

**ANTHROPOLOGY CURRENT AFFAIRS MAGAZINE
MAY 2022**

VISHNUIAS.COM

WE PROVIDE A PATH FOR YOUR SUCCESS

**CURRENT AFFAIRS
ANTHROPOLOGY**

A MAGAZINE FOR CIVIL SERVICES PREPARATION

(Welcome To Vishnu IAS online)

(Research and Training Institute for the best civil services preparation in India)

CONTENTS

PAPER -1

PHYSICAL & ARCHAEOLOGICAL ANTHROPOLOGY

1. Who Were the Denisovans?
2. The temporal lobes of Homo erectus were proportionally smaller than in H. sapiens
3. Tools reveal patterns of Neandertal extinction in the Iberian Peninsula
4. Forensic Anthropology in a Changing Climate
5. New Study of Neanderthal And Denisovan DNA Reveals a Surprising Link to Men Today
6. Ancient Homo sapiens took a talent for cultural creativity from Africa to Asia
7. Two human skeletons from Indus Valley-era found in Rakhigarhi
8. Regular climbing behaviour in a human ancestor
9. Prehistoric rock paintings found in Telangana, history enthusiasts believe they date back 10k-30k years
10. Neanderthal DNA contributes to genetic diversity, bringing more understanding to human evolution

SOCIO – CULTURAL ANTHROPOLOGY

1. Marriage or not? Rituals help dating couples decide relationship

future

2. Daughter can use single mother's caste: Bombay HC
3. Hunter-gatherers may have facilitated cultural revolutions via small social networks.
4. Can the patriarchy be matrilineal? An anthropologist calls for clarity

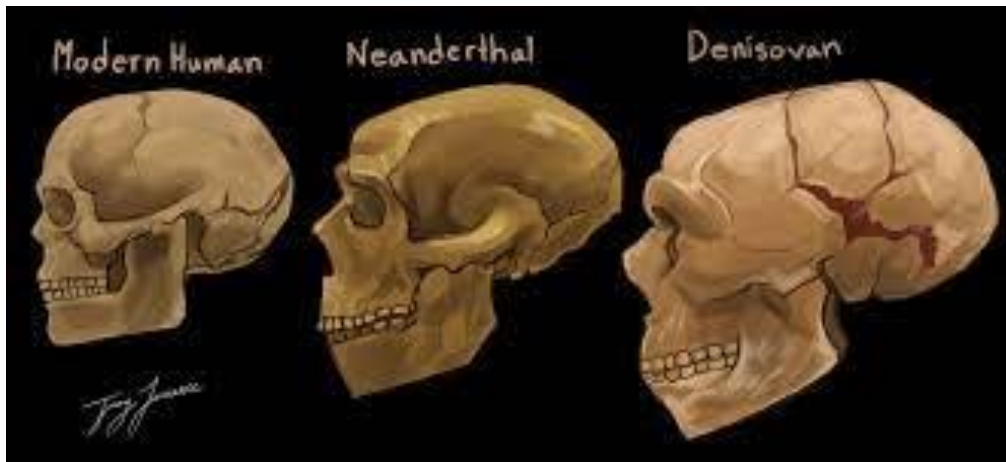
PAPER - 2

INDIAN & TRIBAL ANTHROPOLOGY

1. Manipur: Govt likely to extend SoO agreement with Kuki militants for another six months
2. Health infrastructure weakest in tribal areas: Report
3. Role of gram sabha, local community key in building resilience among tribal communities: Report
4. Eight states tell Supreme Court they wrongly rejected claims of tribals over forest land
5. Caste doesn't just exist in India or in Hinduism - it is pervasive across many religions in South Asia and the diaspora
6. The Miyas of Assam, and their char-chapori culture
7. Attempt to revive Covid-hit Dhokra tribal craft in Odisha
8. Tribal communities suffer when evicted in the name of conservation
9. Why are tribals of Rajasthan and Gujarat demanding a separate state of Bhil Pradesh?

PHYSICAL & ARCHAEOLOGICAL ANTHROPOLOGY

1. Who Were the Denisovans?



At an unusual meeting at a Siberian cave, researchers find that these mysterious archaic humans lived in the same place as both modern humans and Neanderthals – though not necessarily at the same time – and their range probably stretched into east Asia DENISOVA CAVE, SIBERIA – Bence Viola first saw the ancient molar last summer, just after a piece of it was dug out of layers full of brown dirt, gray rock, animal bones, stone tools, and goat feces. He considered the tooth fragments too big and weirdly shaped to be human.

“I thought it must belong to a cave bear,” he says. Several fossils were found that summer in this remote cave in the Altai Mountains. Some, including a toe bone, looked human and were to be sent for DNA analysis to paleogeneticist Svante Pääbo at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. Viola, a post-doc at Max Planck, almost didn’t include the molar. But he and Pääbo decided to play it safe and test all the new fossils. The layer that held the molar in Denisova Cave was also the resting place of a girl’s finger bone, which was so well preserved that Pääbo’s lab was able to sequence its nuclear genome and identify it as belonging to a previously unknown type of archaic human. The team called them the Denisovans.

For the first time, researchers had a genome in search of a fossil record, so every possible new bone was significant. Back in Leipzig, graduate student Susanna Sawyer was charged with extracting DNA from the animal bones. In June, she

stopped Pääbo in the hall. “I think I found another Denisovan,” she said. Preliminary analysis suggested that the molar’s DNA was similar to that of the cave girl’s. Pääbo shook Sawyer’s hand – this was only the third fossil ever found of a Denisovan, the others being the bit of finger bone and another molar, also from Denisova cave. Cave treasure. Researchers have found the tooth of a Denisovan, plus a sophisticated stone bracelet and tools, in Denisova Cave.

What’s more, preliminary analysis of the mitochondrial DNA from the toe bone suggests that it belonged not to a Denisovan but to a Neandertal. That means both types of archaic humans lived in the same cave. And the large, three room cave also holds sophisticated stone tools and bone artifacts that appear to have been crafted by our own species, *Homo sapiens*. “The one place where we are sure all three human forms have lived at one time or another is here in Denisova Cave,” Pääbo said. Today the cave is off the beaten path, in southern Siberia, 350 kilometers north of the Russian border with both Kazakhstan and Mongolia, and closer to Beijing than Moscow.

Their goal was to try to solve the mystery of the cave girl’s identity, to find more of her people, and to explore how the discovery is challenging models of modern human origins. In lively discussions sometimes catalyzed by vodka toasts, they compared what archaeology, genetics, and fossils reveal about the world the Denisovans inhabited 30,000 to 50,000 years ago. Genomic data have already shown that our ancestors mingled with archaic humans, who may have given us valuable immune cell types (see sidebar, p. 1086). But it’s not clear when and where this happened.

From 50,000 to 30,000 years ago, the archaic people hunted bear, lynx, and wild boar in the Altai Mountains, where they set up seasonal camps in summer, said RAS archaeologist Mikhail Shunkov as he led the tours. They retreated to limestone caves such as Denisova in winter. “With a natural opening for a chimney, the cave was quite a cozy place,” Shunkov said, pointing to an opening in the ceiling at Denisova. With a clear view of the Anui River – and any humans or animals passing below – Denisova must have been choice housing, said Pääbo, noting how sunlight streaming through the opening overhead lit the cave like a chapel.

Until recently, the archaeologists had “no doubts that people associated with this industry were anatomically modern,” Derevianko says. But now, thanks to

the genomic results, it's possible that some were Denisovans, Shunkov says. To identify the toolmakers, researchers need fossils, but they are few and far between. As a result, "it remains unknown what the Denisovan looked like or how he behaved," says biological anthropologist Maria Mednikova of the RAS in Moscow.

So Viola's talk at the meeting, describing the single new tooth, drew intense interest. Like the first molar found, it is very large and lacks specialized features found in Neandertals. Nor does the tooth resemble a modern human molar, as it has many unusual cusps, Viola says. The finger bone fragment that first yielded Denisovan DNA was so small that it yielded little information other than it was a child's because the growth plate was not fused. In addition to the few Denisovan fossils, Neandertals also left fossils and characteristic Mousterian stone points and scrapers in Denisova and other caves.

At the meeting, Russian researchers described new finds of Neandertal tools and fossils in caves just 100 and 150 kilometers away from Denisova Cave, dated to 45,000 years ago. Mednikova adds that the toe bone from Denisova looks most like a Neandertal toe from Iraq, fitting well with the preliminary DNA finding. And yet Derevianko thinks Neandertals didn't stay long here, because their bones and artifacts disappear by 40,000 years ago. He views them as brief visitors, probably coming from the west in Kazakhstan. Neighbors, or successors? It is now clear that Neandertals, Denisovans, and modern humans once occupied the Altai – but were they all there at the same time?

This is hard to answer because there are questions about the dating of crucial layer 11 in Denisova Cave. This meter-thick layer held the Denisovan finger and molars, the Neandertal toe, and the modern human artifacts, although some were found in different galleries of the cave. The bones and teeth are too fragmentary to be dated directly. But radiocarbon dating of seven animal bones with cut marks from layer 11 provides dates of 50,000 years or older in both galleries. Yet the layer's youngest sediments date to as late as 16,000 to 30,000 years ago, as reported in December in *Nature*. Thus layer 11 has artifacts from at least two different periods. And, in the south gallery near the spot where the finger bone was found, an obvious wedge of disturbed sediment suggests some mixing.

For now, Derevianko and colleagues propose sequential occupations: The Denisovans were in the cave about 50,000 years ago, Neandertals came in briefly about 45,000 years ago, and modern humans followed. But the

researchers agree that the microstratigraphy of the cave needs more analysis. They are redating layer 11 with radio-carbon on more cut-marked animal bones. Overall, Derevianko and his colleagues see a gradual, local evolution of *H. erectus* into *H. sapiens* in the Altai, with a brief intrusion of Neandertals and Denisovans. This fits a minority view of human origins, called multiregionalism, which posits that the descendants of *H. erectus* evolved into Neandertals and modern humans – and, apparently, Denisovans – in different regions.

Then humans coming out of Africa mingled with the other groups and *H. sapiens* emerged worldwide. As Russian and Chinese archaeologists raised their glasses to toast regional continuity, however, several geneticists shifted uncomfortably or even quietly demurred: That theory is in contrast to the long-prevailing view that *H. sapiens* was born in Africa and swept the globe, wiping out local archaic peoples. And in light of the genomic data, most geneticists now hold a middle-of-the-road view that modern humans arose in and spread out of Africa, then interbred with local archaic peoples to a limited degree (*Science*, 28 January, p. 392).

If modern humans interbred with Neandertals, researchers speculated that fossils of each group, about the same age and found close to each other in Israeli caves, represented the groups who mixed sometime before 90,000 years ago. Those modern people carrying a small amount of Neandertal DNA then split into at least two groups – one that headed into Europe to replace the Neandertals there, and a second group that headed into Asia to mix with the Denisovans, says population geneticist David Reich of Harvard Medical School in Boston.

