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SETTLEMENT PATTERN IN UPPER GANGA VALLEY: SPECIAL REFRENCE TO TARAI OF UTTRANCHAL

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Abstract: The archaeological investigations in Upper and Middle Ganga plain have revealed a long cultural sequence right from late upper Paleothilic to the Iron Age and further. The first colonizers were Epipaleothilic and Mesolithic hunters of Vindhyas. The excavations conducted during last two decades have brought to light Prehistoric culture in Upper Ganga Valley and presence of Painted Grey Ware and Northern Black Painted Ware cultures in Upper Ganga Valley. The present article is an attempt to take a holistic view of prehistoric settlement of Upper Ganga Valley.

INTRODUCTION:

The Gangashtakam expresses purity of Ganga longing fervently

"O Mother! ...Necklace adorning the worlds! Banner rising to heaven! Ι Ι ask that leave of this may body on your banks. Drinking your water. rolling in your waves, Remembering your name, bestowing my gaze upon you." importantroleinthehistoryandarchaeologyof TheIndo-Gangeticplainplays an India.EntireGangaPlain is divisibleinto threemain units:(i) Upper GangaPlain, (ii) MiddleGangaPlain, and (iii)LowerGangaPlain. TheUpper Ganga Plain lies between 73^O30' 00'' $E.82^{\circ}22'$ 00 E and $25^{\circ}15'$ 00"N, $30^{\circ}17'00$ "N, covering an area of about 1, 49,029 sg.km.. The

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studyareais marked by300 m. contour which separates itfromGarhwal-Kumaons Himalaya, fromwestof the river Sharda, whiletheinternationalboundaryofIndia and Nepal marksits northern limits.In thesouthriver Yamunademarcates its border withBundelkhand.In thewest, boundaryof Haryana andUttar Pradesh demarcates thearea.

PHYSIOGRAPHY:

Exceptfor the foothillsof the Himalayas in the North, the whole Ganga basin isaplainarea.Physiographically,itconstitutes apartoftheIndo-Gangeticplain, which is largely flat, feature less and is formed of Pleistoceneandrecentalluvial depositsof the riverGangaand tributaries.River erosions, change incourse of its riversandhumanactivitiesinrecenttimeshave playedan importantrole inshaping thereliefofthestudy The Upper GangaPlaincanfurtherbedividedintofour physiographicunit(Singh, area. R.L. 1995(55).)

- 1. TheSub-mountain belt
- 2. TheGanga-GhaghraDoab
- 3. TheGanga-YamunaDoab
- 4. TheYamunaparravinetrack



Figure 1: Map showing ganga and its tributaries.

Rampur, Pilibhit, Bijnoretc.districtsare includedinthesub-mountainbelt. Presentday Lakhimpur, Sitapur, Gonda, Hardoi, Sultanpurdistrictfallinthe Ganga- Ghaghradoab. The Ganga-Yamunadoabarea, north of Bulandshahrandsouth of Eta, consist of silty and clayey depressionintheBulandshahar,Aligarhetc.render *bangar*tractswhilethesandridgesalternatedby thispositioninthe Doab. The natureofdepositsprobably owestothecrescenticbendsofthetwomainstreams, the Ganga and theYamuna.Eastern partof Haryana fallsin the Yamunaparravinetrack.

SETTLEMENT: HISTORY

The study of settlement process was initially done by L.H.Morgan(36) and Parson(42).Margon work was related to the study of mainly northern American tribal home settlement pattern. In 1937-38 Julian Steyword published his two studies based on tribal community settlements in Northern America. Encoraged by Julian Steyword works, G.R. Villi (58) did his research study on Viru Valley in America. He published his book as "Prehistoric Settlement Pattern in Viru Valley". This book laid foundation of new revolution in settlement based research. In India, wide research in this area was carried after 1986 international conference conducted by I.C.H.R., in which settlement process was laid special emphasis. Several definitions and studies in this area was carried on by Narrol in 1962(37), Chang(8), Winters in 1969(61), Trriger in 1967(56), Chang in 1972(8), Vinford in 1964-65(59), Hill in 1966(18) and Willmenson in 1968(60).

