

DISPERSAL OF SETTLEMENTS IN THE MIDDLE GOMATI BASIN; AN ARCHAEOLOGICAL INVESTIGATION

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INTRODUCTION

Like most of the ancient cities of the world, those of India were mostly located on the banks of rivers. These rivers can be held responsible for bringing prosperity, besides providing water to the city dwellers. But one may ask what happened in those fairly isolated areas of northern India between the major navigable rivers. What kind of development of urban life took place there?

In order to examine this question a relatively isolated portion of the middle Gomati basin, coming under the administrative boundary of Sultanpur district, was surveyed. This area is located in the western part of eastern Uttar Pradesh. The river Ghaghara (Sarayu) flows to the north of this area while the river Ganges, on the banks of which many important cities are located and which has been a holy river since ancient times, flows to the south (Fig. 1).

The district of Sultanpur, located at approximately 26°N, is marked by slight physical variations. Relief is negligible with a slope of only 1° from northwest to southeast. The topographic monotony of the landscape is broken only by the river bluffs of the Gomati and its channels. The maximum elevation of 105 m in the west and northwest gradually decreases towards the east and southeast to less than 93 m, although shallow depressions provide some undulation.

The district under study is divided by the river Gomati into two unequal parts. The southerly one is larger than the northerly. There is a narrow belt of light sandy soil on both sides of the river, with level tracts of *bangar* further away. These form the main feature of the district. Interestingly, this is the area where archaeological sites occur. Altogether, 97 sites have been explored in Sultanpur district, including a number discovered earlier (Fuhrer 1891:325-330; Cunningham 1972:313-317; Joshi 1986:1-8; Tiwari 1986:1-13). 13 sites only contain stray finds such as stone sculptures, bricks, or architectural and ornamental pieces of stone and are not discussed further. Of the remaining 84 true habitation sites, 12 are on the left bank of the Gomati and 17 are on

the right bank, whereas 54 are located in the Gomati-Sai divide, in a region served by lakes or minor tributaries of both rivers. Most of this last group are located in the low lying *bangar* tracts.

