Navasari plates of Yuvaraj Siladitya which refers to Vikramaditya, Navasari grant of Pulakesin II, Surat plates of Siladitya and Balsar copper plates of Mangalarasa (eds. Krishnappa and Gopal 2000: 36). At the same time, inscriptions such as the Eran stone inscription of Toramana and Gwalior stone inscription of Mihirkula firmly attest the rule of the Huna rulers in the central India region (Pandey 1962: 141). A reference in the Rajatarangini by Kalhana glorifies the victory of Mihirkula over the rulers of Cola, Karnata and Lata which is south Gujarat (Pandit 1935: 41). The Mansaur inscription of Yasodharman further clarifies that the Huns held a vast area like the Gupta rulers (Biswas 1973: 77). It is therefore likely that the Hunas controlled a vast part of central India that included the Gujarat region. The accounts of Huien Tsang confirm that raw materials from distant regions reached places like Valabhi, Saurashtra and Gurjjara. He observes that, the population of these cities was dense and the establishments rich. The rare and valuable products of distant regions are stored here in great quantities (Bk XI; Beal 2001 reprint: 266, 269, and 270). In the light of these evidences it would be very likely for the region of Gujarat to be in touch with both central India and Karnataka for procurement of resources.

The signs of a prosperous economy were visible from the urban site of Nagara in Gujarat in this period. The site has a rich artifactual yield and the resource usage was also varied. Chank artifacts were manufactured locally. Hathab had evidence of iron smelting. The resources available within the region were gold, jasper, agate, chalcedony, carnelian, copper, sandstone, granite and shell. Resources were procured from different and distant lands. The findspots of Huna coins include Hidda in Afghanistan, Taxila, and Shah-ji-ki-Dheri in NWFP (Biswas 1973: 200-03) and Mihirkula's Gwalior inscription and Eran Stone inscription of Toramana (ed.Sircar 1965: 420, 424) establish the authority of the Hunas up to central India. The procurement of lapis lazuli from Afghanistan in this period was thus a strong possibility. The raw materials such as silver and lead were obtained from neighbouring Rajasthan. Central India was the nearest source for diamond while gemstones such as ruby that were available in the Karnataka region in southern Deccan. The exchange network of Gujarat in the given period was possibly quite wide. Urban sites such as Nagara, Dwarka, Amreli, Devnimori, Timbarva and Prabhas Patan are common. The smaller settlements were not reported in large numbers. Over all, there are indications of a thriving settlement pattern in the post-Gupta period in this region.
**Rajasthan**

The region was ruled by the Gurjara rulers in the mid-sixth century A.D. Their capital was Mandor and subsequently Morta near Jodhpur. In east Rajasthan, the Guhilots of Mewar were ruling around Udaipur. The dynasty became powerful by the eighth century A.D (Chakrabarti 2006: 425). The archaeological yield from the region in the post-Gupta period is not widespread. The habitations of this period are very scanty. The different sites with the remains of this period are, Nagari, Buchawas, Siswania, Udaipur and Diatra.

**Sitewise Distribution Of Manufactured Objects**

Chart 12c shows the different raw materials used in the post-Gupta period. These are copper, silver, agate and schist.

**Evidence of Manufacture of Finished Products At Different Sites**

No evidence of manufacture has been noted in this region.

**Character of Sites and Distribution of Manufactured Objects**

Nagari is the only urban site of this region. It was the ancient *Madhyamika* and was the capital of the Indo-Greek king Menander. A fortification wall of the Gupta period has been found (Chakrabarti 1995: 221). A citadel dated to the Gupta period was found and two structures of Mahadeva temple were found. One dated to the pre-Christian era and the other Hathi Bada mound was dated c. 700 A.D were unearthed (Bhandarkar 1998: 118-19). Agate beads are reported from Nagari.

The site of Sambhar or ancient Sakambhari was the capital of the Chahamana princes in medieval period. This town was founded about third century B.C and continued to flourish until the tenth century A.D (Sahni 1999 reprint: 73). The excavation exposed structures that range from the third-second centuries BC to tenth century A.D. No details of these structures are found in the excavation report by Sahni (1999 reprint) (Chakrabarti 1997: 221). Copper coins of late Indo-Sassanian period were found at Sambhar (Sahni 1999: 65). Also, Huna coins in copper and silver have been reported from here (Hooja 2006: 144). Bairat, the traditional site of the capital of Virata of *Mahabharata* fame was a bustling town of the early centuries A.D. However, the later history is not very clear and no objects of second century A.D or later date was found. The site was destroyed by the Huna invaders in the fifth-sixth century A.D (Sahni 1905-
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Udaipur</th>
<th>Diatra</th>
<th>Buchawas</th>
<th>Siwana</th>
<th>Nagari</th>
<th>Sambhar</th>
<th>Kasindra</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Schist sculptures</td>
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</tbody>
</table>
MAP-51

SITEWISE DISTRIBUTION OF RAW MATERIALS

IN RAJASTHAN and GUJARAT c. 500-750 A.D.

Cu-Copper
Bo-Bronze
Fe-Iron
□ Lead
□ Gold
Ag-Silver
J-Jasper
Ch-Chalcedony
L-Chalcedony
A-Agate
R-Ruby

Gr-Granite
−-Chert
St-Stalactite
+ Shell
Q-Quartzite
D-Diamond
Ja-Jade
L-Lapis lazuli
S-Sandstone

GULF OF KACHHAR
GULF OF KASHMIR
INDUS
ARMENIAN SEA
GULF OF KASHMIR
The excavation revealed a gap of a few centuries between period III and Period IV at Bairat. Whereas period III related to early centuries of the Christian era, period IV was designated a medieval on the basis of glazed ware found (IAR 1962-63: 31). Late Gupta sculptures were reported in explorations at Nithar and Pangore in Bharatpur district (IAR 1963-64: 28). Besides S.K. Chakrobarty (2004: 64) has reported the find of imitation of Gupta silver coins by Krishnaraja of Kalachuri dynasty from a vast area in the north and Deccan. These sixth century A.D coins were reported from Rajasthan and Malwa regions. V.N. Mishra (2007: 313) observes that the early historic urban centres after the Gupta period. There is little post-Kushana occupation at Rairh, Nagari, Noh, Jodhpura and Sunari. It is only at Nagar and Sambhar that occupation appears to have continued till the tenth century A.D.

The small settlements are Udaipur, Buchawas, Siswania and Diatra. Indo-Sassanian coins (Gadhaiya) copper and silver coins have been reported from Buchawas, Diatra and Siswania. Udaipur has yielded only schist sculptures. At Noh in Bharatpur district, period V was described as “age of poverty and decadence”. The stratum is assigned to seventh-eighth century A.D. Numerous pits were found all over the occupation. These yielded a number of stone plaques and a palm size Buddha or Yaksa figure in white spotted red sandstone (IAR 1963-64: 29). Reema Hooja (2006: 144) has reported the find of Huna coins from small sites in Rajasthan. These were, Jalor, Nagaur, Chotan, Abaneri, Khoh, Ranivavan, Kherjroli, Losal, Desurri, Sardargarh, and Piplaj, Junakhera near Jhalawar. Other sites were in the area of Marwar, Mewar, Kota and Jaipur. Kasindhra in Sirohi district yielded coin hoard of alloy of copper and silver coins (Hooja 2006: 145). Exploration yielded sculptures of early medieval period from Ageri and Jagar in Sawai-Madhopur district and from Varmana in Sirohi district (IAR 1962-63: 31). An ancient embankment and mud ruins of an early medieval temple and sculptures were recovered from Pandoli in Chittorgarh district (IAR 1982-83: 66-67). The site of Indaracharanan in Pali district yielded early medieval remains, inscriptions and sati stone (IAR 1982-83: 70). Chakrabarti (2006: 462) has reported a few early medieval temples from the region. The Sitaleshwara temple at Chandrabhage, Jhalawar is one such dated to the seventh century A.D. A famous temple complex occurs near Osia near Jodhpur dating from the eighth century. It stands on high platforms and narrow pillared porches.
Raw Materials Available Within The Sub-Region

The presence of copper, silver, has been noted on p. 30 and 109.

Schist
In the northwest of Heerawas in Sikar district a few bands of schists exist (Agarwal 1978: 11).

Agate
Chalcedony and agate are found scattered on the surface as secondary deposits associated to the Deccan Trap. Such minerals are found in a good quantity from the Bakani area in Jhalawar district (Dhoundiyal 1964: 12).

Sandstone
Red sandstone comes from Dalmera in Bikaner state. Dholpur and several places in Jodhpur have deposits where different coloured varieties of sandstone are found. Famous quarries of sandstone are found at Bansi and Paharpur in the Bharatpur state (Erskine 1908: 53-54).

Raw Materials Available Outside The Sub-Region

No raw materials seem to have been procured from outside the sub-region.

We do not get sufficient information regarding the post-Gupta period settlements in Rajasthan. The artifactual yield is meager with the exception of coins. Whatever sites have been reported are small settlements with stray finds. The archaeological finds from urban sites such as Rairh, Bairat, Sambhar and Nagar are not adequately reported. It could be inferred that the habitation in this period was either shrinking or the shortfall in artifactual yield could be attributed to lack of proper exploration and documentation.

However, inscriptional data seems to be rich in this region. We find several inscriptions of the different regional dynasties ruling in this period from different parts of Rajasthan. A fragmentary inscription of Yasodharman of Malwa from Chittorgarh indicates that he extended his rule in the Rajasthan region (Hooja 2006: 144). The inscription of Guhila rulers from Nagar (Malava-Nagar) dated c. 684 A.D record the building of a step well at Nagar by a Guhila chief Dhanika (Hooja 2006: 152). Inscriptions of Guhilas have been found from Chatsu area, south of Jaipur, The
Samoli inscription of c. 646 A.D mention Guhila control over Sirohi-Mewar border area. Another branch of the Guhila rulers were ruling over Kiskindha (modern Kalyanpur) south of Udaipur. Their inscriptions of seventh-eighth centuries A.D have feudatory titles used by chiefs owing allegiance to Harshavardhana of Thaneshwar (Hooja 2006: 159). The epigraphic evidence from the region certainly indicates socio-political dynamism in the Rajasthan region in the post-Gupta period.

**Maharashtra**

The region had a well spread out megalithic culture in the earlier periods. The early historic period (c.2nd B.C. - 6th A.D) is marked by the flourishing of Buddhist sites such as Bhaja, Karle and Kanheri. Rock-cut caves are distributed all over the Deccan from Saurashtra to north Kanara linking the coast to the interior regional locations (Chakrabarti, 1995: 199). However, material evidence for the post-Gupta period are known from few sites only. They are Kaundinyapura, Paunar, Bhokardan, Kanheri, Mansar, Prakash Hamalapuri and Thana (Dikshit 1968; Dhavalikar 1968; Deo 1974; IAR 1969-70: 22; 1994-95: 71; 1997-98: 129; Thapar, Athavale, Ramesh, Rao and Shashi 1964-65: 8-129; 1982-83:131).

