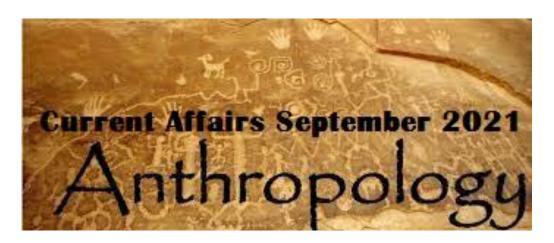
ANTHROPOLOGY CURRENT AFFAIRS MAGAZINE SEPTEMBER 2021

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. Early Homo sapiens groups in Europe faced subarctic climates
- 2. Fossil of earth's oldest-known mammal, Dickinsonia, found in Madhya Pradesh
- 3. Putting a face to Krijn, the Netherland's oldest Neanderthal man
- 4. Forensic anthropological work dealing with ancestry may mistakenly support idea that racial differences are biological
- 5. Earliest evidence of human activity found in the Americas, researchers report

SOCIO – CULTURAL ANTHROPOLOGY

- 6. Scientists find evidence of humans making clothes 120,000 years ago
- 7. COVID-19 in tourism: Anthropological insight to the trivialization of death and life
- 8. Early humans may have survived the harsh winters by hibernating

PAPER - 2

INDIAN & TRIBAL ANTHROPOLOGY

- 1. Amazon launches Karigar Mela in partnership with Tribes India
- 2. Manipur's Zomi people push for BTC-like council
- 3. Rajasthan tribals' struggle for indigenous practices highlighted at U.N. event
- 4. How to Save Forest Culture? 'Silent' Battle by Odisha's Kondhs is The Right Lesson
- 5. TRIFOOD
- 6. Kerala: 'En Uru' to showcase traditional tribal knowledge
- 7. The search for an end to the complex Naga conflict
- 8. In India, forest rights means forest conservation
- 9. Complete literacy for Wayanad's Adivasis: Kerala govt aims at 90% literacy for Adivasis in 6 months
- 10. Tribal Affairs Ministry and AIIMS organized workshop for NGOs for mission of Sahi Poshan-Desh Roshan as part of POSHAN MAAH
- 11. Nourishing The Tribal Food Systems
- 12. Challenges Faced by Nomadic Tribes
- 13. TRIBES INDIA VAN DHAN to expand Online marketing in a big way by tying up with Big Basket, MoU Signed between TRIFED and Big Basket
- 14. Kongthong Whistling Village in Northeast India
- 15. Online classes: Tribal students at the receiving end, says survey
- 16. Despite red flags, green nod for coal mining, new blocks put on auction

PHYSICAL & ARCHAEOLOGICAL ANTHROPOLOGY

1. Early Homo sapiens groups in Europe faced subarctic climates

New insights into the climatic backdrop for an early wave of dispersal of our species into Europe during the last glacial period

The process how our species dispersed into new environments at that time represents an important evolutionary turning point that ultimately led to *Homo sapiens* populating all continents and a large diversity of climate zones and environments. The mechanisms that facilitated initial waves of expansion remain debated, but a majority of models based on the correlation of archaeological sites with spatially distant climatic archives has so far indicated that human groups relied on warmer climatic conditions to spread into new, more northern, environments.

Using evidence directly from the archaeological layers of Bacho Kiro Cave the Max Planck team was now able to show that humans have been enduring very cold climatic conditions, similar to the ones typical for present-day northern Scandinavia, for several thousand years. "Our evidence shows that these human groups were more flexible with regard to the environments they used and more adaptable to different climatic conditions than previously thought," says lead author Sarah Pederzani, a researcher at the Max Planck Institute for Evolutionary Anthropology and the University of Aberdeen. Jean-Jacques Hublin, director of the Department of Human Evolution at the Max Planck Institute, adds: "Using these new insights, new models of the spread of our species across Eurasia will now need to be constructed, taking into account their higher degree of climatic flexibility."

Archaeological materials from Bacho Kiro Cave in Bulgaria

By directly using archaeological materials, such as the remains of herbivores butchered by humans, to generate climatic data the palaeoclimate research team - led by Pederzani and Kate Britton, also a researcher at Max Planck Institute for Evolutionary Anthropology and the University of Aberdeen -- was able to establish a very robust record of local climatic conditions that specifically relates to the times when humans were inhabiting Bacho Kiro Cave.

"This technique enables a more confident assignment of local climatic context compared to the more commonly used chronological correlation between

archaeological data and climatic archives from different localities that formed the basis of much of the existing research on human climatic adaptability -- it really gives us insight into what life was like 'on the ground'," says Britton. "However, due to the time consuming nature of the analysis and the reliance on the availability of particular animal remains, oxygen isotope studies or other ways of generating climatic data directly from archaeological sites remain scarce for the time period when *Homo sapiens* first spread across Eurasia," adds Pederzani. Indeed, this Max Planck study is the first study conducted in the context of the Initial Upper Palaeolithic and could therefore yield such surprising results.

Highly resolved record of past temperatures spanning more than 7,000 years

Pederzani spent one year conducting lab work from drilling series of small samples from the animal teeth through wet chemistry preparation and stable isotope ratio mass spectrometry to obtain all the necessary data. "Through this time intensive analysis that included a total of 179 samples, it was possible to obtain a very highly resolved record of past temperatures, including summer, winter and mean annual temperature estimates for human occupations spanning more than 7,000 years," says Pederzani.

Renewed excavations at Bacho Kiro Cave conducted by an international team led by Max Planck researchers Jean-Jacques Hublin, Tsenka Tsanova and Shannon McPherron, and Nikolay Sirakov of the National Institute of Archaeology with Museum at the Bulgarian Academy of Sciences in Sofia, Bulgaria, started in 2015 and have yielded a rich archaeological record of human activity at the cave including the remnants of occupations that represent the earliest known occurrence of Upper Palaeolithic *Homo sapiens* in Europe. Deposits in the lower portion of the site contained a large number of animal bones, stone tools, pendants and even human fossils and formed the basis of the climatic study to investigate the environmental conditions that humans experienced when they first spread into Southeast Europe from the Levant.

2. Fossil of earth's oldest-known mammal, Dickinsonia, found in Madhya Pradesh

The individual Dickinsonia typically resembles a bilaterally symmetrical ribbed oval. Its fossils are known only in the form of imprints and casts in sandstone beds

Researchers have discovered fossils of one of the Earth's earliest known multicellular animals — the 550-million-year-old Dickinsonia — on the roof of the Bhimbetka rock shelters in Madhya Pradesh. Dickinsonia is an extinct genus of basal animal t...

Dickinsonia is an extinct genus of basal animal that lived during the late Ediacaran period in a geographical area now divided into Australia, China, India, Russia, and Ukraine. The individual Dickinsonia typically resembles a bilaterally symmetrical ribbed oval. Its fossils are known only in the form of imprints and casts in sandstone beds.

The specimens found in Bhimbetka are around 17 inches long, where as the ones that have been found in other parts of the world exceeded four feet in length, the researchers from Geological Society of India (GSI), Nagpur, Maharashtra, noted.

The finding, published in the journal Gondwana Research, confirms close proximity of Australia and India, according to the researchers

"Dickinsonia fossil was first discovered in 1947 in Flinders Ranges of South Australia. Its fossils have also been discovered in Ukraine, Russia and China," Ranjit Khangar Director & Coordinator, GSI, told PTI. "Bhimbetka Rock Shelters, a UNESCO World Heritage Site for Paleolithic and Mesolithic cave art, near Bhopal, is once again highlighted worldwide due to the first discovery of oldest animal fossil, Dickinsonia from India," Khangar said.

The new fossils were discovered on the last day of 36th International Geological Congress 2020 field trip conducted by GSI in March last year. However, it took the team almost a year to publish the findings. Other teammates involved in the study were from the University of Oregon in the US, National Operations Center, Bureau of Land Management, Geospatial Section, US, and the University of Witwatersrand in South Africa.

"Dickinsonia is the earliest Ediacaran multicellular animal life yet found -- predating explosion of life in Cambrian Period (around 541 million years) in geological time scale," Merajuddin Khan, senior geologist and member of GSI, Nagpur, noted.

"Palaeobiologists believe that these earliest living creatures were used to live in shallow warm seas, as early as 570 million years ago, and are representative of earliest complex life form in animal kingdom," Khan told PTI. As the fossil is out of reach, multiple digital images of the site were processed using three-dimensional (3D) modelling, the researchers said. The geological condition and occurrences of Dickinsonia were compared with fossils reported from South Australia before arriving at the final conclusion, they said.

3. Putting a face to Krijn, the Netherland's oldest Neanderthal man

A group of paleo-anthropological artists at Kennis & Kennis Reconstructions have put their skills to good use—reconstructing the face of Krijn, the earliest known Neanderthal living in what was once Doggerland. The results have been included in Rijksmuseum van Oudheden, a Dutch national museum dedicated to exhibiting material from the antiquities.

Krijn is special for another reason. He is the first hominin from the Pleistocene ever found under seawater. A fragment of his skull that included parts of his brow was found in material sucked from the bottom of the North Sea off the coast of the Netherlands in 2001 in an area that was once part of Doggerland. Prior study of the skull fragment showed that Krijn lived approximately 50,000 to 70,000 years ago. Researchers also found that he fed mostly on meat, though he did also eat seafood on occasion. He has been described as likely having a strong, sturdy build, typical of a young male Neanderthal.

Doggerland is the name of an area now under the North Sea that once connected Great Britain to the European continent. Due to colder global temperatures, the ocean level was approximately 50 meters lower than today. In addition to hosting Neanderthal, the area was also home to creatures such as reindeer, mammoths and wooly rhinoceroses.

