



people to continue it. Besides, the traditions and culture of people are very much attached to agriculture only. Their food habits, festivals, folk songs and belief are very much agriculture oriented. Despite all odds, they are continuing these system were they sustain their life as well as maintaining their traditional culture in other side. That is why their sensitivity on shifting cultivation is vague and enjoying a pivotal position in their societies prevalent since from the human culture. This strongly confirms that the system is deeply rooted in tradition, culture, beliefs, festivals, legends and myths of the people.

### Objective and significance of the study

Although shifting cultivation have attracted the attention of social scientists in the areas were it take place, But they do not perceive this as destruction of forests due to absence of any other alternative for cultivation in their ecological setting, so they regard shifting cultivation as the appropriate mod of production of food. but it requires to get idea of the people's perception on it and the extent of their attachment to it. Here author was intended to attempt through holistic intensive field study and to seek to explore the perceptions of shifting cultivators regarding their commitment to shifting practices, their reaction with entire process of shifting cultivation devoted by the jhumias themselves and other family members who dealt with the systems, includes, shifting of field, fallowing of forest, evils and problems connected with it. Though having so many hindrances in the processes of shifting cultivation still farmers belief and perceptions on the system which they cannot leave. This study is a discussion on the different perception of the farmers on shifting cultivation which are given below:-

## II. PERCEPTION OF FARMERS ABOUT CROPS AND RICE

As shifting cultivation being multiple cropping agriculture. Farmers grow many types of crops in a single field of which the paddy is the main. Therefore, sowing of paddy is done more religiously and with festivity. Sowing is done after the construction of field hut (NAKUM) and fencing around the field is finished.(Fig : 1) Starting from the time of sowing to consumption, rice is always caring from religious point of view. While cultivating, farmer consider them as like that of living being that can listen and feel the farmers love and affection. Sometimes one will find farmer talking to crops in the field. During weeding if by mistake a rice plant is uprooted or stamped on it, farmer expresses the guiltiness, even by words saying" Sorry, I have not done it intentionally".



Fig.2: Nasu (granary)

Among the thousands of crops in the field, farmer care each and every single plant like, If any plant has fallen on the ground due to weak soil at the base or broken at the top, farmer gives support at the bottom with soil and top is tied with other plants. Farmer believe, if the rice is burn in fire, rice use to weep and next you would not get good crops. Likewise if child throws it in the fire, parent would scold them and take out the rice immediately from the fire.



Fig.1. Field clear for sowing

That is why if the huge quantity of grain is burn due to fire accident in the village or granary, a ritual of atonement is performed called HURIN. You will find a farmer picking up every grain fallen on the ground during harvesting near the huge heap of grain as the farmer want that all the grain in the field must reach to granary and share the ritual performed by the farmer. It is also believed that if any grain is missed in the field, during harvest that grain remains alone in the field and weeps. That is why, even after the completion of harvesting of field, farmer goes back to the field and looking for (AMPA PAALA) such crops in the field. The emotional attachment of a farmer with the crops is so much that even dream of such crops left in the field weeping like a chick looking for mother.



Fig.3. LIJI - LIPIN

Storing is done very ritualistically. Grains are carried to granary (NASU / NAHU) (Fig.2) every evening when return from field to home. Here all are not allowed to enter in the heart of granary (Jurii). No noise is made during storing and final storing is done mostly by the wife of the family. A fine and rounded pebbles, smaller then the size of an egg called Liji-Lipin or Dosi-Lipin (Fig.3) is considered as the symbol of blessing of the goddess of prosperity. Galo beliefs Liji-Lipin as highly sacred and family assets. To have Liji-lipin is considered fortunate, because all do not posses Lwji-Lipin. It is always kept with grains either at home or granary in a purified brass bowl (Malu) with grains that have never been used by man or women of immoral character and taboo. They also believe that presence of Liji-

Lipin would bring fortunate in the family and its sudden disappear from the house is considered as likelihood of coming of misfortune in the family. It is also believed that when Liji-Lipin is at home, family members should maintain peace and harmony in the family. In every social function especially related to agriculture, they should offer rice powder paste to it. Liji-Lipin is considered a living being, a female goddess. If family does not maintain peace and always quarrels among the family members, this Liji-Lipin will leave the house. Sometimes, accidentally the escaped Liji-Lipin is found in granary of others house.

