

Jhum cultivation practices of the Bangnis (Nishis) of Arunachal Pradesh

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Jhum (slash and burn cultivation) is an age-old system of agriculture among the indigenous groups in the humid tropics. The Jhumias make use of the local ecological and environmental conditions to their advantage. The natural indicators, their magico-religious beliefs, and analogy & faith condition their decision-making. Worships, rituals, myths and folktales also govern their land and resource use. The entire gamut of their socio-cultural life is thus woven around *Jhum* that is not merely an 'Agricultural Activity', but a Cultural Practice' and a 'Way of Life'.

The paper attempts at understanding the complex relation of how the socio-cultural life of Bangni jhumias of East Kameng to *Jhum*. The traditional calendar of *Jhum* activity is presented and is followed by tracing the origin, settlement history and land stewardship of the tribe that closely relates to origin of this practice. The socio-cultural beliefs, magico-religious practices, festivities and rituals associated with *Jhum* are described, to give a view of their traditional system of agriculture and land management.

Keywords: Arunachal Pradesh, *Bangni* Tribe, *Nishis* Tribe, *Jhum* Cultivation, Rice beer

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Jhum or slash and burn cultivation is an age-old practise among the tribal groups throughout the tropics- the Amazon basin, Southeast Asia and sub-Saharan Africa. It is largely viewed as an exploitative system, wherein the land and natural resources are not managed optimally and is taken to be a major cause of deforestation and ecological instability.

Many scholars ascribe the form of agricultural practise of a community, a result of their social progress and not the cause of progress itself. The Government perceives this form of agriculture being practised by those who are outside the mainstream culture and view it as a primitive form that is wasteful of resources¹. The backwardness of *Jhum* is often wrongly attributed to the inherent lethargy or inertia of a tribal group, who are often taken prisoners of their surrounding environment and circumstances².

The difficult topography, inhospitable terrain, incessant rains and harsh climatic conditions in the North East India have led the people to adopt this age old practise. It is also a response to the difficulties in establishing an agro-ecosystem in the difficult tropical forest ecosystem that is characterised by generally poor acidic soils providing few nutrients and a diverse

flora & fauna- leading to many potential competitor species for the food crops¹. A large segment of the tribal population of the region and a majority of the tribal groups of Arunachal Pradesh have been traditionally practising *Jhum*; with the exception of *Apa Tanis* of the Subansiri, *Khamtis* of Lohit and *Monpas* of Towang/West Kameng. It is a major land use of the state and as per estimates, a total area of nearly 0.23 million ha³ is under it and nearly 54,000 families⁴ are reportedly dependent on it for their livelihood.

Jhum is a major component of the larger agro-ecosystem that comprises of agriculture, forestry, hunting & fishing and is a land use system described as to be based on a 'traditional, year round, community wide, largely self contained and ritually sanctioned way of life'¹. The *Jhumias* recognise that the natural processes can be utilised as a natural resource and their indigenous knowledge system rests heavily on religious belief, analogy and often on scientifically inaccurate assessments¹ but notwithstanding that, their knowledge system works. The socio-cultural life of the practising communities is woven around it and is regulated according to the *Jhum* calendar, and so are their rituals and magico-religious pursuits⁵. The *Bangnis* of East Kameng is one such prominent community of the state and a majority of the tribals of

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this community practise *Jhum* that is not merely an 'Agricultural Practise' but a 'Cultural Practise' and 'A Way of their Life'.

Methodology

Field trips were conducted in the various villages of the district, namely Chayangtajo, Dumdila, Soshi-Bagang, Taku, Pakoti, Talloh, Jamoh, Margingla and Biwa-Mebua during the year 2003-04. The surveys were made during different seasons so as to cover the various stages of the *Jhum* cycle. Open ended interviews, prepared questionnaires, group discussions and other participatory methods were used so as to elicit response from the locals that included the elder village folks, village priests (*Njeibu*), village headman (*Gaon Burahs*) and the local staff of the Seppa Forest Division. Additional information on the socio-religious and cultural aspects was also gathered and this was supplemented with the available literature.

