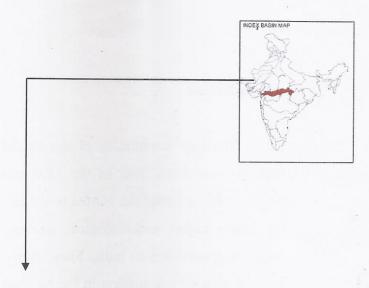
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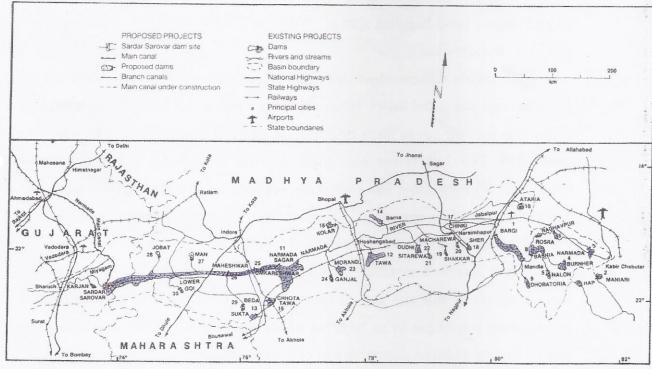
February 2008 (Revised in February 2009)

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THE NARMADA VALLEY 200,000 YEARS OF HERITAGE TO BE DROWNED





Major projects in the Narmada basin

THE NARMADA VALLEY: 200,000 YEARS OF HERITAGE TO BE DROWNED

- Anjali Paranjpye 15th Feb. 2008 (revised February 2009)

1.Introduction

The near completion of the Sardar Sarovar, Indira Sagar, Maheshwar and Omkareshwar dams, four of the 3200 small and large dams to be built along the Narmada River under the Narmada Valley Project, will wipe out vast stretches of the richest known archaeological, geological and palaentological site in the oldest inhabited river valley in India. Flora, fauna and cultural sites which have existed and evolved without interruption in the Narmada Valley since the Stone Age, right up to present times, a mind-boggling span of 150,000 to 200,000 years B.P. (before present), will be irretrievably lost.

It is widely acknowledged that dam-induced submergence leads to irrevocable environmental and social losses. However, the fact that it also leads to loss of cultural sites which hold the key to many riddles of the past and lessons for the future is often overlooked. This loss is not only local, regional or national, but has universal dimensions. Consequently, the perception amongst international circles, especially development funding agencies, regarding dam or other developmental project-induced loss of cultural heritage is rapidly changing.

It is therefore essential, at this juncture, to take into consideration the unique nature of this site and to interpret it in the context of the sustainable development paradigm so as to bring about changes in policies and legislation related to dam-induced destruction of cultural heritage.

1.1 Current status

All four dams mentioned above are nearing completion. Submergence of several sites has taken place in the case of Sardar Sarovar, Indira Sagar (2 metres below Full Reservoir Level (FRL)) and Omkareshwar (2 metres below FRL), even though full submergence will occur after the dam wall is completed and the sluice

gates closed. As soon as the central portion of the dam is raised, the Maheshwar dam reservoir will submerge what little could still be salvaged of one of the most significant cultural and archaeological sites in the country. However, in February 2008, the landmark judgment, the Madhya Pradesh High Court which directed that the present water level of 189 meters cannot be raised until the R&R of all the oustees of the project, including the allotment of land, is completed, has created an opportunity for reviewing and possibly discontinuing further construction of the dam so as to save this priceless heritage from submergence.

Further, in April 2008, during the 46th Meeting of the Environment Sub Group (ESG) of the Narmada Control Authority (NCA), it was decided to form an independent Committee of Experts to undertake assessment work relating to mitigation of impacts generated by the raising of piers and overhead bridge of the Sardar Sarovar Project. In addition to this, the Committee will also assess/evaluate the surveys /studies and implementation of the required plans and their monitoring in compliance with conditions of the environmental clearance granted to the Projects by the Central Government and ground realities to be verified by undertaking field visit to the Project areas.

Project-sponsored surveys of heritage sites in the Narmada Valley and listing of monuments have been of a peremptory nature, salvage operations have been inadequate and not in keeping with the recommendations of the NCA itself, and certainly not showing awareness of the significance of these sights as pointed out by eminent archaeologists from the times of Dr Sankalia in the 1950s to the reports of Dr.Ota and the team from the Archaeological Survey of India in the 1990s. This paper therefore aims at drawing the attention of the ESG and the newly appointed 'independent Committee of Experts' to the extraordinary nature of the Narmada Valley as a unique cultural heritage site.

It also makes a plea for stopping further work on the dams until in-depth studies are carried out for assessing the extent of loss of cultural heritage due to the dams, until alternative solutions are given serious consideration and salvage operations are properly carried out.

2. The importance of the Narmada Valley: past, present and future.

2.1 Anthropological significance.

Excavations have revealed the presence of hominids, followed by their successors, *Homo homilis* and *Homo erectus*, the 'Narmada Man', whose fossil skull was found in 1982, along the entire course of the river. Some sites were more preferred (for instance, the stretch between Jabalpur and Mandaleshwar, or the areas around Maheshwar and Navdatoli) and have revealed vertical layers of settlements belonging to different periods of cultural development.

The valley, therefore, contains the key to understanding the riddle of human evolution in the region, the pre-historic migration routes, the stages of development over a period of 200,000 years, the responses of our ancestors to climate change and other natural phenomena, the consequences of their activities on their surroundings and the lessons that these can teach us.

Modern models of development are not unmixed blessings. Today, when we have reached the crossroad of the development paradigm, it would be prudent to pause, introspect and learn from past experiences and to plan the present and the future with a vision which is holistic and not merely technology-driven. Not only are we not fully aware of what we are destroying, we are often not even aware of the consequences of such acts.

2.1.1 The homeland of *adivasi* tribes.

This narrow strip of land between the Vindhya and Satpura ranges has been, and still continues to be, the home of *adivasi* tribes, for whom the river is a perennial source of sustenance, livelihood and veneration. Starting with our



ancestors in the Palaeolithic Age, the valley contains rich traces of stone tools belonging to different periods, settlements, burial grounds, copper and iron smelting sites, pottery and artifacts which have yet to be thoroughly documented and studied. In fact, the antiquity of the Narmada Valley cultures goes back to 150,000 to 200,000 B.P., whereas the Indus Valley civilization is a mere 3500 years old!

The preliminary studies conducted indicate that the Narmada Valley sites, due to their abundance and continuous sequence of habitation, are unique and precious for understanding the evolution of Man not only in the Narmada Valley, but also for understanding the links between the hominids in Africa and Europe in the west, the Indian subcontinent and East Asia.

