

**ANTHROPOLOGY CURRENT AFFAIRS MAGAZINE**  
**JULY 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. Ancient hominin foot fossil adds insights to mobility over 3 million years ago
2. Famous Sterkfontein Caves deposit 1 million years older than previously thought
3. Ancient Neanderthal cave in Spain with thousands of wall paintings was used for over 50,000 years
4. Neanderthal gene 'caused up to a million Covid deaths'
5. Neanderthal Teeth May Have Grown Faster, Four Months Earlier Than In Modern Humans as Evident in a 120,000-Year Old Milk Tooth

#### **SOCIO – CULTURAL ANTHROPOLOGY**

6. Scientists see cross-group adoption of young bonobo apes in the wild for the first time
7. Ancient DNA reveals origin of first Bronze Age civilizations in Europe
8. Snapshots of cultures on the verge of extinction

## **PAPER - 2**

### **INDIAN & TRIBAL ANTHROPOLOGY**

9. Tendu Leaves Collection in India
10. Fight against Covid-19: Odisha's Bonda tribe shows the way
11. Lok Sabha passes Bill to add more UP communities in Scheduled Tribe list
12. Santhals, Indian Tribe In Spotlight After Droupadi Murmu's Presidential Candidature
13. "We're Not Hindu": Tribals From 5 States Urge Centre To Recognise Religion
14. Mizo Students' Union warns non-tribal contractor over ST certificate
15. How Bhils in Maharashtra, Madhya Pradesh set an example through 'Jeevan Shala'
16. The demands for 'Tribal' status and its approval
17. 'Nata pratha': In some tribal areas of India, women's 'price' is fixed by village councils
18. Santhals: A Look At The Tribal Community Of India's New President Droupadi Murmu
19. Separate religious code for Sarna tribals
20. Hattis of Himachal Pradesh
21. Several schemes being implemented by the Government for development of the tribal population in the country
22. Neanderthals of the north: Flexible adaptation to changing environmental conditions
23. India's Leopard God, Waghoba, Aids Wildlife Conservation In The Country

## PHYSICAL & ARCHAEOLOGICAL ANTHROPOLOGY

### 1. Ancient hominin foot fossil adds insights to mobility over 3 million years ago

A rare juvenile foot fossil of our early hominin ancestor, *Australopithecus afarensis*, exhibits several ape-like foot characteristics that could have aided in foot grasping for climbing trees, a new study shows. This finding further challenges a long-held assumption that *A. afarensis*, a hominin that lived over 3 million years ago, was exclusively bipedal (using only two legs for walking) and only occasionally climbed into trees.

“For the first time, we have an amazing window into what walking was like for a 2½-year-old, more than 3 million years ago,” says lead author, Jeremy DeSilva, an associate professor of anthropology at Dartmouth College, who is one of the world’s foremost authorities on the feet of our earliest ancestors. “This is the most complete foot of an ancient juvenile ever discovered.”

The tiny foot, about the size of a human thumb, is part of a nearly complete 3.32-million-year-old skeleton of a young female *Australopithecus afarensis* discovered in 2002 in the Dikika region of Ethiopia by Zeresenay (Zeray) Alemseged, a professor of organismal biology and anatomy at the University of Chicago and senior author of the study. Alemseged is internationally known as a leading paleontologist on the study of human origins and human evolution. Although this 3.32-million-year-old fossil was announced in a previous 2006 study, many of the skeleton’s elements, including the partial foot known as DIK-1-1f, were encased in sediment and therefore had to be carefully uncovered. Many of these structures have now been exposed after additional preparatory work through 2013.

“Placed at a critical time and the cusp of being human, *Australopithecus afarensis* was more derived than *Ardipithecus* (a facultative biped) but not yet an obligate strider like *Homo erectus*. The Dikika foot adds to the wealth of knowledge on the mosaic nature of hominin skeletal evolution” explained Alemseged.

Given that the fossil of the tiny foot is the same species as the famous Lucy fossil and was found in the same vicinity, it is not surprising that the Dikika child was erroneously labeled “Lucy’s baby” by the popular press, though this youngster lived more than 200,000 years before Lucy.

In studying the fossil foot's remarkably preserved anatomy, the research team strived to reconstruct what life would have been like years ago for this toddler and how our ancestors survived. They examined what the foot would have been used for, how it developed and what it tells us about human evolution. The fossil record indicates that these ancient ancestors were quite good at walking on two legs. "Walking on two legs is a hallmark of being human. But, walking poorly in a landscape full of predators is a recipe for extinction," explained DeSilva.

At 2½ years old, the Dikika child was already walking on two legs, but there are hints in the fossil foot that she was still spending time in the trees, hanging on to her mother as she foraged for food. Based on the skeletal structure of the child's foot, specifically, the base of the big toe, the kids probably spent more time in the trees than adults. "If you were living in Africa 3 million years ago without fire, without structures, and without any means of defense, you'd better be able get up in a tree when the sun goes down," added DeSilva. "These findings are critical for understanding the dietary and ecological adaptation of these species and are consistent with our previous research on other parts of the skeleton, especially, the shoulder blade," Alemseged noted.

## **2. Famous Sterkfontein Caves deposit 1 million years older than previously thought**

New dates for Australopithecus-bearing Sterkfontein Cave deposit places South African hominin fossils at the center of global paleo research.



**New dates for Australopithecus-bearing Sterkfontein Cave deposit places South African hominin fossils at the center of global paleo research**

**Fossils found at the Sterkfontein Caves in South Africa reveal nearly four million years of hominin and environmental evolution. Since research began at the site in 1936 with the discovery, by Robert Broom, of the first adult hominin of the genus *Australopithecus*, it has become famous for the hundreds of *Australopithecus* fossils yielded from excavations of ancient cave infills, including iconic specimens such as the cranium known as Mrs. Ples and the Little Foot skeleton.**

The majority of Sterkfontein's wealth of *Australopithecus* fossils has been excavated from an ancient cave infill called 'Member 4' -- the richest deposit of *Australopithecus* fossils in the world. Over the last 56 years of Wits-led research at Sterkfontein, the age of Member 4 at Sterkfontein have remained contested, with age estimates ranging from as young as about 2 million years ago, younger than the appearance of our genus *Homo*, back to about 3 million years.

New research presented in a paper published in the journal *PNAS* re-evaluates the age of *Australopithecus* from Member 4 at Sterkfontein together with the Jacovec Cavern, which contains a few additional hominin fossils in a deeper chamber in the cave.

"The new ages range from 3.4-3.6 million years for Member 4, indicating that the Sterkfontein hominins were contemporaries of other early *Australopithecus* species, like *Australopithecus afarensis*, in east Africa," says Professor Dominic Stratford, director of research at the caves, and one of the authors on the paper.

The new ages are based on the radioactive decay of the rare isotopes aluminum-26 and beryllium-10 in the mineral quartz. "These radioactive isotopes, known as cosmogenic nuclides, are produced by high-energy cosmic ray reactions near the ground surface, and their radioactive decay dates when the rocks were buried in the cave when they fell in the entrance together with the fossils," says Professor Darryl Granger of Purdue University in the United States and lead author on the paper.

Previous dating of Member 4 has been based on dating calcite flowstone deposits found within the cave fill, but careful observations show that the flowstone is actually younger than the cave fill and so it underestimates the age of the fossils.

"This re-assessment of the age of Sterkfontein *Member 4 Australopithecus* fossils has important implications for the role of South Africa on the hominin evolution

stage. Younger hominins, including *Paranthropus* and our genus *Homo* appear between about 2.8 and 2 million years ago. Based on previously suggested dates, the South African *Australopithecus* species were too young to be their ancestors, so it has been considered more likely that *Homo* and *Paranthropus* evolved in East Africa," says Stratford.

The new dates show that *Australopithecus* existed at Sterkfontein almost a million years prior to the appearance of *Paranthropus* and *Homo*, providing more time for them to evolve here, in the Cradle of Humankind, and placing the hominins from this site front and center in the history early human evolution.

"This important new dating work pushes the age of some of the most interesting fossils in human evolution research, and one of South Africa's most iconic fossils, Mrs Ples, back a million years to a time when, in east Africa, we find other iconic early hominins like Lucy," says Stratford.

"The redating of the *Australopithecus*-bearing infills at the Sterkfontein Caves will undoubtedly re-ignite the debate over the diverse characteristics of *Australopithecus* at Sterkfontein, and whether there could have been South African ancestors to later hominins," says Granger.

### 3. Ancient Neanderthal cave in Spain with thousands of wall paintings was used for over 50,000 years



**We're still only starting to understand Neanderthal culture.**

The Cave of Ardales (Cueva de Ardales) in south Spain took the world of anthropology by storm a few years ago, when a team of researchers claimed the cave contained the oldest man-made paintings, dated to some 64,800 years ago.

The cave paintings were likely made by Neanderthals, and they stirred some controversy, with some researchers claiming that these were naturally occurring pigments, an opinion which seems to have fallen out of favor recently.

Now, a new study sheds new light on the cave, suggesting that it may have been used as a burial place for over 50,000 years, mostly by Neanderthals, but also, sporadically, by *Homo sapiens*.

