

HISTORY OF TRADITIONAL AGRICULTURAL PRACTICES: A STUDY OF THE GALOS OF ARUNACHAL PRADESH.

Chapter-1

Introduction

The Land

Arunachal Pradesh was known as the North-East Frontier Agency (NEFA) till 1972. On 21st January 1972, the territory was constituted into the Union-Territory of Arunachal Pradesh under the Provisions of section 7 of North-Eastern Areas Re-organization act 1971 and ceased to be a tribal area within the state of Assam.¹ In the same year the area was renamed as Arunachal Pradesh and it became a full-fledged state on February 20, 1987.² It is situated in the extreme Northeast tip of India, lying between 26°28' and 29°30' north latitudes and 90°30' and 97°30' east longitude.³ The total area is said to cover 83,743 sq. Kms.⁴

Arunachal Pradesh has a population of 1,382,611 of which male are 720,232 and female are 662,379 according to 2011 census. It is bounded by Bhutan on the west, China on the North, and

¹ The Arunachal Pradesh Code Volume-I, Government of Arunachal Pradesh Law and Judicial Department, Itanagar, 1982, p.ii.

² Manorama Year Book, 1998, p.613.

³ State Gazetteer of Arunachal Pradesh, Volume-I, Government of Arunachal Pradesh Gazetteers Department, Itanagar, 2010,p.3.

⁴ Bose,M.L, History of Arunachal Pradesh, Concept Publication, New Delhi,1979,p.1.

North-East, Burma (Myanmar) on the East and the states of Assam and Nagaland on its South.⁵

Arunachal Pradesh is the largest state area-wise in the North-East region, even larger than Assam which is the most populous. Arunachal Pradesh which was known as the northern frontier of Assam during colonial rule was named the north east frontier tracts in 1912, which the administrative apparatus centred in the foothills. Initially the region comprised of five divisions in 1947. In 1954 the Balipara Frontier Tract was bifurcated into Kameng Frontier Division, Subansiri Frontier Division, *Abor* hills district was renamed Siang Frontier Division, Mishmi Hills District was renamed Lohit Frontier Division, and Tirap Frontier Tact was renamed Tirap Frontier Division.⁶ Their headquarters were the Bomdila, Ziro, Along, Tezu, and Khela. In 1980, the district was recognized from five to nine dividing Kameng, Subansiri, and Lohit into each. Again these districts were farther recognized by dividing the district of Kameng, Subansiri, Siang into three and Lohit into two. Now, presently there are seventeen districts in Arunachal Pradesh.

Predominately the state is inhabited by 26 major tribes and more than 110 minor tribes with their colourful tradition and cultural practices, according to the report of Director of Economic and Statistics, 2001 Government of Arunachal Pradesh. Geographical

⁵ Elwin, Verrier, A Philosophy For NEFA, Shillong, 1964, p.5.

⁶ State Gazetteer of Arunachal Pradesh, op.cit., p.ii.

variation that is temperature and rainfall highly influenced the culture of the tribes. Monpas, Sherdukpens, Dammai (Mijis), Akas, Buguns (Khoas), Sajalongs (Sulungs), Bangnis, Nyisi, Tagins, Hill Miris (Nyishi) now they were officially consolidated with closest ethnic neighbours, the Nyishi in 1998, Apatanis, Adis, Galos, Membas, Khambas, Mishmis, Khamptis, Singpos, Wanchos, Tangsas and Nocte are among the major tribes of Arunachal Pradesh.

Religion

Religion is a human activity that can be easily accepted only within the framework of reality that it creates for itself. If you accept the existence of whatever myth, god, spirit, or supernatural force that a religion proposes, then you can see the logic of all that follows. However, most of the entities, god or whatever, that are the basis of religious thought and action cannot have their existence validated by direct observation.⁷

Indigenous religions are the majority of the world's religions. They are as diverse as the languages spoken, the music made, and the means of subsistence employed by the many and various people who live them in a wide variety of environments, in all continents of the earth. ⁸ Religions are far from static, they change like everything else in this world. Indigenous religions are co-operative

⁷ W. Dow, James, A scientific Definition of Religion, Issn Publication, London,2007,p.2.

⁸ Harvey, Graham, Indigenous Religions a Companion, Cassell London and NewYork, 2000,p.3.

activities in which individuals often have considerable freedom.⁹

The religion and culture of the tribes of arunachal Pradesh is of great variety and consist of beliefs, ideas and faiths which are profound, and complex. The people of the North-East Frontier are no exception; they also have developed a supernatural world to brighten the stark realities of life. They believe in a world of good and evil spirits hovering in the air about them and on the earth below and long to appease enmity or enlist the aid of these secret powers by sacrifices.¹⁰

The indigenous faith of arunachal Pradesh is defined in the Arunachal Pradesh freedom of religion Act 1978. According to this Act indigenous faith means “such religious belief and practice including rites, rituals, festival, observance, performance, and abstinence, performed by the indigenous communities of Arunachal Pradesh.”¹¹

The majority tribes of Arunachal Pradesh profess shamanism or either animism, as their religious faith. All indigenous faiths, beliefs practice which are found among the tribes, constitute their religion. The most of the tribal communities believe in the existence of spirits, give different names to them and worship them in

⁹ Ibid, p.xi.

¹⁰ Bose, M.L., op.cit., p.35.

¹¹ Arunachal Pradesh Freedom of Religion Act, (No.4), Government of Arunachal Pradesh, Itanagar, 1978, p.3.

their own distinct way.¹² The Adis, Galos of Siang, the Akas, Mijis and Khowas of Kameng, the Nyishi of Subansiri, the Apatanis of lower Subansiri, the Tagins of Upper Subansiri, the Mishmis of Lohit and the Singphos, Noctes, Wanchos and Tangsas of Tirap believe in a number of heavenly spirits and offer sacrifices to propitiate them.

The Adis, Galos, Boris, Bokars of Siang, the Nyishis of Subansiri, the Apatanis of Lower Subansiri, Tagin, and Hill Miris (Nyishi) of upper subansiri believe in the concept of *Donyi* (sun) and *Polo* (moon), called *donyi-polo* in their local dialect. Tagin, and Hill Miris (Nyishi) of Upper Subansiri also believe in the concept of sun and the earth and they also worship the *Si* (mother earth) and *Donyi* (sun), called *Si-Donyi* in their local dialect. They regard *Donyi-Polo* as their guardian angel, creator and supreme god.

Buddhism is one of the major religions in Arunachal Pradesh. The Monpas, sherdukpens, khambas, and the Membas, Meyors and Nahs profess the Mahayana form of Buddhism. Khamptis follow Hinayana Buddhism which they brought with them from Khampti Long.¹³ Singphos and Tikhak tangsas are also followers of Hinayana form of Buddhism.

Trace of Brahmanical religion that is Shaktism, Shaivism and Vaishnaviam is also noticed in some part of Arunachal Pradesh.

¹² Dubey, Sanjay, Dynamics of Tribal Local Polity and Panchayat Raj in Arunachal Pradesh, Pioneer Book, New Delhi, 1991, p. 19.

¹³ Dubey, Sanjay, op.cit., p. 35.

Vaishnavism reached the Nocte of Tirap by the eighteen century through the effort of the follower of Sankara Deva of Assam.¹⁴ Nocte and Wancho Tribe are greatly influenced by the Vaishnavism.

Political

All the tribes of Arunachal Pradesh had own traditional socio-political organisation which governed the life within the community according to the traditional laws. Each community evolved its own political institution. Generally village council of Arunachal Pradesh is usually classified into five different categories they are:

- (i) The Adi, Galos, Akas republic type where the village solidarity was stronger than the clan or tribe loyalty.
- (ii) The Nocte, Wancho, Singphos, Tangsas, type were one paramount chief had a number of villages with subordinate chiefs under him.
- (iii) The individualistic Mishmi and Nyishi type where the household and the clan formed the basis of a unit.
- (iv) The Monpa, Sherdukpens and Khamptis theocracy, where a number of villages, who were autonomous in internal affairs were knit together under the theocratic rule of a monastic authority, and

¹⁴ S.K., Chaube, Hill Politics in North-East India, Orient Longman, New Delhi, 1999,p.2.

- (v) The Apatanis type where a large village was segmented into clan sector, each administered by its own clan council.¹⁵

Therefore, political life of the tribal people plays an important role in their societies which help them in maintaining peace and justice in the society. These councils may vary from tribe to tribe in composition, powers and privileges, but they have certain features in common. They are all time honoured political institution deriving their authority from traditions.¹⁶ All council are informal in character, and it constituted by the elderly, respected and influential person. This political institution had a great impact on the functioning of the indigenous political institution.

Language

The languages spoken by the tribes of the North-East Frontier reveal diversity of origin rather than confirm the unity of origin.¹⁷ According to the Grierson linguistic classifications, a number of language spoken in Arunachal Pradesh from the West Kameng district to the Lohit district are put together under the North Assam group of Tibeto-Burman speech family. This affiliation is obviously

¹⁵ Pandey, Deepak, History of Arunachal Pradesh (Earlier times to 1972 A.D), BaniMandir,Pasighat,2012,p.212.

¹⁶ Gazetteer of East & West Siang District, Government of Arunachal Pradesh, Guwahati, 1994, p.253.

¹⁷ Bose, M.L.,op.cit.,p.21.

geographical rather than philological.¹⁸

The Monpas, the Sherdukpens (extra Bhutan-Bhutias), the Khambas and the Membas immigrants from Khams) speak language of the Tibeto-Himalayan group of the Tibeto-Burman family.¹⁹ The Akas, Nyishi, Tagins, Sulungs, Mijis, Galos, Adis, and Mishmis speak languages of the North Assam group of the Tibeto-Burman family. The Khamptis speak a language of the Tai group of Chinese-Siamese family. The Singphos speak a language of the Kachin group of the Tibeto-Burman family, and the Nocte, the Tangsas and the Wanchos (Naga) speak language of the Naga group of the Tibeto-Burman family.²⁰ Thus, there are at least two families and four groups of languages prevalent in the area.²¹

Almost all the tribe except Khamptis and Monpas are without any script. But they are rich in oral literature. The Khamptis and the Monpas have scripts. The Khamptis follows the Tai script while the Monpas follow the Tibetan script.

Economy

The economic life of the people of Arunachal Pradesh is largely depends on its physical and topographical features. In

¹⁸ Gazetteer of East & West Siang District, op.cit., p.74.

¹⁹ Grierson, G.A., Linguistic Survey of India, A Summary Volume iii, Vishveshvaranand Institute, Calcutta, 1976, p.136.

²⁰ Ibid., p.499.

²¹ Bose, M.L., op.cit., p.21.

Arunachal the rainfall is heavy except in the North-East of Kameng district with an average of more than 100 inches per annum.²² This made the economy of the Arunachal Pradesh very much dependent on agriculture, which is supplemented by hunting, gathering and fishing.

Arunachal Pradesh is an agrarian economy as majority of the population is engaged in agriculture. People of Arunachal Pradesh practices two types of agriculture sedentary cultivation (i.e. wet rice and terraced cultivation in the valley section) and *jhum* cultivation or shifting cultivation in the hills and mountainous section of the regions. In this, a patch of land in the forest is cleared by cutting down the undergrowth and felling the trees which when dried, was burnt. Crops were raised for two to three years, depending on the retention of the fertility by the soil. The fallow period is minimum six to seven. In this period soil is left fallow to recover its fertility.

Earlier most of the tribes were depend on shifting cultivation, and the only tribe in entire Arunachal Pradesh which pursue wet rice cultivation method of agriculture is the Apatani tribe settled in the Subansiri district.²³ The Apatanis with a highly developed valley cultivation of rice perfected over centuries has often been suggested to be one of the relatively advanced tribal societies in the North-Eastern region of India. They had been practising wet rice cultivation or terrace rice cultivation with their

²² Bose, M.L., op.cit., p.30.

²³ Pandey, Deepak, op.cit.,p.138.

traditional irrigation system since long time.

The Monpas, Khambas, Membas and Sherdukpens practice terrace cultivation and they generally practiced mixed type of agriculture.

The main crops are paddy, maize, millet, tapioca, ginger, and vegetables of different varieties are grown by them. Besides this Mithun (*Bos-Frontalis*), occupy the place of the most valuable animal among the Galos as well as under *Tani* groups of people of Arunachal Pradesh.

The territory has a very rich tradition of utilitarian crafts. It constitutes another important part of specialised economy of the people of arunachal Pradesh. It is a heritage Monpas, Adis, Mishmis, Khamptis and Wanchos are among those, known for their skill in utilitarian crafts. The Padams, Minyongs, Mishmis skilful weaver.²⁴ The Monpas are famous for making shawls and coat with variety of style and Sherdukpens for their designed bags.

Another source of economy is trade. There existed in early times a regular intercourse of trade between various tribes of Arunachal Pradesh, and the trading community of Assam and Tibet.²⁵ Trade was based on age-old custom and tradition. Earlier trade was based on barter system, where people exchange goods for other goods. Four types of trade were existed among the tribes of Arunachal

²⁴ Ibid., p.145

²⁵ State Gazetteer of Arunachal Pradesh,op.cit.,p.336.

Pradesh, that is, inter-village trade, intra-village trade, inter-tribe trade, and cross border trade including both neighbouring state and country.

Tribal people of Arunachal Pradesh had cross border trade relation with the neighbouring countries like Bhutan, Tibet. They also had flourishing trade with the neighbouring state of Assam. For instance the Apatani produced surplus rice which they traded for salt supplied by the Nyishi, who got it from the plain and for surplus cotton produced by the Adis. The Mishmis, Zakhirings, Boris, Bokars, Pailibos, Sherdukpens, Monpas, Membas, Khambas, Galos and Meyors had trade relation with Tibet. Earlier the Mishmis are keen trader, who actively busy in the trade. The Akas, Monpas had trade relation with Bhutan. The Akas are famous for inter-village trade and they used to exchange their goods for slave from Nyishis. Mishmis, Sherdukpens, Adis, Akas, Galos also had a trade relation with Assam. Musk, animal skin, antler, rice, *Mishmi- Teeta*, dye, beads etc, are some of the products carried by the tribal people of Arunachal Pradesh for trade and they usually exchanged these product for Tibetan rock salt, sword, cloth, etc. Trade is another factor which affects their livelihood and it is also one of the sources of the income generation.

Flora & Fauna

Arunachal Pradesh is one of the botanically little known area of our country. It is entirely mountainous except for narrow strip of plain land, situated adjoining to the state of Assam.²⁶ There are varieties of flora along with the variation of altitude. Unique geographical position and divergence of climate give rise to varieties of vegetation in the state. Based on the climatic conditions and altitude the vegetation of Arunachal Pradesh can be broadly be classified into five major types.²⁷ The five main forest /vegetation types, viz. The tropical forest, subtropical forest, pine forest, temperate forest and alpine forest.²⁸

There are different species and size of trees like *Bola*, *Tita-Champa*, Hollock, Khokan, Makahi, Simul etc and enormous varieties of bamboo and cane are found, particularly in the foothill belt. The different varieties of orchids are found in the state.

The fauna of Arunachal Pradesh is rich and varied. It includes some rare species of wild animals like tiger, leopard, elephant, black Panther, Himalayan black bear, Hillock Gibbon, black deer, barking deer, red pandas, monkey, cat, wild buffalo, goat and Mithun etc. In the state, different varieties of birds are also found, like Hornbill, peacock, pheasant, water birds and so, on.

²⁶ State Gazetteer of Arunachal Pradesh, op.cit., p.34.

²⁷ Ibid., p.35-36.

²⁸ Ibid., p.36.

Climate

Climate in Arunachal Pradesh shows different features owing to the difference in the topography and altitude of the land. The climate in Arunachal Pradesh ranges from sub-tropical to temperate depending on the altitude of the land. Talking about climate of Arunachal Pradesh, it can be said that the regions in the lower belts of Arunachal Pradesh experiences hot and humid climate. The maximum temperature that marks the climate of the foothills in Arunachal Pradesh is 40° c (during summer). The average temperature in this region in winter ranges from 15° to 21° c. During the monsoon, the temperature in this region is between 22° to 30° c. The areas around the middle belt of Arunachal Pradesh are cooler. The middle belt in Arunachal Pradesh experiences micro-thermal climate.

Moreover, Arunachal Pradesh possesses alpine climate in the higher altitudes of the state. The higher regions of Arunachal Pradesh witness snowfall during the winter. The snowfall and the Alpine climate of Arunachal Pradesh largely draw tourists from the different parts of the world to tour within the territory of Arunachal Pradesh. Another distinct feature of the climate at Arunachal Pradesh is rainfall. In fact, Arunachal Pradesh experiences a heavy rainfall during May to September. The average rainfall recorded in Arunachal Pradesh is 300 centimetres. The rainfall in Arunachal Pradesh varies between 450 centimetres to 80 centimetres.

The people

Arunachal Pradesh its people of diverse race, habit and culture present a picture of great variety, the aboriginal people of the highland are known to the people of the outer worlds as the 'tribes men'. The difference between the tribes is marked for their variations in racial affinities, in their customs, usage and institution which even make difference between clan in the same tribe.²⁹

The Galos are now one of the major tribes of Arunachal Pradesh. Other names which have been used by the British and Assamese to refer the Galos in the past includes Duba, Doba, Dobah Abor, Gallong Abor, Galong, Gallong Adi, etc. In 1950 the tribes of Arunachal Pradesh are listed as scheduled tribe in the Constitution of India under the state of Assam (Scheduled Tribe) Order 1950, Part xviii.