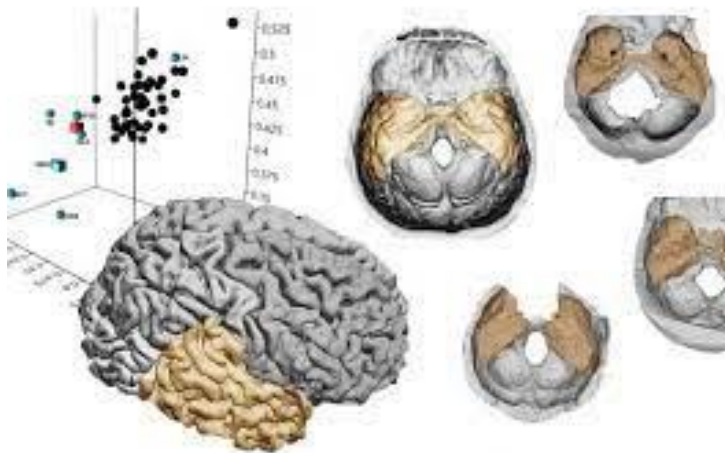
At the meeting, the DNA researchers offered some new insights into this story. They found that the three Denisovans, all from one cave, had more variation in their mtDNA than did seven Neandertals from western Europe to Siberia, Sawyer reported. This and another report at the meeting – that Australian Aborigines, like Melanesians, have inherited 5% of their DNA from Denisovans – suggests that the Denisovan home range once stretched far beyond the Altai, into eastern Asia. “This tells us that the Denisovans had large population sizes,” despite their puny fossil record, Pääbo says. It also shows that Denisovans and the ancestors of Melanesians must have interbred before 40,000 to 60,000 years ago, when Aborigines first settled Australia.

As for the timing of the Neandertal-human mixing, the newest analyses tend to

push that younger. Population geneticist Montgomery Slatkin of the University of California, Berkeley, said that his model runs gave him a wide range of preliminary results, from 65,000 years to 45,000 years ago, but he's still working the numbers. Reich reported that his independent analyses also suggest a younger date. If the mixing happened more recently than 90,000 years ago, it rules out the Israeli fossils as representatives of the groups who mixed. Others, such as Derevianko and paleoanthropologist John Hawks of the University of Wisconsin, Madison, interpret the genetic data differently. They think that even small amounts of interbreeding confirm the regional continuity model, and that there was more mixing in the past, but its traces were erased by later waves of immigrants who swamped out the archaic genes.

To help decide among these models, several groups are searching for Denisovans beyond Denisova, as far east as China, where Pääbo is now analyzing fossil DNA. As Pääbo climbed down a ladder into a flint pit at Denisova and bent his lanky frame low to get a good look at layer 11, a colleague shouted: "Grab a trowel, Svante." Pääbo didn't. But like the others, he is convinced that all types of data – genetic, archaeological, and fossil – will have to be integrated in order to tell the story of the Denisovans and so of our own species. "We're beginning to clarify history in eastern Eurasia," Pääbo said, "and I'm sure that in the next few years, there will be more discoveries."

2. The temporal lobes of Homo erectus were proportionally smaller than in H. sapiens



Emiliano Bruner, a paleoneurologist at the Centro Nacional de Investigación sobre la Evolución Humana (CENIEH), has participated in a study published in the journal *Quaternary International*, on the anatomy of the temporal lobes in the brain of *Homo erectus*, which establishes that they were proportionally smaller than in modern humans.

In *H. sapiens*, the temporal lobes are relatively more highly developed than in other primates, although little is known about their anatomy in extinct human species, because they are housed in a very delicate region of the cranium known as the middle cranial fossa, which is often not conserved in fossil individuals.

An earlier study by the same team had shown that the size of the middle cranial fossa can be used to deduce the volume of the temporal lobes. In this new study, three anatomical diameters were analyzed in fossils of *H. erectus* and *H. ergaster*, and compared with the corresponding measurements for 51 modern humans.

The results suggest that both fossil species had temporal lobes proportionally smaller than in humans today. Moreover, "the Asiatic individuals, namely *Homo erectus*, had larger temporal lobes than in the African ones, *Homo ergaster*, although the scanty fossil record does not allow us to tell whether this is due to chance or a paleoneurological difference between the two species," says Bruner.

As the temporal lobe is a brain region involved in the integration of many cognitive functions, such as memory, the emotions, hearing, social relations and language, any change in their sizes or proportions is of transcendent importance, as this could reveal variations in the development of their neurons or their

connections, and therefore in the cognitive functions associated to this region of the cerebral cortex.

3. Tools reveal patterns of Neandertal extinction in the Iberian Peninsula



Study finds evidence of local extinction and replacement even before Homo sapiens arrived

Neandertal populations in the Iberian Peninsula were experiencing local extinction and replacement even before Homo sapiens arrived, according to a study published March 30, 2022 in the open-access journal *PLOS ONE* by Joseba Rios-Garaizar of the Archaeological Museum of Bilbao, Spain and colleagues.

Neandertals disappeared around 40,000 years ago, but many details of their extinction remain unclear. To elucidate the situation, it is useful to explore how Neandertal populations were changing during their final millennia. In this study, researchers examined the distribution of a tool complex known as the Châtelperronian, which is thought to be unique to certain populations of Neandertals in France and the Iberian Peninsula.

The researchers examined over 5,000 remains of Châtelperronian tools from a site called Aranbaltza II in Barrika, in the Northern Iberian Peninsula, dating to around 45,500 years ago. Comparing this site with other nearby Neandertal tool

sites, they document that the Châtelperronian system does not overlap in time with older Neandertal technologies in this region, suggesting that Châtelperronian tools were not developed from earlier Iberian technology, but instead originated elsewhere before migrating into the region. They also found that Châtelperronian tools appear earlier than the first Homo sapiens tools in the Iberian Peninsula.

Based on this evidence, the authors suggest that older Iberian Neandertal populations disappeared, taking their tool styles with them, and were replaced by different Neandertal groups using Châtelperronian tools, likely migrating from France, and these populations were in turn replaced by Homo sapiens. The researchers propose that these patterns of local Neandertal extinction and replacement will be an important area of future study, as they might have played a significant role in the decline and ultimate demise of Neandertals.

The authors add: "Neandertals with Châtelperronian technology occupied the Northern Iberian Peninsula ca. 43,000 years ago. This territory was unoccupied at the time, following the earlier disappearance of local Neandertal groups, along with their Mousterian technology."

4. Forensic Anthropology in a Changing Climate

A wildfire swept through Northern California. Forensic anthropologists were called in to identify skeletal remains in a devastated recovery scene. The devastating effects of this fire are inextricably tied to both climate change and behavior. The western United States has experienced warmer temperatures and prolonged dry seasons with interspersed winter rain that serves to increase the fuel load through plant growth.

These climatic variables coupled with increased development in once rural areas set the stage for wildfires to have a devastating impact, with catastrophic results in California. Based on lessons learned from the logistical challenges associated with recoveries from these fires, we and other anthropologists are also helping to develop legislation to shape future responses to similar mass disasters, including writing guidelines for wildfire scene recovery, mass fatality management for wildfire-related fatalities, and laboratory identification procedures.

As climate change continues to impact cultures and environments, anthropology as a holistic discipline, and the skills and knowledge of anthropologists, will

become increasingly important. For example, anthropologists can study the prehistory and history of climate and fire management through archaeological and paleoenvironmental work. They can also explore the global impacts of climate change on human migration and conflict.

Through our combined efforts, anthropologists are in an excellent position to assist in the immediate mitigation of challenges as well as speak to past climate change, biological impacts, and the cultural consequences of this devastating global crisis. Forensic anthropologists are increasingly being called on for their skills to assist in mass fatality incidents. With escalating devastation related to climate change and human behavior, demand will only continue to grow.

Large wildfires like those seen in California and in Australia over the last several years, are only one component of these disasters. There are also likely to be extreme weather events, droughts, floods, and landslides related to climate change. While forensic anthropologists are prepared to offer their skills in these trying times, the hope is that we will not have to. During recovery operations, anthropologists were deployed as a means of triage to quickly identify human remains from nonhuman remains or other construction debris, and thus identify areas for concentrated recovery efforts.

For example, in some cases animal remains such as pets or other wildlife were found in the same area as cow bones from a kitchen refrigerator or deer antlers used as home decoration. It was important for recovery teams to quickly identify material as nonhuman remains and be able to move to the next area of interest. Once human remains were identified, anthropologists were embedded with coroner, sheriff, or search and rescue units to assist in the recovery.

As forensic anthropologists, we are also trained to systematically process, recover, and document the remains and other relevant material to aid in an identification. This material could include surgical implants (a knee or hip replacement) or other personal items on the individual (documentation or jewelry). Each of these skills supports efficient recovery efforts as well as providing necessary documentation to assist in subsequent osteological analyses. Forensic anthropologists were also involved in overall planning and logistics to support recovery efforts, including helping to manage individual teams from the incident command center.

5. New Study of Neanderthal And Denisovan DNA Reveals a Surprising Link

to Men Today

Decades of teasing apart Neanderthal DNA has produced an archive of ancient genes that spell out a history of love affairs between estranged branches of humanity's family tree. Until now, the story has been rather lopsided. For whatever reason, the most well preserved material has come from female remains, leaving an entire male genetic history in the dark. Finally, however, Neanderthal (aka Neandertal) men now get to tell their side, thanks to a newly conducting sequencing of their Y chromosome.

Researchers from around the globe collaborated to successfully identify male-specific DNA sequences from the remains of three Neanderthals recovered from sites in modern Russia, Spain, and Belgium. All lived roughly 38,000 to 53,000 years ago, in what's essentially the twilight years of the now extinct humans. These were compared with similar genes in their more eastern cousin, the Denisovan, represented by two sets of Siberian remains from individuals who lived around 70,000 and 120,000 years ago.

If we didn't know any better, we might guess these Neanderthal and Denisovan men would have fairly similar chromosomes. After all, they split from the same stock that divorced modern humans around 800,000 years ago, only their own separation was much more recent – about 400,000 years ago. That wasn't what the researchers found at all. Rather, the Y chromosome in the Neanderthals was a closer match for ours than it was the Denisovans'. "This was quite a surprise to us," says evolutionary geneticist Martin Petr from the Max Planck Institute for Evolutionary Anthropology, the study's lead author.

"We know from studying their autosomal DNA that Neandertals and Denisovans were closely related and that humans living today are their more distant evolutionary cousins. Before we first looked at the data, we expected that their Y chromosomes would show a similar picture." This discrepancy implies a swap took place shortly after their separation, exchanging the Neanderthal's original Y chromosome for one more like ours. Exactly why such an exchange took place isn't clear. We know our ancestors couldn't keep their hands off one another (or pretty much any other human population), with frequent genetic mixing events leaving a legacy of DNA in our own genomes today.