Just after storing of grains in granary they arrange a feast with drinks and food called AMMAM MAMNAM, with believed that there would not be any miraculous disappearance of grain from granary and pray for long-lasting of food throughout the year or till harvesting of next field. In this occasion they cover up the grains at granary(NASU) by mat(PECHE) putting 2-4 piece of gingers leaves and smeared rice powder(Iti) over it, here priest will chant for save. They invite all the village members on the occasion. Women/female member of the family collect the grains from NASU (granary) every day for daily consumption. While collecting grain they use and maintain the unit of measurement through small basket called DOSI MACHE or JURI MACHE (equal to 1/3 of Igin(creel) or 2-3 Kg capacity) which kept in the granary permanently. Person who is on taboo is not assign for such work. Apart from the storing of paddy, Peli & Amlu, Seeds for next cultivations is stored at granary at safe place.

### III. PERCEPTION ON EMOTIONAL AND SENTIMENT ATTACHED TO SHIFTING CULTIVATION

Human being characterized with emotion and sentiments which distinguish them from animals. The feeling of farmer with forest cannot be neglected. While clearing the forest, felling of trees for construction of house, setting of fire in agriculture field and even for collection of minor items from the forest they have feeling of emotion and sentiments towards forest. They feel forest have certain deities who controlled over it. That is why in every process of shifting cultivation from site selection to harvesting farmer offer rituals of different form. The jhumias live perfectly in harmony with nature by adjusting with their eco system and considering themselves as a part of the forest. Scholars have rightly point out that shifting cultivation is a life system of the farmers. It is in their taste, dream and feelings. As learn from the farmers, since their childhood, farmers know only one thing that is shifting cultivation. Most of the time one will find farmers talking about their fields, crops, vegetables and animals only. Even most of their dreams are also about their fields and crops. They know the shifting cultivation field as a source for collection of vegetables, leaves firewood and many other items for use and consumption. They depend more thing from the forest then human being. If someone from family who talk about the sale of the jhum land (Kode Pugnam) they use to reject their decision. There is saying "Riki Pugne Nyima pukpa jido" means person who sold the jhum land of own would become a poorer in his life. But today there is exchange of jhum land for getting government job of their children.

Every year, the clearing of the new forest brings back to them the past memories, sweet and sorrows. Whatever it may be,

all becomes nostalgic for them after so many years of gaps of ten years, twenty years, even forty years. She remembers all the activities that happened during previous cultivation in the same field before ten or twenty years, about the married of daughters who used to accompany her in the field as a child, others co-farmers who are no more on this earth and the festivals they celebrated. In olden days, once a girl is married to a remote village there were no chance of meeting her for years together. During those days, there was no letter writing system, telephone and telegraph as we have today. Daughters married to distant villages also always talk of their parental in villages, where they spent their childhood, the forest, rivers, the fruit trees and the path to field. If someone comes from their village (origin), they would invite them and ask all about the village, the friends, the old location of house, the old fruit trees and fish in the rivers and so on.

Even aged people, who cannot go to field, talk only about the forest, yield in field, rivers, hunting and trapping, sometimes they are also heard singing themselves in a melancholy tune, may be about the sweet memories or suffering they experienced.

Even after so many year of continuous cultivation the same field farmer get emotional attached to the field crops and the path. They love and care each and every plants like their own child. That is the reason many a time farmers are heard talking to crops. Even after the harvest farmer use to go to field and see the missed crops left during harvesting and they usually want to waste the time in field. That is why farmer they don't want stay at village and home even for two or three days. They feel like "Diingii-Deenga" means not feeling fresh while sitting at village. Even they sick, you may see them to go to field, forest, river to collect vegetables (oh) bijao leaves (oko) and they saying it as Insu - Inka, meaning to refresh the body. Sometimes they carry the cooked food and vegetable to field as they feel taste to eat at field then at home. For farmer going to field, forest is like an addiction, addiction of free and fresh life in the forest.