**Sitewise Distribution Of Manufactured Objects**

Chart 13c shows the raw materials used in this region. They are copper, bronze, silver, carnelian, quartz, rock crystal, and coral.

**Evidence of Manufacture of Finished Products At Different Sites**

**Iron Ore:** Furnaces, crucibles and slag in large numbers dated to the fifth century A.D was found in the Buddhist monasteries at Kanheri. It was probably used by monks for fashioning metal objects (IAR 1969-70: 22). Quite a number of iron objects and a large lump of iron slag were found at Paithan in Aurangabad district in the foundation of the stratum dated sixth to eighth century A.D (IAR 1965-66:29).

**Bead making:** The collection of a large amount of beads from Paunar in Period III (c. 3rd-8th AD) shows that it was possibly a bead making site. It has been observed by Dhavalikar (1968: 78) that the site received non-local bead materials like lapis and coral in this period.
# Chart 13c
### Maharashtra—c. 500—750 A.D.

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<tr>
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<th>Kanheri</th>
<th>Hamalapuri</th>
<th>Prakash</th>
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<td>rattle,rod,</td>
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<td></td>
<td>trinklets</td>
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<tr>
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<td>nails, chains,</td>
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<td>arrowheads, bangle, hooks, clamp</td>
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<td></td>
</tr>
<tr>
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<td>Gadhaiya Coins</td>
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<td></td>
<td></td>
<td>coins, coin hoard</td>
<td>beads,</td>
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<td></td>
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<td></td>
<td>trinklets</td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Carnelian</td>
<td>Quartz,</td>
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<td>Rock Crystal</td>
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<tr>
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<td>Coral bead</td>
<td></td>
<td></td>
<td></td>
<td>bangles, rod, mirror handle</td>
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<td>Ordinary Stones</td>
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</table>

- Gadhaiya coins
- Coin hoard
- Beads
- Pendants
- Ear studs
- Trinklets
- Beads
- Ear studs
- Shivalinga
- Grinders
MAP-52

SITEWISE DISTRIBUTION OF RAW MATERIALS IN THE MAHARASHTRA REGION c. 500-750 A.D.

LEGEND
- Cu-Copper
- Fe-Iron
- Sn-Bronze
- Ag-Silver
- C-Carrnelian
- Q-Quartz
- A-Rock Crystal
- Cr-Crystal
- S-Calcite
- Ch-Chalcedony
- L-Lapis Lazuli
- +-Shell

V-Com.
Shell: A number of shell bangles and waste pieces of columella from period III at Paunar indicate that it was a flourishing local industry for manufacture of shell object (Dhavalikar 1968: 99).

Character of Sites and Distribution of Manufactured Objects

There are quite a few urban sites in the region. Prakash was a chalcolithic site in the early times and flourished during the Mauryan times but the later periods were on a modest scale. The resource-use at this site is minimal. The structural buildings of the Gupta and post-Gupta period belonging to period IV (c.6th-11 A.D) were in a dilapidated state. The artifacts are beads of quartz, rock-crystal, carnelian and coral (Thapar, Athavale, Ramesh, Rao and Shashi 1964-65: 24). Kaundanpur (Dikshit 1968) on the bank of the Wardha or ancient Kaudinyapura was the traditional capital of Vidarbha. The excavations yielded a sequence from the megalithic to the Muslim periods (Chakrabarti 1997: 229). Clay roof tiles of the early historic period were found at the site. No information is available beyond the fourth century A.D (Smith 2000: 81). Bhokardan or ancient Bhogavardhana in Amaravati district did not yield much structural data (Chakrabarti 1997: 230). The territory seems to have been held by early Kalachuri rulers of Mahismati. A Kalachuri inscription of 539 A.D found here mentions some land donated in the visaya Bhokardana (Deo 1974: 4-5). Terracotta objects, figurines and plaques from Period II (3rd c A.D onwards) and sandstone plaques depict non-secular motifs like the Lajjagauri and sculptures of Siva or possibly Bodhisattava. Deo (1974: 215) observes that the revival of Brahmanical cults in the Gupta and post-Gupta period at Bhokardan is evidenced by the Brahmanical caves and these plaques and sculptures. Paunar in the Wardha district has been identified with ancient Pravarapura, the capital of the Vakatakas. They ruled from the third to the sixth centuries A.D. The habitation here has been dated from the first millennium BC to the medieval period (Dhavalikar 1968: 7). The stratum of period III dated third to the eighth century A.D as the Vakataka, Vishnukundin and Kalachuri period. The habitation of period III is characterized by well planned foundations. Excavation exposed brick structures, and several other structural remains. The use of bricks, brickbats, construction of ring wells and floors of compact clay were unearthed. Vishnukundin coins, beads, red polished pottery, terracotta objects and stone sculptures were also found (Dhavalikar 1968: 6-7). It has been observed by Dhavalikar (1968: 49) that period III dated c.3rd to 8th A.D was the most prosperous at this site. As such, the
largest number of antiquities of varied nature were found from this period of occupation. Evidence of manufacturing in bead and shell has also been noted. One bead of lapis lazuli has been found in surface collection. Rest of such beads was found at late Satavahana, early historic and early medieval period (Dhavalikar 1968: 85). The site of Paithan in Aurangabad district in period III (dated c. 600-800 A.D) exposed a portion of a brick temple in ruined condition. The plinth was built of exceptionally large sized bricks. The temple was possibly of the Rashtrakuta period (IAR 1965-66: 29).

The religious site of the region was Kanheri, an important centre for Buddhism. It is known for the well distributed rock-cut caves. There is evidence of manufacture of metal objects by the monks in the post-Gupta period in the form of slag, furnaces and crucibles. The majority of these caves consist of a small single room with a small verandah in front. The architecture is dated as late as 8th-9th centuries A.D (Kapoor 2002: 341). A copper disc has been reported from Kanheri (IAR 1969-70: 22). Pauni in Bhandara district was a stupa site on the Jagannath Tekdi mound. The rampart showed evidence of habitation prior to the medieval period. Several stone pillars show that Pauni was inhabited from pre-Maurya to late medieval periods. Copper plate grants of Vakataka rulers were found at the site dated from c.3rd to 6th A.D (Deo and Joshi 1972: 5-8). In explorations in district Aurangabad, at the site of the Balaghat hill, near the Daulatabad fort was found rock-cut caves which were possibly used as a shrine. A fine sculpture of Lakulisa was found there along with other figurines of dvarpala and Parvati. The attributes, dress, ornaments of the Saiva dvarpalas show strong Pallava and Chalukya influence and could be dated sixth-seventh century A.D. Several Mahisasamurthi figures were also noticed in the Ellora caves dated sixth to eighth centuries A.D (IAR 1989-90: 56-57). Mansar in Nagpur district yielded important numismatic data in excavations. The coins ranged from the Kshatrapa, Vakatakas to Indo-Sassanian coins. There were a number of sculptured objects from the porch and shrine floors. They were mainly Uma-Maheshwar, Lajjagauri and plaques depicting religious signs. On the basis of numismatic data, the site has been tentatively dated between c. 300-650 AD (IAR 1994-95: 57). The Ajanta rock-cut caves in the Aurangabad district built in the Vakataka period are world famous mural paintings of Buddhist creed. The fifth-sixth centuries A.D witnessed plentiful structural activities. The latter period saw a profusion of Buddha figures on the façade and the interior of the chaitya hall (Mitra 1956: 4-6). Chandor in south Goa district revealed remains of a brick
structure of early historical period. From the later centuries, a trench near the retaining wall yielded good evidence in form of tiles, bricks and pottery at a temple site dating back to the seventh century AD (IAR 2001-02: 30).

The second tier of settlements in the region includes Hamalapuri (district Nagpur), and Thana. Here the artifacts are bronze Images and silver Gadhaiya coins. Excavations exposed caves and the pillars in the front at Banotiwadi in district Aurangabad. These were known as Dharkund caves comprising main hall with two sub shrines and an incomplete pradakshina patha. The pillars are contemporary with Ajanta/Ellora Buddhist caves. Architecturally it represents the transitional phase of architecture in western India between the Vakatakas and the Chalukyas between mid fifth to the mid sixth century A.D (IAR 1989-90: 55-56).

Raw Materials Available Within The Sub-Region

Copper
The presence of copper has been noted on p. 124.

Iron
The presence of iron has been noted on p.125.

Semi-Precious stones
Dark coloured volcanic lava of the Deccan Trap contains a variety of secondary minerals like agate, jasper and chalcedony. These occupy the lower portion of the ridges. Agate and chalcedony is reported trappean portion of the Nagpur district (Maharashtra District Gazt. Kolaba 1964: 13; 1966: 14). A large part of the Parbhani district is occupied by rocks similar to the Deccan Trap formations. The amygdales are filled with secondary minerals of zeolite group as calcite, chalcedony, agate, onyx and carnelian and rock-crystal (Maharashtra State Gazt. Parbhani, 1967: 20; Jalgaon1962: 9).

Raw Materials Available Outside the Sub-Region

AFGHANISTAN

Lapis Lazuli
Its availability has been noted on p.31.
Epigraphic, Literary and Numismatic Linkages

The Vishnukundin dynasty who ruled from fourth century A.D onwards were the feudatories of the Vakatakas in central and eastern Deccan. The structural and archaeological data of Vishnukundin layers of habitation come from Amaravati, Nagarjunakonda and Peddavegi excavations (Sarma 2008: 50-51). Vishnukundin coins have also been found in excavations near Nagpur and a hoard of alloyed copper coins from Paunar near Wardha district and Nagar in the Bhandara district of Vidarbha. Mirashi (1975: 185) has also noted such coins at Nevasa in western Maharashtra. Mirashi opined that the Vishnukundin King Madhavavarman I conquered Dakshin Koshala, Vidarbha and Maharashtra. Dandin’s Dasakumarcharita has described the help extended by Madhavavarman I to the last Vakataka king Harisen’s son in the wake of the death of Harisen at the hands of the ruler of Banavasi (Mirashi 1975: 185). A copper plate grant of Madhavavarman I is also found at Khanapur in Satara district (Mirashi 1975: 185). Hence the central Deccan region covering parts of Maharashtra and Andhra were possibly within the domain of Vishnukundin rulers. An exchange of resources is not improbable.

