



INDIGENOUS LIVELIHOOD PRACTICES OF THE PUROIK COMMUNITY OF ARUNACHAL PRADESH: A PERSPECTIVE ON POLICY CONSTRUCTION

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ABSTRACT

Knowledge of natural resource management is key to sustainable livelihood. The indigenous worldview of the Puroik community is known for by its cultural uniqueness in terms of forest survival skills, food habits and other forms of livelihood practices. They practice non-agricultural activities like hunting, trapping, fishing, foraging and honey collections and different other. They grow and preserve the Sago palm trees as the flour produced from the palm trunks is used as their stable food. Although these forms of practices are not quite practicable now among the youths and urban dwellers, yet it is still prevalent among the interior community living in the deep forests and hilly terrains. The indigenous method of livelihood practices including food habits of the community lacks any technical analysis and in-depth research towards its sustainability, affordability and stability. In this regard, the present paper is an attempt to understand the indigenous methods of livelihood practices and draw perspectives towards policy construction on food security. The study was conducted in 9 (nine) Puroik Settlements under Nyapin Block in Kurung Kumey District of Arunachal Pradesh with a mixed research design approach to meet the objective of understanding the indigenous lifestyle. To achieve the objective of the study, an un-structured and open ended interview schedule was administered for data collection. The study reveals that the majority of people still practice their age-old indigenous way of life. The study also found that their forest-centric food habits can easily secure their life in any point of time, be it drought or any other challenging circumstances.

Keywords: forest, indigenous, livelihood, resources, sago.

INTRODUCTION

Knowledge of natural resource management is key to sustainable livelihood. Existence of human civilization depends upon the ecosystem and ecosystem services. The occupational practices of the Puroik community are usually non-agricultural in nature. The practice of grow and cultivation of sago palm trees is a unique cultural practices. The flour produced from the palm trunks is used as their stable food. Through this much,

they survive throughout the life. Although these forms of practices are not quite practicable now among the youths and urban dwellers, yet it is still prevalent among the interior community living in the deep forests and hilly terrains. The study reveals that the majority of people still practice their age-old indigenous way of life. The study also found that their forest-centric food habits can easily secure their life in any point of time, be it drought or any other challenging circumstances. Sago palm tree grows in swampy, alluvial and peaty soils where almost no other major crops can grow without drainage or soil improvement (Sato et al., 1979, Jong, 1995). It is one of the most important bio-resources for not only sustainable agriculture but also rural development in swampy areas of the tropics.

The Puroik belong to the Mongoloid stock and speak Tibeto-Burmese language / dialect (Remsangpuia, 2008:19; Ramya, 2011). Historically, the community traced back their origins from the ancient mythology and is a segment of migratory social group who used to have a temporal settlement depending on the availability of forest resources and feasible topographic conditions. Earlier writings referred to the Puroiks as 'Sulung' in the past. Apart from gradual cultural transition witnessed during recent times, the domestic social life of the community was said to be strictly confined to the forest. The history of origin of the community remained complex since the views among the scholars, fellow tribesmen and even within the community itself are varied. The writing of different scholars has different description about the origination of both the term and the community name. According to their mythology, Puroiks have originated from a supernatural being known as 'Khrongkhiya'. Khrongkhiya was one of the sons of *Kri* (Sun God) who is the ancestor of the Puroiks. At present, they are spread across the six (06) districts in the state, namely East Kameng, West Kameng, Kurung Kumey, Kra Daadi, Papum Pare, Upper Subansiri and few pockets in Lower Subansiri districts. According to the 2011 census, the community has a population roughly to 7000 consisting of 53 villages.

Historically, all different forms of occupational as well as the cultural practices of the Puroiks in present times was literally started from the last known settlement at Plo-Sang / Plo-Jaaria, which is located at Sarli Circle in Kurung Kumey District (*Article by Bopai Puroik, EAC*). It is claimed that from here, the cultural civilization of the community mainly flourished to a large extent. According to the cultural mythology, the divine Goddess- *Kri* gifted a variety of seeds to the Puroiks in order to make them survive throughout the generations. The Goddess gifted them the seeds, locally called:

- i) Tasung Yaagligh (Seeds of Sago Tree)
- ii) Chanang Yaagligh (Seeds akin to Sago Tree)
- iii) Bara Yaagligh (Seeds akin to Sago Tree)
- iv) Miigh-ha (Hemlock)
- v) Machcha (Mountain bamboo)

After receiving these items, the Puroiks cultivated and grew the seeds on the land, named *Plo-Sang* or *Plo- Jaaria*. The land was very fertile to production of crops, species and different other edible items in an abundance. However, out of few more seeds variety they only chose the seeds of Tasung Yaagligh,

Chanang Yaagligh and Bara Yaagligh and grew them up on the field. These three varieties have same cultural meaning with slight differences in terms of the body trunks, leafs and flour produce from each of them. Thenceforth, cultivation and grow of these varieties (of Tasung Yaagligh, Chanang Yaagligh and Bara Yaagligh) become their main occupational practices as well as stable food since many centuries.