³⁰ Subsequently by the North Eastern area (re-organization) Act, 1971, the Galo community of was listed as Scheduled Tribe of Arunachal Pradesh. It may be mentioned here that till 2011, the word Galo was erroneously recorded as Gallong or Galong, which was a distorted version of the original word Galo. In order to change the word Gallong into Galo, a bill was introduced in the Parliament on December 7, 2011 to Amend the Part xviii of the Order of 1950 (Scheduled Tribe) of the

²⁹ State Gazetteer of Arunachal Pradesh, op.cit., P.3.

³⁰ Amendment to the Constitution (ST) Order, 1950, Part-XVIII.

Constitution of India. Accordingly, the Constitutional Amendment Act was passed by the Parliament in which the word Galo was substituted in place of the word Gallong on December 19, 2011 and on January 10, 2012 the President of India assented to the Amendment Act 2012.

According to the census of 2011, West Siang district consists of twenty one circles and covers an area of about 8,325 km² (approximately). It lies roughly between 93°57' - 95°23' East longitude and 27°36' - 29°20' North latitude. West Siang district with its headquarters at Aalo (Along) is bounded on the North by China, on its East by East Siang, on its West by the Upper and Lower Subansiri districts of Arunachal Pradesh and on its south it is bounded by Lakhimpur district of Assam.

The total population of the Galos for 2011 is not available but the Statistical Department has presented the roughly estimated total Schedule Tribe Population of West Siang district, according to which the population of Galos is 84,376 approximately, distributed in 260 villages of 13 circles of district.³¹ They inhabit mostly in West Siang district and some parts of East Siang and Upper Subansiri District. The area of Galo habitation starts in the West with the Subansiri river and extends up to the Sido river, a little beyond the Simen river in the South-Eastern part of the division. A few villages of Galos are also situated in the lower Siyom valley on the right bank of

³¹ Extract collected from the Statistical Department of Itanagar, on 16/01/2014.

the Siyom river. Only two Galo villages Kambu and Paya are on the left bank of the river which is otherwise mainly occupied by the Minyongs.³² The Upper Siyom valley, on the left bank is inhabited by the Boris. The Northern and the Southern boundaries of the Galo region are demarcated by Siyom and the Brahmaputra river. In the West are the Hill Miris (Nyishi) now they were officially consolidated with closest ethnic neighbours, the Nyishi in 1998. In the north there are the Minyongs and in the south are the villages of plains Miris, dispersed in the Brahmaputra valley.

The Galos are distributed over large areas in West Siang and parts of East Siang and Upper Subansiri districts respectively. They are belong to Tibeto-Burman linguistic groups and all Galos used to speak same kind of dialect i.e. Galo, but their dialect have minor tonal modification. Almost all the villages of Galos are homogenous in population while Jini and Sido have a mixed village having both the Galo's and the Minyong's.

Earlier the word adis which is a blanket term for many tribes like the Galo, Minyong, Bokar, Bori, Palibos, Ramos, Pasi, Padam, Shimong, Ashing, Milang, Karko and so on. But now the Galos are not under the Adi appellation. Abor is the former appellation for the word Adi, the name came to be more generally used during the Ahom

³² Riba, Tomo, The Tribals and their Changing Environment : A Case Study of Galos of West Siang District Arunachal Pradesh, Himalayan Publishers, Itanagar, 2003, p.32.

period of Assamese history and became a subject of research when the people and the name came within the sphere of Western inquisitiveness. The word is said to be the Assamese in origin, the derivative meaning of this word is, therefore, one who does not submit or own allegiance, to anybody, and it has been variously explained as barbarous, hostile, and savage.³³ The hill (Adis) people without knowing its meaning accepted this name during the casual contacts with the plainsmen and being ignorant of their language did not notice it. And later on, they have developed dislike for the word Abor because it means unruly or savage and started calling themselves as adi, in preference to their former appellation.

Relation of Adis with the Ahom and British State

Adis came in contact with ahoms after the annexation of Chutiya kingdom. The conquest and annexation of the Chutiya kingdom by the Ahom during the reign of Suhungmung in 1523 A.D.³⁴ Also the appointment of governor in Sadiya under the title of Sadiya Khowa Gohain brought the ahom in contact with the adis living in the Northern hill. Adis did not have any traditional right to *Posa* and they also paid some tributes to the Ahom kings. The Ahom granted some concession to the Adi, not actually concession but mere recognition of claim of the Adis over the Miris. In the Assam *Buranji*, it is recorded

³³ Roy, Sachin, op.cit.,p.2.

³⁴ Devi,L., *Ahom-Tribal Relation: A Political Study*, Assam Book Depot, Gauhati, 1968,p.63.

that king Pratap Singha had given some villages to the Adis for the cultivation of paddy and the *Ryots* who cultivated for Adis were exempted from revenue payment to the Ahom authorities.

After the British control of Assam, the Adis initially came in contact with them during 1825 when Captain Bedford first visited a part of Adi country. The knowledge acquired by him remained very limited. Father Krick visited the same padam area sometime before January 1854.³⁵ Dalton visited the same padam area in 1855. The British Government tried to establish a trading post in the Adi country. And then the first expedition was sent in consequence of a raid on a Beeah village in 1858, then in 1859, both of this expedition was a complete failure. In-between 1860 to 1866 agreements were signed for maintain peace between British and Adi in spite of this agreements problems were going on between Adi and British. In addition, the turning point came in 1911 when Mr Noel Williamson Assistant Political Officer and Dr. Gregorson went across the British jurisdiction and were murdered by the Kebang Adis near Komsing after which an expedition was sent next year which established the British authority over Adis.³⁶

Social life of the Galos

³⁵ Roy, Sachin, op.cit., p.17.

³⁶ Bose, M.L., op.cit., p.81.

The Galos society is patriarchal in its nature.³⁷ They live in joint families and maintained congenial social relation with their family, village and also with distant relatives. Father is the head of the house and all the major decision are taken by him with proper consent of her wife. The presence of polygamy is found in the society.

Among the Galos, almost all the system of marriage such as monogamy, polygamy, exogamy, and polygyny existed in Galos society.³⁸ Earlier, exogamous marriage was discouraged. Till today, endogamous marriage are not tolerated and considered incestuous. There is no strict age limit for marriage. And season for marriage are always taken into consideration.³⁹

In Galos society, marriage is a long process. It is performed in two ways that is without Mithun sacrifice and with Mithun sacrifice. The first one is known as *Layap* and it is the first marriage ceremony performed by the boy's parents where the acceptance of the girl as a daughter-in-law is recognised.⁴⁰ The *Hobe-Panam* is the marriage where Mithun sacrifice is involved through a series of activities. It is not compulsory but if the both sides are agree then this marriage is performed. It almost takes a whole year for final preparation of *Hobe-panam*, where numbers of rituals are performed

³⁷ Riba, Tomo, op.cit.,p.53.

³⁸ Ibid.,p.44.

³⁹ Extract from an Interview with Mr.Gumken Bagra, Aged 62, Retired Government Teacher,on 11/08/2014.

⁴⁰ Riba, Tomo, op.cit.,p.45.

like *Hijan-panam* where clearing and felling of tress is done, and in a selected tree, *Itee* (rice paste), *Takee* (ginger), *Poka* (rice beer) is sprinkled.⁴¹

Layap is very compulsory; where brides are bring in the groom's house. The marriage proposal is made from the boy's side. Earlier when arranged marriage was very much prevalent, at that time the priest is called to see suitable girl or girls. It is done through a process of divination called *Roksin-Koknam* (examination of chicken liver or egg yolk). If the men favour any girl, then two or more middlemen are deployed to negotiate the proposal with the girl's parents with a basket of *Opo* (rice beer/ alcohol), few dried meat and fish and one *Jera*, a valuable cloth for the girl's mother. If the girl's parents accept these items, the proposal is accepted. After that simultaneously giving and taking starts.

Then the next rituals is *Hitak-Tagnam* in which special tree *Hich-Pinyi* is cut down and then next ritual is *Opo-Gejinam* or *Nyib-Inam*, in which groom and some relatives used to visit brides house with *Opo* and meat. After that *Opo-Lignam* and *Jet-Monam* ritual is done four five days before *Nyida (Hobe-Panam day)*, where five pigs and many fowls are being sacrificed. After that *Hobe-Panam* is performed where Mithuns are sacrificed, earlier rich people are

⁴¹ Extract from an Interview with Mr.Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

sacrificing many Mithuns just to show their superiority in the society but now ten Mithun is fixed for *Hogi* (for the proper day of *Hobe-Panam*). And on the next day *Rig-Alo* rituals is performed, in which *Itee* (rice paste) is smeared over each other's face. After finishing the long wedding rituals certain taboos are to be observed both by bride and groom and by the family member for a year.

There are two types of negotiations for a marriage ceremony which is based on the beads.⁴² They are *Date- Nyida* and *Dame-Nyida*. *Date-Nyida* is done when girls parent are willing to give *Lisum* or *Likar* beads to grooms family and it is very expensive. *Dame-Nyida* is less expensive as compare to date *Nyida*, in this type of *Nyida* there is absence of *Lisum* or *Likar* beads and instead of *Lisum* or *Likar* ten *Hurgen*, one *Har* beads, one *Dogne* beads is given to grooms parents.

Certain bride price is to be given from the groom's side to the bride's parents and in return bride's parents also have to give something in return like brass plate, beads and so, on. Mithun is used as bride price because according to the Galos belief it is of equal cost as human life.

Kinship

Anthropologist Robin Fox states that "the study of

⁴²Extract from an Interview with Mr.Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

kinship is the study of what man does with these basic facts of life; mating, gestation, parenthood, socialization, siblingship etc". Human society is unique, he argues, in that we are working with same raw material as exist in the animal world, but can conceptualize and categorize it to social ends.⁴³ In short it is the relationship between members of the same family. In order to understand a society, it is very necessary to study kinship system. Kinship refers to the social relationship between members of a society or biological relationship between individuals.

Kinship patterns may be considered to include people related by both descent and by marriage. Human kinship relations through marriage are commonly called affinal in contrast to the relationships that arise in ones group of origin, which may be called ones agnatic group. So relationship by marriage is another type of kinship found in the galo society. For instance if a girl gets married then her husband's father and husband's father's brother and brother of same clan will be her *Ato* (father-in-law) in-relation. Husband's mother and father in law's brother's wives will be her *Ayo* (mother-in-law) in-relation.

Likewise, for the boy, his wife's father and father's brother and brothers of same clan will be his *Ato* (father-in-law)in relation. Wife's mother and father's brother's wives will be her *Ayo*

⁴³ Fox, Robin, Kinship and Marriage, Pelican Book, London, 1967,p.30.

(mother-in-law) in-relation. And wife's brother and sister will be *Yigo* (brother-in-law) and *Yigne* (sister-in-law). Galos observed clan exogamy and one cannot marry within their own clan and even through the parallel cousin marriage is strictly forbidden, cross-cousin marriage is permitted.⁴⁴ The Galos organized their social life through kin groups. First one is relationship that is maintained blood ties, for instance in a family there are five brothers, so in relation their son/daughter will be *Asi and Abir* (brother and sisters) of each other and they will call their father's brother *Abo* and to their wife's as *Ane* (mother).⁴⁵ Also it is applied in the brothers of same clan. Thus a bifurcate merging type of kinship system is found in Galos society. Marriage among members of the same clan is not permitted and considered as incest.

In a polygynous marriage, the co-wives live together within the same homestead of the husband. However, the first wife gets more authority over the family affairs in comparison to second wife.

The Galos society is structured on the basis of clan organisation. In other words, the entire social structured rests upon clan system. Biological relationship among the Galos is known as *Ali-Rumtum* means relation by common blood.⁴⁶ Each clan and sub-clan traces their descent from one common ancestor. For instance *Ete*,

⁴⁴ Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

⁴⁵ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 25/02/2014.

⁴⁶ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

Pakam, Doji, Bagra, Angu, Kamsi, Lollen, Loyi, Amo, Lomi etc are sub clan of the *Paktu* 'semi-ancestor' who himself descended from *Abo-Tani*. The clan and sub clan of the Galos are generally exogamous and earlier it was observed strictly. Also clans are maintaining exogamy even today. Sexual relation between the members of a clan and sub clan is considered as incest and anybody involved in such are strictly punished and even ex-communicated.

Slavery

Earlier slavery was prevailed in the Galos society but they are actually not born as a slave.⁴⁷ There was two type of slavery present in Galos society earlier i.e. war captives and another was those who are transformed into a slave for indulging themselves in crimes like stealing or those who were failed to refund their money, thus, as a punishment or repay their money they have to work as a slave in the honours house.⁴⁸ And they can be freed by their master anytime. And the war captives are those who were abducted during the war. These war slaves have to work for their master and will a slave for his/her lifetime. These slaves can be sold by his/her master anytime to anyone.⁴⁹ There was no such practice of ill treatment but earlier there was some restriction i.e. a master or general people cannot enter

⁴⁷ Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

⁴⁸ Extract from an Interview with Mr. Goto Basar, Aged 67, Gam of Gori village on 22/08/14.

⁴⁹ Extract from an Interview with Mr. Rakjo Yomcha, Aged 52, Village Elder of Yomcha village on 02/08/14.

marriage relations with the slave's family. But they can enjoy food, stay and so on together.

Economic Life of The Galos

Agriculture is the main source of economy. Average rainfall of west siang district is 4000 mm and due to the heavy rainfall the economy of Galos of West Siang district are very much dependant on agriculture, which is supplemented by hunting and fishing. Earlier, they used to cultivate and produced goods either for the self consumption or for exchange at values equal to the values of means of production used up in the process of production. The basic organization of production was slash and burn or *jhum* cultivation and collection of forest products. Now, they also practice the wet rice cultivation and terrace rice cultivation.

Another, source of surplus generation in the economy was from trade. Galos practice the system of trade from very beginning. Earlier trade was based on barter system, where people exchange goods for other goods.

Galos had trade relation with the Boris earlier, who often acted for them as intermediaries in their trade with the Tibet and the plains of Assam. The Galos generally exchange their surplus with Bori and Bokars and they further exchanged these procured items with the

traders of the plains. Inter-tribal trade is also carried out in the interior village.

Political life of the Galos

The Galos are very democratic; they also have their traditional ways of dispensing justice. The most powerful body in the village is the council of elders known as *Keba* where all the cases are brought before it, discussed and decision are given according to traditional laws. The traditional council of elders consist of both male and female. Every village is self-governing and independent.

All the elderly persons enjoy the membership of the *Keba*. Among the Galos, disputes arising in the village are brought before the *Keba*, where they are thoroughly discussed, examined and adjudicated. The *Keba* is vested with judicial power, conferred to it by the society itself, to which every member owes allegiance.⁵⁰ There are three types of *Keba* viz (i) *Dolu Keba* (village council) (ii) *Bango Keba* (council of many villages) and the *Bogum-Boka Keba* (council of whole village).

Like other tribes Galos are also maintain a systematic code of conduct and system of oath and ordeals according to their customs. Generally members of *Keba* are taking their oath infront of district commissioner that they will give their decision on the basic of

⁵⁰ Gazetteer of East Siang and West Siang District, op.cit.,p.257.

truth and they will always respect the value of the red coat. All kinds of disputes and crime are decided by performing various type of traditional ordeal by the *Nyibo* (priest). There are five types of ordeal, they are *Roksin-Kognam* (chicken liver divination), *pip-Sika-Nam* (egg examination), *Taser-Banam*, where lead or zine are heated and poured in the hands of accused or suspected person and they are asked to hold the molten. The next one is *Nyodu*, where accused or suspected person are swearing on the tigers teeth that if he/she is found guilty then their whole family will be badly hurt, and the last one is *Badu-Yunam* , where accused or suspected person's hand's are putting in the boiling water. Thus, on the basis of this traditional ordeal major cases are decided.

Accordingly for every crime there is a particular laws and procedure for its punishment. For instance the different forms of punishment are either through extracting fines or ostracisation from society. For a murdered a person or culprit have to give fine in the form of ten Mithun , ten cow, two nos of *Dogne or Dokso* (beads), *Hiku* and *Dasi* (brass plate) and same for the intentionally hit and run case.⁵¹ Cost of a person killed accidentally, the penalty as punishment in kind of casualty is five Mithun, five cow, brass plate like *Barte-Barbe*.⁵² Value of damaging ones eye is two Mithun and for two eyes is five Mithuns,

⁵¹ By Laws of Adi Bane *Keba* (Bogum Boka) West Siang District, Aalo, Arunachal Pradesh, Approved by Deputy commissioner, West siang District, on 08/04/1997,p.84.

⁵² Ibid.

five cows and one brass metal. Cost of damaging one ear is one Mithun and for two ears two Mithuns and for a teeth one Mithun with minor fines.⁵³ Like this for every crime specific punishments are fixed.

