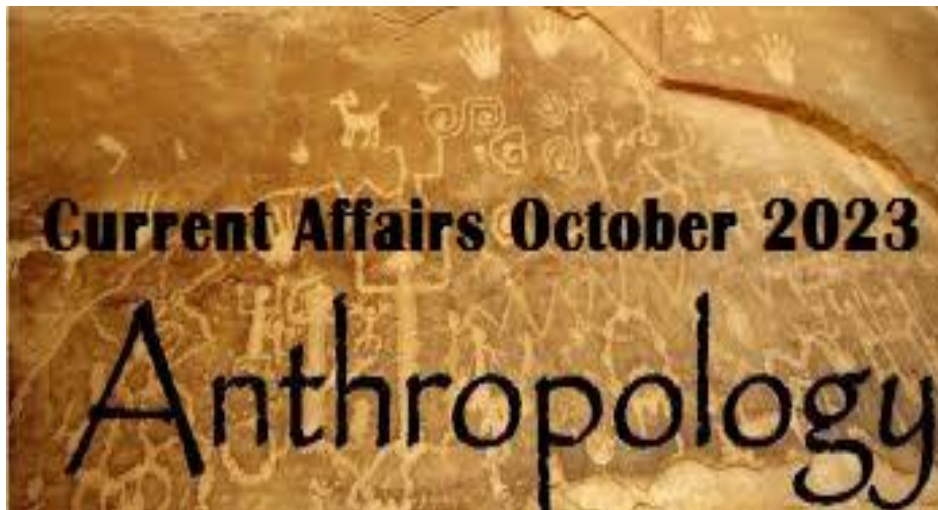


**ANTHROPOLOGY CURRENT AFFAIRS MAGAZINE
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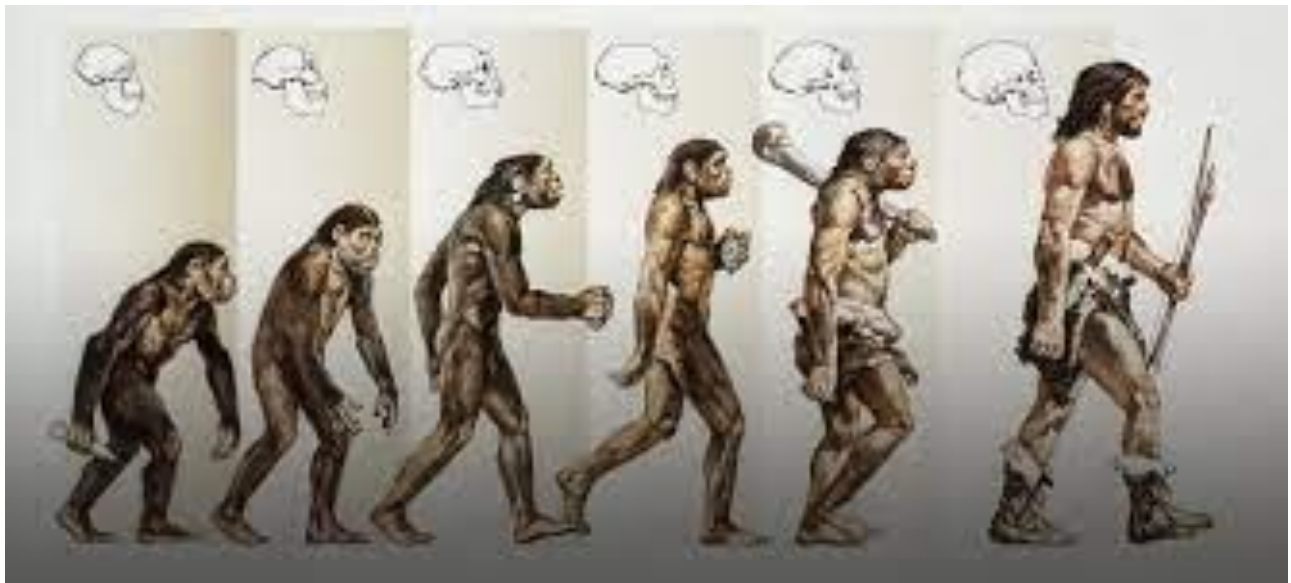
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PAPER -1

PHYSICAL & ARCHAEOLOGICAL ANTHROPOLOGY

1. Human-evolution story rewritten by fresh data and more computing power



Humans did not emerge from a single region of Africa, suggests a powerful modelling study. Rather, our ancestors moved and intermingled for millennia.

The widely held idea that modern-day humans originated from a single region of Africa is being challenged. Models using a vast amount of genomic data suggest that humans arose from multiple ancestral populations around the continent. These ancient populations – which lived more than one million years ago – would have all been the same hominin species but genetically slightly different.

The models supporting this theory rely on new software and genomic-sequencing data from current African and Eurasian populations, as well as Neanderthal remains. The study contributes more evidence to the idea that there is “no single birthplace in Africa, and that human evolution is a process with very deep African roots”

The single-origin theory has been popular for decades, partly on the basis of fossil records. But the theory doesn't fit the data well. All of the tools and physical traits attributed to *Homo sapiens* cropped up throughout Africa around a similar time, 300,000 to 100,000 years ago.

If humans had radiated from a single location, archaeologists would expect to see more recent fossils farther away from a central point, and older ones closer to it.

Ancestral stem

The ancient hominin species, or ‘ancestral stem’, had localized populations which are thought to have interbred with each other over millennia, sharing any genetic differences that they had evolved. They also moved around Africa over time. “Our roots lie in a very diverse overall population made up of fragmented local populations,”

The intertwining of these stems, separated only weakly by their genetic differences, gave rise to a concept of human evolution that the researchers described as a “**weakly structured stem**” – more like a tangled vine than a ‘tree of life’.

Genomic data

This study incorporated genome-sequencing data from existing eastern and western African populations and the Nama people of southern Africa. This spread of genomic data helped the researchers to understand and track the historical movement of genes across generations.

“We really wanted to sit down and very systematically evaluate the models in a more creative way,” says Henn. “It’s a new model for human evolution that is concrete.” The models used variables such as migration and

population merging to predict gene flow over the course of thousands of years. Those predictions were then compared with the genetic variation seen today to determine which models matched the data best.

One previously proposed explanation for today's human diversity is that *H. sapiens* mixed with other archaic human species that had branched off and become isolated. But Henn and her colleagues found that the weakly structured stem model was the better fit, giving a clearer explanation for the variation seen in humans today.

Ultimately, questions still abound about humans' origins. Henn wants to add more DNA from other African regions to the models to see if that changes their results. She also hopes to use the data to make predictions about the fossil record, such as what features would be found in human fossils from a particular area.

2. Predictions for AI and the Future of Anthropology



The future of anthropology is AI. We should embrace it and help shap

e its development, or risk being left behind.

Speculative predictions for how AI will disrupt our discipline in the coming years.

1. All five fields will be disrupted: AI will profoundly impact all branches of anthropology, including applied anthropology. Its integration with archaeology will enable enhanced artifact analysis, reconstruction of ancient environments, and the identification of undiscovered sites. Biological anthropology will benefit from accelerated complex genetic data analysis and reconstructions of early humans. Meanwhile, linguistic anthropology will realize new opportunities for studying, reclaiming, and teaching endangered languages. It will also help cultural and applied anthropologists reveal hidden cultural patterns and spot emerging trends, leading to a better understanding of our past and more attuned interventions in the future.

2. AI as a collaborative partner: AI will soon be foundational to our work practice. We will engage AIs in discussions and creative brainstorming, leveraging their unique strengths to complement and scale our abilities. With the help of AI, anthropologists will be able to gain broader perspectives, leading to richer insights and increased problem-solving abilities. For the savvy researcher, AI will not replace the human anthropologist but will provide a tool to enrich every aspect of the anthropological process.

3. Transforming ethnography: AI is poised to revolutionize ethnography by fundamentally altering how researchers conduct their work. AI-assisted ethnography will support researchers in collecting, analyzing, and interpreting data at scale. Techniques such as web scraping, natural language processing (NLP), and computer vision will make this possible and unveil new insights and patterns. With the added data and complementary analysis,

anthropologists will enhance their practice through new modes of triangulation, ultimately leading to more robust interpretations.

4. Enhancing public engagement: AI-generated visualizations, videos, interactive data representations, and immersive digital experiences will help anthropologists to convey complex research findings and narratives in appealing, relatable, and accessible ways to wider audiences. This enhanced multimodal storytelling will capture the attention of more diverse groups and make it more likely that the general public will consume the information.

5. Automated digital ethnography (ADE): ADE enhances traditional ethnographic methods by automating the research process within digital field sites. By deploying programmed ADE agents, researchers can tap into the vast amounts of unstructured data available on the internet, such as social media posts, forum discussions, and blog entries. As these agents continuously collect and analyze data in real time, they act as ever-present partners in the field, providing researchers with valuable and up-to-date insights.

This real-time engagement will assist anthropologists in quickly identifying emergent human behavior and cultural patterns, leading to more agile and timely research.

6. AI multimodal analysis: Integrating AI into ethnographic research will revolutionize the scale at which anthropologists conduct multimodal analysis. Handling multimodal data can be extremely time consuming, often requiring researchers to meticulously sort through and piece together various forms of information. But with AI we can automate the process of sifting through and analyzing diverse data types, such as text, images, audio, and video, significantly reducing the time and effort required. This efficiency will allow

anthropologists to focus on more complex and nuanced aspects of the research process.

7. Advancing research with knowledge graphs: Anthropological knowledge graphs (AKGs) will revolutionize how anthropologists store and access information by creating specialized knowledge repositories that interlink entities – people, organizations, concepts, historical events, methods, disciplines, publications, and more – within a contextual framework.