Maharashtra in the post-Gupta period was a prosperous region. The number of sites with stratified levels for the period were mostly urban in nature. These sites were formerly the large urban sites in the region. The artifactual repertoire from this period levels are most notable at Paunar and Mansar. Structural and numismatic evidence is seen in abundance at several sites. We find manufacturing activities in the region at Kanheri, Paithan and Paunar, all urban-religious sites. The resource procurement was possibly done within the western region of the subcontinent. A few resources such as copper, iron, bone, shell, agate, jasper, carnelian, rock-crystal and chalcedony were available within the region. Resources such as silver were possibly procured from Andhra to its east and lapis lazuli from Afghanistan. The evidence of wide ranging exchange activity is known from epigraphs of the preceding periods. According to H.P. Ray, the single largest group of donors at Kanheri upto the fourth century A.D comprised negama (merchants), vanija (trader), suvarnakara (goldsmith) and herenika (treasurer) (Olivelle, 2006: 127). This exchange pattern, though on a limited scale was also possibly present in the post-Gupta period.
Central India

The Malwa plateau situated on the ancient lines of communication, and had a well established historical phase, from Mauryan to Gupta times. The post-Gupta settlements in the region are well represented. Ujjain was one of the most flourishing trade centres in ancient times. It has been described as an affluent urban city by Kalidasa in his works *Meghdutam* and *Ritusamhara*. The splendor and opulence of Ujjain are reflected in the poet’s writings (Chandra Rajan 1990:78). The description of Ujjain by Huien Tsang substantiates Kalidasa’s description. It is described by the Chinese traveler as a densely populated city with wealthy establishments (Book XI, Beal 2001: 270). Kosala was also significant and served an an important link between north and the Deccan region. The different sites are Kayatha, Besnagar, Malhar, Pagara, Tumain, Gilaurikhera, Sanchi, Ujjain and Sirpur (Ansari and Dhavalikar 1975; IAR 1964-65; Sharma and Mishra 2003; Chakrabarti 1997; Marshall 1955; Sharma and Joshi 1999-2000).

Sitewise Distribution of Manufactured Objects

Chart 14 c shows the different raw materials used in the region. These are copper, iron, quartz, carnelian, schist, basalt, sandstone, soapstone, shell, bone and ivory.

Evidence of Manufacture of Finished Products At Different Sites

In the post-Gupta period layers at Gilaurikhera, a hearth at the depth of 71 cm in a southern portion of a trench was an evidence of manufacturing activity of this period (Sharma and Mishra 2003: 110).

*Iron:* A workshop was revealed from a brick built room during excavations at Pachrahi (Yadav and Pradhan 2008: 56).

*Bead Making:* A small trench beside the Siva temple at Indragarh in Mandsaur district exposed fluted cores, flakes and blades of jasper, agate and chalcedony associated with pottery. It indicates that the site was a bead-making factory at some stage (Sharma and Mishra 2003: 184). A workshop of bead manufacturing was found in excavations at Pachrahi in Chattisgarh region. Several finished and unfinished beads, waste materials and working area of craft activity were reported (Yadav and Pradhan 2008: 56).
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Kayatha</th>
<th>Tumain</th>
<th>Malhar</th>
<th>Pagara/Gilaurikhera</th>
<th>Ujjain/Sikri</th>
<th>Sirpur/Tripuri</th>
<th>Indragarh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>coins, spouted cup, bowls, bangle, antimony rods</td>
<td>bangles, vessels</td>
<td>weight</td>
<td>objects</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Iron</td>
<td>arrowheads, spearheads, knife blade, ladle, rod</td>
<td>arrowheads, nails, spearheads</td>
<td>nails, arrowheads, spearheads</td>
<td>objects</td>
<td>axe, sickle, edge knife</td>
<td>bangles, chisels, spearhead</td>
<td>bangles, door jams, dowels, chisels, razors</td>
</tr>
<tr>
<td>Gold</td>
<td>coin hoard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Silver</td>
<td>Gadhaiya</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Quartz, Carnelian, drop pendant</td>
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<td>unspecified</td>
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<tr>
<td>Ordinary Stone</td>
<td>Basalt quern, Sandstone figure</td>
<td>pestle, querns</td>
<td>red Sandstone piece, stone seal</td>
<td>ball, grinding stone</td>
<td>Sandstone figure, pillar</td>
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<tr>
<td>Steatite/Soapstone</td>
<td>Soapstone lid, spool</td>
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<tr>
<td>Shell</td>
<td>bead, bangle</td>
<td>beads, bangles</td>
<td>bangle pieces</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Ivory</td>
<td>carved bottle, bangle</td>
<td></td>
<td>bangle piece</td>
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**Chart 14c (continued)**

<table>
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<tr>
<th>Raw Materials</th>
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</tr>
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<tbody>
<tr>
<td>Copper/bronze</td>
<td>objects, rings</td>
</tr>
<tr>
<td>Iron</td>
<td>objects</td>
</tr>
<tr>
<td>Semi-precious stones</td>
<td>unspecified beads</td>
</tr>
<tr>
<td>Ordinary stones</td>
<td>pestles</td>
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</table>
Kayatha was an ancient town of Kapithaka. It is known to be the birth place of the celebrated astronomer Varaha Mihira. Red slipped ware and other ceramic varieties were found from Period V dated second century BC to sixth century A.D (Ansari and Dhavalikar 1975: 8). It was chiefly characterized by a number of structural remains found on the mound. The site continued to be occupied in the post-Gupta period and later and this is evidenced by finds of sculptural and architectural remains of the medieval period (Sharma and Mishra 2003: 118). Tripuri, west of Jabalpur was an ancient urban-religious site with Buddhist remains from earlier periods. The excavations revealed early medieval (Kalachuri) remains and also Indo-Sassanian and Kalachuri coins in gold and silver. Interestingly, a clay sealing of Nalanda Mahavira datable to the early medieval period was found at Tripuri (Sharma and Mishra 2003: 162, 24). Tumain was the ancient site of Tumbavana. Period IV was assigned sixth to twelfth century A.D and yielded black slipped and mica dust wares. Common shapes were bowls, small lamps and vases. Stone statues of Ganesha were found here. An important discovery was that of a hoard of 589 silver Indo-Sassanian coins assignable to seventh and tenth centuries A.D (Sharma and Mishra 2003: 217-18). Jain Tirthankara images, stone structures and red pottery are also reported from Tumain from this period (Chakrabarti 2005: 95). Ancient Vidisha or modern Besnagar was an important urban site and the capital of the Sunga rulers. It was possibly the capital of east Malwa. This was the site of the Heliodorous pillar of an Indo-Greek ambassador of that name. The excavation revealed six main habitational periods and have been identified ranging in chronology from the chalcolithic to the post-Gupta periods (Chakrabarti 1997: 222). Evidence of a pre-existing Shiva temple which might have continued till c.9th-10th A.D was noted here (Sharma and Mishra 2003: 94). Ancient Padmavati has been identified with the modern village of Pawaya near Gwalior. The excavations revealed brick remains and fragments of sculptures and those indicate the occupation of this site from first century A.D to late Gupta period (Chakrabarti 1997: 223). Maheshwar and Navdatoli in west Nimar district have a stratum VII assigned to the Muslim-Maratha period. Though literature and archaeology show a continued occupation of Maheshwar, evidence from excavations shows abandonment of a few areas. No materials have been recovered from the post-Harsha period (Sharma and
Mishra 2003: 130; Chakrabarti 1997: 224). Ujjain was a very important urban site at par with contemporary cities as Taxila, Kausambi and Rajgriha. Under Chandragupta II, Ujjain became a cultural centre along with being commercial and politically important. The affluence of the city of Ujjain is reflected in the works of Kalidasa, the Sanskrit poet. The site on excavation showed a continuous habitation from the Mauryan period to the period of the Paramaras in the ninth-tenth century A.D (Chakrabarti 1997:224). Structural remains were noted in period III assigned to the Sunga from the Paramara period. The rampart was made of heaped clay and had a long chronology from the Mauryan to the end of Paramara period. Terracotta ringed soak pits, ring wells; bottomless soakage jars and terracotta drain pipes have been found in both period II and III (Chakrabari 1997: 224-25). Period II at Pachrahi in Kabirdham district of present Chattisgarh yielded coins of Kalachuri kings. Brick built structures were found in excavations. Terracotta beads and pottery of red ware and grey ware were reported (Yadav and Pradhan 2008: 52).

The resource-use at the urban sites is varied and adequate. Use of copper and iron is abundant. Copper was present in the form of spouted cup, bowl, coins, bangles, vessels. Iron artifacts include arrowheads, spearheads, ladle, and rod, nails, door jams, dowels, chisels and shaving razors. Silver coins are found at Tumain. Semi-precious stones were used at Kayatha, the stones used being quartz and carnelian beads. Basalt quern and soapstone lid and spoon have been found at Kayatha. Other artifacts from Sirpur are a schist stone image and shell sealing. Shell, bone and ivory objects are also found at Kayatha.

The smaller sites of the region are Pagara, Gilaurikhera, and Sikri. Bilawali, a small site in Dewas district had yielded early medieval period antiquities from period IV (Sharma and Mishra 2003: 95). Pagara west of Dhar yielded early and late medieval pottery and other artifacts (Sharma and Mishra 2003: 199). Gilaurikhera yielded pottery of the period. Terracotta ball, well, tablet and other objects were found. Peetnagar in Khargaon district yielded polished red ware and stamped pottery belonging to Gupta-post-Gupta periods (Sharma and Mishra 2003: 149). At Datia, fifty terracotta sealings with Vedic Mantras in script datable to the c.6th-7th A.D was found in exploration (Sharma and Mishra 2003: 23). Keolari in Seoni district has yielded a number of Jain sculptures dated to the early
medieval period (Chakrabarti 2005: 88). At Dhamnar a clay seal dated to the fifth-sixth century A.D was found (Sharma and Mishra 2003: 23). Indragarh in Mandsaur district exposed a Siva temple built according to a stone inscription found there in c.709 A.D of Rashtrakuta period. The partial plan of the temple was revealed, stone images and architectural parts of the temple were also found. A sacrificial pit made of bricks and containing ashes and charred grains were recovered as well (Sharma and Mishra 2003: 184). Ninnore in Sehore district yielded Buddha head, brick walls of houses andapsidal temple, drainage system dated to the third to the seventh century A.D. The excavation revealed a continuous habitation from the Mauryan to the Muslim period without break (Sharma and Mishra 2003: 192, 198). Sodanga, northwest of Ujjain yielded from period IV (c.300-600 A.D) red polished ware and a few objects of iron. A thick deposit of ash was noted on the mound indicating that, the site might have been deserted by the Huna invasion in the sixth century A.D (Sharma and Mishra 2003: 216). Deogarh in Lalitpur district is famous for the Gupta period temple. The site has a dense concentration of early medieval sculptural and architectural remains (Chakrabarti 2005: 94).

