

# **TECHONOLOGY, LIFE AND LIVELIHOOD STRATEGIES OF TRIBES OF THE NILGIRIS: PAST, PRESENT AND CONTINUUM**

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## **ABSTRACT**

The tribes are integral part of our civilization. Yet they mark distinct difference from the mainstream population in terms of resisting change. Even such tribal cultures of the world are fast disappearing consequent to modern technologies. The exotic tribes of the Nilgiris, Tamil Nadu, namely, Toda, Kota, Kurumba and Irula serve a classic example for the phenomenon of social matrix with their native technologies of livelihood and later victims of modern technologies. The establishment of co-existence as livelihood strategy when they were completely in isolation for centuries followed by physical changes of the environment that affected their life and livelihood, consequent to opening of these hills by alien cultures is worth reporting. These aspects of social matrix and coexistence of the past are the positive assertions of group identity and solidarity of inter-group co-ordination and co-operation.

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The Toda being pastoral, live on milk and its products and their livelihood revolves around buffaloes. The Kotas are artisans, musicians and drummers and are the ones extending these essential services to other neighboring communities. The Kurumbas are sorcerers and wizards and also serve as security guards to others. The Irulas are cultivators, trappers of small hunting game and express a separate identity on the Nilgiris. However, modern civilization is like tempest and today the traditional maintenance of interdependence among the tribes is put to cease and is thrown to individualistic living, thus are eking out their life and livelihood in an uneasy situation submitting their future at stake. They struggle between traditionalism and modernism and are caught between change and resistance and live amidst confusion over changing context of livelihood matters. These tribes serve better understanding of social phenomena of life and livelihood matters, from barter to market system and beyond. The paper seeks to present the perspectives of technology, life and livelihood matters of these unique forest tribes of South India and account for changes, physical, social and environmental, in isolation and in contact with alien cultures, thus bridging the past, present and continuum of life and livelihood matters.

## **INTRODUCTION**

Technology, life and livelihood strategy of a traditional community depends on the nature of habitation, environment and resources. Tribes in particular are of two types, plain and forest/hill tribes, and the latter maintains its economy mainly through forest based. In India, a unique tribal situation is found in south Indian forest tribes situated on the hills of the Nilgiris, Tamil

Nadu. The Nilgiris commonly termed as “Blue Mountains’ of Eastern and Western Ghats are said to be the highest mountain ranges of South India. The whole of Nilgiris, eleven degrees of north of equator, forms an elevated steep upland from the low lands of Tamil Nadu in the east, Karnataka in the north and Kerala in the west. These massive hills of Western Ghats were relatively isolated from the rest of the country and became the abode for certain human communities who could adapt themselves to these forests and shaped their life through livelihood strategies as pastoralists, artisans, sorcerers, gatherers and hunters and agriculturists. They were later identified as Todas, Kotas, Kurumbas, Irulas and Badagas respectively. These aboriginals had established co-existence and linked themselves in ritual, economic and social symbiosis for a long time (Breeks, 1873; River, 1906; Francis, 1908; and Walker, 1986).

#### **NOTE ON INITIAL MIGRATION FOR LIVELIHOOD EXPLORATION**

It is important and worthwhile here to focus on the probable original settlement patterns of these human societies on Nilgiri hills. It may be mentioned that in the past several of migrations had occurred among human populations in all parts of the world. These are necessitated in search of better resources for livelihood to their traditional technology. This becomes evident when we look at the tribes of the Nilgiris, their settlement patterns and the establishment of societal network among them for peaceful coexistence. Five distinct groups are said to be the original migrants and settlers of the

Nilgiris perhaps at various times, namely Kurumba, Irula, Toda, Kota and Badaga.