As these AKGs develop, they will empower researchers to better comprehend human social, cultural, biological, and linguistic diversity, paving the way for a web-scale model that accurately represents the complexity of human experience. Creating such graphs will likely necessitate a mixed-methods approach, combining the power of anthropologically fine-tuned LLMs with the precision of ethnographic semantic data modelling. With such knowledge graphs, our field can inch closer to *machine knowing* instead of being grounded in machine learning-based AI approaches.

8. New models of anthropological entrepreneurship: Historically, anthropological entrepreneurs typically set up research practices. While that is not going to change, and it may even be accelerated by the incorporation of AI, the new model of anthropological entrepreneurship will take the form of founding tech companies that combine the wisdom, empathy, and ethics of anthropology with computer and data science to innovative businesses models and products.

By bringing an anthropological perspective to the technology industry, these entrepreneurs can ensure that AI applications are

developed with a deep understanding of the complexities of human societies and the potential consequences of technology. This will create products and services that prioritize ethical considerations, minimize adverse impacts, and contribute positively to global communities.

9. Productize anthropology: My vision for the future of anthropological entrepreneurship includes an AaaS platform. I imagine a subscription-based service that is accessible to anyone, regardless of their background. This platform would harness anthropology-specific AI tools for data collection, analysis, and insights generation, democratizing anthropological knowledge and promoting innovation. By making anthropological insights widely accessible, an anthropology as a service (AaaS) platform could help to propel the discipline forward, ensuring its ongoing relevance and impact in our increasingly digitized world.

As we embrace the exciting possibilities that digital innovation brings to anthropology, we must remain vigilant and committed to addressing the ethical challenges that come along with it. By critically examining issues such as bias, fairness, transparency, privacy, and the potential impact on job markets, we can work towards a future where AI is a force for good within our discipline.

We are uniquely positioned to contribute to these conversations and ensure that anthropological insights inform the evolution of AI technologies.

3. Neanderthals



Researchers have found connections between **Neanderthals' DNA** and a serious hand disease, the shape of people's noses, and even our immune response to pathogens.

About Neanderthals:

- They are a distinct species known as **Homo neanderthalensis**, are our closest ancient human relatives.
- The word Neanderthal means '**human from the Neander Valley.**'
- They were named in **1864**.
- They lived from about **400,000 to 40,000 years ago** across Europe and southwest and central Asia.
- Neanderthals and modern humans share a common ancestor, and their lineages separated at least **500,000 years ago**.
- The first recognized Neanderthal remains were discovered in the **Neander Valley in Germany in 1856**.
- **Gibraltar 1 skull** and **Sima de los Huesos human remains** are among the important Neanderthal fossils discovered.

Characteristics and Lifestyle:

- **Appearance:** Neanderthals had **large noses, strong double-arched brow ridges, and relatively short and stocky bodies.**
- **Brain Size:** Their brain size ranged from at least **1,200cm³ to 1,750cm³**, larger than the modern average but in proportion to their body size.
- **Height and Weight:** Adults grew to about **1.50-1.75m tall** and weighed about **64-82kg.**
- **Diet:** They had a diverse diet consisting of **meat, plants, fungi, and shellfish** when available.
- **Habitat:** Neanderthals were adaptable, living in varied environments from **cold steppe to warm temperate woodlands.**

Intelligence and Behavior:

- Neanderthals were **intelligent** and accomplished humans, skilled **tool makers**, and proficient hunters.
- They developed innovative stone technologies like the **Levallois technique** around **300,000 years ago.**
- They also had the ability to **make fire** from at least **200,000 years ago.**
- Archaeological evidence suggests that Neanderthals **cared for their sick and buried their dead**, indicating **social and compassionate beings.**
- They were capable of **symbolic or artistic expression**, as evidenced by **Palaeolithic artwork** in Spain.

Extinction:

- Neanderthals went extinct around **40,000 years ago.**
- The reasons are still unclear, but **competition for resources with early modern humans** and **rapid and dramatic climate changes** are considered major contributing factors.
- Their extinction may have been staggered, and they were replaced by **early modern humans** due to **local population extinctions.**

4. Genomic study reveals signs of TB adaptation in ancient Andeans



- People have inhabited the Andes mountains of South America for more than 9,000 years, adapting to the scarce oxygen available at high altitudes, along with cold temperatures and intense ultraviolet radiation. A new genomic study suggests that Indigenous populations in present-day Ecuador also adapted to the tuberculosis bacterium, thousands of years before the arrival of Europeans.
- “We found that selection for genes involved in TB-response pathways started to uptick a little over 3,000 years ago,” says Sophie Joseph, first author of the paper and an Emory graduate student in anthropology. “That’s an interesting time because it was when agriculture began proliferating in the region. The development of agriculture leads to more densely populated societies that are better at spreading a respiratory pathogen like TB.”

- The investigators had originally set out to investigate how the Indigenous people of Ecuador adapted to living at high altitude.
- “We were surprised to find that the strongest genetic signals of positive selection were not associated with high altitude but for the immune response to tuberculosis,” says John Lindo, Emory assistant professor of anthropology and senior author of the study. “Our results bring up more questions regarding the prevalence of tuberculosis in the Andes prior to European contact.”
- The Lindo lab specializes in mapping little-explored human lineages of the Americas.
- Previously published research found evidence of the tuberculosis bacterium in the skeletal material of 1,400-year-old Andean mummies, contradicting some theories that TB did not exist in South America until the arrival of Europeans 500 years ago.
- The current paper provides the first evidence for a human immune-system response to TB in ancient Andeans and gives clues to when and how their genomes may have adapted to that exposure.
-
- “Human-pathogen co-evolution is an understudied area that has a huge bearing on modern-day public health,” Joseph says. “Understanding how pathogens and humans have been linked and affecting each other over time may give insights into novel treatments for any number of infectious diseases.”
- Co-authors of the paper include scientists at Central University of Ecuador, Technical University of Manabi in Ecuador, University of Pavia in Italy, University of Iowa and Florida Atlantic University.
-
- The researchers sequenced whole genomes using blood samples from 15 present-day Indigenous individuals living at altitudes above 2,500 meters in several different Ecuadorian provinces. They performed a series of scans to look for signatures of positive selection for genes in their ancestral past. “Computational techniques for sequencing genomes and modeling ancestral selection keep improving,” Joseph says. “The genomes of people living today give us a window into the past.”
-
- Among the strongest signals detected were for biomarkers that are switched on in modern humans during an active TB infection. The researchers modeled the timing of selection for several of the genes involved in the TB-response pathways.

- Although they were not as strong as for exposure to TB, some signals were also detected for biomarkers related to adaptation to hypoxia, or low levels of oxygen in the blood that result from living at high altitude.
-
- Previous research has revealed stark differences in how high-altitude populations in Tibet, Ethiopia and the Peruvian Andes adapted to hypoxia.
- “For the Ecuadorean samples, we did see a couple of overlaps with studies from the Peruvian Andes in the overarching genes involved in the selection for hypoxia, although the variants were slightly different,” Joseph says. “To me, that suggests that there may have been independent adaptations within even small populations, at the community level. It shows the robustness of the genome to solve adaptive problems through different pathways.”
-
- Joseph plans a career focused on mapping ancestral data for Indigenous populations from the Americas. “South America has far fewer genomic studies and publications compared to Europe and I’d like to help close that gap,” she says.
- “I want to understand human evolution and health from an integrated biological perspective,” Joseph adds. “The genome can reveal many fascinating things and yet it is just one aspect of a human being. You also have to consider the environment and social-cultural aspects.”

5. Witchcraft beliefs are widespread, highly variable around the world



In new global dataset, witchcraft beliefs are associated with weak institutions, conformist cultures

A newly compiled dataset quantitatively captures witchcraft beliefs in countries around the world, enabling investigation of key factors associated with such beliefs. Boris Gershman of American University in Washington, D.C., presents these findings in the open-access journal PLOS ONE on November 23, 2022.

Numerous prior studies conducted around the world have documented people's beliefs in witchcraft – the idea that certain individuals have supernatural abilities to inflict harm. Understanding people's witchcraft beliefs can be important for policymaking and other community engagement efforts. However, due to a lack of data, global-scale statistical analyses of witchcraft beliefs have been lacking.

To deepen understanding of witchcraft beliefs, Gershman compiled a new dataset that captures such beliefs among more than 140,000 people from 95 countries and territories. The data come from face-to-face and telephone surveys conducted by the Pew Research Center and professional survey organizations between 2008 and 2017, which included questions about religious beliefs and belief in witchcraft.

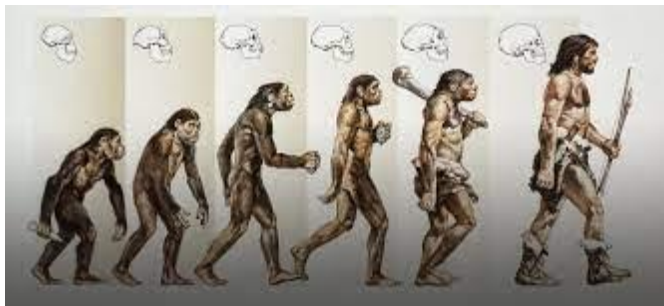
According to the dataset, over 40 percent of survey participants said they believe that "certain people can cast curses or spells that cause bad things to happen to someone." Witchcraft beliefs appear to exist around the world but vary substantially between countries and within world regions. For instance, 9 percent of participants in Sweden reported belief in witchcraft, compared to 90 percent in Tunisia.

Using this dataset, Gershman then conducted an investigation of various individual-level factors associated with witchcraft beliefs. This analysis suggests that, while beliefs cut across socio-demographic groups, people with higher levels of education and economic security are less likely to believe in witchcraft.

Gershman also combined this dataset with other country-level data, finding that witchcraft beliefs differ between countries according to various cultural, institutional, psychological, and socioeconomic factors. For instance, witchcraft beliefs are linked to weak institutions, low levels of social trust, and low innovation, as well as conformist culture and higher levels of in-group bias – the tendency for people to favor others who are similar to them"

These findings, as well as future research using the new dataset, could be applied to help optimize policies and development projects by accounting for local witchcraft beliefs. The authors add: "The study documents that witchcraft beliefs are still widespread around the world. Moreover, their prevalence is systematically related to a number of cultural, institutional, psychological, and socioeconomic characteristics."