The cave features over a thousand paintings and engravings, as well as numerous artifacts and human remains. It measures almost a mile (1.57 km) on two levels connected with each other. It features over 1,000 paintings and engravings, and while these are not nearly as complex as some made by prehistoric modern humans (such as those found in the Chauvet-Pont d'Arc cave of France, which are some 30,000 years old), they show that Neanderthals were far from the simple brutes they were long portrayed as. They also hint that there may be plenty more ancient cave paintings just waiting to be discovered.

The paintings, which feature stenciled hands, dots, and fingertips, are not the only interesting thing about the cave, either. Researchers have just recently been thoroughly exploring some of the remains and objects found in the cave, trying to date them.

Results suggest that the cave's first inhabitants came in around 65,000 years ago – and they must have been Neanderthals, because humans only arrived later, some 35,000 years ago. Also, the cave wasn't just used on occasion, it was used systematically.

"The quantity and nature of materials found during the excavations indicate that Cueva de Ardales was not a campsite, but was mainly visited to carry out non-domestic tasks, such as the production of rock art or the burial of the dead," the researchers write in the study. The cave has been known for some 200 years, but its occupation history is only now being uncovered. According to the researchers, it was a space linked to art and spirituality, but its meaning is still being explored. The cave must have played a key role in the belief systems of some Neanderthal communities – but what exactly that belief system was is yet to be uncovered.



#### 4. Neanderthal gene 'caused up to a million Covid deaths'



**Genetic tweak found in one in six Britons means cells in the lungs are slower to launch defences**

**The LZTFL1 gene, found in one in six Britons, has been shown to double a person's risk of severe disease and death**

A single Neanderthal gene found in one in six Britons is likely to blame for up to a million Covid deaths, according to an Oxford academic.

The LZTFL1 gene is a Neanderthal gene found on chromosome three and has been previously shown to double a person's risk of severe disease and death.

But before now there had never been an estimated figure for how many lives were lost to this single piece of genetic code.

Roughly 15 per cent of Europeans have the Neanderthal form of the gene, compared to about 60 per cent of South Asians.

Dr James Davies of the University of Oxford, a genomic expert and ICU doctor who worked on the Covid wards during the pandemic, discovered the innocuous gene's lethal role last year after creating a brand new cutting-edge way of looking at DNA in exceptional detail.

The method allowed him to identify LZTFL1 as the culpable gene increasing mortality, whereas previous methods had failed to narrow it down beyond 28 different genes.

Speaking at the Cheltenham Science Festival, Dr Davies said: “We used the technique and it identified a virtually understudied gene called LZTFL1 and at the time that this had not been linked to infection at all.

“It’s a single letter difference out of three billion. This tiny section of DNA doubles your risk of dying from Covid.

“It’s position 45,818,159 on chromosome three, and it’s a single change. If you’ve got a G at that site, it’s low risk. And if you have an A at that site it is high risk.”

His team believe that the Neanderthal gene changes how a cell behaves when the SARS-CoV-2 virus binds to the ACE2 receptor on a human cell.

In most people, this leads to the cell then changing shape and becoming less specialised and less prone to infection, stymying the progression of the infection.

“What this high risk variant does is it creates a new signal that tells that gene to stay on for slightly too long in response to infection,” Prof Davies said.

“And so they stay in this state where they’re highly specialised, and they’re prone to infection for longer.”

The number of deaths globally from this nefarious genetic variant “is in the hundreds of thousands to a million,” he told the audience.

### **'Dinner date' between human and Neanderthal**

Dr Davies and his colleague from Oxford Brookes University, Dr Simon Underdown, a biological anthropologist, also revealed that the Neanderthal gene first infiltrated humans 60,000 years ago after one romantic liaison and interspecies tryst between a human and a neanderthal. A solitary coupling event across species lines saw the deadly Covid gene jump from our now-extinct cousin species into us.

“If this dinner date between the human and the Neanderthal had gone wrong, we would have had a much better time in Covid, we would have had hundreds of thousands less deaths,” said Prof Davies.

“The reason that we know that is that it's inherited as this block with 28 single letter changes, and you can track that all the way back and it has to be a single event. It's just so unlikely that you get all 28 changes at the same time and in the same block.”

### **Neanderthals 'looked just like us'**

Dr Underdown added that Neanderthals would likely have looked very similar to humans.

“Arguably, they look just like us,” he said. “If you dress one of these guys up in a hat and a coat...you wouldn't give them a second glance.

“What would happen when a Neanderthal came into contact with Homo sapiens? Would they even recognise them as different? I would argue very much that they wouldn't.”

“They would have thought they were unusual insofar as they didn't look exactly alike but they were similar enough that they probably wouldn't have even known it was something that different.

“We see Neanderthal integration, or sex, taking place around 60,000 years ago after they left Africa and this is the event where James's gene jumps across.

“This is the event where the gene that gives you more severe Covid jumps across into the Homo sapien lineage.”

## 5. Neanderthal Teeth May Have Grown Faster, Four Months Earlier Than In Modern Humans as Evident in a 120,000-Year Old Milk Tooth



Helene Rougier, anthropologist at California State University Northridge in the United States, displays some of the 96 bones and three teeth from five Neanderthal individuals which were found in the Belgium Goyet cave at the Royal Belgian Institute of Natural Sciences, in Brussels, on December 21, 2016. Deep in the caves of Goyet, in present-day Belgium, researchers have found the grisly evidence that the Neanderthals did not just feast on horses or reindeer, but also on each other.

Archaeologists found a preserved Neanderthal milk tooth near Krapina in Croatia that belonged to a seven-month-old baby who lived 120,000 years ago. An analysis of the fossil reveals it emerged four months sooner than in modern human babies.

The team said that the early emergence of teeth helped Neanderthal babies to eat solid foods sooner, which is needed to fuel their larger brains and for their bodies to develop faster.

### **Modern Human Babies Develop Slower Than Neanderthal Infants**

The new research sheds light on the differences between how modern human babies and Neanderthal infants develop after birth. Sky News reported that

scientists at the University of Kent's school of anthropology believe the former develops much slower than the latter as evident in the 120,000-year-old Neanderthal milk tooth they found.

Unlike Neanderthal infants, the Centers for Disease Control and Prevention (CDC) said that human babies start to eat solid food at about six months, and only when they reach their eighth month they can consume a variety of foods from all food groups. But before that period, human babies typically only consume their mother's milk or formula.

On the other hand, Neanderthal infants develop their milk teeth at an earlier age of four months. Their teeth enabled them to eat meats, vegetables, and other solid foods at an earlier age to meet the required energy needed for their larger brains.

Archaeologists used state-of-the-art technology to examine the Neanderthal milk tooth they found, wherein they found evidence that they sprouted quite early. Milk teeth are helpful to scientists because they can study when they emerged. Scientists said that milk teeth begin forming even before an infant is born and further develop as they grow.

Since the teeth are made up of layers of enamel, milk tooth retains a record of their own growth that was preserved well as fossils. Through non-destructive virtual histology that relies on synchrotron radiation, the team was able to see the inside of the milk tooth and identify the exact moment when the Neanderthal infant was born.

### **Faster Growth of Teeth in Neanderthals Suggests High Mortality Rate**

According to Daily Mail, archaeologists today are still finding fossils of Neanderthals despite being extinct for 40,000 years due to being out-competed for food and shelter by Homo sapiens. The milk tooth is just one of the recent fossil finds reported.

Study author Dr. Patrick Mahoney said that their findings reveal that these Neanderthals have a faster rate of dental development, which is likely to help them process more demanding supplementary foods at an earlier age than a modern human child. It is consistent with other studies that suggest Neanderthals have big brains by the time they are two years old, which likely required lots of energy.

Meanwhile, study co-author B. Holly Smith told Inverse that the speed at which the Neanderthal baby teeth grew could mean that the species faced a higher mortality rate. That means when teeth appear earlier, their bodies may have also aged faster compared to modern humans.

## SOCIO – CULTURAL ANTHROPOLOGY

### 6. Scientists see cross-group adoption of young bonobo apes in the wild for the first time

#### Paper-1 Primate behaviour



Scientists have witnessed bonobo apes adopting infants who were born outside of their social group for the first time in the wild. Researchers, including psychologists at Durham University, UK, twice saw the unusual occurrence among bonobos in the Democratic Republic of Congo, in central Africa.

They say their findings give us greater insight into the parental instincts of one of humans' closest relatives and could help to explain the emotional reason behind why people readily adopt children who they have had no previous connection with.

The research, led by Kyoto University, in Japan, is published in the journal *Scientific Reports*.

Researchers observed a number of bonobo groups over several years in the Wamba area of the Democratic Republic of Congo.

The examples of cross-group adoption were seen between April 2019 and March 2020 before Covid-19 restrictions brought observations to a temporary halt.

Chio, aged between 52 to 57 years old, who is thought to be post-menopausal, was seen to adopt three-year-old Ruby who had been part of another unknown group.

Marie, an 18-year-old bonobo was also seen to adopt Flora, who is estimated to be two-and-a-half-years-old, after Flora's mother disappeared from a separate group.