In this new effort, the modelers (the same group that reconstructed Otzi the Iceman) set themselves the goal of recreating the face of Krijn as faithfully as possible. To that end, they began with his skull fragment with an unusual feature—a small dimple just above the raised brow—evidence of a benign tumor under the skin. The team then used collections of other Neanderthal fossils to help render the face in clay. Once the likeness was complete, they used their past experience modeling Neanderthal specimens to add other features, such as hair,

skin tone and eye color. They also chose to give the bust character by portraying Krijn as a happy, young male Neanderthal with a broad smile.

4. Forensic anthropological work dealing with ancestry may mistakenly support idea that racial differences are biological

Forensic anthropologists analyze skeletal remains to help identify people. A new study highlights how this work, specifically dealing with ancestry, may inadvertently support the idea that racial differences are biological. "While forensic anthropologists understand that race is social, our literature problematically does not articulate this. All research dealing with documenting differences (or similarities) in human populations needs to use appropriate terminology that does not support white supremacy or racial claims," explains corresponding author Sean Tallman, Ph.D., RPA, assistant professor of anatomy and neurobiology at Boston University School of Medicine (BUSM).

While modern practitioners have shifted terminology from "race" to "ancestry" to describe regionally patterned human skeletal variation, the degree to which they have changed or critiqued long-embedded classification approaches remains unclear.

Forensic anthropology has lagged behind other anthropological sub-disciplines in its conceptualizations and engagement with "race" and "ancestry" and the processes behind human population variation, which may unwittingly propagate the disproven notion that racial differences are biological.

Researchers performed a content analysis of forensic anthropological literature from 1966 to 2020 that deals with "race" and "ancestry" and found that the two terms—used to describe regionally patterned human skeletal variation—were infrequently defined (13 percent and 12 percent respectively) and while "ancestry" first supplanted "race" in the early 1990s, it remained in use until 2013, long after the bigger field of biological anthropology ceased its use.

Additionally, the researchers found that only 59 percent of authors used population histories, population structures or micro-evolutionary forces to explore the processes that drive regionally patterned human biological variation and have the potential to create differences between human populations. Approximately 25 percent of authors critiqued the use of "race" or "ancestry" to explore human population variation or incorporated more nuanced theoretical

frameworks like embodiment theory (four percent) to explain how structural societal inequities become physiologically embodied.

According to Tallman, all research dealing with documenting differences (or similarities) in human populations needs to use appropriate terminology. "In essence, our oversimplification of the complex processes that pattern human skeletal variability has left the field's research vulnerable to be used to support biomedical claims for biological differences between social racial groups in healthcare and treatments," he adds.

The researchers believe it is important to be cognizant how majority-white perspectives may limit the relevance of forensic anthropological research and propagate the exclusion of Black, Indigenous, Latinx and other people of color. "The field needs to do better in deploying terminology, in discussions of the forces patterning human skeletal variability and in ensuring inclusion," says Tallman.

5. Earliest evidence of human activity found in the Americas, researchers report

Researchers Jeff Pigati and Kathleen Springer, with the U.S. Geological Survey, used radiocarbon dating of seed layers above and below the footprints to determine their age. The dates range in age and confirm human presence over at least two millennia, with the oldest tracks dating back 23,000 years.

This corresponds to the height of the last glacial cycle, during something known as the Last Glacial Maximum, and makes them the oldest known human footprints in the Americas.

It was previously thought that humans entered America much later, after the melting of the North American ice sheets, which opened up migration routes.

"Our dates on the seeds are tightly clustered and maintain stratigraphic order above and below multiple footprint horizons -- this was a remarkable outcome," Springer said.

The footprints tell an interesting tale of what life was like at this time. Judging by their size, the tracks were left mainly by teenagers and younger children, with the occasional adult.

"The footprints left at White Sands give a picture of what was taking place, teenagers interacting with younger children and adults," said lead study author Matthew Bennett from Bournemouth University in England. "We can think of our ancestors as quite functional, hunting and surviving, but what we see here is also activity of play, and of different ages coming together. A true insight into these early people."

"For decades, archaeologists have debated when people first arrived in the Americas," said co-author Vance Holliday, a professor in the UArizona School of Anthropology and Department of Geosciences. "Few archaeologists see reliable evidence for sites older than about 16,000 years. Some think the arrival was later, no more than 13,000 years ago by makers of artifacts called Clovis points. The White Sands tracks provide a much earlier date. There are multiple layers of well-dated human tracks in streambeds where water flowed into an ancient lake. This was 10,000 years before Clovis people."

Holliday and study co-author Brendan Fenerty, a UArizona doctoral student in the Department of Geosciences, documented basic geologic layering and dating in trenches on the White Sands Missile Range near the discovery site several years before the tracks were found.

"We were interested in reconstructing the evolution of the landscape in the context of environmental changes and some younger archaeological sites in the area," Holliday said. "We had no idea what was buried nearby."

Tracks of mammoth, giant ground sloth, dire wolves and birds are also all present at the White Sands site.

"It is an important site because all of the trackways we've found there show an interaction of humans in the landscape alongside extinct animals, like mammoths and giant sloths," said study co-author Sally Reynolds of Bournemouth University. "We can see the co-existence between humans and animals on the site as a whole, and by being able to accurately date these footprints, we're building a greater picture of the landscape."

The human tracks at White Sands were first discovered by David Bustos, resources manager at the park.

"It is incredible to have the confirmation on the age of the human prints, and exciting but also sad to know that this is only a small portion of the 80,000 acres

where the prints have been revealed bare and are also being rapidly lost to ongoing soil erosion," Bustos said.

The team also pioneered non-invasive geophysical techniques to help locate the site. Tommy Urban, from Cornell University, led this part of the work.

"Detection and imaging with nondestructive technology has greatly expanded our capacity to study these remarkable footprints in their broader context," he said.

Traditional archaeology relies on the discovery of bones and tools but can often be difficult to interpret. Human footprints provide unequivocal evidence of presence and also of behavior.

"White Sands provides the first unequivocal evidence for human presence in the Americas during the Last Glacial Maximum," said study co-author Dan Odess of the National Park Service. "Not all archaeological sites contain such unequivocal evidence. One reason why this discovery is important is that it makes the idea that other purportedly ancient sites really are evidence for human presence that much more plausible, even if the evidence they contain is less unequivocal. This doesn't mean all of those sites are legitimate, but it means they cannot be dismissed out of hand."

SOCIO – CULTURAL ANTHROPOLOGY

6. Scientists find evidence of humans making clothes 120,000 years ago

Tools and bones in Moroccan cave could be some of earliest evidence of the hallmark human behaviour

From the medieval fashion for pointy shoes to Victorian waist-squeezing corsets and modern furry onesies, what we wear is a window to our past.

Now researchers say they have found some of the earliest evidence of humans using clothing in a cave in Morocco, with the discovery of bone tools and bones from skinned animals suggesting the practice dates back at least 120,000 years.

Dr Emily Hallett, of the Max Planck Institute for the Science of Human History in Germany, the first author of the study, said the work reinforced the view that early humans in Africa were innovative and resourceful.



"Our study adds another piece to the long list of hallmark human behaviours that begin to appear in the archaeological record of Africa around 100,000 years ago," she said.

While skins and furs are unlikely to survive in deposits for hundreds of thousands of years, previous studies looking at the DNA of clothing lice have suggested clothes may have appeared as early as 170,000 years ago – probably sported by anatomically modern humans in Africa.

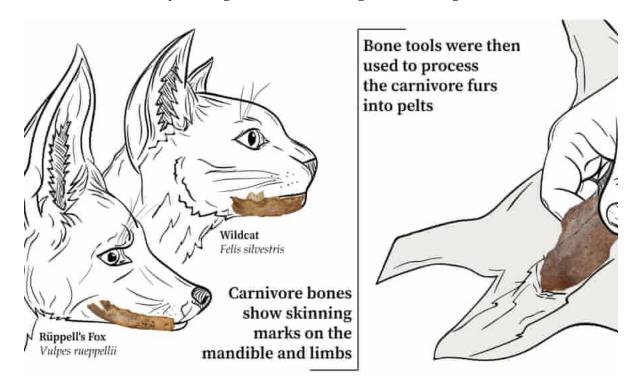
The latest study adds further weight to the idea that early humans may have had something of a wardrobe.

Writing in the journal i Science, Hallett and colleagues report how they analysed animal bones excavated in a series of digs spanning several decades at Contrebandiers Cave on the Atlantic coast of Morocco. The cave has previously been revealed to contain the remains of early humans.

Hallett said she began studying the animal bones in 2012 because she was interested in reconstructing the diet of early humans and exploring whether

there had been any changes in diet associated with changes in stone tool technology.

However, she and her colleagues found 62 bones from layers dating to between 120,000 and 90,000 years ago that showed signs of having been turned into tools.



Sand fox, golden jackal and wildcat bones held further clues, showing cut marks associated with fur removal. Illustration: Jacopo Niccolò Cerasoni

While the purpose of many of the tools remains unknown, the team found broad, rounded end objects known as spatulates that were fashioned from bovid ribs.

Advertisement

"Spatulate-shaped tools are ideal for scraping and thus removing internal connective tissues from leathers and pelts during the hide or fur-working process, as they do not pierce the skin or pelt," the team write.

Sand fox, golden jackal and wildcat bones held further clues, showing cut marks associated with fur removal.

The team also found a whale tooth, which appeared to have been used to flake stone. "I wasn't expecting to find it since whale remains have not been identified in any Pleistocene contexts in north Africa," said Hallett.

While Hallett said it was possible the bone tools could have been used to prepare leather for other uses, the combined evidence suggests it is likely – particularly for fur – that the early humans made clothes.

But mysteries remain including what the resulting outfits would have looked like, and whether they were primarily used for protection against the elements or more symbolic purposes.

Hallett added that she believed European Neanderthals and other sister species were making clothing from animal skins long before 120,000 years ago – not least as they lived in temperate and cold environments.

"Clothing and the expanded toolkits of early humans are likely parts of the package that led to the adaptive success of humans and our ability to succeed globally and in climatically extreme regions," she said.