In simpler term we can define settlement as any form of human habitation which ranges from a single dwelling to a large city. Human Settlement means cluster of dwellings of any type or size where human beings live. In other words we can say that process of settlement inherently involves grouping of people and apportioning of territory as their resource base.

Settlement scanbroadlybedividedinto twotypes-ruraland urban. Before discussingaboutmeaningandtypesofruralandurbansettlementinIndia,we shouldknowsomebasicdifferencesbetweenruralandurbanareasingeneral.

(i)Themajordifferencebetweenruralandurbanareasisthefunction.Ruralareashavepredominantlyprimaryactivities,whereasurbanareashavedominationofsecondaryandtertiaryactivities.areashave

(ii) Generallytheruralareashavelowdensityofpopulationthanurban.

Types and patterns of settlement

Typereferstoacategoryofthings

havingsomecommonfeatures where as pattern refers to a regular form or order in which as eries of things occur. When we says ettlement pattern, the term is strictly applied to the spatial arrangement or distribution of settlements within a given area. It differs from settlement form. Settlement form relates more to the spatial characteristics of individual settlement. However, sometimes forms and patterns are used interchange ably. Buthere we will discuss about the patterns only. As far as type of rural settlements is concerned, it implies the degree of dispersion of the dwellings.

TypesofRuralSettlements

If we group settlements found allover the country, these can broadly be grouped under four categories:

- 1. Compact/clustered/nucleatedsettlement
- 2. Semi-compact/Semi-clustered/fragmentedsettlement
- 3. Helmetedsettlement
- 4. Dispersedsettlement.

Letusdiscuss these types one by one along with some of the major patterns associated with each type.

1. CompactSettlements: Asthenamesuggests, these settlements have closely built uparea. Therefore in such settlements all the dwellings are concentrated in one central sites and these inhabited are a is distinct and separated from the farms and pastures. Maximum settlements of our country come under this category. They are spread over almost every part of the country. These settlements are distributed over the entire nor thern Indo-Gangaplain (from Punjabin the nor thwest to West Bengalin the east), Oriss a coast, basins of Mahanadiin Chhattisgarh, coast alare as of Andhra Pradesh, cauvery delta

	nataka,lowerAssamandTripura,inthe		
valleysofSiwaliksetc.Someting	mespeopleliveincompactsettlementfor	secu	rityordefencepurpose.The
greatest example	of this	type	is in
BundelkhandregionofMadhy	aPradeshandUttarPradesh.InRajastha	n	
alsopeopleliveincompactsettle	ementbecauseofthescarceavailabilityof	2	
cultivablelandandwaterbody.T	herefore, they want to make maximum use	e c	favailablenaturalresources.
Suchsettlementsgenerallyrange	efromaclusterofaboutthirtytohundredso	f	
dwellingof different forms, size an	ndfunctions.Onanaveragetheirsizevariou	S	from500to2,500persons
insparselypopulatedpartsofRa	jasthanto		more
than 10,000 persons in Gangaplain. Very often the ses ettlement shave a large statement of the second statement of the secon			
definitepatternduetocloselybuiltareaandinterveningstreetpatterns.As			
manyas11patternsareidentified. Wewilldiscussonlyfivemajorpatterns.			
Thesepatternsare:(i)Linearpattern(ii)Rectangularpattern(iii)Circular			
pattern(iv)Squarepattern(v)R	adialpattern		
(i)	LinearPattern:Itiscommonly	found	dalongmainroads,railways,
streams, etc. It may have a singler ow of houses arranged along the			
main artery. For example rural settlements found along these acoast, rivervalley, mountain range setc.			
(ii) RectangularPattern:Thisisaverycommontypewhichdevelops			
aroundtherectangularshapeof	agriculturalfieldsasitiscommonto		
findasystemoflandmeasuremen	ntbasedonsquareunits. Villagepaths		
andcarttracksalsoconfirmtoth	erectangularfieldpatternsandrun thro	•	-
andcarttracksalsoconfirmtoth		•	-
andcarttracksalsoconfirmtoth	erectangularfieldpatternsandrun thro tofarmsandfieldsandconnectivity	•	-
andcarttracksalsoconfirmtoth westdirections.Accessibility rectangularshapeofsettleme	erectangularfieldpatternsandrun thro tofarmsandfieldsandconnectivity	of	toothersettlementsleadto coastal
andcarttracksalsoconfirmtoth westdirections.Accessibility rectangularshapeofsettleme	erectangularfieldpatternsandrun thro tofarmsandfieldsandconnectivity nts.Thesettlements	of becited	toothersettlementsleadto coastal forexamples.
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andcarttracksalsoconfirmtoth westdirections.Accessibility rectangularshapeofsettleme MaharashtraandAndhraPrade (iii) patternisassociatedwithvillage roadsandalsorelatedtofeaturess outsideasquarespace.Thesefe (iv) Malwaregion,PunjabandGujar	erectangularfieldpatternsandrun thro tofarmsandfieldsandconnectivity nts.Thesettlements shandeithersideofAravalihills,etc. may SquarePattern: Thisisbasica slyingatthecrossingofcarttracksor restrictingtheextensionofthevillage eaturesmayincludeanoldboundary wall	of becited llyavarie ,thickor	toothersettlementsleadto coastal forexamples. entofrectangulartype.Sucha