Neither Chio nor Marie, who had already had their own offspring, had any pre-existing family connections to the adopted infants or any strong social connections with the youngsters' biological mothers, yet both readily adopted the young bonobos.

Both adoptive mothers carried, groomed, nursed, and shared food with their adopted young. Ruby and Flora were also both observed suckling at their adopted mothers. In the case of Ruby, she might have been suckling for comfort as Chio is unlikely to have been producing milk.

The researchers say this caring nature is evidence of bonobos' strong attraction to infants and high tolerance of individuals, including immature youngsters, from outside of their normal group.

Bonobos, along with chimpanzees, are humans' closest relatives and the researchers say their discovery helps us to understand adoption among people.

Marie-Laure Poiret, a PhD Research Student, in the Department of Psychology, at Durham University, UK, said: "Usually in wild animals adoptive mothers are related to orphaned infants or sometimes young females will adopt orphans to improve their own care-giving behaviours, which increases the future survival chances of their own offspring."

"This means that adoption in non-human animals can usually be explained by the adoptive mother's own self-interest or pre-existing social relationships.

"The cross-group adoption we have seen in the cases of both Chio and Ruby, and Marie and Flora, is as surprising as it is wonderful and perhaps helps us explain adoption among humans, which cannot be explained purely by the benefits received by adoptive mothers.

"Instead it is fair to say from the examples we have seen in bonobos that adoption in humans can be explained by a selfless concern for others and an emotional desire to offer care to someone who we have no previous connection with."

The bonobo groups included in this study have been observed by scientists since the 1970s and researchers have come to know the individuals in each of the groups.

Research lead author Nahoko Tokuyama, Assistant Professor in the Primate Research Institute and Wildlife Research Centre at Kyoto University, Japan, who has spent more than ten years studying bonobos in the Democratic Republic of Congo, said bonobos "never ceased to amaze".

Dr Tokuyama added: "Although cases of adoption were observed in non-human primates, the adoptive mother and adoptees almost exclusively belonged to the same social group.

"This may be because adoption is very costly behavior and because non-human primates form stable groups and have a good ability to recognise other group members.

"It's well known that groups of bonobos sometimes encounter and associate with each other, and that those belonging to different groups can interact tolerantly.

"However, I had never imagined that bonobos could adopt infants from outside of their groups, so these cases were quite surprising."

The researchers plan to continue their observations of the bonobo groups once Covid-19 restrictions allow.



## 7. Ancient DNA reveals origin of first Bronze Age civilizations in Europe



### **Finding shed light on role of migration in Neolithic to Bronze Age transition and emergence of Indo-European languages**

The first civilisations to build monumental palaces and urban centres in Europe are more genetically homogenous than expected, according to the first study to sequence whole genomes gathered from ancient archaeological sites around the Aegean Sea. The study has been published in the journal *Cell*.

Despite marked differences in burial customs, architecture, and art, the Minoan civilization in Crete, the Helladic civilization in mainland Greece and the Cycladic civilization in the Cycladic islands in the middle of the Aegean Sea, were genetically similar during the Early Bronze age (5000 years ago).

The findings are important because it suggests that critical innovations such as the development of urban centres, metal use and intensive trade made during the transition from the Neolithic to the Bronze Age were not just due to mass immigration from east of the Aegean as previously thought, but also from the cultural continuity of local Neolithic groups.

The study also finds that by the Middle Bronze Age (4000-4,600 years ago), individuals from the northern Aegean were considerably different compared to those in the Early Bronze Age. These individuals shared half their ancestry with people from the Pontic-Caspian steppe, a large geographic region stretching between the Danube and the Ural rivers and north of the Black Sea, and were highly similar to present-day Greeks.

The findings suggest that migration waves from herders from the Pontic-Caspian steppe, or populations north of the Aegean that bear Pontic-Caspian Steppe like ancestry, shaped present-day Greece. These potential migration waves all predate the appearance of the earliest documented form of Greek, supporting theories explaining the emergence of Proto-Greek and the evolution of Indo-European languages in either Anatolia or the Pontic-Caspian Steppe region.

The team took samples from well-preserved skeletal remains at archaeological sites. They sequenced six whole genomes, four from all three cultures during the Early Bronze Age and two from a Helladic culture during the Middle Bronze Age.

The researchers also sequenced the mitochondrial genomes from eleven other individuals from the Early Bronze Age. Sequencing whole genomes provided the researchers with enough data to perform demographic and statistical analyses on population histories.

Sequencing ancient genomes is a huge challenge, particularly due to the degradation of the biological material and human contamination. A research team at the CNAG-CRG, played an important role in overcoming this challenge through using machine learning.

According to Oscar Lao, Head of the Population Genomics Group at the CNAG-CRG, "Taking an advantage that the number of samples and DNA quality we found is huge for this type of study, we have developed sophisticated machine learning tools to overcome challenges such as low depth of coverage, damage, and modern human contamination, opening the door for the application of artificial intelligence to palaeogenomics data."

"Implementation of deep learning in demographic inference based on ancient samples allowed us to reconstruct ancestral relationships between ancient populations and reliably infer the amount and timing of massive migration events that marked the cultural transition from Neolithic to Bronze Age in

Aegean," says Olga Dolgova, postdoctoral researcher in the Population Genomics Group at the CNAG-CRG.

The Bronze Age in Eurasia was marked by pivotal changes on the social, political, and economic levels, visible in the appearance of the first large urban centres and monumental palaces. The increasing economic and cultural exchange that developed during this time laid the groundwork for modern economic systems -- including capitalism, long-distance political treaties, and a world trade economy.

Despite their importance for understanding the rise of European civilisations and the spread of Indo-European languages, the genetic origins of the peoples behind the Neolithic to Bronze Age transition and their contribution to the present-day Greek population remain controversial.

Future studies could investigate whole genomes between the Mesolithic and Bronze Age in the Armenian and Caucasus to help further pinpoint the origins of migration into the Aegean, and to better integrate the genomic data with the existing archaeological and linguistic evidence.

## **8. Snapshots of cultures on the verge of extinction**

The rich heritage of our indigenous people is dying," shares Chotani, who shuttles between Noida and Leh.

If you ever chance upon the Instagram page or the website of 'The Last Avatar' you will come face to face with the haunting eyes of a woman from the Bhil tribe in West India or the smiling face of a Dropka tribeswoman from the Dha village in Ladakh. An ongoing archival project, 'The Last Avatar' – it was founded by travel and lifestyle photographer Aman Chotani (33) seven years ago – aims to document indigenous tribes as well as unexplored places of the country. "I went to Canada and I was amazed by how they were preserving their tribes' cultures and traditions. However, it is not the same in India. The rich heritage of our indigenous people is dying," shares Chotani, who shuttles between Noida and Leh.

According to the last census of the Indian population conducted in 2011, around 8.6 per cent of India's population is made up of indigenous tribes. However, a number of them are unrecognised by the urban population mostly because we

are not in contact with them and their cultures. “The tribals [who are undocumented and live in remote villages], with their defining headgears and prominent tattoos, I believe, are similar to the mythological representations of pagan deities. The name comes from the fact that they are the last gods left, and through them, I can document their dying culture,” says Chotani.

A treasure trove of culture  
To begin with, ‘The Last Avatar’ was to be collated as a photobook. In time, it has curated as a digital archive that documents the cultures of many tribal communities in India. “The book is only the first step. I want to make a complete digital archive where people will learn in detail all the tribes in the country,” shares Chotani. He also mentions that he plans on creating a 10-episode web series next year, which will feature 10 tribes that the project has documented.

Through ‘The Last Avatar’, Chotani and his team of five have documented more than 25 indigenous tribes till date. These range from the Raikas from Rajasthan, the Apatani tribe from Arunachal Pradesh, among others. “The best way to interact with the tribespeople is to be humble, and respect their culture. When I have had a language barrier, the local people in the area have proved to be very helpful,” Chotani says.

The project is also a means to break preconceived notions about many of these tribespeople and Chotani recalls his experience with the Konyak tribe. When he first visited this tribe in Nagaland, he realised that their reputation as headhunters made many warn him not to meet them alone. “Everyone kept telling me that they are dangerous and I should be careful but I had a wonderful time with them. They were so welcoming; I even had the opportunity to live with the king.”

Preserving culture  
‘The Last Avatar’ was registered as an NGO in 2019. Along with the documentation, they work towards tribal rehabilitation by conducting special art and cultural workshops – folk storytelling, traditional paintings, etc. – to connect the youth in tribal areas with their roots. “The youth have started adopting Western beliefs. They don’t wear traditional clothes; many don’t live with their family. I wanted to make them proud of their legacy,” he shares. His team will also be setting up a dental camp in Leh in July. Talking about the importance of this project, Chotani concludes, “It’s beautiful that we get to explore these

cultures and the people who are part of it. They are as much a part of India as we are. People should know about them.”

## INDIAN & TRIBAL ANTHROPOLOGY

### 9. Tendu Leaves Collection in India

Tribal residents in Chhattisgarh have decided to file an FIR against an official of the state forest department after he confiscated the tendu leaves that they had collected.

