## **Chapter VII: Conclusion and Future Work**

The basic premise with which this thesis started was to ascertain the identity of Jammu plains in the supra regional cultural and political milieu. The literary evidence being scanty, the major focus of investigation was on analysing the archaeological material. The patchy chronological discourse of the area had always been a weak link in ascertaining its cultural continuity. As already discussed in Chapter I, the historiography of the region is said to have started only during the medieval period. Archaeological reconstruction of the area therefore proved to be of utmost importance in ascertaining the antiquity of outer plains of Jammu. The systematic surveys of the present study were aimed at locating settlements from Neolithic to Early Historic period for building up a verifiable and consistent historical narrative of the area and to highlight the contribution of the plains of Jammu in the bigger context of overall cultural development. The research thus helps better understand a coherent picture of the culture history and the evolving settlement pattern of the area.

The outer plains of Jammu have yielded evidence of continuous occupation from Mauryan period (4th/3rd century BCE) to the end of Early Medieval period (9th/10th century CE). The surveys in this study covered 59 sites which also included revisiting 25 sites reported by previous researchers. The material culture analysis supplemented by the settlement pattern reconstruction done as a part of this thesis has contributed in highlighting the importance the region had in the past. A two-pronged analytical method was used in the study for a comprehensive understanding of the past: First, by coalescing the new data generated through the systematic surveys and analysis of the material remains belonging to different periods recovered from the region. In this process, the radiocarbon dates obtained from the two scraped sections of Biyan Tibba and Satowali (Chapter IV) proved to be of utmost importance in fixing the chronological position. Second was, through a review of pre-existing

archaeological and historical data (see Chapter IV) in view of the new findings. It becomes obvious that the development of the area under each chronological period depended on its specific land use pattern and this aspect has been duly highlighted (see chapter VI).

Cultural development in the protohistoric period (Period I) in the outer plains of Jammu is clouded with uncertainty owing to scanty settlements. The pattern of limited occupancy in the region is seen till mid-1<sup>st</sup> millennium BCE. This obvious paucity of occupation in Period I is readily noticeable with only one site each of the Harappan (Manda), Neolithic (Malpur) and PGW (Tibba Name Shah) reported from the region. This overall pattern of cultural vacuum, as stated in the previous chapter, could be due to the lack of external catalytic element (political, religious, or economic) necessary for settlements to take root and flourish in Jammu. As described in Chapter VI, the Jammu region was not preferred for habitation till late medieval period but served as a good commercial hub.

The material culture belonging to Period II (4th century BCE – 1st century BCE/CE) of this research as explained in Chapter V, was located at 17 sites in the outer plains of Jammu, eight discovered by the researcher and nine (four excavated and five explored) documented in IAR by previous studies. The sites, when seen in the background of their spatial location, landscape features and material culture helped to assess their functionality. The spatial location of the newly discovered sites of this period has added a new perspective to the land use pattern by these early settlers. Except for two sites located-on the bank of the river Chenab in the Kandi belt, rest of them are located in the Plains away from major river activity. The sites located on the banks of rivers probably were exploiting the river route for commercial usage. The development of the trading routes along the *Uttarapatha*, overlapping this period, appears to have provided the necessary impetus for settlement to spring up. The area, therefore,

makes a mark on the archaeological map of the subcontinent in this period. Although the definite entities traded along the route involving Jammu is difficult to ascertain, probability of timber, and certain raw materials (e.g., lead and steatite) are important to consider since they historically were commodities of exchange from Jammu (see Chapter VI). It can, therefore, be assumed that the area was a key player in bridging the high elevated areas with mainland India.

The locational analysis of the sites belonging to Period II further highlighted the preferences of the low elevated landscape for the settlement. The sites in the plains (the Sirowal belt) – have shallow underground water level, making the entire belt an agriculturally productive zone. The evidence of rice tampered potsherds from the sites located in the plains belonging to this Period probably points out an intra-zonal agricultural commodity (rice and other produce) exchange between the rainfed Kandi zone (with fewer agricultural resources) and the plains. The absence of any major river in the Sirowal belt worked in favour because the rivers of the research area are known for their furious erosional tendencies (See Chapter VI).