Religious life

Origin of The Mythical Fore-Father *Abo-Tani*

The Galos trace their origin from *Jimi Ane* (mother).⁵⁴ According to the Galos myth, *Jimi Ane*, the creator, created *Medo* (the sky) and *Mich*. From *Mich* came *Chichi* (earth).it is believed that *Chichi* is female and *Medo* is male. From the union of *Medo* (sky) and *Chichi* (earth) created the forest and all kinds of trees, bushes, grasses etc, and animals including *Tani* (ancestor of human-being), *Taki* (ancestor of spirits) and *Tanyo* (ancestor of tiger). Similarly from the *Tanyo* the race of cat families born and from *Taki* the generation of *Uyis*. And from *Tani* the human race came into being i.e. *Nipe* (human) and *Nyinyi/Sonyi*(Mithun). Therefore human is related to all life forms.

The Galos are characterized under hereditary shamanism where they believe in the spiritual qualities of nature and at the same time had the conception of a supreme being. Among Galos, there are number of benevolent and malevolent god and goddesses

⁵³ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

⁵⁴ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

bless and punish the people according to their action.⁵⁵ And sometimes the same *Uyu* may act as benevolent as well as malevolent. Some of the malevolent spirits are *Yapom* (jungle's evil spirit), *Urom* (souls of the dead turn into evil spirit), *Aggo-Hune* (evil spirits causing misfortune), and so, on. Benevolent spirits are *Pinku-Pinte*, *Pirku-Pirte* and *Liku-Lite* (deities of the granary). Offerings to the spirits are made on various occasion to appease them. Sacrifices are made to spirits with the hope of receiving blessing and help in various spheres of life. The *Nyibo* (priest) is an important person in the society without whom no rituals are possible. They are the mediator between the human and spirit world.⁵⁶

They are also the followers of the *Donyi-Polo* as a supreme god since early times with no specific way to pin-point the exact time period of the evolution of the practice. It is the combined divine figure of *Donyi (sun) and Polo (moon)*. *Jimi* is the supreme-being, who has created this world and rule over it. And it is also belief that *Jimi* is the creator of *Donyi-Polo* as a guardian of the people, who has to keeps a watch on the duties of all living being.

The Galos generally bury their dead. The dead bodies are buried a little away from the village. But, the dead bodies of unnatural death like accident, murder, suicides, etc. are buried far away

⁵⁵ Extract from an Interview with Mr.Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

⁵⁶ Extract from an Interview with Mr.Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

from the village.

Usually priest's incantations and the performance of rituals for the journey of the soul are for those people who die naturally and also for those who died of ageing. But for unnatural deaths nothing special rituals are performed to guide the soul to the ancestral abode.⁵⁷ all the people who die unnaturally (*Gir-Talle*) like women at childbirth, premature children, accidental death like suicides, car accident, death of small kids both married and unmarried, married couples without any offspring death rituals do not take place.

During the recitation priest usually count their genealogy from their fore-father. Among Galos it is a belief that burial is kind of farewell in which priest used to convinced death person's souls to reach the abode of ancestors, not to return again. During recitation priests starts his recitation by saying 'let the dead person lay down on the floor'.⁵⁸ After that he urges them saying that, "you have to leave the four corners of your house i.e. *Nyode* (west), *Udu* (east), *Nyosi* (south), *Bago* (north), *Aayap* (every windows), *Koba* (staircase), *Dotpuli* (veranda), *Naka* (ceiling), *Rapko* (chimney).⁵⁹ The *Nyibo* also try to convince the soul by saying that every living things had to die one day including *Mane* (fish), *Paata* (birds), *Takop* (grasshopper), *Bunika*

⁵⁷ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 25/02/2014.

⁵⁸ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

⁵⁹ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 25/02/2014.

(rat), even your fore-father also have to go through with this phase of life. So, even after their death, all of them are happy there.

And also try to convince him by saying it is just a kind of changing phase of life and you will be going to settle there and we will be wishing for your good stay. A day before putting a dead body into the grave, family members used to cut their nail and kept the nails of only old persons, in order that their succeeding generations will have long life like them. Before *Nyibo* starts their incantations, a rice paste is smear on the dead person face. The priestly chant begins with reference to the myth about the *Jayii-Bone's* marriage.⁶⁰

Among the Galos it is believed that, after the death souls are remains in their own village for five days. Generally, there are two kinds of stairs that is found in every houses of the Galos i.e *Nyime-Koba* for female and *Nyilo-Koba* for male and it is said that every soul starts their journey from the former one i.e *Nyime-Koba*, those who had natural death they starts their journey from their left side and right side for those who had accidental death.⁶¹ According to priest after death, people those who got opportunity and capacity to do *Togu-Panna* (big marriages) and *Pakka-Panna* (big rituals), they used to carry their axes along with his journey as a soul which was used to sacrificing mithuns. And the souls of common people other than a

⁶⁰ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

⁶¹ Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

priest or the riches (have capacity to do big *Togu-Panna* and *Pakka-Panna* starts their journey with a *Aan Yachi* (pig), and hunters used to carry their *Upuk* (arrow) and *liri* (bow) with them. After five days it is generally belief that souls visit their house to collect their belongings there after priest direct and guide them to go to their new world known as *Uyi-Moko* name of their new world. In *Uyi-Moko* new souls are welcomed by the old souls with songs and *Ponu-Monam* (local dance).it is believed that, after death souls retain their social status while alive, for instance rich will be rich and the poor will remain poor. According to the priest there is no particular names of places were souls stayed while they begin their journey for *Uyi Moko*. It is believed that those women who died during pregnancy, their souls start their journey from the river and their souls will be living near *Kolu, Kodak* tree (wild banana). Boundary between living world and world of the dead is known as *Dilik-Delek*.⁶²

Mopin is the big festivals of the Galos which is directly or indirectly related with the cultivation. It is celebrated in a very large scale. This festival of the Galos is celebrated for five days. It is usually celebrated in the 5th of April. Some of the other rituals are *Mode* and. *Hoorin* is another important ritual of Galos. These rituals are associated with cultivation where the Mithun is sacrificed. *Mode* ritual is generally performed in the month of April and *Hoorin* ritual is

⁶² Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 25/02/2014.

performed in *Nasu* (granary) in the month of April. *Yojir* is another important ritual associated with cultivation. It is not associated with any particular process of cultivation but is performed for good harvest and good luck for the whole family.⁶³ *Yojir* is a very costly ritual. It takes more than a year for its preparation and is generally performed in the month of September.

Statement of problem

The Galos community greatly depend on *Modi-Rik* (*jhum* cultivation) which they have practised for centuries. According to the myth of Galos it is belief that, the first seed of paddy and maize was given by the *Mopin to Abo-Tani*, which has been carried by *Kiipuu* (dog) from the land of "*Diggo Pirne*" the heavenly land of *Mopin- Moji*. Since then the practice of agriculture did started by *Abo-Tani*, which is being continuing this days in providing food for the people in this land.

The three main physical factors which combine to influence the type of agriculture are climate, topography and soil type. The whole area is a network of hills, on the slopes of which, the Galos have their agriculture field. They cultivate three types of *jhum* field in a year. These are *Pel-Lek*, *Docho* and *Rigne*.⁶⁴ The word *Pel-Lek* means

⁶³ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

⁶⁴ Riba , Tomo, op.cit.,p.64.

a field exclusively meant for growing maize, usually small in size and cleared in advanced so, that maize can be eaten during the cultivation. Next is the *Docho*, it is the field for rising of crops for first consumption and it is little larger than that of *Pel-Lek*. The last is *Rigne* which means mother field or main field. All the agricultural rituals are performed during the cultivation of the main field.

Shifting cultivation generally begin in the month of february, in this type of cultivation usually a selection of sites is selected and then the forest was cleared by cutting down the undergrowth and felling the trees which left in the field for nearly a month to dry and by March, they are fired and sowing is generally over by the end of April. While cutting the trees it is ensure that no *Hilok* trees are cut as these trees are believed to be the abodes of spirits. If however cutting of trees is essential, offering of fowls and eggs are made to the spirits. Crops were raised for two – three years in a single plot, depending on the retention of the fertility by the soil. Fallow period of *jhum* cycle is about 5 to 6 year. In this period soil is left fallow to recover its fertility.

All agricultural activities are linked with religious beliefs and one has its bearing on the other. Before sowing *Surin-Ampir* is offered sacrifice. What should be offered is determined by divination by the *Nyibo* the shaman or the priest, who used to perform all these

rituals. Together with paddy and maize, millet and some vegetables like chilli and *Giyi (Brassica)* is also sown broadcast in the same field, according to its season. The paddy is ripe by the month of September-October.

In this proposed research an attempt is made to study the Galos of Arunachal Pradesh and the history of traditional agricultural practices of Galos tribe of West Siang district in particular. Apart from the origin and immigration of the Galos, their settlement pattern, and demographic study is very important, which can help us to understand the history of Galos. And it is important to study the traditional land ownership in *jhum* plots and its allied aspects in the context of tradition and modernity of agricultural practices. There shall also be an attempt to examine terrace cultivation and wet rice cultivation among the Galos and its origins.

Therefore, a humble attempt is made to unravel the history and origin of traditional agricultural practice among the Galos. In addition to above all, the study further aims to know how agriculture affects the socio-economic life of Galos in particular and people of Arunachal Pradesh in general.

Area of study

The area of study would be confined to the Galo dominated area of West-Siang district of the Arunachal Pradesh. The

total population of the West Siang district is about 1,12,274 comprising 58,168 males and 54,106 females as per the 2011 census records. There are twenty-one circle out of which 13 circle is Galos dominated area, they are Darak, Kamba, Liromoba, Yomcha, Aalo, Tirbin, Basar, Dari, Gensi, Sibe, Likabali, Kangku, Bagra. According to 2011 census record their total population is about 84,376 comprising 43,570 males and 40,806 females. This is the area of study that research has outlined and has conducted the field survey in. The people i have surveyed through broad random sampling who belong to different age groups and class interviewed are given below in the table number 1.1.

Table No. 1.1

List of the informants interviewed from time to time

Sl.no	Name of the respondent	Sex	Age	Status	Village
1	Karnya Kamsi	Male	81	<i>Gam Burah</i>	Doyor
2	Remo Kamsi	Male	66	Priest	Doyor
3	Beto Kamsi	Male	38	Farmer	Doyor
4	Bajum Karlo	Male	5	<i>Gam</i>	Gogar

			6	<i>Burah</i>	
5	Ribi Ngolum	Female	5 3	House wife	Gogar
6	Rinya Ngolum	Male	4 7	Teach er	Gogar
7	Riikbi Ngulom	Female	3 8	House wife	Gogar
8	Komdu Taipodia	Male	6 7	Retired Teach er	Likaba li
9	Kaade Taipodia	Female	6 0	House wife	Likaba li
10	Nitum Riba	Male	4 2	District agricul ture officer, west siang district , Aalo.	Padi
11	Meken Ete	Male	5 2	Co- priest	Darka
12	Kirido Padu	Male	4 7	Contract or	Darka
13	Kenyir Padu	Female	4 5	Ex- Anchal	Darka
14	Nyai Riba	Male	6 2	<i>Gam</i>	Regi
15	Goto Basar	Male	6 7	<i>Gam</i>	Gori
16	Gokar Basar	Male	6 2	Retired Forest	Gori

				Guard	
17	Nyado Basar	Male	5 2	U.D.C	Gori
18	Nyado Riba	Male	6 7	Head <i>Gam</i>	Paggi
19	Emmi Riba	Male	6 9	Priest	Regi
20	Racha Badak	Male	6 0	Village Elder	Tai
21	Kalom Badak	Male	6 1	Village Elder	Tai
22	Rakjo Yomcha	Male	5 2	Farmer	Yomc ha
23	Lizar Yomcha	Male	6 8	Village Elder	Yomc ha
24	Kitum Ete	Male	6 9	Priest	Bene
25	Binge Ete	Male	5 6	Head <i>Gam</i>	Bene
26	Hilem Loyi	Male	6 2	Gam	Paka m
27	Gumken Bagra	Male	6 2	Retired Teach er	Doji

Objectives of the study

1. To examine evolution of traditional agricultural practices among the Galos of West Siang district, Arunachal Pradesh and examine the myths of origin and folklore.

2. To highlight type of agriculture, with studying the myth of origin of practices technology and labour organisation.
3. To study the land ownership associated with agricultural practice and its allied aspects in the context of tradition and modernity and understands its continuity.
4. To examine different taboos and rituals practices associated with agriculture.
5. To study the different varieties of agricultural production, seeds etc.
6. To study and outline the changes due to developmental process in post-independence period.

Research methodology

The proposed work is in nature of narrative which was analysed within a framework. Both primary and secondary data was collected and scrutinized. For exploring primary archival data, the state archives of government of Arunachal Pradesh, Itanagar is consulted. Besides this, all the available documents like literature including archival records like political proceedings, administrative reports, and memoirs from archives and libraries were also consulted.

The secondary sources both unpublished and published work is used to collect the relevant materials on agricultural practices among the Galos and about its socio-economic, cultural and political

condition. The secondary sources like books, official records, journals, research article, unpublished thesis and general articles on agriculture in Arunachal Pradesh are taken into consideration. To ascertain the fact a field work is undertaken. Interview was conducted with the help of schedules which helped in knowing the truth more closely. Also the newspaper and general articles of academic interest etc was scrutinized. Questionnaire and interview was conducted with the educated elite, the chief and their families, priest, youth and women. Participant and non participant observation method was used to supplement the proposed study.

Review of the literature

There are many existing literature on agriculture practices in relation with the tribes of Arunachal Pradesh. We also find sources materials from the library, including published and unpublished thesis. However, the traditional agricultural practice of tribe particular on Galos tribe of Arunachal Pradesh has not been explored in it's entirely. In addition there are ethnographic woks which mention about the traditional agricultural practice in the context of the overall tribes of state. Through these we can get brief understanding about the agricultural practices and its socio-economic importance among the tribes in general and Galos of West Siang district in particular of Arunachal Pradesh.

A.k. Purkayastha's *Arunachal Agriculture: Over The Years*, has discussed about the agricultural development and source of economy of Arunachal Pradesh and help in developing a basic idea about agricultural practice and its development among the tribes Arunachal Pradesh and also about their sources of economy.

Bibhash Dhar and Palash Chandra Coomar (ed.) In his edited book *Tribes of Arunachal Pradesh History and Culture*, has studied the tribes of Arunachal Pradesh and his work helpful in understanding agriculture of Arunachal Pradesh in general.

C.V.F. Haimendorf in his *The Apatanis and Their Neighbours* has thoroughly discussed about Apatani society as well as their agricultural system. This book help in understanding practice of wet rice cultivation among the Apatanis.

Dipak Kumar Dutta's *A Glimpse of The Galos's Customary Religion*, deals with the Galos's customary religion and practices of West Siang district of Arunachal Pradesh. His work is helpful in understanding Galos's customary religion and importance of the *Nyibo* among them.

Girish Chopra's *Agricultural Geography*, deals with the agriculture and sustainable development. Also it discussed about issues of land and

natural resources management.

H.G.Joshi in his book *Arunachal Pradesh Past and Present*, deals with journey of Arunachal Pradesh from past to the present and there is a little reference about the agriculture. However his accounts lack clear information about agriculture.

H.k. Barpujari's, in he *Problem of The Hills Tribes of North-East Frontier (1822-42) Vol.-I* discussed generally those tribes which came in contact with the British in the eighteen century. The book gives insight into the various British policies toward the hill tribes of Arunachal Pradesh.

K.S. Thokchom, in his book *Developmental Scope of North-East in the Near Future*, explained the scope and chances of development of North-East and it highlights the kinds of agriculture practices followed by different region of North-East.

Lakshmi Devi's, *Ahom Tribal Relation: A Political Study*, provide an understanding and its deals with the basics of Ahom tribal relation, and provides valuable information on the Ahom policy.

Majid Husain's *The Systematic Agriculture Geography*, deals with origin and development of agriculture system of the world and its issues of

land and natural resources management.

Manish Sharma's in his *Economy of Arunachal Pradesh* has tried to explain the economic situation of Arunachal Pradesh, where agriculture was briefly explained as an important effecting factor of the economy.

M.C. Behera, and S.K.Chaudhuri's, edited book *Indigenous Faith and Practices of The Tribes of Arunachal Pradesh*, deals about the religious beliefs and practice of the Adis with a special reference to Galos.

M.L. Bose's, in his *History of Arunachal Pradesh*, he discussed about all tribes of Arunachal Pradesh and also about their economy. This book also gives a brief sketch about Ahom and British relation with the hill tribes.

N.Sharma and S.P.Shukla's, *Geography and Development of Hill Areas*, deals about the geographical effect on Arunachal Pradesh and its development and aspect of economy. Also there is a reference about agriculture and its condition.

R.Gopalakrishnan, in his book *The North-East India*, has discussed about the land, people and source of economy of whole North-East states of India. Also there is a reference about shifting cultivation of

North-Eastern region.

R.K.Samanta, in *India's North-East The Process of Change And Development*, in his edited book it studied the issues of agricultural development on tribal dominated North-East India. This book highlights the process of agricultural development among the tribal dominated area of North-East India.

S.Dutta's, studies in *The History, Economy And Culture of Arunachal Pradesh* (1997) in his edited book contain several articles written by various scholars. Throwing light on the various socio-economic life of the tribes of Arunachal Pradesh.

S.L. Barua's, *A Comprehensive History of Assam* provides brief sketch on the Ahom's policy towards the neighbouring hill tribes. It helps in understanding ahom and British relation with their neighbouring hill tribes.