What we often fail to realize is that this is a system of life which has developed and evolved over thousands of years, based on needs which are linked to the availability of resources. It is a system which has sustained itself and the resources on which it was dependent. These time-honored systems need to be studied in depth, especially since the modern systems have not proved to be sustainable even for short spans. Dams have a life span of 50 to 60 years, man-made forests are unable to create bio-diversity.

The river and its valley are an intrinsic part of the psyche and folklore of the *Bhils*, *Madias*, *Gonds*, *Pradhans*, *Baigas*, *Kawar*, *Halba*, *Dhanwar*, *Bhumija*, *Agaria*, *Bharia* and several other tribes living in the valley. For thousands of years, these communities have lived in communion with the natural resources, drawing sustenance from the river and the land. The people here believe that when a river stops flowing, the flow of life stops, hence the river must flow. (*Bokhare*, *N*. 2005). Modern hydrologists are now talking of maintaining minimum natural flows, something that the *adivasi*s had figured out centuries ago!

2.1.2 The Narmada Parikrama

A pilgrimage of 1310 kilometers from the origin of the river at Amarkantak to Bharuch on the Western coast and back, the Parikrama has attracted pilgrims from far and near, throughout the ages, and is considered to be the most sacred of pilgrimages. All along its course are memorial stones, shelters for travelers and pilgrims, temples, forts and embankments built over the centuries.

In India, pilgrimages are not merely an expression of religious faith, they are a socio-cultural phenomenon, a way of getting to know the land and the river, of learning about people by sharing a common experience, of understanding the symbiotic relationships between the natural environment, flora and fauna and human beings. These were the 'open universities' of life.

3. Archaeological significance

The archaeological investigations in 1952-53 at Navdatoli and Maheshwar by H.D.Sankalia, B.Subbarao and S.B.Deo of the Deccan College, Pune revealed the richness of the Narmada Valley in terms of archaeological heritage sites "It is one of the milestones of archaeology of the Indian subcontinent", says M. Dhavalikar, of the Deccan College. According to him, "Navdatoli is as important a site as Mohenjadaro-Harappa. Life here dates back to 1800 B.C and where over 2200 stone implements have been found."

The eminent historian, Romila Thapar is of the opinion that 'every mound counts' in this valley.



3.1. Brief history of explorations

The early studies concentrated mainly on the geological features and the fossils found in the layers of rock. The multi-disciplinary expedition of De Terra and Paterson in 1935 gave a new dimension to the study of the Pleistocene¹ period in the valley.

¹ Geological period 250,000 BP. Corresponds to the Palaeolithic period in archaeology

Subsequent investigations led to the discovery of ostrich egg shells, fossils of extinct animals like the hippopotamus, fossils of the oldest raindrops (over 1 billion years ago), the earliest known wooden seal dating back to 1st century B.C., a partial skull of a hominid, Stone Age tools, iron smelting sites of the Iron Age, traces of the first farmers of the Chalcolithic period, pottery, beads and other artifacts, revealing fascinating information about the only site in India where one can find a continuous sequence of habitation dating from the Palaeolithic² period, through the Mesolithic³, Neolithic⁴, Chalcolithic⁵ periods, the early Iron Age right up to the present times. The region thus attracted archaeologists, palaentologists, geologists and anthropologists from the world over.

In 1952-53, and again in 1958, an archaeological team headed by H.D.Sankalia from the Deccan College, Poona, conducted detailed excavations at Maheshwar and Navdatoli, in order to understand the stratigraphical and cultural sequence of the alluvial deposits along the Narmada River. This epoch-making study found evidence that every kilometer along the upper Narmada was inhabited by Middle Palaeolithic Man, and that almost the entire stretch of 1310 kms up to the Gulf of Cambay was inhabited by subsequent cultures. The stretch between Narsingpur and Hoshangabad contained the largest number of animal fossils of the Middle Pleistocene period, as well as tools of the Palaeolithic period. The stretch between Jabalpur and Mandaleshwar was found to be continuously inhabited from the Stone Age to the present day.

The discovery of a partial skull of a hominid by A.Sonakia in 1982 was a significant landmark. Not only was it the earliest known hominid in the Indian subcontinent (about .2 to .7 million years B.P.), the *Narmada Man* helped to bridge the gap between the African Homo erectus in the west and the Chinese and Javan Homo erectus in the east. Also, it corroborated the findings of earlier researchers, establishing beyond doubt the importance of the Narmada valley for anthropological and archaeological research.





Sheila Misra's research revealed blade tools of the Acheulian⁷ type, made of chert, belonging to the Upper Palaeolithic period (100,000 years B.P.). She underlines the importance of this region by concluding that 'the pre-historic sites discovered in this area are relatively mute testimony to the presence of man in this area. The season of occupation, the activities carried out at the sites, what the people ate, how they obtained it, when and how long and how many people occupied the site are questions of primary interest to the pre-historian. Unfortunately, in the present state of our knowledge, we can only speculate about the answers.' It seems as if we will never know the answers.

These and many more studies have revealed the significance and unique nature of the Narmada valley as a virtual living museum of 150,000 to 200,000 years of habitation. All the studies expressed the need for more in-depth studies and excavations since the preliminary findings indicated that there was a treasure trove of cultural heritage beneath

4. The Consequences of the Narmada Valley Development Project.

In 1984, when researchers were discovering more and more fascinating features of the archaeological sites in the Narmada Valley, the Central Government of India gave conditional clearance to the Narmada Valley Development Project which would entail the construction of 30 major, 135 medium and 3000 minor dams, submerging 700 kilometers of the course of the river, including 4000 square kilometers of forests, innumerable species of flora and fauna, thousands of villages, historical monuments, archaeological and cultural sites, and displacing more than 250,000 people.

Today, almost every field of human activity has been revolutionized with more advanced technologies and new insights. New and more efficient forms of water harnessing, irrigation techniques and generation of electricity have been developed. Viable alternatives are available for achieving the benefits claimed by projects conceived over four decades ago. Some of them, such as reforms in Rehabilitation Policies have been incorporated to some extent in project planning and

⁷ See Annex.1

implementation. The attitude of international funding agencies towards cultural heritage in the case of dam-induced submergence is changing.

In his Presidential lecture at the World Bank Forum in 1999, Amartya Sen⁸ voiced similar concerns, "Those interested in biodiversity suggest that if preventive steps are not taken today to protect biodiversity, then the destruction becomes irreversible. The same is with historical and cultural matters. What is lost today is lost also to future generations. Any process of economic review must identify consumption of culture, and not just commercial products, as part of its calculations. The process of development can be destructive of culture. The industrialization of societies is often at the expense of cultural and historical objects and structures."

We shall see later in this paper how this point of view is now being voiced in international forums, and to some extent, within the country. But will it be loud enough to save the priceless cultural heritage of the Narmada Valley?