Dr Matt Pope, an expert on Neanderthals at the UCL Institute of Archaeology who was not involved in the study, said clothing almost certainly had an evolutionary origin before 120,000 years ago, noting among other evidence finds of even older stone scrapers, some with traces of hide working.

But, he added, the new research suggested Homo sapiens at Contrabandiers Cave, like Neanderthal people from sites such as Abri Peyrony and Pech-de-l'Azé in France, were making specialised tools to turn animal hides into smooth, supple leather – a material that could also be useful for shelters, windbreaks and even containers.

"This is an adaptation which goes beyond just the adoption of clothing, it allows us to imagine clothing which is more waterproof, closer-fitting and easier to move in, than more simple scraped hides," said Pope. "The early dates for these tools from Contrebandiers Cave help us to further understand the origins of this technology and its distribution amongst different populations of early humans."

7. COVID-19 in tourism: Anthropological insight to the trivialization of death and life

Many of the effects of national lockdowns in the wake of the COVID-19 pandemic will be enduring across society. Work published in the *International Journal of Tourism Anthropology* looks at one aspect of those effects and their impact on a vast and important industry, tourism.

Raoni Borges Barbosa and Jean Henrique Costa of the State University of Rio Grande do Norte in Natal, Brazil, Bintang Handayani of the University of Malasia Kelatan, Malaysia, and Maximiliano Korstanje of the University of Palermo in Buenos Aires, Argentina, pose some central questions regarding our sense of the "new normal" with regard to measures such as social distancing and how it affects human relation and activities. They also consider the domestication and perhaps trivialisation of death as the pandemic continues.

"In the pre-pandemic world, tourists were valorised as ambassadors of the civilized order, but now they appear to be demonized as potential carriers of a lethal disease," the team writes. They liken the perception of disease-carrying tourists to our perception of the terrorist threat where life for many is lived in fear of threats that may well be hiding in plain sight. The team adds that the unparalleled effects of the COVID-19 pandemic with the closure of borders, travelers stranded for months away from home, geopolitical conflict between nations, as well as a rising chauvinist and separatist world view that demonizes the once positive notion of the so-called global village. Moreover, they suggest, "The new normal symbolically equates to the banality of life and the normalization of death."

One day this pandemic will pass into history as all previous pandemics have done, our descendants may, to paraphrase poet Neil Peart, "read of us with sadness for the seeds that we let grow."

8. Early humans may have survived the harsh winters by hibernating

Bears do it. Bats do it. Even European hedgehogs do it. And now it turns out that early human beings may also have been at it. They hibernated, according to fossil experts.

Evidence from bones found at one of the world's most important fossil sites suggests that our hominid predecessors may have dealt with extreme cold hundreds of thousands of years ago by sleeping through the winter.

The scientists argue that lesions and other signs of damage in fossilised bones of early humans are the same as those left in the bones of other animals that hibernate. These suggest that our predecessors coped with the ferocious winters at that time by slowing down their metabolisms and sleeping for months.

The conclusions are based on excavations in a cave called Sima de los Huesos – the pit of bones – at Atapuerca, near Burgos in northern Spain.

Over the past three decades, the fossilised remains of several dozen humans have been scraped from sediments found at the bottom of the vertiginous 50-foot shaft that forms the central part of the pit at Atapuerca. The cave is effectively a mass grave, say researchers who have found thousands of teeth and pieces of bone that appear to have been deliberately dumped there. These fossils date back more than 400,000 years and were probably from early Neanderthals or their predecessors.

The site is one of the planet's most important palaeontological treasure troves and has provided key insights into the way that human evolution progressed in Europe. But now researchers have produced an unexpected twist to this tale.

In a paper published in the journal *L'Anthropologie*, Juan-Luis Arsuaga – who led the team that first excavated at the site – and Antonis Bartsiokas, of Democritus University of Thrace in Greece, argue that the fossils found there show seasonal variations that suggest that bone growth was disrupted for several months of each year.

Advertisement

They suggest these early humans found themselves "in metabolic states that helped them to survive for long periods of time in frigid conditions with limited supplies of food and enough stores of body fat". They hibernated and this is recorded as disruptions in bone development.

The researchers admit the notion "may sound like science fiction" but point out that many mammals including primates such as bushbabies and lemurs do this. "This suggests that the genetic basis and physiology for such a hypometabolism could be preserved in many mammalian species including humans," state Arsuaga and Bartsiokas.

The pattern of lesions found in the human bones at the Sima cave are consistent with lesions found in bones of hibernating mammals, including cave bears. "A strategy of hibernation would have been the only solution for them to survive having to spend months in a cave due to the frigid conditions," the authors state.

They also point to the fact that the remains of a hibernating cave bear (*Ursus deningeri*) have also been found in the Sima pit making it all the more credible to suggest humans were doing the same "to survive the frigid conditions and food scarcity as did the cave bears".

The authors examine several counter-arguments. Modern Inuit and Sámi people – although living in equally harsh, cold conditions – do not hibernate. So why did the people in the Sima cave?

The answer, say Arsuaga and Bartsiokas, is that fatty fish and reindeer fat provide Inuit and Sami people with food during winter and so preclude the need for them to hibernate. In contrast, the area around the Sima site half a million years ago would not have provided anything like enough food. As they state: "The aridification of Iberia then could not have provided enough fat-rich food for the people of Sima during the harsh winter - making them resort to cave hibernation."

A museum exhibit of a Neanderthal family, who faced brutal winters. Photograph: Nikola Solic/Reuters
Advertisement

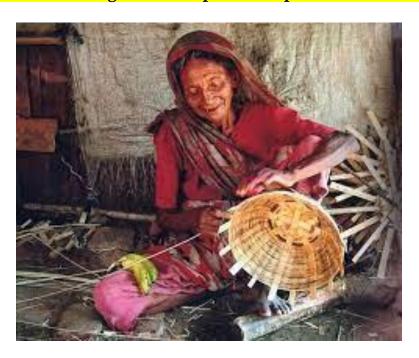
"It is a very interesting argument and it will certainly stimulate debate," said forensic anthropologist Patrick Randolph-Quinney of Northumbria University in Newcastle. "However, there are other explanations for the variations seen in the bones found in Sima and these have to be addressed fully before we can come to any realistic conclusions. That has not been done yet, I believe."

Chris Stringer of the Natural History Museum in London pointed out that large mammals such as bears do not actually hibernate, because their large bodies cannot lower their core temperature enough. Instead they enter a less deep sleep known as torpor. In such a condition, the energy demands of the human-sized brains of the Sima people would have remained very large, creating an additional survival problem for them during torpor.

"Nevertheless, the idea is a fascinating one that could be tested by examining the genomes of the Sima people, Neanderthals and Denisovans for signs of genetic changes linked with the physiology of torpor," he added.

INDIAN & TRIBAL ANTHROPOLOGY

1. Amazon launches Karigar Mela in partnership with Tribes India



Amazon India launched Karigar Mela in partnership with Tribes India. As part of this initiative, customers will be able to access and shop from a selection of over 1.2 lakh unique traditional tribal and local Indian handicrafts and handloom selections.

Some of the unique art forms that will be available in products listed for purchase as part of Karigar Mela include Bidri, Dhokra, Ikkat, Patachitra, Blue Art Pottery etc.

"The launch of Karigar Mela will play an important role in helping artisans and weavers revive their livelihoods and accelerate their growth during these challenging times," said Arjun Munda, minister, Tribal Affairs, Government of India.

"To help generate online demand for artisans and weavers' products while supporting them with working capital as they look to bounce back from the recent disruptions, we have launched the 'Karigar Mela' storefront," said Amit Agarwal, global senior vice president and country head, Amazon India.

As part of the Karigar Mela initiative, Karigar sellers will also benefit from a 100 per cent Selling on Amazon (SoA) fee waiver for two weeks starting from August 30, 2021 to September 12, 2021.

"With Amazon introducing the Karigar Mela initiative towards the revival of this segment, tribal artisan sellers will benefit from a dedicated store as it will bring customer attention to their unique and differentiated products while providing them with a host of relaxations and benefits of selling online," said Pravir Krishna, MD, Trifed, Government of India.

In the last one year, Amazon launched initiatives such as Stand for Handmade for small sellers which enabled over 4,500 Pochampally weavers from 56 villages of Telangana, and weavers and artisans from several other States who are associated with sellers that are part of Amazon Karigar programme to resume their handlooms and handicrafts business.

2. Manipur's Zomi people push for BTC-like council



- State's Zomi ethnic group has renewed its demand for a self-administered zone on the lines of the Bodoland Territorial Council (BTC) in Assam.
- Zomi council is an apex body of the Zomi tribes which include Gante, Kom, Mate, Paite, Simte, Tedim Chin, Thangkhal, Zou and Vaiphei.
- The Zomi Council, representing nine Zomi tribes, said it was banking on the decisive leadership of Prime Minister Narendra Modi, Mr. Shah and Manipur Chief Minister Nongthombam Biren Singh for the creation of Zoland Territorial Council (ZTC) under the Sixth Schedule of the Constitution.
- SoO is the abbreviation for the tripartite suspension of operations among the Centre, the Manipur government and 25 extremist groups belonging to the Kuki-Zomi groups.
- While 17 of these groups formed the Kuki National Organisation (KNO), eight came together as the United People's Front (UPF).
- The SoO agreement was first signed by the underground Zomi Revolutionary Army (ZRA) in 2005. The other groups came on board later.
- The KNO and UPF had demanded the creation of an autonomous hill state within Manipur. The demand evolved into that of a BTC-like territorial council

Bodoland Territorial Council (BTC):

- The Bodoland Territorial Council (BTC) is an autonomous district council for the Bodoland Territorial Region in India. It was established in February 2003.
- The BTC has 40 elected members and an additional six members that are appointed by the Governor of Assam.
- The area under the BTC jurisdiction is officially called the Bodoland Territorial Region (BTR). The region falls within the geographical map of the least developed region in India.
- The agro-based economy is the only source of livelihood of the people. Industrialisation and other employment opportunities are scant.