eachotherandpresentacontinuousfrontsothatwhenviewedfrom outside, the villages look like a walled and fortified enclosure pierced byafewopenings. Theroundform was an atural outcome of maximum aggregationforthepurposeofdefenceduringthe past centrewhichmay beasourceofwater(pond,well),atempleor mosque, a centre of commercial activity or Thus, the streets seem to be radiating from a common centre. Examples simplyanopenspace. aresettlementsnearGurushikar, MountAbuinRajasthan, VindhyachalinUttarPradesh, etc. 2. Semi-CompactSettlement: Asthenamesuggests, the dwellings or houses are not well-knitted. Such settlements arecharacterizedbyasmall but compactnuclears around which hamlets are dispersed. It covers more area thanthecompactsettlements. These settlements are found bothinplains and plateausdependingupontheenvironmental conditions prevailing in that area. Such settlements are situated along streams in Manipur Mandla and Balaghat districts of Madhya Pradesh, and Rajgarh district of Chhattisgarh. DiffintheChhotaNagpur erent tribalgroupsinhabitsuchsettlements region.In Nagaland, such settlements may be in the form of blushing villages. Like, compactsettlements, semicompactsettlementsmayalsohavedifferent patterns.Someofthepatternsare(i)checkerboardpattern(ii)Elongated pattern(iii)Fanshapedpattern. (i) CheckerBoardPattern: This is a type of settlement found generally atthejunction of two roads. The village streets meete achotheratan angleorareparalleltoeachother. This is because of the tendency to alignthedwellingsalongcardinalaxes. Thispatterniscommoninthe northernplains. (ii) ElongatedPattern:Suchsettlementoccursasaresultofelongation of the rectangular pattern due to influence of site features. For instance, in the Gangaplains, in a reas liable to in undation, the rectangular pattern becomes unusually elongated along the high ground. Even otherwise theadvantageofferedbyriversidelocationforcessuchapattern. FanShapedPattern: This is seen where some focal points or line is situated at one end of the village. A (iii) riverside, aroad, an orchard, a wellor even a place of worship. Such focalobjectmaybeatanka patternsarecommoninthedeltaregionwherethedwellingssimply followthefanshapedprofileofthedeltaasinthecaseofMahanadi, Godavari, Krishna, Cauvery, etc. Such patterns are also common in the Himalayan foothills.