But this isn't like leaving behind a small genetic recipe for coping with a disease or malnutrition. It's a whole recipe book that potentially affects a wide range of male sexual and non-sexual characteristics. One possibility is that this version of

the Y chromosome was simply doing a better job.

"We speculate that given the important role of the Y chromosome in reproduction and fertility, the lower evolutionary fitness of Neanderthal Y chromosomes might have caused natural selection to favour the Y chromosomes from early modern humans, eventually leading to their replacement" says Petr.

Computer simulations showed that relatively small Neanderthal communities scattered across the continent could have easily amassed a bunch of problematic mutations through inbreeding. A more robust version of a Y chromosome picked up from humans could have added a fertility boost, quickly gaining ground as it was passed from fathers to sons down the family line. Whoever those chromosome donors were, they eventually petered out themselves.

Though more closely related to our modern global community, their bloodlines were also a dead end. Just getting this level of detail from ancient male bones was a task in itself. Jokes about fragile masculinity aside, the Y chromosome isn't exactly a solid piece of work. In the study, the researchers put the early human Y chromosomes together by using modern Y sequences as a template for a special set of probes.

Clinging to as much shared DNA as they could, the probes also dredged up enough unique sequences to build a complete picture. It's technology we might be able to use to fill in even more of the missing chapters of the Neanderthal's past. "If we can retrieve Y chromosome sequences from Neandertals that lived prior to this hypothesised early introgression event, such as the 430,000-year-old Neandertals from Sima de los Huesos in Spain, we predict that they would still have the original Neanderthal Y chromosome and will therefore be more similar to Denisovans than to modern humans," says senior author Janet Kelso from the Max Planck Institute for Evolutionary Anthropology.

It's certainly possible, but given how studies like this tend to deliver more twists than any modern reality show, we're sure there'll be a surprise or two waiting in just about any set of male Neanderthal genes we find.

6. Ancient *Homo sapiens* took a talent for cultural creativity from Africa to Asia

Creativity runs deep in human evolution. Stone Age people steered their cultures through some inventive twists and turns as far-flung groups of *Homo sapiens*

independently learned to cope with harsh African environments and unfamiliar Asian settings, two new reports suggest.

Southern African hunter-gatherers who inhabited an arid, inland landscape between around 92,000 and 80,000 years ago survived thanks to techniques and behaviors that they formulated on their own. Those ancient innovations owed nothing to seaside communities known to have influenced how many southern African groups made stone tools starting several thousand years later, say archaeologist Alex Mackay of the University of Wollongong in Australia and his colleagues.

And in what is now northern China, *H. sapiens* who reached the region by around 40,000 years ago also concocted novel tools and were the first in that region to grind up pigments for decorative or symbolic purposes, say archaeologist Fa-Gang Wang of the Hebei Provincial Institute of Cultural Relics and Archaeology in China and colleagues.

Together, the studies suggest Stone Age culture was more innovative than previously thought.

Previous studies in Africa suggested that distinctive toolmaking methods at coastal sites spread across much of the southern part of the continent from at least around 72,000 years ago until roughly 59,000 years ago (SN: 10/30/08). But human innovations represented by finds at a rockshelter about 44 kilometers from southern Africa's Atlantic coast, called Varsche Rivier 003 (or VR003), challenge a popular idea that developments in toolmaking and other cultural behaviors originated only in seaside, resource-rich locales where neighboring human groups could have regularly shared information, Mackay and colleagues report February 28 in *Nature Ecology & Evolution*.

The stone tools and other artifacts found at Varsche Rivier also don't appear at sites of comparable age situated 100 kilometers to the south. That suggests ancient *H. sapiens* at VR003 were no copycats, Mackay says. "By 92,000 years ago, humans — even those likely living in lowdensity populations — were more than capable of generating new ideas when left to their own devices."

That doesn't surprise archaeologist Marlize Lombard of the University of Johannesburg. *H. sapiens* in southern Africa 100,000 years ago or more developed a range of hunting tools most likely tailored to different environments, including

lightweight stone-tipped spears akin to iron-tipped javelins now favored by Indigenous African hunters.

At that time, “*H. sapiens* populations had the necessary [mental] understanding to apply high levels of technical adaptability and creative expression wherever and whenever they needed or chose to,” says Lombard, who did not participate in either of the new studies.

One creative innovation at VR003 advanced stone-tool making. Stone Age people at the site slowly heated pieces of silcrete rock in open hearths, causing the chunks to shatter into small, angular fragments. Tiny, sharp-edged tools, most no longer than a paper clip, were struck off silcrete fragments. Finished products were probably used for a variety of cutting tasks and possibly hunting. Experiments with silcrete from sources near VR003 helped the researchers identify signature changes to the surfaces of heat-shattered rocks and damage produced when toolmakers struck thin flakes off those rocks.

Mackay’s group also unearthed 26 fragments of mollusk shells, mostly from aquatic snails called limpets. Evidence of long-distance transport of edible shellfish at the time of VR003’s occupation is rare but has been found at two other sites in arid parts of southern Africa. No evidence of interaction with coastal groups has turned up at those sites either. Finally, 21 ostrich eggshell fragments uncovered at the site appear to have come from intact shells that were used as water vessels. Curved edges of these fragments once formed holes that were chiseled out of eggshells so that they could hold liquid, the scientists suspect.

People may have made water containers out of ostrich eggshells as early as around 105,000 years ago at another inland southern African site (*SN*: 3/31/21).

More than a continent away, *H. sapiens* again got creative after reaching northern China’s Nihewan Basin around 40,000 years ago, Wang and colleagues report March 2 in *Nature*. Excavations at a site called Xiamabei revealed a patch of red-stained sediment, and the researchers found two pigment pieces with different mineral compositions and a pigment-stained limestone slab. The findings indicate that Xiamabei’s residents ground up colored pigment chunks roughly 9,000 years before the earliest previous evidence of pigment use in East Asia.

Nearly 400 stone artifacts found at Xiamabei include blade-like tools, many about the size of tiny tools at VR003. Those finds stand out as novel for northern China around 40,000 years ago, the scientists say. Seven tools displayed signs of having

been attached to handles and used for tasks such as hide scraping and cutting plants or animal tissue. Although no hominid fossils have been found at Xiamabei, fossils unearthed elsewhere in northern China indicate that *H. sapiens* reached the area around 40,000 years ago.

Denisovans and Neandertals also inhabited northern China at that time. It's uncertain which population – or possibly a group with mixed ancestry or cultural influences – left its mark at Xiamabei. Whatever the case, a longstanding assumption that a single set of cultural innovations carried by *H. sapiens* from Africa – including beads, pendants and techniques for making tiny stone blades – swept across Asia starting perhaps 35,000 years ago appears increasingly unlikely, says archaeologist and study coauthor Shi-Xia Yang of the Chinese Academy of Sciences in Beijing.

7. Two human skeletons from Indus Valley-era found in Rakhigarhi



RAKHIGARHI, May 8: DNA samples collected from two human skeletons unearthed at a necropolis of a Harappan-era city site in Haryana have been sent for scientific examination, the outcome of which might tell about the ancestry and food habits of people who lived in Rakhigarhi region thousands of years ago. The skeletons of two women were found a couple of months ago at mound number 7 (named RGR 7 by the Archaeological Survey of India), believed to be nearly 5,000 years old. Pots and other artefacts were also found buried next to them in a pit, part of the funerary rituals back in the Harappan Civilisation era,

ASI officials said.

“Seven mounds (RGR 1- RGR 7) scattered around two villages (Rakhi Khas and Rakhi Shahpur) in Hisar district are part of the Rakhigarhi archaeological site. RGR 7 is a cemetery site of the Harappan period when this was a well-organised city. The two skeletons were unearthed about two months ago by our team. And, DNA samples were collected by experts about two weeks ago,” ASI Joint Director General, SK Manjul told PTI. At present RGR 1, RGR 3 and RGR 7 have been taken up for investigation. Manjul, who is leading the excavation team at Rakhigarhi site, about 150 km north-west of Delhi, since it commenced on February 24, 2022, said the DNA analysis will help answer a lot of questions, anthropological or otherwise.

The samples will be first examined by Birbal Sahni Institute of Paleosciences, Lucknow for preliminary investigation and scientific comparison, before being sent further for forensic analysis from anthropological perspective, he said. “The outcome of the DNA analysis will help tell about the ancestry of the people who lived at this ancient city, whether they were native or had migrated from elsewhere to settle. Besides, samples taken from the teeth area would tell about their food habits, what kind of food they consumed and other anthropological patterns related to that human settlement which must have been one of the largest, dating from the Harappan Civilisation period,” said Manjul, who had also led the excavation at Sanauli in Uttar Pradesh in 2018 where pre-Iron Age artefacts were unearthed.

Rakhigarhi site is one of the “five iconic sites” declared by the central government as per the Union budget 2020-21. The cultural span of Harappan Civilisation can be broadly subdivided into three periods – early (3300 BC to 2600 BC), mature (2600 BC to 1900 BC), and late (1900 BC to 1700 BC), as per archaeology experts. Five major urban sites – Mohenjo-Daro, Harappa, Ganweriwala, all three sites now in Pakistan, and Rakhigarhi and Dholavira in India, have been identified as regional centers of the Harappan Civilisation.

Arvin Manjul, Regional Director (North), ASI, said while carbon dating would tell the age via scientific process, the excavation site at mound RGR 7, as per current status of the excavation, can be said to be tentatively dated close to 3,000

BC period, making the site about 5,000 years old.

“Again there are techniques to get exact age from skeletal remains, but the two skeletons found in separate burial pits are of women. The sex was determined through examination of pelvic structures and other biological details. The age of the two women, when they had died, was possibly in the range of 40-50 years, as per our assessment,” Arvin told PTI.

The two skeletons were found lying in supine position with head pointing in the north direction. They both were buried with plethora of pottery and adorned jewellery like jasper and agate beads and shell bangles. A symbolic miniature copper mirror was found buried along with one of the skeletons, officials said.

Animal bones were also found at the site, they said.

First attempts to archaeologically explore the Rakhigarhi site is said to have been done in late 1960s. The site was first excavated by the Institute of Archaeology, ASI in 1998-2001. Later, Deccan College, Pune excavated the site from 2013 to 2016, and RGR 7 which is located 500 m north of RGR 1 had yielded around 60 burials in the previous excavations, the ASI said. (PTI)

8. Regular climbing behaviour in a human ancestor



A new study led by the University of Kent has found evidence that human ancestors as recent as two million years ago may have regularly climbed trees. Walking on two legs has long been a defining feature to differentiate modern

humans, as well as extinct species on our lineage (aka hominins), from our closest living ape relatives: chimpanzees, gorillas and orangutans.