Srivastava's *The Gallongs* (1988), gives an ethnographic account of the book and throwing light on economy, polity, religion and socio-cultural life of the Galos. It gives a complete picture of Galos and their system of agriculture.

S. Roy's book *Aspect of Padam Minyong Culture* (1960), gives an idea about how Adi word for abor came to use. This book discussed in detail about the economy, polity, religion and socio-cultural life of the Padam Minyong culture.

Tejum Padu's *Mopin 'Poopwr' Poonu Nwwtom and Mvmmvn Gogrv of the Galos of Arunachal Pradesh* thoroughly mentioned about the mopin festival of Galos. Through these we can get brief understanding about origin of agriculture among the Galos and why their mopin festival is celebrated.

Tai Nyori's book *History And Culture of Adis*, deals with the Adis and about their origin. It also discusses about their religious beliefs and practices of with a special reference to Galos.

Tomo Riba's *The Tribals And Their Changing Environment*, discusses about the Galos and their economy, polity, religion and socio-cultural life as well as its geo-environmental background. This book gives insight about Galos of West Siang district in particular and practice of agriculture system among them.

Verrier Elwin's, India's *North-East Frontier In The Nineteenth Centur*, in his edited book throw light on socio-economic relation of the tribes of

Arunachal Pradesh. The book is ethnographic study of the tribes.

Verrier Elwin's, *A Philosophy For NEFA*, has discussed about all the tribes of Arunachal and about their socio-religious and cultural life. Also discussed about the various problem faced by them. This book is helpful in knowing about tribes of Arunachal Pradesh and about their uniqueness.

Tage Tatung's M.Phil dissertation, "*A Study of The Dynamics of Agricultural Practices Among The Apatanis of Arunachal Pradesh*", throws lights on the practice of sedentary agriculture practice among the Galos and also it discusses about the economy life of the Apatanis.

Jumyir Basar's Ph.d dissertation, "*A Study of Indigenous Knowledge System in Development Policies And Programmes With Social Reference To Resources Management By The Galo of Arunachal Pradesh*", highlights about the practice of *jhum* cultivation among the Galos. It also deals about the continuity and changes in the field of agriculture.

In the preceding statement as regards to review of literature, the books mentioned provide sketchy yet distinct knowledge about Galos and about the practice of agricultural system. Therefore

this study seeks to bridge the gaps in the existing body of knowledge and provide proper understanding about the history of traditional agriculture practice of Galos in particular and whole tribes of Arunachal Pradesh in general.

Though above mentioned books have been published regarding the agriculture and Galos of Arunachal Pradesh, so far we do not have a clear cut and comprehensive idea about history of traditional agricultural practices among Galos of West Siang district in a historical frame work. However, the proposed research work is to deal in details on the history of traditional agriculture practices among Galos of West Siang district.

Organisation of the study

The study has been organised in six chapters to reflect about the history of traditional agricultural practices among Galos of west siang district.

Chapterization

The research work shall be dealt with in following chapters:

Chapter i: Introduction

In the conventional way the first chapter shall be the introduction, where the topic will be introduced. It would profile the geography of the state and well as briefly profile the major aspects of the socio-economic, political and religious life of the Galos. Besides, it would

highlight the significance of the study, review of literature and sources and research methodology used for the work. Also it will also deal with their family, kinship, organisation of the clans, marriages under their social life, the system of governance, customary law and justice, method of war-slavery under political life and under the religious life it will deal with its belief and practices.

Chapter ii: Evolution of Traditional Agricultural Practices Among The Galos.

This chapter will outline the myths of origin and migration of the Galos and their settlement pattern. Also a background of evolution of traditional agricultural practice among the Galos will be dealt with a study of the myths of origin of the practice. In addition, attempt shall be made to outline the various rituals associated with agriculture with the taboos too shall be examined.

Chapter iii: Traditional And Modern Agricultural Practices

This chapter shall seek to study the evolution of practices of traditional terrace farming and also examine the ritual practices if any associated with it. Also an attempt shall be made to outline the origin of wet rice cultivation and explore if there are any rituals associated with it. Also a profile of the crops cultivated in the terraces and the wet-rice plots shall be made.

Chapter iv: Pattern of Cropping, Ownership of Land, Labour And Technology.

This chapter shall try to deal with the varieties of crops cultivated in the various types of fields. It shall profile the sowing seasons for each and the corpus of domesticated vegetables. The concept of the kitchen garden as distinct from the agricultural lots shall be explored. Seek to explore the physical dimensions of the land. It shall seek to examine also the customary laws and practices of inheritance. An attempt shall be made to document the pattern of the land ownership within the various agricultural practices. The status of woman within these customary inheritance practices shall be dealt with. The organisation of labour shall be examined too and an attempt shall be made to explore the technological dimensions of agriculture and particularly of the processes and tools used.

Chapter v: Continuity And Change In Agricultural Practices.

This chapter will try to examine the impact of various land regulations in the society. Also an assessment shall be made on the current status of agriculture and how society is dealing with changes.

Chapter vi: conclusion.

This chapter will summarise the major findings of the research and organise it within a perspective.

Chapter 2

Evolution of Traditional Agricultural Practices Among The Galos

Migration

It is very difficult to arrive at any definite conclusion regarding the original homeland, the routes of migration and date of settlement of the tribes of Arunachal Pradesh. Many ethnographers, anthropologist, scholars like George A. Grierson, C.H. Hesselmayr, J.P. Mills, T.K. Bhattacharjee, Sachin Roy, Tai Nyori, Verrier Elwin and so on, have tried to bring out a vivid hypothesis, but still failed to reach into proper conclusion. The first attempt to write down the history of Arunachal Pradesh, William Robinson's account of 1841, referred to the "dark veil which conceals the origin of the tribes".⁶⁵ The several histories written during the succeeding 150 years have not yet dispelled that obscurity. A major problem is the scarcity of written records, before British records began in the early nineteenth century,

⁶⁵ Robinson, W, A Descriptive Account of Assam, Ostell and Lepage, British Library, Calcutta, 1841, P.335.

only two sets of sources refer to the hill tribes of Arunachal. First, we have Tibetan texts that mention contact, beginning in the fifteenth century, between Tibetans and tribes along the northern border of present-day Arunachal Pradesh. The other documents are Ahom chronicles, which again refer to conflicts with tribes, this time along the southern border with Assam from the seventeenth century. Two other possible sources, Sanskrit texts and archaeology, contain little useful information.⁶⁶ The tribes themselves have no indigenous writing.

Every tribe of Arunachal Pradesh has different myth, of origin and migration, and folklore, which is very varied, as well have different perception about their origin which making it hard to reach at proper conclusion. Despite inconclusive data it is believed concisely that long ago, the ancestor of the Galos lived in somewhere near Tibetan region and on the fringes of the Indo-Tibetan Frontier. Stream of migrating families came down from time to time from upper areas and, in absence of adequate geographical knowledge, they followed the mountain passes. Gradually, the lower valleys gave them shelter and they slowly settled there sometimes, they had to emigrate on account of raids of migrating neighbours.

⁶⁶ Pukhan, J.N. Arunachal's Trade With Its Neighbours in The Pre-Colonial Days, In Cross-Border Trade of North-east India, edited by S. Dutta, Hope India Publications, Gurgaon, 2000, p. 138.

There are no written records available and we have, therefore to depend on the people's oral tradition. According to their traditions regarding the route of their migration, the most of the Galos came from *Tada-Dege* in the upper course of Siyom river.⁶⁷ The *Lare* group of Galos, for instance, believed that Galos are Mongolian people, and migrated from Northern side of China and belief that some Galos known as *Loba* are still inhabitants of China.⁶⁸ This is generally accepted by all Galos that they migrated from a place called *Tada-Dege* near Mc-Mahon line and then they reached *Topo-Golo* where they settled for a substantial period of time and decided to call themselves as Galos.⁶⁹ All the Galos migrated from the same route, after reaching *Yomge* river they choose different path and reached towards their present settlement areas slowly- slowly. It is a junction point which divides their path in different parts. From there Galos settled in different area according to their convenient. Some migrated from there according to their needs of proper land for settlement and availability of food.

After that, *lare* group of Galos, reached *Reetu-Ragi*, then *Aambin-Doro* and stayed at *Mayir Rai*, after that reached *Bobe-Zagar* between *Potom* and *Yomcha* village. Thereafter they reached *Simi-*

⁶⁷ Srivastava, L.R.N., *The Gallongs (reprint)*, Directorate of Research, Government of Arunachal Pradesh, Itanagar, 1988,p.5.

⁶⁸ Extract from an Interview with Mr. Bajum Karlo, Aged 56, Gam *Burah* of Gogar village on 12/06/14.

⁶⁹ Extract from an Interview with Mr. Bajum Karlo, Aged 56, Gam *Burah* of Gogar village on 12/06/14.

Popdi, and for time-being settled at *Bolok-Kalo* after that reached at *Mempo-Rakpo* near *Tirbin*.⁷⁰ They went to *Silm Kame* and then *Basar*, where almost a section of *Lare* group of Galos settled there. After some period a group of *Lare* group of Galos started their journey again and settled at *Dali, Ego, Dari, Siji, Garu, Gensi and Likabali*.

The *Karka* Galos, for instance, believed that their original settlement was at *Pa-Pigru*, near *Tada-Dege*, just at the Indo-Tibetan border.⁷¹ Having migrated from this place they came down through the *Bori* area, through *Peri, Kamba, Karbak, Boje, Bole* to *Yomcha*, which became their next permanent settlement for decades⁷². But, with the growth in population, the village could not accommodate all consequently, from here they migrated in different directions. For instance *Lombi* came to *Jirigi* and finally settled at *Lombi*, *Gamlin* came to *Kadai* and then to *Gamlin*.

Traditional ways of livelihood of Galos

Earlier all humans had lived as hunters and gatherers, dwelling together in small, stable, nomadic bands that operated in close harmony with nature. According to Galos folklore, the mythical forefather *Abo-Tani*, the first human who began to transcend the life

⁷⁰ Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village on 23/07/14.

⁷¹ Nyori, Tai, *History and culture of the Adis*, Omsons Publication, New Delhi, 1993, p.53.

⁷² Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

ways and create uniquely human modes of subsistence that clearly distinguished them from other animals.

The Galos use their land for cultivation which is one of their important economic pursuits. The Galo community follow two types of cultivation practices *Modi Rike* or *Tump Rike* (shifting cultivation) and *Isi Rike* (sedentary cultivation). Sedentary cultivation is done at valley bottoms and sometimes on small terraces constructed at the base of the hill slopes all around; this results in a whole set of plots forming a saucer-shaped structure. The structure, organization and function of these agro-ecosystem types differ significantly depending upon social, cultural, economic and ecological setting in which this land use system is practiced.⁷³ Agriculture is evidently the mainstay of the people, and it determines their socio-economic relation and cultural life.⁷⁴ The Galos of Arunachal Pradesh by and large practice a slash and burn method of agriculture known as shifting cultivation or *jhum* cultivation. The economic life of the Galos is largely conditioned by its physical and topographical features. And they adapted himself in his natural surroundings with his technological equipments and social resources. This made their economy largely dependent on agriculture, which is supplemented by trade, hunting and

⁷³ Apatani Wet Rice Cultivation: An Example of a Highly Evolved Traditional Agro ecosystem ,

P.S. Ramakrishnan School of Environmental Sciences Jawaharlal Nehru University ,
New Delhi 110067, p.1.

⁷⁴ Gazetteer of East & West Siang District, op.cit., p.135.

fishing.

The practice of Wet Rice Cultivation as well Terrace Cultivation has been adopted as a consequences of planned intervention. The Galo community greatly depend on *Modi Rike (jhum cultivation)*. And they are still continuing this primitive way of cultivation for centuries.

Shifting cultivation (*Jhum* cultivation)

Shifting cultivation or *jhum* cultivation refers to the type of cultivation in which a field is left uncultivated for some years so as to enable it to re-fertilise itself. In this type of cultivation the farmer cultivates a field for a season or two and then shifts to another field leaving the first field to re-fertilise itself. Here a forest is cleared and cultivated for a season or two and then left abandoned for a long period of time so that it gets re-fertilised.⁷⁵ One important aspect of *jhum* cultivation is that it is dry land cultivation and irrigation is not used for cultivation of the field. *jhum* cultivation is the oldest form of cultivation among the Galos. It has been practised by Galo community since time immemorial. Although none of the persons interviewed during the field study were able to give a logical explanation and exact date of how and when Galos started the practise of *jhum* cultivation but it is generally believed that the first human being on earth

⁷⁵ Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

(forefather of Galos) *Abo-Tani* started this practice of *jhum* cultivation long time ago. The seeds for cultivation are believed to have been given to *Abo-Tani* by *Mopin-Moji* (the god of harvesting and wealth). *Jhum* land cultivation is divided into two types *Mobi* and *Moro*.⁷⁶ This classification is based on fallow period of land. Fallow period means the time gap for which a *jhum* field is left uncultivated. *Mobi* refers to the *jhum* field whose fallow period is less than 6 to 8 years and *Moro* refer to *jhum* field whose fallow period is more than 10 to 15 years.⁷⁷ since the fallow period for *Moro* is more they generally have a well grown forest and as such is more fertile with high productivity while for *Mobi* field fertility is less as it has less fallow period (i.e less time for re-fertilisation). The higher fertility of *Moro* field is because of organic deposits from tree leaves etc accumulated over its long fallow period. There is an interesting mythological story about how *Abo-Tani* started the practise of *jhum* cultivation.

Myth Regarding The First *Jhum* Cultivation Done By *Abo-Tani*

Abo-Tani, the first human of the *Tani* group, lived all alone on the earth. Initially he did not know about cultivation and lived a life of gatherer like a nomad, completely depending on natural resources. Also he was very lazy and always busy in roaming around

⁷⁶ Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

⁷⁷ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

here and there.⁷⁸ Looking at *Abo-Tani's* situation *Ane Dinyi-Loma* (guardian angel or creator of world) became very sad and decided to help him. She suggested him to fix a *Takom* (fishing trap) in a river to catch fish. Actually it was not just a fishing trap but *Ane Dinyi-Loma* wanted *Abo-Tani* to stop living like a nomad and learn to live a settled life. As suggested *Abo-Tani* started fixing *Takom* and every morning when he went to check his *Takom* for fish he found that his *Takom* was filled with *Ekkam* (leaves), bamboo and wood particles. When he enquired, *Lidu-Tode* (a water bird) told *Tani* that *Takar-Taji* (chief of living being) was performing *Toghu-Padak* (marriage ceremonial function) on the upper course of the river. For the ceremony ten Mithuns (*Bos Frontalis*) were ready for sacrifice and huge quantity of *Opo* (rice beer) and *Asin* (food) were being prepared. And all this debris was as a result of preparations for the wedding ceremony. Hearing this *Abo-Tani* became angry that the debris were disturbing his fishing and decided to take revenge on *Takar-Taji*. *Abo-Tani* asked the *Lidu-Tode* (bird) how to reach the place of marriage function. The bird told him that she knows the place and will leave her faeces at every stone as a sign so that *Abo-Tani* can follow those signs to reach the place. Among Galos, it is believed that due to this even today the birds still continue the habit of doing faeces on the stone.

Before going to *Takar-Taji's* place, *Abo-Tani* met *ane*

⁷⁸ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

Dinyi-Loma (guardian angel or creator of world) and told her about all those things and asked her help. She told him to make an effigy of *Kolu* (wild banana plant) plant, properly dress it in a women's attire and place it near the edge of the highest peak. She also asked *Abo-Tani* to keep a *Kome* (bamboo stick) nearby the effigy.⁷⁹

After carrying out *Ane Dinyi-Loma's* instruction *Abo-Tani* followed the symbol made by the bird and reached at *Takar-Taji's* place. On reaching there he found that all the living beings were invited, except him. After learning about this he felt highly insulted and became angrier. He became more determined to take revenge. Intentionally, *Abo-Tani* asked *Takar-Taji* to show his various instrument of wedding such as *Papum-Pachak*, (a small bag shaped metal being carried on back by the bride and groom during the ceremony), *Papum-Pasak*, *Gui-Pasak*, *Gui-Gamyo*, *Murdom-Ponyo*, *Isi-Pukshi*.⁸⁰ After seeing these materials he criticized there finishing. Hearing this *Takar-Taji* became worried. *Abo-Tani* then told *Takar-Taji* that, his mother was an expert in making this entire item. Hearing this *Takar-Taji* asked *Abo-Tani* how to meet his mother. Actually, *Abo-Tani* did not have his mother, it was only a game plan. He told him that his mother lived at the edge of the highest peak. He also told him that his mother is deaf and dumb because of which a *Kome* (bamboo stick) is always kept nearby her, so

⁷⁹ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/07/2014.

⁸⁰ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

that it can be used to get her response.