Objectives:

The objective of the present paper is to understand the indigenous methods of livelihood practices of the Puroik Community and to draw perspectives towards policy construction.

Materials and Methods

The study was conducted in 9 (nine) Puroik Settlements under Nyapin Block in Kurung Kumey District of Arunachal Pradesh with a mixed research design approach to meet the objective of understanding the indigenous lifestyle. To achieve the objective of the study, an un-structured and open ended interview schedule was administered for data collection.

Reviews of Literature

The Puroik community is one of the lesser-known tribe of frontier state of Arunachal Pradesh. There are no sufficient available literatures on account of Puroik tribe. However, there are few available secondary sources pertaining to this community that were mainly recorded by non-native scholars and few indigenous researchers in recent times. The literature reviews done for this paper include the following:

According to Deuri (1982), the tribe was in effect re-discovered by Dr C. von Fürer-Haimendorf in 1944-1945 and the next visit by C.R. Stonor in 1945 and 1948. Finding and interaction of the Puroik people in the frontier state is one of the milestone discoveries of the cultural Anthropologists during the late pre-colonial era. Deuri, in his book *The Sulung*, he described that the Puroik villages are mostly situated in inaccessible area and to reach the village one has to climb invariably thickly wooden hills, stumbling up the dry beds of many water course during winter and clambering up the steep faces of rocks either by holding on cane ropes or on notched ladders. From here, we can understand the situations of the community as they lived in far-reaching hilly areas.

According to Dutta and Duarah (1990), the Puroik community is one of the prominent tribes of Arunachal Pradesh. They are considered to be the oldest of the hill tribes. As evident from the discovery of the tribe by anthropologists like Haimendorf (1944) and Stonor (1945) during the pre-colonial era, the Puroik is one of known tribes in the state. However, due to various reasons the community's nomenclature (i.e. Puroik) could not be found in official records. It is claimed by the community people that with the enactment of the *The Bonded Labour (Abolition) Act, 1976*, the nomenclature 'Puroik' also came into existence with full dignity and recognition as per the Constitution of India.

Hiroshima (2009), in his paper observed that the starch yield of sago palm may be affected by growth environment such as soil fertility in geographically near areas where genetically near sago palms grow. On the other hand, it can sustain under comparatively severe environmental conditions such as costal area or acid soil. As such the sago palm tree can be seen growing in the rocks as well. Hence, this palm species is very useful to turn over the poor productivity lands or barren lands with sterile soil as productive

lands for ensuring even larger amount of biomass covering the increase in demands for both food resource and energy source.

Lieberherr (2015) in his studies describes that, Sago palms are crucially important plants in the life, culture and mythology of the Puroiks and its starch of the stem is the basis for almost every meal. Other parts of the plants are used as construction material, for tools and as fodder. He categorically described that, there is a strong cultural values and strong sense of belief system behind the cultivation and preservation of the sago palm tree by the Puroiks. He further explained that sago palms are also used in some other form (e.g. as pig fodder) and sometime as a meal, by other communities.

According to Remsangpiua (2008), The Puroik is a small and downtrodden hill tribe in the remote corner of the Eastern Himalayas and Puroik itself is the language spoken by them. According to him, the community lived in a downtrodden and underprivileged condition of life. Due to their settlement in far-flung hilly and deep forest, the community, in fact has been deprived of basic amenities, services and entitlements. Majority of the community members do not access and receive benefits from the government.

According to Stonor (1952), the Sulungs were scattered over several thousand square miles, apparently from Bhutan on the west to the Subansiri on the east. Temperamentally, Puroiks were quiet, shy, and altogether unobtrusive on first acquaintance. Their folk life is different from other neighbouring tribes in terms of customs, traditions, language and belief system. Owe to their migratory nature of settlements, the Puroik people are randomly distributed across the state with no particular areas to be considered or called as the mainland of the community. Empirical evidence also suggests that the community people are randomly settled down in different locations, far-reaching to one another. It means some community members are still dwelling in the extreme interior places, while others are in the nearby town areas.