As has been discussed in Chapter VI, small village settlements of this period were developed within 40 km diameter, indicating the networking of sites for cultural and commercial interactions, with a few sites relatively bigger in size leading to the process of site structuring in later period. The prominence of Jammu's outer plains in the regional context grew because of this trading feature. The area, with its small settlements, appears to have catered to the needs of the large urban centres around it throughout its history.

Although urbanism is typically associated with settlements with an urban character and the focus of attention of scholars has been on urban settlements, this study emphasises the need for conducting research in areas like the current one with small village settlements. The current study also emphasises the fact

that Jammu has maintained its rural character since its founding and has been involved in the nexus of settlements catering to the dynamism of the Northern plains' Early historic period.

The rice husk used as a tampering material (Chapter IV) in the local red ware could signify two developments. To begin with, it signifies widespread cultivation of rice in this period and secondly, since the rice husk tempered potsherds are found from plains, the economic interaction of agriculturally productive plains with rainfed Kandi zone (with sparse agricultural production). Antiquities in the form of terracotta bangles most likely hint towards the emergence of local art and craft industry during this period (see chapter IV, see Fig. V.7)

The area had been politically under various dynastic influences throughout Period II. Although the underlying essence of the area has always remained tribal as discussed in Chapter VI, most of the major dynasties of North and North-West India—the Mauryas, the Indo-Greeks, Indo-Parthians and Indo-Scythian had their sway over the research area. The extension of NBPW and its associated pottery in the north and south of Jammu, as well as political influences in the form of material culture, such as the Manshera and Shehbazgarhi inscriptions (Hultzsch, 1991) in Pakistan's Khyber Pakhtunkhwa province, show that these political processes were active throughout the northwestern zone and the outer plains of Jammu were only a small part of them.

Around the end of the 1<sup>st</sup> millennium BCE, there is a surge of settlements seen in the outer plains of Jammu. The settlement number increases dramatically and a total of 82 sites belonging to Period III are reported from the region. In addition to the cultural continuity in all the sites of Period II, there is territorial expansion into different zones. Several new sites came up in the abandoned paleochannel of the river Chenab and on the higher reaches near the foothills (Chapter V and VI). Of the 82 sites, 37 were discovered or re-explored by the

researcher (Chapter IV). This considerable increase in the number of settlements implies that the area is participating in trade networking, which is an important aspect of the historical period under consideration.

The spatial expansion of settlements to the paleochannel of river Chenab as discussed in Chapter VI is a process involving migration of the river, providing a fertile tract for the habitations to grow. The inhabitation of the higher reaches, however, can indeed be taken as a zoomed-out phenomena of the expansion of territories of the "Kushana period" in the adjoining territories of Punch, Doda and Rajauri, mainly owing to the active trade routes.

Like in the preceding period, these sites are small village settlements falling within a diameter of 60 km. Although the area is devoid of any major urban centre, there is a constant growth of relatively big sized sites, reflecting the complex site structuring process probably for resource acquisition. In this regard, the growth of site density in the Kandi area is interesting. This concentration of sites in the upper reaches probably could be to acquire the raw material from higher reaches, owing to the intensity of trade and commerce in this period. The emergence of the major regional Buddhist site of Ambaran appears to be following the trend of symbiotic contact between religious institutions and economic networks, as it is located on the Chenab riverbank. As described in Chapter VI, donations, along with charity, were emphasised in Buddhist literature as the fundamental path to enlightenment and are followed by the laity on the site. Along its location on the commerce route, the presence of the Buddhist monument at Ambaran have aided in the region's general cultural development.

This pattern of expanding village settlements in the area with the major urban centres at around 280 km south-east (Sanghol) and around 200 km north-west (Taxila) signifies the existence of a village nexus in the smooth functioning of the major urban setups.