The resource-use at these sites is similar to the urban sites. However, the number of objects found from these sites is limited.

There were several religious sites in the region especially associated with Buddhism. Avra in Mandsaur district, though not mentioned anywhere in literature, has seventh century rock cut Buddhist caves with monasteries (Sharma and Mishra 2003:88). The stupas cut in a hill called the Chandangiri in ancient times. The neighbouring town of Chandawasa is named after it. The fourth-fifth century A.D stratum had structural remains of the post-Khastrapa layers. This layer yielded Mother-Goddess figurines and red polished ware (Sharma and Mishra 2003: 88). Sanchi in east Malwa was the famous Buddhist stupa site from the period of the Mauryan ruler Ashoka in the third century B.C. With a continued occupation of this site, the sixth-seventh century A.D at Sanchi is represented by art remains of detached images continuing the contemplative spirit of divine peace. However the depiction of beauty by the earlier artists was missing (Marshall 1955: 22). Dhavalikar (2003: 89) has recorded small stupas at the site dated to the sixth century AD. One stupa east of temple was heavily repaired and dated to the the seventh-eighth century A.D (Dhavalikar 2003: 90). Malhar in Bilaspur district witnessed occupation from Mauryan
period to Gupta period and later. This was the capital of south Kosala which was later shifter to Sirpur. Period IV at Malhar assigned to post-Gupta period (c.650-900 A.D) did not yield structural evidence except that the site was associated with the Buddhist creed. Baked clay seals and sealings bearing the Buddhist symbols, terracotta objects, sculptural and pottery, decorated pieces were some of the objects associated with this period (Sharma and Mishra 2003: 135; Chakrabarti 2005: 52). Sirpur in Mahasamund district presently in Chattisgarh state was first mentioned in the inscription of Sarabhapuriya king Mahasudeoraj of fifth-sixth century A.D (Joshi and Sharma 1999-2000:110). Sirpur was an urban-cum-religious site from early times. It was the nucleus of political as well as art and literary activities in whole of Dakshin Kosala. A Buddhist nunnery was found here. Also Huien Tsang discovered almost a hundred Buddhist monasteries here (Joshi and Sharma 1999-2000:110). Excavations at Sirpur revealed remains of two large monasteries. It was rectangular in plan with a large paved courtyard in the middle and rows of irregularly grouped cells. The first phase dated to the fifth century A.D and the second phase dated seventh century A.D was a period of large scale structural activity at the site (Chakrabarti 2005: 54). This is evidenced by stone and brick structures. Images of Bodhisattava, Manjusri, and Avalokiteswara were recovered from the viharas in damaged condition (Sharma and Mishra 2003: 209, 215). Birchahabili Tila in Sikri situated in the upper Vindhyan ranges was a place mentioned in the Mahabharata in connection with Sahadev’s southern campaign on the eve of Rajasuya yajna performed by the Pandavas. Excavations revealed a stratum dated sixth to the ninth century A.D. Structures made of random rubble masonary and mud bricks. A hearth with brickbats lining was excavated here. These were dateable to sixth- eighth century A.D (Sharma, Prabhakar, Pradhan and Kabui 2000-01: 57-58). At the site of Balikeshwara in east Nimar district the excavation revealed three phases of structural activities. The Phase I (post-Gupta period) is represented by brick structure laid in front and back of a Siva temple. No other information on this phase is known from the excavations (Sharma and Mishra 2003:177). Ekalbara in Dhar district was an ancient mound. Six cultural periods were revealed here, from the chalcolithic period to Paramara and Muslim period (IAR 2001-02: 109).

The elaboration of artifactual remains has been found from the site of Malhar. Use of copper is seen at Malhar and Sirpur in form of weight, several iron objects such as nails, arropwheads and spearheads, door jams, dowels, chisels have been reported
from these sites. Gold coins of Sarabhapuriya dynasty have been reported from Sirpur. Semi-precious stones have been used in the form of beads at Malhar but it has not been specified. Other raw materials used include only a red sandstone piece only. Shell sealing has been reported from Sirpur.

A wealth of epigraphic, numismatic and sculptural evidence is available from the region of the post-Gupta period. Seven inscriptions of the Aulikara dynasty of Mandsaur were found from Bihar-Kotra, Bhanpura, Hasalpur and Risthal indicate that early Aulikara rulers were feudatories of the Guptas. The Mansaur inscription of Yasodharman describes the defeat of the Huna ruler Mihirkula by Yasodharman (Sharma and Mishra 2003: 7). Maitraka inscriptions from Nogawa in Ratlam district indicate the sway of the rulers in western Malwa (Sharma and Mishra 2003: 9). One of the branches of the Rashtrakuta rulers ruling in the seventh-eighth centuries AD is found in the region at Tiwarkhed and Multai in Betul districts. Gurjar-Pratihara grants are known from Gwalior who ruled in the early eighth century A.D (Sharma and Mishra 2003: 10). Indo-Sassanian coins have been found in hoards from several sites in the region. These are, Avra, Indore, Ujjain, Eran, Chanderi, Chhindwara, Devatpur, Patan, Balaghat, Mandhata, Seoni, Raipur, Hoshangabad and Tumain (Sharma and Mishra 2003: 20). Painted caves are found at Bagh dated to sixth-seventh centuries A.D. This is highlighted through the discovery of copper plate inscriptions of feudatories of the imperial Gupta rulers (Chakrabarti 2005: 107).

**Raw Materials Available Within The Sub-Region**

The presence of copper, silver, iron, sandstones, soapstone and semi-precious stones such as quartz, agate, jasper and chalcedony has been noted on p. 104.

**Iron**

Iron ores of good quality occur in Balaghat, Raipur and Bilaspur district. The Chanda districts have most extensive deposits that consist of crystalline haematite. (I.G.I. Central Provinces 1908:58). Deposits occur at Kurai range in south of Seoni district (IGI Central Provinces 1908: 234). In the upper half of Narmada valley, iron ore occurs at Narasinghpur with mines at Tendukheda, north of Narmada (IGI Central Provinces 1908: 248).
Schists

The Bijawar series consist of crystalline limestone, quartzite and schist (Srivastava 1968:10).

Raw Materials Available Outside The Sub-Region

GUJARAT

Shell

Shell is available in the coastline.

Epigraphic, Numismatic and Literary Linkages

The dominant coin type in the post-Gupta period was the Indo-Sassanian or Gadhaiya type coinage. These were found from a wide region in north India that spread from Rajasthan, Gujarat, western Deccan, Malwa, and Uttar Pradesh to Bihar. Indo-Sassanian coins have been found as stray coins as well as in hoard from Tumain. The uniform spread of this currency in the post-Gupta period indicates a certain connection between these regions. Politically, the Chalukya dynasty became an important power in south Deccan. Chalukyas established a vast empire from Gujarat to south Karnataka and in and around the Godavari in Andhra (Chakrabarti 2006: 426). Their inscriptions are found at several sites in Gujarat and speak of their presence in the region. These were Kaira grant of Vijayaraya, Navsari plates of Pulakesin II, and Balsar plates of Mangalarasa (ed. Krishnappa and Gopal 2000: 36). In the early seventh century A.D, the Aihole inscription of Chalukyan ruler Pulakesin II describes his campaign in eastern Deccan where he defeated the Panduvamsis of Dakshin-Kosala and the Ganga rulers of Kalinganagara (ed. Majumdar 1954: 238). The above evidence of epigraphs indicates that the Chalukyan rulers held a part of the Central Provinces as well as parts of the Orissa region. The Dakshin Kosala region comprising Chattisgarh and Orissa is also marked by the flourishing of Buddhist settlements in both the regions in the post-Gupta period. Sirpur in Chattisgarh and Lalitagiri and Ratnagiri in Orissa have both been described by Huien Tsang as flourishing centres of Buddhism. Numerous monasteries have been discovered at both these sites.

A number of Kushana donatary inscriptions were found from the apsidal temple at Lalitagiri. The fact that it was a foremost Buddhist site and was connected to several
parts of India is clearly established by these records. The account of Huien Tsang in the seventh century A.D describes his journey from Karnasuvarna, Odra, Tamralipti, Pushpagiri, Kongoda and Kalinga and Andhra. The Ratnavali suggest a coastal Kalinga route was connected to Kausambi and passed through South Kosala (Patnaik 1993: 50). A link between these sectors was highly probable in the light of the above evidence of movement in the region.

The Vindhyan region in the post-Gupta period had a well spread out occupation. The artifactual repertoire in the urban region is adequate. This is especially true of Kayatha; Tumain, Malhar, Sirpur are sites with which have yielded substantial artifactual finds. Manufacturing activity in this period is noted at Gilaurikheda and Indragarh, both small sites. Most of the resources were obtained from within the region except shell which was in all likelihood procured from Gujarat for the western Malwa region; while the sites of Sirpur, could have obtained shell from the east coast in Orissa. The exchange network in this period was limited. However, the region comprised different types of settlements that had a continued occupation from the early historical upto medieval period which speak of its importance even in the the post-Gupta period.

*Andhra Pradesh*

The region is known for the Ashokan edicts at Yeragudi and Rajmundhry and had well established Mauryan and post-Mauryan settlements. The early centuries of the Christian era witnessed the coming up of several Buddhist establishments throughout the region. Some of the sites with Buddhist remains are Amaravati, Nagarjunakonda, Yaleshwaram and Kotilingala. In the post-Gupta period however the number of sites has come down substantially. The two sites, Amarabad and Dachapalli, are small. Archaeology does not reveal much about these sites.

*Sitewise Distribution of Manufactured Objects*

Chart 15c shows the raw materials used in this region. They are gold and limestone.

*Evidence of Manufacture of Finished Products At Different Sites*

No evidence of manufacture can be seen at any of these sites.
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Amarabad</th>
<th>Dachapalli</th>
<th>Nelakondapalli</th>
<th>Kudavelli</th>
<th>Yaleshwaram</th>
<th>Amaravati</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>coins</td>
<td>rings</td>
<td></td>
<td></td>
<td>Bronze images</td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td></td>
<td></td>
<td></td>
<td>Spearhead, arrowhead, nails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>coin</td>
<td></td>
<td></td>
<td>Roman coins</td>
<td>Crystal relic caskets</td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Limestone</td>
<td>unspecified beads</td>
<td>unspecified beads</td>
<td></td>
<td>stone plaques</td>
<td>Limestone pillars</td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td></td>
<td></td>
<td></td>
<td>Limestone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td></td>
<td></td>
<td></td>
<td>Beads</td>
<td>Beads, bangles</td>
<td></td>
</tr>
</tbody>
</table>
SITEWISE DISTRIBUTION OF RAW MATERIALS IN ANDHRA AND ANDHRA COAST c. 500-750 A.D.