Study area

East Kameng district is situated in the western part of Arunachal Pradesh in the eastern Himalayas, between 92° 30'-93° 24' E longitudes and 26° 56'-27° 59' N latitude. It has its HQ at Seppa. The terrain consists of sub-montane and mountainous ranges rising from 300 m to 4,000 m amsl and sloping down to the plains of Assam. It is divided into longitudinal and narrow valleys by river Kameng and its tributaries. Tertiary, Gondwana, un-fossiliferous sediments and metamorphites define the geology. The soil is moderately to severely eroded with low fertility. The climate varies from subtropical in the foothills to temperate in the northern part with a yearly variation in temperature from 9-36°C and with a mean annual rainfall between 1,500-2,500 mm⁶.

East Kameng is home to the valiant *Bangnis*, the industrious *Mijis*, the commanding *Akas* and the nomadic *Sulungs* of the high hills in the North. These tribes belong to the Indo-Mongoloid group and speak dialects belonging to the Tibeto-Burman group of languages². The *Bangnis* are demographically the dominant tribe of the district. They are also called *Nishis* in the other parts of Arunachal Pradesh, predominantly in the Papum Pare, Lower Subansiri and Kurung Kumey districts. A distinction is sometimes made between the *Bangnis* and the *Nishis* on dialectical grounds, though they are taken to be the western and eastern sections of the same tribal community⁷. They were also earlier referred to as the

Daflas- a term that has now been disregarded due to its derogatory connotation. In the present paper, the name *Nishis* is used alternately with the *Bangnis*. *Nishis* live in a typical long house, *Agu namtung* (Fig. 1). These long houses may extend upto 40 m and house as many as 10 families with servants, making a perfect example of the house being the real social unit.

Observations

The major stages that the traditional *Jhum* cycle (Figs. 2 to 5) goes through are: site selection and clearing (*Raktik*), burning (*Amah reh*), sowing (*Amchik*), weeding (*Rawu*), protection and harvesting (*Amte tena*). In each of these stages the *Jhumia* needs to take some crucial decisions concerning the location, scheduling, crops and the labour inputs¹. This decision making, though needs to take care of the agro-climatic and environmental conditions, is also moulded by the social and cultural factors. A host of natural indicators also act to help the *Jhumia* in this process of decision-making.

The traditional calendar of events of *Jhum* is described first covering the major stages. This is followed by tracing the evolution of this practise through the settlement history of the tribe and their land tenure system. The social organisation and societal norms, and the magico-religious belief governing *Jhum* are described next. This is followed by notes on the festivals and rituals that the *Bangnis* associate with this practise.

Traditional *Jhum* calendar

The traditional calendar of events related to the *Jhum* called *Rak-pa*, is presented in Table 1. A distinction is made by the *Nishi Jhumias* in the pattern of *Jhum* based on the locality where it is undertaken. In case the *Jhum* is in the vicinity of towns or administrative centres which have more population density and hence the land is at a premium, then it is called *Taning*. In case of *Jhum* in remote villages and interiors, it is known as *Rakteh* or *Amteh* that is characterised by late harvest of paddy. Further, the fallow cycle in *Taning* is 3-5 years and 7-9 years in *Rakteh*. The paddy sown as early as in the months of February is the early paddy as *Nincho*, *Rene* and *Ningte*. The late paddy is sown in the *Rakteh* upto April. In addition, in the interior areas there are nearer plots called *Balu*, which are more intensively cultivated and may be viewed as kitchen gardens⁸.

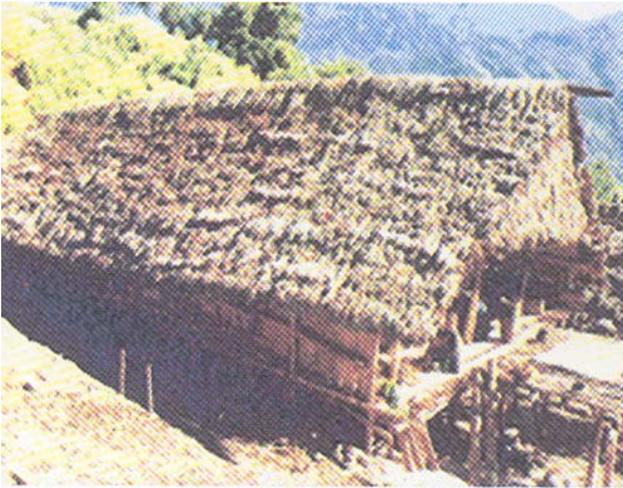


Fig.1. A typical Nishi long house (*Agu namtung*)