(iv)HelmetedSettlements:these typesofsettlementsarefragmented intoseveralsmallunits. The main settlement does not have much influenceontheotherunits. Veryoftentheoriginal site is not easily distinguishableandthesehamletsareoftenspreadovertheareawith interveningfields. Thissegregation is often influenced by social and ethnicfactors. The hamlets are locally named as faliya, para, dhana, West dhani, nanglayetc. These settlements are generally found in Bengal, eastern Uttar Pradesh, Madhya Pradeshand coastal plains. Geographically it covers lower Gangaplain, lower valleys of the Himalayasandcentralplateauoruplandregionofthecountry. 4.DispersedSettlements: Thisisalsoknownasisolated settlements. Here thesettlementischaracterizedbyunitsofsmallsizewhichmayconsistofa singlehousetoasmallgroupofhouses.Itvariesfromtwotosevenhuts. Therefore, in this type, hamlets are scattered over avast area and does not haveanyspecificpattern.Suchtypeofsettlementsarefoundintribalareas ofcentralpartofIndiacoveringChhotaNagpurplateau,MadhyaPradesh, Rajasthan, etc. Such patterns are also common in the hills of north Bengal, Jammu&Kashmir,TamilNaduandKerela.

Cultures of Upper Ganga Valley:

1. The Mesolithic Culture: Thefirst effective for a ys of prehistoric man in the Upper Ganga plainweremadeat thefarendoftheterminalPleistoceneandat beginning ofearly the Holoceneperiod. This stageisknown asthe Epipalaeolithic(atransitionalphasefromtheLateUpperPalaeolithic totheearlyMesolithic). DuringthisstagetheStoneAgemanfrom the Vindhyasused tocross the Ganga and Yamuna rivers in the north and colonize the Ganga plain. The second phase, known as the Mesolithic, constitutesatransitional stagefromthePalaeolithic toNeolithic. TheMesolithic fromdifferent sites, characterized bymicroliths, have beenreported ecological zonesacrossthelength widthof thecountry, excepting from the major portion of the Indoand andthenorth Gangeticplain eastern partofIndia. The chronologyofthe radiocarbon MesolithicphaseintheGangavalleyis still notfirmly established. Two

d a t e s obtained f r o m SaraiNaharRai(a place in mid Ganga Valley)onbonesamplesgaveareading of 10050±110BP and26601±120BP.Itis believedthattheformerdaterepresents the early phase of the culture. However, a time spanof8000B.C.to 2000B.C.hasbeenproposed for the Mesolithic phase of the Ganga valley.

2.The Neolithic Interlude: Intheupper-Gangavalley,traces of Neolithic culture were found. Inrecentyears,Neolithic artifactscomprising alimited number of microliths and the characteristic cord-impressed: hand-

madepotteryhavebeenfoundfrommorethanadozensites, and of these sites, Fathepur district including Navbhasta-Begav, BrahmanTola, Budvan, Kukra , Kukri, Barkhana and Lokhiyapurhavebeen excavated.

3. TheChalcolithicCulture:ThediscoveryofChalcolithiccultures in the Upper and MiddleGangaPlainis barely threedecades old, and this discovery is largelythere sult of field investigations carried outby the Universities of Allabahad, Banaras, Gorakhpurand Patnaand the Departmentsof Allabahad, Banaras, Gorakhpur

of UP and Biharstates. The Chalcolithic levels were identified first at Chirand in 1968-69 and subsequently at Sohgaurain 1974-75, although the latter site had been investigated earlier also.

The Neolithic phase in the Upper and Middle GangaPlain and the Vindhyaswas succeeded by the Chalcolithic cultures. There is notime gap between the two cultures and agradual evolution from the former to the latter has been witnessed at a number of sites. The excavations at sites like Sohagaura, Imlidih Khurd, Chirand Chechar and Senuwar have furnished evidence pertaining to the transitional stagefrom the preceding Neolithic cultures of the region to the Chalcolithic. The onlyperceptible changed uring the Chalcolithiis the introduction of copperint this region sometime in the latter half of third millennium B.C. This resulted in tremendous farming activity bringing about agricultural surplus inabig way and the consequent increase in human population. Whereas the Neolithic settlements were few and far between, the number as wellas the size of the settlements increased several fold in the Chalcolithic phase. Exploration carried out in 14,600 sq.km. area of the Middle G ang a Plain has brought to light more than 200 sites. Surely, many more sites lie buried and are yetto be documented. Of the explored sites, about two dozen have been excavated sofar (Misra, B.B2000 (35)). Important among them are Kakoria, Magha, Koldihwa, Khajuri, Banimilia-Bahera, Takiaper, Malhar, Raja NalKaTilain the VindhyasandJhusi, Kausambi, Sringaverapura, Rajghat, Prahladpur,