This new research, based on analysis of fossil leg bones, provides evidence that a hominin species (believed to be either *Paranthropus robustus* or early *Homo*) regularly adopted highly flexed hip joints; a posture that in other non-human apes is associated with climbing trees. These findings came from analysing and comparing the internal bone structures of two fossil leg bones from South Africa, discovered over 60 years ago and believed to have lived between 1 and 3 million years ago.

For both fossils, the external shape of the bones were very similar showing a more human-like than ape-like hip joint, suggesting they were both walking on two legs. The researchers examined the internal bone structure because it remodels during life based on how individuals use their limbs. Unexpectedly, when the team analysed the inside of the spherical head of the femur, it showed that they were loading their hip joints in different ways.

The research project was led by Dr Leoni Georgiou, Dr Matthew Skinner and Professor Tracy Kivell at the University of Kent's School of Anthropology and Conservation, and included a large international team of biomechanical engineers and palaeontologists. These results demonstrate that novel information about human evolution can be hidden within fossil bones that can alter our understanding of when, where and how we became the humans we are today.

Dr Georgiou said: 'It is very exciting to be able to reconstruct the actual behaviour of these individuals who lived millions of years ago and every time we CT scan a new fossil it is a chance to learn something new about our evolutionary history.'

Dr Skinner said: 'It has been challenging to resolve debates regarding the degree to which climbing remained an important behaviour in our past. Evidence has been sparse, controversial and not widely accepted, and as we have shown in this study the external shape of bones can be misleading.'

Further analysis of the internal structure of other bones of the skeleton may reveal exciting findings about the evolution of other key human behaviours such as stone tool making and tool use. Our research team is now expanding our work to look at hands, feet, knees, shoulders and the spine.'

9. Prehistoric rock paintings found in Telangana, history enthusiasts believe they date back 10k-30k years



The mesolithic age rock art site, located on a small hillock on a private land, was discovered by the members of Kotha Telangana Charitha Brundam, who then verified and cross-checked the paintings with research articles and published books.

History enthusiasts in Telangana have discovered a prehistoric rock paintings site, dating back at least 10,000 to 30,000 years, at Kasipeta in Yadadri Bhuvanagiri district.

The mesolithic age rock art site, located on a small hillock on a private land, was discovered by the members of Kotha Telangana Charitha Brundam, who then verified and cross-checked the paintings with research articles and published books.

On the inner side of a hood rock shelter on the hillock, the group found several paintings in red ochre. A nearby cave is worshipped as Lord Venkateswara temple. "It is private land. There is no idol or temple. It is a hood rock cave and on the lower side and inside there are paintings that resemble what we have seen at Edathunoor in Sangareddy district. Those paintings are well documented and established in history books," said Sriramoju Haragopal, a retired headmaster and the group's convenor.

The group identified four bisons, two men, and an animal resembling a horse. The human figure standing behind the four bisons was drawn using the X pattern. The painting of the other man standing near the bison is similar to the petroglyph of a man with a weapon at the Regonda site. The group believes that many rock paintings were lost due to the lime coating applied by local villagers.

They found microlith rock tools on the downside of the hillock, apart from a cairn cyst and a menhir identified in the vicinity. They have also found evidence of pre-historic iron melting in a nearby cave in the form of iron slag and iron pieces, according to Haragopal. The microlithic tools, rock art style, and the items and bisons in the paintings indicate that the rock art site belongs to the microlithic age. The painting of the man with the weapon might be of a later historical period.

The paintings were examined and verified by Bandi Muralidhar Reddy, an expert on prehistoric rock art. A member and advisor to the group, Reddy was a student of Vishnu Wakankar who is considered the father of Indian rock art studies.

Archaeologist Dr E Shivanagi Reddy confirmed that the rock paintings were authentic and discovered for the first time in the region. "This is a new site that is going to be added to the list of Telangana rock art sites. These rock-art sites are the first documentation of experiences man encountered as a hunter-gatherer. The purpose was to disseminate information for the future. From the Mesolithic age, this continued till the Neolithic and the Iron age.

10. Neanderthal DNA contributes to genetic diversity, bringing more understanding to human evolution



The advent of DNA sequencing has given scientists a clearer insight into the interconnectedness of evolution and the we like path that different organisms take, splitting apart and coming back together. Tony Capra, associate professor of biological sciences, has come to new conclusions about the influence of Neanderthal DNA on some genetic traits of modern humans.

The article “Neanderthal introgression reintroduced functional ancestral alleles lost in Eurasian populations” was published in the journal *Nature Ecology & Evolution* on July 27. The ancestors of all modern humans lived across the African continent, until approximately 100,000 years ago when a subset of humans decided to venture further afield. Neanderthals, an extinct relative of modern humans, had been longtime residents of Europe and central and south Asia; their ancestors had already migrated there 700,000 years previously.

The humans who moved into central Asia and the Middle East encountered and reproduced with Neanderthals. Neanderthal DNA is present in some modern humans, and now research shows that can sometimes be a good thing. “When Neanderthals split off from what became the human population 700,000 years ago, they took specific genetic variants along with them. Some of these genetic variants were later lost in human populations. We show that interbreeding with Neanderthals restored hundreds of thousands of previously lost genetic variants,” said Capra.

“These reintroduced genetic variants are more likely to have positive effects than genetic variants unique to Neanderthals.” In practice these reintroduced variants might have helped to regulate negative traits associated with Neanderthal DNA including autoimmune and neuropsychiatric diseases and addiction risk. Connecting how genetics alter risk is essential to understanding

the function and development of disease.

With this research we identify a unique set of very old genetic variants that predate Neanderthals, but that may have enabled segments of Neanderthal DNA to remain in the DNA of modern humans," said David Rinker, the first author of this research and postdoctoral scholar in the Capra Lab. "Pinpointing when those alleles (i.e., variant forms of genes) originated along the human timeline offers an evolutionary perspective on which genetic variants keep modern humans healthy, and has broad implications for how disease risk factors have evolved."

Capra's lab worked with data from the 1000 Genomes Project and the Neanderthal Genome Project, two open initiatives that document genetic variation in detail. The researchers collaborated with Emily Hodges, assistant professor of biochemistry, to conduct a functional dissection of Neanderthal and human DNA to identify which variants have functional effects. "This analysis gives physical proof of our hypothesis," noted Capra. "It serves as a blueprint for doing analyses of this kind on a larger scale because we've proved the effect of these reintroduced genetic variants on a molecular level."

SOCIO – CULTURAL ANTHROPOLOGY

1. Marriage or not? Rituals help dating couples decide relationship future

Rituals such as those centered around holidays and other celebrations play an important part in human relationships. When dating couples engage in rituals together, they learn more about each other. And those experiences can serve as diagnostic tools of where the relationship is going, a University of Illinois study shows. "Rituals have the power to bond individuals and give us a preview into family life and couple life.

We found they help magnify normative relationship experiences," says Chris Maniotes, graduate student in the Department of Human Development and Family Studies (HDFS) at U of I and lead author of the paper, published in *Journal of Social and Personal Relationships*. Rituals are experiences that are shared with others, and they impact communication between individuals. While rituals are typically celebrations such as holidays, they can also be idiosyncratic

events a couple creates, such as Friday movie night.

Most rituals are recurring events, though some (such as rites of passage) occur just once in a person's life. Rituals have elements of routine, but they have symbolic meaning that goes beyond routine interaction. "Rituals provide a unique time to review one's partner and relationship; you get to see a host of behaviors and interactions that might normally be obscured," Maniotes notes. "Some of the ways rituals affected commitment to wed with these couples was by altering their view of their partner, giving them a new perspective." Maniotes and co-authors Brian Ogolsky and Jennifer Hardesty, researchers in HDFS, analyzed in-depth interviews with 48 individuals (24 couples) in the U.S. Southwest region.

Respondents were on average 23 years old and had been in their relationship for 2.5 years. They were randomly selected from a larger study examining commitment to wed in heterosexual dating couples over a period of nine months. For this study, the researchers looked at the impact of rituals. They found commitment to wed could increase or decrease, depending on the nature of the interaction.

Rituals can reinforce bonds and strengthen commitment, but they can also showcase conflict areas and make people less likely to see the relationship heading towards marriage. For example, holiday celebrations involving rituals could highlight interactions with extended family and provide a window into how people navigate through conflict. "Rituals seem to really play a role in pausing and slowing down individuals, helping them take a better look at their relationship. They help them see, 'this is who we are as a couple; this is who we are as a family,'" Maniotes explains.

Rituals may not be the defining driver of where a relationship is going, but along with a constellation of experiences and behaviors it brings up important nuances that affect couples' decision whether or not to wed. Couples who are dating can benefit from understanding how rituals affect their relationship. That's even more important during current COVID-19 restrictions, where rituals we used to take for granted are less predictable, Maniotes says. "Just recognizing the importance of rituals in our lives, and the magnitude of the role they play, can help us integrate them in an intentional way," he concludes.

2. Daughter can use single mother's caste: Bombay HC

NAGPUR: In a landmark verdict, the Nagpur bench of Bombay High Court allowed a daughter to use the caste of her mother. The court clarified that it's natural for a child to learn the values, customs and practices of her mother's community after losing contact with her father.

While quashing the Schedule Tribe Caste Certificate Scrutiny Committee's decision to deny caste certificate of the Halba tribe to the 20-year-old petitioner who studies in Pune, a division bench comprising justices Sunil Shukre and Pushpa Ganediwala remitted the matter back to the sub-divisional officer for reconsidering her application for a caste certificate which would enable her to get a fee concession for higher studies.

"The petitioner's mother is a tribal woman belonging to the 'Halba' Schedule Tribes. She married a non-tribal. The marriage, however, ended soon and made no cultural impact on the girl in the sense that it didn't result in she getting values, learning customs and practices of her father's community.

Rather, she was raised in an atmosphere dominated by the customs and traditions of her mother's community. It was, therefore, natural for her to start claiming the social status professed by her mother," the judges ruled. According to counsel Ashwin Deshpande, the petitioner's parents entered into a wedlock on August 8, 1996 and she was born on July 21, 1997.

After differences cropped up between her parents, the tribal mother left her husband's company and started living with her parents. Their marriage was subsequently dissolved in 2003. Since then, the petitioner has been living with her mother. When the petitioner grew up, she applied for a caste certificate which is mandatory for taking admission via the reserved quota. However, the admission was rejected by the scrutiny committee under the Maharashtra Scheduled Castes, Scheduled Tribes, De-Notified Tribes, Nomadic Tribes, Other Backward Classes and Special Backward Category (Regulation of Issuance and Verification of Caste) Certificate Act, 2000.

The committee pointed out that the petitioner submitted documentary evidence of her mother, which isn't allowed under Rule 12 of Rules 2003. Terming the Caste Scrutiny Committee's decision as 'unfortunate', the judges noted that in spite of producing sufficient documentary evidence for consideration, the authorities continued to harp on the documents from the paternal side. "If we consider the provisions of Rule 12, apparently there's nothing wrong in such an approach.