### IV. PERCEPTION ON TIME, SEASON AND MONTH WITH SHIFTING CULTIVATION

In olden days people do not have watch to see the time and have calendar to plan the day to day work. They only know the four shifts of time Morning (Aro), day (Alo), evening (Arum) and night (Ayo).The behaviour of animals and birds understand them to know the time of the day. Though farmers don't have wrist watch on their hand they never miss their time of daily activities. At home, behaviour of domestic animals, cock, cow, pig and dog tell the time and morning breeze tell the morning time.



Fig. 4: Woman on way to field



During the cloudy day when the farmer is in the field or in the forest, they cannot read the position of the sun to assume the time, In that case they take the help from the calls of bird. For instance, bird call PUK- RU – RU(Laughing birds) live in group, at noon all would make a loud call in group it signifies the approaching of evening. When they make next call farmer prepare to go home from field. Many bird make call of their friend towards roost as farmer assume as already evening. Besides day to day behaviour of plants and animals, their response to season is very much observable. They believed, season means change in temperature, rainfall and change in the direction of the wind which effect the behaviour of plants and animal life.

Like that of time, Galo have own way of counting seasons and months. Their calendar is purely a lunar calendar, which is solely based on the phases of the moon. The beginning of the month is noted by sighting of a new crescent moon. Thus, the year starts from any month. They have no New Year and Week system as in Gregorian or Hindu calendar. Sometimes, it is not always possible to have a view of moon during long overcast of the sky. In such cases they follow the behavior of animals and plant. These natural indicators are also used to confirm any confusion regarding counting of months. Their year contains twelve lunar months with same length of month having 30 days. A year is divided into four seasons where their whole shifting cultivation activities are taken place. The following are the seasons as follows:-

1. Summer (Diigu / lobo)
2. Winter (Diichi / Dene)
3. Spring (Diur–Lour)
4. Autumn/dry season ( Diigin / Tehrukh)

#### V. PERCEPTION ON GENEALOGY COUNTING AND SHIFTING CULTIVATION

When many societies have lost the track of their origins, the Tani groups of Arunachal Pradesh in general and Galo tribe in particular still maintaining the counting of their genealogies and trace themselves back to many generations. The counting of genealogy has survived mainly due to shifting cultivation. In every rituals and feast relate to agriculture farmers refer the names of forefathers generation and geneology. The counting of genealogy is very important to know the generations in the same clans. Tani groups strictly maintain the clan relationship, especially in the matter related to marriage.

Age of the individual can be count with memories from the year of cultivation corresponding to the birth year of the children or the birth year can be remember with memories of that corresponding year of cultivation of the particular patch.

#### VI. PERCEPTION OF PEOPLE ON COMMUNITY INVOLVEMENT AND SHIFTING CULTIVATION

In so many cases in village reciprocity of work is mostly found effective in agriculture activities. In certain problems like death of family members, fire accident and when somebody could not work in the field for sickness or for any incapacity, the whole village members helped him and finished the job (Dis do rigur hinam). This help farmers closeness to each other and they can share their problems without investing hard financial which

is only possible in shifting cultivation. Types of community involvement mentioned above in shifting cultivation are as follows:-

- a. Ess hinam / Riigey hemin hinam (Reciprocity in field work)
- b. Dis-do lo Rigur hinam (Reciprocity in mutual help basis)
- c. Ho-nam / Rige jolik nam (day base wage pay system)

#### VII. PERCEPTION OF PEOPLE ON FESTIVAL AND SHIFTING CULTIVATION.

Festivals are an important aspect of culture in any part of the world. Festivals have been defined by falassi (1987) in the classical cultural-anthropological perspective “as a sacred or profane time of celebration, marked by special observance” . As regard to the state of Arunachal Pradesh, Festival forms an essential aspect of the socio-cultural life of the people.