4.1 Archaeological investigations: the Narmada Valley Project

Without entering into the debate and controversies about the Narmada Valley Project, we will limit our analysis to a scrutiny of the approach of the apex body of the project, namely, the Narmada Control Authority (NCA), with regard to the archaeological and cultural heritage of the areas to be submerged by the 2 mega dams (Sardar Sarovar and Indira Sagar) and by the Maheshwar and Omkareshwar dams.

The three Riparian states of Gujarat, Madhya Pradesh and Maharashtra were entrusted the task of doing a 'complete survey of cultural and religious sites within the submergence zone. The aim is to list all archaeological sites, identify and name sites under state protection, identify sites of religious and cultural significance not protected by law but meriting relocation'.

4.2. Findings of the Archaeological Survey of India

In 1988, archaeological investigations of 167 of the 254 villages to be affected by the Narmada Sagar Project in Madhya Pradesh⁹ were undertaken by S.B.Ota on behalf of the Archaeological Survey of India (pre-history branch). The abundance of microlithic sites, mounds belonging to the pre-historic, early historic and historic

⁸ Renowned economist and Nobel laureate, proponent of 'development with a human face'.

periods, containing cultural artifacts like pottery, beads, coins, stone tools as well as dwelling sites, forts, monuments, iron smelters led the survey team to the conclusion that an intensive survey needed to be made in order to document all the sites which would be submerged by the dam. Several temples and loose sculptures would have to be relocated. The report stressed the urgent need for conducting salvage operations not only for structures above the ground, but also for the pre-historic mounds and underground sites.

In 1994, an intensive investigation of the sites to be submerged by the Narmada Sagar Dam, was carried out by a team from the ASI, Nagpur once again under the leadership of S.B.Ota. This survey once again confirmed the importance of the site. 50 pre-historic mounds were identified in 84 villages, of which 15 were recommended for investigation, excavation or relocation.

Curiously enough the State Department of Archaeology and Museums, Bhopal had also surveyed the same villages in 1993, and had recommended only one mound for excavation, a few 'stray' sculptures for transportation and only two temples, Semalda and Bara Bada for relocation. Otherwise, they found little else of 'significance'!

Similarly, in 1999, another team from the A.S.I. conducted a survey of 19 villages in the submergence zone of the Sardar Sarovar dam in Gujarat¹⁰, and reported that no state / centrally protected sites were found, since the existing sites had not been listed. However, it recommended the re-location of several sites of cultural value. This is a glaring example of how inadequacies in laws pertaining to protection of heritage sites, and their non-implementation can be used to their advantage by the authorities.

It may be pointed out here that this is more or less the approach of the authorities in infrastructure development projects the world over. Under the principle of 'eminent domain' and in the name of the 'greater common good', project authorities are invested with tremendous powers to acquire land, drive people out of their homes, divert rivers, flatten mountains and generally change the ecological, social and cultural environment. The fact that these are common property resources and that the State is merely a custodian, is forgotten in the euphoria of development activity. Also forgotten are the 'conditions' on which clearance was given for the project. The most glaring examples of non-fulfillment of conditions are to be found in

¹⁰ See Annex.3

the Narmada Valley. The World Bank, which had partly financed the project, withdrew after the Morse Commission found that the conditionalities pertaining to rehabilitation of project-affected persons were not fulfilled.

4.3 Archaeological investigations: State Departments of Archaeology (Gujarat, Maharashtra, Madhya Pradesh)

Even though both the ASI reports had emphasized the unique nature of the sites and recommended more detailed excavation and salvage operations, the task of further investigations was entrusted to the State Departments of Archaeology of Gujarat, Maharashtra and Madhya Pradesh, who did not have the means and possibly the autonomy to carry out such in-depth investigations.

In 1989, the Gujarat State Department of Archaeology surveyed 19 villages to be submerged by the Sardar Sarovar Project. Only the temples of Hapeshwar and Shoolpaneshwar were recommended for re-location.

In Maharashtra, 24 villages in Akkrani taluka and 9 villages in Akkalkuwa taluka were surveyed. Typically, 'no state-protected monuments were found'!

The Department of Archaeology for the state of Madhya Pradesh first surveyed 120 villages in the Sardar Sarovar submergence zone, and in 1991 another 73 villages were surveyed. 38 archaeological mounds / monuments were recommended for excavation / re-location

The Narmada Valley Development Authority had made available Rs 5 crores (Rs 50 million) under the Narmada Salvage Plan for salvage work pertaining to archaeological sites in the submergence of Sardar Sarovar, Narmada Sagar, Omkareshwar, Maheshwar, Jorbat and Man Projects. The only salvage work done was the reconstruction (not re-location) of Hapeshwar and Shoolpaneshwar temples, and the excavation of an early historic mound at Kherinama in Hoshangabad district where ancient tools, ostrich shell and artifacts were found. Ten mounds and five sites were recommended for re-location.



Shoolpaneshwar Submerged Under Sardar Sarovar Reservoir

5. Anthropological Studies.

The Anthropological Survey of India has carried out studies of 33 tribes under its project called "Peoples of India". Its report was published in 1990 and an interim report was submitted to the Narmada Control Authority and to the Ministry of Environment and Forests in 1991.

Under the Narmada Salvage Plan, the Anthropological Survey of India scanned and surveyed some sites in the SSP and NSP submergence area. Some bio-material retrieved from here has been shifted to the Rashtriya Manav Sangrahalaya at Bhopal.

In spite of the peremptory nature of the state department surveys, the minutes of the NCA (March 2001) claimed that 'detailed inventories and elaborate plans were carried out by the ASI and the state departments for protection of identified monuments.'

6. Maheshwar: Why it should be saved.

The stretch between Maheshwar and Navdatoli , and between Jabalpur and Mandaleshwar, contains the richest concentration of archaeological and cultural heritage in the Narmada Valley. Maheshwar also occupies an important niche in the history and the economic prosperity of Nimar and in the cultural history of the Indian sub-continent. Merely re-locating a few temples or monuments cannot preserve this priceless heritage.

The Maheshwar dam, which will drown this rich legacy, is expected to generate 400 megawatts of electricity at an astronomical price. Studies have revealed that this once power-rich state is suffering from power shortage since 70% of the industries were using power without paying for it (*Roy Arundhati*, 2005). Cutting transmission and distribution losses and tapping other sources of energy could be one solution. Generating electricity by some other means is possible, but there is no way we can ever recreate the valley, its rocks, its forests, its fossils and its cultural history.