3. Rajasthan tribals' struggle for indigenous practices highlighted at U.N. event



The tribal communities in southern Rajasthan have utilised their indigenous agricultural practices to survive during the pandemic and embraced an intelligent food management after this year's rabi crop harvesting. The pandemic has immensely affected their livelihood and economy.

The struggle of the tribal population to preserve their indigenous practices and the challenges of survival amid malnourishment, weather variability and resource losses were highlighted at a side event at the U.N. High-Level Political Forum on Sustainable Development held earlier this week. Its emphasis was on "tribal voices" which could deliver the best solutions.

The event, organised with an online participation of experts, was dedicated to the theme, "Indigenous solutions to achieve sustainable development goals (SDGs) with accelerated actions." Experts gave several suggestions for ensuring a better association of indigenous communities with natural resources, including seed, water and soil.

Increased commercialisation

Jayesh Joshi, secretary of the Banswara-based Vaagdhara, which works on tribal livelihood issues, said at the event the tribals were pioneers of Gandhian Swaraj and had all the solutions to achieve the SDGs. "Increased commercialisation is responsible for disturbing indigenous practices, leading to inequalities and new challenges," he said.

Mr. Joshi said the development of the tribal-dominated region was adversely affected by the factors such as low productivity caused by soil erosion, malnourishment, climate change, poorly managed rainfed farming, loss of resources and fast reducing biodiversity.

The tribal communities in Banswara, Dungarpur and Udaipur districts earlier had a forest resource-based livelihood, but the large-scale deforestation forced them to shift to farming activities on a sloping land and caused degradation of land.

Poverty, hunger eradication

Gandhian scholar Sudarshan Iyengar said the first two SDGs — poverty eradication and hunger eradication — could be achieved through the concepts of Swadeshi and Gram Swaraj. Gagan Sethi of Revitalising Rainfed Agriculture Network (RRAN) laid emphasis on empowerment of tribal communities to decide and allocate resources according to their indigenous needs.

The event, attended by over 100 participants, recommended strengthening of livelihood scenario for tribal communities by connecting missing links of resource management in agriculture, forestry, animal husbandry, pasture and medicinal products. The experts also suggested promoting climate-resilient integrated farming systems in the tribal areas.

4. How to Save Forest Culture? 'Silent' Battle by Odisha's Kondhs is The Right Lesson



Accustomed to consuming nearly 275 varieties of wild fruits, vegetables and herbs from the jungles, the Kondhs were suddenly instructed to practice monoculture and forget their culture. Here is how they stood firm. One of the main problems with the common development paradigm is that Adivasis are considered underdeveloped. People do not recognise that their prosperity lies in their unique lifestyle and world views. That is why the government and the NGOs tried to intervene and impose modern-day practices on them. The result was appalling," reveals Debjeet Sarangi from Living Farms, a non-profit organisation helping Kondhs in Rayagada to uphold their unique culture since 2008.

Much like the iconic Chipko movement, despite threats of imprisonment, repeated interventions from the forest department, and the ever-present pressure to give into the so-called 'modern' methods of cultivation, the Kondhs stayed unflinching on their resolution – to bring back their forests and way of life.

Living Farms has helped the Kondhs in over 800 villages of Rayagada in their struggle against the invasion of modernity. Gradually, the expanse of the movement spread like wildfire all over Rayagada, bringing 1,06,000 Adivasi and Dalit households in 2000 villages under its ambit.

The Kondhs and Their Way of Life

Just like the majority of Kondhs, Landi Sikoka and Tulasa Kurangalika from Khalpadar village have little idea what 'global warming' means. There is perhaps no translation for the term in 'Kui' — their native tongue. But, their plates are vibrant with rich and healthy forest harvest, their homes are abodes of peace, their air fresh with the musty petrichor after rains.

The Kondhs lead a sustainable lifestyle — in perfect harmony with nature — teaches a lot to the modern generation, bearing the brunts of its mindless consumption.

The southern hinterlands of the coastal state is lined by a thick foliage of tropical forests, inhabited by wild beasts, birds and the Kondh community. Their quaint huts of mud and thatch are never huddled together to delineate a settlement, rather they build their homes in groups of few at naturally-secured locations, like atop a hillock or beside one.

A land beyond the cacophony of cities

Accustomed to the traditional livelihood of hunting-gathering, the Kondhs were never rigid cultivators, but the passing years saw them practising *dongar* cultivation (shifting agriculture) of vegetables, fruits, grains and leaves that constitute their traditional diet.

They periodically clear patches of forests to make way for seasonal farming.

"On these plots of lands, manually-run implements are used, for multiple millets-based crops that cover millets, oilseeds and pulses needed for subsistence of the household," social activist Kavitha Kuruganti describes about the Kondh style of agriculture.

Keeping the Traditions Alive

Among the community, the traditional practice of game hunting had faded through the ages, but forest gathering of fruits, berries, mushrooms, tubers, leafy greens, bamboo shoots etc. still continued, which actually defined their characteristic cuisine.

Living on the ideals of *sundi* (trust) and *mitho* (friendship), the minimalistic lifestyle of the Kondhs is characterised by beautiful customs that brings the Kutumb (community) together.



Division of labour in farming

"When a newly married couple wants to set up a house of their own, the entire village would help them in building their house, without expecting any wages," informs Kuruganti, for instance.

She also states how women enjoy greater autonomy among the Kondhs than any other aboriginal communities, as they remain at the forefront of their contact with the outer world. Be it trading at local *haat* (market) or choosing their life partners independently, Kondh women exercise ample independence.

From granary banks to village funds in kind (seeds, grains, even domestic animals) – the Kondh economy was least dependent on paper currencies. In fact, the older generation might even have never held money in their hands. They had always been content with their traditional economic structure, without any influence of the rapidly changing outer world.

The grains on their plates
When Modern Ways Intervene

However, things slowly started to change. The government intervened in their lives, so did several non-profit organisations. The flawed notion was that these Adivasis were 'backward', 'poor' and 'illiterate'.

The community faced the infiltration of modernity in several aspects, especially agriculture. Accustomed to sourcing nearly 275 varieties of wild fruits, vegetables and herbs from the jungles, the Kondhs were suddenly instructed to practise monoculture of crops like paddy, a practice alien to them.

"A government agricultural scheme designed keeping a Punjab farmer in mind will never work for the Adivasis. The imposition of monoculture cropping by forest officials reflected badly in the health of the tribals as their dietary diversity disappeared," shares Sarangi.

The intention was good, the execution was bad. Both the government and the non-government entities failed to understand and relate with the Kondh culture and compelled them to resort to mainstream habits. "If one crop failed, the people now had no alternatives on their plates," says Sarangi, explaining the drawbacks of monoculture.

"The diversified food basket thereby provides a vital safety net against hunger, increasing crop failures caused by climate change, erratic rainfall, mounting ecological degradation including water scarcity, and depleted soils," describes a Living Farms representative.

There were additional issues as well. For instance, the Kondhs had inherently been patrons of 100 per cent organic farming. But now, chemical fertilisers and pesticides were handed over to them to support the singular crops. This inevitably ruined the soil richness of the forested zones, which once used to be hotspots of flora biodiversity.

Katha Chhatu - a mushroom with a distinct flavour

Also, they were now forced to diverge from their internally sustainable economy, as they ventured into the towns and cities to source the chemicals. The hefty investment cost was an additional woe.

The natural forests comprised a rich trove of mangoes, Jamun, jackfruit, tamarind, berries etc. But officials coerced them into replacing their orchards with cash-yielding trees like teak and eucalyptus. The forest department even

cleared out parts of the natural forests to make way for these 'profitable' plantations.

Kondh youngsters, who ventured outside for education or employment brought back instant noodles or soya nuggets with them – foods which were gravely detested by the community leaders. They yearned for the forest to be back on their plates. And when the authorities threatened or warned them with consequences, they countered back with their silent protests.

Indigenous greens

Taking Back the Forests

Women, once again, pioneered the Kondh war against modernity by leading resistance movements in many villages. Farmers decided to refrain from chemical agriculture and monocropping. They stopped sowing hybrid 'corporate' seeds and reseeded their mandua (finger millets).

The farmers refused to cower down to the forest officials and stopped their natural forests from being destroyed further. They had seen in their neighbouring villages how these economic plantations destroy the forest's sanctity and degrade soil quality. They would not let the same happen to their own zones.

Mother and kids at field

The men, women and children from every family worked on a war footing to replant, restore and replenish the beauty of their aboriginal mother – the jungle.

The results have been exceedingly prominent in the past five years, with the forests once again glistening with vibrant colours and a captivating aura. Their plates are once again 'full' with bounty from the forest.

Chera Kanda - a locally sourced tuber

Living Farms continue to conduct local food festivals and workshop to showcase the beauty of the Kondh culture. They predominantly focus on a deep sense of respect for the community and keeping their dying traditions alive. Their support programmes are designed with the basic aim of retaining the communitarian fabric of Kondh society, while also introducing them with the indispensable aspect of modernity.

Even after sustained and cumulative resistance from the locals, self-appointed "saviours" still continue trying to 'reform' them. And thus the Kondh's struggle to combat such imposition persists parallelly. Amid the disappearing diversity and rampant cultural appropriation in India, the unknown story of the Kondhs will remain a glorious chapter.

5. TRIFOOD



TRIFOOD Scheme is a joint initiative of Ministry of Food Processing Industry, Ministry of Tribal Affairs and TRIFED. Under this scheme a tertiary value addition center will be set up in Jagdalpur in Chhattisgarh and Raigad in Maharashtra at a cost of approximately Rs.11 crores.

TRIFOOD Scheme, implemented in the backdrop of VanDhan Yojana will promote value addition to Minor Forest Produce (MFP). The units are envisaged to be professionally operated by reputed food processors who will operate the facilities for a designated period of time under the overall administrative control of TRIFED so that the assets created are efficiently commercially utilised as per its installed capacities and designed objectives. In the process creating local employment opportunities for the tribal communities and providing entrepreneurial opportunities in terms of raw material linkages to the units.

