

Environmental Concerns Through Re-Reading Genomic Views and Mythical Creation of Man and the World

Rakesh Kumar* & Suresh Dahal**

*Ph.D. Research Scholar, Department of Tribal Studies
Central University of Jharkhand, Ranchi, Jharkhand, India.

**Ph.D. Research Scholar, Department of Anthropology University of Delhi,
New Delhi, India.

ABSTRACT

It is a common saying that God created the universe and our planet 'Earth' on which we live, along with the notion that God also created human beings. There are various written accounts of the mythical creation of man by God within mythological explanation in the form of a cultural system, which has been narrated in the form of folk tales, sagas, legends stories, and different types of myths; however, there is a piece of scientific shreds of evidence which contradict the idea that we came on this planet as human beings. According to genomic studies, human evolution went through various stages of development throughout the course of time and space, from single cells to the complex human body. The genesis of modern humans has always been a topic of debate and investigation. In the present paper, the researchers wanted to study the evolution of modern humans through two different perspectives i.e. genomic view and mythical creation of man and the world. The primary backdrop of the present paper was the dialogues surrounding the genomic and the Adivasi worldview of their evolution. This paper is primarily based on the comparative study of Adivasi people's view and genetic perspective on human evolution. The authors of this paper have focused on the Adivasis's deep connection to nature and their evolutionary history.

Keyword: Adivasi, Nature-Man-Spirit Complex, Ecology, Genetic Diversity, Mythical Evolution, Philosophy.

INTRODUCTION

The process of human evolution is indeed a fascinating journey that spans millions of years through various stages of development, from a single cell to the complex human body. Modern human beings, also called 'Homo sapiens', are the only survived species of genus 'Homo'. The Evolution of modern human beings and their evolutionary relationships with other hominins has been a matter of discourse and investigation amidst criticism from scientists, anthropologists, historians, and others. Various tribal (hereafter terms either 'tribal' or 'Adivasi' will be interchangeably used for 'tribes' below in the present article) and non-tribal mythological

stories, like folk tales, sagas, legends stories, and other mythical narrations talk about the origin and development of humans beings on earth in their own

Address for correspondence :

Rakesh Kumar, Ph.D. Research Scholar, Department of Tribal Studies,
Central University of Jharkhand, Ranchi, Jharkhand, India, Pin 835222.

E-Mail: rakeshkumar140494@gmail.com,

ORCID ID: <https://orcid.org/0000-0001-8220-6683>

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution Non Commercial Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: voiceforvoiceless2013@gmail.com

ACCESS THIS ARTICLE ONLINE

Quick Response Code:



Available online at :

thirdvoice.voiceforvoiceless.in

DOI:

<https://doi.org/10.5281/zenodo.10473017>

Article No - TVRV00044

Received	Reviewed	Accepted	Published
02-Aug.-2023	27-Sept.-2023	22-Oct.-2023	10-Nov.-2023

Volume	Issue	Nov.	ISSN
No. 5	No. 2	2023	2583-1852(P), 2584-0878(O)

How to cite this article: Kumar R., Dahal S., 2023. Environmental Concerns Through Re-Reading Genomic Views and Mythical Creation of Man and the World. *THE THIRD VOICE REALITY AND VISION*. Vol No-5, Issue No-2, Nov; Pp: 50-58

ways of interpretation. However, these culturally bound mythological stories differ from those of scientific points of view. We have always been curious to know about the origin of human beings, flora, and fauna living on this planet 'Earth' as well as the origin of life that has an interdependent relationship with other living organisms.

Alice Robert gave his statement in the forward of a book 'Evolution the Human Story' that "Religion and philosophy may provide one way of exploring these questions, but science leads us to look for evidence and answers in the world around us, and within us". This kind of statement always possesses an evolutionary viewpoint that can be studied in detail in order to know about our origin "as a species, in our own biological and ecological context" (Guerrero, 2011). Modern science can solve the mysteries of the evolutionary history of humans and life by searching for footprints of humans left millions of years ago.