But when we look at it from a different prospective, which is the background of a distressed family led by a single mother, we are convinced that this case requires a different approach," they said. They added that in 2003, there was a court's order whereby the petitioner's custody, a girl of about six years then, was granted to her mother. Since then, she has been looked after, raised and educated by her mother in the background provided by her parental community.

"The petitioner had no concern with her biological father for all these years. Practically, she inculcated the values, practices, customs and traditions of the community to which her mother belonged," the judges held, before allowing her plea.

3. Hunter-gatherers may have facilitated cultural revolutions via small social networks.



Hunter-gatherer human ancestors from around 3,00,000 years ago may have facilitated a cultural revolution by developing ideas in small social networks, and regularly drawing on knowledge from their neighbouring camps, a new study says. The research, published in the journal *Science Advances*, mapped close-range social interactions between individuals of Agta hunter-gatherers in the Philippines using radio sensor technology every hour for one month.

They found that the social structure of the hunter-gatherers, built around small

family units linked by strong friendships and high in-between camp mobility, was key to the development of new cultural ideas. According to the scientists, this is because the social structure allowed for the co-existence of multiple traditions or solutions to a similar problem in different parts of the network. "It is fair to say that 'visits between camps' is the social media of current hunter-gatherers, and probably of our extinct hunter-gatherer ancestors," said study co-author and anthropologist Andrea Migliano from the University College London.

"When we need a new solution for a problem, we go online and use multiple sources to obtain information from a variety of people. Hunter-gatherers use their social network exactly in the same way," Migliano explained. The researchers said these constant visits between camps are essential for information to be recombined and continuously generate cultural innovations.

In the study, the scientists selected pairs of individuals from the Agta hunter gatherer community, based on the strength of their social ties, to combine different medicinal plants and share the discovery of any new super medicine with their close family ties. They simulated this process over an artificial and fully connected network of a similar size, where all individuals were connected to each other and immediately transmitted any discoveries to all network members.

The findings revealed that the rates of cultural evolution were much higher across the real hunter-gatherer social networks. While fully connected networks spread innovations more quickly, the real hunter-gatherer networks promoted the independent evolution of multiple medicines in different clusters of the network -- different camps, households, family clusters -- the study noted. These independently developed medicines could be later recombined producing a more complex culture, the scientists said.

"Previous studies have shown that fluid social structures already characterised expanding Upper Palaeolithic human populations and that long-range cultural exchange in the Homo sapiens lineage dates back to at least 3,20,000 years ago," said study co-author Lucio Vinicius from UCL. "However, the link we found between cultural evolution and the fluid sociality of hunter-gatherers indicates that as hunter-gatherers expanded within and then out of Africa, this social structure of small and interconnected bands may have facilitated the sequence of cultural and technological revolutions that characterises our species," he said.

"Humans have a unique capacity to create and accumulate culture. From a simple pencil to the International Space Station, human culture is a product of multiple minds over many generations, and cannot be recreated from scratch by one single individual," said Mark Dyble, another co-author of the study from UCL. "This capacity for cumulative culture is central to humanity's success, and evolved in our past hunter-gatherer ancestors. Our work shows that the kind of social organisation that is typical of contemporary hunter-gatherers serves to promote cultural evolution," Dyble said.

4. Can the patriarchy be matrilineal? An anthropologist calls for clarity



For over a century, anthropologists have attempted to describe human societies as "matrilineal" or "patrilineal" emphasizing relatedness among women or men, respectively. A new paper by Laura Fortunato, an anthropologist at the University of Oxford and External Professor at the Santa Fe Institute, argues that it is time to confront the ambiguity at the heart of these terms.

When it comes to kinship, societies universally consider children to be related to both parents. However, societies have varying systems for reckoning descent, or membership in a kinship group, and for determining other elements of social organization, including inheritance of property, succession to office, and where couples live following marriage. For example, in just under 10% of human societies, a child inherits property through the female line, meaning that when it comes time for a son to pass it on, it would go not to his own children, but to his sister's.

This is a form of matrilineal inheritance. Yet the son might maintain close links with his father and his kin. For instance, succession to office may be transmitted from father to son, and thus through the male line. In other words, succession to office is patrilineal. Is this society, then, "matrilineal" or "patrilineal"? As it turns out, these words are used across anthropology "to mean a vague combination of things," says Fortunato.

"Matriliny" has become, in many cases, a shorthand for matrilineal descent, a problematic conflation that disregards the complexities of intergenerational transmission. "In actuality," Fortunato says, "the bias towards females, towards males, may apply to one domain of societal organization and not [another]." Based on the results of an independent 1972 study analyzing 186 societies, Fortunato observes that the majority (74%) of societies that do not reckon descent at all still show a bias towards residence with relatives through either the female or male line. Yet to call an entire society "matrilineal" or "patrilineal" is misleading.

What's more, "the moment we imply descent, then you can't extend the framework to other animal species because they don't have language – culture that allows humans to trace relatedness beyond immediate kin." Take an animal species, for example, in which females teach their offspring foraging skills. Lineal kinship organization – in this case, matrilineal – is still at play even in the absence of culturally-recognized descent groups. Fortunato suggests that we should reframe lineal kinship organization in terms of biases in investment: a matrilineal bias in a certain area, for instance, corresponds to investment in the offspring of "the women of the group."

A single society might have both matrilineal and patrilineal elements, allowing the framework to accommodate much more complex scenarios. Crucially, Fortunato's framework also does not imply greater women's empowerment – the bias is understood to be in favor of daughters' offspring, potentially at the expense of the daughters themselves. Such clarity is essential especially in light of larger discussions about women's political influence and anthropology's problematic history in the area.

"The early theorists linked [matriliny] to matriarchy," says Fortunato. "Matriarchy was seen as the 'primitive' form, and then eventually there's a transition to the 'advanced' form which is the patriarchy." Fortunato suggests terminological specificity as a first step in overcoming such problematic conclusions. The paper appears in the theme issue of *Philosophical Transactions*

of the Royal Society B, "The evolution of female biased kinship in humans and other mammals," for which Fortunato was a co-editor along with Siobhán M. Mattison, Mary K. Shenk, Melissa Emery Thompson, and Monique Borgerhoff Mulder.

Fortunato pushes even farther than the theme, arguing that even "female-biased kinship" does not provide the specificity needed to robustly understand these issues; rather, a full reframing is needed to untangle matriline from descent and open the discussion to other species. Ultimately, ambiguous terminology is not simply a matter of semantics, but of scientific understanding – and more clarity can revamp our understanding of how power and resources move through generational time.

INDIAN & TRIBAL ANTHROPOLOGY

1. Manipur: Govt likely to extend SoO agreement with Kuki militants for another six months

While the state government and the militant groups have held talks, the final confirmation will be released by the Ministry of Home Affairs. The tripartite Suspension of Operation (SoO) agreement between the Government of India, Government of Manipur and the two umbrella groups of Kuki militants, United People's Front (UPF) and Kuki National Organization (KNO), is likely to be extended for another six months. With the agreement set to expire on August 31, officials of the state met representatives of the two umbrella groups in separate meetings.

The first meeting was held on August 17 with representatives of the KNO and the second meeting with the UPF on Thursday. Representatives from the Centre did not attend both the meetings owing to the COVID-19 pandemic. It is learnt that during the meetings, all the parties have agreed in spirit to extend the SoO agreement for another six months, till February 28, 2021. However, the final confirmation will be released by the Ministry of Home Affairs.

“We held rounds of meeting with the representatives of both the umbrella groups and discussed on the matter of the extension of the SoO agreement. But the confirmation of the extension will be done by the MHA”, said Rehanuddin Choudhry, Joint Secretary Home, Manipur. Of the total 25 armed Kuki groups operating in the state, 17 are under the KNO and eight under the United Peoples’ Front (UPF). KNO and UPF signed the tripartite suspension of operation (SoO) agreement with the government of India and Manipur on August 22, 2008.

Since then, the Government has been extending the agreement. Dr Seilen Haokip, spokesperson KNO, said, “We are ready for settlement. Talks with the Governments have been comprehensive. Now, it is only a matter of signing the deal.” In response to the opposition voiced by civil society organisations of the Imphal valley (the majority meiteis), Haokip clarified that the demand of the outfits is within the ambit of the Indian Constitution and within the state of Manipur.

“We are not demanding something out of the ordinary. We are asking for our constitutional rights within the state and there is nothing to be alarmed,” added the KNO spokesperson. The Kuki militants began their armed rebellion demanding a separate state for the Kukis, scattered in different parts of the Northeastern states and Myanmar. Later, the umbrella groups stepped down from their earlier demand to a “Territorial Council” (TC). They submitted the outline of the TC during their sixth round of political talks on January 10, 2018.

2. Health infrastructure weakest in tribal areas: Report

Major shortfall of doctors and nurses at Primary Health Centres in the tribal areas of Chhattisgarh, Madhya Pradesh and Odisha, Parliamentary Standing Committee notes There is a deficit of 1,240 Primary Health Centres (PHC), 273 Community Health Centers (CHC) and 6,503 Sub Centers (SC) in the tribal areas of the country, a report presented by the Standing Committee on Social Justice and Empowerment on January 3 found. This deficit is highest in Madhya Pradesh (381 PHCs), Jharkhand (228 PHCs) and Rajasthan (225 PHCs).

Under the norms of the Union Ministry of Health and Family Welfare (MoHFW), there should be a PHC per 20,000 population and a CHC per 80,000 population. “The Committee also notes with grave concern that there is a major shortfall of doctors at PHCs in the tribal areas of Chhattisgarh, Madhya Pradesh and Odisha,” the report states. The committee found that the highest shortfall of doctors at PHCs is in the tribal areas of Chhattisgarh (235), Madhya Pradesh (124) and Odisha (90).

Moreover, 22.4 per cent of the sanctioned posts of nursing staff at PHCs and CHCs and 27.6 per cent of the sanctioned posts of doctors at PHCs in the tribal areas are vacant. The Committee also found that out of the 2,35,637 Schedule Tribe (ST) women who registered under Pradhan Mantri Matritva Vandana Yojana (PMMVY) – Maternity Benefit Programme – only 1,73,808 got the benefit in 2017-18. Moreover, it was also found that Rs 2,400 crore was allocated in the budget for PMMVY in 2018-19, out of which Rs 185.76 crore was for the Tribal-sub Plan, but no funds have been released under PMMVY during the year 2018-19.

“States with Schedule V areas are prominently hit by the deficit,” the report states, and adds, “Given the acuteness of tribal health issues, a separate Tribal Health Plan is proposed to be implemented in consultation with MoHFW, the Ministry of AYUSH and the concerned state governments to overcome the deficits in tribal areas, in terms of physical infrastructure and consequent requirement of manpower etc. in a focused manner to be accomplished by 2022.”