6. Human-evolution story rewritten by fresh data and more computing power



Humans did not emerge from a single region of Africa, suggests a powerful modelling study. Rather, our ancestors moved and intermingled for millennia.

The widely held idea that modern-day humans originated from a single region of Africa is being challenged. Models using a vast amount of genomic data suggest that humans arose from multiple ancestral populations around the continent. These ancient populations – which lived more than one million years ago – would have all been the same hominin species but genetically slightly different.

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If humans had radiated from a single location, archaeologists would expect to see more recent fossils farther away from a central point, and older ones closer to it.

Ancestral stem

The ancient hominin species, or ‘ancestral stem’, had localized populations which are thought to have interbred with each other over millennia, sharing any genetic differences that they had evolved. They also moved around Africa over time. “Our roots lie in a very diverse overall population made up of fragmented local populations,”

The intertwining of these stems, separated only weakly by their genetic differences, gave rise to a concept of human evolution that the researchers described as a “weakly structured stem” – more like a tangled vine than a ‘tree of life’.

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This study incorporated genome-sequencing data from existing eastern and western African populations and the Nama people of southern Africa. This spread of genomic data helped the researchers to understand and track the historical movement of genes across generations.

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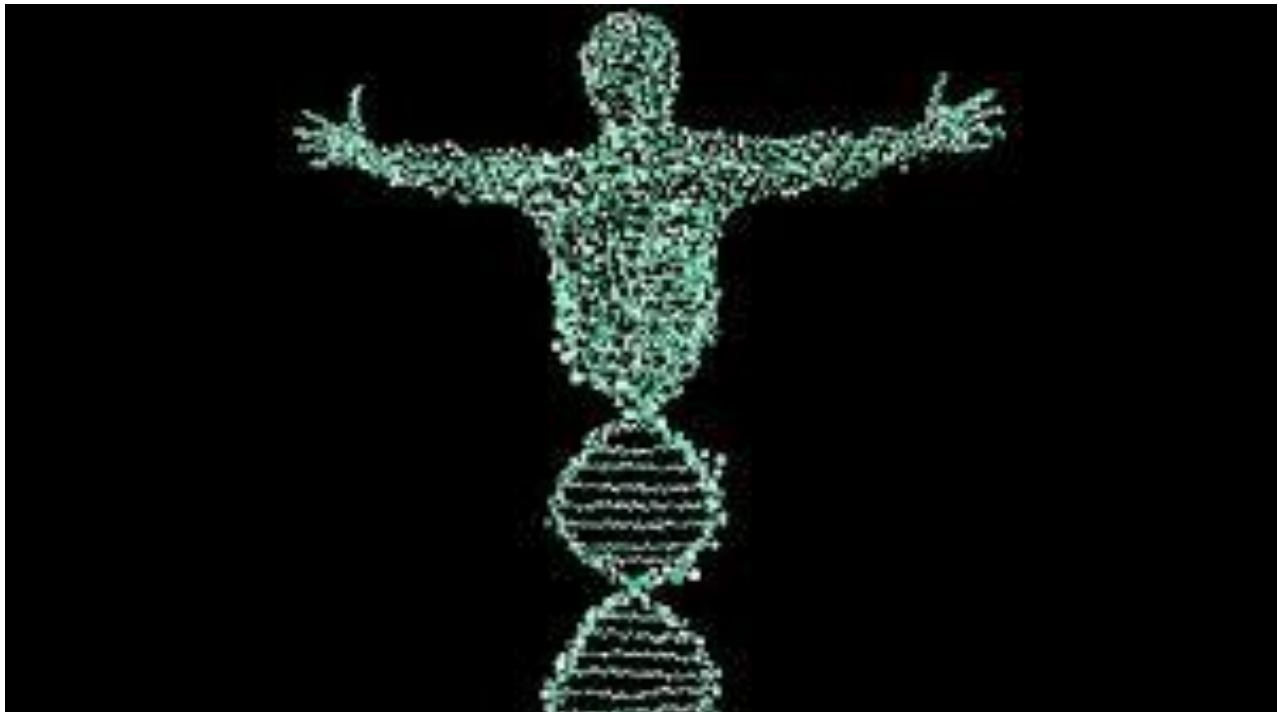
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Ultimately, questions still abound about humans' origins. Henn wants to add more DNA from other African regions to the models to see if that changes their results. She also hopes to use the data to make predictions about the fossil record, such as what features would be found in human fossils from a particular area.

7. Ancient viral DNA in human genome protects against infections: Research



According to new research, viral DNA embedded in human genomes from ancient infections acts as antivirals, protecting human cells from certain modern viruses.

Previous research has shown that endogenous retroviruses, fragments of ancient viral DNA found in the genomes of mice, chickens, cats, and sheep, provide immunity against modern viruses that originate outside the body by preventing them from entering host cells. Despite the fact that this research was done on human cells in culture, it shows that endogenous retroviruses have an antiviral effect on humans.

The study is significant because it could discover a pool of natural antiviral proteins that could lead to treatments without autoimmune side effects. The research suggests the existence of a genome defence system that has yet to be identified but could be quite extensive.

"The results show that in the human genome, we have a reservoir of proteins that have the potential to block a broad range of viruses," said Cedric Feschotte, professor of molecular biology and genetics in the College of Agriculture and Life Sciences. John Frank, PhD. '20, a former graduate student in Feschotte's lab and now a postdoctoral researcher at Yale University is the study's first author.

Endogenous retroviruses make up about 8 per cent of the human genome, which is more than four times the amount of DNA that makes up the genes that code for proteins. Retroviruses enter a host cell and introduce their RNA, which is converted to DNA and integrated into the host's genome. The cell then replicates the virus in accordance with the genetic instructions.

To replicate itself, the virus hijacks the cell's transcriptional machinery. Retroviruses typically infect cells that do not pass from generation to generation, but some infect germ cells, such as an egg or sperm, allowing retroviral DNA to pass from parent to offspring and eventually become permanent fixtures in the host genome.

To enter a cell, a viral envelope protein binds to a receptor on the cell's

surface, similar to a key in a lock. For some viruses, such as SARS-CoV-2, the envelope serves as a spike protein.

Frank, Feschotte, and colleagues used computational genomics to scan the human genome and catalogue all potential retroviral envelope protein-coding sequences that might still have receptor-binding activity. They then performed additional tests to determine which of these genes were active, i.e. expressing retroviral envelope gene products in specific human cell types.

"We found clear evidence of expression," Feschotte said, "and many of them are expressed in the early embryo and in germ cells, and a subset is expressed in immune cells upon infection."

8. Paleo-genomics

2022 Nobel Prize in Physiology or Medicine to **Svante Pääbo** for his discoveries concerning the **genomes of extinct hominins** and human evolution. Pääbo's seminal research gave rise to an entirely new scientific discipline; *paleogenomics*,

Paleogenomics, is the science of reconstructing and analyzing the genomes of organisms that are not alive in the present day. Paleogenomic analyses genomes by extracting their **Ancient DNA (aDNA)**.

Ancient DNA (aDNA) is the degraded genetic material from deceased organisms that is preserved either in the remains of these organisms or in the environment.

Paleogenomics and its relevance

□ Pääbo's discoveries have established a unique resource, which is utilized extensively by the scientific community to better understand **human evolution and migration**.

□ During the expansion of *Homo sapiens* outside Africa and their migration east, they not only encountered and **interbred** with **Neanderthals**, but also with **Denisovans**

- New powerful methods for sequence analysis indicate that **archaic hominins may also have mixed** with *Homo sapiens* in Africa. However, no genomes from extinct hominins in Africa have yet been sequenced due to accelerated degradation of archaic DNA in tropical climates.
- We now able to understand that archaic gene sequences from our extinct relatives influence the physiology of present-day humans. One such example is the **Denisovan** version of the **gene EPAS1**, which confers an advantage for survival at high altitude and is common among present-day Tibetans. Other examples are **Neanderthal** genes that affect our **immune response to different types of infections**.

These discoveries have shed new light on the origins of human populations, their migratory history, and the extent of admixture between humans and ancient, now-extinct hominins, such as Neanderthals, and between modern human populations. However, ancient genomics is also of value for medical research, making it possible to reconstruct the history of human health over time, including past epidemics. This research allows increased understanding of the present-day links between genomic diversity and disease.

The Neanderthal Genome Project

In 1997, **Svante Pääbo**, then at the Ludwig Maximilian University in Munich, analyzed DNA from the mitochondria of a Neanderthal. This was the first time DNA from an extinct form of humans could be studied. In 2006, he initiated the

“Neanderthal Genome Project” at the Max Planck Institute for Evolutionary Anthropology in Leipzig with the ultimate goal to study the complete genome of Neanderthals.

The scientists initially focused on the DNA in the mitochondria which is small and particularly easy to retrieve. In 2008, they published the first fully decoded mitochondrial genome of a Neanderthal. The analysis showed that it fell outside the variation of mitochondrial genomes in humans living today. It therefore did not indicate that Neanderthals and modern humans would have mixed with each other.

This changed in 2010, when the team was able to publish a preliminary version of the complete Neanderthal genome. This showed that the Neanderthal genes had been passed on to people living outside whose genetic roots are outside Africa.

Another result of the project was the discovery of a previously unknown extinct human group, the Denisovans, based on a genome sequence determined from a small bone found at Denisova Cave in Southern Siberia. Denisovans were distant relatives in Asia to Neandertals and passed on genes to present-day people in Asia and Oceania.

In 2013, the researchers completed the project with the publication of a high-quality version of the genome of a 50,000-year-old Neanderthal. Never before had researchers analyzed the genome of an extinct life form in such high quality.