LEGENDS
- Cu - Copper
- Ag - Silver
- Fe - Iron
- Go - Gold
- Bo - Bronze
- Cr - Crystal
- Li - Limestone
- + - Shell
Character of Sites and Distribution of Manufactured Objects

Yaleshwaram in Nalgonda district has revealed extensive habitational deposits. The remains are mostly associated with Buddhism. Excavations revealed layers ranging from megalithic period levels to Vishnukundin period from the mid fifth century onwards (Khan 1963: 21). Early historical pottery, coins and two limestone pillars bearing a sixth century A.D inscription were found in the post-Ikshvaku period at Yaleshwaram. Several structures were encountered belonging to a temple complex. The structures included primarily an apsidal chaitya hall. A large hall was found with limestone pillars. Wedge shaped bricks were used in these structures (IAR 1960-61: 3). Kudavelli in Mahbubnagar was a thriving site in the early historical period as known by the evidence of Roman and Byzantine gold coins. The stratum dated eighth to twelfth century A.D assigned to period IIA revealed artifacts of the early Chalukyan period. The site witnessed the foundation of the early Chalukyan Sangameshwara Siva temple. A number of other brick built shrines were exposed around the temple complex. Other antiquities found from this sub-period are, beads, spindle whorls of terracotta, and tops of stones. The ceramic industry in this period included red-slipped, dull red, dull black and black slipped wares (IAR 1978-79: 39). Amaravati in the Guntur district is a world renowned Buddhist establishment of the early centuries A.D. The affinity of the style of its architecture is shared by other sites associated with Buddhism in Sanchi and Bharhut in Central India. The history of Amaravati is spread across several centuries spanning from fourth century B.C to fourteenth century A.D (Singh 2004: 249). Nelakondapalli is a stupa site in the Khammam district. The mahastupa, and viharas were built of burnt bricks and antiquities of both Ikshvaku and Vishnukundin period were found (Babu 1999: 47). Coins of the Vishnukundin dynasty were also found here (IAR 1977-78: 3). During the period from third and the sixth century A.D structural viharas were added to the existing stupa (Sarma 2008: 218). Kesareghatta in Rangareddy district was a township of the Vishnukundin rulers. Excavations exposed extensive fortification wall built around the periphery. The superstructure was possibly raised in brick and the fortification had three main gates. Antiquities from the site from this period included Vishnukundin coins of fourth-fifth century A.D and pottery (Sarma 2008: 212). Nagarjunakonda, the celebrated centre of the Ikshvaku rulers of the third century A.D
did not reveal a post-Ikshvaku stratum in excavations. The site did not develop beyond the early fourth century due to the desolation of certain portions especially the temple are due to river action as observed by Soundarajan (2006: 52, 55).

The sites surveyed above were mostly represented by Buddhist structural remains and did not yield many antiquities. Limestone pillars were part of architectural remains at Yaleshwaram. Copper coins of ruling dynasties and rings were the artifacts found at Nelakondapalli and Kudavelli. The latter site also yielded a few iron artifacts such as, spearhead, nails and arrowheads. Semi-precious stones were used as beads but the raw materials have been left unspecified for sites like Nelakondapalli and Kudavelli. Other artifacts include shell beads and bangles from Nelakondapalli and Kudavelli.

The site of Amarabad in Mahbubnagar (IAR 1968-69: 58) is a small settlement. A gold coin of the Western Chalukyas has been found from Amarabad. Other sites such as Chagapur, Rampur and Manopad in Mahbubnagar district revealed early medieval temples (IAR 1978-79: 3).

Raw Materials Available Within The Sub-Region

The presence of gold is noted on p. 133.

Copper

In Gani-Kalva area in Nandyal and Kurnool district there are old workings of copper (Rajagopal 1974: 14). Native copper mines are situated between Chimur and Warrangal near Hyderabad (Mallet 1887: 6).

Iron

Numerous small occurrences of iron-ore (haematite) are noted in the Kurnool district. Reasonably good deposits are found at Ramallakota, Veldurthy area in Dhone taluk. Here, massive and flaky haematite occurs in fault zones of the Cuddapah formations (Rajagopal 1974: 15).

Limestone

Narji limestone occurs in Koilkuntala and Dhone taluk in Kurnool district. Limestone also occurs in the Palnad region at Dachhapalli in Guntur region (Rajgopal 1974: 15; 1977: 16).
Raw Materials Available Outside The Sub-Region

ANDHRA COAST

Shell

This is available along the coastline.

Epigraphic, Numismatic and Literary Linkages

The post-Gupta period was dominated by several regional kingdoms such as the Salankayanas, Anandas, Brihatpalanyas and so on. The Vishnukundin dynasty (c.4\textsuperscript{th} - 7\textsuperscript{th} A.D) was known to have controlled the area of central and eastern Deccan that was once under the Vakatakas. These covered some parts of Andhra region particularly the lower Godavari and Krishna basins. Their coins have been found from Nagarjunakonda, Yaleshwaram, Tangutur, Vaddamanu, Telkunta, Dharanikota, Pedavegi and Kesaraghatta in Andhra region (Sarma 2008: 51, 192). The Vishnukundin rulers controlled a vast area in the coastal strip of Andhra as well. This is proved by their grants found in Polamur in Godavari district (594 A.D), Velupuru Pillar Inscription in Guntur district (495 AD), Ramatirtham copper plate inscription from Vishakhapatnam district (544 A.D), Chikkakula plates (565 A.D), Tummalagudem plates (566 A.D) and Polamuru plates from Ramchandrapuram (612 A.D) in east Godavari district (Sewell 1932: 21; ed. Parashar –Sen 1993: 140-141). The next powerful rulers of the Deccan were the early Chalukyas of Badami in Karnataka. They were a dominant power from sixth to the eighth century A.D. The Aihole inscription of Pulakesin II lists his military conquests far and wide. The Chalukyan empire, besides other regions included the eastern region of Andhra where the family of the Eastern Chalukyas of Pithapuram was established (Majumdar 1954: 250). The Western Chalukya grants have been found in Guntur district (650 A.D) Nandyal Kurnool (689 AD) and Nellore district (654 A.D), of Andhra (Sewell 1932: 24-26).

In the Andhra region in the post-Gupta period, occupation was confined to a few pockets. Sites were noted in Mahbubnagar in the west, Yaleshwaram in Nalgonda in the central region and Nelakondapalli in the Khammam district in the north. These were mostly Buddhist sites and had architectural remains. We do not find any
evidence of manufacturing activity in this period. The limited raw materials used were gold, iron, copper, limestone and shell. The whole pattern of exchange was restricted and most of the materials used were available from within except shell. This was possibly procured from the coastal region. The habitation in this period was more elaborate in the coastal region as shall be surveyed in the next section.

**Andhra Coast**

This was an important region for its maritime trade throughout the period from early historical times. It has Buddhist sites such as Bavikonda, Thothlakonda and urban centres as Peddavegi (Fogelin 2006).

**Sitewise Distribution of Manufactured Objects**

Chart 16c shows the different raw materials used in the region. These are copper, bronze, iron, silver, carnelian, crystal, quartz, limestone, sandstone and shell.

**Evidence of Manufacture of Finished Products At Different Sites**

No evidence of manufacture can be seen at any of these sites.

**Character of Sites and Distribution of Manufactured Objects**

Peddavegi was the ancient site of Vengipura in west Godavari. It was the capital of the Salankayana, Vishnukundin and Chalukyan dynasties from the third to the eleventh centuries A.D. The coins of these powers have been obtained from Peddavegi. Huien Tsang mentioned a stupa built here by Ashoka (IAR 1984-5: 7). During the Vishnukundin period (5th-7th c.AD), the stupa became insignificant and was replaced by the Brahmanical temples of soft red sandstone. The ruins in the site in the early Chalukyan period was the Parameshwara temple whose basement was exposed in excavations (Sarma 2000: 16-17). Sankaram in the southwest of Thotlakonda was a monastic site of the early centuries A.D. Rock-cut cells with figures of the Buddha were discovered here (Fogelin 2006: 103). Vaddamanu in Guntur district revealed a layer dated c. 500-600 A.D assigned to the Vishnukundin period. An assembly hall of period IV was partially excavated in this phase (IAR 1984-85: 3). Rajamundhry had a continuous habitation from the second-eighteenth centuries A.D. Limited excavation revealed a stupa, a brick wall of a monastery. The late centuries A.D revealed Hindu bronze figurines (Fogelin 2006: 105).
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Peddavegi</th>
<th>Peddakonduru</th>
<th>Pavuralakonda</th>
<th>Salihundam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>coins, rings, pieces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>blade, spoon, chisel, nails</td>
<td>stylus, knife, nails, coins, arrowheads</td>
<td>blade, bar,</td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>coin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Carnelian intaglio</td>
<td>beads</td>
<td>Quartz, Crystal</td>
<td></td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td>Limestone plaque, Sandstone plaque Limestone, linga, Sandstone architectural remains</td>
<td>Limestone linga</td>
<td>Sandstone disc</td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td>bangles, beads, discs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SITEWISE DISTRIBUTION OF RAW MATERIALS IN ANDHRA AND ANDHRA COAST c. 500-750 A.D.

LEGENDS
Cu - Copper
Fe - Iron
Co - Gold
Bo - Bronze
Li - Limestone
+ - Shell

MAP-55
The resource usage at the site of Peddavegi is reasonable. Copper and iron has been used as coins, spoons, nails, chisels, blade and rings. A single silver coin of Vishnukundin dynasty has been found. The use of semi-precious stones is not profuse. We find a carnelian intaglio. Limestone and sandstone plaques and a Shivalinga are some of the objects made of ordinary stones. Shell is used as bangles, beads and discs.