About 25% of total raw materials is expected to be sourced locally from the identified Vandhan SHGs/Vandhan Kendras in the catchment areas as per the grade and quantity requirement, consistently for period of 5 years.

6. Kerala: 'En Uru' to showcase traditional tribal knowledge



KOZHIKODE 'En Uru', the first tribal heritage village in the state, which is intended to provide a permanent platform to showcase the diverse tribal traditional knowledge and heritage as well as enhance livelihood options to the tribal communities, was inaugurated at Lakkidi in Wayanad on Wednesday.

The buildings constructed for the first phase of the heritage village was inaugurated by A K Balan, minister for welfare of scheduled castes, scheduled tribes & backward classes, via videoconferencing. The Rs 10-crore project is being set up jointly by the scheduled tribes development department and state tourism department in 25 acres near Lakkidi.

Balan said that the heritage village will help showcase and preserve tribal indigenous knowledge as well as help the tribal communities sell their unique products to tourists and others without middlemen.

"Once the project is completed it will provide direct employment to 50 persons

and indirect job opportunities to about 1,000 people," he said.

The first phase of the heritage village comprises tribal market, tribal food outlets, facilitation centre and warehouse.

P S Shyam Prasad, CEO of En Uru, said that the tribal market will have 16 individual shops and three exhibition halls to facilitate live manufacture and sale of unique tribal products like medicinal plants, traditional agriculture produce, forest produce, handicrafts, indigenous tribal medicinal products, bamboo products, tribal paintings, sculptures, etc.

The second phase of the heritage village will have an open air theatre which will provide a venue to stage tribal art forms, tribal interpretation centre, heritage walkway and art and craft workshop for live production and sale of artifacts and other tribal products.

The project is being implemented with Rs 5.5 crore from the scheduled tribes development department, and tourism department has earmarked Rs 4.5 crore for the second phase of the project.

In his message, Wayanad MP Rahul Gandhi said that despite growing challenges to their way of life, tribal communities are fighting to preserve their art, music, storytelling and culinary traditions. "However, ensuring the survival of this cultural heritage requires interventions that help generate sustainable livelihoods," he said.

7. The search for an end to the complex Naga conflict



The Centre must note that most armed insurgencies find resolution in a grey zone called 'compromise'

Despite having huge strategic significance, India's northeastern frontier has largely remained marginal in the country's popular imagination as well as mainstream politics. The region has witnessed multiple crises including bloody insurgencies, but still lacks the emotional resonance of the Kashmir conflict due to geographical, cultural, and ethnic factors.

Rooted in the politics of sub-nationalism, complexities of regional geopolitics and the evolving dynamics of counterinsurgency tactics, the Naga insurgency has defied a lasting solution; it is an extraordinarily complicated conflict whose management has involved a mix of violent response and bargaining.

The absence of R.N. Ravi, the Nagaland Governor and the Centre's interlocutor for Naga peace talks, in the recently-held meeting of the Naga peace process in New Delhi and the subsequent involvement of the Intelligence Bureau to carry the talks further only testifies the intractable nature of the conflict. But it is not negotiating table alone where various issues pertaining to the Naga problem are being discussed and addressed. The politics of its 'resolution' is taking place at multiple sites.

'Ceasefires' and factions

The Naga insurgency has come a long way, and so has the politics to contain it. In the early phase, the Naga insurgents were provided with what has come to be known as 'safe haven' in Myanmar. India's adversaries (China and Pakistan) also provided them with vital external support at one point of time. A major accommodative tactic in the form of statehood to Nagaland in 1963 was not successful. Thereafter, the constant pressure from security forces coerced the Naga National Council (NNC) to sign the Shillong Accord of 1975, whose offspring was the National Socialist Council of Nagalim (NSCN). When the NSCN split into several factions, the Centre responded with entering into peace negotiations with almost each of them. But the undesirable outcome of these 'ceasefires' has been the creation and existence of unspoken 'spheres of influence'. It is these spheres that have come under increasing scrutiny and attack from the Centre through the Nagaland Governor.

The Modi government and the National Socialist Council of Nagalim (Isak-Muivah), or the NSCN-IM, the most powerful of the Naga insurgent groups which has been in peace talks with the Centre since the 1997 ceasefire, had signed a framework agreement in August 2015 which was claimed a historic achievement at that time. But a final accord has remained elusive since. When the Centre realised that privileging one insurgent group could eventually distort the contours of the final peace accord, it subsequently enlarged the peace process by roping in seven other Naga insurgent groups under the umbrella of Naga National Political Groups (NNPG). But another important group, the NSCN-Khaplang, whose cadres are reported to be inside Myanmar, is still outside the formal process.

Culture of extortion

Given this complex backdrop, Mr. Ravi's recent letter to Nagaland's Chief Minister Neiphu Rio seems to have opened a Pandora's box. In his widely-circulated letter, Mr. Ravi had expressed his anguish over the culture of extortion and the collapse of general law and order situation in Nagaland, where organised armed gangs run their own parallel 'tax collection' regimes. Extortions in the name of taxes have been a thorny facet of the Naga issue. The 'taxes' levied by insurgent groups are so intricately intertwined in almost all developmental activities in Nagaland that any serious discussion of the issue has been conveniently avoided. One of the major aims of the NSCN-IM has been to acquire formal recognition to this informal practice through negotiations.

As the Governor has crossed the proverbial Rubicon, the NSCN-IM cannot be happy for the simple reason that it is loath to being branded as an 'armed gang' and is vehemently opposed to the treatment of the Naga issue as a 'law and order' problem. Offended by military actions initiated against its cadres in recent months, the NSCN-IM is equally unnerved over a recent directive by the Nagaland government asking its employees to self-declare the membership of any of their close relatives with underground groups.

Unease over interpretations

There has already been much debate and controversy about the interpretation of 'sovereignty', as reflected in the latest "Naga Independence Day" speech by NSCN-IM chief Thuingaleng Muivah. Demand for a separate flag and a 'constitution' has been a key hindrance in building trust among the parties. Some Indian States contiguous to Nagaland have been affected through the mobilisation of the Naga population in these States. That is why they are apprehensive of the demand for 'Greater Nagalim', which would imply a ceding of their Naga-inhabited territories. Another significant issue is how the weapons in the NSCN-IM camps are going to be managed. As a 'ceasefire' group, its cadres are supposed to retain their weapons inside the designated camps for self-defence only, but more often than not, many influential cadres are seen moving with weapons in civilian localities, leading to many problems. It would be an uphill task for the Centre to ensure that all weapons are surrendered at the time of the final accord.

The last word

The NSCN-IM has demanded the removal of Mr. Ravi as the Centre's interlocutor in the peace process, asking for affirmation of the 2015 framework agreement as being "alive in its original form". What has further widened the trust deficit is the allegation by the NSCN-IM that the interlocutor has subtly manipulated the framework agreement. Was it a case of over-promise and under delivery on the part of Mr. Ravi? Nevertheless, the Centre must keep in mind that most of the armed insurgencies across the world do not end in either total victory or comprehensive defeat, but in a grey zone called 'compromise'. It has become even more urgent in view of China's unusually aggressive behaviour in Ladakh. One need not forget that some high-profile NSCN-IM commanders are reported to have fled last year to China's Yunnan province to seek Beijing's support.

8. In India, forest rights means forest conservation

Shruti Agarwal writes: There is a need and the ecosystem to support forest rights in India.



On June 14, Prime Minister Narendra Modi addressed the UN High-Level Dialogue on Desertification, Land Degradation and Drought. He reiterated that India was on track to achieve land degradation neutrality by 2030, citing the example of the Banni grassland in Gujarat where the region's highly degraded lands were being restored and the livelihoods of pastoralists supported using what he termed a "novel approach."

One of Asia's largest tropical grasslands, Banni is home to great biological diversity and is the lifeline of its pastoralist communities. However, climate change and the invasion by Prosopis juliflora — a species that covers nearly 54 per cent of the grassland — have severely impacted its unique ecology. A study conducted earlier this year recognises that unless action is taken, Banni grassland is headed for severe fodder scarcity.

This is precisely what the Banni's pastoralist communities (Maldharis) have been doing for the past few years. They uproot Prosopis in the pre-monsoon period and when it rains, the native grass species' regenerate from their rootstock. Their endeavour needs to be supported.

Local communities applying their deep knowledge of the local ecology to become "decision-makers" in restoring their commons is indeed novel in India.

However, the mandate for them to do so is not new. Through the Forest Rights Act (FRA), 2006, adivasis and other traditional forest-dwelling communities, including pastoralists, are legally empowered to decide on the management and restoration of their community forest resources (CFR) and stop any activity that adversely impacts biodiversity or the local ecology.

Today — similar to the Banni grasslands — our forests are grappling with degradation, an important contributor to GHG emissions. More than 40 per cent of the forest cover is open, often degraded. India has committed to restore 26 million hectares of degraded forests and lands by 2030 under the Bonn pledge. As part of its Nationally Determined Contribution under the Paris Agreement, it has also targeted creating an additional carbon sink of 2.5 to 3 billion tonnes by 2030 through additional forest and tree cover.

Forest restoration is an important climate mitigation strategy. Beyond carbon sequestration, its benefits include biodiversity conservation and sustainable development. India's potential to remove carbon through forest restoration is among the highest in the Global South as per a 2020 study published in Nature, Ecology and Evolution. At 123.3 million, India also has the greatest number of people living near areas with forest restoration opportunities (within 8km).

Initiatives to restore degraded landscapes are, however, not new to India. Be it social forestry in the 1970s, tree growers' cooperative societies in the 1980s, Joint Forest Management in the 1990s or the National Afforestation Programme and Green India Mission in the last two decades, studies have found them to have limited restoration benefits. These initiatives have drawn criticism for paying little attention to the land and forest tenure of local communities, failing to incorporate traditional ecological knowledge, and not assisting communities to receive the opportunities they desire from restoration.