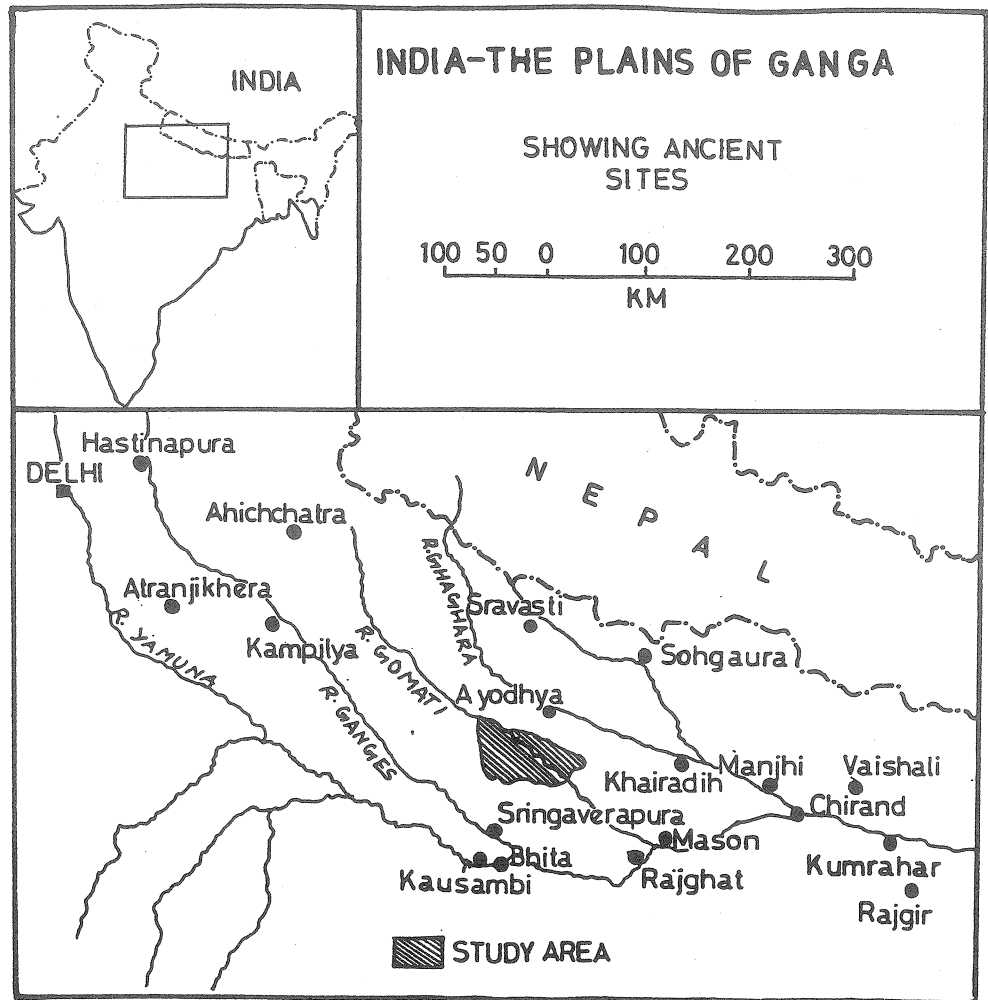


FIGURE 1: MAJOR SITES ON THE GANGA PLAINS

THE SETTLEMENTS

From the survey results the sites were divided into four time periods; before 200 BC, 200 BC to AD 1, AD 1-300 (Fig. 2) and after AD 300. These periods were defined according to dateable items such as pottery, terracotta figurines, sizes of burnt bricks, coins, terracotta seals and sealings. The oldest evidence for settlement found in our surveys dated back to 600 BC, although Sharma (1980:130) has reported Mesolithic sites in this

area with non-geometric microliths. These Mesolithic sites have been associated with phase IIA of Chopani Mando.

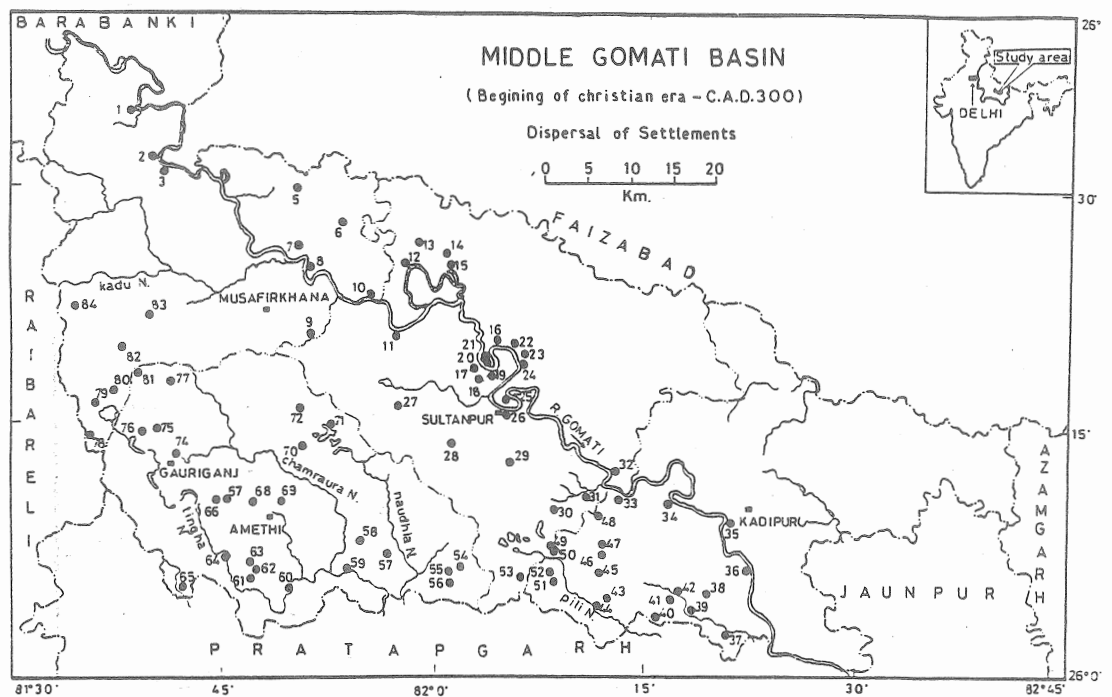


FIGURE 2: SITE DISTRIBUTION IN THE MIDDLE GOMATI BASIN, AD 1-300

The excavated sites at Sravasti and Ayodhya (Sinha 1967:14-15; Lal 1976-77:52-53) are not very far from the study area and these also show an absence of cultural debris older than c.600 BC. This supports and in a way confirms our own field observations. The settlements which came into existence around 600 BC were located predominantly near lakes, with few being along the Gomati itself. Average spacing between these early settlements was roughly between 5 and 15 km and only 12 were found (Fig. 3,A). These sites were all small and lacked burnt brick.

A greater number of settlements appeared during the 3rd century BC, together with new kinds of pottery and the first burnt bricks. A marginal increase in the number of settlements to 8 can be observed along the Gomati, and the increase is considerably more conspicuous with 23 sites in the Gomati-Sai divide. The average distance between settlements now dropped to between 2 and 11 km.

During the 1st and 2nd centuries AD there was a spurt in settlement numbers all over the region. Pottery had now become mostly utilitarian and there were also massive burnt brick structures. The number of settlements along the Gomati now increased

considerably, as also again in the Gomati-Sai divide. The average spacing between two settlements was now reduced to between only 0.5 to 8 km and some settlements covered over 1 km². Out of the 84 habitational sites explored in the study area no less than 82 were occupied during this phase (Fig. 3,C).