As a matter of fact festival are the mirrors of the peoples culture. Every society in Arunachal Pradesh celebrates a number of festival and most of them are agricultural oriented. Say, Nyokum of Nyishis, Dree of Apatani, Boori Boot Yullo of Hills Miri, Chalo-loku of Nocte, Oriah of Wancho, Nyetshhidow of Akash and Mol or Moh of Tangsas are the major agricultural festival celebrated in different districts of Arunachal Pradesh. Like other communities of state, Galo inhabitant tribes of West Siang district Mopin as an agricultural festival celebrated in the Galo month of Luki (April) is a colourful festival for bumper cropping agricultural in that they seek the goddess of prosperity and fertility for bumper crop in the form of Rili bongo Lanam.(Fig.5)

It is a festival of good harvest, good health and peace. The tradition, culture, beliefs faith and aspiration of the Galos find an expression through the celebration. In almost all major religion of the world, fertility cult is the pivotal factor so this Mopin festival is celebrated as fertility cult in honour of the goddess of prosperity and fertility. As believed by Galo, Mopin ‘the goodness of prosperity and festival depict and symbolizes Galo culture - The seedling season of crops. When we look the history of evolution of Mopin, it was Abo-Tani, considered as ancestor of the human being on earth who initiate, taught and give the power of the art of cultivation which give us food today. Accordingly today the power is praised in the form of Mopin. The Gallos celebrate Mopin as a part of its cultural festival for bumper cropping. Therefore, it is wish of the farmer or the every society member of the Galos, though the festivals in their society rooted in religious austerity, are mirthful and joyous occasions of

prolonged feasting, copious drinking and merry-making and celebrated for bumper cropping and harvesting and to worship the mother earth Anyi-pinku pinte whom they call goddess of prosperity and peace.

### VIII. PERCEPTION ON DISTANCE OF FIELD AND SHIFTING CULTIVATION

The distance of field is most important aspect which farmer depends on. From the very beginning farmer make a plan for which site he is suppose to do cultivation. As per distance of site, the size of the patch would be decided. In some family only father and mother is doing shifting cultivation which prefer smaller size of field, because large size field may makes problem for them in later. Normally size of the field is depends upon the number of actual workers in the family.

Domestic animals like cow, pig and Mithun are eaten up the paddy if one is not taken care every time. That is why one who has cultivated near the village has to well fence the field to prevent such animals. But distant field will not face this kind of problems. The dense forest land highly fertile and there is a scope of higher production, hence the energetic family prefer the dense forest land for shifting cultivation. Moreover, the distant field facilitate them for hunting as it is near to the forest. But it is not true in all sense because each and every one have no their own land for cultivation in the site of their choice, which compel them to cultivate in any available site. In some cases Jhumia took the land on lease from other people only for current year or cultivation.

Now the trend has been change every one wants to do the cultivation in nearby village as they are not care about the production of rice rather they take care and practicing multiple cropping of cash crops like eggplants, chillies, ginger, soya bean, beans etc. Easy collections of firewood for household and easy communication for sell out of the product are the advantages for doing cultivation near the village. To keeps the movement continues, younger of the family arranges a patch near village for their elder one who could not go to the distant field. In the view of scientific, the continue movement keeps the elderly persons healthy. Sometimes term PAACHE is also used for second year cultivation like RIIGA, but size is much smaller. It is mainly done by old women in the field near to village

### IX. METHODOLOGY

The study has based on primary and secondary data collected from the various sources. The primacy data has been collected with formal and informal interview /discussion with the farmers. The questionnaire was framed for acquiring systematic information during field work in different circle of districts by authors while accumulating the information.

The secondary data inputs like socio-economic, agriculture operation has been taken help from the related Departments (Agricultur, Economic Statisticse,district handbook etc) of state Government and write up / pamphlets published from the different sources.

### X. RESULTS AND DISCUSSION

As said, shifting cultivation is the main stay of the people for gathering food. This has linkage with all activities of these tribal and cannot be apart with this method of cultivation as they maintaining since from the time immemorial. Here in study area, the shifting cultivation is believed to be ideal were high rainfall, luxuriant growth of vegetation and low land man ratio and other physical factors like topography, soil and climate fits well to opt the people for sustenance. The Jhumia they adjust with the nature and that is why they don't bore something to do in the forest. They feel safer in the forest other than anything which they perceived in different aspects. In this paper author has targeted in finding out people's reaction and to get idea of the jhumias in shifting cultivation practices and extent of their attachment in different attitude that leads to their socio-economic life.

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