Smaller sites with early medieval structures/temples were found in explorations. Totaravullapadu in Krishna district; Ambadipudi, Daivalarapudu, Dharmavaram, Dhenukonda, Mukteshwaram, Kalavakur and Kondamunjalaru in Prakasam district have exposed cultural assemblage of the early medieval period (IAR 1977-78: 2). Dachapalli in east Godavari district is a small site and has yielded a limestone Shiva linga which is an interesting find from here (IAR 1989-90: 1). Jaggayapeta in Krishna district was a stupa site and explorations revealed that the stupa was in existence till sixth-seventh centuries A.D (Babu 1999: 39). An early medieval period cultural assemblage and sculptures were found at Gangavalle in Jaggayapeta area (IAR 1984-85:4). Ghantasala in Krishna district revealed a long sequence of occupation. It ranged from Satavahana period to post-Ikshvaku period habitation. The post Ikshvaku period datable to the fifth century onwards revealed a square brick structure with extant brick courses raised over a high square brick platform. A stucco head of Yakshi was a noteworthy find (IAR 1984-85:5). Peddakonduru in Guntur district revealed in excavations a temple of Anandeshwara which had a unique linga within the square sanctum. This ardhanari linga was the first of its kind in the region and can be assigned to the post-Ikshvaku period possibly of the Anandgotrin dynasty (IAR 1986-87: 9). Another site of Pavuralakonda in Vishakhapatnam district was exposed in a layer belonging to the Vishnukundin period with antiquities. They included brick-structures, coins, pottery, terracotta beads, figurines and iron nails (IAR 2001-02: 12).

The town of Dhanyakataka served as the capital and head quarter of several known dynasties such as the Pallava rulers, Salankayanas, Vishnukundins and the Chalukyas of Vengi (Sarkar and Nainar 1972: 8-9). The great stupa is called Mahachaitya and has the paved pradakshina patha with a circular alignment of the railing, represented by several pillars or ayaka-stambhas Sarkar and Nainar 1972: 9). In the period between the fourth to the sixth century A.D there were several sculptures and metal images ascribed to this
phase. A few bronze images of standing Buddha were assigned to this period. On the basis of sculptures alone, it is possible to establish that the *Mahachaitya* continued as a centre of Buddhism till about tenth century A.D (Sarkar and Nainar 1972: 16-17). Excavations yielded Vishnukundin coins and crystal relic caskets dated between sixth and eleventh centuries A.D of period V (Babu 1999: 24-5). Sankaram, southwest of Thothlakonda, was an important Buddhist establishment in the fifth century AD. The rock cut cells contain the figure of the Buddha but later centuries revealed the figures of Siva and Ganesha (in the ninth century A.D.) It attests to the use of the site until the ninth century A.D but not solely by the Buddhists (Fogelin 2006: 103). Rajamundry exposed in limited excavations layers datable from the second century to eighteenth century. The earlier period revealed remains of a stupa. However later levels revealed Hindu bronzes (IAR 1979-80:1). Ramatirtham in north coastal Andhra Pradesh exposed layers dated from first to ninth century A.D. Though the earlier levels exposed stupas and other Buddhist structures, the latest datable finds include Jain images from eighth-ninth centuries A.D (Fogelin 2006: 105). Mukhalingam is a site with a long chronology. The site dated from the first century BC to ninth century A.D. Several fragments of ninth century Buddha images have been found at the site (Fogelin 2006: 106). Salihundam is a Buddhist site in the Srikakulam district. Salihundam and the area around it formed part of ancient kingdom of Kalinga in the Mauryan period (Subramanyam 1964: 10).The site had a substantial Kushana and Gupta period layer as well. The excavations revealed a layer dated second to the sixth century A.D. The structures contain monasteries and several other religious structures. The later images show the influence of Vajrayana Buddhism. Numerous inscriptions are dated between second and the sixth century A.D (Fogelin 2006: 106).

*Raw Materials Available Within The Sub-Region*

The presence of copper, iron, and sandstone and shell has been noted on p. 139

*Limestone*

Limestone is available in the Palnad region at Dachhapalli in Guntur region. Also crystalline limestone is reported from Vinjamuru area in Nellore district (Rajgopal 1977: 16; 1978: 7). This has also ben discussed on p. 252.
Raw Materials Available Outside The Sub-Region

KARNATAKA

Crystal

Crystal is associated with pegmatite veins in north-south direction on east of Mangalur schist patch in Shorapur taluk in Gulbarga district (Sri Sathyan 1966: 23).

ANDHRA PLATEAU

The availability of semi-precious stones have been noted on p. 133.

Silver

Lead and galena is available in the Chelama area in Nandyal taluk there are occurrences of galena. There are several old workings in the area. (Rajagopal 1974: 14)

Epigraphic, Numismatic and Literary Linkages

The Early Chalukyas of Badami under Pulakesin II formed a powerful empire. The Aihole inscription of Pulakesin II (634-35 A.D) gives a graphic account of his victories. He is known to have besieged the Kadambas of Vanavasi, Gangas of south Mysore and the Alupas of Shimoga district in the different parts of Karnataka (ed. Majumdar 1954: 235). The establishment of the eastern Chalukya dynasty at Pishthapura in Godavari district substantiates the hold of the Chalukyas over a vast region in the Deccan. Grants of seventh century of Western Chalukyas were found in Anantpur and Bellary district, Kadur district in north Mysore in Karnataka (Sewell 1932: 26). Grants of the Western Chalukyas have been found from Badami, Aihole and Pattadakal in north Karnataka (eds. Krishnappa and Gopal 2000: 37). Such records have been found in the Andhra region as well. These are, grant by Vinayaditya (689-90 A.D) from Nandyal and Kurnool district of Andhra (Sewell 1932: 26). Several grants of Pulakesin II Chalukya prove his dominance over this region. These are Hyderabad plates, Kopparam plates of Pulakesin II, Peddavadaguru stone inscription of Satyasraya, Kurnool plates of Adityavarsa, Nilluru stone inscription of Kirtivarman II and so on (eds. Krishnappa and Gopal 2000: 36-37).

The ancient city of Vengipura in the post-Gupta period was in and around the Andhra coast. The spread of Buddhist sites is striking in this portion of coastal Andhra. Sites such as Sankaram near Thotlakonda, Ramatirtham, Mukhalingam, Rajamundry and Salihundam showed the importance of Buddhist creed this region. Resource wise, the
region yielded few artifacts. Hence we do not see the variety in resource utilization. A few resources that were available within the region were copper, iron, limestone, sandstone and shell. The resources obtained from outside were silver and semi-precious stones possibly from Andhra mainland and crystal from north Karnataka region. The resources used did not include any specialized materials such as lapis lazuli. The contact zones of this region were restricted. The lack of any manufacturing activity is noteworthy for an urban site like Vengipura.

Karnataka

The region has several early historic sites from the time of the Mauryas. Some of them are Bramhagiri, Chandravalli, Banavasi, and Vadgaon-Madhavpur and so on. Occupation of these sites continued till the early centuries A.D In the post-Gupta period we come across sites as Talkad, Hampi and Honnudiker with cultural material of the period.

Sitewise Distribution of Manufactured Objects

Chart 17c shows the different raw materials used in the region. These are copper, bronze, iron, lead, gold, silver, quartz, agate, rock-crystal, crystal, carnelian, chalcedony, beryl, amber, amethyst, jade, mica, malachite, fuchsite, quartzite, granite, soapstone, bone ivory and shell.

Evidence of Manufacture of Finished Products At Different Sites

At Gudnapur in Uttara Kannara district a goldsmith’s design mould was found. A rectangular solid cast iron bar used by goldsmith's for making ornaments was also found (IAR 1990-91:32).

Character of Sites and Distribution of Manufactured Objects

The urban sites of the region include Talakad (Mysore district) and Hampi (Bellary district). Talkad is a popular town known as the capital of the western Gangas who ruled from the sixth century A.D onwards. In one of the grants of king Sivamara (c.713-14 A.D) the site is referred to as Vijayaskandhavara. Inscriptions of Ganga rulers are also found here. The Ganga rulers are known to have built temples dedicated to Lord Shiva at this site (eds. Devaraj, Murthy, Krishnamurthy and Swamy 1996: 3). Hampi is another site with magnificent temples of the early Chalukyas. Excavations revealed stone objects including
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Talkad</th>
<th>Honnudiker</th>
<th>Hampi</th>
<th>Guddnapur</th>
<th>Nagaral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>pieces,buttons, rod, needle, antimony rod</td>
<td>Bronze statue rings</td>
<td>coins</td>
<td>casket</td>
<td>coins</td>
</tr>
<tr>
<td>Iron</td>
<td>pieces, ring, clamp, spearhead javelin head, door hinge</td>
<td>rings, nail, needles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td></td>
<td>ingots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold</td>
<td>pieces</td>
<td>buckle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver</td>
<td>rings</td>
<td></td>
<td></td>
<td></td>
<td>objects</td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td>Quartz, Agate beads, Crystal</td>
<td>Rock Crystal knobs, lids</td>
<td></td>
<td></td>
<td>Carnelian bead</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quartz, Chalcedony beads, Beryl, Carnelian beads, Amber, Amethyst beads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lapis Lazuli</td>
<td>beads</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Stone</td>
<td>Mica chips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quartzite, Fuchsite beads, Serpentine beads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granite</td>
<td></td>
<td></td>
<td></td>
<td>querns,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>sculptures</td>
<td></td>
</tr>
<tr>
<td>Steatite/Soapstone</td>
<td>Soapstone beads, reel/spool</td>
<td>Soapstone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shivalingas,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>sculptures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td>beads, bangles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ivory</td>
<td>beads, bangles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>comb, pendant</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
fragments of architectural remains and sculptures stylistically dated to the later Chalukyan period (IAR 1983-84: 38). Explorations in Sannati in the Gulbarga district have brought to light sites in and around this region dating from the prehistoric to medieval cultures especially with respect to art and architectural activities between the second to the eighteenth centuries AD (Parashar-Sen 2004: 141). An ancient quarry site was found at Pattadakal from where quality rock material was extracted for construction of Badami Chalukyan edifices of eighth century A.D. The site yielded eight label inscriptions in character of eighth century A.D (IAR 2001-02: 334; Singh 2009:631). Banavasi was an important site of the early historical period. Period IV here has been assigned to post-Kadamba period. This strata yielded disturbed layers and fragmentary sculptures of Kali, brick bats and a few dull red ware and gray ware sherds (IAR 1994-95: 41).

The resource-use at the urban sites is profuse. Different kinds of raw materials have been used for the artifacts. Copper and iron has been amply used. Copper pieces, buttons, needle and antimony rods are some of the forms of their use. At Hampi copper coins of Chalukyas has been found. Iron artifacts are household articles and weapons such as javelins, spearhead, nails, rings, clamps, door hinge and so on. Lead ingots are found at Hampi. Gold pieces and buckles and silver rings are found at Talkad and Hampi respectively.