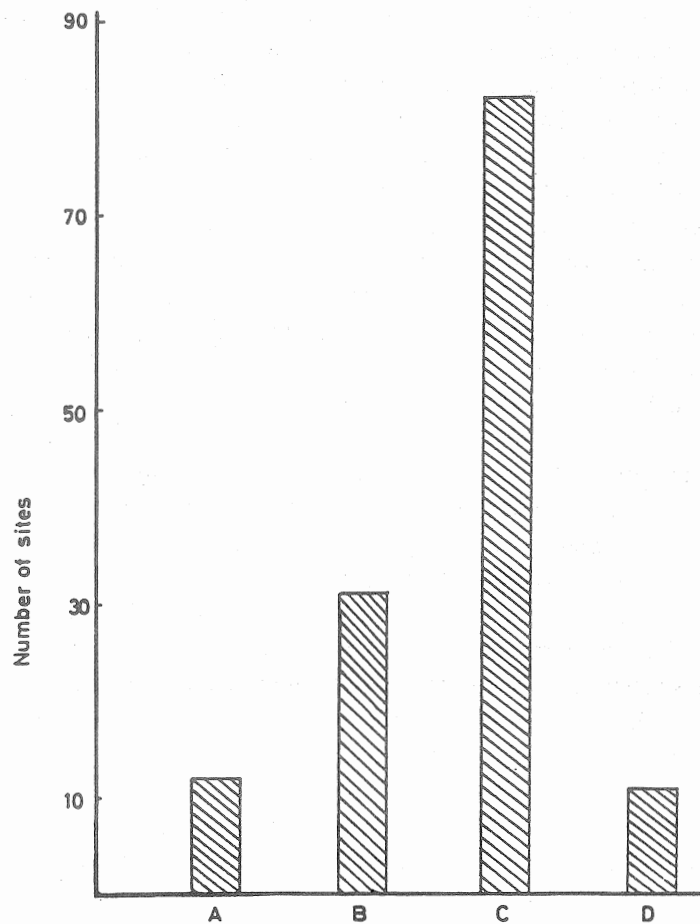


FIGURE 3: NUMBERS OF SITES DISCOVERED BY TIME PERIOD

In the final period, after AD 300, an overall decline of settlements occurred, with only 11 located (Fig. 3,D). It seems that people deserted their habitations, perhaps due to changes in soil conditions. The present observation has to be confirmed by more extensive survey in neighbouring regions, but a similar desertion of sites after AD 300 has been noticed throughout the Gangetic plains. An overall deterioration in the quality of the antiquities as well as in the pottery recovered from these later settlements is observed. The average spacing between settlements now rose again to between 3 and 10 km.

DISCUSSION AND CONCLUSION

The survey region lies between two important lines of communication, the Ghaghara to the north and Ganges to the south. It is, therefore, likely that none of the urban centres mentioned in ancient texts was located in this region of comparative isolation. However, on the basis of the number of settlements located it seems that the Gomati basin did play a substantial role in the development of urbanization in the region.

The river Gomati is still flowing in the same bed as in 600 BC, although some very localised changes in its course have been observed. This can be stated since a number of settlements dated to this time are still located very close to the river course. However, early settlers first preferred the Gomati-Sai divide, and later the banks of the river itself. The latter trend was developed more after AD 1. Considering the fact that the river Gomati flowed in a very uncertain manner it is likely that the earliest habitants settled close to lakes and tributaries since they were not properly equipped to cope with the floods and rigorous flow of the Gomati. Later, when the area became less fertile, they shifted closer to the Gomati banks. The movement from the Gomati-Sai divide towards the Gomati banks can be understood in the light of the present-day geomorphology of the area.

In the central and northwestern parts of the district there is a spread of infertile land. At present this area is very sparsely populated, as attested earlier this century by Nevill (1903). Here the terrain is generally low lying and the drainage is poor. Without sufficient alluvial flushing an increase in surface salinity, giving saline efflorescences locally termed *reh*, has made the land infertile. The situation did not occur around 200 BC, however, and the area appears to have been more fertile then and suitable for habitation. Afterwards, because of an adverse change in the soil condition to infertile *usar* land, people moved to other suitable areas such as the banks of the river Gomati. Settlements on this river might also have served as conduit points for distributing items like iron ore and semi-precious stones which had to be imported from outside.

During the 1st and 2nd centuries AD there was a spurt in the number of settlements as well as in the size of the population, as represented by the 82 settlements of this period. The area of occupation expanded and many smaller settlements emerged. There is continuity between this period and its predecessor in the fact that all the large-sized settlements yielded remains of earlier occupation periods, whereas the smaller settlements mostly were newly founded. These smaller settlements were generally located on natural soil and perhaps served as feeder villages to the larger settlements. The increase in the number of settlements along the banks of the river Gomati during the 1st and 2nd centuries probably suggests that a better understanding of water control had developed by this time.

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