3. Role of gram sabha, local community key in building resilience among tribal communities: Report



The study documented case studies from Gujarat, Chhattisgarh, Maharashtra, West Bengal, Karnataka, and Odisha. NEW DELHI: Recognition of rights to use community forests under the Forest Rights Act enabled forest-dependent communities to address the loss of livelihood opportunities that emerged amid the COVID-19 pandemic and the subsequent lockdown in the country, showed a report 'Community Forest Rights and the Pandemic: Gram Sabhas Lead The Way.'

The report was produced by a team of independent researchers of advocacy group Community Forest Rights -- Learning and Advocacy, and Vikalp Sangam initiative -- a platform which focusses on environmental issues. The study documented case studies from Gujarat, Chhattisgarh, Maharashtra, West Bengal, Karnataka, and Odisha. Tribal communities have been severely impacted by the pandemic and have been marginalised further with large-scale loss of livelihood options.

The report pointed out Adivasi and other traditional forest dwelling (OTFD) communities coped better with the crisis where their land and forest rights were recognised. The role of gram sabhas proved to be crucial when they were been empowered under the legislations of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (FRA) and Panchayat Extension to Scheduled Areas Act 1996 (PESA). In cases where the provisions of the legislations were diligently implemented, the recognition of rights led to overcoming constraints and crisis, it showed.

Securing tenure, recognising individual and collective rights, and support for Adivasi and OTFDs towards effective management, restoration and conservation of their customary forests, and autonomy of gram sabhas could reduce the need for distress out-migration as it could create ample livelihood opportunities, the report said. Ownership rights over minor forest produce such as mahua, bamboo, tendu leaves created sustainable economies for the communities.

Around 100 million forest dwellers depend on MFP for food, shelter, medicines and having cash with them, according to the Centre. They derive 20-40 per cent of their annual income from MFP. The case studies showed examples of gram sabhas coming to the aid of the most vulnerable among the forest communities like women and children, landless families, pastoralists, particularly vulnerable tribal groups (PVTGs) through collective resources generated from community forests.

Convergence of FRA and Mahatma Gandhi National Rural Employment Guarantee Act and scaling up efforts for employment generation from individual forest rights and community forest rights can be an effective strategy to boost local economy in tribal areas, the report suggested.

4. Eight states tell Supreme Court they wrongly rejected claims of tribals over forest land



Rajasthan, Tripura, Karnataka, Chhattisgarh, Goa, Bengal, Assam & Maharashtra have filed affidavits, admitting their fault in rejecting claims on forest land. New Delhi: As many as eight state governments have told the Supreme Court that its own officers have not followed due procedure while rejecting claims of lakhs of tribals over forest land – thereby putting them at the risk of eviction.

According to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, the claim of a forest dweller means his/her right to live, conduct farming and collect forest produce from a particular area. The claim has to be first made before the forest rights committee of the gram sabha, then the sub-divisional level committee and then the district-level committee for final approval.

The affidavits have been filed by the governments of Rajasthan, Tripura, Karnataka, Chhattisgarh, Goa, West Bengal, Assam and Maharashtra. The Act says the reasons for rejecting the claims need to be communicated in writing to the claimant, following which the claimant can appeal against it in the sub-divisional level committee within 60 days. However, a review of all the affidavits, accessed by ThePrint, revealed that the reasons for rejecting the claims were not informed to the claimants.

The affidavits of the state governments stated that most of the claims of forest dwellers are awaiting a final decision, and, in most cases, proper

reasons for rejection were not given – often not taking into account the evidence submitted to claim the ownership. On 13 February, the Supreme Court had ordered the eviction of 1.89 million forest dwellers whose claims were rejected.

However, the court later stayed the verdict and asked the state governments to explain why the claims were rejected and whether all the evidence was examined before rejecting them. Following the court order, 17 states filed their affidavits before the SC, out of which these eight states have categorically stated that they wrongly rejected the claims. **Rajasthan rejected 39% claims** The Congress-led Rajasthan government in its affidavit has stated that over 39 per cent of the claims are awaiting a final decision.

The affidavit, however, showed a goof-up – the government cited approval orders by sub-divisional magistrate office, Vallabhnagar, Udaipur, as rejection orders. In Tripura, the government affidavit revealed that some claims awaited a final decision and were never formally rejected. It also noted that the claimants were not informed of their right to appeal before the sub-divisional level committee.

The government has sought six months' time to complete re-examination of the claims. **Karnataka rejected over 62% claims, Goa 68%** Karnataka directly blamed its officials for rejecting the claims without applying their mind. In its affidavit, the government stated that over 62 per cent of the claims got rejected, and the sub-divisional committees junked most of them “without making detailed inquiry”. The government also stated that over a lakh claims were rejected and that no reason was given for declining over 12,000 claims.

The state government has asked for 18 months' time to have a re-look at all the rejected and pending claims. The situation remains the same in Chhattisgarh where the process followed for rejection of the claims was “not in accordance with forest rights rules” and, hence, there were a large number of “inappropriate rejections”. In Goa, almost 68 per cent of the claims are awaiting a final decision. The government said that no opportunity was given to the forest dwellers to produce evidence, which

could prove their right over a particular area.

Similarly, brazen rejections were carried out in West Bengal where out of the 1,42,000 claims, over 95,000 were rejected without any proper reason. In Assam too, claims were rejected without any reason. The Maharashtra government, meanwhile, stated in its affidavit that the district-level committee in most of the cases did not take into account “admissible” evidence by claimants.

Such admissions of several state governments hold significance in the light of the central government’s initial argument that “due diligence” was carried out while rejecting claims of forest dwellers. The Supreme Court will now hear the matter in November, when arguments on the constitutionality of the Act will also be raised.

5. Caste doesn't just exist in India or in Hinduism – it is pervasive across many religions in South Asia and the diaspora



The California State University system, America’s largest public higher education system, recently added caste, a birth-based social hierarchy

system, to its anti-discrimination policy, allowing students, staff and faculty across its 23 campuses to report caste bias and discrimination.

CSU's move has drawn a sharp response from some in the Indian diaspora: About 80 faculty members of Indian heritage, as well as the Hindu American Foundation, a Washington, D.C.-based advocacy group, have opposed the decision, claiming that it is potentially stigmatizing for persons of Hindu or Indian heritage. They have also threatened a lawsuit against CSU if this decision is not revoked.

The caste system is often conflated in Western media with Hindu religion and India alone. However, as social scientists specializing in South Asian Studies, we know that the caste system is neither exclusive to Hindu religion nor is it endemic to India.

Caste in South Asia

While the caste system originated in Hindu scriptures, it crystallized during British colonial rule and has stratified society in every South Asian religious community. In addition to India, it is present in Pakistan, Bangladesh, Nepal, Sri Lanka, the Maldives and Bhutan.

Social, economic and political status in this pernicious system is tied to traditional occupations fixed by birth. Brahmins, for example, who are assigned priestly work, are at the top, and Dalits, relegated to the bottom, are forced into occupations that are considered abject in South Asia, such as cleaning streets and toilets, or working in the tanning industry. Caste-based rules of marriage maintain these boundaries firmly.

Caste organizes social life not only among Hindus but also in Muslim, Christian, Sikh and Buddhist communities in the region. It is an intergenerational system based on birth into a caste group. Caste identities stay even generations after someone converts out of Hinduism and into any of these faiths.

Among South Asian Christians, Anglo-Indians are at the top of the hierarchy. This small community includes individuals of mixed descent from Indian and British parents. Those who converted to Christianity, even

generations ago, from middle level Hindu castes come next, followed by those from Indigenous backgrounds. Those who converted to Christianity from Dalit castes are placed at the bottom.

Muslims across the region are organized with the minority Ashraf communities at the top. The Ashraf community claims noble status as the “original” Muslims in South Asia, due to their descent from Central Asian, Iranian and Arab ethnic groups. The middle in this social hierarchy is comprised of Ajlaf, considered to be “low-born” communities that converted from Hindu artisanal castes. The group at the bottom includes converts from Dalit communities who are identified with the demeaning term Arzal, which means vile or vulgar.

In the Sikh community, the powerful land-owning caste, Jat-Sikhs, are at the top, followed by converts from Hindu trading communities in the middle and converts from lower caste Hindu communities, Mazhabi Sikhs, at the bottom.

While Buddhism in India is close to being casteless, its dominant versions in Sri Lanka and Nepal have caste-based hierarchies.

Caste carries over after conversion

While many of the so-called lower caste groups converted to escape their persecution in Hinduism, their new religions did not treat them as fully equal.

South Asian Christians, Muslims, Sikhs and Buddhists with Dalit family histories continue to face prejudice from their new co-religionists. They are excluded from or experience segregation at shared places of worship and sites of burial or cremation across all these regions.

Social scientists have shown that strict caste-based rules continue to regulate social organization and everyday interactions. Intercaste marriages are rare: In India alone, they have remained at about 5% of all marriages over the past several decades. When they take place, the couples risk violence.

While urbanization and education have normalized everyday interactions across caste groups in shared urban spaces, entertaining lower caste individuals in upper caste households is still taboo in many families. A 2014 survey found one in every four Indians to be practicing untouchability, a dehumanizing practice in which people from Dalit castes are not to be touched or allowed to come in contact with upper caste individuals. Untouchability was prohibited in India in 1950 when its egalitarian constitution came into force. However, home ownership is segregated by caste, and religion and caste discrimination is pervasive in the rental market where residential associations use flimsy procedural excuses for keeping lower caste individuals out.

Lower castes are expected to defer to the higher status of upper castes, refrain from expressing themselves in shared spaces and avoid displaying material affluence. They risk being punished by socioeconomic boycotts, which could include ostracizing the Dalits or keeping them out of employment. It may even include assault or murder. In Pakistan, anti-blasphemy laws are used as a pretext for caste violence against Dalits, many of whom have converted to Christianity.

Caste and life outcomes

Studies show that caste-based identity is a major determinant of overall success in South Asia. Upper caste individuals have better literacy and greater representation in higher education. They are wealthier and dominate private sector employment, as well as entrepreneurship.

While affirmative action programs initiated by the British and continued in independent India have made improvements in the educational levels of lower caste groups, employment opportunities for them have been limited.

Studies also demonstrate how caste identity affects nutrition and health through purchasing power and access to health services.

Most socioeconomic elites in South Asia, regardless of religion, are affiliated with upper caste groups, and the vast majority of the poor come from lower caste groups.

Caste in the diaspora

Scholars have documented similar discriminatory practices in the diaspora in the U.K., Australia, Canada and the African continent.

Caste has started getting recognition as a discriminatory category, especially in the U.S., in recent years. A 2016 survey, “Caste in the USA”, the first formal documentation of caste discrimination within the U.S. diaspora, found that caste discrimination was pervasive across workplaces, educational institutions, places of worship and even in romantic partnerships.

In 2020, the state of California sued Cisco Systems, a technology company in the Silicon Valley, on a complaint against caste-based discrimination. Harvard University, Colby College, UC Davis and Brandeis University have recognized caste as a protected status and have included it in their nondiscrimination policies.