Kurumbas are perhaps the first settlers of the Nilgiris followed by Irulas from the plains of Karnataka and Tamil Nadu, the then Mysore and Madras Presidencies. This has been the case as they occupied lowlands of the Nilgiris and are subjected to sickle cell anemia caused due to virulent malaria causing mosquitoes. Earlier accounts of these hills also indicate that evil spirits inhabited these massive hills. As a result, those who penetrated into these forests did not return or come back with a deadly sickness Shortt, 1869; Thurston, 1896, 1909). The other tales of these hills indicated the presence of little dark people who practiced black magic (Ibid.). The bio-anthropological information indicates that Kurumbas and Irulas are medium built people with dark complexion. They are of an average short to medium stature of 154 cms (males) and 142 cms (females) and weight of 50 kgs (males) and 40 kgs (females). They are often dolichocephalic to mesocephalic, possess mesorhine noses with mesoprosopic faces (Short and Ouchterlony, 1868, Thurston, 1909). They belong to Dravidian and Protoaustraloid ethnic stock (Risley, 1915; Guha, 1955). Kirk, (1962) reported the results of ABO, Rh and other blood group systems on selected South Indian population samples including Kurumbas and Irulas of the Nilgiris. Hb S or Sickle-cell hemoglobin are present in more than 20% of the Kurumbas and Irulas in the Nilgiri Hills (Negi, 1975, Kirk, 1962). G -6 - PD deficiency was also detected in the Kurumbas of Nilgiris (Saha, 1976). The protein and calorie content of the

diets of Kurumba show that they fall under the category of malnutrition and undernutrition (Sen Gupta, 1960, Reddy, K.N. 1988).

The other tribal groups namely, Todas and kotas occupied high uplands of the Nilgiris who probably could have migrated from Wynad and Mysore regions. Information on somatoscopy and somatometry of Todas and Kotas are available (Shortt, 1868, Thurston, 1896, 1909). Accordingly Todas and Kotas are medium built with an average stature of 165 cms (males) and 155 cms (females) and weight of 55 kgs (males) and 40 kgs (females). They are dolichocephalic and often possess mesorhine noses. Todas and Kotas are fair in complexion and often possess the rare physical trait of hairy ear rims. The earliest report on the ABO blood groups system (serology) on the Todas of Nilgiri Hills, was published by S. R. Pandit in 1934 and later by R. L. Kirk, (1962). In the Nilgiri Wynad region high frequency of Sickel-cell trait is found especially among Kurumba and Irula tribal groups excepting that of Toda and Kota (Negi, 1975). As a matter of fact, the incidence of sickle cell anemia was first reported in the world from these Nilgiris among these tribes of Kurumba and Irula. Similarly G - 6 -PD deficiency was detected more Kurumba and Irula of the Nilgiris but was absent in the Toda and Kota (Saha, 1976). The protein and calorie content of the diets of Todas indicate that they are well fed and their protein intake is high (Sen Gupta, 1960; Reddy, K. N, 1988). There is a clear distinction among the groups of Nilgiris as the Toda and Kota look alike with fair skin color, while the Kurumbas and Irulas are dark complexion. This is the testimony for their migrations and settlement patterns. It is evident that Todas occupy high upland plateau of Nilgiris

ranging between 6,000 to 7,500 feet. The other neighboring tribe is Kota who again occupies high to middle upland plateau ranging between 5,500 to 6,500 feet. The other two tribes namely Kurumba and Irula occupy lower slopes of the Nilgiris ranging between 2,000 to 3,000 feet only. This is the reason for the high incidence of sickle cell anemia among these two groups as these lower slopes of Nilgiris have found a good breeding ground for malaria causing mosquitoes.

There is another migrant community on these Hills namely, Badagas probably migrated during the 16<sup>th</sup> century who now dominate the Hill region. They occupy higher to middle uplands of the Nilgiris ranging between 5,000 to 6,500 feet. They also possess fair skin complexion. The name, Badaga, is derived from 'Vadagar' means 'north', i.e., people from north, i.e., Karnataka. The Badaga people are undoubtedly migrants from plains of Karnataka, earlier Mysore presidency. The average height of male and female is 166.2 and 155.5 cms and weight of 55 and 45 kgs. They are very gentle in their appearance and soft in expression (Breeks, 1873). Initially this migrant community consisted only few hundred souls, but later when their exploration for livelihood bore fruit, larger migrations by them followed, thereby, today they are spread in 480 villages with a population of more than 7 lacks. This is a rare phenomenon that stands testimony to successful human migration. With the arrival of the Badaga on the Nilgiris a new phase of life has begun among other communities as well. Badagas are known for their agricultural technology. Thus, they quickly established rapport with the Todas and grabbed their land in the name of 'gudu' agreement. The Kotas have become