Archeologists and Scientists both have provided historical and archaeological evidence of human evolution by studying fossil remains, viz., bone fragments, skeletons, and other human and animal remains from millions of years ago that were excavated from different parts of the world. These fossil remains share anatomical and behavioral similarities with humans, anthropoids, and other extinct primates. At the same time, the claim of scientists that modern humans shared close ancestry with other primates (either extinct or living) such as chimpanzees and gorillas appears to be true. Further, Anthropological studies also disclose the close relationship between apes (primates) and humans (*Homo sapiens*) in terms of physiological and morphological characteristics. There was dramatic changes took place in Earth's climate, from glacial (ice ages) to interglacial (warm periods). These climatic changes and their fluctuations led to the extinction of many species along with the origin and development of others. Despite these various climatic fluctuations, hominins survived by being adaptable and advanced in those processes. These continuous environmental fluctuations influenced many stages of human development, which can be seen even today in their structural development and behavioral aspects.

However, when it comes to the indigenous people's view, we may find a different story. People of different 'Adivasi' and 'indigenous' communities living in different geographical and ecological settings of the world have different stories of human evolution and

development. These stories, originally in their own languages, are associated with various myths and legends stories, which have been passed down as oral traditions from one generation to another around the world. These stories tell how their Supreme God created them. In addition, the mythological narratives of the 'Adivasi' and 'indigenous' people also include belief systems, customs, and traditions, socioeconomic and political systems, which underline the close relationship of their existence with nature 'ecology'. The stories of the evolution of man especially in tribal, and also in non-tribal communities, usually start with the Supreme God who created them to live on earth as the modern man.

The present article is an attempt to understand the evolutionary history of the people from different perspectives with a special focus on the 'Adivasi' people of India. The present paper is primarily based on secondary sources, and available literature (published books and updated scientific research articles) has been analyzed. Further, some selected works related to evolutionary theory, genomic studies, and the mythical evolution of Adivasi peoples have been also reviewed and analyzed in this paper. According to Darwin's evolutionary theory and the study of fossil remains obtained from archaeological excavations, there is a strong argument that the mythical origin of man is not supported by genomic studies. Underlining these key points, this research paper will, further, elaborate on human development and its interdependent relationships with nature.

GENOMIC VIEWS OF HUMAN EVOLUTION

Genomic studies are important in understanding the evolutionary history of humans. The modern humans (*Homo sapiens*) have a long history of evolution. *Homo sapiens* are only the surviving species of the 'genus *Homo*'. The topic of the evolution of modern human beings has been always debatable. Archeological and genetic data suggest that at some point of time, the world was a home of different species that belonged to the genus *Homo*. Fossil evidence also suggests that the modern human first evolved somewhere in those countries of East Africa around 2.5 million years ago evolving from the genus of apes 'Australopithecus', and scattered through East Africa to various parts of the world. Most of them settled in vast areas of Europe and Asia following different routes. A genomic study of ancient DNA revealed that Europe and Western Asia were once populated by *Homo Neanderthalensis* before the arrival of modern humans. Similarly, countries of

Eastern Asia were once habited by *Homo erectus*; likewise, the islands of Indonesia were inhabited by *Homo Solonensis*. When we study the chronological development of modern humans, we find that the genus *Homo* evolved into *Homo sapiens* to the present-day modern humans passing through various stages of evolution. Reviewing the timeline of human evolution, *Australopithecus* was preceded by *Homo erectus*, followed by *Homo Neanderthalensis*, and finally *Homo sapiens* (modern man).

During the 19th and 20th centuries, numerous ancient fossils were discovered from East and South Africa. These discoveries led to the formation of two different models of modern human evolution, viz., (1) the Out of Africa Hypothesis, and (2) the Multiregional Hypothesis. The model, Out of Africa, is the widely accepted model. It explains that modern human beings originally evolved in East Africa, and scattered throughout the world by replacing the ancient hominins living outside of Africa about 70,000 years ago. On the other hand, an alternate theory, called as multiregional model, proposes that modern humans evolved independently in various regions of the world over a long period of time. Based on the available and current genetic evidence, recent studies on Mitochondrial DNA (mtDNA)¹ revealed that there had been emigration processes from “African origin of modern humans around 2,00,000 years ago”, who were dispersed Out-of-Africa across the world; and this theory was established as ‘Out-of Africa’ theory (Vigilant et. al., 1991), which was supported by other genomic researches and their studies (Sylvester, Krishna, Rao, & Chandrasekar, 2020, p. 29). A DNA study has led to several significant evolutionary insights (Nielson, Akey, Jakobsson, Pritchard, Tishkoff, & Willerslev, 2017). According to genetic, archeological, and fossil data, it is believed that the distribution of modern human beings from the countries of Africa to the Mediterranean, and to the Arabian Peninsula took place around 1,20,000 to 90,000 years ago (Groucutt, et al., 2015).