WEST NIMAR River Map Chenpura Indore Katkut Sarwani Barkichauki Gujri Dhanpara . 6.1 Barwah # Maheshwar Mandleshwar Sanawad • Kasrawad Kheri Gothanya Rodava . Burut • Barkhera Matudpura Gagaon Mugdabad of Segaon Bhikangaon • Dival KHARGAON Lamkheri Sakarkheri • Barud • Bistan Jhiranya m Bhagwanpur Nimar the Dhavdi Pipaljhopa Kakora • Tajdin LEGEND State Boundary Rupgarh District Boundary Rivers Umari Manjala • District Headquarter Major Town MAHARASHTRA Map not to Scale Other Town Copyright @ 2007 Compare Infobase Limited

Geographical

location

Situated in a slight bend on the southern bank of the Narmada River, at the junction River the Maheshwari and the Narmada, the ancient city of Mahismati established on was cliff-like high 100 terraces. feet above the water level.

These terraces have been eroded into a series of mounds. As H.D.Sankalia says in his report, "If there is any place on the Narmada known today which has a continuous chain of mounds proclaiming the site of an ancient city on both the banks, which lies on the highway from Ujjain to Paithan, which has Buddhist stupas, a large number of Shiva and Vishnu temples, some from the 3rd century B.C. a site whose antiquity the excavations have taken right back to the pre-historic period, through a proto-historic period then such a place is Maheshwar." Earlier, in the 18th century, the extraordinarily able and enlightened ruler of Malwa(Nimar), Ahilyabai Holkar, struck by the beauty of the spot, had shifted her capital from Indore to Maheshwar. Lord Curzon, Viceroy of India, was also reportedly struck dumb by the extraordinary beauty of the place.

On the basis of the antiquities found here, Sankalia was able to trace the entire sequence of human habitation for Maheshwar.¹¹

Maheshwar has the unique distinction of having been almost continuously inhabited right from the Early Stone Age up to the present times.

The Maheshwar dam, will submerge Maheshwar town and 61 villages in the fertile province of western Nimad as well as some of the richest archaeological sites, especially the stretch between Mandaleshwar and Maheshwar.

6.2 Cultural heritage sites in and around Maheshwar

a) Artefacts

Several mounds containing beads and bangles were found at Gongwana, in Maheshwar tehsil. Relics of the pre-historic and proto-historic period were found at Lepa, Bhattiyan and Patharad.

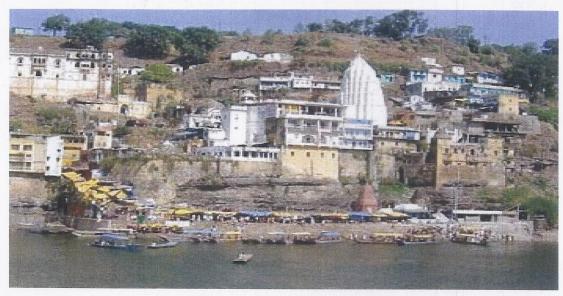
b) Pottery

- i) Black and Red pottery without painting.
- ii) Polished Grey Ware and Polished Black Ware, with very fine workmanship and exquisite animal paintings, not commonly found in the region, suggestive of the presence of settlers from outside. Also known as the Ahar Culture, this indicates links from pre-historic times between Ahar in Rajasthan, and Navdatoli, Khaparkheda, Pipri Utavad and Bilwada in Madhya Pradesh.

¹¹ see Annex.4

- iii) Urns containing ashes, signifying burial practices. A terra cotta urn, black on the inside and red and black on the outside, still intact, was found at Harimchi Tekdi.
- iv) Dwelling sites of the Chalcolithic period have been found here.

c) Temples and sculptures



The list below contains some of the important listed temples and sculptures and is by no means exhaustive.

- i) Kaleshwar temple at Maheshwar (1565 A.D.) containing a beautifully decorated marble shivalinga. Exquisitely carved borders surround the door frames.
- ii) Matangeshwara, Kadambeshwara, Vruddha Kaleshwara and Kesho-Narayan temples built roughly in the same period.
- iii) The beautiful Lakshmi Narayana temple containing sculptures of Ganesha, Vishnu, Shiva, and Lakshmi, built in Ahilyabai Holkar's time and which was a favorite resting place of parikrama pilgrims.
- iv) The ancient temple of Omkarji built by Raja Mandhata. A short distance from here are the remains of a Jain temple of the 12th century. 24 figures of Lord Vishnu, carved in green stone, overlook the spot where the river branches into two.
- v) The sacred Omkaramalleshwara temple which is one of the 12 jyotirlingas in the country. At this spot, the Narmada River flows out from beneath the mountain, swirls around the 'yoni' and disappears once again.
- vi) The Siddhartha temple with imposing 5 feet high elephants.

- vii) The Runamukteshwara Mandir, Gayashil Trishulakunda, Vishnu Mandir, Jai Siddhvarakuta and the Ravana Nala with the huge Chamundi idol all contribute to the splendor of the region.
 - It is reported that Lord Curzon, Viceroy of India, was struck dumb by the beauty of the place.
- viii) At Bakava in Barwah tehsil is the traditional industry of making shivalingas.
- ix) The famous Neelakeshwara Mandir at the Gaudhari Sangam from where the Narmada <u>Parikrama</u> begins.
- x) Ruins of the sacred Bilkaleswara temple and the Jamadagni ashram.
- xi)Beautiful sculptures of Shiva-Parvati , Vishnu and Nagadevata at Gongawa.
- xii) Ardhangeshwara Mandir at Bhampura containing sculptures of Ardhanariswara, Shiva-Parvati and Vishnu.
- xiii) Old Vimaleshwara Mandir at Belsar.

d) Ghats

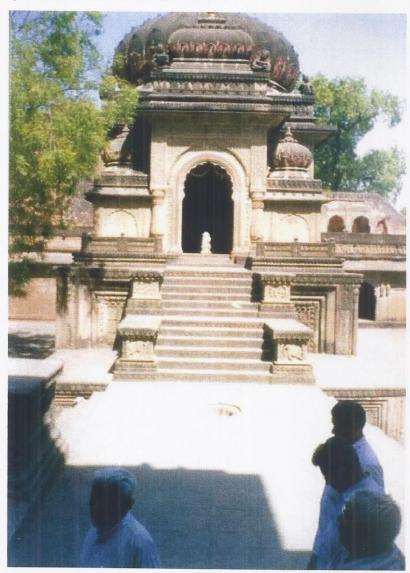
A number of embankments with flights of steps were built along the banks of the river during the Maratha period. Of these, Ahilyadevi's Ghat, Peshwe Ghat and the Rajeshwara Ghat are among the oldest.



e) Forts and memorials

- i) The Mordhwaj fort at Mardana (Tehsil Kasarawad) was built by the Gauli king Mordhwaj . Only the arched doorways remain.
- ii) Innumerable memorials to the memory of ancestors are strewn over the countryside.

f) Chhatris and memorial stones



hero stones are found all along the course of the river.