The usage of both water route and land route in the research area, primarily owing to the rigorous trading pursuit in general in this period therefore seems plausible. The various established routes radiating from Jammu to the uplands and lowlands as documented in Chapter I suggest their frequent use. Therefore, the possibility of them traversed by the travellers of the period under consideration seems reasonable. The water route via Chenab on the other hand, as discussed in Chapter I and V, was used for transporting wood till the 19th century. The propositions of efficacy of these routes and the material exchanged, however, requires more research.

This period overlaps with the rule of the Kushanas, essentially known for its trading networks and Buddhist activities. Buddhism emerged as the major tradition in the area and continued for a long time. Various factors like the popularity of Buddhist ideology, location of the area in the context of interregional trade route, proximity of the important Buddhist centres around Jammu (Sanghol and Taxila) would have given thrust to the overall development of the area during this period. Local geographic condition, for example, the availability of fertile land around the old bed of the river Chenab owing to its meandering paved way for people to occupy more areas.

It therefore appears that the area held regional importance due to the presence of a stupa with reliquary and monastic establishment around. It, however, is significant to note that although regionally important, it failed to make a lasting impression in the bigger, overall cultural developmental context, as discussed in Chapter VI.

Agriculture production based on rice cultivation appears to have played a major role in sustaining the new settlements along with craft activity. Evidence of more sherds of the rice husk tempered pottery from the scraped sections of both Biyan and Satowali (chapter IV) is suggestive of the continuation of rice cultivation in the area. In addition, population engaging in craft producing

activities like pottery production, terracotta bangles and beads are seen in continuation from Period II.

Period IV commences by the mid-1<sup>st</sup> millennium AD till end of the millennium. Analysis of settlement belonging to this period indicated that sites were also located in the south-eastern plains of Kathua and the right bank of the river Chenab, in addition to the plains and the foothills. Most of the sites have cultural continuity from Period II and Period III. A total of 91 sites, which include 56 sites either discovered or re-explored by the researcher (see Chapter IV), belonging to this period are reported from the study area.

The sites, like the previous two periods, are categorised as small villages and are located within the diameter of 100 km. While settlements are primarily concentrated in the same micro-zone as in the previous period, this period also witnesses an expansion of settlements along the right bank of river Chenab. The sites in the old bed of the left bank of Chenab were continued to be occupied in this period, along with the emergence of new settlements, irrespective of the flood threat, on the left bank (as evident from the site of Jafarchak and Ghattala). It seems that, because of population pressure, people have shown resilience to the frequent natural calamities and would have devised new strategies to deal with the floods.

Politically, this period overlaps with the rule of Gupta dynasty in the area, which is evident from the Allahabad inscription that mentions the Madras as subordinates of Samudragupta. The cultural interaction further accentuated in this period which is evident by many factors. One of the factors is the extension of pottery belonging to the Rangmahal ceramic tradition and associated glazed ware (See Chapter V, VI and Appendix I) into Jammu from the adjoining areas. The Rangmahal pottery as explained in Chapter VI is concentrated in a particular zone comprising of areas of Punjab, Haryana, Rajasthan and Gujarat and is dated from mid to late first millennium CE. The extension of this peculiar

pottery in the plains of Jammu points towards the concept of shared ideas between these regions. This flow of artistic expressions would have taken the traditional trade route for its dissemination to the new cultural zone of Jammu.

The fact that Buddhism continued to play an important role in this period is reflected through the vigorous structural activities undertaken at the Ambaran Buddhist establishment. In addition to the reconstruction activities, embellishing of the structures with terracotta figurines is observed. These would signify the economic need for retaining the structure, primarily because of the vulnerability owing to its location on the bank of Chenab and for facilitating the now burgeoning trade. However, the effect of general decline of Buddhism in the second half of 1st millennium CE is also witnessed at the site. Ambaran is abandoned in the seventh century, suggesting that the research area was undergoing the same socio-religious changes as witnessed in the adjoining areas.