Masondih, Sohagaura, Narhan, Imlidih, Khairadih, Chirand, Chechar, Maner, Oriup, Champa, ManjhiandSenuwar Sonepur, Taradih, in Middle ganga Valley andNavbhasta-Begav, BrahmanTola, Budvan, Kukra Kukri. Barkhana Lokhiyapurin and the UpperGangaValley. The general features of the chalcolithic culturein theMiddleGangaPlaincanbelistedasfollows:

A. Houses and Settlement Patterns: TheChalcolithic inhabitantslivedin wattle-anddaubstructures, circular oroval in plan and in houseshavingmud walls. The Chalcolithicculturesin Bihar havebeen documented inthe excavations atChirand, Sonpur, Oriupand other sites. Evidence comingfromthefirsttwoof thesesitesshowsthattheChalcolithic peoplelivedinhousesmadeofmudplaster,reedsorbamboos. The5.50mthickChalcolithic depositatChirandrevealed, atitsearliest level,acircularhearthandpost-holesandfloorsofburntearth. The exposedlimefloorsatSonpurhadcircularpitsrepresenting circularhuts, withvarying diametersof 1.84to2.44m.andwithbonesof animals andbirds inside.

B. Ceramics Industry: Asithasbeen rightly said, pottery is the alphabet of archaeology and until recently ceramics was considered as a diagnostic trait of Neolithic culture. However, the discovery of an -ceramic stage of Neolithic cultures of WesternAsiahasexploded this myth. In India, pottery hasbeen reported from the Mesolithic levels of Chopani Mando, Baghai Khor, Lekhahia Rock Shelter I, Langhnaj and other sites, but it is absent on the Mesolithic sites of Pratapgarh. Pottery appears again in the Neolithic levels at Lahuradeva, Sohagaura and Imlidih Khurd, Navbhasta-Begav, Brahman Tola, Budvan, Kukra, Kukri, Barkhana and Lokhiya purwhere it is marked by a hand made cord-impressed redware. In the Chalcolithic cultures the ceramic assemblage mainly comprises the black-and-red ware, the black slipped ware and the red ware. The pots are usually wheel-thrown, though hand-made

specimensarealsomet with.Theredware,themostprolificceramic industry,ischaracterizedby the bowl, including thelipped and pedestalled varieties,withconvex sidesandevertedrim;convex or straight-sideddisheswithsaggerorflatbase;shallowbasinincluding thelipped variety andstoragejar. Thetypesinblack-and-redwareinclude the deep carinated, lipped orpedestalled bowl; dish with convex or straight sides and saggerbase; small vase, basin, and straight-sided troughs. Though, ingeneral, the pottery isplain but decoration in the form of paintings, (essentially linear), incisions, and applied patterns are also metwith. In the Sarayuparplain, the chalcolithic cultures have beenidentified atSohagaura, Narhan, Khairadihandother sites. Atall these sites, thisphase ischaracterized bytheoccurrence of black- and-red ware (plain and painted), black-slipped ware (plain and painted), redware (both slipped and un-slipped), burnished black ware, cordimpressedpotteryandrusticatedware. The last three wares are found inlimited number. At Narhan, thepainted blackslippedware ismeager: the prominent ware being thepainted black-and-red ware. Abouttwentyper centshreds in this ware have been reported. On the contrary, the painted black isthe slipped ware prominent industry atKhairadih(SinghP. 1992(53)). The appearance of iron in the uppermost Chalcolithic levels ofSonpurandChirandis significant. Asimilarstratigraphicposition obtains atNarhanalso.