artisans, musicians to Todas and Badagas. The Kurumbas started serving Todas and Badagas as their guards and also stamped themselves as 'sorcerers' and doers of 'witchcraft'. The Irulas largely lead a life of gatherers and hunters of small range animals. Such was the social co-existence among these human groups for several hundreds of years. Another lease of life was seen with the arrival of British and made the Hills for their military establishment.

The foregoing account of life and livelihood matters indicates that the 'technology' is a livelihood strategy, which changes life and its conditions. Applying this to the tribes of Nilgiris, the first settlers of the Hills, Kurumbas and Irulas have had a simple technology of food gatherers and hunters of small game. The Todas being pastoralists depended mainly buffalo economy and their life revolved around it. The Kotas have had many strategies of livelihood, as artisans, musicians and cultivators of land. Badagas had brought a better agricultural technology to the Hills and stamped themselves as agents of change in life of other human societies on Nilgiri Hills. Later, the British's also have become another agent of change with the introduction of coffee, tea and eucalyptus plantations that brought tremendous change in the life of these human societies.

### **SETTLEMENT PATTERNS, STATUS AND IDENTIFICATION**

The migration patterns of various human groups/ societies reveal one perspective of knowledge, and the way these groups were identified and categorized by subsequent state administrations speak altogether different

story. Considering the migration patterns, it may not sound wise to give status to migrant populations as primitive or dispersed tribes as is the case of Toda, Kota, Irula and Kurumba and Hindu peasant community as in the case of Badagas. If we go back to the past the whole of Nilgiris were in Mysore state presidency. Later with the formation of linguistic states, the Nilgiris are added to Tamil Nadu. Thus, the original and early settlers of these hills, not taking into account of administrative boundaries, both the Kurumba and Irula are the ones extended into Karnataka or Mysore presidency. Whereas, the Toda and Kota have probably migrated from Karnataka as well Wynad as well Mysore region respectively. The Badagas are also accounted as people from north, i.e., Mysore. Thus, all groups excepting Todas have had their origin from Mysore region only. By way of migration for better livelihood they have lost their identity of birth place but are now identified as tribes/primitive tribes/peasant groups etc., by the present state governments, Tamil Nadu and Karnataka.

What is being tried to project here is the status of community depends on the technological possession. The Irulas and Kurumbas have had simple primitive forest based technological livelihood activity, like, gathering and hunting. On the other hand the Kotas had the knowledge of agriculture associated with implement making besides being drummers and musicians. These technological soundness of them helped them more close to the other forward technocrats like Badagas and Todas. Todas, in particular, being lacto-vegetarians, have had the technology of milk and associated industry. Since Todas had no knowledge of agricultural technology and since Badagas



were very much associated with it, that served them a better survival livelihood strategy in tilling the lands of Todas by way growing several millets and sharing the same with “*gudu*”, a kind of barter system.

The tribal situation of the Nilgiris has been a subject matter in the academics as well planning and administrative circles for understanding more of life and livelihood situation among the human groups based on respective culture and technology. It is felt by many earlier and contemporary research workers that the ecosystem of Nilgiris has been disturbed first with the entry of Badagas in 16<sup>th</sup> century and then with the British entry in 19<sup>th</sup> century. However, looking at the situation of these settlement patterns of various groups, their livelihood strategies, the situation can be viewed the other way. Badagas, the first incoming peasant migrants from Karnataka, now major non-tribal community in the district of the Nilgiris, Tamil Nadu. They seem to have been poor, hard working agricultural people driven by poverty to find the new land for agriculture. On the evidence of customs of which still survive, that Badagas on their arrival somewhere during 16<sup>th</sup> century, came quickly to terms with Todas and also with other tribes like Kota and Kurumbas in bringing the vast forest lands under cultivation and exchanging the resultant produce among them. What matters here is that it was due to the technological skill of Badagas that lead them to sustainable development in livelihood strategy over the others. The traditional native tribal groups of the Nilgiris had until then a technology that suited them only to a limited extent. The other groups did not imbibe the changing state of technological change brought by Badagas. As such only Badagas got benefited through their