- i) At Rawerkhedi, on the banks of the Narmada, a 'chhatri' or umbrella shaped structure is built in the memory of Peshwa Baji Rao II who laid down his life there.
- ii) Chhatris built in the memory of Ahilyabai Holkar, Vitthal Maharaj, Sardar Bule Saheb, Manorama.
- iii)The Samadhi of saint Dhanjibaba.
 Countless samadhis, sati stones and

g) Iron smelting sites

These are found in layers representing the Early Iron Age, 600 to 3000 B.P.

h) Sites with Acheulian tools.

Large quantities of stone tools of the Acheulian type, made from chert and dating to the Upper Palaeolithic period (30,000 B.P.)



This brings us to the crux of the issue: what is the relevance of archaeology and cultural heritage in today's world? Is it really a development versus culture debate or are both of them two sides of the same coin and need to be looked at as complementing each other and not competing with each other? This will be discussed in the ensuing sections.

7. Relevance of archaeology and anthropology in the modern world

Archaeology deals with the material culture of man from pre-historic times, helping us to establish links with our past through the study of objects like seals, tools, pottery, artifacts, dwelling sites and sculptures. Modern archaeology has developed a multi-disciplinary approach, which co-relates and interprets not only such material cultural evidence, but also the geological, climatic, environmental and ecological

conditions which existed in the past and which may provide a key to coping with the present and the future.

Since anthropology deals with the origin and behavior of man as well as the development of societies and culture, it enables us to learn about the social and community life of our ancestors. Like archaeology, anthropology can provide clues to the cultural development in the Narmada Valley from Palaeolithic times to the present day. The valley, with its large and varied tribal population is an anthropologist's delight.

A rich archaeological site helps determine the chronology and sequence of habitation at a site and to develop a data base of knowledge. Excavations have revealed elaborate drainage systems (Mohenjo-daro, Harappa), water harvesting and distribution systems (Buddhist caves), importance of repairs and maintenance of water systems (Skanda Gupta's rock inscription at Junagadh), and revealed information about building techniques (Pyramids), farming practices (Inamgaon), trades, crafts, rituals and beliefs.

In modern times, archaeology helps us to put together the jigsaw puzzle of our past and our links with other cultures. In a world of narrow parochialism and intolerance of other cultures, the scientific study of interrelationships and commonalities between different cultures could imbibe respect and tolerance for cultural differences.

7.1 Cultural Heritage: New global perceptions

Today, the scale of human intervention has become so large and invasive, that cultural heritage sites are being destroyed at an unprecedented pace and scale. Taking cognizance of this, article 27 of the United Nations' Universal Declaration of Human Rights, categorically states that 'diversity of cultural heritage is essential for sustaining our ability to cope with the past, present and future' and for creating a pool, of knowledge which cannot be created by any other means.

In 1999, the World Bank, which funds development projects the world over, decided to review World Bank-supported work in cultural heritage by initiating a discussion on "Culture and Sustainable Development: Premises and Work Plan" (now known as *Culture and Sustainable Development: Framework for Action*). The outcome of this exercise was a study, *Cultural Properties in Policy and Practice*. This

is the first systematic effort to examine cultural heritage in the work of the World Bank.

The purpose of the study is to identify the Bank's past work with physical cultural property and assess its effectiveness.

At this juncture, our concern is not with the World Bank and its policies per se, but with the implications of this study for saving cultural heritage sites in ongoing projects and in future ones, since World Bank loans have become a permanent feature of our current model of development. With the globalization of economies, cultural heritage must also be considered a global responsibility.

The World Bank study admits that 'The Bank has not always ensured that the projects it financed did not harm cultural property.' The study further admits that, 'historically, the Bank's record on addressing cultural property has been mixed. In part, these shortcomings have been due to the shortage of resources to ensure full integration of cultural heritage in the Bank's Economic Assessment process and throughout the project cycle. The Bank's guidance on good practices in addressing cultural heritage issues in environmental assessment seems to be applied inconsistently. Issues ranged from a lack of satisfactory reconnaissance surveys before work was done, the use of inappropriate materials in historic areas, and major construction in protected zones. Fragmentation of responsibility and weak implementation contribute to the problem. Local institutions responsible for emergency salvage, archiving, and collections are usually left to their own devices and are often the weak link. Also, verification is often not done by the donor agency. When it comes to doing good, the Bank has never articulated a corporate strategy for cultural heritage. Prioritizing Bank support for cultural heritage is the job of a strategy. The current approach does not accomplish this.'

Finally, the most telling outcome of this study is the admission that 'even though the outcome of Bank activities involving physical cultural heritage has been satisfactory, sustainability and institutional development impact need improvement.'

The relevance of cultural heritage to Bank country strategies is most often limited to its potential for attracting tourists which, while it may offer excellent short-term economic growth potential, is neither the best nor only value of cultural heritage. The study fieldwork found that when cultural assets generated significant funds they were often used elsewhere. Ministries and other national institutions with cultural heritage responsibilities are often weak, under-funded, and understaffed.

While the legal authority and responsibility for managing cultural heritage resources rests with various levels of government, the capacity for doing so is not always available. At the policy and strategy level, capacity needs for national cultural institutions include forming or revising legal and regulatory structures; evaluation of cultural resources; analysis of conservation requirements; priority setting; coordination with line ministries; and public information and education policies.

The silver lining is that the study also reveals that 'in recent years some borrowers, notably Georgia and Albania, have expressed a desire to have Bank assistance to conserve their cultural heritage. These borrowers and others have recognized the value of cultural heritage conservation to economic development, not only through attracting tourists, but also to attract business, investment, create innovative milieus, and improve social networks and "social capital." Their concern with doing good, that is, conserving and enhancing their own cultural heritage-is reflected in many initiatives.' It is surprising that small countries show more awareness about preserving their heritage than giants like India.

The Narmada Valley Project illustrates all the lacunae identified in the study. 'Incredible India', unfortunately, looks at our ancient heritage only as a means for attracting tourists and generating funds. One wonders when we will wake up to the realization that there are even more precious things than marble mosques and rock-cut caves sculpture which need to be preserved and protected.





7.1.1 Cultural Heritage Management: Emerging International Trends

The magnitude of dam-induced loss of cultural heritage is so serious that the same year as the World Bank started the process of introspection described above, the issue was also raised at the World Archaeological Congress (WAC) in South Africa (1999). Subsequently, a workshop on Cultural Heritage Management was held in the University of Florida in Feb.2000, with papers from countries in all continents, narrating the nature of loss due to dam construction, measures taken and the need for new policies on cultural heritage management. This prompted the World Commission on Dams (WCD), to prepare a Working Paper on "Dams and the Cultural Heritage Movement" (Aug.2000), with the specific objectives of presenting an overview of past and present practices of cultural heritage management and to recommend criteria and guidelines for the future.