By assigning rights to protect, manage and restore around 40 million hectare of forests to village-level democratic institutions, CFR rights under FRA tackle these issues. There are several cases of CFR rights enabling successful ecological restoration of forests, biodiversity conservation and food and livelihood security. The recognition of these rights, however, has happened at an extremely slow pace. Less than 5 per cent of the total potential area has been brought under CFR. In Banni too, title deeds formally recognising the CFR rights of the pastoralists are yet to be issued. Institutional support for CFR remains minimal.

There are compelling reasons for India to recognise and support CFR rights. Strong, peer-reviewed evidence from across the world shows that community forests with legally recognised rights are healthier and associated with lower deforestation rates, higher carbon storage and biodiversity compared to other forests. In its 2019 Special Report on Climate Change and Land, the Intergovernmental Panel on Climate Change also noted that "land titling and recognition programmes, particularly those that authorise and respect indigenous and communal tenure, can lead to improved management of forests, including for carbon storage."

Global attention is on ecosystem restoration — the United Nations theme for the decade. India's restoration commitments are amongst the most ambitious in the world. Its potential to benefit from forest restoration is also among the highest. It also has a legal framework — the Forest Rights Act — that facilitates an approach internationally acknowledged as essential for combating climate change. All that is needed now is to recognise and support community forest rights.

9. Complete literacy for Wayanad's Adivasis: Kerala govt aims at 90% literacy for Adivasis in 6 months



The present project, 'Wayanad Complete Tribal Literacy Project' headed by

Kerala State Literacy Mission aims to achieve 90% literacy rate among Adivasis within the next six months

Kerala government intends to increase the literacy rate amongst Adivasis in the Wayanad district as part of the 'Wayanad Complete Tribal Literacy Project', with the aim to reach "complete literacy".

Under this project, some volunteers led a survey, reported *The Wire*. Across Wayanad, roughly 3,000 volunteers and officials partook in the survey. This team included not only students but also, tribal promoters, members of Kudumbasree, panchayat level coordinators, elected representatives and officials from the state literacy mission and other departments. Kerala State Literacy Mission authority oversees the project which is in its third phase, having already completed two phases since 2017.

Nirmala Rachel Joy told *The Wire*, that more than 7000 people have been benefited with the project which covered up to 4000 in the initial phase and the rest in the next phase. Nirmala joined the mission post the winding up of the first phase. Wayanad's tribal community, which constitutes about 20% of the Wayanad's population, has literacy rate of about 70%, which is significantly lower than the state's and Wayanad's literacy rate.

This divide is what the local authorities are trying to fill, with the help of civilian volunteers. If the present project is able to achieve its target, then Wayanad will be achieving 90% literacy rate among Adivasis within the next six months. The officials think that this model could inspire the whole country, if everything runs smoothly and they achieve their targets.

It was, a productive Sunday for the student volunteer groups which contributed in the survey. One government vehicle ran multiple trips to bring the volunteers to the hamlets at the Meppadi panchayat, reported *The Wire*.

10. Tribal Affairs Ministry and AIIMS organized workshop for NGOs for mission of Sahi Poshan-Desh Roshan as part of POSHAN MAAH

Key Highlights:

- The purpose of the workshop was to closely associate NGOs working with Ministry of Tribal Affairs in area of tribal health.
- The need for proper nutrition during pregnancy, lactating mothers and beyond was highlighted during the workshop.
- A chart showing age-wise nutrition needs was also shared with the participating NGOs by them.

A workshop for Non-Governmental Organizations on Nutrition and Health was organized by the Ministry of Tribal Affairs on 09th September, 2021, as part of its POSHAN MAAH activities. The purpose of the workshop was to closely associate NGOs working with Ministry of Tribal Affairs in the mission of Sahi Poshan-.Desh Roshan.The workshop was attended by more than 70 NGOs who are working in the health sector in tribal areas.



Ms. Anuja Agarwala, Senior Dietician, All India Institute of Medical Sciences, New Delhi explained the need for proper nutrition during pregnancy, for lactating mothers and beyond.



Ms. Richa Jaiswal, Senior Dietician, All India Institute of Medical Sciences, New Delhi gave detailed information on optimal nutrition for Heart Health and beyond. A chart showing age-wise nutrition needs was also shared with the participating NGOs by them.



The workshop was organized by Tribal Health Cell under Ministry of Tribal Affairs. Dr Navaljit kapoor, Jt Secy, Ministry of Tribal Affairs and Ms Vinita Srivastava, Advisor tribal health explained the importance of nutrition and various activities undertaken by Ministry for improving health and wellness of tribal population.

Ministry of Tribal Affairs is working with more than 350 Non-Governmental Organisations (NGOs) who have roots in difficult geographies like LWE, hilly, remote and border areas. It is important to associate such organizations as they have capacity to cater comparatively service deficient areas where direct outreach of Government services through its institutional mechanism is not adequate: They also have understanding of the local context in terms of barriers and facilitators. Tribal women have higher IMR and MMR mainly because of their poor nutritional status and tribal children have higher incidence of anemia, stunting and wasting. For ensuring effective implementation of nutrition strategies, it is important to understand tribal culture, practices and traditional indigenous knowledge systems while designing and provisioning context-specific services to tribal women and children for improving their health condition.



Ministry has planned many such activities jointly with MoWCD for the Poshan Maah.

11. Nourishing The Tribal Food Systems



The tribal food system is dependent on dryland agriculture, forests, common property, water resources, and biodiversity, says Basanta Kumar Kar, recipient of the Global Nutrition Leadership Award

India's 10.5 crore tribal population from about 705 distinct Scheduled Tribes (STs) representing 8.6 per cent of the total population is hardest hit by the menace of hunger, malnutrition, and pandemic. Estimates show that about 40 per cent of under-five tribal children in India are chronically malnourished (stunted). Chronic malnutrition impacts survival, growth, learning, performance in school and productivity as adults. More than half of preschoolers and more than one-third of school-age children and adolescents belonging to scheduled tribes were reportedly anaemic. Almost 85 per cent of children in the age group of 6-23 months do not receive a minimum acceptable diet that includes a minimum of four or more food groups. Reportedly, 40 per cent of women consume fried food, and 18 per cent consume aerated drinks. The prevalence of overweight and obesity is 10 per cent among scheduled tribe women which is unusual and alarming. This is of serious concern, indicating that the food system is failing to deliver and supply safe and nutritious diets.

Food systems aggregate the food value chain, nutrition, livelihoods and climate systems, range of actors that provide a right to life and a life to live with dignity. The tribal food system is dependent on dryland agriculture, forests, common property, water resources, and biodiversity. The tribals have been fighting for Jal (water), Jangal (forest) and Jameen (land). Agricultural and food policies have largely focused on increasing food production and mitigating hunger and energy inadequacy. The food subsidies on rice and wheat, urbanisation, globalisation

and the consumption of highly refined and processed foods given the societal changes have impacted tribal food systems. In particular, traditional food systems in the tribal areas, the local diversity from plants and crops that are rich food sources of macro and micro-nutrients, notably the millets, wild edible foods, leafy vegetables, nuts, seeds and fruits are being largely eroded and losing their rightful place.

The diluted food systems have caused multiple burdens of malnutrition, namely, undernutrition, micronutrient malnutrition as well as overweight/obesity which are conditions favourable for emerging non -communicable diseases. Malnutrition is not only impairing the cognitive potential, demographic dividend, growth, and productivity but is also increasing the burden of the disease.

High levels of exclusions, poor sanitation, hygiene and lack of safe drinking water, worm infestation, co-infections, and diseases like malaria, lymphatic filariasis, sickle cell anaemia and tuberculosis exacerbate morbidity and mortality. The reported prevalence of mortality among children and women, starvation and chronic illness have been haunting for generations. It is perpetual. The COVID -19 pandemic has aggravated the situation, with the tribal food systems being drastically affected.

To contain the spread of the infection, mitigate hunger and malnutrition, the Government has responded readily to various measures. The provisions under India's target-driven Poshan Abhiyaan, free food grains under the Targeted Public Distribution System (TPDS) along with the supplementary nutrition at the doorstep are benefitting all vulnerable populations. The 'One Nation – One Ration Card Scheme' allows people to access food entitlements from anywhere in India irrespective of the place where the ration card is registered. There is a growing interest in the promotion of Nutri-cereals and biofortified crops. Odisha Millet Mission and Andhra Pradesh Millets Board are significant steps towards nourishing the tribal food systems.