migration from the earlier places as their traditional technology had an edge over others. As a result, their population has been increased tremendously as a result of subsequent migrations. Their population size now stands at 7 lacks (provisional figures of Census 2001). The growth in the population is not due to the fertility behaviour but mainly through continued migrations after establishment of better livelihood. This could be ascribed to positive assertion of the population and a developmental livelihood strategy.

### **BRITISH ENTRY AND INTRODUCTION OF NEW TECHNOLOGY**

British who after advent of the Nilgiris, first developed them as a health resort and subsequently as a seat of Government and center of coffee and tea plantations, thus initiating major changes in the social as well as the physical environment of the Nilgiris. By the end of nineteenth century, the following changes had occurred affecting the life styles of native people of the Nilgiris. The British brought the Nilgiris well accessible to plains by way of road and rail. The thick forests of the Nilgiris were destroyed and brought on tea and coffee plantations. Large scale migrations of plains people to these hills from adjoining states had taken place for establishment of commercial business. As a result, the local tribes, particularly Kurumba and Irula, had lost their dependence on their surroundings and taken up wage labour on the British plantations. The tribes, Toda and Kota, could able to resist from this change for some time but not for long. The British Government had prohibited the practice of 'slash and burn cultivation' by the local tribes in 1863 and thus effected further economic change among them. Rice had been introduced on

large scale and all the native tribes developed liking to it. As a result ceasing of food grain dependence between tribes had slowly emerged. Because of liking to rice almost all tribes of the Nilgiris started buying rice from the commercial centers either by selling their products or cash earned through labour. Thus, all indigenous groups now participate in cash rather than traditional barter system. The forest department had imposed restriction on hunting and collection of forest produce. Thus, the restriction had brought compelling effects on food getting technologies of tribes like, Irula and Kurumba and as a result the hunting habits of them were also disappeared.

The entry of British on these hills though described as further onslaught on the ecosystem of the Nilgiris, the other side of the story can be put the other way. As a matter of fact, the British introduced a new technology of livelihood to the native groups, i.e., introduction of tea, coffee and eucalyptus plantation, potato cultivation and cultivation of other European vegetables, such as cabbage, cauliflower, carrot and others including fruits like Berries. It is a matter of great interest to note that out of all others it is only Badagas who instantly responded to the new technology wave and got benefited immensely. Whereas the other tribes especially the Irula and Kurumba have now ultimately become wage labours in tea and coffee estates of Badagas. It is ironical to note that by not tuning themselves to the technological change for better livelihood, they have ultimately become labourers in their own lands.

Thus, change in life is inevitable and the change may be physical, environmental and cultural through the introduction of new technology for

better livelihood. People/societies/communities who respond positively to the technological change would lead a better life and those who cannot would find themselves in an uneasy situation to eke out life. Such is the situation of Nilgiri tribes even today. The kurumbas are the worst sufferers of technological change brought out by others. The Irulas are again finding themselves difficult with the depletion in forest resources and now are majority, serving as plantation labourers. The Todas are slowly tuning with the technological change and are now not only good in pastoralism and agriculture but also in education and employment. The Todas are, however, encountering with certain problems of technological change as they are left now with limited grazing lands for their buffalo herds. The Badagas are now said to be the most successful community in elevating themselves to higher standards of life and livelihood strategies. They are a very strong and vibrant community in the Nilgiris, good in agriculture, education, employment and all walks of life. They represent in the State Assembly as well at the Parliament. Such a change among them could be possible only by way of getting responded to the new technology. This is a very good example of life and livelihood strategies of a community over a period of time. It becomes true that when ecological sustenance becomes a problem certain populations living in such ecosystems eventually face severe crisis, both in terms of biological and cultural well being. Thus, what is needed is, imparting suitable knowledge for the new technology and help communities/societies in sustaining them to new ways of life. This could alone be an appreciable livelihood strategy for better life. However, the attitude and efforts of the society would alone matter at times of change initiated by new technology.