The use of different varieties of semi-precious stones is seen at Talkad. They are quartz, agate, crystal, chalcedony, amethyst, amber, jade and carnelian beads. Lapis lazuli beads are also seen at Talkad. The variety of ordinary stones is also seen at Talkad only. These are mica chips, quartzite, malachite, fuchsite and serpentine beads. Granite querns and sculptures are found at Hampi. Soapstone beads, Shivalinga and spool are other uses of resources. Shell, ivory and bone have been used as bangles, beads, comb and pendants.

The second section of settlements includes Honnudiker in Tumkur district. Herkal in northwest of Bagalkot has revealed a long sequence of cultures from Paleolithic to to early and medieval historical culture (Murthy, Sures, Pooncha and Basavaraj 2001: 11). At Gudnapur in Uttarakannada district were exposed in exploratons two brick structures of fifth-sixth centuries A.D. Excavations laid bare rectangular pillared verandah on one
side of the main brick structure. On either end of the verandah walls were raised to form rooms. A narrow pathway of brickbats was found between the central platform and the rectangular hall. Pottery comprising red slipped ware, greenish ware and vessels such as lids, spouts and sprinklers were found. Beads of sem-precious stones and a gold inlaid stud was also found from this layer (IAR 1990-91: 31-2). The only artifact category from Honnudiker is bronze statues. At Ajjibal in Sirsi Taluk a temple datable to the seventh century A.D was found (IAR 1983-84: 46). Hanumankop in Dharwad district is another small site from which brick structure of post-Kadamba period and later structures were unearthed (IAR 1994-95: 35).

Buddhist sites are noted in the region. At Aihole a double storeyed Buddhist Vihara was exposed assigned to the Chalukyan period (596-8 A.D). At Badami some unfinished images of Avalokiteshwara and Buddha sculptures were found. The Chinese traveler Huien Tsang is stated to have visited Badami and had noted the existence of Hinayana and Mahayana Buddhists at that place. A reference to the gift of a land to Buddhist vihara and sangha at Melkote in Mandya district by a Ganga ruler is also known which underlines the spread of Buddhism in the Karnataka region (Sarma and Vara Prasada Rao 1993: 112-113).

**Raw Materials Available Within The Sub-Region**

The presence of gold, iron, copper, lead and silver, soapstone, green quartzite, amethyst have been noted on p.146, 147.

**Granite**

Banded granite gneiss is quarried at a number of places near Bondal, Thokur and Paddushedde in the Mangalore taluk (South Kanara District Gazt. 1973: 13).

**Semi-precious stones**

Different varieties of semi-precious stones are found in the region. These have been noted on p.140, 147,148.

**Mica**

Fuchsite
Quartzite is found Yarehalli in the Chikmaglur district (Karnataka State Gazt Chikmaglur district 1981: 13).

Shell and Ivory: These could be readily available from the Kanara coasts in the west of Karnataka.

Raw Materials Available Outside The Sub-Region
The presence of lapis lazuli (Afghanistan) has already been noted on p. 31.

KERALA
Amber
Amber occurs frequently with carbonaceous clay and woody horizons in Alleppy and Kottayam district (Ramachandran 1986: 86).

ANDHRA PRADESH
Serpentine
Serpentine occurrences are at Chintalacheruvu in Gooty taluk, Kondapuram in Tadpatri taluk in Anantpur district (Shivashankaranarayana 1970: 25).

Epigraphic, Numismatic and Literary Linkages
The epigraphic evidence of the early Chalukya rulers like Kirtivarman I (566-7-597-98 A.D), Mangalesa (597-610 A.D) and Pulakesin II (610-642 A.D) gives us an elaborate picture of their hold over a vast territory from west coast to the east coast. The Mahakuta Pillar inscription of Mangalesa describes the victory of Kirtivarman I over rulers of Vanga, Anga, Kalinga, Kerala, and Ganga among many others (ed. Majumdar 1954: 232). The famous Aihole inscription of Pulakesin II describes his military expedition and conquest of eastern Deccan including the regions of Kosala, Kalingas and besiege of the fortress of Pishthapura in the Godavari district. The most profound evidence of extension of Chalukyan rule is the establishment of the eastern Chalukya dynasty under Pulakesin II’s younger brother Vishnuvardhan in the region (ed. Majumdar 1954: 238). Several inscriptions of the western Chalukyas are found at Nellore, Kurnool and Anantpur districts of Andhra (Sewell 1932: 24, 25, 26). The Hyderabad plates
of Pulakesin II, Kopparam plates, Nilluru stone inscription of Kirtivarman II and so on are some of the epigraphic evidences of extension of Chalukyan rule in the region of Andhra.

Karnataka was a well settled region in the post-Gupta period with a few cities. Talkad in Mysore district and Hampi in Bellary district were the well known urban sites. Talkad was famous as the capital of the Western Gangas was a flourishing centre. The volume and variety of artifacts speak of its affluence. Manufacturing activity is also noted in the region. Hampi was a thriving religious centre in the region. However, the settlements in the post-Gupta period was not widespread. The variety of raw materials used was mostly available within the region. These were gold, copper, iron, soapstone, granite and a few varieties of semi-precious stones.

The region was dependent on neighbouring as well as far off zones for obtaining certain resources. The Andhradesa and Kerela were the neighbouring territories from where different types of semi-precious stones were brought. Non-local resource such as lapis lazuli was possibly obtained from Afghanistan.

**Tamil Nadu**


**Sitewise Distribution of Manufactured Objects**

Chart 18c shows the different raw materials used in the region. These are copper, iron, gold, amethyst, agate, carnelian, steatite and shell.

**Evidence of Manufacture of Finished Products At Different Sites**

*Iron:* Iron slags were reported from Palur in Kanchipuram district and the area seemed associated with iron smelting activity (IAR 2001-02: 232).
<table>
<thead>
<tr>
<th>Raw Materials</th>
<th>Uraiyur</th>
<th>Pallavamedu</th>
<th>Perur</th>
<th>Kanchipuram</th>
<th>Adiyamankottai</th>
<th>Tikkampulyur</th>
<th>Alagarai</th>
<th>Kaveripatnam</th>
<th>Alagankulam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper/Bronze</td>
<td>antimony rods, objects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>nails, rings, sword</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron</td>
<td>objects</td>
<td>nails, beads, knives, hook, small spears, arrowheads, sickles</td>
<td></td>
<td></td>
<td>arrowhead, nail, nut cracker, arrowheads</td>
<td>daggers, knives</td>
<td></td>
<td></td>
<td>chisel</td>
</tr>
<tr>
<td>Gold</td>
<td>pieces of chain</td>
<td>bead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Precious stone</td>
<td></td>
<td>Amethyst, Agate beads, Carnelian beads</td>
<td>Carnelian, beads, Jasper, Crystal, Amethyst</td>
<td>Garnet beads, Agate beads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shell</td>
<td></td>
<td>bangles</td>
<td>bangles</td>
<td></td>
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</tr>
</tbody>
</table>
MAP-57

SITEWISE DISTRIBUTION OF RAW MATERIALS IN TAMIL NADU AND KERALA, C. 500-750 A.D.

Legend:
- Cu - Copper
- Fe - Iron
- Go - Gold
- Am - Amethyst
- A - Agate
- Cr - Crystal
- J - Jasper
- G - Garnet
- C - Carmelian
- St - Steatite
- + - Shell
**Bead Manufacturing:** Vadavur in the Chingleput district exposed a manufacturing site for beads. The site yielded beads in various stages of manufacture, crucibles, and other equipments. The beads were made of agate, chalcedony, glass and so on (IAR 1979-80: 68).

**Shell:** A large quantity of waste shells was found at Tikampuliyur in Tiruchirapalli district from Period II (3rd/4th c.-9th/10th c.A.D). These evidences indicated a factory site for the manufacture of shell bangles and beads (Ramachandran 1980: 116).

**Character of Sites and Distribution of Manufactured Objects**

Uraiyur was the ancient capital of the Sangam Cholas in the early centuries A.D. Period II (4th-6th/7th c. A.D) and revealed structural remains of rammed clay flooring composed of rammed brick-bats and rubble. A few antiquities were also revealed (IAR 1965-66: 26). Stratum III was assigned a post sixth century A.D date after a break from the previous period (Ramachandran 1980: 119). The artifacts are of copper as antimony rods, iron as unspecified objects and pieces of a gold chain. Tikampuliyur in Tiruchirapalli district has a Period II designated as the early medieval culture dated third-fourth century A.D to ninth-tenth centuries A.D (Mahalingam 1970: 15). Human and animal figurines in terracotta and a few other antiquities were found at the site. There was large scale building activities in this period. Rubble and brick walls, baked and unbaked were found. A double granary of two square rooms with two side projections was found here (Ramachandran 1980: 116-17). Similarly, Alagarai, a site that served as an embankment in the ancient times also had a stratum assigned to the early medieval period (Mahalingam 1970: 65). Copper coins of early medieval period and shell bangles were reported from this site (Ramachandran 1980: 118). Kaveripattinam or ancient Pumpuhar was the well known port town of the early Chola rulers in Tanjavur district. Epics such as *Silppadikaram* and *Manimekalai* dated to fifth-sixth centuries A.D relate the stories of entering Puhar, the port city on the Coromandal coast (Soundara Rajan 1994: 8). Excavations revealed one full wing of the monastery with oblong rooms. A compound wall was found surrounding the monastery. A small brick structure was found outside the wall with a few copper coins, painted stucco fragments and terracotta images of the early medieval century were reported (IAR 1965-66: 24).
Arikamedu, the famous Indo-Roman trading post on the Coromandal Coast of the early centuries A.D revealed in recent excavations a Phase G assigned a date sixth to tenth centuries A.D (Begley 2004: 12). No antiquities have been reported from this phase. Excavations at Alagankulam have opened up a new chapter in Indo-Roman history with the discovery of Roman coins upto fourth-fifth centuries A.D. This site in Ramanathapuram was once a port on the east coast during c. 500-1200 A.D (ed. Sridhar 2005: 4). The excavations revealed various stages of occupation and Period IV dated 500-1200 A.D was exposed. The pottery from this phase was coarse red ware, Chinese celadon ware, porcelain ware and so on. The soil was associated with brickbats and tile pieces (ed. Sridhar 2005: 10, 14). Perur is another site with remains of the early medieval period. Habitation showed continuity from the sixth to the ninth century A.D (ed. Sridhar 2005: 58). Excavations revealed levels dated third-sixth centuries A.D and sixth-ninth centuries A.D respectively. Period III-third-sixth centuries A.D exposed habitation under the roof of the grooved tiles (ed. Shetty 2003: 14, 49). Structural activity of walls of baked bricks, covered stone drains was reported (Ramachandran 1980: 114; IAR 1970-71: 34). An important discovery of a small hip-hop with Chera emblem engraved with two lamps on either side is repoted from Perur. Other artefacts are terracotta figurines from the early medieval period (IAR 2001-02: 230). Ukkirankottai in Tirunevelli district was the fortified city of Karavandapuram of Pandyan period. Excavations revealed a wide wall made of mud and mud-bricks and a moat. The excavation within the walled area revealed a single culture deposit datable to the seventh to the tenth century A.D (IAR 1970-71: 35). Korkai in Teni district was a royal centre of early historic period. The early medieval period revealed a Jain sculpture at the site (Rajan, Selvakumar and Yatheeskumar 2009: 464).