Thungon (1983) described that, they maintained livelihood and managed all social affairs within themselves in the forest. Known for making the sago palm as their staple food, Puroiks are also known for incomparable tactics of hunting, food gathering and mountain climbing due to their acquaintance with forest life. From among the twenty (20) major tribes of Arunachal Pradesh, Sulungs (now Puroiks) are one of the most backward tribes. According to this very description, the Puroik holds expertise knowledge about forest dwelling, tracking, hunting, gathering and exploration of the unreached locations in the deep or mountainous region.

Results and Discussion

The indigenous worldview of the Puroik community is known for by its cultural uniqueness in terms of forest survival skills, food habits and other forms of livelihood practices. They practice non-agricultural activities like hunting, trapping, fishing, foraging and honey collections and different other. They believe on taboo systems which is very much integral to their cultures and traditions. They also believe on existence of supernatural beings considered them behind the acts of anything.

Nature of Settlement: Albeit the majority of indigenous communities across the globe is usually characterized by manner of forest-centric life, however, in case of the Puroik community the nature of settlement, location of settlement and manner in which they survives has a unique in its own (Ramjuk,

2017). Unlike the other tribal communities who are, in most cases, settled down permanently in particular places, they (Puroiks) settled their dwelling home in the highland mountainous region preferably nearby the river side. They use to migrate from one place to another collectively in search of convenient occupational practices and fertile soils for cultivation. As far as the settlement pattern is concerned, the nature of settlement and household compositions of the Puroiks may consider in two types viz. (a) Interior type (b) Exterior type. In Interior Type, there is no road connectivity, schools, hospitals etc available. Their settlement is simply and mainly relied upon accessibility of forest resources and to practice of forest hunting & trapping of wild birds & animals. In Exterior Type, settlement are found in the semi-urban areas where there is potential connectivity or availability of road, transports, schools, hospitals, dispensary and other modern facilities at least nearby to their village / colony. The people dwelling in such places are now in transitional level. Most of the community are no longer practice non-agricultural occupations particularly the task of sago flour making and days long hunting-trapping practices which they used to do in the past times.

Occupational Practices: Puroiks are the indigenous livelihood holders who are living at the edge of the Kurung Kumey district by hunting and gathering (Ramya, 2013; 2014). Besides, they also engage themselves in fishing as hunting and gathering as a seasonal occupation. People engaged themselves in particular profession(s) in which they spent the time and in return they get the share of it. It means through one's occupation their daily needs are drawn and whole life is cyclically managed thereof. As such unlike the present time, the Puroik's occupations were forest-centric only. Of many other practices their main occupations are (i) Sago making/ producing (ii) Hunting, trapping & fishing. These two are very prominence in the context of the community because they are well known to have well-equipped skills, expertise, knowledge and managing skills of various professions. As per the mythology, this kind of practice is their tradition. More than occupation it is their identity. It constitute as the core components as social custom, tradition, mores and values. In fact, no other tribal communities of Arunachal Pradesh have ever adopted the sago making as traditional occupation. Although, few other neighboring tribes like Nyishi, Bangrus and few other tribes also having the practice of growing sage palm, but they have never been considered it as an occupation. Usually, they consider the sago mainly as fodder for pigs, though little amount of it is sometime consume in merrily manner. Hence, the adoption of sago cultivation as occupation gives the Puroik community a unique identity before the world. This indicates and defines their distinct cultural heritage inherited from immemorial past. On the basis of both the historical and empirical evidences, the occupational practices of the community can be understood in following forms-

Sago Palm Cultivation and Flour Produce: Palms are amongst the most culturally significant of plants in the way they combine important sources of food with a wide range of other uses (Balick 1988). Their usefulness is often reflected in a prominent symbolic role, and some might appropriately be described as 'ethnobiological keystone species' (Ellen 2001). It is the most prominent occupational practice adopted by the community people involving multi-level tasks right from chopping of the sago trunk to produce the flour. The people cultivate the sago plants in their gardens and fields. They grow them in multitudes covering large portion of community forest. When it attains to reap age, the trunks are cutting down in

pieces then again crushing the logs till it produce flours (*mechei*). There is no specific seasons or times to make and produce the sago. It can be done throughout the year depending on the weather conditions and tenacity of the workers whosoever engaged themselves in the task. The sago palm trees are of three types. In their own dialect they are called as (i) Tasung Yaagligh (ii) Chanang Yaagligh (iii) Bara Yaagligh. The synonymous terms in Nyishi, they are called Tasse, Tachi and Tabbe respectively. Here the term ‘Yaagligh’ means ‘the seeds’ rather than calling the trees, yet it is directly implies the trees only rather than the seeds.