#### Tendu Leaves

- Leaves of tree species *Diospyros melanoxylon* are used as wrappers of tobacco to produce bidi.
- This tree is commonly known as “tendu,” but also called “abrus” in Andhra Pradesh, “kendu” in Orissa and West Bengal, “tembru” in Gujarat, “kari” in Kerala, “tembhurni” in Maharashtra, and “bali tupra” in Tamil Nadu.
- This leaf is considered the most suitable wrapper on account of the ease with which it can be rolled and its wide availability.
- Tendu is also called ‘green gold’ and is a prominent minor forest produce in India.

#### How it is traded?

- In 1964, the trade in tendu leaves was nationalised in then-undivided Madhya Pradesh.
- Until then, people were free to sell tendu leaves in markets across the country.
- Maharashtra adopted the same system in 1969, undivided Andhra Pradesh in 1971, Odisha in 1973, Gujarat in 1979, Rajasthan in 1974 and Chhattisgarh in 2000.
- Under this arrangement, the state forest department collects tendu leaves, allows their transportation and sells them to traders.

### Why is there a dispute?

- The dispute is essentially about who has the right to sell the leaves.
- State governments say only they can do so due to nationalization.
- On the other hand, tendu leaf collectors cite **The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006** and the **2013 Supreme Court verdict in the Niyamgiri Case** to say private collectors can sell them on their own.
- Tendu leaf collectors allege that the government gives them a lower price for the leaves, while it fetches a higher price in the open market.

### What do the tribals want?

- The tribals, after having obtained forest rights leases under the FRA 2006, now want to sell tendu leaves on their own, with the permission of Gram Sabhas and make good profits.
- Many types of minor forest produce like Mahua, Salbeej or the seeds of the Sal tree (*Shorea robusta*) and Chironji or Almondette kernels (*Buchanania lanzan*) are collected and sold by tribals.
- Hence, there should not be a dispute over tendu leaves.

### 10. Fight against Covid-19: Odisha's Bonda tribe shows the way

Not a single member has been infected so far during the third wave of the pandemic although the number of patients in the state has been rising by the day



A woman in Malkangiri's Bonda valley at a medical camp.

Till a decade ago, the vulnerable and primitive Bonda tribe used to lose a large number of members to malaria every year because its traditions ruled out the use of mosquito nets or modern medicines.

Over the past one year, though, the tribe of less than 10,000 people that likes to shut out the external world has shed its aversion to needles and vaccination to script one of the success stories of Odisha's fight against Covid.

#### Advertisement

Not a single member of the tribe has been infected so far during the third wave of the pandemic although the number of Covid patients in Odisha has been rising by the day.

Almost every eligible member of the Bonda community has taken both doses of the Covid vaccine. Now, the administration is preparing to give booster doses to Bondas aged 60 and above.

Odisha on Thursday reported 10,368 new Covid patients and 88,346 active cases.

The Bonda community lives in isolation on the Bonda Hill in Malkangiri district and follows over 1,000-year-old traditions.

"They are very protective about their culture and traditions. They look at the outer world with suspicion," a local journalist said.

Dr Debabrata Barik, medical officer at the Khairput Community Health Centre, told **The Telegraph**: "Earlier, the Bondas were reluctant to take vaccines. Last year, we convinced them about the need to take the jabs, and they came forward to cooperate."

He added: "Of course, we lied to them that they would be deprived of government facilities (like free rice) if they didn't take the vaccine shots. It helped. Through last year, 42 of them got infected with Covid. However, not a single case has been reported this time."

The Bondas, a Particularly Vulnerable Tribal Group, are known for their stagnant population, low literacy levels and mostly pre-agricultural economy. They mostly earn a living by selling forest produce like wood and fruits.

Asked how they would have come into contact with Covid-positive people, Dr Barik said: "When they come to the local market from the hilltop, they come into contact with Covid (carriers). Their sons and daughters also move outside for various kinds of work. Sometimes, they act as carriers."

About six-seven years ago, the medical authorities had registered another triumph by persuading the Bondas to use mosquito nets and take anti-malarial medicines, if required.

"Malaria has stopped being a major threat to their health. This has been possible because of their adaptability," Dr Barik said.

Once every week, Dr Barik and his team leave the community health centre early in the morning to visit the Bonda Hill.

"We always carry our food and return only in the afternoon. All sorts of health issues have been addressed," he said.

However, there's one precaution the Bondas continue to shun like many of their fellow Indians.

Sukanti Keshani, a Bonda woman working at an Anganwadi centre, said: "I have been working as an Anganwadi worker for the last three months. All people in my community are now aware of health issues. All know about the repercussions of Covid. But they are still averse to wearing masks."

### **11. Lok Sabha passes Bill to add more UP communities in Scheduled Tribe list**

The Lok Sabha on Friday passed the Constitution (Scheduled Castes and Scheduled Tribes) Order (2nd Amendment) Bill, 2022, to bring certain tribal communities such as Gond, Dhuriya, Nayak, Ojha, Pathari and Rajgond - living in the Sant Kabir Nagar, Kushinagar, Chanduali, and Sant Ravidas Nagar districts - into the list of the STs in UP.

The BJP had made a pre-poll promise to make such legislations to these communities who have been seeking their inclusion in the ST list.

Besides, the government has introduced in the Lok Sabha a bill to extend India's domestic laws to provide a regulatory framework for research activities in the Antarctic and have its own national measures to protect the Antarctic environment and the dependent ecosystem.



'The Indian Antarctic Bill 2022', which was introduced in the Lok Sabha on Friday, was opposed by All India Trinamool Congress member Saugata Roy. Roy asked how Parliament could legislate on matters related to "Antarctic, which is a no man's land".

Responding to this, the Union Minister for Earth Science and Technology Jitendra Singh said Parliament had the right to legislate on the matter. He pointed out that the proposed legislation was also aimed at upholding the Indian obligations to the international Antarctic Treaty, the Convention on the Conservation of Antarctic Marine Living Resources and the Protocol on Environmental Protection to the Antarctic Treaty.

## 12. Santhals, Indian Tribe In Spotlight After Droupadi Murmu's Presidential Candidature



**The Santhal tribe has been in the headlines since NDA's nomination of Droupadi Murmu, one of its candidates for the presidency, for election to the highest constitutional position in India.**

### **Who is Droupadi Murmu?**

The ruling party, the NDA, announced Droupadi Murmu, an Odisha tribal leader, as its candidate for the upcoming presidential race on Tuesday. The choice was made during a meeting of the BJP's parliamentary board. Former Union Minister Yashwant Sinha has been nominated as the opposition's nominee, and he will compete against Droupadi Murmu.

**Droupadi Murmu would be India's 1st tribal and second female president if**

she were to win the election.

**The two-time BJP legislator from Rairangpur in Mayurbhanj, 64-year-old Murmu is a former minister for the state of Odisha. She was chosen to be the governor of Jharkhand, where she served in that position until 2021, becoming the state's first female governor.**

### **Who are Santhals?**

An indigenous group called Santhals, commonly referred to as Manjhis, is mostly found in the states of Jharkhand, Odisha, Bihar, and West Bengal. There are more than 5 million Santhals in India alone, according to Britannica.

Agriculture is their main line of work. However, many have reportedly started switching to other jobs, such as labourers and coal miners. One of the highest concentrations of the tribe can be seen in Murmu's hometown, Mayurbhanj. Apart from the Mayurbhanj area, Santhals may be found in Keonjhar and Balasore in Odisha.

The name "Santhal" is made up of two words: "santha," which means quiet and tranquil, and "ala," which means man, according to the Scheduled Castes and Scheduled Tribes Research and Training Institute (SCSTRTI), Bhubaneswar.

In India, the Santhals, after the Gonds and the Bhils, are the third-largest Scheduled Tribe group.

### **Life and history of Santhals**

The Santhals once lived as nomads before settling on the Chota Nagpur plateau, said SCSTRTI, cited by The Hindu.

The name "Santhal" is made up of two words: "santha," which means quiet and tranquil, and "ala," which means man, according to the Scheduled Castes and Scheduled Tribes Research and Training Institute (SCSTRTI), Bhubaneswar.

In India, the Santhals, after the Gonds and the Bhils, are the third-largest Scheduled Tribe group.

### **Life and history of Santhals**

The Santhals once lived as nomads before settling on the Chota Nagpur plateau, said SCSTRTI, cited by The Hindu.

They moved to Bihar's Santhal Parganas during the end of the eighteenth century before arriving in Odisha.

Through the Santal Hul (revolution) of 1855–1866, the Santhals are also credited as confronting the East India Company's military power. The distressed Santhals organised their own army, made mostly of farmers, and fought their oppressors. Along with destroying the train connections and postal links, they also broke into, raided, and vandalised warehouses and storehouses. The Santhals were gunned down by the British once they were informed of the situation.

Despite its failure, the revolt is regarded as the origin of Bengal's Naxalite movement. The Santhal Rebellion is regarded as one of the most remarkable events in the history of the Indian subcontinent before independence.