Reforms in the Food Systems

Investment in tribal food systems will supercharge demographic dividends. It calls for a leadership agenda of action. To increase the availability, accessibility, affordability, and consumption of safe and nutritious foods; the undernourished tribals need a caring, resilient, inclusive, nutrition-sensitive and sustainable food system. The suggested reforms are as follows:

- 1. Structural Reforms- A new legislation on food systems that can take care of a) sustainable food and nutrition, b) food safety and c) preserving biosafety and biodiversity is necessary for a dignified living and just and equitable governance. Effective implementation of the provisions under the Forest Rights Act- 2006, Panchayat Extension to Scheduled Areas (PESA) Act and the NITI Aayog's Model Agricultural Land Leasing Act- 2016 will go a long way in increasing entitlements. There is a high incidence of physical violence and early marriage among tribal women. Investment in women's empowerment and rights and workable institutional arrangements will be key drivers in addressing exclusions and gender-based disparities. Special food systems strengthening measures for aboriginal extinctive primitive tribes is needed as they suffer from multiple marginalisations.
- **2. First and Second Windows of Opportunity-** The food systems for tribals need to prioritise actions for the First 1000 Days of life- The First Window of Opportunity and adolescent girls-The Second Window of Opportunity. During the first 1000 days, through inter-personal counselling and home contacts by the grassroots functionaries, initiatives should be taken to promote appropriate infant and young child feeding. Prevention and control of adolescent anaemia and improving reproductive health and life skills of adolescent girls will pave the way for a safe and healthy outcome in newborns.
- **3. Atmanirbhar POSHAN (Nutritional Self Reliance)-** It is one of the critical policy measures on revitalising food systems. Each district must be self-sufficient in at least six food groups- this can bring food and nutritional self-sufficiency at the sub-national level. These food groups constitute cereals and millets, pulses, milk and milk products, roots and tubers, green leafy vegetables, other vegetables, fruits, sugar, fat/ oil and meat, fish, poultry, and eggs.
- **4. Integrated Strategy to Address Disease Burden-** There must be an integrated strategy on addressing issues of malnutrition, lymphatic filariasis and malaria, childhood TB, sickle cell anaemia and HIV reduction. In this regard, India needs to establish a centre of excellence. In the endemic areas, screening of filaria and malaria need to be incorporated specifically in routine antenatal care, village health nutrition and sanitation days (VHNSD) and in the gram sabhas.
- **5.** Addressing All Forms of Hunger- Addressing protein, calorie and hidden hunger, known as micronutrient malnutrition, would require investing in the tribal cultural endowments, traditional diets, dryland agriculture and crops with high nutrition (millets, pulses, wild edible foods among others) which were

traditionally consumed by the tribals. It calls for expanding food programs and income safety nets, diversifying both production and farming system to include poultry, fishery, and dairy. Increasing dietary diversity, promoting food fortification and bio-fortification, and streamlining the existing supplementation programs would control hidden hunger. Working with India's Jal Jeevan Mission to increase access to safe water and making the water a source of nutrients would be a significant milestone.

- **6. Prevention and Control of Overweight and Obesity-** It would require multiple strategies on addressing the local food system to improve access to safe and nutrient-dense foods and discourage the intake of high salt, sugar, and fatrich foods. Food-based dietary guidelines need to be used as a tool in agriculture, food, and health planning to set targets in healthy food production and consumption. India's food regulating body FSSAI, Micro Small and Medium food Enterprises and Farmer's Cooperatives can play an enabling role in reducing the impending double burden on malnutrition.
- **7. Survive and Thrive-An Emergent Initiative-** Survive and thrive of wasted and severely affected malnourished children is an emergent initiative. The children need a safe and dignified living. Each state needs to establish a Child Task Force. The rising wasting is a challenge during the pandemic. Revitalising home visits and inter-personal counselling following COVID norms, activating Nutrition Rehabilitation Centers (NRCs) and nutrition surveillance will be important measures during the pandemic.
- 8. Promoting and Protecting Livelihoods- Tribals need a sustained income that can address seasonality, perpetual poverty and increase affordability. Promotion of women smallholder farmer-led resilient nutrition-sensitive agriculture, nutrition entrepreneurs under "Stand Up India Scheme" and incentivising tribal micro-small and medium enterprises (MSMSEs) will be important measures. India's flagship Mahatma Gandhi National Rural Employment Guarantee Scheme can be linked to Nutri-garden, watershed programs, diversifying production and farming system. Household-level non-farm enterprises may be encouraged through a cooperative system. Protecting income from conspicuous consumption and sustained savings would be a key determinant for sustainable livelihoods.

COVID-19 provides an opportunity for new world order. It is a critical wake-up call to redesign the food systems that promotes and protects biodiversity, delivers a nutritious and affordable diet for all. All the stakeholders need to come

together to systematically solve the food and nutrition divide for sustainable food systems and the planet.

12. Challenges Faced by Nomadic Tribes



Nomads and Semi-Nomads are social groups who undertakes a fairly frequent, usually seasonal physical movement as part of their livelihood strategy and moves from one place to another.

Ministry/Department of Social Justice and Empowerment vide Gazette Notification dated 21.02.2019 has constituted Development and Welfare Board for Denotified, Nomadic and Semi-Nomadic Communities (DWBDNCs) for

Development and Welfare of Denotified, Nomadic and Semi-Nomadic Communities for a period of three years extendable upto 5 years with following responsibilities:

- To formulate and implement Welfare and Development programmes, as required, for Denotified, Nomadic and Semi-Nomadic Communities.
- To identify the locations/areas where these communities are densely populated.
- To assess and identify gaps in accessing existing programmes and entitlements and to collaborate with Ministries/implementing agencies to ensure that ongoing programmes meet the special requirements of Denotified, Nomadic and Semi-Nomadic Communities.
- To monitor and evaluate the progress of the schemes of Government of India and the States/UTs with reference to Denotified, Nomadic and Semi-Nomadic Communities.

The Department is implementing the Centrally Sponsored Scheme for educational upliftment of De-notified, Nomadic and Semi-Nomadic Tribes (DNTs) namely Dr. Ambedkar Pre & Post Matric Scholarship for students through Implementing Agencies (States/UTs). The scheme of Pre-matric Scholarship for DNT students is helpful in spreading education amongst DNT children especially the girl child.

This information was given by Minister of State for Social Justice and Empowerment **Shri Krishan Pal Gurjar** in a written reply in Rajya Sabha today.

13. TRIBES INDIA VAN DHAN to expand Online marketing in a big way by tying up with Big Basket, MoU Signed between TRIFED and Big Basket



Key Highlights:

- The MoU between TRIFED and Big Basket signed for promotion and sale of Organics, natural Van Dhan products and TRIFOOD products.
- MoU between TRIFED and PurtyAgrotech signed in order to promote the art of growing pearls among other tribal entrepreneurs.

The Union Minister of Tribal affairs Shri Arjun Munda has said, "The government is taking up ambitious transformational programmes which will prove to be game changer for the tribal livelihoods in times to come". Shri Arjun Munda was speaking at the onboarding of two major initiatives for boosting tribal livelihoods, one with signing of MoU between TRIFED and Big Basket and the other of MoU between TRIFED and PurtyAgrotech of Jharkhand in New Delhi today.

Addressing on the occasion, the Minister added that as we celebrate Azadi Ka Amrit Mahotsav, it is the vision of the Prime Minister that we reach out to the person at the last mile and works towards establishing an Atmanirbhar Bharat. He further remarked that it is in this spirit that the Ministry of Tribal Affairs and TRIFED are working on a war footing to bring about social and economic empowerment fribal people through large number of such initiatives.

The MoU between TRIFED and Big Basketis for the promotion and sale of the natural Van Dhan products through Big Basket platform while MoUbetween

TRIFED and PurtyAgrotechwill promote the art of growing pearls among other tribal entrepreneurs across India and tap the potential of this market.

The Union Minister explained that the Tribal artisans, tribal producers, their products and livelihood programmes are the focus of the Prime Minister. He further elaborated that now the tribal products are being brought into the market through value addition and ensuring outstanding quality with the help of research and design through TRIFED and various initiatives of M/o Tribal Affairs. The tribal people have hidden talents and a great potential for making excellent products and they believe in "Mera Van - MeraDhan - MeraUdhyam". As a nation, it is our duty to ensure that their skills, arts and crafts are not lost for posterity, therefore these programmes have been launched today to benefit the tribals countrywide, the Minister added.

Speaking at the occasion Shri Pravir Krishna, Managing Director, TRIFED said that TRIFED is working day and night to find new and better marketing opportunities both domestically and internationally for the unique tribal products and Minor forest produce. He further added that these two new initiatives will become operational from 2nd October this year and will give a new thrust to tribal livelihoods.

TRIFED is continuing to forge partnerships with different organisations to create synergies together, as a part of its ongoing efforts to improve the lives and livelihoods of the tribals and tribal empowerment. In this context, TRIFED has tied up with Big Basket, an established E-grocery platform that will also work for the promotion and sale of the natural Van Dhan products being made available to them from VAN DHAN production units.

TRIFED and Big Baskethave entered into a Memorandum of Understanding on 20 September, 2021. The MoU was exchanged between Sh.Seshu Kumar, Chief Merchandising Officer (CMO), BIG BASKET and Shri Pravir Krishna, Managing Director, TRIFED in the presence of Shri Arjun Munda, Minister for Tribal Affairs and senior officials of both organisations. TRIFED by converging with Big Basket can leverage their infrastructure, expertise and reach in order to make the Organics, Naturals and TRIFOOD Van Dhan products available to a wider clientele across the country. It will also enable Big Basket to enrich its portfolio by inclusion of hand-made authentic forest products sourced by the tribal population. This collaboration will also promote Big Basket's social cause by means of promoting tribal entrepreneurship and generating livelihood opportunity for the tribals.

MoU Signing between TRIFED and Big Basket

E-grocery has been one of the fastest-growing segments in the consumer e-commerce space and its growth is propelled by India's rising consumption and digital penetration. The current pandemic has further accelerated its adoption as consumers seek the convenience of ordering quality groceries delivered safely at home. BigBasket was founded in 2011 in Bangalore and has expanded its presence to 25+ cities across India since then. In the e-grocery space, BigBasket provides one of the largest assortments (and provides customers the convenience of home deliveries on preferred dates and time slots). This partnership will give a great opportunity to modern-day consumers who are more aware and particular about their health and lifestyle needs. Healthier alternatives like The potential product categories can be Van Dhan Naturals, Food grains, Oils, Bakery, Beverages, Snacks, Cleaning and Household, Beauty & Hygiene, Gourmet, etc.

14. Kongthong Whistling Village in Northeast India

It is a village where people usually do not use entire tune but only the whisper when they call each other in the village. However, when they are out in the fields to work, they only just use their special tune to communicate each other, the duration of which is not more than a minute, is used.

The grace of the village is under highlight of several peoples after the name quoted in the parliament when Rajya Shaba Member "Prof Rakesh Singha" toured at the village on 14 Aug 2019.

He appealed that the village to be included in intangible cultural heritage of UNESCO as he is concerned that the unique cultural practice could be disappeared if not included in Intangible Cultural Heritage of UNESCO.