Takar-Taji decided to approach *Abo-Tani's* mother to make all these items for him and sent his servant *Kako-Tazhi* (squirrel) to approach *Abo-Tani's* mother with the instruction that the lady was deaf and dumb, so, to use the *Kome* (bamboo stick) to get her response. *Kako-Tazhi* went to meet *Abo-Tani's* mother and did as suggested by his master. When he pushed *Abo-Tani's* mother with the stick to get a response, the effigy fell down from the highest peak and drowned into the deep river. The poor squirrel became terrified to tell *Takar-Taji* and *Abo-Tani* about the incident. But very nervously he told about the incident to them. After learning about the incident *Abo-Tani* became very happy that his plan has worked perfectly. But he showed his fake anger and claimed that his mother has been killed due to *Takar-Taji*. He showed as if he was very furious and threatened to destroy the whole world in anger. Unknown to *Abo-Tani's* plan *Takar-Taji* became terribly shaken and asked *Abo-Tani* for forgiveness. He requested *Abo-Tani* to calm down and said that he was ready to compensate anything for his mother's death. *Tani* demanded nine Mithuns out of ten from *Takar-Taji*, which were kept for sacrifice as compensation.⁸¹ *Takar-Taji* reluctantly agreed to give *Abo-Tani* nine *Hobe* (Mithuns).

Takar-Taji had invited a large number of guests and now

⁸¹ Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

only one Mithun was to be sacrificed. And, one Mithun was not enough for whole guests. So, the guests were offered various other things. In order to substitute his feast program even *Takar-Taji* sacrificed *Papu-Ruli* (a small kind of rat).

Because of scarcity caused by *Abo-Tani's* plan, one *Dumpu* (deer) and a *Kipu* (dog) was given a pack of fermented *Agyaa-Posum* (soya bean) to be divided between them. But both of them quarrelled with each other and the *Dumpu* (deer) got angry. Angrily he kicked the *Agyaa-Posum*, destroyed it and ran away. The angry dog chased the deer. It was not so difficult for the dog to follow the deer, as the deer had stamped on the fermented soya bean. Due to this it is believed that the foot of deer is still gives the smell of fermented soya bean.⁸² By following the track made by the deer as a result of smell from the fermented soya beans, the dog reached the *Diigoo-Piirne*, the heavenly land of *Mopin-Moji*, where they were preparing rice powder. They threw the rice paste over the deer's body and it is believed from that day deer have white spots on their body.⁸³ *Abo-Tani* also followed the dog and reached *Diigoo-Piirne*.

Mopin was surprised to find them. She picked up the deer and imprisoned *Abo-Tani* and dog by putting *Pako-Raglik* (putting wood in their leg). *Dinyi-Loma*, after knowing that was very sad and

⁸² Extract from an Interview with Mr. Nyado Riba, Aged 52, Gam *Burah* of Regi village, on 22/07/2014

⁸³ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/07/2014.

with her magical power she told *Abo-Tani* how to escape from that place. So, *Abo-Tani* hinted the dog to look for a rodent. The dog did so and with the help of another dog and he caught a smelly *Kirti-Pumpa* (rat). He hid the rodent under his armpit and after few days the rat started to smell. When rotten smell started to emit from his body, *Abo-Tani* called *Mopin* and told her that he is about to die and that's why he smells like this. Hearing this *Mopin* became little nervous as *Abo-Tani* was the only human being on the earth and his death could bring troubles for her. Out of sympathy and to save *Abo-Tani*, *Mopin* ordered *Diyii-Taamii* to release *Abo-Tani* and the dog.

During his short stay, *Abo-Tani* observed that the land of *Mopin* was full of prosperity with food and wealth. After being released *Abo-Tani* demanded that he be compensated for being kept a prisoner and being made to go through such hardship. *Mopin* agreed and as compensation gave *Abo-Tani* some seeds of paddy and maize.⁸⁴ *Abo-Tani* has no utensils to carry the seeds given by *mopin*, so, the seeds were carried in the backside of the ear of the dog. It is still believed by the Galos that because of this the back of the dog's ear is shaped the way it is. *Abo-Tani* then came back to earth and sowed the seeds in a barren place called *Abin-Bindo-Poko-Looto* without even clearing (or cultivating) the place.⁸⁵ After sowing the seeds *Abo-Tani* went about living his life before roaming from here to there. He did not take proper

⁸⁴ Padu, Tejum., *Mopin 'Poopwr' Poonu Nwwtom and Mvmmvn Gogrv of the Galos of Arunachal Pradesh*, Farsight Publication, Delhi, 2010,p.33.

⁸⁵ Padu, Tejum.,op.cit.,p.33.

care of the seeds that he had shown. However because those seeds were the magical they returned back to the land of *Mopin*. The seeds cried and told *Mopin* that *Abo-Tani* had sowed them in a barren place and did not take care of them. They even told her that *Abo-Tani* even do not have any proper instrument to start cultivation properly.

Abo-Tani returned to the field and found no symbols of germination of a single plant. He was very angry, and thought all the seeds were eaten by the birds and in anger he started killing birds to check their stomach but he could not find any trace of the seeds. After trying hard to find the seeds when he could not find the seeds *Abo-Tani* again went to the place of *Mopin* and *Diggo-Yaamii* and told her that the seeds had disappeared. *Mopin* was angry at *Abo-Tani* and told him that the seeds had returned back to her as *Abo-Tani* had not taken proper care of them. She even scolded *Abo-Tani* for not having proper tools for cultivation. *Abo-Tani* after realising his mistake asked *Mopin* for help and requested her to tell him how to acquire agricultural tools and also to teach him to cultivate.

Mopin agreed to help *Tani* so, she asked him to construct a *Komduu Pora* (a kind of fishing trap) at *Yei-Yela-Buku*, so that he would be able to caught *Horam*, (otter). Who's *Rampin* (skin) could be used to exchange for the tools.⁸⁶ Like this *Mopin* gave a knife to him to construct a *Komduu* (trap). *Abo-Tani* followed all the

⁸⁶ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

instructions and accordingly caught *Horam*. After that he went to *Nyir Poro's* place (god of tools and implement) and offered the skin to him. And in exchange *Nyir Poro* gave tools and implements of cultivation like *Eggi* (axe), *dao* (sword) to him. After acquiring the tools *Abo-Tani* started clearing the forest. While he was busy in clearing the forest, suddenly *Yapom* and *Yaji*, the deities of the jungle appeared before him and asked him to stop clearing the forest.⁸⁷ Then again *Abo-Tani*, went back to *Mopin's* place, he told her about the incident and asked her again to help him.

Mopin promised to help *Abo-Tani*. And, asked *Yapom-Yaji* to give some plot of land to him. But they denied doing so. Due to this *Mopin* made a plan to snatch the whole land from them. Accordingly, she organised a competition between *Abo-Tani* and *Yapom-Yaji*. And said some trees should be felled in the forest. When the trees dried up, a fire will be lit and in the middle of the burning forest all of you have to stand. And in the end the one who will be survive he will be known as master of the earth. Meanwhile in advance *Mopin* secretly told *Abo-Tani* to dig a pit in the forest and asked him to slip into it when fire starts.

Accordingly *Diyii-Taamii* begins the competition by putting fire in the forest. *Yapom - Yaji* could not withstand the fire and came out of the fire they accepted their defeat. *Abo-Tani* by following

⁸⁷ Padu, Tejum., op.cit,p.33

all the instruction given by the *Mopin* won the competition and became the master of the earth. With this *Abo-Tani* was freed from all the restriction and started cultivation by sowing seeds of '*Miillii -Amlii*'. But it is also fixed that *Abo-Tani* should sacrifice animals and perform rituals whenever needed to please deities of the forest. *Yapom-Yaji* and all other deities requested *Abo-Tani* to honour *mopin* with celebration rituals, with the guidance and help of *DiyiiT* and *Pinku-Pinte*. So he created image of *Mopin*, who gives him more seeds, with which *Abo-Tani* started regular cultivation.

Again *Abo-Tani* went back to *Mopin's* place, but this time he went to ask hand of her beautiful daughter for marriage.⁸⁸ *Mopin* accepted *Abo-Tani* as her son-in-law and also asked her daughter *Diyii-Taamii's* consent on this. Thus, like this way *Diyii-Taamii* and *Abo-Tani* got married. Marriage ceremony was attended by the *Mopin* and all the deities. *Mopin* presented them agricultural tools, seeds and precious stone. Earlier it was believed that the single grain has the power of preparing a pot full of rice. So both were happily married and begin their life full of peace. And both of them used to cultivate small plot of land but made proper use of magical seeds. Later on *Abo-Tani* additionally married *Rosi-Taamii*, daughter of *Diro (famine)*, because of which *Diyii-Taamii* got angry and went back to her mother's place. Now *Rosi-taamii* has to take care of the household

⁸⁸ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher,
on 11/08/2014.

duties, which was earlier followed by *Diyii-Taamii*.

So, in the absence of *Diyii-Taamii*, *Rosi-Taamii* unknowing prepared the magical grain. *Rosi-Taamii* didn't know the power of single grain, which has the capacity to prepare a pot full of rice.⁸⁹ Thus, she used more than one grain at a time and produced a huge quantity of rice. At first, she did not know what to do with this extra quantity of rice and due to afraid of *Abo-Tani's* reaction, she, called *Dirro-Kiibo* (hungry dog) to finish it. *Dirro-Kiibo* came and ate all extra quantity of rice. After that, *Rosi-Taamii* again prepared the rice by using only one grain, but this time rice did not produced huge quantity and remained only one. It was because, *Dirro-Kiibo* (famine) ate magical power of the grains as well as the left over. Due to this *Abo-Tani* had to face famine for the first time and his situation was terrible.

Mopin and *Diyii-Taamii* heard about the miserable condition of *Abo-Tani*, but still *Diyii-Taamii* was not willing to return at *Abo-Tani's* place. *Abo-Tani* was very sad when he heard that *Diyii-Taamii* was very angry and not willing to return. So, *Abo-Tani* decided to approach *Diyii-Taamii* for the last time and when he approached her, she couldn't refuse. But she put a condition that is she will return to him only in one condition that '*Rosi-Taamii* should leave forever, that she should be thrown into the river, and even the *Dirro-Kiibo* should be

⁸⁹ Extract from an Interview with Mr. Kitum Ete, Aged 69, Priest of Bene village, on 12/08/2014.

destroyed.⁹⁰ After that *Abo-Tani* should pray *mopin* and other deities who will again provide him seeds, and agriculture implements, only then *Diyii-Taamii* would return, along with *mopin*. Thus, accordingly *Abo-Tani* killed *Rosi-Taamii* and drowned into the river. And *Dirro-Kiibo* was cut into pieces and thrown into a waterfall. Then *Abo-Tani* made images of *mopin* and other deities with the help of *Diyii-Taamii* and sincerely worshipped all of them. With this *Abo-Tani* impressed *mopin* and all the other deities, in returned they brought *Diyii-Taamii* along with them and bestowed him with agriculture implement and different seeds, except the magical seed which had the power of preparing large quantity of food from one single grain. Also directed him to celebrate *Mopin* every year. *Abo-Tani* also obtained the power of cultivate large area. Consequently *Mopin* is being celebrated every year during the sowing season, hoping for good harvest and prosperity.

Stages of *Jhum* Cultivation

Jhum cultivation is also known as *Modi-Rik* and *Tump-Rik* in the Galo language. It is still one of the sustaining occupations of the Galos and *jhum* cultivation is primitive form of agriculture practice. They cultivate three types of *jhum* field in a year, these are *Pel-Lek*, *Docho* and *Rigne*.⁹¹ The word *Pel-Lek* means a field exclusively meant

⁹⁰ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher,
on 11/08/2014.

⁹¹ Riba, Tomo, op.cit,p.64.

for growing maize, usually small in size and cleared in advanced so, that maize can be eaten during the cultivation. The *Docho* is the field for rising of crops (generally paddy) for first consumption and it is little larger than that of *Pel-Lek*. The last one is *Rigne* which means mother field or main field. As can be easily seen the three classifications is done on the basis of requirement of consumption during cultivation and duration of crop growth. *Tape* (maize) takes less time to grow so it is cultivated first in *Pel-Lek* so that it can be consumed during the time paddy grown in *Docho* and *Rigne* get ready for harvesting.⁹² All the agricultural rituals are performed during the cultivation of the main field.

In entire district of West Siang different time table is followed for the *jhum* cultivation, this is because of the climate factor. Due to this some areas of west siang starts their cultivation little early and some area were very late. The command of nature is seen not less in determining the nature of *jhum* in the area. Crops are raised for two to three years in a single plot, depending on the retention of the fertility of the soil. There are two type of *jhum* field based on fallow period. According to that first one is *Mobi* and second is *More* forest. In a *Mobi* forest fallow period is 6 to 8 and for *More* forest 10 to 15 year. In this period soil is left fallow to recover its. Stages of *jhum* cultivation among the Galos of West Siang district is shown in the table 1.2.

⁹² Extract from an Interview with Mr. Racha Badak, Aged 60, Village Elder of Tai village, on 05/08/2014.

Table 1.2

Stage of *Jhum* cultivation among the Galos of west siang district

<i>Polo</i> (month) in Galos	Month	Time of activities	
		Local name	Meaning
<i>Rate</i>	November	<i>Rime-Panam</i>	Clearing of jungle for demarcation of area.
<i>Rale-Desi</i>	December-January	<i>Hine-Tenam</i>	Felling of trees
		<i>Hijir-Jirnam</i>	Chopping of fallen trees
<i>Lumi-Luki</i>	February-March	<i>Rike-Runam</i>	Setting of fire to the debris.
		<i>Rike-Romnam</i>	Burning of dry leaves and bushes.

<i>Luchir</i>	April	<i>Erbu-Nyynam</i> <i>Nakum-Monam</i> <i>Holu-Ragnam</i> <i>Ali</i> <i>Anyo-Lignam</i>	Materials collection for farm hut and fencing. Constructi on of the farm hut. Erection of fencing Sowing of seeds
<i>Luyo-Tenlo</i>	May-June	<i>Eijee-Monam</i> <i>Rikbo-Bunam</i>	Weeding Weeding out unused plants

<i>Hiyo</i>	July	<i>Tepe Okke</i> <i>Ali Anyo-</i> <i>Lanam</i> <i>Peta</i> <i>kanam</i>	Harvesting of Maize and other mixed crops To scare birds
<i>Hite-Pira</i>	August- September	<i>Amo-</i> <i>Lanam</i> <i>Amo-</i> <i>Yabnam</i> <i>Amo-</i> <i>Genam</i>	Harvesting of paddy Winnowing Paddy taken to granary

Source: Field survey

Thus, the site selection and clearing of the forest generally begin in the month of *Rate* (November) to *Rale* (December) and sometimes goes up to *Desi* (January). During these months, fallen trees were taking time to dry due to the heavy fog and it remains damp and wet for few more days. In most of the areas clearing time is more

or less same only, but after that their scheduled are different. After that *Rike Runam* (setting of fire) is usually stars from the month of *Lumi* (February). Villages under aalo east section, Likabali, Kangku, starts setting of fires from the month of *Lumi* (February) and Aalo West, Liromoba, Tirbin, Yomcha, Dari, Gensi, Darak, Kamba section starts from the month of *Luki* (march). After that clearing and burning of *Rigrom Panam* (half burnt debris) will start gradually. After that farmers used to *Nakum Monam* (construct of hut) and soon after finishing hut construction they start the construction of the fencing for the protection of the crop.⁹³

In the most of the area, sowing of seed start from the month of *Luchir* (April). Those area having high temperature like Aalo, Kamba, Likabali, Tirbin, Liromoba, Darak, Bagra, Kankgu, Yomcha circle starts sowing seeds from the month of *Luchir* (April) and Basar, Dari, Gensi, Sibe Circle starts Sowing Seeds from the end of *Luchir* or some time from the beginning of the *Luyo* (May) month. Till the germination of seeds, farmer used to take necessary care for the protection of the crop. After the germination of seeds, now next step is *Eijee Monam* (weeding), which is the most important part and it effects the production of the crop. Due to the difference in temperature, *Eijee Monam* month is also different, area like Aalo, Kamba, Likabali, Tirbin,

⁹³ Extract from an Interview with Mr. Racha Badak, Aged 60, Village Elder of Tai village, on 05/08/2014.

Liromoba, Kangku , Bagra starts from the month of *Luyo* (May) and area like Darak , Yomcha, Basar, Dari, Gensi Starts from *Tenlo* (June) till the month of *Hiyo* (July).

Thus, after the *Eijee Monam* harvesting of paddy in West Siang district starts from the month of *Hite* (August) . Aalo, Kamba, Likabali, Tirbin, Liromoba, Bagra, Kankgu circle harvest their crop from the month of *Hite* (August) and Darak, Yomcha, Basar Starts their harvesting from the ending Month of *Hite* till *Pira* (September). Dari, Gensi, Sibe circle harvest their crop from the ending month of *Pira* till the month of *Lubo* (October). With the help of their feet threshing of the grains is done and after separating grains from straw the grains are stored in the granaries. Even, after finishing harvesting farmers used to visit their field to collect local vegetables.⁹⁴ Like this cultivation cycle will continue for two-three years, depending on the fertility of the soil. Circle wise *jhum* cultivation of west siang district has been shown in the following table 1.3.

Table 1.3 Circle wise cycle of *Jhum* cultivation of West Siang

⁹⁴ Extract from an Interview with Mrs. Ribi Ngulom, Aged 53, of Gogar village, on 14/06/2014.