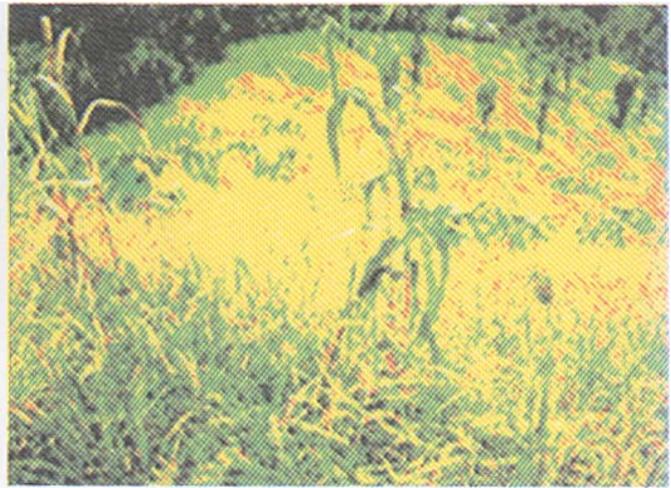


Fig.2. Jhum plot planted with paddy, maize, tapioca and millets

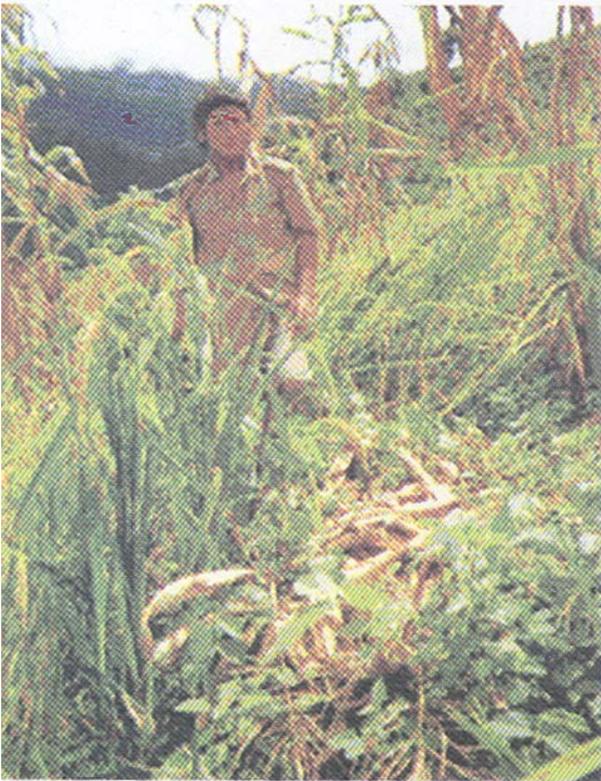


Fig.3. Terraces (*Panbe*) in a Jhum plot

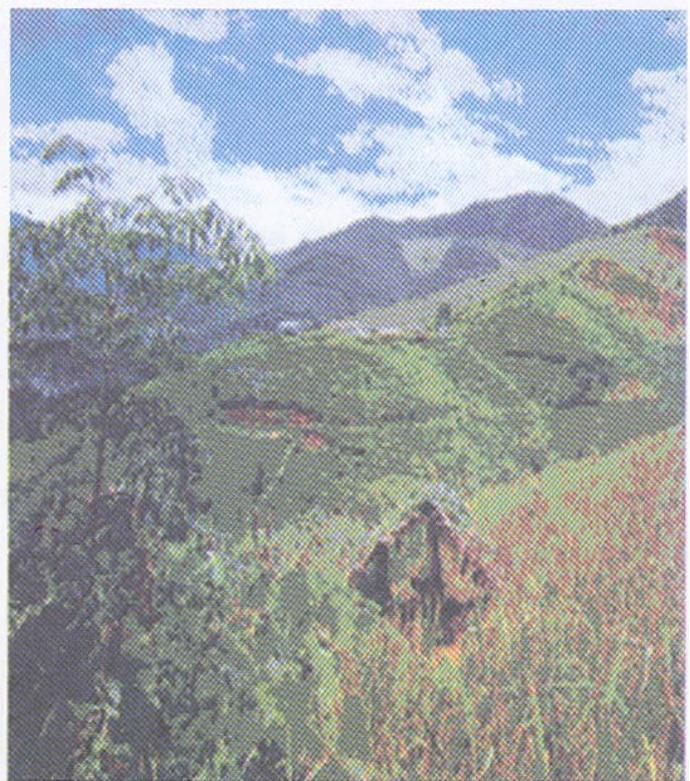


Fig.4. A protection hut (*Rag-biyon*) in a Jhum plot



Fig. 5. Harvesting of Jhum paddy

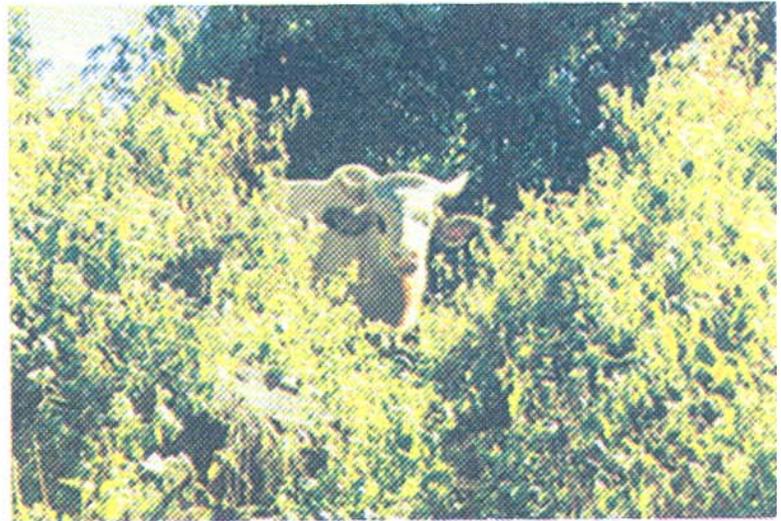


Fig. 6. Mithun (*Bos frontalis*)



Fig. 7. *Endi-phuk* caterpillar feeding on the leaf of *Urium* (*Bischofia javanica*)

Table 1 — Traditional *Jhum* Calendar of the *Bangnis*

Traditional <i>Bangni</i> Month	English Month	Natural Indicators	Activities
<i>Rajo</i>	Dec/Jan	Calls of <i>Chou pou</i> bird signal felling of trees, jungle cutting continues till there is chirping of <i>Tuk pi pipi</i> bird.	Selection of new plots for <i>Jhum</i> . Jungle cutting & slashing of under growth, shrubs, twigs & trees.
<i>Rate</i>	Jan/Feb	Calls of <i>Pipiar</i> bird indicate time for burning the fields. Abundant flowering of <i>Sanglo</i> (<i>Bombax ceiba</i>) and chirping of <i>Pako tabo</i> signals, sowing of early paddy (<i>Nincho</i>)	Jungle cutting & slashing continues. Burning of slash and clearing of charred remains. The resulting ash serves as fertilizer and helps to neutralise soil acidity. Sowing of <i>Nincho</i> (early paddy) - <i>Naga</i> , <i>Aripata</i> along with maize (<i>Tapio</i>) and millets. Sowing of maize along the upper slopes of the terraces, peripheries & along bunds to help in soil binding.
<i>Date / Limi</i>	Feb/Mar	Singing of <i>Pakyo tabo</i> bird indicates jungle cutting for <i>Rakteh</i> plots. The <i>jhumias</i> go for taking omens by observing egg yolk or chicken liver (<i>Rosin</i>) Flowering of <i>Mekahi</i> (<i>Phoebe cooperiana</i>) indicates sowing of <i>Ningte</i> paddy.	Terracing (<i>Panbe</i>) of steep slopes and higher areas, along contours, with old logs, weeds, stems, etc to prevent run off and to help retain humus. The terraces are normally 9, 5 or 3 ft long and placed 5 m vertically apart. Soil preparation and sowing of maize in <i>Rakteh</i> plots.