Even though these guidelines are yet to be integrated into policy frameworks, the process has been initiated. The most important gain from this exercise has been the **definition of cultural heritage** which has been broadened to include:

- a) archaeological sites as well as resources.
- b) cultural resources of living populations, such as modes of subsistence, social organization, religious practices, (eg. The Narmada Parikrama, the centuries old pilgrimage from the source of the river to the mouth), food habits etc.
- c) cultural landscapes such as land forms, biotic and non-biotic features of land resulting from historic and pre-historic times, representing the cultural heritage of 'a people, a nation, of humanity.'

Thus, the conclusions and recommendations that emerged are much broader in scope:

- i) Referring to article 27 of the UN Universal Declaration of Human Rights, the recommendations emphasize the fact that diversity of cultural heritage is essential for sustaining our ability to cope with the past, present and future and for creating a pool of knowledge which cannot be created by any other means.
- ii) Legislation needs be made at the national and international levels for preserving cultural heritage.
- iii) Funding of large-scale development projects must be linked to cultural heritage management and this in turn should be incorporated into the Environmental Impact Assessment.
- iv) In the context of uncertain present and future, we need to preserve the past so as to understand how they overcame food shortage, population growth, climate change etc.
- v) The magnitude of the loss of cultural heritage is irreversible and irreplenishable.
- vi) Cultural Heritage Management should be directed towards capacity building of local population and poverty alleviation.

8. Laws related to protection of archaeological monuments and sites: India.

There is only one law in India which is related to the protection of archaeological sites and remains. The remaining two are related to the prevention of misuse of important monuments (Indian Treasure Trove Act, 1878) and to the regulation of export of antiquities (The Antiquities and Art Treasures Act, 1972).

Promulgated in 1958, The Ancient Monuments and Archaeological Sites and Remains Act and its Rules (1959) is the only legislation which is applied today for the preservation of archaeological sites, monuments, sculptures and carvings. The limitations of this Act are that the broader definition of cultural heritage (as discussed above) does not come under its purview. Also, if a site or monument is not 'listed' under this Act, it is not deemed protected or worthy of protection. This is the case in the Narmada Valley. The reports of the State departments of archaeology have used precisely this logic for declaring that there were no sites worth saving in the valley, since they had not been listed.

We have already seen the abundance of evidence of the pre-historic, protohistoric and historic periods in the Narmada Valley. However, besides this, there are trees under which the *adivasis* have worshipped for centuries (devedanis), burial sites, festival grounds, flora and fauna which have cultural significance for the communities, which are part of their folklore and their collective memory. The new trends in international cultural heritage management practices consider all these as important as monuments and buildings.

8.1 Recent trends in heritage conservation legislation: India

According to a report in the Indian Archaeology Review, in November 2007, the Director-General of the Archaeological Survey of India, Anshu Vaish announced that an amendment to the Ancient Monuments and Archaeological Sites and Remains Act, 1958 and Rules, 1959 is on the anvil. He also stated that it would soon be mandatory for all agencies (government or private), to conduct heritage impact assessments, similar to EIAs, and obtain clearance from the ASI before the commencement of all new infra-structure projects.

At a meeting of the Central Advisory Board of Archaeology, in December 2007 the Hon'ble Minister for Culture, Ambika Soni announced that the Govt. of India plans to set up a National Heritage Commission for framing guidelines for conserving heritage monuments and sites.

It is hoped that the proposed changes will be introduced and implemented in the near future, so that the tragic loss of priceless cultural heritage in the Narmada Valley is averted. Even at this stage, timely intervention could save at least a representative sample of this heritage by arresting submergence due to the Maheshwar dam reservoir.

It appears that the Narmada Valley Development Authority (NVDA) is also waking up to the realization that the Narmada valley is an important cultural heritage site. It has recently started a monthly lecture series, more than two decades after commencement of the project works, to 'expose officers and employees to latest knowledge and various dimensions of the Narmada Valley.' K.K.Mohammad was invited to give a lecture on 'Archaeological Wealth of the Narmada Valley.' He too, like others before him, stressed upon the rich archaeological wealth beneath the surface and recommended extensive exploration of the "oldest civilization in the Indian sub-continent", (Hindustan Times, Bhopal, 11/05/07).

On this occasion, Uday Kumar Varma, Chairman of the NVDA announced that 36 temples and 41 monuments were being re-located (19 temples in the SSP zone,

6 in the NSP zone, 9 in Omkareshwar and 2 in Maheshwar) and that land was being acquired at Amarkantak for 'conservation' work. If conservation of cultural heritage in the Narmada valley is to be effective, such fragmented and arbitrary salvage work is of little use. With the current awareness of the importance of this heritage, it would be appropriate to review the project and its effect on the cultural heritage and to look for alternatives.

9. Conclusions

- 9.1.1 It is evident from our study that the entire Narmada valley is a unique and ancient cultural heritage site. At least some of the representative sites need to be preserved.
- 9.1.2 The stretches between Maheshwar and Navdatoli, Jabalpur and Mandaleshwar have been found to be particularly rich and should be saved from submergence at any cost.
- 9.1.3 The cultural aspects in these areas are intrinsic to this site and can neither be shifted nor reproduced.
- 9.1.4 The problems of water-logging and salinity caused by the dams already constructed (eg. Tawa, Bargi etc.) outweigh the projected benefits. The same is likely to happen in the case of the four dams mentioned in this paper. It is evident that they will not yield all the benefits they were expected to. The very objectives for which the rich natural and cultural heritage of the valley is being submerged and thousands of people ousted from their homes and lands, are not likely to be fulfilled.
- 9.1.5 International funding agencies are giving top priority to conservation and management of cultural heritage. New technologies for increasing irrigation potential and power generation have emerged during the last two decades. Globalization of trade and commerce has given a global significance to culture and cultural heritage. In this changed scenario, it has become imperative to take steps for preventing further destruction of cultural heritage in the Narmada Valley.

9.1.6 Imaginative and innovative cultural tourism can generate funds for a longer period than purely developmental activities, since the latter will cease as soon as the reservoir gets silted, which would be in 50 or 60 years' time.

10. Recommendations.

It is recommended that:

10.1.1 In order to avoid further loss of cultural heritage due to development projects, the proposed changes in the laws for protection of heritage sites be made at the earliest.

The broader definition of cultural heritage, as stated in Article 27 of the United Nations' Universal Declaration of Human Rights be incorporated in the new laws.