Stages of <i>Jhum</i> cultivation	Selection of site	Clearing of jungle and felling of trees	Plot is left to dry	Setting of fire and burning of debris	Sowing of seeds	Weeding	Twice weeding	Harvesting	Threshing and storing
Names of the circle	Months								
Darak	December	January	February	March	April	May	June	August-September	October
Kamba	November	December	February	March	April	May	June	August	August-October
Liromoba	November	December	February	March	April	May	June	August	August-October
Yomcha	December	January	February	March	April	May	June	August-September	October
Aalo	November	December	February	February-march	April	May	June	August	August-October
Tirbin	November	December	February	March	April	May	June	August	August-October
Basar	December	January	February	March	April-May	May-june	June-July	August-September	October
Dari	December	January	February	March	April-May	May-june	June-July	September-October	October
Gensi	December	January	February	March	April-May	May-june	June-July	September-October	October
Sibe	December	January	February	March	April-May	May-june	June-July	September-October	October
Likabali	November	December	February	February-March	April	May	June	August	August-october
Kangku	November	January	February	February-March	April	May	June	August	August-october
Bagra	November	December	February	March	April	May	June	August	August-october

Sources: Field Survey

Preparing the fields

(a) *Mok Kagak Nam* (site selection)

The cycle of *Jhum* cultivation is preceded by a series of preparatory activities which generally begin in the month of *Rate*

(November).⁹⁵ During this month the appropriate site is selected by the individual families within the village precincts. This act is preceded by thorough discussion among male members within the village on which area is to be cleared. Before selecting the site care is taken to ensure certain necessities like ascertaining the soil fertility, it should not have been previously demarcated area; it should not be in the isolated area for the security point of view. The fields should have proximity with that of other families as it is of crucial importance. Protection of the crops from birds and animal is also an important task for which co-farmer is required and also for the fencing the fields to a co-farmer is essential as it becomes burdensome for a single family to fence such a vast area. The assigned month for the site selection is different in different circle of west siang district. It depends mainly on the physical and topographical features especially the month on which rainy season occurs. The physiographic conditions, altitude and aspect of slope play significant role in determination of temperature and climate of the region. Temperature of Aalo, Bagra, Kamba, Likabali, Kangku, Tirbin, Liromoba, is far higher than that of Gensi, Dari and Basar. There is also much difference in the temperature of Likabali and Kangku located in the South and the North Western part of darak circle. Where the former remains hot and warm throughout the year, the latter experience cold

⁹⁵ Extract from an Interview with Mr. Karnya Kamsi, Aged 81, Gam of Doyor village, on 18/02/2014.

temperature with snow cover.⁹⁶ This difference is not because of latitudinal differences but altitudinal variation. Because of this temperature differences circle like Aalo, Bagra, Kamba, Likabali, Kangku, Tirbin, Liromoba, Yomcha, Starts their cultivation cycle little early than the Gensi, Darak, Basar, Dari area.

After selection of site, next task is deciding on the size of the field. Size of the field depends on the working force within the family. The main work force consists of the grown up members of family both men and women, but other than family there exists different types of workforce namely, *Rigur* i.e free exchange of labour between the relatives, *Rige* i.e reciprocal exchange of labour and *Riglap* i.e exchange of labour on payment in cash or kind like rice, domesticated animals, traditional agricultural tools, etc.⁹⁷ In many areas it is generally seen that there is a broad division of labour between the men and the women. Work like clearing of jungle, construction of farm hut, fencing, thrashing of grains and storing of grains are mainly assigned to male members of the family while works like clearing of half burnt debris, sowing of seeds, weeding and harvesting are assigned to the female members of the family. It is important to note that this division of work is not rigid and both male and female perform all the task of cultivation depending on individual

⁹⁶ Riba, Tomo, op.cit.,p.23.

⁹⁷ Basar, Jumyir, "A Study of Indigeneous Knowledge System In Development Policies And Programmes With Socil Reference to Resources Management By The Galo of Arunachal Pradesh", Ph.d Dissertation, Arunachal Pradesh, unpublished, 2011, p.106.

circumstances and requirement.

(b) *Rike Panam* (techniques of clearing forests)

After selecting the site & size, they usually start *Hin-Tenam* (cutting trees) from the month of *Rate* (November) till the month of *Desi* (January). Clearing of the forests generally starts from bottom of a hill.⁹⁸ First the smaller trees, shrubs, herbs and creepers are cleared. The creepers are pulled out cut into pieces and the dead leaves are scratched out so that, later on when fire is set to the field it could catch fire properly and ashes would enhance the fertility of the soil. Cutting of banana plants are done in advance because it takes time to decay. Before felling the big trees like *Hillok*, a special rite is performed called the *Pombek*. This rite is performed as it is believed that spirits called *Yapom-Yaje* resides in big trees and through this rite permission to cut the big tree is sought from them.⁹⁹ This rite is performed by the *Nyibo* and sometimes animal sacrifices are also done. Usually a fowl is sacrificed to appease the *Yapom*, who are the guardian angels of the forest. In the evening of the first day of cutting trees, cleaning of shrubs and creepers, the cultivators celebrate as the mark of reservation of the field (*Rike Pagak-Nam*) . After this process the field is left to dry for a month or more. In the month of *Lumi* (February) farmers collect woods from the field. Generally only big

⁹⁸ Riba, Tomo, op.cit.,p.66.

⁹⁹ Extract from an Interview with Mr.Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

trees which dry fast and are good for burning as firewood are collected, eg *Kora*, *Hitir*, *Talik*, *Tatek-Lorek* etc are considered as good quality firewood.¹⁰⁰ Trees such as *Tage* etc are not used as firewood as they do not burn properly.

(c) *Rike Runam* (burning of dried trees and debris)

In the month of *Luki* (March) and *Luchir* (April), burning of dried trees and debris in the *jhum* land is done. After ensuring that the fallen trees are well dried, fire is set to the field. Utmost care is taken to avoid accidents. Before setting the fire a track is made to be used by the cultivator who is going to set fire. Generally children etc are not allowed in the field on the day of *Rike Runam* (setting of fire). Setting of fire is done keeping in mind the direction towards which wind is blowing so that the direction of movement of fire can be somewhat controlled. Also generally trees and debris are cleared from the boundary of the field and moved towards the middle of the field so that fire is confined within the field and do not spread to the jungle.

(d) *Rigrom-Panam* (clearing of debris)

After the *jhum* land is set fire most of the trees are burnt. But there still remains some half burnt woods and debris etc. These

¹⁰⁰ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

half burned woods and debris are cleared so that the field can be made ready for sowing. Sometimes half burned debris is again set fire till they are properly burnt. Setting fire to *jhum* land serves two purposes for the farmer, one it helps to clear the field for sowing and second it is believed traditionally that burning of woods and debris in the field enhances the fertility of the field.¹⁰¹ Clearing of debris is done immediately after setting fire of *jhum* land as half burned debris becomes hard and difficult to cut after few days.

(e) *Nakum-Monam and Holu-Ragman* (farm hut and fencing)

Once the process of clearing the forest through burning is achieved the farmer begins to construct a hut. The hut is required for multiple purposes such as a resting place during the cultivation period, storing place for the paddy after cutting etc. In many parts of west siang the hut is half constructed without the roof before the process of burning of half burnt debris is done.¹⁰² This is done as a precaution so that the roof of the hut does not catch fire when the half burnt debris is put to fire. In these areas after the burning the half burnt debris, the farmers complete the hut by putting *Tayek* (*Livistona Jenkinsiana Griff*) leaves as roofing, while in some area farmers construct the completed hut directly after the burning of the half burnt debris. Bamboos, cane, *Tayek* leaves (*Livistona Jenkinsiana Griff*) and wood are the main

¹⁰¹ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹⁰² Extract from an Interview with Mr. Beto Kamsi, Aged 38, of Doyor village, on 19/02/2014.

materials for the construction of the hut. This hut is known as *Nakum* in galo dialect. This is generally small in size, and is raised about 2 to 3 meters above the ground with approximate length of 4 meters and breadth 3 meters respectively.

Soon after finishing the construction of hut, the construction of the fencing for the protection of the plot from animals commences. It is a joint coordinated work of all the farmers of the same site as the fencing of one field is joined to the fencing of next field so that a continuous fencing around all the field of the site is created. The fencing is made with bamboo and *Danik* (wooden post).¹⁰³ Bamboo is usually split from the centre into two equal parts along its entire length. The *Danik* (wooden post) are erected at a distance of 3 feet approximately. The split bamboo is knotted to the *Danik* (wooden post) by the rope called *Payne* (bamboo rope) or *Oso* (cane rope) and held firm. Generally about five to six pieces of split bamboo is knotted to the wooden post at a distance of 5 inches (approximately) from one another thus creating a strong fencing around the field.¹⁰⁴ This completes the process of preparing the field for cultivation and brings the commencement of the agricultural season.

(f) *Amo Chinnam* (sowing of seeds)

¹⁰³ Extract from an Interview with Mr. Kalom Badak, Aged 61, Village Elder of Tai village, on 05/08/2014.

¹⁰⁴ Extract from an Interview with Mr. Racha Badak, Aged 60, Village Elder of Tai village, on 05/08/2014.

The agricultural cycle begins with sowing of seeds which usually start from the month of April. After the completion of the processes clearing of fields and fencing etc described above, the sowing of seeds starts. Sowing of seeds is done mainly by the women and in groups. Generally, a day is fixed for sowing of the particular field and on that day the owner of the field gathers or calls all his labour force to help him for sowing seeds in the field. The labour force is generally accumulated either through *Rigur* i.e free exchange of labour between the relatives, *Rige* i.e reciprocal exchange of labour or *Riglap* i.e exchange of labour on payment in cash or kind like rice, domesticated animals, traditional agricultural tools etc. The sowing of the seeds starts from the corner of a field, which is situated close to the un-cleared forest.¹⁰⁵ Before sowing the paddy seeds they usually begin planting some vegetables like cucumber, root crops, mustard, chilli, and some other vegetables for consumption in between the cycles of cultivation. Millet and *Giyi* (*Brassica*) are sown through broad casting and rice and maize are dibbled perfectly on the slope. Seeds are sown through the technique of dibbling in which women with the help of a *Hingi* (stick) make holes at a distance of less than half metre and put seeds into them and cover the holes with soil by their feet. In some parts of west siang male members do the work of covering the holes with soil. They use *Dere* (a traditional agricultural tool made of

¹⁰⁵ Riba,Tomo, op.cit.,p.68.

bamboo) to cover the holes with soil.¹⁰⁶ Generally creepers and climbers like pumpkin, cucumber, etc are grown in the corner of the field.

(g) *Eijee-Monam* (weeding)

There are two stages of weeding known as *Morin* and *Moro*.¹⁰⁷ The selective removal of some weeds which grows very fast and overgrows the crops is called *Moro*. The systematic weeding where a single weed is not allowed to remain is called *Morin*. The weeds are uprooted and carried in *Pua* (small basket made of bamboo) and dumped in an *Eipum*, a dumping point. The production of the crop depends on the weeding which helps in softening of the soil, allows penetration of sun light, proper aeration of soil etc.

(h) Protection of crops

Protection of the crops is an important task. Proper protection is to be given to the crops, just after the sowing and ripening. Different types of traps are used by the Galos, to protect crops from birds and animals. Different designed of traps made of bamboo, cane, wood, and stones are used to kill birds and animals. Bows, arrows and guns are always kept with them in the field. Even the farmers timely used to check strength of the fence and sometimes wooden, bamboo

¹⁰⁶ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹⁰⁷ Extract from an Interview with Mr. Goto Basar, Aged 67, Gam of Gori village, on 19/08/2014.

fence are raised to protect the field from domestic animals. Sometimes a whole field is attacked by pests and insects. In this case farmers used to perform rituals called *Dir Tachi*, for the protection of the crop.

(i) *Amo-Lanam* (harvesting)

Before harvesting the crop, every village used to perform a ritual called *Aampu-Yule* for the nice crop.¹⁰⁸ In which whole village people have to follow certain taboos like for a day, whole village will not go anywhere neither any outsider is allowed to enter the village. And also one more rituals used to perform before harvesting that is *Ziri* for prosperity. Harvesting of crops usually starts from the month of *Hite* (August) and due to different in temperature harvesting time is also different in many area. In Aalo, Likabali area harvesting of crop starts from august and in Gensi, Dari area harvesting starts from end of September or sometimes starts from the month of *Lubo* (october). The ripening of crops gives the farmer a sense of satisfaction. Harvesting of crops either starts from the corner of the field to save the crops from the being destroyed the birds and animals or near the hut to make space. It is done by the both male and female and while ripening they used to carry *Igin* (a cylindrical shape basket made of bamboo and cane) on their back. Harvested grains are thrown into the basket, and

¹⁰⁸ Extract from an Interview with Mr. Kirdo Padu, Aged 45, Contractor of Darka village, on 17/07/2014.

collected by the both male and female then carried to *Nakum* (farm hut).

(j) *Amo-hignam* (threshing of the grains)

Threshing of the grains is done with the help of the legs by crashing on the *Pese* (local mat).simultaneously straws are separated from the paddy and then winnowing is done where unhealthy paddy is separated by blowing out. This unhealthy paddy or rice husk is used in preparing *Poka* (rice beer).¹⁰⁹ Then the grains are stored in a farm hut for the time-being.

(k) *Amo-Lenam* (storing of grains)

Grains are stored in the granaries. Earlier granaries are usually constructed away from the village to save it from any fire accident in the villages but now a day's granaries are constructed within the boundaries of their house. Grains which are touched by the continuous rains are kept over the fire in *Pese* (local mat). Maize, root crops etc are kept smoked.¹¹⁰

Rituals related to agriculture

¹⁰⁹ Extract from an Interview with Mr. Nyai Riba, Aged 62, Gam of Regi village, on 17/07/2014.

¹¹⁰ Extract from an Interview with Mrs. Riikbi Ngulom, Aged 38, of Gogar village, on 14/06/2014.

Ritual refers to something that has the characteristics of a rite, a practise or an observation generally of a religion but can also be non religious. It is defined by the oxford dictionaries as “a religious or solemn ceremony consisting of a series of actions performed according to a prescribed order”.

Rituals play a significant role in any society especially in a tribal society. Life in tribal societies is generally very closely related to the nature, the hills, forests and the rivers etc. because of this tribal livelihood is full of rites and rituals. The galo society is also full of rites and rituals. There is a ritual associated with almost in every aspect of life in the Galo society such as rituals associated with birth, death, marriage, cultivation etc.

There are different types of rituals which are associated with the entire cycle of *jhum* cultivation. Some of these rituals are individually initiated like *Pombek* etc while others like *Mopin* etc are community initiated. Almost all there rituals are performed by the *Nyibo* (priest) and some kind of sacrifice either animal or bird is done in these rituals. The important rituals associated with the cycle of *jhum* cultivation are explored below.

A. Pombek

The ritual cycle begins with *Pombek* rituals. It is usually performed before felling the big trees like *Hillok* during the process of clearing of the forest for cultivation.¹¹¹ And, this ritual is performed only in those fields where this big tree like *Hillok* is found. This rite is performed as it is believed that spirits called *Yapom-Yaje* resides in big trees and through this rite permission to cut the big tree is sought from them. This rite is performed by the *Nyibo*. Usually a fowl is sacrificed to appease the *Yapom*, and sometimes animal sacrifices are also done. It is believed that if big trees like *Hillok* are cut without performing this ritual it angers the *Yapom-Yaje* (spirit) and brings bad luck and illness to the one who cuts the tree.¹¹²

B. *Hingi-Genam* (to bear the gift of god)

This ritual is performed to receive the blessing of *Ayi-Agam* (diety) during the sowing, weeding and harvesting process. This ritual is performed by the *Nyibo* during the process sowing of seed in the field. The priest and the male members of the family prepare a representation of the deity *Ayi-Agam* (who is considered to be the giver of good luck and good harvest) .The representation is made from bamboo and varieties of the grass such as *Enshi*, *Hika* are used to make images of the spirits.¹¹³ During the rituals the priest chants some

¹¹¹ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/14.

¹¹² Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹¹³ Extract from an Interview with Mr. Kitum Ete, Aged 69, Priest of Bene village,

hymns and sacrifices of fowls for invoking the diety is done. A small quantity of rice powder and blood of the fowls are sprayed over the representation of the diety and other agriculture tool.

C. Aampu-Yule

This ritual is performed before harvesting of the crop, usually in the month of July. This is a community initiated ritual where the priest prays for the good harvest for the entire village as a whole as well as for the protection of the crop from being destroyed.¹¹⁴ Sometimes matured crops suffer from various diseases, namely paddy blast, root knot etc. The Galos believe that such diseases are caused by the various spirits like *Yapom-Yaje*. Thus, in order to protect the crops and to appease these spirits they perform this ritual. In every village of Galos this ritual is performed for a bountiful crop. After performing this ritual the entire village people have to follow a taboo for an entire day i.e. next day after the ritual is performed. According to the taboo people of the village have to stay in their own village and are not allowed to go outside the village neither are outsiders is allowed to enter the village.¹¹⁵

D. Amo Mamnam

on 12/08/2014.
¹¹⁴ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.
¹¹⁵ Extract from an Interview with Mr. Emmi Riba, Aged 65, Priest of Regi village, on 23/07/2014.

Amo-Mamnam is the rituals associated with the storing of the freshly harvested grains of the season. This ritual is performed when the crop has been cultivated and is going to be stored in the granary.¹¹⁶ The ritual is performed by the head of the family and generally priest is not required. In this ritual the newly harvested grains are stored in the granary and are covered with a carpet like object made out of bamboo ropes called *Upo*. The head of the family then smears ginger paste, rice paste and *Poka* (rice bear) on the *Upo*. Through this ritual is a way of showing gratitude to the god for a good harvest and also a prayer for protection of the grains from rodents etc during storage in the granary. In this ritual people are praying the deity *Ayi-Agam*, who is considered to be the giver of good luck and good harvest). In the evening domestic animals are sacrificed and there is a small feast with friends and family.