The Neanderthal and Denisovan genomes have allowed the history these extinct human forms and their interactions with each other and with modern humans to be elucidated. They have also made it possible to discover the medical and other consequences of genetic variants passed on by Neandertals and Denisovans to present-day people.

9. Stone Age discovery in Kenya fuels mystery of who made the earliest tools



Archaeologists in Kenya have dug up some of the oldest stone tools ever found, but who used them is a mystery. In the past, scientists assumed that

our direct ancestors were the only toolmakers. But two big fossil teeth found along with the tools at the Kenyan site belong to an extinct human cousin known as **Paranthropus**,

Using a combination of dating techniques, including the rate of decay of radioactive elements, reversals of Earth's magnetic field and the presence of certain fossil animals whose timing in the fossil record is well established, the research team was able to date the items recovered from **Nyayanga** to between 2.58 and 3 million years old. "This is one of the oldest if not the oldest example of Oldowan technology," Plummer said. "This shows the toolkit was more widely distributed at an earlier date than people realized, and that it was used to process a wide variety of plant and animal tissues.

The discovery of teeth from the muscular-jawed **Paranthropus** alongside these stone tools begs the question of whether it might have been that lineage rather than the Homo genus that was the architect of the earliest Oldowan stone tools, or perhaps even that multiple lineages were making these tools at roughly the same time.

Through analysis of the wear patterns on the stone tools and animal bones discovered at Nyayanga, Kenya, the team behind this latest discovery shows that these stone tools were used by early human ancestors to process a wide range of materials and foods, including plants, meat and even bone marrow

SOCIO – CULTURAL ANTHROPOLOGY

1. Ritual is a social technology as ancient as our species: Cargo Cult Rituals Reveal About Human Nature



In Melanesia, Indigenous communities developed elaborate rituals to bring themselves material wealth starting in the late 19th century. These practices reveal a profoundly important and universal social technology.

These remarkable religious movements became known outside of Melanesia as “cargo cults.” The term first appeared in print in an Australian news magazine in 1945 and was soon adopted by many anthropologists. Others in the field raised objections over the term, pointing to its Western-centric origin and pejorative connotations.

Ethnographers stressed that these movements were about much more than just material goods. They saw them as revitalization movements, acts of

resistance against colonial intervention and missionization. By the middle of the 20th century, Indigenous communities throughout the area had experienced more than a century of European and later Australian, Japanese, and U.S. colonial and military interventions. These intruders had taken control of their land and coaxed or forced them into slave labor.

Missionaries had also established a kind of moral police that punished those who practiced traditional customs not in accordance with Christianity. Within that context, ethnographers argued, cargo cults had emerged as a way for local leaders to consolidate their power, relieve social stress, and/or unite communities under a proto-nationalist ideology or a demand for political autonomy.

But the emergence of cargo cults also reveals something else: the universal human need for ritual. Examined from this perspective, the practices of Melanesians may begin to look more familiar to those of us living in other parts of the world.

EARLY ANTHROPOLOGISTS SAW RITUAL as a crude attempt to make sense of the world. They often disparagingly described Indigenous beliefs and practices as “prelogical,” like those of young children. The assumption was that one day these groups of people would “grow up” and shed their backward ideas. Ironically, however, in reporting on what they saw as “primitive” or exotic, anthropologists often unwittingly described the behaviors of people in their own societies – revealing some truths about human nature in general.

MELANESIAN CARGO CULTS FLARED up during times of crisis. When colonists started arriving in the area in the 17th century, Melanesians saw their ways of life upended. The invaders imposed changes that devalued their customs and norms, and colonists’ military strength left them feeling powerless to react. Faced with the pressures of modernization and capitalism, their traditional exchange systems, based on barter and gifting, now seemed obsolete. And while previously self-sufficient, they suddenly felt relative deprivation compared to the foreigners’ opulent lifestyles. It was against this backdrop that cargo cults emerged. And indeed, such

movements occurred more commonly in those areas that faced greater encroachment from the colonizers.

This reflects a broader pattern: People are more prone to turn to ritual in stressful contexts such as war, illness, or natural catastrophes.

Indeed, experiments show that ritual can be an effective coping mechanism. For example, in research conducted with Hindu women in Mauritius, my colleagues and I found that performing prayers at a temple helped the women reduce stress (both subjective and physiological) caused by contemplating natural disasters. Likewise, cargo cult rituals may have helped Melanesians cope with the uncertainty of their rapidly changing conditions.

They also served crucial social functions. By bringing Indigenous people together to enact them, these rituals forged a sense of common identity and helped create a collective conscience.

A belief in an ideology, either religious or secular, may serve similar functions by offering people hope and fostering shared identities. But rituals embody these social realities in ways that mere words or rhetoric cannot. While calls for reviving traditional beliefs and customs had been around for some time in

Melanesia, it was through the practice of rituals that cargo cults were able to spread. Marching, dancing, and singing in synchrony while displaying group symbols are all excellent ways of inducing the kind of visceral bonding that collective ceremonies are often so good at. After all, cargo cult rituals were directly copied from another cohesive unit: the U.S. Army.

To an outsider, the actions of Melanesians may seem naïve or misguided. But who among us has never participated in a ritual that would have seemed equally comical to an unfamiliar observer?

Ritual is a social technology as ancient as our species. While its forms may vary widely through time and space, its role in our lives remains virtually unchanged. Whether at a religious temple, a sports stadium, or a political rally, the coordinated, symbolic actions of the congregants,

rather than their abstract beliefs, help them assuage their anxieties and find belonging

2. Rapid ethnographies in the NHS

Traditional long-form ethnography on health and care services has proven essential to understanding the social and cultural aspects of illness and care provision. Ethnography has also been described as a route to understanding the professional, organisational and cultural aspects of context, which can ultimately reveal the 'what and how' of improving patient care, as well as the barriers to doing so (Black et al., 2021; Leslie et al., 2014). Yet, in most cases, traditional long-form ethnography is a long-term investment of time and energy, with regular observation occurring over weeks, months and years (Wolcott, 2005).

Alternatively Rapid ethnographies allow for the production of rapid evidence while not losing the depth on social processes and context provided by ethnographic approaches.

What are rapid ethnographies?

Rapid ethnographies developed when researchers from various disciplines, but especially from within public health, began adapting traditional long-form ethnography to address their research needs and inform decision-making (Wall, 2014). The work they were doing was described as 'sociological ethnography in applied research' or 'ethnographically-informed rapid research'.

But quickly new terminology arose to describe the approaches including examples such as: 'rapid ethnographic assessment', 'participatory rural appraisal', and 'rapid assessment procedures'. These approaches often relied on inexperienced teams without backgrounds in disease-based research skills or qualitative research and included people from the cultural group of interest.

What are the criticisms of rapid ethnographies?

The benefits of rapid ethnographies, in brief, include their possible application to a variety of settings, their applied and practical nature, their increased affordability relative to long-term fieldwork because of their short duration (often up to six months), and their ability to make research findings available to practice and policy in a more timely way than long-form ethnographic approaches (Vindrola-Padros, 2020).

There are also many challenges to carrying out rapid ethnographies: one set linked to their relatively short durations, the other linked to their use of teams (Vindrola-Padros, 2020). Regarding duration, while there are no agreed standards, many anthropologists argue that ethnographic research takes time. Time is needed to build trust and relationships with participants and obtain greater insight into the lives of their participants and their own predispositions. This allows for detailed accounting surrounding both the emic (insider view) and the etic (outsider view) perspectives and therefore acknowledges the existence of multiple realities, an essential feature of an ethnography.

A short duration may make it challenging for researchers to capture changes over time, find representative samples, be serendipitous in the field, or check against reactivity (e.g., the Hawthorne effect, in which research participants are assumed to alter their behaviour in response to being observed). Furthermore, short fieldwork durations may make it challenging to understand all relevant sociocultural factors at stake or document conflicts and contradictions in findings. It may also be challenging on short timelines to use Geertz's technique of 'thick description' and critically reflect on findings; undertake member checking; explore additional topics with participants; and transform the data into socio-culturally acceptable solutions.

Another set of challenges relates to the use of teams in rapid ethnographic research. While teamwork is widely used in health services research, scholars who prefer lone (often traditional long-form) ethnographies suggest that having multiple team members might influence the reliability of the data. This is because researchers may have different levels of understanding of the topic and may collect and analyse data in different

ways. Team working additionally requires recruitment, skills training or alignment, team-building activities and clear delineation of members' roles – which can be difficult to arrange under time pressures.

Proponents of rapid ethnographies and team-based research also argue that multidisciplinary teams bring different expertise and perspectives to a research project, leading to more comprehensive interpretations of findings. Additionally, several strategies can encourage standardisation of data collection and analysis within teams, including: (i) the use of standardised data collection tools; (ii) team training and discussions; (iii) shared processes of data collection; (iv) cross-checking during team meetings; and (v) designating a member of the team to act as a cross-checker across collected data.

Moreover, within teams it is possible to minimise potential biases through 'team reflexivity' whereby team members evaluate their positionality during fieldwork, discuss potential biases and ethical issues and reach consensus on how to move forward. Team-based reflexivity has been said to improve teamwork and contribute to the analysis of positionality in the fieldsite, a known challenge in rapid study timeframes.

Example

Bradshaw and colleagues (2022) aimed to explore the personal and social experiences of people on palliative care participating in hospice-based Tai Chi (including its impact in mitigating experiences of social death). They carried out their fieldwork in six months at one site using observation and formal and informal interviews. They used ethnographic creative non-fictions to analyse data and present the lived experiences of illness in palliative and hospice care populations. While previous research is available on the physical and psychological health benefits of Tai Chi, this study illustrated its social and relational value as a non-pharmacological intervention that complements holistic care aims of palliative care.

PAPER - 2

INDIAN & TRIBAL ANTHROPOLOGY

1. Sickle-cell disease among Tribal People



- Tribal Affairs Minister Arjun Munda on Tuesday said there is a lot of doubt among the targeted tribal population as to why the government is testing their blood.
- On the occasion of World Sickle Cell Day, Union Minister for Tribal Affairs Shri Arjun Munda conducted a workshop at the National Institute of Tribal Research in New Delhi to raise awareness about the sickle-cell disease.