<i>Leking</i>	Mar/ Apr		Other crops such as cucumber (<i>Mekung</i>), cucurbits (<i>Tarok</i>), chillies (<i>Yamdak</i>), ginger (<i>Take</i>), beans (<i>Tape</i>), tapioca (<i>Aning</i>), yam (<i>Aningye</i>), leafy vegetables (<i>Yangkya & Giang</i>), Okra, White Sesame (<i>Tanam</i>) are later sown randomly. Different tuber varieties are sown along the peripheries. Being non browsable, they act as a live fence for protection against goats & cattle. However if planted with rice, leads to lowering of productivity of rice.
<i>Lechir</i>	Apr/May	Chirping of <i>Tuk pi pipi</i> and <i>Pinchung</i> bird's signal, onset of <i>Rakteh</i> paddy sowing that goes on till the time the <i>Gaga</i> (frog) starts croaking. Sowing of late paddy also coincides with the flowering of <i>Takuk changne</i> (<i>Gynocardia odorata</i>).	Under growth and weeds cleared by scraping with a hand held tool (<i>Avek</i>) consisting of a metal strip shaped in the fig of open 8. Broadcasting of millets (<i>Maruah</i> , <i>Piyok & Tia</i>). Later hand sowing of <i>Rakteh</i> (late paddy) varieties as- <i>Radang</i> , <i>Ronchi</i> , <i>Rongje</i> , <i>Ramak pe</i> , <i>Rakhiya pe</i> , in holes, by digging with a hand held hoe (<i>Chaughku</i>). 3-5 seeds per hole are sown in each hole to allow for non-germination and damage by field mice & cut worms. Sowing of paddy follows millets so that there is no clustering and competition for paddy is less.
<i>Yulo</i>	May/June		First weeding is done after 20-30 days depending upon the growth of the weeds using dibble with an iron spoon or bent bamboo strip in the shape of open 8 (<i>Tabupe</i>).
<i>Tiklo</i>	June/July		Second weeding. Leafy vegetables and cucurbits are ready for harvest.