E. Yojir

Yojir is another important ritual associated to with cultivation. It is not associated with any particular process of cultivation but is performed for good harvest and good luck for the whole family.¹¹⁷ *Yojir* is a very costly ritual and not everyone is able to

¹¹⁶ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

¹¹⁷ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

perform it. It takes more than a year for its preparation and is generally performed in the month of September. It is generally performed by well to do families of the village. The family with the means and having the desire to perform the ritual "*Yojir*" conducts a *Roksin Kanam* (chicken liver divination) at the family level to determine if it is in their luck to conduct the ritual or not. If through the test it is established that it is not in their luck to conduct the ritual *Yojir* then they cannot perform the *Yojir*. But if the test result indicates that they can conduct *Yojir* then another *Roksin Kanam* (chicken liver divination) is performed to select the priest who will perform the *Yojir* for the family.

Male folk and children from every family participate in these rituals. For the ritual *Yojir* idols of diety "*Mopin Ampir*" is prepared using bamboo, and different types of locally available grass and shrubs. For preparation of a symbol of the diety two night and two days are required. On the day of the ritual the *Nyibo* and his assistant *Bo* (co-priest) chants hymns and animals like Mithun, cows , pigs and chicken etc are sacrificed .womenfolk of the villages pay visit with rice beer in a *Komtu* (bamboo tube) and they serve all the members present at the rituals.¹¹⁸ This act is termed as *Opo-Hika* . On the following day of the ritual *Aar* (taboo) is observed within the village. The following day women of the village are invited by the owner of the house and are served with the food and rice beer. On the third following day of the

¹¹⁸ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

sacrifice the *Nyibo*, the *Bo* (co-priest) and some family members visit the paddy field of the one who performed the “*Yojir*” to spread the good luck and for good harvest of the field.

F. Mode

Mode is one of the big rituals of the Galos that is associated with cultivation and this ritual is generally performed in the month of April.¹¹⁹ Like *Yojir* it is not associated with any particular process of cultivation. *Mode* is performed in both *jhum* and settled type of cultivation. In Galos society it is a matter of great pride to perform this ritual as it is difficult and highly expensive. Everyone wants to perform this ritual, but sometimes even though the person is very rich he is unable to perform this ritual as it is believed that god's gives symbols to the person (or the family) who are suppose to perform this ritual. Whether a person can perform this ritual or not is determined through *Roksin-Kanam* (chicken liver divination). If through the *Roksin-Kanam* indication for *Mode* rituals are found then only this ritual can be performed. The procedure of this ritual is similar to that of *Yojir* but with more number of sacrifices and a bigger feast. When a person performed this ritual they have to follow certain restriction for a year like they are not permitted to give grains to any one from their

¹¹⁹ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

granaries.¹²⁰ These restrictions are laid out by the priest. Also for five days following the performance of the ritual the members of the family observe taboo and accordingly remain restricted in their own houses, neither do they allow anyone to enter their houses. For five days they will only eat the meat left over from the *Mode* ritual. Some of it is smoked and they generally avoid consuming green leafy vegetables during those five days. *Mode* is usually performed for ensuring prosperity and as a celebration everyone smears each other's face with rice paste. It is one of the big rituals in Galos where Mithun is sacrificed.

G. Hoorin

Like *Mode*, *Hoorin* is another important ritual of Galos associated with cultivation where the Mithun is sacrificed. *Hoorin* rituals are performed in *Nasu* (granary) in the month of April. *Nasu* is a separate building constructed away from the house for storage of grains. This ritual is dedicated to the goddess of wealth i.e. *Mopin*, *Pinku-Pinte* and those who perform this ritual seek wealth and prosperity.¹²¹ Like *Mode* everyone wants to perform this ritual but everyone is not lucky enough. For *Hoorin* also it is believed that gods reveal to the person (or the family) if they are supposed to perform the ritual. Whether a person can perform this ritual or not is determined through a *Roksin-Kanam*. If through the *Roksin-Kanam* indication for

¹²⁰ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

¹²¹ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

Hoorin rituals are found then only this ritual can be performed. The procedures of *Hoorin* are similar to that of *Mode* and *Yojir* but only the chants and hymns of the *Nyibo* and *bo* change. Also the number and types of animal sacrifice differs in the three rituals (*Mode*, *Yojir*, *Hoorin*).

When a person initiates the ritual of *Hoorin* they have to follow some restriction for a year as specified by the priest.¹²² Also for five days after the rituals they will be confined in their own house and no one is allowed to enter their house. For five days they will only eat the meat left over from the *Hoorin* ritual. They are to generally avoid consuming green leafy vegetables during those five days. Those who observe the ritual are not allowed to eat some specific local vegetables like *Hibe* for the entire year. However they are allowed to consume ginger. Like *Mode*, in *Hoorin* also people make merry by smearing rice paste on each other's face.

H. Mopin

Mopin is the biggest ritual of Galos, associated with agriculture. The *Mopin* has been derived from the two words *Mo* and *Aapin*, *Mo* and *Moko* carries the meaning of whole earth and *Aapin* means pollen.¹²³ Thus, it carries the meaning of flowering earth, *Aapin*

¹²² Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

¹²³ Extract from Article "Origin of *Mopin* Festival in Broad Perspective" by Gumken Bagra, published in *Diggo-Yamo Mopin Souvenir* 2014, Published by Central *Mopin* Celebration Committee, Aalo, 2014, p.12.

(pollen) which is the main source of fertilizer. The genesis of the celebration has been traced back to the legends of *Abo-Tani*, the mythical ancestor of *Tani* group of tribes including the Galos. So, the celebration remind the days of *Abo-Tani* when mother *Mopin* herself led *Abo-Tani* from dream to world of realities in everything he do. Accordingly, *Abo-Tani* celebrated mopin every year during the time of sowing seeds for good harvest. Subsequently, people celebrated *Mopin* as *Abo-Tani* had started but truth is beyond the reach of the history of mankind.

It is observed by the whole community in the form of a festival. *Mopin* is observed for wealth and prosperity. It is celebrated for five days usually in the month of April beginning from 5th of April. For different villages date is fixed by village members within the month of April. This festival is to be celebrated within the month of April because it is the month of sowing of seeds and through *Mopin* the people pray to *Diggo-Pirne* (goddess of sowing) and *Mopin* (goddess of wealth and prosperity) for a good harvest and prosperity.¹²⁴

For observing *Mopin* all the members of the community conduct a meeting to plan the celebrations. During the meeting one family is selected to be the one who will sacrifice the Mithun during the celebration of the *Mopin* ritual. The family is named as the *Pingi-Neri*.

¹²⁴ Extract from an Interview with Mr. Binge Ete, Aged 56, Head Gam of Bene village, on 11/08/2014.

In some villages *Roksin-Kanam* is also conducted to decide who will become the *Pingi-Neri*.¹²⁵

During the *Mopin* ritual, the *Nyibo* makes prayer to *Mopin* (goddess of wealth and prosperity) and mithun, pigs, cow, fowls etc are sacrificed to please the goddess. In this festival people play with *Itee* (rice powder) by smearing it on each other's faces. The fifth day of the festival is marked with a farewell feast in honour of the *Mopin*.

Conclusion

Thus we can observe that it is not possible to exactly pin point the origin, route of migration and specific timelines of the migration of the Galos. This is because there is no written record available and whatever knowledge (or record) we have is in the form of oral rendition passed on from generations to generations. Although no exact conclusion regarding migration of the Galos can be ascertained due to lack of written records it can be roughly estimated that all the Galos have migrated from a place called *Tada Dege* located in the upper course of *Siyom* river near Mc Mohan line in Indo Tibetan border. This is mentioned in many books written about the Galos and also during my

¹²⁵ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

interview in different villages of Galo areas. From *Tada Dege* they came to *Topo Golo* where they acquired the name Galo. From here different Galos migrated and settled in different areas. Like the *Lare* Galos came to basar and near by areas, the *Pugo* Galos settled in Aalo areas, the *Kari-Karka* Galos settled in Yomcha and nearby areas.

Galos are an agrarian society and majority of the population is engaged in agriculture. *Jhum* cultivation is the traditional practice of the Galos . They believe that the practice was first started by *Abo---Tani* the first ancestor of the Galos and since then Galos has been practicing *jhumming*. There are six stages of *jhum* cultivation and there are specific months associated with each stage. In all circles of West Siang these stages are performed but there is slight variation in the timing as illustrated in table 1.2. .

The Galos are a superstitious tribe and they believe in lots of ritual and taboos. Galos believe that all things of the nature are a creation of supernatural power and that their every action is being watched over by invisible supernatural beings who punishes or rewards them according to their actions. Because of this belief whenever they extract anything from nature by way of hunting, fishing or agriculture

they perform rituals to seek permission and to thank the supernatural beings. In the field of *jhum* cultivation also Galos follow a lot of rituals and taboos such as *Dir-Tachi*, *Ampu-Yulu*, *Pombek*, *Hingi-Genam*, *Amo-Mamnam*, *Yojir Hoorin*, *Mode* etc. Even in today's modern times Galos are performing these rituals with true faith.

Chapter 3

Traditional and Modern Agricultural Practices

Origins of Terrace Cultivation And Wet Rice Cultivation

Agriculture, as practiced in one place by a settled farmer in which field are not rotated is called sedentary agriculture.¹²⁶ Sedentary cultivation thus refers to the type of cultivation in which the field is cultivated continuously season after season and no fallow period is allowed in between. The main feature of sedentary cultivation is that irrigation is a must for such type of cultivation be it through a river or a small stream. Irrigation is necessary for this type of cultivation because the water helps in increasing and retaining the fertility of the soil. Water from rivers or streams brings with it necessary minerals, manures (from dead and decayed plants and animals) and other sediments from upstream and deposits it in the field leading to increase in fertility of the soil. There are two types of sedentary cultivation practised by the Galo community of Arunachal Pradesh, namely wet rice cultivation and terrace cultivation.

Ayi-Pata-Rike (wet rice cultivation) is done in flat valley area which has perennial source of water from river, stream, tributaries, etc. Whereas terraced cultivation is done in hilly areas making a plot in terraced way and it completely depends on the rain water.

The only tribe in entire Arunachal Pradesh which pursue this method of agriculture is the Apatani tribe settled in the subansiri

¹²⁶ Pandey, Deepak, opcit., p.138.

district.¹²⁷ Nearly a century ago, in 1897, R.B. McCabe visited the Apatani plateau and surprisingly noticed 'highly cultivated and artificially irrigated terraces'.¹²⁸ Which had been developed in the past immemorial. The wet rice cultivation, as a natural sequence in the Basar bowl of present West Siang district.¹²⁹ Terraced rice cultivation was found among the Monpas of Tawang district and among the Sherdukpens of West Kameng district. The Nyisis in the foothills of the lower Subansiri district, the Khamptis of Lohit district and Singphos of Changlang district had adopted wet rice cultivation, perhaps from the adjoining plains of Assam. The membans of West Siang district had also developed terraced rice cultivation, but the bulk of communities used to practice *jhum* cultivation till the middle of the century.¹³⁰

The Galos refer to sedentary cultivation as *Pata-Rike* or *Isi-Rike*. *Isi-Rike* is derived from two local words *Isi* meaning water and *Rike* meaning field thus referring to water supplied field or an irrigated field. The traditional agriculture was primarily *jhum* cultivation and was the only known form of agriculture among the Galos. But later on wet rice cultivation and terraced cultivation was also adopted and gained popularity. Before the 1962, the Galos were also one of the hierarchically trader by occupation. They had trade relation with their

¹²⁷ Pandey, Deepak, Op.cit., p.138.

¹²⁸ From R.B McCabes' report in V.Elwin (ed), India's North East Frontier in the Nineteenth Century, Oxford University Press, 1959, P.191.

¹²⁹ J.K.Barthakur, op.cit., p.7.

¹³⁰ Dutta, S., op.cit., p.336.

neighbours that is Tibet and Assam. During that period some of the Galo trader noticed the wet rice cultivation of plains of Assam, which was a completely a different kind of agriculture practice for them. The curiosity made them to gather some knowledge about the wet rice cultivation. After procuring all those knowledge about wet rice cultivation, they utilised the gathered knowledge and started the wet rice cultivation in the valley section. Thus, it is very difficult to pinpoint the exact date for the beginning of both wet rice cultivation and terraced cultivation in west siang. According to Mr. Nitum Riba District Agriculture Officer of Aalo the district head-quarter, sedentary cultivation might have started with the establishment of separate Agriculture Office in 1955 at Aalo, which was earlier working under Rural Works Department as planned economic development was introduced after India's independence.¹³¹ In the 1950s there was a massive government attempt to introduce and promote wet rice cultivation and terraced rice cultivation as against *jhum* cultivation as the policy makers construed that large scale *jhum* cultivation was leading to deforestation. It is possible that because of this government initiative steps wet rice cultivation as well as terraced rice cultivation gained popularity among Galos. During that time village level worker was assigned with the duties to promote sedentary cultivation among the people. They guided the villagers about various benefits of

¹³¹ Extract from an Interview with Mr. Nitum Riba, District Agricultural officer, on 11/08/2014.

sedentary cultivation as compared to *jhum* cultivation and encouraged them to adopt the same.

In Yomcha circle terraced cultivation was said to have started in between 1950s¹³² by Yomrak Yomcha.¹³² According to the people of yomcha circle, he went to Assam in those days and noticed the wet rice cultivation.¹³³ He asked farmers of Assam and gathered knowledge about wet rice cultivation. After that he utilized all the gathered knowledge and opened first settled type of agriculture in Yomcha circle and with this the people of that area slowly adopted the new form of agriculture. Likewise many villages of West Siang district were attracted to the new form of the agriculture either through government initiative or from neighbouring Assam. Terraced and wet rice cultivation quickly gained popularity and many adopted this new form of agriculture. As farmers realised that production in this type of cultivation is comparatively high than the *jhum* cultivation, which in a long run is much profitable. In spite of this it could not replace the old traditional agriculture practice of *jhum* cultivation completely, because they are very much dependent on *jhum* cultivation for their basic necessities.

Wet rice cultivation

¹³² Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

¹³³ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

Wet rice cultivation is the most popular form of cultivation practised by the Galo community. It is practiced in all the circles of Galo inhabited area is the main source of livelihood in West Siang district. In this type of cultivation a plain land located near a river, stream or tributary is selected by the farmer for developing it into a field. The farmer raises ridges to compartmentalize the plain land into rectangular shaped boxes called *Hipe*. These compartments *Hipe* are used for retention of water for paddy cultivation. Generally big compartments are made in areas which are more levelled and smaller compartments are made in areas where land is not levelled. Wet rice fields are irrigated from rivers and streams by digging a canal system from the field to the river or streams. These canals are locally called *Nallah* and in areas where the source of water is far such canals run many kilometres long. In aalo circle wet rice fields are located on the banks of river *Sipu*, *Yomgo* and *Siang*.

Terrace Cultivation

A terrace is a piece of sloped land or a hill that has been cut into a series of successively receding flat surfaces or platforms which resemble steps. This type of landscaping is called terracing. As stated above terraced cultivation is a type of settled cultivation in which the field is created by cutting a terraced plot in a hilly area. Here the graduated terrace steps are carved on hilly or mountainous terrain to create a flat surface for farming. The field or plot for terraced

cultivation is very difficult to create as it takes a lot of hardwork and skill to carve out a terraced field in a hill. In this type of cultivation water is preserved on the hilltop forests and channelled down to the terraces for irrigation through cannels. It is comparatively costly and also difficult to make canals into terraced field for irrigation. Because of this terraced cultivation is not very popular among the Galos. It is practiced in Aalo, Bagra, Basar, Darak, Kamba, Liromoba, Yomcha, Tirbin, Dari, Gensi, and Sibe circle except Likabali and Kangku circle but number of terraced fields are very limited in these areas.¹³⁴ Also the existing terraced rice cultivation fields are the ones that have been created long time ago and there is no visible new terraced cultivation field being created now a days in galo areas.