Sickle-cell Disease:-

- It is a genetic disorder.
 - It is mostly found in the tribal population of India.
 - It is an inherited disease.
 - The blood cell which carries oxygen was affected by this disorder.
 - This affects the shape of the blood cell.
 - In this disorder the blood cells which are affected are shaped like sickled.
 - The cells also become sticky and rigid which causes a block of blood flow.
- **Treatment:-** The treatment of this disease relieves and prevents pain but there is no cure for most people who carry this disease.
 - **Symptoms:-** The symptoms are showing usually at 6 months but vary person to person. Symptoms include
 -
 - Swelling of hands and feet.
 - Frequent infections.
 - Delayed growth or puberty.
 - Vision problems

Emergency symptoms

- One-sided paralysis or weakness in the face, arms or legs
- Confusion
- Difficulty walking or talking
- Sudden vision changes
- Unexplained numbness
- Severe headache

Diagnosis:- To determine which type of sickle-cell anaemia we can find by genetic testing.

- In the case of sickle-cell anaemia, genetic testing is really helpful.

• **Types of sickle-cell anaemia:-**

- There are different forms of sickle cell disease. They include
- Hb S beta-thalassemia
 - All of these haemoglobin types cause a vaso-occlusive crisis. HbSS is the most common.

Sickle cell anaemia among Tribal Peoples:-

- Among Tribal Peoples of India sickle cell anaemia is widely spread.
- Among tribal populations Sickle cell disease (SCD) is generally milder than non-tribal groups with fewer episodes of painful crises, infections, acute chest syndrome and need for hospitalisation.
- On maternal and perinatal outcomes in tribal women with sickle cell disease there is not so much information available.
- Recently in Maharashtra, Gujarat, Odisha and Chattisgarh initiated newborn screening programmes for SCD. This helps to understand the natural history of SCD.
- In India parental diagnosis is acceptable by tribal families.
- The Indian Council of Medical Research and the National Rural Health Mission in different States are undertaking outreach programmes for better management and control of the disease.

- To control and manage the disease among tribals the Indian Council of Medical Research and the National Rural Health Mission in different States are undertaking different programmes.

2. STs trail non-STs in 81 health measures: 2021 study



A recent study in 'The Lancet Regional Health – Southeast Asia' has analyzed health, nutrition, and population trends among Scheduled Tribes (STs) in India from 2016 to 2021 using data from National Family Health Surveys.

What are the key findings of the study?

Scheduled Tribes(STs) Population: According to the 2011 Census, there are over 104 million STs spread across 705 recognised ethnic groups. They make up 8.6% of India's population.

Challenges faced by STs over non-STs: In 2021, the non-ST population outperformed the ST population in 81 out of 129 indicators. STs continued to face challenges, particularly concerning women's status and major

public health issues such as child malnutrition, anemia, insufficient vaccination coverage and disparities in fertility and mortality rates. For instance:

- **Child Mortality:** The child mortality rate for STs was alarmingly high, with 50 out of every 1,000 children not surviving to their fifth birthday.
- **Child Malnutrition:** Child malnutrition was a significant issue, with over 40% of ST children under five being stunted and underweight.
- **High Blood Pressure:** Between 2016 and 2021, there was a notable increase in high blood pressure levels among ST men and women aged 15–49, with increases of 7.5% and 8.9%, respectively.

Indicators in which STs outperformed non-STs: STs surpassed non-STs in indicators such as gender balance, gender balance at birth, use of family planning methods, consistent treatment during pregnancy and adherence to recommended breastfeeding practices.

- Moreover, STs showed a reduced occurrence of diabetes and hypertension compared to non-STs.

Improvements made by STs between 2016 to 2021: During this period, STs made progress in indicators such as:

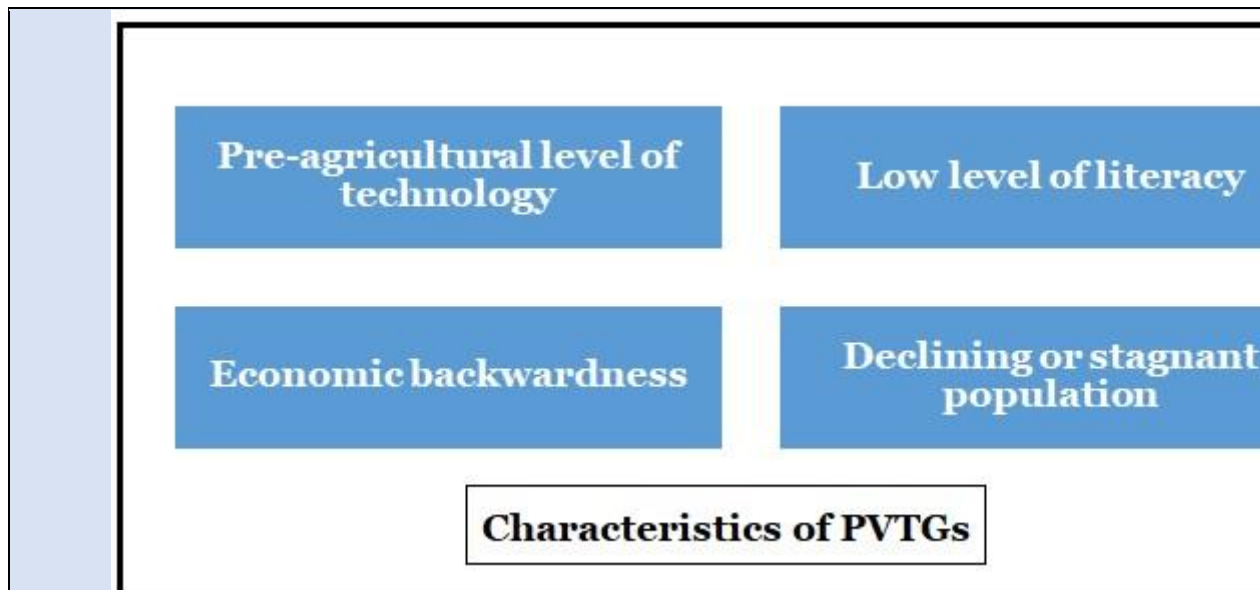
- **Sanitation Facilities:** Access to improved sanitation facilities improved significantly, with a 30.4 percentage point increase from 2015–2016 to 2019–2021.
- **Skilled Birth Attendance:** More births were attended by skilled health personnel, increasing by 13 percentage points.
- **Full Vaccination Coverage:** Coverage for full vaccination among children aged 12–23 months increased by 18.6 points.
- **Civil Birth Registration:** Civil registration of births among STs also rose from 76% in 2016 to 88% in 2021, indicating better documentation and recognition of births within the community.

3. Baiga Tribes gets Habitat Rights



Recently Baiga Particularly Vulnerable Tribal Group (PVTG) in Chhattisgarh become the second in the State to get habitat rights after Kamar PVTG. **Particularly Vulnerable Tribal Groups**

- There are 75 PVTGs out of 705 STs, spread over 18 states and 1 Union Territory (A&N Islands).



- **Dhebar commission-** In 1973, it created Primitive Tribal Groups (PTGs) as a separate category, who are less developed among the tribal groups.
- **PVTGs-** In 2006, the Government of India renamed the PTGs as Particularly Vulnerable Tribal Groups (PVTGs).
- **Features-** They are mostly homogenous, with a small population, relatively physically isolated, social institutes cast in a simple mould, absence of written language, relatively simple technology and a slower rate of change etc.,
- **Statistics-** Highest PVTGs is present in Odisha (13) followed by Andhra Pradesh (12).
- **Chhattisgarh-** It has 7 PVTGs namely Kamar, Baiga, Pahadi Korba, Abujmadiya, Birhor, Pando and Bhujia.
- **Scheme for Development of PVTGs-** It was established in 2008 to adopt a holistic approach to the socio-economic development of PVTGs.
- **Pradhan Mantri PVTGs Development Mission-** It was introduced in the Union Budget 2023-24 to improve the socio-economic status of PVTGs and bridging gaps in health, education, livelihoods, and basic infrastructure.

What are habitat rights?

According to FRA, habitat includes the area comprising the customary habitat and such other habitats in reserved forests and protected forests of primitive tribal groups and pre-agricultural communities and other forest dwelling Scheduled Tribes.

- **Habitat rights** - They can be defined as a bundle of rights comprising of the connections with the landscape: livelihood, social, and cultural practices embedded in the territory that forms their habitat.
- They are given to PVTGs under Section 3(1) (e) of **The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006**.
- The title may not be an ownership title in the nature of a private property owner, but consent and consultation of the gram sabha will be needed for any developmental activity.
- **Status-** Till now, the following PVTGs had been given the habitat rights.
 - Baigas & Bharias - Madhya Pradesh
 - Kamars & Baigas- Chhattisgarh

Community forest Resource rights can be extended to all types of Scheduled Tribes and Other Traditional Forest Dwellers (OTFDs).

Habitat rights is specially meant for the recognition of traditional rights of PVTG/Pre-agricultural Communities.

What is the significance of granting habitat rights?

- The recognition provides the community concerned rights over their
 - customary territory of habitation,
 - socio-cultural practices,
 - economic and livelihood means,
 - intellectual knowledge of biodiversity and ecology,
 - traditional knowledge of use of natural resources,
 - protection and conservation of their natural and cultural heritage
- Habitat rights safeguard and promote traditional livelihood and ecological knowledge passed down through generations.

- Grant of habitat rights provide an additional layer of legal protection.
- They also help converge different government schemes and initiatives from various departments to empower PVTG communities to develop their habitats.
- If any kind of development activity is hampering their habitat rights, the tribal group can take up the matter with the administration under the Forest Rights Act, and if not resolved, the matter can be taken to court.