These developments in the U.S. have put the spotlight again on this centuries-old system that denies equality to large populations on the basis of an oppressive and rigid hierarchical system. It is up to the American diaspora how they commit to engage with it, as they themselves strive for equality and fairness in their new multicultural society.

6. The Miyas of Assam, and their char-chapori culture



A proposal for a museum reflecting char-chapori culture has triggered a controversy. Who are the Miyas, what are the char-chaporis, and what is controversial about the proposal?

Months ahead of the Assembly elections, a proposed “Miya museum” reflecting the “culture and heritage of the people living in char-chaporis” has stirred up a controversy in Assam.

What is the controversy?

Last month, Assam BJP minister Himanta Biswa Sarma tweeted out a letter from Congress MLA Sherman Ali that requested the government to expedite the process of constructing a museum “reflecting the culture and heritage of the people living in char-chaporis” in Guwahati’s Srimanta Sankardeva Kalakshetra.

Char-chaporis are shifting riverine islands of the Brahmaputra and are primarily inhabited by the Muslims of Bengali-origin (pejoratively referred to as ‘Miyas’).

Sarma tweeted: “In my understanding, there is no separate identity and culture in Char Anchal of Assam as most of the people had migrated from Bangladesh. Obviously, in Srimanta Sankardeva Kalakshetra, which is the

epitome of Assamese culture, we will not allow any distortion. Sorry MLA sahib.”

In response, the Opposition has accused the BJP of trying to polarise the state before 2021 elections.

Incidentally, the museum was recommended in March by a legislative panel – Departmentally Related Standing Committee (DRSC) on Education – comprising BJP and its allies. Asked about this, Sarma told reporters: “Whatever committee, whosoever’s committee has given whatever report... that report will just remain in their files in their cupboards only. The Assam government is clear that in the Kalakshetra **there will not be any ‘Miya museum’.**”

Who are the Miyas?

The ‘Miya’ community comprises descendants of Muslim migrants from East Bengal (now Bangladesh) to Assam. They came to be referred to as ‘Miyas’, often in a derogatory manner.

The community migrated in several waves – starting with the British annexation of Assam in 1826, and continuing into Partition and the 1971 Bangladesh Liberation War – and have resulted in changes in demographic composition of the region. Years of discontent among the indigenous people led to the six-year-long (1979-85) anti-foreigner Assam Agitation to weed out the “illegal immigrant”, who was perceived as trying to take over jobs, language and culture of the indigenous population.

What are char-chaporis?

A char is a floating island while chaporis are low-lying flood-prone riverbanks. “They are used interchangeably or with a hyphen... They keep changing shapes – a char can become a chapori, or vice versa, depending on the push and pull of the Brahmaputra,” said Abdul Kalam Azad, human rights researcher based in Guwahati.

The website of the Directorate of Char Areas Development puts the population of chars at 24.90 lakh as per a socio-economic survey in 2002-03. "The population is bound to have increased since," said Azad.

Prone to floods and erosion, these areas are marked by low development indices. "80% of the Char population lives below poverty line," states the website. A UNDP Assam Human Development report from 2014 describes the char areas as suffering from "communication deficits, lack of adequate schooling facilities beyond primary, girl child marriage, poverty and illiteracy".

While Bengali-origin Muslims primarily occupy these islands, other communities such as Misings, Deoris, Kocharis, Nepalis also live here. In popular imagination, however, chars have become synonymous to the Bengali-speaking Muslims of dubious nationality.

How do the Miyas identify themselves?

Over the years, the Miyas have often been stereotyped and derided as "Bangladeshi". "That's an odd term to use since the community's roots in Assam are much older than 1971 when Bangladesh was born," said political scientist Dr Sanjib Baruah.

"It is a very complex community – many are generations removed from immigrant ancestors. Over the years, the community has tried to integrate into the larger Assamese society, by speaking Assamese, sending their children to Assamese schools and declaring Assamese as their language since the 1951 census."

Dr Baruah said the community had a significant presence in Assamese literary and cultural life. He referred to sessions he has attended of the Asam Sahitya Sabha, the apex literary body. "I am often impressed by the high quality of the Assamese spoken and written by many people from this background."

Prominent Assamese personalities such as the late human rights activist-journalist Parag Kumar Das have made efforts for greater acceptance of char dwellers. "He explored the char areas and started writing about them

in Assamese publications like Prantik. He brought to light that they studied in Assamese medium schools, that they were not ‘Bangladeshis’ and that they had lived here for over a hundred years,” said cultural researcher and historian Ankur Tamuli Phukan.

“The first Assamese school in a char area was set up as far back in 1899,” said Hafiz Ahmed, who runs the Char Chapori Sahitya Parishad, a literary body. “Today, the community is not just made up of farmers, drivers and labourers. There are doctors, writers, researchers, engineers – but no one wants to recognise that.”

Why a claim of a distinct culture?

While identifying as Assamese, the ‘Miya’ community feels that like other ethnic groups, they too should celebrate their own culture and heritage within the larger Assamese fold.

Mirza Lutfar Rahman, who runs a YouTube channel, ‘Mi-Chang stories’ that showcases char culture, said the community’s cultural motifs and heritage are related to agriculture and the river. The community has a variety of songs (bhatiali related to the river, magan geet or harvest songs, noi khelor geet or boat songs etc), instruments and equipment to catch fish, as well as different kinds of boats.

“While this heritage may or may not have similarities with residents of present-day Bangladesh, it is unique to Assam’s char dwellers because it is a product of a hundred years of assimilation with the Assamese society,” said Rahman, “For example, we have an ancient performative martial art called the Lathibari. While the norm is to traditionally wear colourful clothes, our version has us donning a white vest and dhoti, an Assamese gamosa on our heads and waists – these are unmissable Assamese elements. Our bhatiali geet speaks of the Brahmaputra river. Now is that not Assamese culture?”

Why are some Assamese uncomfortable with that?

The museum has been proposed in the Kalakshetra, which is a cultural complex in Guwahati named after neo-Vaishnavite reformer Srimanta

Sankardev, and which was set up as part of Clause 6 (“... to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people”) of the Assam Accord, signed at the culmination of the Assam Agitation.

According to Tamuli Phukan, the fact that the museum is proposed to be part of Kalakshetra, a product of the Assam Accord, hurts Assamese sentiments. “The Assamese feel that these claims of a distinct cultural sphere/ identity by the community may eventually lead to political or ethnic assertions in the future. This is not a fear that has been conjured up overnight but a fear of decades.”

In 2019, a controversy had broken out regarding poetry written by the Miya community in their native dialects. Given Assam’s sensitive political history, where language is the biggest fault line, the poetry faced backlash from the Assamese-speaking community.

What is the Miya view of this?

The community feels the issue is being politicised for vested interests. “Until now, not even one person has said that we are separate from Assamese society, and it is within that, we just want our heritage – whether art or culture – to be preserved,” said Azad, “Even if our songs, culture etc are displayed or exhibited – what is the inconvenience? It will just add a layer to the culture of the Assamese society, and make it even richer.”

“How can a community comprising lakhs not have a culture of their own?” Ahmed said, referring to BJP minister Sarma’s comments. “Maybe their culture is not as developed, but how can you say they have no culture?”

Dr Baruah said the migration and assimilation of the Bengali-origin communities reflect “an amazing success story of Axomiya culture’s capacity to integrate new people”. “The Kalakshetra should find ways to incorporate newer elements of our culture into its collection to show that this integrative capacity has not diminished,” he said.

7. Attempt to revive Covid-hit Dhokra tribal craft in Odisha



Dokra or Dhokra is a non-ferrous metal casting that has been used in India for over 4,000 years. Alluringly, the handicraft is still prepared by hand by village artisans of Odisha, without the involvement of any machines. Anwasha tribal arts and crafts have scaled up their production with the village artisans to knit up the lost period due to the pandemic.

Dokra or Dhokra is a non-ferrous metal casting that has been used in India for over 4,000 years and is still continuing. One of the earliest known lost wax artefacts is the dancing girl of Mohenjo-daro

Covid hits tribal craft

Covid-19 pandemic has disrupted the tribal craft in a big way, especially those in rural tribal interiors. The artisans have been reeling under the Covid-19 crisis since its outbreak in 2020. To add to their woes, the second and the third waves of the Covid pandemic gave a devastating blow to thousands of artisans, workers and weavers across odisha, thus putting the livelihood of over 3000 odd workers depending on it at stake.

There was complete severance of the production to sales cycle, since most of their products belonged to the non-essential category and they were unable to sell them during the Covid induced lockdown.

Significance of Dhokra tribal craft

'Dokra' or Dhokra is a typical tribal craft in bronze with its mesh-like features giving it a distinctive beauty. The socio-religious links to the Dhokra craft are strong in Hindu society, which dates back to the prehistoric times of the Harappa and Mohenjo-daro periods of the Indus Valley Civilization.

Notably, during different festivals like manobasa and laxmi puja, the Dokra materials are purchased and worshipped in the house. Alluringly, the handicraft is still prepared by hand by village artisans of Odisha, without the involvement of any machines. The products of Dhokra artisans are religious images, elephants, horses, peacocks, owls, lamps, bowls, which are very popular and in great demand in local markets as well as foreign markets.

Attempt to revive Dokra Handicraft

As the pandemic period is nearing an end and life is returning to almost normal, Anwasha tribal arts and crafts have scaled up their production with the village artisans to knit up the lost period due to the pandemic.

Bhubaneswar-based Anwasha Tribal arts and crafts have put in their efforts to revive the state of doldrums, the crafts and lives of artisans involved in it. They are getting support from Delhi-based Artist Puneet Kaushik who has been working for 30 years on contemporary art.

Talking to India Today, A C Sahoo, President of Anwesh art and tribal crafts, said "We are working with 2000 artisans across Odisha, working on creating tribal bronze craft known as Dokra and tribal jewelers, helping them financially and improving their livelihood which was disrupted during the Covid-19 pandemic."

Dhokra means casting of bell metal through a lost wax process. During the process, the vacuum created between the core and the clay layer is filled with molten metal, which is then allowed to cool down and solidify after it vaporizes. The outer clay mould is cracked open, revealing the beauty of the final sculpture.

This sort of metal casting has been used in India for over 4,000 years and is still continuing in tribal belts. One of the earliest known lost wax artefacts is the dancing girl of Mohenjo-daro, added Sahoo.

Dambarudhar Behera (Secretary) Anwasha Tribal Art and Crafts said that the traditional Dokla is created in Kuliana and Khunta in Mayurbhanj, Arakata in Nayagarh, narsinghpur and baragarhsingh in Cuttack, hijri and gadibuda in Rayagada and puttumgarh in Kandhamal district by Tribal artisans.

Puneet Kaushik said, "I have been working with the local tribal artists for the last 30 years. My whole idea is to develop the indigenous techniques and the skills they have in a more contemporary manner, focusing on equitable working conditions, reviving traditional techniques through innovative materials and technology, sustainable production processes and above all, an effort to bring about a transition in the crafts sector in the Indian subcontinent."