The current study was aimed at bringing out the role of the outer plains of Jammu in the background of its spatial location in the overall cultural development of the region. The area therefore can be highlighted essentially for two major contributions: a. it facilitated the establishment of trade route from mainland to highlands and vice versa via both land and water ways, and b. it helped in tapping the resources and acquisition of raw materials from the higher reaches. In the context of the latter, raw material like lead, steatite and timber have been referred to as materials of value exported from Jammu. Hence, the functionality of the area, if seen in the broader context of economic production, fits well in the narrative of urbanisation process, but interestingly the regional identity of the area is kept intact. In other words, the area, although never making a bigger impact at a supra-regional level, has always acted in the background in the form of a nexus of small settlements. These settlements on one hand enabled the smooth functioning of the trade routes and on the other

hand became satellite units for the nearby urban centres to operate efficiently. The spatial location of the area propelled it to be a part of and partner to the trading activities. However, the inability to carve a prominent niche for itself also appears to be because of the geographical constraints of the area as observed by Drew (1875).

The area of the outer plains of Jammu ever since its inception as a habitation zone appears to be part of the expansionist policy of the bigger entity, either in the south – in the mainland – or further north. The contribution of the otherwise culturally shadowed region of Jammu was valuable in linking major cultural zones around it (Kour in press). This is interesting when seen in the light of early historic urbanisation where urban centres are the major players and the small village settlements cater to their metropolitan needs. The regional contribution of these small, peripheral villages is utterly important in understanding the overall development of the urbanised system.

## Limitation of the study

Absence of sufficient material culture because of the lack of large-scale excavation of sites is a major hindrance in providing a complete picture of the processes underlining the cultural development of the area. In addition, the paucity of proper reports of small excavation undertaken in the area and the inaccessibility of those excavated materials for reanalysis have been points of concern.

At the beginning of the study, Ropar and Sanghol in Punjab were decided to be taken as index sites. However, in absence of the excavated reports, the material culture stored at various locations were thought to be analysed. Though it proved to be of considerable help in understanding the development of material culture in the adjoining areas of Jammu, there were major limitations. The restraint imposed due to the incapability to access the entire excavated

material and the state of preservation of the artifacts has limited the utility of these sites for reconstructing the chronological sequence of the plains of Jammu. This issue was partially resolved by resorting to scraping the section of two sites of the research area. This has been particularly helpful in checking and reconstructing the chronology based on stratigraphic correlation and radiometric dating.

The major limitation of this research was the inability to visit all the sites bordering the Line of Control (LOC) due to security reasons. This hindered data collection and certainly had bearing on understanding the overall settlement pattern of the region. In addition, the limitation of restricting numbers of researchers for exploratory surveys has constantly been there. The reluctance of the local people to interact freely and help data gathering by associating with unfamiliar people visiting the villages of border areas severely affected the on-field research.

## Future work

The current state of most of the sites is a matter of concern (Kour in press). The immediate threat is the agricultural expansion of the land due to which the mounds are razed to the ground. The shifting of river is also one of the factors of their destruction. The documentation of the archaeological sites of the areas in Jammu and adjoining districts therefore requires immediate attention. The plains further south of Jammu along with the surrounding hilly areas are a repository of historical knowledge and therefore hold much potential for an extensive interdisciplinary study. These include the usage of Earth observatory data and other multi source geospatial datasets for understanding the fluvial landscape of the region, which primarily shapes the man-land interactions.

The past landscape utilisation in the research area cannot be restricted based on the current political boundaries. The outer plains of Jammu share their territorial borders with Sialkot in Pakistan, and it is inevitable that the settlement pattern observed in the former area will have an extension in the plains of Sialkot. The lack of archaeological research in Sialkot and the inability to carry out the physical archaeological investigations by researchers across the border will be an issue for generations to come. Therefore, the usage of remote sensing procedures to understand primary level large scale archaeological patterns can come as an aid.

The current research adds up to the knowledge of the behaviour of non-urban settlements in the context of technologically advanced urbanised societies as mentioned above. It highlights the symbiotic relationship between the two in the context of overall cultural development over a long period of time and provides enough points to ponder upon for the posterity.