#### **Demographic details**

The literacy rates in tribal groups outside of the Northeast are often lower. However, the Santhals have a higher literacy rate than other groups in Odisha, Jharkhand, and West Bengal, according to SCSTRTI Director A. B. Ota, cited by The Hindu. This is due to a pro-school education consciousness that has existed among the Santhals since at least the 1960s.

**As per the same report, many of the groups have reached the creamy layer of Indian society. Hemant Soren, the chief minister of Jharkhand, is a Santhal, for instance. In addition to being a Santhal, the current Comptroller and Auditor General of India (CAGI), Girsh Chandra Murmu, was the 1st Lt Governor of the UT of Jammu and Kashmir.**

### 13. "We're Not Hindu": Tribals From 5 States Urge Centre To Recognise Religion



"We Adivasis are neither Hindus nor Christians. We have our own way of life, religious practices, customs, culture and religious thoughts, different from any other religion," a tribal leader said.

A large number of people from various tribal communities of five states, including Jharkhand, Odisha and Assam, staged a demonstration here on Thursday, demanding that the Centre recognise their religion as 'Sarna' and ensure their enumeration under this category during the upcoming census.

The agitators also took a pledge to intensify their struggle in order to get the government recognition to the 'Sarna dharma code' and held a mass prayer at Jantar Mantar, seeking blessings of their deities and revered leaders.

The agitation was organised to mark the anniversary of the beginning of the Santhal Rebellion against the British on June 30, 1855.

The members, majority of whom belonged to the Santhal tribe, raised their demands under the aegis of the Adivasi Sengel Abhiyan (tribal empowerment campaign) from as many as 250 scheduled tribes-dominated blocks from 50 districts of Jharkhand, Bihar, Odisha, West Bengal and Assam.

"We are here to demand that the government recognises our religion as 'Sarna' and include a provision in the upcoming census for enumeration of Adivasis under this category," Salkhan Murmu, a prominent tribal leader from Jharkhand, who is spearheading the movement, told PTI.

"We wanted to call on President Ram Nath Kovind to convey our feelings and urge him to recognise our religion as Sarna, but could not get an appointment with him. So, we submitted a memorandum of our demands to the President through the police," he added.

Mr Murmu, who was a BJP MP from Odisha's Mayurbhanj Lok Sabha constituency for two consecutive terms from 1998-2004, said tribals in the country have their own religion, religious practices and customs, but it has not yet been recognised by the government.

"We Adivasis are neither Hindus nor Christians. We have our own way of life, religious practices, customs, culture and religious thoughts, different from any other religion. We worship nature and not idols. There is neither Varna system in our society or any sort of inequality," he said.

In absence of the government's recognition to the tribals' religion, the members of the Scheduled Tribe communities in the country are misled to embrace other faiths, he claimed.

"India is home to over 12 crore tribal people. They have been recognised as Scheduled Tribes but unfortunately their religion has not been recognised even as it is fundamental under the Constitution," he said.

"Since all the tribal people worship nature and their religious thoughts, practice, culture and customs are way different from any other religion, we demand that our religion be recognised as Sarna," Mr Murmu said.

Sarna can be accepted as a common name for the religion of all 'adivasis' in the country as it means place of worship in Santhali language, he pointed out.

As many as 1,000 people had arrived from the five states in trains, but not all could join the protest as police denied them permission citing some court order and restrictions imposed due to Covid-19, he said.

#### **14. Mizo Students' Union warns non-tribal contractor over ST certificate**

AIZAWL: Mizo Students' Union (MSU), one of the most influential and largest student bodies in Mizoram, on Wednesday asked a non-tribal contractor, who allegedly fraudulently acquired a scheduled tribe certificate from the state government 3 years back, to surrender the certificate to the issuing authority on or before February 18.

The students' body warned to launch a search operation for the trader, who is now at large if he fails to surrender the certificate within a time frame.

A press statement issued by the student body said that the non-tribal contractor, whose original name was Kamrul Laskar Uddin, changed his name to Kamlova Chhange (a Mizo first name and clan name) and ST certificate was issued to him accordingly in June 2018 from the office of deputy commissioner of Aizawl district.

Though it had appealed to Aizawl deputy commissioner in November last year to cancel the tribal certificate, measures could not be initiated due to the burning of the deputy commissioner's office, the student body said.

The student body had also appealed to Uddin, who promised the student leaders that he will ask for cancellation on February 7, but failed to do so within the deadline citing he has an emergency, it said.

Uddin has been missing since February 7 and he is not reachable over the phone since then, the student body said. Citing that the issuance of a tribal certificate to non-tribal is not safe for the indigenous Mizos, the student body said it would not simply ignore the matter.

It asked the non-tribal contractor to surrender the certificate to Aizawl deputy commissioner on or before February 18 failing which it would launch a search for him, it said.

Earlier, the Central Committee of the Young Mizo Association, the largest civil society group in Mizoram, had also demanded the cancellation of the Scheduled Tribe certificate issued to Uddin.

The organisation president R. Lalngheta had said that they will file a complaint

to the state home minister against the issuance of Scheduled Tribe certificate to the man who now goes by the name Kamlova Chhangte. Uddin owns a construction farm at Thuampui locality in Aizawl. He is said to have married a Mizo woman and lives at Thuampui in Aizawl.

According to the ST certificate, the photo of which has gone viral on social media, Kamlova Chhangte's father is Tlangchhuana Chhangte.

There is an old Mizo custom known as Saphun which allows people from one clan to adopt the customs and practices of another clan.

In such a case, a person from one clan, say Ralte, will be adopted into another clan, for example, Sailo. Then he can carry the Sailo clan name.

This custom, however, has gradually died with the advent of Christianity in Mizoram and is no longer practiced. Mizo Customary Law experts said the Saphun custom applies only between Mizo clans and a non-Mizo cannot become a Mizo under Saphun custom even it is still practiced.

### **15. How Bhils in Maharashtra, Madhya Pradesh set an example through 'Jeevan Shala'**

When the state of tribal education in the country remains dismal and most government schools in India's tribal areas are only on paper, the Bhil community opened up schools called "**Jeevan Shala**" for their children.

The students attending the schools are educated not just in regular subjects but also about water, forests and land. They are introduced to all the herbs found in the forest as well as edible tubers. They are informed about their uses and consumption.



### Other such initiatives:

The 'Shaala Sangwari' project in Chhattisgarh's Kabirdham district aims to employ educated Baiga tribal youth by making them teach their community's children in primary and middle schools.

## 16. The demands for 'Tribal' status and its approval

The Centre government is considering granting "tribal" status to the Trans-Giri region of Himachal Pradesh's Sirmour district.

- The demand to declare **Trans-Giri a tribal area** is old and is tied up with the demand for Scheduled Tribe (ST) status for the **Hatti community** which lives in the area.

### Hatti community

- They live in the **Himachal-Uttarakhand border** in the **basin** of the **Giri** and **Tons** rivers.
  - Tons river marks the **border** between **Himachal and Uttarakhand**.
- It is a **close-knit community** who take their name from their traditional occupation of selling home-grown crops, vegetables, meat at small-town markets known as '**Haats**'.
- Hatti men traditionally wear a **distinctive white headgear** on ceremonial occasions.
- The Hattis are governed by a traditional council called '**khumbli**'.



- **Khumbli** is like 'khaps' of Haryana, decide community matters.
- They are two main clans of the Hatti community: Hattis living in the i) Trans-Giri area of Himachal Pradesh and ii) Jaunsar Bawar in Uttarakhand.
  - Both were once part of the **royal estate of Sirmaur**.
  - Both clans have **similar traditions, and inter-marriages are common**.
- They have a **fairly rigid caste system**: Bhat and Khash are upper castes, and the Badhois are below them, and inter-caste marriages have traditionally been discouraged.
- Their population is **2.5 lakh** in the 2011 Census.
  - The present population is estimated at around 3 lakhs.

### Tribal Areas

Constitution provides for two types of areas:

- i) Scheduled Areas in terms of the Fifth Schedule of the Constitution, and
- ii) **Tribal Areas** in terms of **Sixth Schedule under Article 244 (2)**.

### Criteria for the declaration of the Scheduled Area under Fifth schedule

- Preponderance of tribal **population**
- Compactness and **reasonable size** of the area
- A viable **administrative entity** such as a district, block or taluk
- **Economic backwardness** of the area as compared to neighbouring areas.

### Demand for Tribal Status by Hattis

- Hattis (those living in Trans-Giri area of Himachal Pradesh) have been demanding ST status since 1967, when tribal status was accorded to another clan of Hattis which is in Jaunsar Bawar in Uttarakhand.

### Requirement for ST status

- Criteria are **not** spelt out in the **Constitution**.
- However, by **government orders** following criteria are followed:
  - Indications of **primitive** traits\
  - Distinctive **culture**

- **Geographical isolation**
- **Shyness** of contact with the community at large
- **Backwardness**
- **Constitution** gives **President** power to **specify ST** in various states and UTs and **Parliament** to **amend** this list.