At Adiyamanakottai, Period II dated second century to ninth century A.D has revealed a few antiquities and a brick structure with post holes at regular intervals. This might have been the raised platform of a building (IAR 1980-81: 65; 1981-82: 63). Modur in the Dharmapuri district has a period III dated to c. 500-1400 A.D. Coarse red ware pottery is associated with this period. This period also revealed terracotta figurines of Lord Ram and Mother Goddess, spindle whorls and shell bangle pieces, smoking pipes, hip-hops and graffiti marked pottery (ed. Sridhar 2005: 44). Mangudi in Tirunevelli district has revealed a stratum dated 600-1400 A.D. Excavations revealed
relics, potsherds, coins and five inscribed potsherds in Tamil Brahmi (ed. Shetty 2003: 51). Boluvampatti in the Coimbatore district was once a flourishing centre of trade activity. Excavations here revealed a terracotta seal with royal emblem bow, seated tiger and fish with an inscription ‘Varman’ of seventh century A.D. Brick structures were also exposed (ed. Sridhar 2005: 61; Rajan, Selvakumar and Yatheeskumar 2009: 92). Also Panayakulam in Dharmapuri district has revealed in excavations potsherds, terracotta figurines, bricks dated to the eighth century A.D, bones and herostone of seventh century A.D in Vatelluttu characters. The excavations proved a continued occupation of this site from the sixth to the twelfth centuries A.D (ed. Sridhar 2005: 63). In the Chingleput district, early medieval habitation sites were noticed at Kambarajapuram, Kambavariyapalaiyam, Peramannalur, Mulapattu and Pudupakkam. The site of Mulapattu yielded a terracotta human head and at Vadavur a bead manufacturing activity was noted here (IAR 1979-80: 68).

The artifacts are of iron (nails, rings) and gold bead at Perur and shell bangles at both these sites along with Modur. At Adiyamanakottai we have the use of iron in somewhat more varied forms. These are nails, beads, sickles, knives, spears and arrowheads. Steatite points are also found here.

Other sites where early medieval structural remains and habitations have been reported are the following.Govintaputtur Ariyalur district has revealed a early medieval Shiva temple (Rajan, Selvakuar and Yatheeskumar 2009: 67); Gudimangalam in Coimbatore district has a early medieval habitation mound and inscription (Rajan, Selvakuar and Yatheeskumar 2009: 95); Akilantapuram in Erode district has revealed an early medieval habitation mound (Rajan, Selvakuar and Yatheeskumar 2009: 191); Saluvankuppam in Kanchipuram district has rock cut caves and Pallava inscriptions of seventh-eighth centuries A.D (Rajan, Selvakuar and Yatheeskumar 2009: 255); Karai in Perambalur distr has produced an early medieval memorial stone inscription (Rajan, Selvakuar and Yatheeskumar 2009: 348); Neganurpatti in Vellore district has an early medieval habitation mound (Rajan, Selvakuar and Yatheeskumar 2009: 567).

Kanchipuram is the religious site of the region. The Buddhist *stupas* here are witnessed through structural remains of shrine chamber and inscribed potsherds.
bearing the name of a Buddhist monk (IAR 1970-71: 32). At the site of Pallavamedu a structural phase IB assigned fourth-ninth century A.D during the early Pallava rulers produced amphorae jars of local manufacture and stone objects. The structural remains were the base of a votive stupa (Ramachandran 1980: 95-96). Mamallapuram in the Kanchipuram district exposed early medieval structures of rock cut caves, monolithic temples of the Pallava period dated seventh-eighth century A.D (Rajan, Selvakumar and Yatheeskumar 2009: 247; IAR1990-91: 63). At Kanchipuram we find a few semi-precious stone beads. These are agate, carnelian and amethyst. Mahabalipuram was a noted site of the Shore temple of the early eighth century A.D built by the Pallava rulers. It exposed free standing monolith rathas or stone replicas of structural temples. Sculptures from Mahabalipuram reveal the beginning of Pallava art in the seventh-eighth centuries A.D. The art form reached its peak in the later period under the Cholas (Chakrabarti 2006: 464, 470).

Raw Materials Available Within The Sub-Region

The presence of gold, copper, iron, steatite and shell have been noted on p. 155.

Amethyst

Various stones are found in the laterite rocks of the western and upland regions in the neighbourhood of Vallam in Tanjore district. The chief varieties are amethysts among other stones (Baliga 1957:6-7).

Raw Materials Available Outside The Sub-Region

KARNATAKA

Semi-precious stones

The varieties of semi-precious stones have been noted on p.147.

Epigraphic, Numismatic and Literary Linkages

The affinity between Tamil land and Karnataka is established by records of the conflict between the western Chalukya rulers of Badami and the Pallavas of Kanchi. The Western Chalukyas who ruled in extensive region in the Deccan from the sixth to the eighth century A.D were an indigenous Kanarese family who ruled from Badami
in the Bijapur district (ed. Majumdar 1954: 227). The Aihole inscription of the illustrated ruler Pulakesin II (c.610-11-642 A.D) elaborated his military conquests and down south Pulakesin II is known to have defeated the Pallava ruler Mahendravarman I and cornered him at the capital of his kingdom at Kanchi. This is further corroborated by the Pallava Kakasudi grant. It recorded that the western Chalukya ruler had penetrated to the heart of the Pallava kingdom (ed. Majumdar 1954: 238).

The political conflict between the two prominent rulers of the south continued in the eighth century A.D as well. The Kanchi stone inscription of Vikramaditya II (Pulakesin’s successor) records the conquest of this ruler over the Pallavas (eds. Krishnappa and Gopal 2000: 36). Another fragmentary record of the Chalukya monarch Kirtivarman II is found at the Rajasimheshvara temple at Kanchipuram (ed. Majumdar 1954: 247-48).

The Tamil country in the post-Gupta period had a wide spread. The number of urban areas is several. These are Uraiyur, Alagankulam, Kanchipuram, Tikkampuliyur, Alagarai and Kaveripattinam and Korkai. It is worth noting that these sites mostly yield sporadic early medieval structural remains. Some of them also produce artifacts such as terracotta figurines and pottery of this period. On the whole the artifactual yields from these sites are not much. Several smaller sites such as Boluvampatti, Modur, Mangudi, and Adiyamanakottai and so on are also reported with cultural material of the early medieval period. Manufacturing activity is found from Vadavur in Chingleput district where bead manufacturing activity was reported. Also, manufacture of shell artifacts is known from Tikkampuliyur in the Tiruchirapalli district. Resource procurement during this period was possibly done mostly from within. Some resources such as gold, copper, iron, amethyst, steatite and shell were locally available. Semi-precious stones such as agate and carnelian were possibly obtained from Karnataka region adjoining the Deccan Trap. The political connection between these regions is attested by the epigraphic records of the Chalukya and the Pallava dynasties. It is not improbable that such political connections also paved the way for movement of people and trade.

Kerala

Kerala lies on the western coast of Indian subcontinent between the Sahyadri and the Arabian Sea. The western coast also comprises the Konkan region, Karnataka coastal
area and Kerala/Malabar region (Singh 1971: 907). These texts of the early centuries A.D mainly refer to Chera and Pandyan kingdom and their chief exports such as stones of all kinds and so on. Mention is found of Muziris and Nelcynda and Cochin that were important trade centres in the early centuries AD in Kerala (Schoff 1995: 287). The Raghuvamsa of Kalidasa described the victory of Raghu over the Pandyan kingdom from the banks of the Kaveri to Cape Comorin including the Malabar Coast on the west. It further refers to the crossing of the Sahyadri range by Raghu to defeat the kings of Kerala and Konkana (Law 1985 reprint: 166-67). Archaeologically, the region of Kerala has mainly megalithic sites such as Porkalam, Cheramangar in Trichur district, and Kuppakolli in Wynad district and Naduvil in Kannur district. Pattanam was an important site of the Indo-Roman trade in the early centuries A.D. Sites with early medieval period habitation and remains are very few and will be surveyed in this section.

**Character of Sites and Distribution of Manufactured Objects**

It is opined by Rajan Gurukkal (1999: 25-37) that the megaliths of Kerala, Sri Lanka and Tamilnadu are assigned to the period between mid-1000 BC and the beginning of the 1000 A.D on the basis of comparative archaeology. In this light a few sites can be surveyed again.

Pattanam south-east of Periyar river was the first early historic site in the Kerala region with strong evidence of an Indo-Roman trade in the early centuries A.D. Sherds of Italian sigillata and other pottery finds have been indicators of this connection from early historic levels. The excavations uncovered a number of artifacts such as pottery, beads indicating wide contacts during the early historic c. 300 B.C-500 A.D and early medieval period dated c.500-1000 A.D (Shajan, Cherian, Tomber and Selvakumar 2008: 1).

In the light of meager archaeological evidence for the early medieval period, it is prudent to fall back on other sources of information for the period. The Pugalur inscriptions give the names of the Chera rulers of the early centuries A.D. However Nagaswamy (1981: 37) observes that little is known about the Cheras between the third and the eighth centuries A.D when the Kalabharas, an obscure dynasty invaded the Tamil country. The epigraphical evidence gives a glimpse into the transformation
of socio-economic patterns after the post-Sangam age and the Kalabhara interregnum. Gurukkal (1999:36) refers to 4th-5th c.AD texts such as *Kilkanakku* that insist on the significance of peace, obedience and morality indicating the state of anarchy in the region during the period. The Pulankurichchi rock inscription of late fourth century A.D is the first known record of a *brahmadeya* village in Tamilnadu and indicates the growth of cultivation prior to the Kalabhara raids. The later inscriptions refer to the transformation of these brahmana households into corporate settlements and emergence of a new socio-economic pattern (Gurukkal 1999: 37). The early sixth century A.D grammatical treatise *Tolakapiam* (Porul) represents the early beginnings of a society primarily based on wet-land agriculture. A detailed study of the inscriptional sources is needed in order to understand the rejuvenation process of the socio-economic structure along with the rise of the imperial powers in the ninth century A.D. Archaeology is unfortunately silent on the process of revival.