- 10.1.2 A mechanism for **detailed studies** should be put into place at the time of conceptualization of a project. The studies should not be conducted haphazardly and hastily as has been the case in the Narmada Valley.
- **10.1.3** The proposed **mandatory heritage clearance** for development projects should be introduced at the earliest.
- 10.1.4 An independent monitoring body should be set up for verification of compliance of heritage norms.
- 10.1.5 Development objectives should be location-specific and de-centralized so that the intrinsic features of the site to be affected by the project are fully taken into account, and the plans modified accordingly before making a major intervention. In the case of the dams mentioned above, even a reduction in dam height could save some sites.
- 10.1.6 Development activities should have a holistic approach, taking into consideration sustainable options. It is now well known that de-centralized systems of water harnessing and distribution cause less damage to the environment and are sustainable for much longer periods. In India, traditional water management systems, such as the tanks built by the Gond

kings in Bhandara, when properly maintained, continue to provide water in areas where centralized systems can never reach.

- 10.1.7 Best practices from other similar projects in India and other countries be emulated wherever appropriate in the Narmada Valley.
- 10.1.8 Creation of awareness regarding cultural heritage among local population.
 Emphasis should be on training local residents for interpretation and conservation of heritage sites.

Knowledge and expertise of academicians, researchers, artistes and students may be solicited for this purpose, but traditional time-tested methods should also be included. These are often easier for people to understand and implement.

- 10.1.9 Means of poverty alleviation and creation of wealth through cultural heritage management be explored. This aspect be given attention as it will ensure people's participation and consequently ensure their support for conserving the site. The traditional life-styles could be showcased.
- 10.1.10 Innovative events on the lines of the Heritage Day in Europe, heritage tours, festivals etc. be organized. Special efforts be made to include the lesser known sites.
- 10.1.11 A Task Force consisting of academicians, researchers, representatives of local communities, officials from Archaeological and Anthropological Survey of India and project officials be formed for assessing the extent of loss of cultural heritage by dams in the Narmada Valley.
- 10.1.12 Establishment of a Committee for examining non-destructive and optimal alternatives.
- 10.1.13 A moratorium be declared on the Maheshwar and Omkareshwar dams until further studies are done and salvage / relocation operations are satisfactorily completed.

In conclusion, we would like to make a fervent appeal to take every measure possible to prevent further destruction of the important cultural heritage sites in the Narmada Valley and to appeal to the Hon'ble Minister for Culture, Smt. Ambika Soni, to

- i) urgently constitute the proposed National Heritage Commission
- ii) take a decision to stop further loss of precious and irretrievable cultural heritage sites in the country,
- iii) prepare a strategy for mitigating the harm done so far.

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ANNEXURE 1

UNIVERSAL SEQUENCE OF CULTURES

1. PRE-HISTORIC PERIOD

A) PALAEOLITHIC PERIOD (100,000-250,000 B.P.)

Also known as the Stone Age, this stage marks the point when Early Man (hominid) first started using stone as a tool. The chronological age may vary from region to region, ranging from 100,000 to 250,000 years B.P.(Before Present) and is categorized as 'pre-historic' since it existed before the invention of writing. Geologically, this period is known as the Pleistocene period.

The Palaeolithic period is further divided on the basis of the types of stone tools associated with that period:

- i) Upper Palaeolithic (40,000 B.P): First appearance of Homo sapiens. Evidence of tremendous changes in flora, fauna and the development of early cultures.
- ii) Middle Palaeolithic (30,000 B.P.)
- iii) Lower Palaeolithic (10,000 to 30,000 B.P.)
- iv) Acheulian type: the first standardized tradition of tool making, represented mainly by hand axes, cleavers, choppers and flakes of chert.

B) MESOLITHIC PERIOD

The disappearance of the ice sheets caused profound changes in the environment and cultural patterns. Presence of chipped stone tools and microliths (very small, fine stone tools). Geologically known as the Holocene period (20,000 years B.P.), it marks the end of the Pleistocene period. Evidence of rudimentary agriculture and domestication of animals.

C) NEOLITHIC PERIOD (4,000 to 8,000 B.P.)

Also known as the New Stone Age, this period marks the dawn of village settlements due to new techniques of growing grain and cereals. Development of arts and crafts due to liberation from hunting and food gathering activities. The stone tools are ground and polished.

2.PROTO-HISTORIC PERIOD

This is the period when writing has been found to exist, but has not yet been deciphered.

A) CHALCOLITHIC PERIOD (2750 to 4000 B.P.)

Also called the Bronze Age since the knowledge of copper smelting seems to have spread everywhere, and the use of copper became popular.

3. HISTORIC PERIOD (600 to 3000 B.P.)

Also known as the Iron Age, it marked the discovery of iron smelting techniques. Invention of the wheel and weapons leading to large-scale.

ANNEXURE 2

ARCHAEOLOGICAL SURVEY OF INDIA, NAGPUR ARCHAEOLOGICAL INVESTIGATIONS IN THE SUBMERGENCE AREA OF THE NARMADA SAGAR DAM, MADHYA PRADESH: A RECONNAISSANCE SURVEY,1998 (S.B. OTA)

Tehsil: KHANDWA

VILLAGE Balwara Jamoti

Purni

Chandel

Tehsil: HARSUD

VILLAGE Abhawa Amulni

Baihari (Bir)

Balri

Bamangaon Bandariya Bargaon Barur Belwari

Bhawarli

Bijalpur Khurd

.

Bijalpur Kalan

Billod Billod Mal Blurari Boribandri

Chalpa Kalan

Charkhera

ARCHAEOLOGICAL REMAINS

Acheulian

Acheulian, microlithic, loose sculptures

i) 2 Aceulian localitiesii) 2 microlithic localitiesiii) Early Historical moundiv) Medieval mound

v) Iron smelting site

Temple remains (12th / 13th Cent.A.D.)

ARCHAEOLOGICAL REMAINS

Aceulian

Medieval mound

Medieval mound

Remains of Shiva temple (12th /13th

Cent.A.D.:Barkeshwar Mahadev Mandir

Medieval mound Medieval mound Medieval mound Medieval mound

2 Microlothic localities

2 Medieval mounds Medieval brick temple Remnants of stone temple 4 Aceulian localities Early Historical mound

Loose sculptures
Sati memorial stones
Iron smelting sites

Medieval site with fortification: Kotra

Late medieval structures

Temple remains (12th/13th Cent.A.D.)

Microlithic
Medieval mound
Medieval mound
Microlithic

Medieval mound Early historical mound

Microlithic

Chhirwan Microlithic
Chich Medieval mound

Chikhli 2 medieval mounds Dewaldi Medieval mound

Dagarkheri Ruins of late med. period

Ganor Medieval mound
Gehelgaon Iron smelting site
Gehungaon Medieval mound
Gondikhera Microlithic

Gullas Middle Palaeolithic: 2 localities

Haripura Iron smelting site Medieval site

Hathnora Late medieval structure

Harsud Vishnu temple (late 12th /13th Cent.A.D.)