Tasung Yaagligh: It refers, particularly, to the Sago Palm Tree. Many steps are involve in the making processes. Firstly, by visiting the garden or field the reap ones are chose and cutting down. Then, the trunk of the tree is again chopped into several shorter pieces for comfortably grinding through a spade-shaped bamboo sticks. After, get over the grinding step, the chaps produced from the grinding is again carefully stored in. For getting the final output, a two-level bowl structure is installed in a horizontal shape. The construction of structure is made up of plant stems, bamboo and forest ropes. After that, chaps are put into the upper bowl made up of the bark and skeleton of sago trees. The other bowl-structure installed in lower portion is either sacks or thick cotton clothes for store up the suspense of the chaps which is being put in the upper level and spin through fresh water. The flour produced out of it becomes consumable; hence, it is use for dual purposes, one for self consuming and another for sale.

The working patterns, techniques and processes involved in making of sago trees is same in the case of other two varieties, that is, Chanang Yaagligh (Tachi) and Bara Yaagligh (Tabbe). However, in comparison to the former, the later’s two varieties are not so preferable and demanding among the indigenous livelihood dependants due to its untenable flavor and taste. It is considered that both the Chanang Yaagligh (Tachi) and Bara Yaagligh (Tabbe) were used as a supplementary consumables in past times, that is even, only in extreme situations affected the community life, like land dryness, destroyed by pests, hailstorm, mudslides and wild animal disturbances causing starvation and poverty.

Hunting and Trapping: There are different forms of forest hunting practiced by the community. Different poaching techniques are used to hunt the targets. Hunting is usually carried out on the dense forest to both the animals and birds. Hunting is purely done by using traditional bows, arrows and spears. In each of these weapons, a natural poison (hemlock) is mixed in the edges of arrows and spears. The Puroiks people are considered as expert hunters who have enduring strength to extreme face hardships and can explore the unreached places of forest. They are also expert in mountain trekking and capable of roaming in snowy land. While going for hunting, hunters usually perform some rituals for their own safety and guidance in the forest, for protection of one’s family and also for the encountering and hunting of animals. If they hunted, the lion, tiger and bear the hunter is subject to certain restrictions as such thing is critically viewed as a taboo.

The trapping practice on the other hand is a specialized based hunting technique where people have to acquire sufficient knowledge to operate it. Trapping system has different structures and names as well. They are locally called as *Gurang*, *Gungga*, *Makai*, *Maang*, *Kyaam*, *Ueye*. Among them, *Gurang* is one of the most popular trapping form of occupation which still prevalent among them. In their dialect, it is called

Kubung Mingnam means *Rat Hunting*. *Gurang* is a systematically designed bamboo poaching structure that is put on the passing routes for trapping or hunting the wild rats. This kind of hunting is usually done in the high altitude dense forest and mountainous region where rivulets are available. There is mass movement of rat during monsoon (summer season) from one side to other crossing of the rivulets or streams. In the meantime, poaching frames / structures are putting on the routes made up of logs just to lure the rats and trapped the mouse. After sometimes (or days) carcasses of the rat are collected. Then they bring it to their home, sometime sale in local market. During this entire period of hunting, trapping and trekking across the mountains, they rest and sleep in the *Langpek* (cave), to which, they fondly called as natural home.

Fishing: Fishing practices of the Puroiks is seasonal. During winter, they use to construct stone house underwater for dwelling of the fish. After sometimes, not less than a fortnight, the underwater fish house is open by laying *adar* (a conical-shaped basket) around the house. The fish is trapped alive in the basket. The other form of fishing practice is that, a bit different type of *adar* (a conical-shaped basket) is simply hang up on the raised platform in the middle of the river or tributaries through ropes. It is believed that the fish would somehow enter into the basket and got trapped.

Forest gathering: Forest is the main source of livelihood for many forest-centric nomadic tribes across the world. As such, the Puroik community also have some prominent livelihood practices. They collected different seasonal forest varieties including fruits, vegetables, sweet roots & stems and many other things for their consumption. In other words, the natural resource is the main source of life and livelihood of the Puroiks. They are always accessible to various forest resources, be it for consumption purposes and other utilities. In this manner, their life seems secured in long run.