### Key Facts

- Scheduled Tribes in Himachal Pradesh includes **Gaddis, Gujjars, Kinnaras (Kinnauras), Lahaulas, Pangwalas etc.**
- The bulk of the tribal population lives in remote, high-altitude areas in the districts of **Lahaul, Spiti, Kinnaur, and Chamba.**
- The tribal population of the state Himachal Pradesh 3.92 lakh (about 6% of the total) in 2011.

### 17. 'Nata pratha': In some tribal areas of India, women's 'price' is fixed by village councils

First husbands break marriage and pass on wife to another man

**Banswara district, Rajasthan: Last month, India was talking about 'Bulli Bai' and 'Sulli Deals' - apps that enabled fake online "auctions" of hundreds of Muslim women. But not many may know that some women are "auctioned" offline in India in the name of centuries old 'nata' tradition.**

This custom is prevalent in some tribal belts of the country. According to the custom, man has to pay money to have a modern day live-in relationship with a woman of his choice, after woman's first husband breaks the marriage and passes on his wife to other man in return for money.

This money, the "bride price" is fixed by the village panchayat, the sum may range from few thousand rupees to even a few hundreds of thousands, depending upon the paying capacity of person concerned. Men then utilise this amount to "buy" themselves new wives.

Gulf News travelled to Banswara District of Rajasthan State to unearth the truth. And saw many cases of 'nata pratha' in the tribal villages of this district. We first met Vimlesh (name changed), uncle of a woman Vimla (name changed) of Maiji

village, whose 'nata' has been done. As woman was not available for comment, her uncle narrated her story.

"Vimla, a mother of two, did Nata two years back, after her first marriage broke. The man who did nata with her paid Rs100,000, a rate fixed by village panchayat to her first husband, and only after that she was allowed to move in with the second man."

We met another 'nata' case in Rohanwari village of Banswara district. Again the woman was not available for comment. But her brother-in-Law, Basu (name changed) narrated Meera's (name changed) story. "Meera decided to do nata, during COVID-19 time in 2020, after her first marriage broke. But village panchayat decided that she can only do nata after her second man pay Rs150,000 to her first husband. Which he did, after which Meera, a mother of two, was allowed to go with a second man."

It is the panchayat that decides women's rate for nata. If someone failed to pay the decided amount, than the two parties engage in fighting.

Parmesh Chandra Patidar, an activist associated with Vaagdhara NGO of Banswara district said, "Money in nata is a bad thing, where panchayat decides the amount only after which a woman is allowed to do nata. Such practice should be stopped."

Jayesh Joshi, secretary of the Same NGO said, "There is no law in the country to curb nata pratha. Police also don't register cases in such tradition. This tradition is mostly prevalent in Bhel tribe of Rajasthan. Nata tradition is on the decline amongst the educated section of the said tribe."

Anita Damor, a women's right activist of the same region, described nata pratha as both good and bad for the women. "It is good in the sense that it empowers women to leave their abusive husbands and go for a live-in relationship with a second man. And bad because the panchayat fixes the rate of the women for nata."

Banswara Superintendent of Police Rajesh Meena told Gulf News: "There is no law in the country to curb Nata." When asked about his views where women are auctioned in the panchayat, the SP said: "I cannot comment on this as I have no detailed knowledge of the subject."

## 18. Santhals: A Look At The Tribal Community Of India's New President Droupadi Murmu



The third largest schedule tribe community in the country after Gond and Bhil, the Santhal community's history and heritage are under the spotlight at the national and international levels.

Indian Presidential elect Droupadi Murmu, who is set to be sworn in as India's 15th President, oasts of the many firsts. The first tribal woman to hold the position of President, Murmu represents the Santhal community. Murmu's victory has given the Santhal community of India a chance to celebrate and gain further identification for themselves across Odisha, Jharkhand and West Bengal.

The third largest schedule tribe community in the country after Gond and Bhil, the Santhal community's history and heritage are under the spotlight at the national and international levels.

### **Who are the Santhals?**

The Santal, or Santhal, are a Munda ethnic group native to South Asia. They are agriculturists and eke their livelihood from farming.

Santhal, also spelt as Santal, means a calm and peaceful person. '*Santa*' means calm and '*ala*' means a man in the Santhal language.

Murmu's home district, Mayurbhanj, in Odisha is one of the most densely populated places for Santhal inhabitation. In Odisha, Santhals are found in Keonjhar and Balasore, other than the Mayurbhanj district.

The Scheduled Castes and Scheduled Tribes Research and Training Institute (SCSTRI), Bhubaneswar, gives a detailed account of the present and history of the Santhal settlements, their social habits, and culture and so on.

### **The Santhal history and uprising**

The Santhals are an aboriginal tribe of India. They were a monadic tribe for the longest until they settled in the Chotanagpur Plateau. By the end of the 18 century, they had started settling in the Santhal Paraganas of Jharkhand (earlier Bihar) and from there eventually started migrating to West Bengal, Odisha and other states of northern India.

The Santhal uprising, one of the most noted events of revolt against the British Raj, took place in 1855 and 1857. This was India's first major peasant uprising fueled by the implementation of the Permanent Land Settlement in 1793.

Through the aforementioned policy, the British government seized properties and lands those have been cultivated by the Santhals for ages. The Zamindari (landlord) system was introduced and Santhals were exploited for the longest until in 1850s, when they revolted against the British rulers.

The Santhals took part in the guerrilla conflict. For Bihar, this was an unusual occurrence. In order to fight their oppressors, the Santhals organised their own army of peasants. Although the uprising proved successful for a short span, it failed to uproot the power and Armies of the British raj.

### **Social habits of the Santhals**

The literacy rate of the Santhals is comparatively higher than the other tribes of Odisha. Santhals speak Santhali which has its own script called 'Ol chiki' invented by Pundit Raghunath Murmu. Ol Chiki has also been included in the Eighth Commission of the Constitution and Santhal is also taught as a subject in many post-graduate degrees.

They are nature worshipers and pay their obeisance at Jaher (sacred groves). When it comes to religion, the Santhals have no temples of their own and follow the Sarna religion.

The traditional attire of Santhals includes *gamchaa* and *dhoti* for men, while short-checked sarees for women. While various forms of marriage are acceptable within the community, divorce is never taboo.

They are very fond of their cultural folk songs and dance, and community members play different musical instruments including flute, sarangi, kamak and dhol.

Known as 'Olah', Santhals' homes are mainly painted with three colours on the outer wall. The bottom is painted with black soil, the middle with white while the upper part is painted red.

### **Renowned Santhal government officials**

While Murmu's victory is being hailed 'a golden era for Santhals', Jharkhand Chief Minister Hemant Soren also belongs to the Santhal community. Like many Santhals, who follow Sarna, Soren too has been wanting a special religious status for the Sarna people.

Chandra Murmu, the first Lieutenant Governor of the Union Territory of Jammu and Kashmir, and now the Comptroller and Auditor General of India, also belongs to the Santhal community.

Mayurbhanj Member of Parliament, Biseswar Tudu, a Santhal, is Union Minister for Tribal Affairs and Jal Shakti.

## **19. Separate religious code for Sarna tribals**

As **demands for a Sarna religious code in Census 2021** grow in Jharkhand, many outfits are busy trying to convince the tribal people that they are Hindus.

- In November 2020, the **Jharkhand government convened a special Assembly session to pass a resolution to recognise Sarna religion and include it as a separate code in the Census of 2021.**

### **The Sarna Religion**

- The followers of Sarna faith believe **pray to nature.**

- The holy grail of the faith is **“Jal (water), Jungle (forest), Zameen (land)”** and its followers **pray to the trees and hills while believing in protecting the forest areas.**
- Jharkhand has 32 tribal groups of which eight are from Particularly Vulnerable Tribal Groups.
- While many follow Hindu religion, some have converted to Christianity – this has become one of the planks of demanding a separate code **“to save religious identity” – as various tribal organisations put it.**

### Why need Sarna Code?

- It is believed that **50 lakhs tribal in the entire country put their religion as ‘Sarna’ in the 2011 census,** although it was not a code.
- Thus it is important to recognize them.

### Politics around the code

- Many of the tribals who follow this faith have **later converted to Christianity** – the state has more than 4% Christians most of whom are tribals.
- Some who still follow the Sarna faith believe the converted tribals are **taking the benefits of reservation** as a minority.
- They also believe that benefits should be given specifically to them and not those who have converted.

### What sense does a separate code make?

- The **protection of their language and history** is an important aspect of tribals.
- Between 1871 and 1951, the **tribals had a different code.** However, it was changed around 1961-62.
- Experts argue that when today the entire world is focusing on reducing pollution and protecting the environment, it is prudent that **Sarna**

becomes a religious code as the soul of this religion is to protect nature and the environment.

## 20. Hattis of Himachal Pradesh



Centre is considering the Himachal Pradesh' government's request for **inclusion of the Hatti community in the list of Scheduled Tribes** in the state.