The fossils found in Ethiopia date back to 1,50,000 – 1,90,000 years ago is the earliest evidence of modern humans (White, et al., 2003). Apart from Africa, fossil evidence of anatomically modern humans has also been discovered rest of the world. Through tracing the

dispersal of African origin, it became clear that Africa is the origin of the evolution of modern humans, from where they dispersed to different parts of the world about 2,00,000 years ago, and this fact is supported by genetic evidence. Further, a genomic study has shown that the DNA of peoples of European and Asian origin shared some similarities with the Neanderthal DNA; but these similarities are not found in the DNA of African people (Vigilant, Stoneking, Harpending, Hawkes, & Wilson, 1991). This implies that modern human beings evolved somewhere in Africa, and ventured out to another part of Europe and Asia.

People of India: India is renowned for its cultural and topographical diversity. As per the Census report (2011), it is home to 1.21 billion populations of which 8.6% of the total population constitutes the Adivasi communities (Ministry of Home Affairs, 2011). India possesses a diversity of geographical settings varying from dry plateaus, perennial forests, high Himalayas, fertile lands, and deserts. This geographical diversity provides the home to diverse populations of various ethnic groups that possess different unique flora and fauna. There are about 705 tribal communities, who are, constitutionally, documented as Scheduled Tribes (ST), and also referred as ‘Adivasi’ today. Based on ethnic and linguistic diversity, they speak four major languages; Austro-Asiatic (Mundari), Dravidian, Indo-Aryan, and Tibeto-Burman (Kulkarni-Joshi, 2019). A study by D. N. Majumdar on ‘Race & Culture in India’ (1944) disclosed the fact that little had been done on scientific study of races in those circumstances (Majumdar, 1944, p. X), but much of the studies have been done based on H. H. Risley’s works on ‘Tribes and Caste of Bengal’ (1892) in two volumes, and on Sir Herbert Risley’s works on ‘The People of India’ (1915) who conducted studies on races, castes, ethnic communities ‘Adivasis’ and ‘Indigenous people of India’ (Risley, 1892; Risley, 1915); but none of these had provided much information on their origin and development, as is known from the above recent research.

The origin of the indigenous or tribal people of India, as well as others, has constantly been a subject of distinguishable discourses among historians and anthropologists. Genetic studies have emphasized that the Indians shared the branches of haplogroup M,

¹ Genetic studies analyze “human complete mitochondrial DNA sequences to resolve phylogenies and antiquity of different lineages belonging to the major haplo groups L, N and M (East-Asian lineages).” Studies disclosed that there have been “absence of mtDNA sequence information of M lineages reported in India that exhibits highest diversity within the sub-continent, the present study was undertaken to provide a detailed analysis of this macro haplo group to precisely characterize and unravel the intricate phylogeny of the lineages and to establish the antiquity of M lineages in India” (Rajkumar, Banerjee, Gunturi, Trivedi, & Kashyap, 2005).

however, they are absent in western Eurasians, which suggest that peoples belonging to haplogroup M emigrated from East Africa to Asia by the wave of primary migrant of anatomically modern humans following the southern route, 60,000 years ago. The Indian subcontinent is considered a crucial geographical area for early human migration as it is located at the intersections corridors of Pacific west and east Eurasia and Africa (Cavalli-Sforza, Cavalli-Sforza, Menozzi, & Piazza, 1994; Tamang & Thangaraj, 2012). Recent genetic research discloses that populations inhabiting the Indian subcontinent in Asia hold wide diversity from both biological and cultural perspectives, where a strong difference even exists between the people of Adivasi and non-Adivasi. It has been found that about 60 percent of the total population connects with M out of four major maternal lineages L, M, N, and R, which are the specific branches of haplogroup that emerged from the African haplogroup L3 (Rajkumar, Banerjee, Gunturi, Trivedi, & Kashyap, 2005).

This is the most reasonable perspective that the waves of dispersal of human populations from one place to another went through the world to the Indian Subcontinent over the last thousands of centuries followed various migration routes, which could also be attributed to the ethnic diversity present in the Indian population. Over the decades, studies based on genetics through the haploid and diploid have enhanced the knowledge of the evolution of modern human beings and their dispersal from the African Subcontinent to South Asia through southern routes (Thangaraj, et al., 2006). Thus, using the available data of ancient and modern DNA, genetic studies have revealed the signs of early settlers, who migrated from out of Africa (Thangaraj, et al., 2005).