The other associated finds from Sonpur and Chiran dinclude tanged and socketed

arrowheadshavingcircular orsquaresection andpins ofbone, arrowheadsofivory and styliofboth materials. Besides, there areterracotta beads, somepear-shaped and someothers with inciseddecorations; beadsofsteatite, chalcedonetc., balls, pestles and quemsofstone, bones of birds and fish and a few Neolithic celts from Chirand. The post-cremation circular pit-burials at Sonpur and suspectedsuchotherburials atChirand arenoteworthy (Roy(inGhosh,ed.)1989,I (45)). The Sonpurburial shaving diameter of 1.82to2.12m andadepth of91emandcontaining ash, charred bone pieces and sherds of black, regandblack-and-red wares and a handmade jar with5kgofcharredrice, suggest thatthepeople burnt their dead andburiedtheircharredbones.Thehandmadejarwith5kgofcharred foundinthe burial rice atSonpurindicates the evidence ofrice cultivation there.

smallantiquitiesfoundatKhairadih,Narhan, Sohagaura,Navbhasta-Thenoteworthy Barkhana Begav, BrahmanTola, Budvan. Kukra and Lokhiyapurconsist . Kukri, ofbeadsofagate, chalcedony, carnelian, jasper; steatite besides, Socketed and tanged arrowheads ofbone, points, potterydiscs, etc. Terracottabeads, decorated within cised designs, arecommon Khairadih toboth andSohagaura..AtKhairadih,the useofglassisattestedbythepresenceofa microbeadofblueglass (Singh, P. 1992:(53)), whileatNarhanapolished celtisreported(Singh, P.

1993– 1994 (54)). The presence of a socketed copperarrowhead, an indeterminate object, a rodand a copperpiece, respectively found at Khairadih, Narhan and Sohagaura suggest the scarce use of the metal. Anoteworthy point, which n e e d s o u r attention, is the complete absence of lithic tools-an essential element in the 'Chalcolithic' appellation-at these sites (Singh, P. 1992(53)).

Prehistoric sites of Upper Ganga Valley:

Diversified in about an area of 1, 49.029 sq. km., upper ganga valley shows the existence of human settlement in and around Neolithic and Chalcolithic periods. Despite of this that Upper Ganga valley contains some regions that shows the proof of Harrapa and Harappan culture but there dwelling area was comparatively very very less, restricted to Meerut and Saharanpur area. The history and culture of Himalayan region remained in dilemma due to non regular excavation of Himalayan area as well as these excavations were not taken in broad prospective and neither some surprising results came before historians. After establishment of Garhwal University, in 1976 department of History and Archaeology came into existence and under the leadership of Dr. A.P. Nautiyal, this department started showing its recognition. The departmental team started its first excavation at Ranihat in Tehri district of Uttrakhand in 1977-78. Here they found the existence of reminiscence of houses and temples made up of Mauryan period bricks. They also explored Shung period vessels and iron bows and arrows along with weapon to catch fish etc. Proceeding in his exploration works Dr.Nautiyal also excavated the site of Mordwaj in Bijnor (U.P.), in year 1979-80. Here he got reminiscence of Kushan period of about 6 B.C. to 3 B.C., where his team got houses made of solid bricks as well as idols of that period.

In 1980, the exploration at the site of Thapli, a village on the bank of river Alaknanda in Tehri district of Uttrakhand which opened the doors of Painted Grey Ware Culture right into Himalayas. Its significant in sense that it correlates this with the rich culture of Mahabharata period. These Painted Grey Ware potteries contains paintings in black colour which contains pictures of Sun, convex rayed circle, vertical horizontal lines, leaves and flowers etc. These paintings also show maturity in art culture. Also copper bangles as well as bird made up of solid mud is excavated from this site.