Contd...

Table 1 — Traditional *Jhum* Calendar of the *Bangnis* — *Contd.*

Traditional <i>Bangni Month</i>	English Month	Natural Indicators	Activities
<i>Sengno</i>	July/Aug		Harvesting of early paddy & other vegetables. Harvesting of paddy is generally done by cutting the panicles with a knife (<i>Geisk</i>) or pulling away the grains from the panicles manually. The collected panicles are taken in a cane basket (<i>Ege</i>).
<i>Sengte</i>	Aug/Sep		Post harvesting, threshing of the paddy is done in the field protection huts (<i>Rag Biyon</i>) by spreading on a mat and working with the feet. Storage is in the family granary (<i>Nasung</i>). Weeding in late paddy fields goes on. Harvesting of maize & millets. The millets are used in preparation of locally fermented beer called <i>Apong</i> .
<i>Parwa</i>	Sep/Oct		Maize harvesting and other activities as collection of bamboo shoots, hunting, fishing, etc. gain prominence.
<i>Lebi</i>	Oct/Nov		Harvesting of <i>Rakteh</i> paddy crop. Other vegetables are also harvested.
<i>Rallih</i>	Nov/Dec		Harvesting of <i>Rakteh</i> Paddy crop is over and is accompanied by digging out of tubers and other underground crops. Construction of new long houses also goes on during this time.

Source: Primary data with reference⁸

Normally in the *Balu* only those crops are grown that ripen earlier so as to secure people against food shortage during the period when the bulk of the crops are ripening in the *Rakteh*.

Settlement history

The origin of the *Nishis* is shrouded in a misty past. No one knows for sure as there are no written traditions and everything has been passed by word of mouth from one generation to the next. The only source of information is probably the myth of their origin and migration, which is still remembered by the people but remains largely a matter of conjecture. According to it, they have descended from the first mythical ancestor *Abo Teni*, originally dwelling in some remote corner of the eastern Himalayas⁸.

At some stage they migrated in groups to their present habitat in waves. The migration extended, perhaps, over several centuries, one group ousting the earlier settlers, till it was itself ousted by yet another and stronger group⁸. It is believed that they migrated to these areas in search of land for *Jhum*, as most of this area was unclaimed at that time. They settled here in

an appropriate area of the jungle after clearing it and they started to raise crops for sustenance. This mode of cultivation was of the slash and burn type, chiefly due to the difficult nature of the terrain, non-availability of suitable gently sloping land and adverse climatic conditions especially in the foothills.

These areas got established by old traditions and agreements with the neighbouring villages and were taken to belong to the village as a whole. All the inhabitants are concerned to preserve the integrity of its boundary, which are clearly marked by streams, hills or great trees. All the natural resources as the forests, pastures, fisheries, all the members of the village thus hold agricultural land and water resources jointly. The right to utilisation of these resources is enjoyed equitably irrespective of the group, clan or lineage.

The land within the jurisdiction of the village boundary was divided among them as per their customary traditions. Thus, the individual who opened the land after wresting it from the forests became the rightful owner of that area. This land was inherited by the successive generations along the patrilineal line.