Kongthong a small village is nestled in the Khat-ar Shnong area on way to Sohra in East Khasi Hills, district of Meghalaya 60kms to the south from Shillong in India is a must visit for its panoramic view, unique culture and virgin beauty. There is no sign boards to guide you, you will find lack of road connectivity giving you an offroading feeling . It takes around 4 hr from Shillong to reach this place.

The village resides a population of around 650 residents, magically those 650 inhabitants has their own unique tune composed by their mother. When a person dies, the song dies. Nobody uses the same tune even after the death.

They are always in touch with nature. They believe god is unseen but he is there taking care of the world. They have extreme love and respect for nature.

One more different practice of this village is earlier people here were uneducated so during those times if somebody purchased or sold their land it was difficult to keep a record of it. They used to follow a different system where in they used to erect a stone in the presence of members of village durbar and the parties selling and buying land. The stone would stand as evidence to both the families that the land is sold to a particular family and can't be taken back. They call it 'Mausakhi' in khasi, mau means stone and sakhi means evidence.

Apart from these practices, the village has a football pitch, a place for community gathering where they perform their festival and cultural dance. Village has no hospital or police station but a dispensary and school till grade 8. The crime rate here is 0 making it safe to live here. People here are very simple, gentle, polite, warm and extremely hospitable.

WAY OF COMMUNICATING

The village is also known as "Whistling Village" as every individual there has their unique caller tune. They call this tune "Jingrwai Lawbei" which means mother's love song. In Kongthong village, when a child is born mother hums whiper a tune for the child which they are inspired by birds. As the child grows this tune becomes his caller tune, and he is called by that tune. Also each and other inhabitants knows each other's tune.

"Jingrwai Lawbei" is like a secret code for every individual in this village which cannot be copied. If a person is somewhere far which cannot be seen with eyes, this tune is used to communicate among each other and the person understands that he is needed somewhere and responds. The person calling might have something to speak or need to come with them or they just want to know if he is there or no. Nobody can respond on behalf of anybody.

With a very practical theory that high frequency sound travel longer distance in less time, people of Kong thong have been following this culture since decades now.

Take days out of your busy city life visit this beautiful place, living there would give you experience which no other part in world would give you.



EXPERIENCING AT KONGTHONG

Kongthong is an amazing place. The best thing you can do here is to understand and know the villagers and their lifestyle. Listen to the people being called out by whistles.

Apart from that, being tucked away from the rest of the world, the village is untouched and pristine. You can definitely find this place to be serene and totally away from the maddening crowd of the city. Enjoy this serenity and nature around you.

You can also indulge in activities like kite flying, swimming, hiking and bird watching. Listen to Khasi fables around bonfire while enjoying Khasi dishes...





BEST TIME TO VISIT KONGTHONG WHISTELING VILLAGE

At Meghalaya, you can never actually predict the weather. But usually, October to April has clear skies and best weather. You can make a week-long plan if you want to visit the important places of Meghalaya.

Kong thong also serves as a perfect weekend destination for you.

HOW TO REACH KONGTHONG WHISTELING

The nearest airport is Umroi Airport at Shillong. The nearest Railway head is Guwahati. From Guwahati, you have to reach Shillong either by shared sumos and car, or you can hire a cab

From Shillong, the place is around 55 km. You can hire a car from Shillong to reach here. To reach Kong thong, you have to trek from the last point on the motor able road. The village is not connected by proper roads and can only be arrived by a 10 km trek.

HISTORY

According to the Legends, Once a man went alone in Jungle for timber, climbed a tree to get rid of the thugs who was following him then he started calling his friends by whistling and making sounds so that the goons get unaware of him. Thereupon he was rescued by his friends.

Since then the practice of whistling and making sounds to communicate has been evolved. It soon became a maternal practice for mothers when they started giving distinctive sounds to their kids which becomes their identity when they grow elder.

15. Online classes: Tribal students at the receiving end, says survey



Pointing to the impact of the pandemic on learning, a survey has found that students in tribal areas received less than optimal exposure to online classes. The students in tribal locations in five districts reported that they attend less than an hour of online class on working days. The survey was conducted by Kanal Innovations, an NGO, among students (Class I to Plus II) in Palakkad (Attapadi), Malappuram (Nilambur), Wayanad, Thiruvananthapuram and Kollam.

The students who took part in the survey complained that lack of mobile phone connectivity and occasional power outage affected their virtual classroom learning. "There are a lot of students who need the support of teachers to keep them motivated to study. Any disruption will affect learning skills and it would be tough to bring them back to learning," said Anson P D Alexander, director, Kanal Innovations. The students access classes offered by Kerala Infrastructure and Technology for Education (KITE) through its television channel VICTERS. The survey also pointed out the problems being faced by students of private schools where they complained of online sessions up to seven hours a day.

"Many schools flout the direction to limit online classes to three hours. Besides, students spend more time online for tuition and homework," said Anson. The survey found that students who are not adept at typing complained of not being able to complete the exams conducted by schools using online platforms.

Most of the students in the tribal settlements across the state are struggling due to lack of resources. However, all the 16 students at the Government Tribal LP School in Puruvimala are able to continue their online education with the help of a few good samaritans who provided smartphones and televisions to them.

Children from the tribal settlements such as Thenmala, Thodumala and Puruvimala study at this LP school. After class IV, they have to travel to the city to continue their education. "Only a few children from the tribal settlements join the school and most of them stop education after class IV because of the travel involved. So, it is important that more attention be given to these children," said Akhilesh S S, one of the teachers at the school.

Last year, gadgets were distributed to about seven students by various charity organisations, Akhilesh said. "This year, the remaining students were also provided with smartphones. With the help of the alumni of 2007-2008 BEd batch of Mar Theophilus Training College, the last child was given a smartphone two weeks ago," he added.

The survey also pointed out the situation of Plus I students in government schools. "Many students in Thiruvananthapuram city have never met teachers or classmates in person. Their school WhatsApp group contains a message from the teacher intimating about the online class of the day," said Anson. The survey covered 330 students from five regions- rural, urban, tribal, coastal and high range - from 14 districts.

16. Despite red flags, green nod for coal mining, new blocks put on auction



Move despite NCST order to defer public hearings, and ICMR study pointing to adverse impact of coal mining on health.

DESPITE A CLEAR order by the National Commission of Scheduled Tribes (NCST) to defer public hearings, and a study by Indian Council of Medical Research that points to adverse impact of coal mining on health of tribals, the Chhattisgarh government and the Union Ministry of Environment, Forest and Climate Change (MoEF & CC), facilitated the green clearance for a coal mine in Gare Palma area of Tamnar tehsil in Rajgarh district.

What has now irked tribals and village panchayats is that three coal blocks in Sector IV of Gare Palma and two from the adjacent Ghargoda tehsil, also in Rajgarh district, have been put up for auction despite government-sponsored studies clearly stating that the air and water in the region is polluted, and pointing to increased prevalence of respiratory diseases amongst villagers.

The ICMR health report is the first of its kind in the country, and was undertaken following an NCST order of April 4, 2018, that called for conducting "a detailed enquiry into the complaints with respect to deprivation of rights and safeguards to the Scheduled Tribes". NCST, which had heard from residents of 17 villages, had also asked Chhattisgarh state government to defer the public hearing for

Maharashtra State Power Generation Company Limited (MahaGenCo) to be held on April 17, 2018, till all studies were undertaken.

The NCST had intervened after villagers in the region approached the commission about the adverse social and ecological impact of mining in the region by MahaGenCo. While MahaGenCo holds the licence to mine coal in Gare Palma Sector II, a Gujarat state agency has obtained the licence for mining in Gare Palma Sector I.

Despite the NCST order, the public hearing was conducted on September 27, 2019. And despite the ICMR handing over the health report to MoEF & CC in February 2020, the Expert Appraisal Committee of the ministry noted in its September 28, 2020, meeting that the "ICMR's health assessment and project of health of people living in Tamnar block was yet to completed." MahaGenCo itself had submitted to the court that ICMR had handed over the health report to MoEF & CC in February 2020.

The study authored by National Institute of Research in Tribal Health for ICMR found that 42.7 per cent pre-school children were underweight. "Overall acute respiratory infection (20.9%) constituted the most common morbidity among children," the report said, holding "nearby mining activities" responsible. The study was conducted in 2019-2020 on 5,233 individuals covering 984 households from 33 villages in Tamnar block. The study's objective was to find out the morbidity, mortality and nutritional status of the population residing in Tamnar Block of Ramgarh District.

"During the survey held for a year from 2019-2020, we also observed high prevalence of acute respiratory infection (20.9%). This was much higher than the National Family Health Survey-4 Chhattisgarh report where it was only 2.2% in the last 2 weeks preceding the survey. The reason could be due to environmental pollution or poor air quality index. However, in-depth studies need to be done to rule out possible other causes of infections as any infection of the lung in early childhood may cause the development of COPD and bronchiectasis in later years of life," the report said.

While the report recommended to strength in health infrastructure in the region along with looking at alcohol de-addiction, it also entailed provision for safe drinking water, that is water free from "Fluoride, arsenic of any geogenic contamination" as a recommendation especially in two villages Mudagaon and Saraitola. Bringing up rise of fungal infection and its correlation with Arsenic

concentration in water, the report quoted a CSIR-NEERI report from 2018, stating, "the presence of alarmingly high levels of Arsenic in drinking water along with acidic pH of water in 14 villages of Tamnar block and the optimal pH for arsenic absorption is 5.0 were associated with the development of fungal infection among villagers."

The NCST officials confirmed that a study of three reports focusing on the ecological conditions of the region was ordered in April 2018, focused on health assessment, ground water study and fly ash disposal in the region. State Pollution Control Boards officials couldn't be reached. The Union MoEF & CC did not respond to the questions mailed to it citing lack of awareness of the said study. The scientist at the department working on Environmental Health, to whom the questions were directed by the ministry, said he was unaware about the study. "It was not related to their field," he said.