A study conducted among the caste population (ranked upper caste) from Southern India (Andhra Pradesh) highlighted that their genetic affinity is mostly similar to the East Europeans, while the lower caste shares the genomic affinity similar to Asians (Bamshad, et al., 2011). It has been hypothesized that the Tibeto-Burman linguistic tribal family shares their close genetic affinity with Southern China. Further, it has been hypothesized that some tribal peoples were already there in the southern part of the Indian Subcontinent before the arrival of Indo-European nomads. Genomic study conducted among different castes and tribal populations supported that Austro-Asiatic tribal people are the early settlers in India (Basu, et al., 2003; Sylvester, Krishna, Rao, & Chandrasekar, 2020).

ADIVASI WORLDVIEWS OF THEIR EVOLUTION

Adivasi or indigenous people's perspective on human evolution is very different from the genetic lens. In the present day, the way of life of the tribals, their philosophy, tradition, culture, customary law, and politics all have attracted the attention of scholars; however, little attention has been given in terms of their history of origin. Adivasi or indigenous people have been living for aeon ago from catastrophic to soothing conditions of nature 'ecology', where they learned various methods of economic activities as their earning livelihoods, viz. hunting, food gathering, collecting minor forest products to animal husbandry, and then farming. These all were gradually developed through ages. In due course of times, they progressed from primitive hunting-gathering stages to pastoralism, and then to settled agriculturists, and thereafter eventually lived in a community that evolved from 'hamlets to villages'.

More or less, all of these processes of earning a livelihood in those circumstances forced them to have firm faith in the nature of birth, fear, disease, and death. Actually, these are the things that made them unite to live in the community. Later, the community forced its people to regulate themselves according to their norms and traditional practices to survive, which were first introduced to protect the community and its people; and with time they also developed a harmonious coexistence with nature. Later all of these things converted into religious practices and customs an integral part of their lives that is going up to the present time.

All the above mentioned things were happening among them at one level; while at another level, birth, fear, disease and death, and growing conviction towards nature were taking the forms of many legends, folktales and mythologies. These legends, folktales or mythologies are replete with details of various stories that explain how humans originated. These stories also tell how the earth, forest, mountain or earth etc. originated (मुण्डा & मानीक, 2009 पृ. 12-20, 39-40, 51-80). And more or less these two things were probably going on simultaneously or later period of time. All these things led them to create a mythological worldview of 'animism' with the supreme God 'Singhbonga' i.e. 'monotheism' to secure the past and future along with securing all their economic activities. According to the

study done by Richard Levins in his research paper “Evolution in Communities Near Equilibrium”, the above mentioned processes have been disclosed, but in another perspective has been adopted to see, understand and express them, which we can see in his following quote:

“The structure and dynamics of ecological communities depend on the biological properties of the component species, each of which is evolving under selection pressures that depend on the circumstances of the species. These circumstances include the constellation of other species in the community. Therefore, selection on any given species necessarily affects, as well as depends on, the community as a whole, in ways that cannot be understood by looking at species in isolation”(Levins, 1975, p. 16).

Broadly speaking the myth plays an important role in every individual society in India; be it tribal society or non-tribal. The tribal communities of Jharkhand in India have a strong belief that their supreme god ‘Singhbonga’ along with other bongas, deities, diuri, ghosts and other supernatural forces reside in the ‘nature’ around their villages or homes. According to their beliefs, these natural habitats can be forests, mountains, rivers, ponds or leaves of trees. It is their firm belief that all these supernatural forces regulate and secure their lives in their traditional settlements or villages (मुण्डा & मानीक, 2009). Several tribal communities of Jharkhand refer different names to their supreme god ‘Singhbonga’, who according to them in their mythological view is not only the “originator of the universe”, but also the creator of human beings. That’s means they believe that they are children of the supreme god ‘Singhbonga’ God father ‘Sun’ and God mother ‘Earth’ (Chatterjee & Sharma, 2018, p. 50; Standing, 2017; Roy, 1921, pp. 155-157; . मुण्डा & मानीक, 2009).Based on the study of various sources mentioned above, it is strongly affirmed that various kinds of preconceptions, myths, legends, and bongas have always existed among them with the fear and belief that the Supreme God ‘Singhbonga’ had created them, makes proposals parallel to the evolutionary worldview of Genesis.