8. Tribal communities suffer when evicted in the name of conservation



The tribal communities are paying a brutal price for governments' agenda to boost safari, create protected areas and attract tourism

Several research studies have revealed that stewardship by forest-dwelling communities considerably slows the rate of forest degradation. Since

mitigating and adapting to climate change requires sustainable forests management, the tribal people who have been living in and around the forest for millennia could play a key role.

But this proven logic is highly criticised by conservationists as they firmly believe that the presence of tribal communities in the forest is deleterious for the wildlife and ecosystem. And many countries' governments often encourage eviction of tribal communities with an agenda to boost safari, create protected areas and attract tourism. In the process, the tribal communities continue to pay the brutal price for conservation.

"It has been estimated that 50 per cent of protected areas worldwide have been established on lands traditionally occupied and used by tribal people," said Victoria Tauli-Corpuz, UN Special Rapporteur on the Rights of Indigenous Peoples. "For over a century, conservation has resulted in cultural destruction and large-scale displacements of tribal people from their ancestral lands."

Let us revisit the pitiable condition of tribal communities across India and Cameroon, with a special focus on their status of land rights and tyrannical measures adopted by governments to alienate tribals from their ancestral land and forest.

Eviction in the name of conservation

Taken for instance, the recent decision by the Supreme Court in February has been severely condemned by human and tribal rights activists. The country's apex judicial system has ordered to evict more than one million forest dwelling people, in case their application has been rejected under Forest Rights Act (FRA), 2006.

"It is important to re-investigate the rejected cases and aid applicants to secure their genuine rights under FRA," said Sandeep Kumar Pattnaik, a Bhubaneswar-based researcher. "FRA clearly says the gram sabha is supreme in deciding the claims under the Act."

Thanks to the collective advocacy by several activist groups, the SC was forced to stay its earlier decision. However, this is not the first case in India

where the tribal communities have been asked to leave their homes in the name of conservation.

In 2014, around 450 families from indigenous *Baiga* and *Gond* communities were evicted to protect tigers in the Kanha Tiger Reserve. “Many affected families did not receive compensation and rehabilitation benefits as assured by the government,” claimed tribal activists.

“Baiga communities who have carefully managed the tiger’s habitats over generations are annihilated by forced evictions,” said Stephen Corry, director of Survival International, a UK-based international organisation that campaigns for rights of indigenous tribal people and uncontacted people, said. “The tribal communities were not involved in poaching, but they were the best conservationists.”

Similarly, in 2017, the government destroyed around 8,000 homes and forcefully evicted nearly 40,000 people from protected areas. For instance, in April 2017, more than 148 houses were demolished and 156 families were evicted from Thatkola and Sargodu Forest Reserve in Karnataka, as per the SC orders. Also in Assam, more than 1,000 people from Bodo, Rabha and Mishing tribal communities were forcefully evicted from the Orange National Park in the same year.

According to a research conducted by Housing and Land Rights Network in 2018, “In a majority of reported eviction cases, state authorities did not follow due process established by national and international standards.” The research also revealed that, “All cases of forced eviction resulted in multiple and often gross human rights violations.”

Cameroon sails in the same boat

What has happened in India with the tribal people is also happening all over the world – hounding of the weak and exploitation of the forest land and natural resources – tribals are the worst victims. In this context, the condition of tribals in Cameroon, a central African country, is also not satisfactory despite the fact that the country is a signatory of the ‘UN Declaration on the Rights of Indigenous People’.

Majority of the tribal people in Cameroon live in or around forest areas often rich with minerals, oil and timbers. Of country's 22.5 million hectares of forest area, 17.5 million are classified as productive forests and are being allocated to logging companies, according to the Ministry of Forestry and Wildlife, Cameroon.

"They say our forest has become a national park now. We are not allowed to enter our forest anymore," said a man belonging to an indigenous community around the Bakossi National Park, South-west region of Cameroon. "For generations we have lived in the forest. But now we cannot collect bush mango, bush pepper, mushroom, and wild fruits from the forest. How will we survive?" he said.

Forceful eviction of tribal communities is the highest form of human rights violation. Around 68 per cent of Bakossi National Park comes under community forest areas (CFAs) but less than 10 per cent of the tribal people have the rights to govern their CFAs.

"We know when and where the poachers are, but no one will listen to us," a Baka man told Survival International. For generations, the indigenous Baka people in Cameroon have lived in the forest harmoniously.

Today many of the Baka people are living on the road side at the outskirts of towns, deprived from basic needs food, shelter and portable water. "Eviction of tribal people is increasing, with intimidation, harassment, threat, and violence being used by the ruling government in Cameroon against who resists," say local journalists.

In the last two decades, there has been a growing concern by several international conservation-based organisations to protect the endangered wildlife species, with a special focus on Asia and Africa. For example, in Cameroon, the rate of creation of protected areas and sanctuaries has increased exponentially in the last one decade.

World Wildlife Fund (WWF) is one of the international collaborators of Cameroon government to protect wildlife and create sanctuaries. Over the years, it was reported that many conservation-focused projects funded by

WWF across Africa and Asia have grossly violated human rights of tribal communities.

In 2016, WWF was accused by Survival International of funding and logistically aiding anti-poaching eco-guards in Equatorial Africa. “The eco-guards sponsored by the WWF were allegedly abusing and victimising the indigenous pygmy communities in the region,” according to Survival International.

“The conservation-versus-people approach to protect wildlife has worsened the lives of thousands of native people,” said Simon Counsell, director of Rainforest Foundation, an international conservation-focused organisation.

Way forward

It is high time the respective governments and conservation-based organisations began duly acknowledging the critical role tribal people play in conservation, preservation and safeguarding the richness of local biodiversity.

The low-carbon-footprint lifestyle of the tribal people has conserved the global environment for millennia and their wisdom and sustainable methods should be recognised, adopted and promoted to effectively mitigate climate change.

“When traditional communities are given full legal rights to their land, they protect the environment efficiently and cheaply,” according to a study conducted by the Centre for International Forestry Research.

“In India there are many instances where tribal communities have played pioneering role in protecting wildlife and forest”, said Manohar Chowhan, member of Campaign For Survival and Dignity, a civil society network advocating for the rights of forest-dwelling people.

“Take for example, the community-led blackbuck conservation initiative in Ganjam district of Odisha,” he said. From a meager population of around

573 in 1990, the census of 2018 revealed an estimated 4,044 blackbuck in the area, thanks to the conservation efforts of the local community.

Another classic example is the Biligirirangana Hills Tiger Reserve in southern India where the Soliga tribal communities have been allowed to stay. It is reported that there has been an increase in the number of tiger population far above the national average.

“We worship tiger as gods,” a Soliga told the BBC. “You remove us and you remove the tigers,” said another Soliga.

Abishek Harihar of the University of Kent in Canterbury, UK, said, “Working with the tribal people is the key to save wildlife.”

“Radical transformation is imperative since the present conservation model is counterproductive. The present approach is neither helping the local communities nor protecting the wildlife,” said Srinibash Dash, program officer at the Panchayatiraj Department in Odisha.

“The tribal people are better at looking after their forest than anyone else. They also represent one of our best hopes for doing so in the future,” concluded Das.

9. Why are tribals of Rajasthan and Gujarat demanding a separate state of Bhil Pradesh?

The Bharatiya Tribal Party (BTP), a political party based in Gujarat, envisions Bhil Pradesh as a separate state carved out of 39 districts spread over four states: 16 in Gujarat, 10 in Rajasthan, seven in Madhya Pradesh, and six in Maharashtra.

The demands for a “Bhil Pradesh”, a separate state for tribal people in western India, have of late begun to be raised again. What is the basis of the demand, and who is raising them?

What is ‘Bhil Pradesh’?

BTP Rajasthan president Dr Velaram Ghogra said that Bhil social reformer and spiritual leader Govind Guru first raised the demand for a separate state for tribals back in 1913 after the Mangarh massacre. The massacre, which took place six years before Jallianwalla Bagh and is sometimes referred to as the “Adivasi Jallianwala”, saw hundreds of Bhil tribals being killed by British forces on November 17, 1913 in the hills of Mangarh on the border of Rajasthan and Gujarat.

“Post-Independence, the demand for Bhil Pradesh was raised repeatedly,” Ghogra said. Over the decades, the demand was raised and amplified by, among others, the multi-term Congress MP from Dahod Somjibhai Damor; former Ratlam MP Dileep Singh Bhuria, also of the Congress; and the former CPI member of the Rajasthan Assembly, Meghraj Tawar.

But why do the tribals want a separate state of their own?

Ghogra said, “Earlier, the Dungarpur, Banswara, Udaipur region in Rajasthan and Gujarat, MP, etc. was part of a single entity. But post-Independence, the tribal majority regions were divided by the political parties, so that the tribals don’t organise and unite.”

According to Ghogra, over the decades, several Union governments brought various “laws, benefits, schemes, and committee reports” on tribals, but went slow on their execution and implementation.

“There were various measures such as the protection of tribal interests through the Fifth Schedule under Article 244(1) of the Constitution, but most of these were mere assurances by the ruling party, whether it was the Congress or the BJP,” he said.

Ghogra cited the example of The Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996. “The law was enacted in 1996. The Rajasthan government adopted the law in 1999, and came out with its Rules in 2011. But even in my village Paldeval in Dungarpur, 25 years on, people don’t even know about the law. Even the MLAs and ministers of the BJP and Congress don’t have proper knowledge about the law.”

Ghogra recalled that during the Congress's recent Chintan Shivir in Udaipur, Chief Minister Ashok Gehlot had said, "Next time, the Congress will leave no stone unturned in fulfilling the demands of the tribals." But it was always "the next time", Ghogra said – "Seventy-five years have passed and it's still the next time. Ever since Independence, parties haven't seen tribals beyond vote bank politics."

The nervousness of the Congress and BJP about the BTP can be gauged from the Rajasthan Zila Parishad election results in December 2020. The ZP members of the ruling Congress and Opposition BJP joined forces to defeat a Zila Pramukh candidate supported by the BTP at Dungarpur in Rajasthan; BTP-backed Independents had won 13 out of the 27 seats in the Dungarpur Zila Parishad, while the BJP and Congress had won 8 and 6 seats respectively.

Is the demand for Bhil Pradesh gaining ground?

The creation of a separate Bhil Pradesh is one of the main objectives of the BTP, which was formed in 2017 in Gujarat. Ghogra said that he had been directly involved with the demand for over a decade. Meetings and gatherings are routinely held to mobilise tribals and spread awareness.

"Tribal youths have lost confidence in both the Congress and BJP," Ghogra said. "With the spread of social media, you can read up and verify things for yourself now," he said. "Seeing how we have fared in 75 years, there is no other way but to have our own separate Bhil Pradesh."