Handicraft: Besides expert in within-the-forest occupational works, Puroiks are also skilful and knowledgeable in handy works. By using the mountain ropes and bamboos they made varieties of handicrafts, like, basket, bowls, carpets, bags, headgears, bows and arrows etc. The craft items made are mainly utilized for domestic usages, however, they also sell some items on demand and at the request of any outsiders. Besides that, women are engaged themselves in weaving of cloths by using natural threads extracted from the bark of the trees. The thread used in weaving is made of the fibres of a shrubby nettle plant locally called Hyek (Deuri, 1983, p.18).

Technical Lapses

The indigenous method of livelihood practices including food habits of the community lacks any technical analysis and in-depth research towards its maintainability, sustainability, affordability and stability. There is undisputable consideration among many native tribal people of Arunachal Pradesh that, sago flour can be taken as supplementary consumables. The flour produce out of the sago trunks can be stocked and preserved for a sustained duration (not less than a weekend period). Due to its wetness, the flour is slow to decay; hence it remains in a raw form for long duration which can be good for cook and eat.

Although, it has been considered as stable food for the community since time immemorial, no fully-demonstrated scientific studies and analysis had ever been carried out on the traditional adaptation of sago palm trees, its cultivation, preservation, maintainability, potential hygiene so on. There is lack of

information about the health and hygiene benefits over the times. Hence, it requires thorough experiment with the help of chemical labs to ascertain the presence of chemical substances and such other materials. However, relevance of preservation of sago palm tree cultivation is of very much important. Although the indigenous method of preparing and making the sago flour is tenable, it requires the involvement of technical aspects for better and convenient working pattern of production of the sago flour. In traditional practice there is several steps of producing the sago flour, all of them entailed with specialize skills to operate. In every step, there must have good command in terms of skill and techniques to carry out the tasks. These manual based procedures can be supplemented by different alternatives by using modern machineries.

In terms of economic, it can be purchased at affordable and lump-sum rates. The reason of cheapness is because of abundance of sago palm trees in highland mountainous regions, but less demands in local markets. Due to its durable life, the sago palm trees can be seen as sustainable economic resources.

Implications and Policy Perspectives

The sago palm, which is an elite species among the starch producing palms, grows in natural condition need to be carried out systematic, ecological, physiological, agronomic and economic studies and formulate policy for its long-term preservation. In the light of skill-driven scientific developments over the times, now the need of the hour is to look for improving the community life in a better way. Self sufficiency is good, but now the approach should be leaning towards sustainable livelihood, which needs to have deeper understandings. Certain suggestions intended for policy construction are given in following ways-

- i) It needs to carry out in-depth studies in relation to food habits and adaptations in line with food security mission by scientific or policy research institutions.
- ii) The Sago Flour should be conducted an experimental analysis in laboratory to ascertain the chemical composition and health related aspects in it.
- iii) In order to know the importance of Sago Palm trees, it requires proper documentation in the form of videography and the same should be relay telecast in the public broadcast entities like All India Radio and Doordarshan Kendras.
- iv) Government should encourage the cultivation of sago palm trees to beat the starvation, during droughts and other difficult situations.
- v) Government should bring policy to link the sago cultivation to commercialization. They must be encouraged to sit in rural mart or in local market for sale of their items.
- vi) Government should look into the feasibility of fixing price for the sago flour as well as the other forest food items
- vii) PSUs, GOs, NGOs and CVOs must intervene for their socio-economic upliftment and overall wellbeing.
- viii) Being an expert forest hunter, their wisdom, knowledge and intelligence can be utilized in search and rescue mission in the dense forest.
- ix) Their skills and abilities to manage the forest related affairs can be used in exploration mission.

- x) Government should also make policy to shift their traditional hunting-trapping occupations to other alternatives, so that exploiting of natural resources in the pretext of tradition can be minimized. There is sharp contradiction between the traditional customary practices that both of them have their own course of actions and applicability. Hence, the policy must be drawn without distorting the values and spirits of anyone.

Conclusion

Economic development in indigenous contexts is often very different from mainstream forms of economic development. Indigenous communities face different contextual factors and have different intellectual and cultural traditions reflected in values and ways of life, particularly with regard to their land and marine resources. The need of the hour is to draw comprehensive policy encompassing various aspects of livelihood practices and other associated concepts pertaining to the questions of livelihood practices of the Puroik community. Whatever forms may be there, the occupational practices as a community life must be brought into the mainstream economy so that the overall living conditions of the community may be stepped into the path of prosperity and development. Bringing policy to preserve the cultural values of the Puroik community is going to be benefitted not only to the community concerned but also to the mass people as well. It is time and again, observed and asserted by the traditional experts including the members outside the Puroik community that cultivation of sago palm trees can beat the unforeseen challenges like drought situations and human being can survived through it.

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