Prominent scholar Verrier Elwin has documented not one, but several stories, about the mythological evolution of the tribal people living throughout India, which are not being narrated here in detail, but rather reflect the worldview of the stories as well as their Customs, culture

and religious matters, have been studied in detail. The stories have been preserved by oral tradition among them for centuries. Although there are slight variations in those stories among different tribal communities like the Bhuiya, Birhor, Chero, Gond, Munda, Santal and other tribal communities, there are many similarities. The stories narrate the origin of man and the world, and also how and why their supreme God ‘Singhbonga’ made them. They narrate that “the world develops from the primal ocean directly and there is no hint of a previous world that has been destroyed”(Elwin, 1949, pp. 11-42; मुण्डा & मानीक, 2009). Further, Verrier Elwin documented that there had been a peculiar custom behind each and every legend and myth engrained with cultural and religious aspects which was found among other Adivasi communities in different forms. In his own words:

“The Muria myths of Sun and Moon and the coming of death because there is nothing specifically Muria about the tribe’s ideas on these subjects and they show interesting parallels and contrasts to the stories of other peoples. So too the Juang myth of the leaf dress, the Agaria myths of iron, the Bondo stories about nudity and shaven heads, the Kond myths of human sacrifice, the Pardhan account of the origin of ritual beggary are so ultimately connected with customs peculiar to these tribes alone.”(Elwin, 1949, p. 6)

The stories that belong to the great work “Specimens of the Oral Literature of Middle India: Myths of Middle India” of Verrier Elwin extensively documented upon pages no. 11-42 gave light upon the mythical evolution that how the Supreme God ‘Sun’ ‘Dharmesh’ or ‘Singhbonga’ created them, who originally belongs to the Oraons, Munda, Ho and other Adivasi communities (Elwin, 1949). The same thing is also supported by the distinguished work of Ramdayal Munda and Ratan Singh Manki (मुण्डा & मानीक, 2009). These stories should be studied in its ecological significance, which possesses three segments e.g. “creation of earth and human beings, the fall of human beings, punishment and the restoration”(Lugun, 2020, p. 360) which shows different stages of life-span or day-time or weather or season. A similar story is expressed in another version of the creation and patron of people by the Supreme God, which has also existed among the Munda, Ho, Santhal and other tribal communities adjacent to them. These evolutionary mythologies of

human origins appear to have been expressed as experiences of thousands of years in their traditional ecological and geographic settings (Roy, 1921, pp. 155-156; Elwin, 1949, pp. 11-42).

There are traditional beliefs and stories among the tribal people of Kerala about some of “mythical origins of many hunting deities”, who resemble the mythological heroes of ‘Kiratarjuniyam’². They would first dedicate a portion of the prey to the hunting deities after successfully securing each game ‘hunting’ to express respect for their hunting deities, which evolved into a mythological evolution of ‘human to divine authority’; and the remaining part was distributed among the hunters and other people (Freeman, 1999, pp. 276-277). This type of cultural practice was also performed in those of Sauria Paharias and other hunting Adivasi communities of Jharkhand, and also throughout India and the world. Reviewing on the above observations and finding, it is clear to understand that these types of cultural traits were used to do for securing hunting games along with the securing the lives of the participants of those games in that circumstances which indicates their respect and homages to ecological worldviews.

RESULT AND DISCUSSION

Before coming to the extensive discussion of the above mentioned concepts and theory of human evolution, we would like start from the quote of James George Roche Forlong, one who had joined the Indian Army in 1843 and fought against the Mahrathas Campaign of 1845-46, is well known for his enthusiasm works on comparative studies of religion throughout the world. He was well acquainted with the lives and faiths of Adivasi, Kolarian and Dravidian, of the forests through his “road-building skills through the jungles of India and Burma”³, where he noticed that many of the sacred places of tribal societies were differed in many ways from the sacred shrines of the Hindus ‘Aryans’. Those sacred places of tribal societies were located in forests, on inaccessible mountains or on rocks, near a dark pool, rivers, water streams, sacred tree or well under the open sky without any temple-like structure (Forlong, 1883, pp. XIV-XV).

Doing observational study on spiritual and ritual practice among Adivasi peoples of Jharkhand reveals that they

possess strong beliefs in nature and environment ‘ecology’. There have not been yet any temples beside merely object as symbols of the divine ‘nature’ presence in their traditional settlements or villages. The above mentioned beliefs system strongly underline the religious and cultural tradition of the tribal society that the Supreme God controls the life-cycles of people including birth, disease and death. Along with these notions the Supreme God also ensures how to successfully carry out all economic activities or how to survive from agricultural productions that are grown in their natural environment. These all things are nothing but the immediate manifestation of their past experience of thousands of years, which got synthesized in the form of myths, legends and stories of mythical creations of man, which contain the worldview of human origin of tribal communities.