Habitat rights under FRA, 2006

- Right to perform all customary religious or cultural ceremonies in the landscape related to their clans
- Right to protect and conserve the natural entities and sacred sites recognised under habitat rights.
- Right to protect and conserve places important for religious and spiritual purposes such as sacred groves; the right of passage to abodes of deities in forests, hill tops, origin of rivers and other remote parts of forests
- Right to practice traditional cultivation systems and other livelihood generating activities including seasonal resource use
- Habitat rights exclude any traditional right of hunting or trapping or extracting a part of the body of any species of wild animal

How does the government fix a habitat?

- **Technical assistance-** United Nations Development Program (UNDP) is providing technical assistance to the administration to implement the habitat rights law.
- **Guidelines-** The procedure is based on a detailed guideline given for habitat fixation purpose in 2014 by the Ministry of Tribal Affairs (MoTA).
- **State level departments-** Forest, Revenue, Tribal and Panchayati Raj are coordinating with the UNDP team to ascertain habitat.
- **Consultation-** As per MoTA guidelines, the traditional tribal leaders of the tribe are consulted about the extent of their culture, traditions, occupation.

- **Habitat declaration-** The consultation with the traditional tribal leaders is verified by the government and then a habitat is declared.

4. India's ST communities



Despite persistent demands by Adivasi organisations, 59% of India's STs remain outside the purview of Article 244.

Status of Scheduled Tribes (ST) in India

- India has 705 ST communities in 26 States and 6 Union Territories making up 8.6% of the country's population.
- **Highest number** - As per Census 2011,
 - Madhya Pradesh- 14.7%
 - Maharashtra- 10.1%
- **No STs** - Punjab, Chandigarh, Haryana, NCT Delhi, Puducherry
- **PVTGs-** There are 75 PVTGs out of 705 STs, spread over 18 states and 1 Union Territory (A&N Islands)
- **Characteristics of PVTGs-** PVTGs have

- Declining or stagnant population
- Low level of literacy
- Pre-agricultural level of technology
- Economically backward

Generally inhabit remote localities having poor infrastructure and administrative support

What is the place for ST communities in India?

- **Scheduled Areas-** It cover 11.3% of India's land area, and have been notified in 10 States - Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, and Himachal Pradesh.
- However, 59% of India's STs remain outside the purview of Article 244.
- In 2015, Kerala proposed to notify certain scheduled areas but it awaits the Indian government's approval.
- **Denial of rights-** They are denied rights under the laws such as the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and the Biological Diversity Act 2002.
- **Bhuria Committee-** Constituted in 1995 to look into the extension of Panchayat Raj to Scheduled Areas, it recommended the inclusion of these villages but this is yet to be done.
- **STs as minority-** The absence of viable ST-majority administrative units has been used to demand the denotification of parts of Scheduled Areas where STs are now a minority due to the influx of non-tribal individuals.

How the Scheduled area is governed?

The President of India notifies India's Scheduled Areas.

- **Role of President-** The Fifth Schedule confers powers exclusively on the President to declare any area to be a Scheduled Area.

- In 2006, the Supreme Court held that the identification of Scheduled Areas is an executive function, therefore it doesn't possess the expertise to scrutinise the empirical basis of the same.
- **Tribal advisory council-** States with Scheduled Areas need to constitute a Tribal Advisory Council with up to 20 ST members to advise the Governor on matters regarding ST welfare.
- The Governor will then submit a report every year to the President regarding the administration of Scheduled Areas.
- **Role of Centre-** It can give directions to the State regarding the administration of Scheduled Areas.
- **Power of Governor-** The Governor can repeal or amend any law enacted by Parliament and the State Legislative Assembly in its application to the Scheduled Area of that State.
- The Governor can also make regulations for a Scheduled Area, especially to prohibit or restrict the transfer of tribal land by or among members of the STs.
- **The Panchayat Extension to Scheduled Areas (PESA) Act, 1996** - It was enacted to remove the bottlenecks of the authority that empowered the elected panchayat bodies.
- It states that the Gram Sabhas exercises substantial authority through direct democracy, and stated that structures at the higher levels do not assume the powers and authority of the gram sabha.

How are scheduled tribes identified?

Neither the Constitution nor any law provides any criteria to identify Scheduled Areas.

- **Dhebar Commission report 1961-** It provided the guiding norms to identify Scheduled Areas
- No law prescribes the minimum percentage of STs in such an area nor a cut-off date for its identification.
- **Scheduled Areas and Scheduled Tribes Commission 2002-** It had recommended that all revenue villages with 40% and more tribal population according to the 1951 census may be considered as Scheduled Area on merit.

- **Bhuria community**- It recognised a face-to-face community, a hamlet or a group of hamlets managing its own affairs to be the basic
- **PESA Act**- The Act defined a 'village' as a habitation or a hamlet comprising a community and managing its affairs in accordance with traditions and customs.
- All those whose names are included in the electoral rolls in such a village constituted the Gram Sabha.
- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act or FRA, 2006 adopted this definition.
- The PESA definition of a village expanded it beyond Scheduled Areas to forest fringes and forest villages as well.
- **FRA 2006** – It requires them to demarcate community forest resource.
- The traditional or customary boundary within revenue and forest lands (where applicable) would constitute the territorial jurisdiction of the village in the Scheduled Area.

What lies ahead?

- All habitations outside Scheduled Areas in all States and Union Territories where STs are the largest social group will need to be notified as Scheduled Areas irrespective of their contiguity.
- The geographical limit of these villages will need to extend to the community forest resource area on forest land under FRA 2006, and to the customary boundary within revenue lands made possible through suitable amendments to the relevant State laws.
- The geographical limits of the revenue village, panchayat, taluka, and district will need to be redrawn so that these are fully Scheduled Areas.

5. Habitat rights for Baiga tribals in Chhatisgarh



The Baiga Particularly Vulnerable Tribal Group (PVTG) recently became the **second group** to get **habitat rights in Chhatisgarh**, after the Kamar PVTG.

Habitat Rights

- **Habitat rights** recognition grants **specific rights** to the concerned **community** over their **customary habitation territory**.
- **Legal Framework** was provided under **Section 3(1) (e)** of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, also known as the **Forest Rights Act (FRA)**.
- **Section 2(h) of FRA** defines "**habitat**" to encompass customary habitats, reserved forests, protected forests of **primitive tribal groups, pre-agricultural communities**, and other forest dwelling Scheduled Tribes.

- It was notified by a directive under the **Ministry of Tribal Affairs (MoTA)** to **use these rights** for habitation, livelihood, social, economic, spiritual, sacred, religious, and other purposes **related to PVTGs**.
- **Four state-level departments** (Forest, Revenue, Tribal, and Panchayati Raj) collaborated with the **United Nations Development Programme (UNDP)** to define what constitutes a habitat after consulting traditional tribal leaders about culture, traditions, and occupation of tribes.
- Some of the **rights include**:
 - Control and use of **socio-cultural** practices.
 - Economic and **livelihood** activities.
 - **Intellectual knowledge** of biodiversity and ecology.
 - **Traditional knowledge** of using natural resources.
 - Protection and conservation of **natural and cultural heritage**.

Significance of Habitat Rights

- It safeguards **traditional livelihood and ecological knowledge** passed through generations.
- This would facilitate **coordination of government schemes** and initiatives from different departments to empower PVTG communities in developing their habitats.
- It would **stop or regulate activities** like mining or developmental activities harming the habitat and livelihoods of PVTGs.
- To promote a **sense of identity** and ownership and improve **participatory area development** through governmental support.
- **Only three PVTGs** including **Bhuria** (Madhya Pradesh), **Kamar**, and **Baiga** (Chhattisgarh) have been granted habitat rights.

Particularly Vulnerable Tribal Group (PVTG):

- **Criteria for identification** of PVTGs include:
 - Pre-agricultural level of technology
 - Low level of literacy

- Economic backwardness
- A declining or stagnant population.
- PVTGs have **low health indices** and largely reside in **isolated, remote, and difficult areas** in small and scattered hamlets/habitats.
- **75 tribal communities across 18 states and one Union Territory** have been recognized by the government as PVTGs based on the recommendations of **Dhebar Commission (1960-61)**.
- A legal protection and recognition for communities to safeguard their customary territories and culture is provided by laws including **Forest Conservation Act (1980), Land Acquisition Act (2013), and SC/ST Prevention of Atrocities Act (1989)**.
- The consent and consultation of the **Gram Sabha** are required for any developmental activity within the habitat, ensuring **participation of PVTGs in decisions** affecting their land and resources.
- If a **developmental activity** hampers the habitat or livelihoods of PVTGs, it can be **resolved** under the Forest Rights Act, including an appeal to a court.
- MoTA started a scheme in 2019, for their **protection and improvement** in terms of **social indicators** like livelihood, health, nutrition and education to decrease their vulnerability.
- **Section 3(1)(e)** of Forest Rights Act, specifically **mandates the recognition of habitat rights** for PVTGs.

What are Baiga tribes:

- The word '**Baiga**' originated from **Hindi word Vaidya** meaning **healer or Doctor**, so it possesses knowledge of biodiversity, with **oral traditions** passed through generations.
- They live in **intimacy with elements of nature**, and livelihood is connected to forest ecology, nomadic hunter-gatherers, shifting agriculture (**bevar farming**), and skilled medicinal practices.
- People live in **inaccessible hilly and forest areas** along with **Gonds and Bhumia tribes**, in **houses made of clay**, thatch (grass), and walls painted with **yellow or white soil**.
- **40.6% of the tribe is literate** including 50.4% men and 30.8% women (2011 census).

- They are considered as **inventors of folk Karma naacha** (dance), one of the most popular **dance forms** of Chattisgarh.
- This community has a **population of 88,317 people** residing in Rajnandgaon, Kawardha, Mungeli, Gaurela-Pendra-Marwahi, etc districts in **Chhattisgarh** and adjacent districts of **Madhya Pradesh**.