In 1981-82, the department team also explored the Bharat Mandir in Rishikesh, Uttrakhand which contained reminiscence of houses belonging to Pre Gupta period and Post Gupta period. Several precious idols were found from this site. Between Haridwar and Kotdwar region Panduwala a site was excavated in 1984 where reminiscence of houses and temples belonging to Kushana period were explored. In the same concern, excavations at the site of Malari, a village in Chamoli district of Uttrakhand and village Purola, a village in Uttarkashi district of Uttrakhand were also remarkable. In Malari, which is located at height of 3800 meter above sea level, a village in Mid Himalayan region showed the reminiscence of Palaeolithic period. There was custom of burying dead bodies by deeply borrowing the Calcium Rock Mountains. This culture is quite similar to that of Iran of Mid Asian culture. At Purola, a village in Uttarkashi district of Uttrakhand, IshtikaVedicahad been explored which was 24meter long and 18 meter wide. It carried the shape of bird named *Garud* which had its wings in North south direction and its face towards East. It is made up of different types of bricks, in middle of which there is a well 60x 60cm and 2.60mt deep. All residuals including bones, coal, different type of mud pottery etc belongs to Kushana period. Besides these, some coins were also found that contains scriptures of vedic tree, barahsingha and swastika symbols incarnated on them, belonging to Kuninda empire. Its time period can be considered between 2B.C. to 2 A.D. The type of pure Garud bird vedica was made for purpose of AshwamegYagya, Somyagyaand Purshmegyagya etc. The main objective behind this type of Yagyavedica was that Yagyakartawas able to fly like Garud (bird) to successfully reach Swarg or sky. This Yagyavedica also reveals that in this Upper Ganga valley, Kuninda had done AshwamegYagya here in which several animals were given sacrifice in mass level.

Besides these achievements, rock carvings were excavated in Chamoli district that contained pictures of hunting along with man and animals images, all painted with red mud, which proves the existence of human settlement in Himalayas during Pre-historic period. Likewise, excavations carried out at Sanra and Baseri in Kumaon near Ramganga gives evidences of crematorium. Also vessels, pots and human bones and skeleton were found in large scale of about 1000B.C.

DEVELOPMENT OF PAINTED GREY WARE CULTURE:

The Painted Grey Ware culture (PGW) is an Iron Ageculture of the Gangetic plain and the Ghaggar-Hakra valley, lasting from roughly 1200 BCE to 600 BCE. It is contemporary to, and a successor of the Black and red ware culture. Characterized by a style of fine, grey pottery painted with geometric patterns in black, this culture is associated with village and town settlements (but without large cities like those of the Harappans), domesticated horses, ivory-working, and the advent of iron metallurgy. But this point of view may change as fresh surveys by archaeologist Vinay Kumar Gupta suggest Mathura was the largest PGW site around 375 hectares in area. Among the largest sites is also the recently excavated Ahichatra, with at least 40 hectares of area in PGW times along with evidence of early construction of the fortification which goes back to PGW levels. Two periods of PGW were identified recently at Ahichhatra, the earliest from 1500 to 800 BCE, and the Late from 800 to 400 BCE. Total number of PGW sites discovered so far is more than 1100. (57).

It probably corresponds to the middle and late Vedic period, i.e., the Kuru-Panchala kingdom, the first large state in South Asia after the decline of the Indus Valley Civilization. It is succeeded by Northern Black Polished Ware from 700-500 BCE, associated with the rise of the great Mahajanapada states and of the Magadha Empire.

DEVELOPMENTOFNORTHERNBLACKPOLISHEDWARE:

Northernblack polishedwareisthemost alight chapterof Indianarchaeology.InGangavalley, secondurbanization has started foundthe togetherwithN.B.P.W.tradition.Wehave vogue of iron with this tradition and this may have been the only cause of second urbancivilization along withN.B.P.W. tradition.There are characteristichallmark ofthis so many tradition, which indicates the theory of secondurbanization, likeiron instrument, coins, establishmentofagricultureand ranching, structures, terracotta, beads, authentic potteries, ivoryinstrument etc.

CONCLUSION:

The discovery as a result of excavations at Ranihat in Tehri, Thapli in Tehri, Malari in Chamoli and Purola in Uttarkashi, all sites in Upper Ganga Valley showed that the sites have been a cradle of human civilization right from Prehistoric period down to the blossoming of Urban phase of culture in the region. The presence of Painted Grey Ware culture and Northern Black Polished Ware culture shows the caravan of human succession journey from prehistoric to Iron Age and further.

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