All of these procedures have been an essential part of their existence and they typically perform these actions in order to appease them at seasonal festivals and sacrifices. In this way, the whole process of their earning livelihoods and enjoying social and cultural life is being fulfilled in their traditional ecological settings. They typically have a symbiotic relationship with nature and environment ‘ecology’, and express their mythical progression of ecological and philosophical thought in the form of “nature-man-spirit complex” (Vidyarthi & Rai, 1976; O’Malley, 1907; O’Malley, 1917).

In the realm of diverse academic concepts and theories, we have been totally ignorant about the meaning of Adivasis’s rich culture and history. The Adivasi people have their own worldview of evolution of man as we studied above, which is the hallmark of sustainability towards the natural environment where they have been inhabited from aeon ago, which connect them scientifically with anthropoid as genomic views of human origin. Here we would like also cite Rossano who disclosed that:

“Our primate heritage makes us naturally social. But even among primates, humans are hypersocial. Over the course of evolution, our hominin ancestors lost nearly all the individual traits needed for survival. Gone were the menacingly large canine teeth that chimpanzees use to threaten rivals and hunt prey. Gone were

² Kiratarjuniyam is the great work of Bharavi in which it has discourses of a conflict for hunting right a wild pig between Kirat ‘Adivasi hunter’ and Arjun ‘non-Adivasi hunter’ because both had shot the same wild pig. Here Kirat represent lord Shiva and Arjun represents an epic hero respectively

³https://en.wikipedia.org/wiki/James_Forlong

the long forelimbs and grasping feet necessary to climb trees to find fruit and to escape predators. Gone was the hair that protected the naked skin from biting and stinging insects and that allowed infants to cling while their mother foraged. By the time of *Homo erectus*, our ancestors were naked, oddball primates whose fate depended on their smarts, their tools, and one another. Left on his or her own, *Homo* had no chance. Inclusion in the group was life; separation from the group was a death sentence. The dependence of the individual on the group is reflected in the traditional African proverb as “I am because we are, and since we are, therefore I am”(Rossano, 2013, p. 14).

Based on the fact of Rossano, Darwin, anthropological and archaeological studies, modern humans have evolved through different evolutionary stages ranging from early archaic hominins to present modern *homo sapiens* through a continual process of growth and development. As per the study by Stamos (2013) who disclosed the fact of myth that “In the very least, mythological beliefs involve a serious lack of critical reasoning often combined with a dogmatic certainty that one is right, all of which should become obvious once the knowledge necessary to see through the myth becomes acquired” (Stamos, 2013, p. 5).

Above studies and reviews reveals that mythological stories are just fictional stories or imaginary narratives, which have been expressed in the form of myths and legends by synthesizing thousands of year’s old experiences of our ancestors. When these would have been synthesized by our ancestors, they would have through them expressed the indigenous knowledge system in the form of folk tales to ensure the sustainability of their posterity in nature during the erstwhile periods. That’s mean all of these were developed in response to the need for the people to share their knowledge in order to adapt and to survive in those conditions. Mythological stories of evolution or the origin of man are not true or ‘nothing’, but are closely related to the ecological experience and thoughts of our great elder for sustainability in nature ‘ecology’. Moreover, mythological stories that tell about the origin of people are the culturally bounded folktales that have been transmitted orally one generation after another generation. However, in the age of modern science and technology, these stories find little or no place, but the

importance of such belief system cannot be ignored as it possesses cultural legacy of sustainability towards nature and environment ‘ecology’.

MAN AND ENVIRONMENT

According to the study by Charles D. Laughlin (2014) on some aspects of ritual which was studied by A. M. Hocart disclosed that, there is a psychological need and satisfaction for sustainability towards nature ‘ecology’ that have existed before every good and bad thing that has ever happened in human history, which encouraged them to be “institutionalized” in their ecological settings. And later, these institutions experienced a process that was subsequently termed as ‘ritual’ in which society was reorganized around the performance of need-fulfilling practices. Further he disclosed that myth is created as “body of knowledge” and “myth and ritual being requisite to accomplishing the good life by controlling the natural contingencies” around the world for sustainability towards nature (Laughlin, 2014). Subha Chakraborty Dasgupta cited the works of Giambattista Vico who said that “imagination embodied in myth or the creative impulse underlying human history” (Dasgupta, 2003, p. 200).