## **FUTURE OF TECHNOLOGY AND HUMAN SOCIETIES:**

Such is the management of forest resources when migrant human societies with their traditional technologies and establishment of social matrix with co-ordination and cooperation for centuries until new technological agents brought developmental changes in life and livelihood strategies. It is a fact that such a situation witnessed on Nilgiris is found no where in the world and this phenomenon explains the true perspectives of human nature and its capacity in adjudging positive agents of change.

The modern technological change of any human society is education and employment. If these are viewed among communities of the Nilgiris, the Badagas stand first, followed by Kotas. All others, Irula and Kurumba including the Toda, are lagging behind, thus, they remain to be backward over the Badaga and Kota. The Kota who once considered squalid are now progressing group. The Badaga have almost joined the mainstream population. This is the state of development of human societies over a period time by way of acceptance or reluctance or resistance to agents of technological change. The future of other communities like Toda, Irula and Kurumba are at stake. They either remain at where they are now or get absorbed in the mainstream slowly but would stamp themselves as backward communities in the use of technology for human betterment in life and livelihood strategy. It is truly a combat between traditionalism and modernism.

Today's concept of life and its progress depend on technology and the technology changes for the better every day. The society in general and its individual in particular should go hand in hand with technology for well-being as well human progress in the new extending horizons of civilization. The modern man's slogan of life is "Keep in touch with technology". How do we account for those who are not getting along with the pace of modern technology? Who would end up where? Time alone is a witness to human technology and consequent changes in life and livelihood matters.

## **REFERENCES**

Brecks, James Wilkinson, 1873. An account of the primitive tribes and monuments of the Nilgiris. Edited by S.M. Brecks, London, India Museum.

Emeneau, M.B . 1971. Toda Songs Oxford. The Clarendon press.

Francis, Walter. 1908. Madras District Gazetteers: The Nilgiris. Madras Government press.

Guha, B. S. 1935. The Racial Affinities of the peoples of India. Census of India. 1931. Vol. I. Part III, Delhi.

Kirk, R.L. 1962. The blood and serum groups of selected populations in South India and Ceylon. *Am. J. Phys. Anthropol.* 20: 485-497.

Negi, R. S. 1975. Ethnic component in the distribution of Sickle cell trait in India. In: *Bio-anthropological Research in India*. H.K. Rakshit (ed.) Anthropological Survey of India. Calcutta. 83-85.

Pandit, S. R. 1934. Blood group distribution in the Todas. *Indian. J. Med. Res.* 21: 613-615

- Reddy, K.N. 1988. A study on food systems on Nilgiri tribes. Unpublished project report of Tribal Research Center, Ooty, Tamil Nadu.
- Risley, H.H 1915. The people of India. Calcutta.
- River, W.H.R. 1906. The Todas. Mac-Millan & Company. London.
- Saha, N. 1976. Population genetic studies in Kerala and the Nilgiris. Human Heredity. 26: 175-197.
- Sen Gupta, P.N. 1960. Dietaries of primitive tribes of Nilgiris. In : The Adivasis . Publication Division, Ministry of information and broadcasting, Government of India.
- Shortt, J. and Col. Ouchterlony. 1868. An account of the tribes of the Nilgiris. Madras
- Shortt, John 1869. An account of the Hill Tribes of the Nilgiris. Transactions of the Ethnological Society of London. 7 (NS): 230-90.
- Thurston, Edgar, 1896. Anthropology of the Todas and Kotas of the Nilgiri Hills and of the Brahmans, Kammalans pallis ands pariahs of Madras City. Bulletin of the Madras Government Museum. Vol.1. No. 4. Pp. 139-236.
- Thurston, Edgar, 1909. Castes and Tribes of Southern India. Madras Government press. 7 volumes.
- Walker, Anthony, R. 1986. The Toda of south India. A New look. Hindustan publishing corporation, Delhi.