6. Tribes of India: No home for the Nicobarese



Over the past 17 years, and most recently in 2022, the hunter-gatherers, fisherfolk and farmers of a Nicobarese tribe inhabiting a rainforest-draped island of the Andaman and Nicobar archipelago for about 50,000 years have pleaded with the Union government to return them to the ancestral land they lived in before the 2004 tsunami.

But with a Rs 72,000 crore plan to build a giant port, an international airport, a power plant and tourism facilities – by cutting down about a million trees in 130 sq km of rainforest – the government has erected a wall of silence against their requests to return home. The official reply to our RTI query: ‘No information’.

Great Nicobar is the southernmost tip of India and lies less than 200 km north of the Indonesian island of Sumatra. It is hilly and covered with lush rainforests, sustained by around 3,500 mm of annual rainfall. Mangroves line its coast.

Two tribes of South-East Asian descent are indigenous to the island: the Nicobarese, who mostly live along the island's south and west coast, and the Shompen, who inhabit the interior of the island's lush forests. Their quiet existence was changed forever when a great tsunami came along in 2004. About 20 of the Nicobar islands were the first to be hit, out of the 600-odd in the Andaman and Nicobar archipelago.

They are located in the Ring of Fire – a seismically active region of undersea volcanoes that experiences several earthquakes and geological ripples throughout the year. In their coastal villages, the Nicobarese suffered the most devastating impacts of the cyclone. Of the 250 who lived along the island's west coast, only nine survived.

There were other Nicobarese survivors who lived on higher ground. The Indian government relocated them to what were meant to be temporary shelters in Campbell Bay on the island's eastern coast. Ever since they were first resettled in 2005, they have asked to go back to their ancestral lands along the southern and western coast of Great Nicobar.

Over 17 years, the Nicobarese repeated that request, but the government of the islands, a Union territory directly administered by New Delhi through a lieutenant governor, has ignored those pleas despite, alleged the Nicobarese, promises to the contrary.

In March 2021, it became apparent that there was little likelihood the Nicobarese were ever going home: that was when the Union government's think-tank, the NITI Aayog, unveiled a Rs 72,000 crore plan – first conceived in the 1970s – to transform the southern half of Great Nicobar over 30 years into an “alternative to Hong Kong”, as Sanat Kaul, a former chief secretary of the islands and author of the book, *Andaman and Nicobar Islands: India's Untapped Strategic Assets*, described the plan.

The government plans then to wipe out – or ‘divert’, in official parlance – 130 sq km of the island's rainforests to build a seaport, an international airport, a power plant, and town and tourism facilities on ‘uninhabited’ land, according to a ‘feasibility study’ prepared for the NITI Aayog in March 2021 by an American multinational consulting firm called AECOM.

The government hopes that the port being strategically located near one of the world's busiest shipping lanes, the Malacca Strait, will feed off it. The project,

which will occupy a third of the island, ignores not just the ancestral claims of the Nicobarese and their pleas to go back home, but some of the Shompen as well, who continue to live in the rainforest staring at an uncertain future.

The plan for them, if any, has not been made public. “Four Shompen settlements, along with their southern hunting and foraging grounds, will be devastated by the project,” Survival International, a 54-year-old global advocacy group has said.

“Their sacred river system will also be ruined. This will in turn destroy their pandanus trees, one of their most important sources of food.” “It is impossible to imagine that the Shompen will be able to survive this overwhelming and catastrophic transformation of their island,” said Survival International.

Apathy, void promises, inaction

In August 2022, Barnabas Manju, 45, chairman of the tribal council of the Great Nicobar and Little Nicobar Islands, wrote to lieutenant governor D.K. Joshi (with copies to the President of India, the prime minister and the home minister, among others) requesting a return to their original homes – that officials have promised frequently over the years since the tsunami, he said.

“Where we are living now is not a permanent settlement,” Manju told Article 14 in Hindi and some English. “It’s not part of our identity.” The land, he said, was what was linked to that identity. In his letter to the government, Manju complained that the Nicobarese felt pressured to adopt clothes, a diet and an ‘outlook’ that he said were ‘alien to us’.

They were ‘unable to perform various rites, rituals and festivals’, and felt ‘exposed, insecure and indoctrinated’. The Nicobarese largely practise Christianity mixed with animism and a variety of beliefs tied to ancient traditions. For example, almost all of them keep figurines called kareus in their homes to scare away ghosts and use the services of shamans.

Manish Chandi, a social ecologist with two decades of experience on the island, said “settlers and mainlanders who do not have any ancestral connection to the islands and the lands” of the Nicobarese largely do not understand how the tribe regard ancestral heritage and cosmological phenomenon as being responsible for their well-being.

Reduced to daily wage labourers

The detachment from their land has also adversely transformed the livelihood of the tribe. Before the tsunami, the Nicobarese grew areca and coconut plantations, reared poultry and pigs, fished and hunted. But in Campbell Bay, Manju said, the government has not given them land for plantations.

‘We work as labourers in the construction sector,’ said Manju, their situation echoing a fate that has been repeated with tribal communities across India. Against their wishes and disregarding their wishes to return to their ancestral lands, Manju said in his letter that the government built shelters at settlements called Rajiv Nagar and New Chingen in Campbell Bay area.

In 2010, the government constructed more permanent shelters than the tin-roofed ones the community was forced to live in since the tsunami. These ‘permanent shelters’ built with iron girders and wooden planks, are sometimes on stilts.

Approximately 500 Nicobarese – almost the total number of the Nicobarese on the island – live in these homes consisting of two bedrooms, a small kitchen and a bathroom, closely packed together. “The post-tsunami shelters at Rajiv Nagar and elsewhere cater to nuclear families, whereas the original Nicobarese homes catered to joint families,” said Chandi.

“The transformation afforded by the post-tsunami governmental intervention illustrates the poor understanding of even basic tenets of the islanders social ecology and livelihood requirements.”

‘We have struggled with inadequate forms of habitations and livelihoods that we do not desire, are unaccustomed to, and do not want for the future of our children or subsequent generations,’ wrote Manju in his letter to the government. ‘We have repeatedly requested assistance from the Andaman administration to shift our community back to our pre-tsunami villages, but our requests have only been met with apathy, void promises and inaction for 16 years.’

A copy of the letter was also sent to local officials, such as the deputy commissioner in Nicobar, the secretary at the department of tribal welfare in the Andaman and Nicobar administration and the Union tribal affairs and environment ministries. None of the officials have responded to the letter.

On 23 August, Article 14 sought comment from lieutenant governor Joshi and his secretary, Union tribal affairs minister Arjun Munda and his secretary, and two NITI Aayog officials (vice chairman Suman Bery and director Urvashi Prasad).

We sent a follow-up query on 28 August, but there was no response. We will update this story if we get a response.

'No information' on resettlement

This reporter filed an RTI (right to information) query with the Union ministry of tribal affairs asking whether it was aware of the request by the local tribal council for resettlement and, if yes, how those demands would be met. In response, the ministry said in May 2023 that it had 'no information'.

The reporter, the ministry said, should seek information from the island authorities, who, as we said, ignored all queries. This wall of silence continues even as the government's Rs 72,000 -crore mega project gains steam in the southern half of Great Nicobar, despite official obfuscation of the facts of the land takeover. The government claims that the trans shipment terminal, for example, is on 'uninhabited' land, according to the pre-feasibility report prepared to obtain environmental clearance.

But it is clearly part of the ancestral land of the Nicobarese and where they lived for centuries until the tsunami struck and where the Shompen communities continue to live. The area marked for the proposed international port overlaps with two Shompen forest settlements called Kirasis and Kurchinom.

The Kirasis settlement comprises three families and their relatives. An uncertain number are spread out in Kurchinom. The proposed sites for tourist resorts along the west coast in the NITI Aayog plan are next to two more Shompen settlements of about 10 families. The Shompen are illiterate by modern standards, said experts, but they are schooled in the ways of the forest and the land, and are almost self-sufficient.

They have had little contact with the world outside the rainforest. "When the development plan [proposed by the NITI Aayog] takes place and reaches these settlements, it will push the people further north and into internal conflict with other Shompen communities," said Chandi. Currently, each Shompen community and habitation has their own foraging area and forest plot, with little overlap.

Small overlaps are tolerated, but it is uncertain what might happen if and when entire habitations are forced to relocate. The Nicobarese allege that the government made false promises. "The officials who come to visit us only give assurances," said Manju. "Some of them also discourage us from going back to

our land, saying they will not be able to give us facilities [like roads, telecommunications, etc] if we go back.”

Nicobarese withdrew consent

In November 2022, the tribal council withdrew a no-objection certificate (NOC) it had provided in August 2022 for the use of 130 sq km of rainforest, 84 km of which was an officially designated tribal reserve, which means diversion of such lands for any purpose requires the consent of the tribal community.

The tribal council said that during a public hearing for the project in August 2022, the government did not make them aware that tribal reserve areas would no longer be regarded as such and would become part of the project. The letter alleged that the chairman, Manju, was ‘rushed’ to sign the NOC by officials present at the hearing ‘on the very first day and was denied any time for consultation with other community members’.

During these NOC discussions too, the letter alleged, officials gave ‘false assurances’ that they would assist the Nicobarese community in returning to their ancestral land. A 2021 environmental impact assessment report for the project makes no mention of the longstanding demand for relocation. During discussions about environmental clearance, an expert appraisal committee (EAC) claimed in 2022 that the local administration had agreed that the project would not disturb the Nicobarese and the Shompen or their habitations.

The EIA said that if habitat was lost, the Shompen would be provided ‘fair compensation’. This contention, said experts, raises two questions: does the expert committee expect that the project will displace the Shompen?

What about the Nicobarese and their demands to be resettled on lands that will now be swallowed by the project? Article 14 sent an email to Deepak Apte, chairman of the EAC, and Amardeep Raju, member secretary, asking if they were aware of the tribal council’s plea for resettlement and how it could impact the environmental clearance granted to the project.