The areas under *Jhum* are thus clearly demarcated and there is a sense of individual ownership within a broad framework of communal possession. The individual right of cultivation continues through the cycle of agricultural operations and remains suspended during the fallow periods, when the land is thrown open for common pasture.

Land tenure systems & stewardship

Earlier the villages had some sort of migration related to the *Jhum* cycle and the entire village moved to a new spot once the resources in the immediate vicinity got exhausted. The rotation period of *Jhum* in this area has now come down to 5-7 years and one can therefore observe severe degradation of the areas. Each individual family has a number of *Jhum* plots in the common village boundary and they rotate their *Jhum* in these year after year. Thus there is no fixed cycle of *Jhum* and it mainly depends on the number of separate plots a family possess where cultivation can be rotated year after year.

The title of the land passes to their male descendents. The members of the other clan who settle later can borrow land from the village common or from a family having in surplus, till it, but can not pass it on to their descendents without the approval of the village council (*Bang-nyele*). The land is thus either inherited or transferred. In case of transfer of land, transfer can be made only to members of the same tribe. There are also cases of vesting of land with the daughters, who are otherwise not entitled to inherit the land, in case there are no descendents in the male line⁹.

The land for *Jhum* is also given for short-term lease for one year or one growing season. The tenant has the right to the produce for that season and forfeits any claim in the future from that piece of land. The lessor may charge some rent in cash or kind or may even lease his land for free. In case the individual has surplus land, which he cannot put under *Jhum* and is lying unused, then based on mutual understanding, the land may be given to a needy person in the village on a long-term lease. In addition, there are a few instances where land has been transferred in the name of the needy, in case the lessor does not have any descendent in the male line⁶.

With the adoption of newer modes of land use, wet rice cultivation, horticulture gardens, plantations and settled agriculture, etc. the traditional systems of land transfer have given way to private land holdings which can be bought and sold.

Social organisation & norms

The *Nishis* are polygynous, patriarchal and clannish people. The most striking feature of the *Nishi* society is that a group of lineally related families, bound by kinship ties, live in a single homestead, which is extraordinarily long and divided into compartments². A single long house (*Agu*) may shelter as many as 10 families and servants, and may run to a length of more than 50 yards⁸. The *Nishi* family is a mother-centred nuclear family with unmarried daughters and sons eating at the mother's hearth¹⁰. Though rarely several of these houses may be found in a neighbourhood as a cohesive village, the feeling of one-village-community is conspicuously absent and the real social unit is the house². The *Nishis* are thus basically individualistic and the only source of cohesion among them is their feeling of oneness through blood and clan spirit.

Their tribal society is a close knit one with strong family and clan network. The entire clan helps in the *Jhum* activity by mobilising necessary labour-by-labour co-operation. While the men folk look after the heavier and more laborious work as slashing & burning of forests, removal of stumps & logs, and bunding & fencing of area; the women look after the back breaking work of sowing, weeding, harvesting, husking, threshing and storage of the crops. In addition, children also participate in these activities especially protection of the crops.

Women are the pivots of their society with regard to the economic activity and needless to say, *Jhum* is the most prominent of them all. Yet they enjoy no specific rights regarding property of the fields, either as a daughter or as a wife¹⁰. Social norms play a major role in this society. A point may be made here with regard to polygyny, which is considered to be a status symbol and a mark of richness. The *Nishi* consider wealth and prosperity to be linked to the number of wives a man can support. This also has a relation with *Jhum* since more the wives more will be the hands to tend the *Jhum* lands.

They have devised institutional ways for mobilising the necessary labour needed at the community level. These are known as *Rey Yenam*, *Dorum Rey* and *Goya Rey* and basically the mother centric families in the long house call for the same¹⁰. While in the former no reciprocity is required, the second calls for reciprocal exchange of labour. *Goya Rey* is the community, where co-operative work involves more than two villages. The success of

cultivation depends much on how well the mother organises the required labour, given the difficult conditions and remotely scattered plots¹⁰.

Socio-religious beliefs

Complex systems of beliefs in spiritual qualities of nature and at the same time conception of a Supreme Being are the two important ideas characterising their religion. Different categories of *Wiyus* (spirits) and *Orums* (ancestral ghosts) dominate their spiritual and religious world. The *Wiyus* inhabit a wide range of habitation, each having a specific and assigned one and are regarded to be instrumental in bringing misfortune, disease and misery. Because of their malevolent nature they are in the active imagination of the people and are to be appeased with appropriate propitiations and sacrifices.