Loose sculptures
Medieval mound
Jabgaon Medieval lound
Jaitapur Khurd Microlithic

Jalwan Medieval mound
Jhagria Mal Medieval mound
Jhirighat Medieval mound

Jogibira Shiva temple remains (12th/13th C. A.D.)

3 Medeival mounds

Loose sculptures, Sati memorial stones

JunapaniMedieval moundKarauliMicrolithicKashipuraMicrolithic

Kasarawad Medieval mound
Khudia Mal Middle Palaeolithic

Middle Palaeolithic
Medieval mound

2 Shiva temples (late medieval)
Khutia Medieval mound

Khutia Medieval mound
Kukdal Middle Palaeolithic
Vishnu sculpture

Temple remains (12th/13th Cent. AD)

Kuksi Medieval mound
Lachhora Medieval mound
Lodhisanthri Medieval mound
Mahatpur Microlithic mound

Nagpur Microlithic Medieval mound Microlithic

Nandgaon Sati memorial stones
Medieval mound

Naoghata Acheulian
Nazarpur Microlithic

Newalkhera Medieval mound Middle Palaeolithic

ANNEXURE 3

ARCHAEOLOGICAL SURVEY OF INDIA, PRE-HISTORY BRANCH,NAGPUR: SALVAGE ARCHAEOLOGY IN SARDAR SAROVAR SUBMERGENCE AREA, 1994

LIST OF ARCHAEOLOGICAL REMAINS TO BE SUBMERGED BY THE SARDAR SAROVAR PROJECT

District: NIMAR

VILLAGE Khajpur Bhanta

Jangarwa Paliya

Kathora Pichhauri

Nandgaon Pendra Bhilkhera

Ekalra

Kasarawad

Piplaj Dehdala Bagud Kheri Piplod

Segawan

Utawad

Taluk: BARWANI

ARCHAEOLOGICAL REMAINS Solitary unidentified female deity i) Upper Palaeolithic artifacts

ii) Historical mound

iii) Ruins of medieval fort: Rajgarh

Medieval mound

i) Stray Middle Palaeolithic artifacts

ii) 2 mounds: medieval and historical

Chalcolithic mound i) Chalcolithic mound

ii) Ancient temple remains

iii) Hero stones Medieval mound Medieval mound i) Historical mound

ii) Stray fragments of sculptures

iii) Medieval chhatrisi) Chalcolithic mounds

ii) Historical mound: Sangaon

i) Chalcolithic moundii) Historical mound

iii) Shiva temple: Holkar period

Historical mound Chalcolithic mound Historical mound Historical mound i) Historical mound

ii) Remains of temple and sculptures

(12th / 13th cent.A.D.)

i) Upper Palaeolithic mound

ii) Medieval mound

Chalcolithic mound

Taluk: THIKRI

VILLAGE Chikhalda

Khaparkhera Karondiya

Koteshwar

Katnera

Raswa Kolgaon

Warud Bhavriya

Nawadpura

Chandankheri

Dahar

Kikarwas Dharamai

Taluk: MANAWAR VILLAGE Sisgaon

Khera Babligaon Balwara

AD

Bodhwara period

Johur

ARCHAEOLOGICAL REMAINS

i) Historical mound

ii) Medieval temple remains

iii) Ghat: Medieval period Chalcolithic mound

i) Upper Palaeolithic artifacts

ii) Medieval mound: Rohana

iii) Ghat: Late medieval period

i) Medieval mound

ii) Temple and sculpture remains

i) Historical mound

ii) Medieval temple remains

iii) Historical mound Middle Palaeolithic site

i) Middle Palaeolithic artifacts

ii) Historical mound

iii) Temple remains: early medieval

Chalcolithic mound

i) Historical mound

ii) Temple and sculpture remains (12th / 13th cent.A.D.)

iii) Late medieval fort remains

iv) Hero stones

i) Microlithic artifacts

ii) Solitary identified sculpture

i) Upper Palaeolithic artifacts

ii) Historical mound

iii) Stray sculpture of Shiva-Parvati (12th / 13th Cent. A.D.)

i) Medieval mound

ii) Medieval temple remains

Medieval mound

i) Temple and sculpture remains (12th / 13th Cent.A.D.)

ARCHAEOLOGICAL REMAINS

i) Medieval mound

ii) Medieval temple remains

Historical mound

Late Medieval mound

i) Historical mound

ii) Temple remains

iii) Sculpture remains 12th / 13th Cent.

Temple ruins, sculptures of Parmara

(11th/12th Cent.A.D.) Historical mound

Gangli	i) Medieval mound
remains	ii) Medieval temple and sculpture
Junakhera Semalda	iii) Chhatri iv) Temple: Holkar period Historical mound
Schlarda	i) Upper Palaeolithic artifactsii) Medieval moundiii) Medieval Temples
Achhola Parkhar	iv) Chhatrisv) Stray sculptures: medievalMedieval mound
Jotpur	Medieval temple i) Upper palaeolithic artifacts
Bara Bada	ii) Medieval mound: Narayanpurai) Stray sculptures (Paramara period)ii) Medieval mound
Ratwa Bagarpura	iii) Medieval temple Medieval mounds i) Middle Palaeolithic site ii) Upper Palaeolithic artifacts
Kothra Amlatha	iii) Chalcolithic mound Medieval temple remains Historical mound

Historical mound

ANNEXURE 4

MAHESHWAR AND ITS ENVIRONS: SEQUENCE OF CULTURES

1. Pleistocene period

Palaeolithic sites: (150,000 to 200,000 B.P) Evidence of continuous habitation since 150,000 BP in the stretch between Jabalpur and Mandaleshwar.

- a) Acheulian type tools: hand-axes, cleavers, choppers, flakes. (100,000 B.P.)
- b) Pebble tools found at Durkhedi
- c) Blade tools made of chert (17,000 to 39,000 B.P.)

2) Holocene period

a) Mesolithic sites (10,000 B.P.): Microliths

b)Neolithic sites (8000 to 4000 B.P.): Stone tools with burnt tips, evidence of domestication of animals, primitive agriculture, semi-nomadic lifestyle: Durkhedi Nala, Mortakha Road near Omkareshwar, Patalpuri near Choral, Amba, Mehtakheri, Gangatekri, Barwah, Sahasradhara, Dongri, Ganesh Nala, Auliya, Dharampuri.

d) Chalcolithic sites (3,600 B.P.): Permanent dwelling sites, chalcedony blades, ground stone axes, pottery, querns, copper objects at Maheshwar and Navdatoli.

POTTERY TYPES

- 1. Painted Red Ware
- 2. Painted Black and Red Ware
- 3. White-slipped Painted Ware
- 4. Greyish Black Ware
- 5. Very Coarse Red and Black Ware
- 6. Incised Ware
- 7. Tan Ware