Above studies and reviews reveals that myths are nothing more than the past experiences of people living around the world over the past thousands of years in the ecological and environmental settings that today form stories with traditions, customs, religion and culture have turned into myths, legends. All these stories, myths and legends have been told orally for their future generations to easily acquire ways of living comfortably in nature. In other words, these stories, myths and legends were a means of expressing and expanding human communities’ own ancient traditional knowledge systems and their joining together and co-existence with nature, which contained environmental concerns and knowledge of how to live amidst nature.

To express its wonder, fear, faith and gratitude towards nature, the human community considered the theory of its origin inspired by nature as divine, expressed in its stories, myths and legends, which it calls God as a whole. That is why various forms of nature, viz., river, mountain, tree, plant, animal, food-grain, soil, and other have been worshiped as humans by giving them the status of God. All these processes are a way of expressing our gratitude to nature, which is very important to understand today, in which all the mysterious information about human growth and development is hidden.

CONCLUSION

Concepts of mythical and ecological originality among Adivasi peoples that have been passed down orally from one generation to another through ages are being accepted as myth in them. Actually, these are the stories of survival under those circumstances by their great elders, who verbally passed on their thousands years' experiences to the younger generation in the form of songs, ballads, stories or narratives. These narratives have been termed as myth in the modern world, which are present in almost every Adivasi community of India and across the world. We as researchers argue that they embraced them as mythical evolution or cultural legends to contribute their knowledge systems orally to the next coming generation to live and to earn livelihood smoothly which shows the deep connection of Adivasi people with the nature and environment 'ecology'.

FINANCIAL SUPPORT AND SPONSORSHIP: Nil

CONFLICTS OF INTEREST: There are no conflicts of interest.

REFERENCES

1. Bamshad, M., Kivisild, T., Watkins, W., Dixon, M., Ricker, L., Rao, B., et al. (2011). *Genetic Evidence on the Origin of Indian Caste Population*. *Genome Res*, 11, 994-1004.
2. Basu, A., Mukherjee, N., Roy, S., Sengupta, S., Banerjee, S., Chakraborty, M., et al. (2003). *Ethnic India: A Genomic View with Special Reference to Peopling and Structure*. *Genomic Research*, 13(10), 2277-2290.
3. Cavalli-Sforza, L., Cavalli-Sforza, L., Menozzi, P., & Piazza, A. (1994). *The History and Geography of Human Genes*. New Jersey.
4. Chatterjee, S., & Sharma, R. (2018, July). *Belief of Tribal's in Supernatural Power and its Relation with Religious Life -With Special Reference to Indian Tribal Society*. *International Journal of Research and Analytical Reviews (IJRAR)*, 5(3), 48-55.
5. Dasgupta, S. C. (2003, March-April). *Contesting Polarities: Creating Spaces—Reading Myths in Mahasweta Devi's Stories*. *Indian Literature* (URL: <https://www.jstor.org/stable/23341402>), 27(2), 200-205.
6. Elwin, V. (1949). *Specimens of the Oral Literature of Middle India: Myths of Middle India*. Madras: Oxford University Press.
7. Forlong, J. G. (1883). *Rivers of Live or, Sources and Streams of the Faith of a Man in All Lands; Showing the Evolution of Faiths from the Rudest Symbolism to the Latest Spiritual Development* (2005; Celephaïs Press ed., Vol. 1). London: Bernard Quaritch.
8. Freeman, J. R. (1999, May). *Gods, Groves and the Culture of Nature in Kerala*. *Modern Asian Studies* (URL: <https://www.jstor.org/stable/313169>), 33(2), 257-302.
9. Groucutt, H., Petragila, M., Bailey, G., Scerri, E., Parton, A., Clark-Balzan, L., et al. (2015). *Rethinking the Dispersal of Homo Sapiens out of Africa*. *Evolutionary Anthropology: Issues, News, and Reviews*, 24(4), 149-164.
10. Guerrero, A. G. (Ed.). (2011). *Evolution: The Human Story*. London: Dorling Kindersley.
11. Kulkarni-Joshi, S. (2019). *Linguistic history and language diversity in India: Views and counter views*. *Journal of Biosciences* (DOI: 10.1007/s12038-019-9879-1).
12. Laughlin, C. D. (2014). *A.M. Hocart on Ritual: On the Quest for Life, Ceremony, Governance and the Bureaucratic State*. *Journal of Ritual Studies* (URL: <https://www.jstor.org/stable/44368885>), 28(1), 31-43.
13. Levins, R. (1975). *Evolution in Communities Near Equilibrium*. In M. L. Cody, & J. M. Diamond, (Eds.), *Ecology and Evolution of Communities* (3rd (1979) ed., pp. 16-50). Cambridge: The Belknap Press of Harvard University Press.
14. Lugun, J. K. (2020, March). *Centrality of "Life" in the Oraon Indigenous Community of Chotanagpur*. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 7(3), 360-363.
15. Majumdar, D. N. (1944). *Race & Culture in India*. Lucknow: Universal Publisher Ltd.
16. Ministry of Home Affairs, G. o. (2011). A-01: Number of villages, towns, households, population and area (India, states/UTs, districts and Sub-districts) - 2011. Retrieved September 19, 2022, from *Census of India*: <https://censusindia.gov.in/census.website/data/census-tables>