The most dreaded of the spirits are *Dojing* and *Yapom*, the spirits of the jungle. They take a great toll on the people by making them fall ill. The *Wiyus* noted for various kinds of fever are *Jengte & Pamte*, *Nyori & Pamri*. Living in deep valleys and ravines are *Girr & Nyori* who cause sufferings by pain. *Yan Wui* is supposed to live in the lofty northern hills with a large family and is supposed to visit people with diseases of various kinds. *Kirri & Lirri* live on riverbanks and are prone to offence when people trespass their haunts, say on a fishing spree. They occupy a prominent place in the *Yulo* (ceremony of Mithun sacrifice performed after marriage or recovery of a patient) shrine and share the sacrifice of Mithuns (semi domesticated Bison—*Bos frontalis*) and pigs. *Yobu*, the God of chase is invariably found at the balcony or the entrance of the house. If *Yobu* gets offended, the hunters may not get any game in spite of their best efforts⁸.

By far the most important economic activity of their community is agriculture. To have a good crop, *Parte Rinte Wiyus* should be favourably disposed². Small bamboo representations are hung in the granaries to guard them from harm. Inside the house are hung small-decorated representations of woven split bamboo for the *Wiyus* living within the house. They are to a large extent responsible for the welfare of the inmates and receive offerings of fowl.

The *Nishis* believe that without the kindness and blessings of *Ane Duini* or the Sun-mother nothing can be obtained or achieved in the world⁸. She is the benevolent and gives children. *Duini* is believed to give crops and fill the granaries and take care of the animals. However there are no special prayers to

appease her and she is not reviled even in most trying times of distress and calamity.

Worship & rituals

There are certain areas in the vicinity of the villages, which are considered to be the abode of the *Wiyus* and to break that area for cultivation, or to fell a tree inside is totally prohibited due to the fear of displeasing the *Wiyu*. If the nearby areas are to be brought under *Jhum*, the forgiveness of the *Wiyu* of the jungle is sought and offerings of fowl or pig are made. Among the *Nishis*, before felling of trees in the common wastelands (*Goye-myodi*), the deities are propitiated with offerings of fowl, vermilion and incense sticks. On one hand their mercy is sought for felling the tree and on the other they are thanked for rearing the tree for so long⁶. During the clearing of land for *Jhum*, it is a belief among the *Nishis* not to cut trees of a particular type so as not to invoke the spirits of the woods. A particular mention may be made of *Sengri & Sengne* (*Ficus* sp.), which are considered to be the abode of *Wiyus* and to cut them or to use their wood as firewood is tabooed.

At every stage, beginning with the selection of plot of the land, clearing trees, the *Wiyus* of the forests, trees and earth are duly propitiated with proper incantations, ceremonies and sacrifices. They have a tradition of taking omens with egg-yolk or chicken liver. After the incantations, the chicken's throat is cut halfway open and after it is dead, the belly is cut open. The liver is then taken out for observation. If an egg is used, it is boiled, cooled and peeled. With a hair it is cut into two halves. The yolk is scratched with an iron pin in the centre for observations⁸. This is called *Rosin* or *Mangal* and is performed by the *Njeibu*- the village priest.

After planting of the paddy fields when the seedlings go lush green, they invoke *Dojing*, the *Wiyu* of the jungle to protect their crop from damage and to bring prosperity to the community. To save the *Jhum* crops from withering and pests, *Parte Rinte Wiyus* have to be kept in good humour by sacrificing pigs and Mithuns (Fig. 6). If the paddy crop shows indications of drying or being infested by pests, the *Wiyus* are propitiated with offerings. This ceremony is called *Myoing* and is performed by the *Njeibu*. The *Jhumia* make offerings of fowl, pig or goat, which are sacrificed to invoke the spirits. All the *Wiyus* are believed to love blood and hence all rituals are marked by sacrifice of animals. The place of the sacrifice is

near the house and elaborate ceremonial and sacrificial structures of bamboo are constructed to represent the spirits. Often these structures, called *Yugings*, are profusely decorated with bamboo shavings and bamboos having linear designs on them. On them, the blood of the sacrifice is smeared.

After the last harvesting of the season i.e. when crops are obtained from the *Rakteh* for the first time, the rich *Nishi* sacrifice a pig and invite their kinsmen and other members of the village to a feast called *Rakdum*. Singing and dancing mark the festivities. A particular mention may be made here of the *Buiyasadon* dance that is performed by the tribesmen for the welfare and prosperity of the performer and is performed after the harvest. *Endi-phuk* caterpillar feeds on leaves of *Urium* (*Bischofia javanica*). The silk is used locally for making *Endi-chadar* (Fig. 7).