We sent a follow-up email on 28 August, but there was no response. We will update this story if a response is received.

In a report titled ‘Monumental Folly’ released in 2021 by Kalpavriksh, an NGO working on environmental and social issues, author and member Pankaj Sekhsaria laid out a host of other serious issues with the project.

These include procedural irregularities, such as quick impact assessments spanning only three months, and a 'grave threat' to wildlife habitat, for the giant leatherback turtle in particular, which nests on beaches that the project will take over. The report also explains how the lives of the Nicobarese and the Shompen are set to be adversely impacted by the project.

'The Andaman and Nicobar Island system lies at a very fragile and vulnerable intersection of the geological, ecological and socio-cultural,' wrote Sekhsaria.

'The NITI Aayog's Great Nicobar plan is deeply ignorant of these multiple realities even as it aggressively pursues a completely illusory agenda of economic growth and development. To go ahead with it will be to perpetuate a monumental folly, the price paid for which cannot even be comprehended.'

"There is a huge scope for development on the island," Chandi said. "But not like this... not at the cost of displacement of tribals. This is the most damaging proposition."

7. Arunachal: Chakma and Hajong Tribes Protest to Get Rid of the 'Refugee' Tag



The refugee label on the Chakma and Hajong tribes traces back to when Bangladesh was East Pakistan, and the then Indian government had settled around 20,000 refugees of these tribes in Arunachal Pradesh.

Post July 2022, the Hajong and Chakma tribes of Arunachal Pradesh have been battling the disadvantages of not being permanent residents of the state. To people from these tribes across the country, landing a government job or getting admission to a Central University is impossible.

Rahul Chakma, a young lad in his early twenties, had to fight for permission from his boss to attend a protest in Jantar Mantar on January 8, 2023. The youth graduate from Dayam village in the Upper Subansiri district in Arunachal Pradesh works at a Hyundai showroom in Gurugram, earning around Rs 15,000 a month.

"I told my boss that it is not just a matter of some ordinary protest; it is a life and death situation for my community. It is for the future generations for whom survival will get difficult without our basic rights. Only then he allowed me to go."

The refugee label on the Chakma and Hajong tribes traces back to when Bangladesh was East Pakistan, and the then Indian government had settled around 20,000 refugees of these tribes in Arunachal Pradesh. These communities were displaced by the Kaptai dam and resorted to asylum in India. Later, the tribes were given Temporary Residential Certificates as well. The Supreme Court in 1996 and 2015 gave orders with a timeline to the Central and state Governments to grant them citizenship.

However, the communities have faced discrimination from the other indigenous tribes of the north-east states and have also been ostracised by the political parties.

"We are like a golden egg to the parties," said a youth from the Hajong community." The parties discriminate against us to lure the votes of the majority tribes. Whoever would talk ill about us is surely going to come into power," he added.

During his conversation with *NewsClick*, Rahul is reminded of his graduation days in Guwahati, where he studied B.com. He narrates, "There was always a hesitancy in accepting that I belong to the Chakma tribe. I could never add that; if I did or if the people I used to hang out with find about my tribe, I would be labelled as a refugee even though I was born in this very country. All my friends in my college days were only from my tribe."

Not just the indigenous people but the Chakma and Hajong residents allege direct discrimination from the state. There is not a single government college in their area, while conditions of the primary schools are dilapidating with just one teacher in many schools, teaching up till class 10th, allege the residents.

Arunachal Pradesh's government said on July 30, 2022, that a five-member committee, including two representatives from the AAPSU, would be formed to check the RPCs (Resident Proof Certificates). The group would be chaired by the secretary for food and civil supplies. The Arunachal Pradesh government stopped issuing new RPCs in Changlang district on July 31, 2022, and has since completely cancelled all RPCs.

This has resulted in revolts from the tribes. The disallowance does not just stop mere residential proof but obstructs these tribes from accessing education from government-aided universities and has even suppressed them economically. During the same time the government took this decision to give a Permanent Residence Certificate, Rahul had cleared his exams for the paramilitary forces. He wanted to join the Assam Rifles and serve the country. However, after clearing his written and physical exams, he failed to clear the document verification as he needed residential proof.

"I talk to my friends in the southern states of Karnataka and Tamil Nadu. All of us from our community come from financially marginalised backgrounds. We are solely dependent on agriculture. We wanted to uplift the condition of our

families, but we are being stopped from doing so. My friends in the southern states work in factories and motor industries despite being highly qualified," iterated Rahul. The protests currently happened only at Jantar Mantar in Delhi, but in the coming months, if the government fails to provide residential proof to these tribes, the youth say they will protest in every state.

Around 50-60 people from Arunachal Pradesh had come to protest at Delhi's Jantar Mantar, and in total, some 500 people registered at the protest in the National Capital. Slogans of "Arunachal Government Down Down" could be seen. The leaders of APCSU (Arunachal Pradesh Chakma Students' Union) stressed how the youth were being forced to drop out of schools and colleges right after the 10th grade since wherever they went, they had to face issues regarding their residential proof.

While Chakmas are Buddhists, Hajongs are Hindus by faith. About 65,000 Chakmas and Hajongs permanently reside in Arunachal Pradesh in Northeast India.

"The Chakmas and Hajongs are neither illegal people, foreigners, nor refugees but bonafide Indian Citizens and permanent residents of Arunachal Pradesh. The Hon'ble Gauhati High Court vide Judgement dated 19.03.2013 in PIL No. 52 of 2010 has held that the Bengal Eastern Frontier Regulation (BEFR), 1873, or ILP, shall not apply to the Chakmas and Hajongs because they were permanently settled in Arunachal Pradesh by the competent authority. Hence, the decision to withdraw the residential proof certificate (RPC) and to issue a 'Temporary Settlement Certificate' (TSC) to them is illegal and illogical. 90-95% of Chakmas and Hajongs are citizens of India by birth under section 3(1)(a) of the Citizenship Act of 1955," stated Drishya Muni Chakma, President of the APCSU.

The communities strongly disagree with accepting the tag of a Temporary resident.

"We were born here. The ones who migrated from East Pakistan, almost all of them are dead now. Why are we labelled as refugees? We were born here, studied here, and want to serve the country. We have lived with this label for almost 60 years now. And now, if we settle for a temporary resident certificate, the refugee tag on us will stay for the next 60 years," says Priyanka, another youth from the Chakma community who has been living in Delhi for a couple of years now.

Rahul could not study post his graduation since he was not financially strong. Gave an exam for paramilitary forces and was also selected, but he was denied because of the residential proof. Hundreds like him were denied government jobs and admission to Central Universities.

"After the transportation cost, house rent, and daily expenses, I hardly manage to save anything to send back home. I do not see an escape," says Rahul.

Youth like Rahul have accepted their fate. They feel that the government will not do anything for them now, and they will have to survive somehow. However, their battle for a Permanent Resident Certificate is for the younger generations. People in the community are under a lot of rage and want to amplify the protests in the near future. As the northeast state moves closer towards the Assembly elections this year, so does the battle of the Chakma and Hajong tribes to get their basic human rights of being citizens.

About the Chakma tribes:

- The Chakma tribes are an **ethnic group** present in the **eastern-most** regions of the India and are also found in **Bangladesh** and **Myanmar**.
 - In **Myanmar**, **Chakma** people are known as **Daingnet**.
- They are found in Indian states of **Mizoram** (major), **Tripura** (major), **Arunachal Pradesh**, and **Assam**.
- They have originated from **South-East Asia** and are ethnically linked to **Tibeto-Burman groups** in Northeast India.
- They speak "**Chakma**" language an **Indo-Aryan language**, which is closely related to **Bengali**, **Tibeto-Chinese**, **Assamese** and **Arakan** language.
- They have their own **script** in **Burmese** alphabets, but they use **Bengali script** more.
- They mostly practice **Theravada Buddhism**, due to **19th-century** reforms and institutionalisation by **Queen Rani Kalindi**.
- They are headed by the **Chakma Raja**, whose status as a **tribal head** has been historically recognised by the **Government of British India** and the **Government of Bangladesh**.
- They are divided amongst 3 major groups like (i) **Anokia** (ii) **Tandugia** (iii) **Mangla**.

8. Kati Bihu: Significance, Rituals, and Celebrations in Assam



Prime Minister recently extended his wishes on the auspicious occasion of **Kati Bihu** to the people of **Assam**.

Kati Bihu: Also known as Kongali Bihu, it is celebrated on the first day of the Kati month in the Assamese calendar that falls in mid-October.

- The festival signifies the **transplanting of rice crops** and the commencement of the **new harvest season**.
- The name is derived from **empty granaries** during this period and **lamps or candles** are lit to combat darkness and hardships.

Rituals of Kati Bihu:

- It is a central lamp is placed near the **sacred Tulsi plant**, symbolising hope, reflection, atonement, and an **optimistic outlook for the future**.
- It is observed throughout the **state of Assam** when **bamboo pathways** are constructed to honour the ancestors.

Bihu Festivals in Assam:

- There are **three Bihu festivals** in Assam with each marking a **distinct phase in the farming cycle**.

- The other **Bihu** festivals include '**Bohag Bihu**' celebrated in the month of Baisakh (**April**), and '**Magh Bihu**' celebrated in the middle of **January**.

Bihu Dance:

- The **Bihu dance** is an **indigenous folk dance** related to the Bihu festival and an important part of Assamese culture.
- The **dancers perform in a circle** beginning with a slower tempo, which gradually gains momentum.
- **Musical instruments like** Drums, cymbals, hornpipes, harps and bamboo clappers are used.
- Though the dance is inspired by **agricultural operations**, the songs, and the graceful dancing, also reflect love and romance.
- The dance maintains **authenticity** and displays the **traditional Assamese handlooms** and handicrafts in their beauty and glory.
- The costume worn by the women consists of a **Gitigee (kind of headgear)**, **Agoo** (mekhala), and **Lagu Richa** (chaddar).