- The community has been making the **demand since 1967, when tribal status was accorded to people living in the Jaunsar Bawar area of Uttarakhand, which shares a border with Sirmaur district.**
- Their demand for tribal status gained strength because of **resolutions passed at various maha Khumblis over the years.**
- The Hattis are a **close-knit community who got their name from their tradition of selling homegrown vegetables, crops, meat and wool etc. at small markets called 'haat' in towns.**
- The Hatti community, whose men generally don a **distinctive white headgear during ceremonies, is cut off from Sirmaur by two rivers called Giri and Tons.**
  - Tons divides it from the Jaunsar Bawar area of Uttarakhand.
- The Hattis who live in the trans-Giri area and Jaunsar Bawar in Uttarakhand **were once part of the royal estate of Sirmaur until Jaunsar Bawar's separation in 1815.**
  - The two clans have **similar traditions, and inter-marriages are commonplace.**



- There is a rigid caste system among the Hattis – **the Bhat and Khash are the upper castes, while the Badhois are below them.**

### What is a Scheduled Tribe?

- **Article 366 (25)** of the Constitution refers to **Scheduled Tribes** as those communities, who are scheduled in accordance with Article 342 of the Constitution.
- **Article 342** says that only those communities who have been declared as such by the President through an initial public notification or through a subsequent amending Act of Parliament will be Scheduled Tribes.
- The list of Scheduled Tribes is State/UT specific, and a **community declared as a Scheduled Tribe in one State need not be so in another State.**
- **The Constitution is silent about the criteria for specification of a community as a Scheduled Tribe.**
  - Primitiveness, geographical isolation, shyness and social, educational & economic backwardness are the traits that distinguish Scheduled Tribe communities from other communities.
- There are certain Scheduled Tribes, 75 in number known as **Particularly Vulnerable Tribal Groups (PVTGs)**, who are characterized by:
  - Pre-agriculture level of technology.
  - Stagnant or declining population.
  - Extremely low literacy.
  - Subsistence level of economy.
- **Government Initiatives for STs:**
  - The **Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA).**
  - The **Provision of the Panchayats (Extension to the Scheduled Areas) Act, 1996.**
  - Minor Forest Produce Act 2005.
  - **SC And ST (Prevention Of Atrocities) Act.**
  - Tribal Sub-Plan Strategy are focused on the socio-economic empowerment of STs.

## 21. Several schemes being implemented by the Government for development of the tribal population in the country

### 1. Special Central Assistance to Tribal Sub-Scheme (SCA to TSS)

Special Central Assistance to Tribal Sub-Scheme (SCA to TSS) is 100% grant from Government of India (since 1977-78). It is charged to Consolidated Fund of India (except grants for North Eastern States, a voted item) and is an additive to State Plan funds and efforts for Tribal Development. This grant is utilized for economic development of Integrated Tribal Development Agency (ITDA), Integrated Tribal Development Project (ITDP), Modified Area Development Approach (MADA) Pockets and Clusters, PVTGs and dispersed tribal population.

## **2. Grants-in-Aid under Article 275(1) of the Constitution**

Grants-in-aid under Proviso to Article 275(1) of Constitution of India is 100% annual grant from Government of India to States. It is charged to Consolidated Fund of India (except grants for North Eastern States, a voted item) and is an additive to State Plan funds and efforts for Tribal Development. Funds are utilized for socio-economic development of Integrated Tribal Development Agency (ITDA), Integrated Tribal Development Project (ITDP), Modified Area Development Approach (MADA) Pockets and Clusters and for PVTGs.

## **3. Scheme of Grant-in-Aid to Voluntary Organizations working for the Welfare of Scheduled Tribes**

- The Scheme was launched in 1953-54 and was last revised w.e.f. 1<sup>st</sup> April 2008. The prime objective of the scheme is to enhance the reach of welfare schemes of Government and fill the gaps in service deficient tribal areas, in the sectors such as education, health, drinking water, agro-horticultural productivity, social security net etc. through the efforts of voluntary organizations, and to provide favourable environment for socio-economic upliftment and overall development of the Scheduled Tribes (STs). Any other innovative activity having direct positive impact on the socio-economic development or livelihood generation of STs may also be
- The scheme is Central Sector Scheme. The grants are provided to the non-governmental organizations on application, in a prescribed format, duly recommended by the multi-disciplinary State Level Committee of the concerned State Government/UT Administration. Funds are generally provided to the extent of 90% by the Government. The voluntary

organization is expected to bear the remaining 10% balance from its own resources.

#### **4. Scheme of Strengthening Education among ST Girls in Low Literacy Districts**

The scheme aims to bridge the gap in literacy levels between the general female population and tribal women, in the identified districts or blocks, more particularly in naxal affected areas and in areas inhabited by Particularly Vulnerable Tribal Groups (PVTGs), by creating the required ambience for education for ST girls. It is a Central Sector gender specific scheme and the Ministry provides 100% funding. The grants are provided to the eligible NGOs on an application (in the prescribed format) duly recommended by the multidisciplinary State Level Committee of the concerned State Government / UT Administration. The Scheme has been revised with effect from 1.4.2008. It is being implemented in 54 identified low literacy districts where ST Population is 25% or more and ST female literacy rate is below 35% as per 2001 Census.

#### **5. Scheme of Vocational Training in Tribal Areas**

The main aim of the Scheme is to develop the skills of the ST youth for a variety of jobs as well as self-employment and to improve their socio-economic condition by enhancing their income. The scheme covers all the States and Union Territories. It is not an area-specific scheme, the condition being that free vocational training facilities are extended only to tribal youth, 100% grants under the scheme are provided to the States, Union Territories and other Associations implementing the Scheme. Each Vocational Training Centre (VTC) under the scheme may cater to five vocational courses in traditional skills depending upon the employment potential of the area. It has been decided to discontinue the Scheme from 2018-19 and the intervention is to be subsumed under the Scheme Special Central Assistance to Tribal Sub-Scheme (SCA to TSS).

## 22. Neanderthals of the north: Flexible adaptation to changing environmental conditions



Were Neanderthals really as well adapted to a life in the cold as previously assumed, or did they prefer more temperate environmental conditions during the last Ice Age? To answer these questions, it is worthwhile to examine Neanderthal sites on the northern periphery of their range. After all, it was there that environmental fluctuations were most noticeable, especially as a result of repeated ice advances from Scandinavia. A region particularly suitable for such investigations is northern Germany, with its numerous documented Neanderthal sites.

In a recent study, researchers from MPI-EVA, FAU, Leuphana University Lüneburg, LIAG and other partner institutions have now investigated the remains of Neanderthals at a former lakeshore in Lichtenberg in the Wendland region (Lower Saxony). Using an integrative research approach, the team has combined analytical methods from archaeology, luminescence dating, sedimentology, micromorphology with the study of pollen and phytoliths to explore in detail the relationship between human presence in the north and changing environmental conditions.

### **A window into environmental history**

"Archaeological excavations are a window into environmental history," says Michael Hein, a geographer at MPI-EVA. "Based on sediments and pollen grains

they contain, we can reconstruct the vegetation and environmental conditions of the time. For this, the most accurate dating possible is required, which -- in the case of Central Europe -- is still lacking for many climatic phases of the last Ice Age." Collecting environmental information and performing independent dating is of great interest to archaeology and paleoenvironmental research alike.

"In Lichtenberg, we have now succeeded in dating quite accurately the end of a pronounced warm phase -- the so-called Brörup Interstadial -- to 90,000 years," Hein adds. "Thus, the cooling of the continent would have coincided with the climate change in the Greenland ice and the North Atlantic. A direct coupling had so far only been suspected -- but not proven -- for northern Germany."

### **Settlement of northern areas also during cold phases**

The study also found that Neanderthals occupied a lightly wooded lakeshore about 90,000 years ago in a relatively temperate climate. Stone tools found at the former campsite attest to a variety of activities, such as woodworking and plant processing. Already between 1987 and 1994, the Landesmuseum Hannover excavated a site close to Lichtenberg containing bifacial backed knives, so-called "Keilmesser" -- specialized cutting tools. In the excavations, the layers of this former campsite are located above the lakeshore campsite, which is associated with a temperate climate period, and date to a time about 70,000 years ago, when the last Ice Age's first cold maximum began. The researchers were thus able to prove that Neanderthals had indeed inhabited the northern regions even during cold phases.

### **Flexible adaptation to environmental conditions**

"Changes in stone tools indicate that Neanderthals adapted in line with changing environmental conditions," says Marcel Weiß, an archaeologist at FAU. "In Lichtenberg, we were able to show that they repeatedly visited northern Central Europe -- which developed from a heavily forested environment during the last warm period, to sparser forests of a cold-moderate climate period at the beginning of the last Ice Age, to the cold tundra of the first cold maximum."

In this context, the stone tools, especially knives made of flint, show that the Neanderthals' lakeshore site may have served a hunting party for a short stay. Evidence from other sites from the same time period indicates that during cold

phases Neanderthals likely visited their northern dwelling grounds mainly during the summer months.

### **23. India's Leopard God, Waghoba, Aids Wildlife Conservation In The Country**

“People in other cities have cats and dogs, but here we have wild leopards as our companions. Leopards are family to us. We also pray to the Waghoba- our leopard deity, who keeps us safe from all evils,” - Prakash Bhoir, a resident of Mumbai.