The major festivals of the *Nishis* revolve around the *Jhum*. Before the commencement of cultivation, the festival of *Mnyokom-Yulo* is celebrated. Various deities are invoked during the festival and animal sacrifices are offered so as to protect their crops from the ravages of insects, wild animals and other pests; give health and vitality to their domestic animals, and for the well being of their brethren. Small effigies of bamboo are erected at the festival place (*Mnyokom-Yulo Nyageng*) representing different deities and spirits, the prominent among them being *Yapom*—the God of jungle; *Kanjarang—Yulo*, *Tangrang-Yulo* & *Regeu—Yulo*—the Gods of agriculture. At the end of the festival, the villagers observe a taboo for five days during which they do not go out of the village for *Jhum*, hunting or collection of forest produce. Outsiders are also not allowed to enter the village. The observance of taboo is known as *Mnyokom-arina* and violation of the same entails fine¹¹.

After harvesting, *Sirom Molo Sochum* festival is celebrated in the month of *Rajo* (December) every year. Prayers and sacrifices are offered to the Gods and deities to fill their granaries with bumper harvest. Before this festival the houses and granaries are rebuilt and the crops are harvested and stored¹². In the field huts the people thrash the paddy and bring it in baskets, singing songs on the way. For the festival, the householders prepare rice, meat and prepare *Apong* (rice beer) and entertain guests and receive blessings and wishes for more abundant crops next year. They believe that if the guests and the deities are satisfied with food and drink, more crops will grow in their

fields the following year. Prayers are offered to the goddess of crops and if some food stuff disappears or foot prints of some animal are seen, it is believed that the goddess came to them and the crops will be abundant.

An interesting myth of the *Nishis* narrated by a song, related to this festival goes thus¹². Their ancestor *Nima-Teni* did not worship the goddess of crops and so she ran away to *Dogo Dekani* (the land of summer). But *Nima-Teni* went to the land of summer, entreated the goddess and ultimately married her. He got all kinds of seeds from her and learnt the art of cultivation. After he returned back to the land of cold and introduced agriculture. In the song the maestro sings that all should till their fields and set fire to the over growth when the birds like cuckoo start singing and the insects like cicadas begin to chirp. When they sing all day long, they should begin to sow. It is said that *Nima-Teni* taught the *Nishis* and then went away to the land of summer with his wife, the goddess of crops.

Conclusion

The practise of *Jhum* is thus not merely another exercise by the tribals for their sustenance, but a traditional method of earning a livelihood, a traditional farming system that 'uses local products and techniques', has 'roots in the past', has evolved to their present stage as a result of the interaction of the cultural and environmental conditions of the region¹ and is deeply embedded in the tribal psyche.

Jhum is ecologically sound and viable, if the fields are kept fallow for sufficiently long time so that these open sites can heal and regenerate, i.e. the long fallows help in better soil recovery¹. A decline in fallow period leads to a declining productivity and hence the conditions of degradation. In the study area, ironically the cycle of *Jhum* has come down to 5-7 years.

Different Government departments aimed at providing an alternate source of livelihood to the *Jhumias* and rehabilitating the degraded *Jhum* lands, but the results have been far from satisfactory have executed many schemes. Either the schemes were not continued for sufficient long periods of time to make the *Jhumias* self reliant by providing them an assured livelihood or these lacked an adequate extension backup. The situation is worsened by the sheer topographic remoteness of the area and the widely scattered villages.

In the interior areas even if the farmers go for horticulture, there are no markets to either sell their cash crops or to buy their subsistence requirements. In the wet rice plots only one crop is raised and for the other crops the *Jhumias* have to depend on their traditional *Jhum* plots which are a multi crop system and meets up their requirements of vegetables, tubers, fruits and climbers. There are cases of the *Jhumias* feeding the PDS rice to their poultry as the same does not meet their requirements of brewing the drinks or performing rituals, which the glutinous *Jhum* rice does⁶.

The practise continues and not many people have been weaned away from this enterprise. The strategies to tackle *Jhum* should revolve around improving the system itself in consultation with the local communities, taking into account their existing beliefs and practices, rather than replacing the system by one which is imposed on them and hence out rightly rejected by the communities.

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