17. Nielson, R., Akey, J., Jakobsson, M., Pritchard, J., Tishkoff, S., & Willerslev, E. (2017, January 18). *Tracing the Peopling of the World through Genomics*. *Nature* (doi: 10.1038/nature21347. PMID: 28102248; PMCID: PMC5772775), 541(7637), 302-310.
18. O'Malley, L. S. (1907). *Bengal District Gazetteers Palamau. Calcutta: The Bengal Secretariat Book Depot*.
19. O'Malley, L. S. (1917). *Bengal, Bihar, Orissa and Sikkim. Cambridge: Cambridge University Press*.
20. Rajkumar, R., Banerjee, J., Gunturi, H. B., Trivedi, R., & Kashyap, V. K. (2005, April). *Phylogeny and antiquity of M macrohaplogroup inferred from complete mt DNA sequence of Indian specific lineages*. *BMC Evolutionary Biology* (doi:10.1186/1471-2148-5-26).
21. Risely, H. (1915). *The People of India (2 ed.)*. (W. Crooke, Ed.) *Calcutta: Thacker, Spink & Co*.
22. Risley, H. H. (1892). *The Tribes and Castes of Bengal. Calcutta: Bengal Secretariat Press*.
23. Rossano, M. J. (2013). *Mortal Rituals: What the Story of the Andes Survivors Tells Us About Human Evolutios*. *New York: Columbia University Press*.
24. Roy, S. C. (Ed.). (1921, June). *Ethnographic Notes and Queries*. *Man in India*, 1(2), 149-165.
25. Stamos, D. N. (2013). *The Myth of Universal Human Rights: Its Origin, History, and Explanation, Along with a More Humane Way (2016 ed.)*. *New York: Routledge*.
26. Standing, H. (2017). *Munda Religion and Social Structure - Published Ph.D Thesis (School of Oriental and African Studies, University of London). ProQuest*.
27. Sylvester, C., Krishna, M. S., Rao, J. S., & Chandrasekar, A. (2020, January). *In-situ clustering of mtDNA haplogroup M inferred from complete mitogenomes of two tribal populations of Southern India*. *Homo: internationale Zeitschrift fur die vergleichende Forschung am Menschen* (DOI: 10.1127/homo/2020/1144), 71(1), 29-36.
28. Tamang, R., & Thangaraj, K. (2012). *Genomic View on the Peopling of India*. *Investig Genet* 3, 20 (URL: <https://doi.org/10.1186/2041-2223-3-20>).
29. Thangaraj, K., Chaubey, G., Kivisild, T., Reddy, A., Singh, V., Rasalkar, A., et al. (2005). *Reconstructing the Origin of Andaman Islanders*. *Science* (doi: 10.1126/science.1109987), 996.
30. Thangaraj, K., Chaubey, G., Singh, V., Vanniarajan, A., Thanseem, I., Reddy, A., et al. (2006). *In Situ Origin of Deep Rooting Lineages of Mitochondrial Macrohaplogroup 'M' in India*. *BMC Genomics*, 7(1), 1-6.
31. Vidyarthi, L. P., & Rai, B. K. (1976). *The Tribal Culture of India*. *New Delhi: Concept Publishing Company*.
32. Vigilant, L., Stoneking, M., Harpending, H., Hawakes, K., & Wilson, A. (1991). *African Populations and the Evolution of Human Mitochondrial DNA*. *Science*, 253(5027), 1503-1507.
33. White, T., Asfaw, B., De-Gusta, D., Gilbert, H., Richards, G., Suwa, G., et al. (2003). *Pleistocene*