Indeed, the bustling metropolis of Mumbai, India's financial capital, is a city like no other. While it houses a human population of more than 20 million, it also has a heart spacious enough to accommodate over 40 wild leopards! Mumbai also has temples where indigenous communities or Adivasis worship these big cats in the form of the Waghoba. And according to science, this cultural reverence of the predators by the people allows them to share space with the wild animals, facilitating conservation in the long run. Thus, understanding such cultural institutions is essential for the implementation of modern conservation practices.

#### **Mumbai's Forest Gods And Forest People**

“We, the Adivasis of Mumbai, worship Hirwa Devi or Green Goddess who blesses our lives with natural resources that keep us alive. We also pray to the Waghoba or the leopard/tiger God. He is the King of the Forest. The strength and courage of the Waghoba keep our forests safe. And we all know that forests are necessary for our survival,” said Chaitali Bhoir, a young woman and a member of the Adivasi community, as she showed us around her beautiful mud home in Kelti pada in the heart of the forested Aarey Milk Colony.

The Adivasis of Mumbai are indigenous communities belonging to various tribes like Warlis, Kolis, Dubbas, and others. They have a deep-rooted connection with nature. In Mumbai, they live in tiny hamlets called padas, primarily in and around the forested patches like the Sanjay Gandhi National Park and adjacent Aarey Milk Colony. Leopards roam wild in such places, but these people hardly complain. On the contrary, they take pride in living with the predators.

“We respect the wild animals and their way of life. We know that once the night falls, we must stay indoors and not venture out alone. It is time for the leopards to roam around. Sometimes, they do prey on our livestock. So, whenever a leopard roars near us, we break a coconut shell praying to the Waghoba to spare

our livestock but continue to protect our forest and our lives like he has done for millennia,” said Prakash Bhoir, Chaitali’s father-in-law. Prakash, an Adivasi, also holds a job in the local municipal corporation.

According to him, most leopard attacks on humans in Mumbai occur when people disrespect the forest rules. As immigrants from elsewhere encroach into forested land, they do not pay heed to ways of nature. They cut down trees, dump garbage irresponsibly, and change the landscape in ways that derail the smooth functioning of the ecosystem. With reduced space and natural prey, leopards now get attracted to dogs and pigs feeding on garbage, bringing them in close contact with humans. And sometimes, these predators end up attacking humans, leading to the public demand to remove the leopards from the area.

“Unlike our non-adviasi neighbors, we welcome the leopard. We keep our surroundings clean and garbage-free so that when the leopard visits us, he stays for a while and then leaves. A couple of months back, a leopard visited my backyard a day before my son’s wedding. He just stood there for a few minutes and then left silently. I told my wife that here is the Waghoba to bless us before the event!” said Bhoir pointing to where the leopard stood just a few yards from his house.

Bhoir also finds it unfortunate that news channels often portray stories of leopards entering human homes when, in reality, humans have invaded leopard territory. He worries that people’s fear of leopards might spell doom on the forest. To him, leopards are beautiful animals and not fierce, bloodthirsty beasts that people often think them to be. Nature has designed them to be carnivores, so they need to hunt for their survival. That cannot make them dangerous. If that is so, humans are dangerous too. For Bhoir and his other community members, however, leopards are family.

“Our attachment with this beautiful animal is such that if we do not see or hear about leopard sightings in our area for about a week, we get concerned. We worry that someone might have killed them or caused any other harm to them,” said Bhoir.

This deep bonding with the forest and its leopards keeps Bhoir and his tribal community members alert. Whenever there is a threat to the forests of Mumbai, the Adivasis rise up in protest. During the Save Aarey Movement, many of them were arrested by the police while protesting against the felling of trees in Aarey to construct a metro carshed facility. Their protests, however, did not go in vain.

The project had to be shifted to a new location, and a part of Aarey was declared a reserve forest. .

### Conservation Science And People's Beliefs - The Connection



Waghoba Shrine at Varwade in Talasari, Maharashtra. Image Credits: Project Waghoba/Ramya Nair

The worship of the Waghoba and other elements of nature is not limited to the Adivasis of Mumbai but is more widespread. A study published in *Frontiers in Conservation Science* in 2021 documented over 150 shrines dedicated to the Waghoba in villages of the Warli tribals in Mumbai and other parts of the state of Maharashtra. The study was conducted by researchers from WCS-India, WCT-India, INN Univ., Norway, and NINA, Norway.

The study discovered that the origin of the institution of the Waghoba is rooted in what today's modern conservation science terms as "human-wildlife conflict" and "livestock depredation by big cats." Although the origin story has many variants, most depict Waghoba as someone born human. With time, the Waghoba exhibited traits of the "wagh or tiger/leopard" and killed village livestock. The frightened villagers wanted to kill Waghoba but his mother negotiated a deal with them. According to the agreement, the Waghoba would stay in the forest and not kill livestock. In exchange, the people would worship the Waghoba in Waghoba shrines and make occasional offerings to him in the form of animal sacrifices to appease him. Thus, according to the researchers, the Waghoba's origin story itself instills a feeling of kinship with the big cats in the hearts of the Waghoba worshippers. And the institution of the Waghoba acts as a tolerance-building mechanism allowing people to share space with apex predators like tigers and leopards.



“India has been practicing conservation through its culture for thousands of years. Cultural institutions like Waghoba worship have served as the driving force behind the deep-rooted conservation movement prevalent in the country,” said Dr. Anish Andheria, who co-authored the study. He is also the President of Wildlife Conservation Trust, India, and one of India’s leading wildlife conservationists.

“Ancient Indian scriptures depict animals as Gods. Animals ranging from elephants and tigers to ants and rats are worshipped in the country. Such reverence for animals acts as a catalyst in safeguarding our ecosystems and wildlife,” he said.

According to Dr. Andheria, it is more important now than ever before to recognize people’s cultural affiliations before they disappear in an era of consumerism and globalization, snapping their connection with nature. The bonding between people and nature needs to be rejuvenated and preserved before it is lost. He also believes that the engagement of local communities is vital to further conservation goals in India



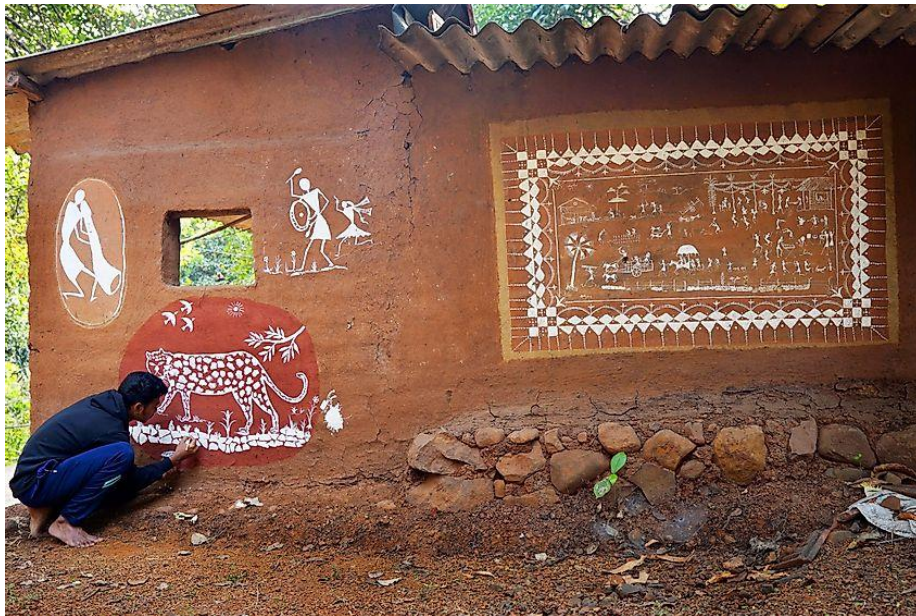
Aarey leopard. Image

credit: Ranjeet Jadhav/ AareyGP

“In the last five decades, conservation in India has mostly focused on protecting forested landscapes from people. However, only around 5% of the country’s area could be protected that way. That is not enough. Protection now needs to be community-managed. Conservation conversations should include the local communities and their opinions integrated while designing conservation programs,” he said.

### **Holding On To Nature Worship**

Today, India's socio-economic scene is changing at a fast pace. Rapid urbanization is taking place all over the country. Integration of indigenous communities like Mumbai's Adivasis into mainstream society is diluting their cultures based on nature worship. But people like the Bhoirs are determined to hold on to their traditions and beliefs.



Leopards play a major role in the life of the Adivasis of Mumbai. Here, a Warli painter is painting a leopard on the facade of a home in Aarey Milk Colony. Image credit: Mahesh Yadav/JY Brothers

“People call Adivasis poor and illiterate. But our homes are surrounded by thousands of trees and rich biodiversity. How can we be poor when we have so much natural wealth? We are also proud of the knowledge inherited from our ancestors. We are aware that the forest keeps us alive. It gives us oxygen, food, and more. And hence we worship water, soil, forest, and wildlife. We are proud of our beliefs as they help protect and preserve natural resources for our future generations,” said Prakash Bhoir.

“We are like guests on this Earth. We must say thank you to Mother Earth for our life. So, do not cause any harm to her. No other species does so,” is Bhoir’s message to all of us.