Stages of Sedentary Cultivation

The cycles of sedentary cultivation are the same in all circles of West Siang district. The only differences being in time table for the cultivation season. In the areas with low temperature like Basar, Darak, Dari Yomcha, etc farming season starts late as compared to areas with higher temperature like Likabali, Aalo, Bagra, etc where farming seasons comparatively starts early. Variation in period of faming season also depends on depends on type of seed farmers preferred to cultivate, as cultivation period of some seeds of paddy are

¹³⁴Extract from an Interview with Mr. Nitum Riba, District Agricultural officer, on 11/08/2014.

longer than others. The cultivation of *Lemuk, Tapa, Pau* seeds begins in the month of January-February and their harvesting is done in the month of August- September. The cultivation of *Mipun* and *Kamti* seeds begins in the month of *July* and its harvesting starts from November and continues till December

Although sedentary cultivation has two types namely wet rice cultivation and terraced cultivation, the cultivation stages and crops cultivated in both wet rice cultivation and terraced rice cultivation is same. The difference between them exists only in terms of topography of field, opening of fields, and irrigation system. In terms of topography of field the difference between both this sedentary cultivation is that wet rice cultivation is done in flat valley and terraced cultivation is done in hilly area. Opening of Terraced field is done by curving out series of successively receding flat surfaces in a hill while opening of wet rice field is done by converting a plain land into rectangular shaped boxes. In terms of irrigation system wet rice field is generally irrigated by rivers while terraced fields are irrigated by streams. The different stages of cultivation in sedentary cultivation are enumerated below:

i. *Kotiya-Pinnam* (broadcasting of grains)

Wet rice cultivation and terrace cultivation starts from late *Desi* (January) in Aalo, Bagra, Likabali, Kangku, Tirbin, Kamba, and in Liromoba, Basar, Dari, Gensi, Sibe, Darak, Yomcha it starts from *Lumi*

(February). In this month small plot of field is cleared and seeds are broadcast there. This plot is generally located in the corner of the field for easy carrying of the *Kotiya* (seedling) to the main field. Some of the terms used by Assamese farmers are also used by the Galos, as some practices of the sedentary cultivation are adopted from adjoining plains of Assam. For instance *Kotiya* is a word which has an Assamese origin.

Before broadcasting seeds a small plot of land is cleaned and dug up with the help of *Kutar* (spade). After that debris are taken out. Simultaneously, at home the paddy seeds are wetted in the *Igin* (basket made of bamboo) for more than two days. After that wetted paddy is broadcast in the plot and whole plot is covered by *Toko* leaves or by the tarpaulin till the seeds are not sprouted out. For winter crops *Mipun* and *Kamti* broadcasting of grains starts from the month of *Hiyo* (July).

ii. ***Himi-Teb-Bin-Nam* (weeding)**

Soon after broadcasting of paddy weeds, grass and small plants that have grown in the field during the off season are cut from the root and kept to dry. After drying they are burned and ash particles are left in the field for fertility. Next is the cleaning of the *Nalah-Ibin-Nam* (irrigation canal). Here the entire stretch of irrigation canal from the field upto the source of water -river or stream- is

cleaned of debris , sand and stones.¹³⁵

iii. *Gimik or Tagmik*, (tilling of plot)

After the field has been cleared of weeds, the next process of is the tilling of land. Traditionally land use to be tilled manually using a spade. With the passage of time people started the use of animals for ploughing of field. This practise of using animals mainly oxen for ploughing the field is called *Aal-Ginam* and has been learnt by Galo farmers from the neighbouring state of Assam.¹³⁶ Usually two ox is used to plough the field and they are called the *Aal*. The instrument used for ploughing the field is called *Nangol*. It is made of wood with a sharp iron plate attached to the edge for ploughing. Now a day's machines like power tiller, tractor (only in big field) are used for tilling purpose.

iv. *Isi-Peliknam* (watering of the field)

After ploughing, the field is flooded with water from the irrigation canal. The field is kept flooded for about a week to make the soil wet and soft. After the field has become soft next is the *Moi-Narnam* (levelling of soil). Here the amount of water in the field is reduced so that the soil can be properly levelled. While levelling the soil

¹³⁵ Extract from an Interview with Mr. Goto Basar, Aged 67, Gam of Gori village on 22/08/14.

¹³⁶ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

the remaining debris like grass etc are removed from the field called *Naya-Upak-Nam*.¹³⁷ This process is usually done in the month of *lumi* (February) and *Luki* (March). For winter crops *Mipun* and *Kampti* paddy these processes are done in the month of *Hiyo* (July) itself.

v. *Amo-Dinam* (transplantation of seedlings)

After completing the preceding processes the field is now ready for sowing. Planting of seedlings is done in the month of *Luchir* (April). For *Mipun* and *Kamti* paddy (winter crops) it is done in the month of *Hite* (August). When the seedlings (*Kotiya*) planted in the seedbeds grows to about approximately five inches in height it is carefully picked up from seedling plot and kept in the water. Sometimes it is directly brought to the field and planted in the plot. At a time one or two seedlings are planted depending upon its size and fertility of soil. The distances between two seedlings are nearly six to seven inches.

vi. *Pe-Ra-Monam* (weeding)

After planting of seedlings the next step is *Pe-Ra-Monam* (weeding). Along with the planted seedlings there grows some weeds and it is very necessary to pick out those weeds as it may

¹³⁷ Extract from an Interview with Mr. Goto Basar, Aged 67, Gam of Gori village on 22/08/14.

disturb and destroy the healthy growth of the crops. Among Galos it has been observed that weeding is done twice in one season. Weeding is generally carried in the month of *Tenlo* (June) and second weeding is done in the month of *Hiyo* (July) and *Hite* (August). However this time table is not fixed and depends on the growth of weeds in the field.¹³⁸ Weeds growing on the *Gil* (contours) of two plots are also *Gil-Pabin-Nam* (cleaned), while picking out the weeds of the plot.

vii. Use of fertilisers

Traditionally Galos do not have the practise of using fertilisers in the fields. This is mainly because of lack of knowledge and availability of fertilizers in olden times. Also the field were high in fertility and production was enough for self consumption and hence there was no need of fertilizers. But in recent times some farmers especially in Aalo, Basar and Likabali circles are using fertilizers to enhance productivity of their field. The practise of using fertilizers is being popularised by Department of Agriculture, Government of Arunachal Pradesh through training sessions for farmers, interaction by village level workers etc. Fertilising the fields is generally done after weeding is completed but some fertilizers are used during and after the ploughing of field.¹³⁹

¹³⁸ Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

¹³⁹ Extract from an Interview with Mr. Binge Ete, Aged 56, Head Gam of Bene village on

viii. Protection of Paddy From Birds, Animals, Insects And Pests

It is the one of the most important works for the farmers. When the paddy plants grow up, then grains starts to come out in the plant. This is one of the crucial time for the farmers as he has to provide proper care to the crops and protect it from birds and animals till the reaping time comes. There are many instances of crops being destroyed by birds or animals due to lack of proper protection. The Galo community has been practicing agriculture particularly *jhum* since time immemorial and has developed a number of techniques and devices to protect its crop. These techniques and devices can be divided into two types one to scare away birds and other to protect the crop from the animals (both domesticated and wild). Devices to scare away birds include *Bor-Bor*, *Takop*, *Tajen*, *Petta mole* etc.¹⁴⁰

(a) *Bor-Bor*

It is a contraption made of bamboo pole of about 6 to 8 feet height. Here the top end of the bamboo (about one foot) is split into about 10 to 12 times through the length so that an instrument resembling a broom is made.¹⁴¹ About 10 to 15 such bamboo poles are placed at different corners of the field and a *Tajen* (rope) is tied below the split end of the bamboo. When the other end of the *Tajen* is pulled

12/08/14.

¹⁴⁰ Extract from an Interview with Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

¹⁴¹ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

by the farmer it causes the split bamboos to strike against one another which produce a “*Bor-Bor*” sound. This sound scares away the birds from the field thereby protecting the crops.

(b) *Takop*

Takop is another contraption used to scare away birds. Here a bamboo of about one foot is cut keeping one end open and other end closed from the node (like a elongated water glass).¹⁴² then a wooden pole of about 6 to 8 foot is inserted inside the bamboo. Here care is taken to select a thin piece of wood so that there is enough space for the wooden pole to move inside the bamboo piece freely. Next a hole is made in the bamboo piece. Finally a *Tajen* (long rope) is inserted through the hole and is tied to the wooden pole. Now this contraption is placed at different corners of the field. When the *Tajen* is pulled by the farmer, the wooden pole strikes against the bamboo making a “*Tak-Tak*” sound which scares away the birds.¹⁴³

(c) *Tajen*

Here long ropes made of bamboo are tied crisscross across the field and *Ipuk* (bamboo scales) or *banana* stem cut into about half feet long are hung into the ropes at a distance of about 2 feet from one another. When wind blows the banana stems or *Ipuk*

¹⁴² Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

¹⁴³ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

along with the bamboo rope moves vigorously thereby scaring the birds.¹⁴⁴

(d) *Petta-Molena* (scare crow)

This is a popular method used in many other parts of the country also. Here an imitation of man is made from different locally available items like bamboo, wood, paddy straw etc and placed at different locations of the field. To make it look more authentic old clothes and old hats are used.

(e) *Holuu* (fencing)

Fencing is the primary method used by the farmer to protect his crops from animals both wild and domesticated. Generally fences are made of wooden pole called *Danik* and bamboos split into two parts throughout the length called *Luupo*. Here the wooden poles are fixed vertically on the ground at a distance of about 2 to 3 feet from one another and 5 to 6 pieces of bamboo splits are tied horizontally on the wooden poles at about 1 feet distance from one another.¹⁴⁵ The strength of the fence is inversely proportional to the distance of wooden poles from one another i.e. smaller the distance between the wooden poles higher is the strength of fence. Sometime to enhance the strength of the fence it is propped up by slanting wooden poles

¹⁴⁴ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹⁴⁵ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

called *Lutur*.¹⁴⁶ Galos generally construct two types of fences namely *Ek-Holu* (fencing meant for pigs) and *Hob-Hou-Hollu* (fencing meant for cows). the materials used and techniques for construction are same for both. The only difference being the height of the fence and also the gap between the horizontally placed bamboo splits. For the *Ek-Holu* (fencing meant for pigs) the height of the fence is about 4 feet and the gap between the bamboo splits are very less but for the *Hob-Hou-Hollu* (fencing meant for cows) height is about 6 feet and the gap between the bamboo splits are much wider. Fencing in the settled cultivation both wet rice and terraced cultivation is done after the crops are planted in the field generally in the month of April. In Galo areas generally fields of many farmers are interconnected to one another and as such the fencing are also interconnected. The farmer builds fences along the length of his field till the next field and the fence is continued by the owner of the next field.

(f) Controlling pests and rodents

The next important stage of cultivation is controlling and destroying of pests to prevent them from damaging crops. In olden days among Galos there was very limited knowledge about pest control and as such very few methods of pest control was available. One prominent method of pest control is use of traditional plants. Here

¹⁴⁶ Extract from an Interview with Mr. Nyai Riba, Aged 62, Gam of Paagi village, on 24/07/2014.

plants like *Onyor* are kept dipped in the irrigation canal. *Onyor* is a locally available poisonous plant that has a strong smell.¹⁴⁷ When *Onyor* is kept dipped in the irrigation canal its poisonous properties dissolve in the water and reaches the paddy field through the water thereby killing the pests.

Another traditional pest control method used by Galos is performing of ritual called *Dir-Tachi*. The word *Dir* means famine and *Tachi* means pests as such the ritual is for prevention of famine (or famine like situation) caused by pests.¹⁴⁸ The ritual is performed by the priest using an egg or chicken and is performed to appease the evil spirit *Yapom*, *Nyipo* and *Doli-Doga*. this is a community based ritual and is performed for the village as a whole by the *Nyibo*. It is performed in when the paddy crop starts to flower generally in the month of May-June. The ritual is followed by a taboo for two day to be observed by the whole village. On that day no one is allowed to enter or go out of the village. Rodents are also a major destroyer of crops. Galo farmers use locally made rodent traps such *Ujju*, *Gore* to catch and kill rodents so as to prevent them from destroying the crops.

As stated in the beginning traditionally Galo people had very limited knowledge and methods of pest control but now a days a

¹⁴⁷ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

¹⁴⁸ Extract from an Interview with Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

variety of methods and techniques are being used by the Galo farmers for controlling pests.

ix. *Ammo-Lanam* (reaping of paddy)

Reaping is the most important stage of cultivation. When paddy plant is *Ngin-Nam* (perfectly ripened) the farmers get ready to harvest the crops. But the farmer does not directly go and harvest the crops as it is considered as bad omen. Before harvesting certain traditions are to be observed. On the first day of reaping the crops a ritual called *Amo-Tipnam* is observed.¹⁴⁹ Here early in the morning all the family members go to the field. The women of the house (generally the mother) goes to the field and reaps a small portion of field while the male of the house (generally the father) constructs a structure called *Ziri* made of bamboo and *Tapi* (a local plant that looks like sugarcane) on the courtyard of the *Nakum* (a farm hut made in the field).¹⁵⁰ When the structure, *Ziri*, is completed the mother brings whatever crops has been harvested by her and keeps it in *Upo* (local mat made of bamboo rope) and the father chants some hymns and sacrifices a chicken or dog in the *Ziri*. The blood of the animal sacrificed is mixed with *Itti* (rice powder), *Takke* (ginger paste) and *Poka* (rice beer). The entire mixture is then sprinkled around the field and also on the harvested crop kept in

¹⁴⁹ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹⁵⁰ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

the *Upo*.¹⁵¹ On this day a taboo is observed where none of the family member is allowed to enter others' house neither do they entertain guests. In the evening the members of the family celebrate the starting of harvesting of crops by having a feast among themselves and from the next day reaping of crops begins in full swing.

Paddy is reaped by using knife, sickle or machete/Dao. The womenfolk carry a conical shaped bamboo basket called *Igin* in their back to collect the grains. The *Igin* is attached to a stripe made of *Oso* (a local vine plant) and the stripe is worn by the womenfolk in their head so that the *Igin* is placed at their backs. The harvested grains are thrown into the basket and when the basket gets full it is emptied into a bigger *Igin* carried by the males they carry the grains to the *Nakum*.

Reaping time for the crops is in the month of *Hite* (August) and *Pira* (September) while for *Mipun* and *Kamti paddy* it is in the month of *Rate* (November), for the others. In West Siang Aalo, Kamba, Likabali, Tirbin, Liromoba, Bagra, Kankgu circles harvest their crop from the month of *Hite* (August) and Darak, Yomcha, Gensi, Sibe circle starts their harvesting from the later part of *Hite* till *Pira* (September). Dari, circle harvest their crop from *Rate* (November) till the beginning of the *Rale* (December). Mostly in dari and basar circle usually cultivate *Mipun* and *Kampti* paddy.

¹⁵¹ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

x. *Amo-Hignam* (threshing of paddy)

After harvesting, the paddy is kept in the *Upo* (bamboo mat). The next step is threshing of paddy which is done manually by crushing and stamping the cut paddy with the feet to separate the straw from the grain.¹⁵² After threshing the straw is separated from the grains manually *Amro-Upak-Nam* and the grains are left in the sun to dry.

xi. *Amo-Yabnam* (winnowing)

The next is winnowing. Winnowing is done to separate the paddy from the rice husk (*Amya*) after which the husk free paddy is carried to *Nasu* (granary) with the help of the *igin* (conical basket). The granary is located nearby to the house. *Amya* (rice husk) is collected for making *poka* (rice beer).

After the first harvest is over the farmer next prepares for the *Aam-Labe* (second harvest). Once the paddy is cut another round of grains grow on the already cut paddy plant. This re-growth of grain is termed as *Aam-Labe*.¹⁵³ The farmer repairs his fences and waits for the re-grown grains to ripen. Once it is ripe it is harvested and stored in the granary in the procedure explained before. This second reaping of paddy is considered tastier than the first one but their production is less than the first. In most of the areas of West Siang district these

¹⁵² Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

¹⁵³ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

grains which are less fertile producing very small quantity of grain where farmers do not collect the second grain of paddy. Some are leave this for their animals to graze while some farmers leave it due to the problem of fencing as it is not possible for a single farmer to cover vast area with fencing two times in a season.¹⁵⁴

In West Siang district usually two cycles of crop are cultivated i.e the summer crops and winter crop. *Lemuk, Tapa, Pau, Jyoti, Ir8 (Indian Research no.8), IR-20, IR-64* are the summer crop and *Mipun (Dhan Aambin), Kamti* are winter crop. The cultivating month is slightly different in different circles but the procedure used for their cultivation is similar in all circles. In table number 1.4 cycle of sedentary cultivation summer crops (*Lemuk, Tapa, Pau*) is shown and in table number 1.5 cycle of sedentary cultivation winter crops (*Mipun* and *Kamti*).

Table No.1.4

Cycle of Sedentary Cultivation Summer Crops

(*Lemuk, Tapa, Pau*)

Month	<i>Polo</i> (month) in Galo	Stages of sedentary cultivation	Stages of sedentary cultivation in Galo
January-	<i>Desi</i>	Cutting of small	<i>Himi-Teb-Bin-</i>

¹⁵⁴ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

		grass	<i>Nam</i>
February	<i>Lumi</i>	Broadcasting of grains	<i>Kotiya-Pinnam</i>
March	<i>Luki</i>	Preliminary tilling	<i>Pata-Tagnam</i>
April	<i>Luchir</i>	Final tilling by spade or hand crawler, Levelling of the soil of a plot	<i>Gimik or Tagmik,</i> <i>Moi-Nar-Nam</i>
May	<i>Luyo</i>	Planting	<i>Amo-Dinam</i>
June	<i>Tenlo</i>	Weeding	<i>Pe-ra-Monam</i>
July	<i>Hiyo</i>	Twice weeding	<i>Lenyi-be-pe-ra-Monam</i>
August	<i>Hite</i>	Taking care of the grains from birds	<i>Peta-Kanam</i>
August-September	<i>Hite-Pira</i>	Reaping	<i>Amo-Lanam</i>
October	<i>Lubo</i>	Threshing of grains, carrying of grains, storing of grains in granary	<i>Amo-Hignam,</i> <i>Amo-Gesinam,</i> <i>Nasu-Tol-Am - Lenam</i>
November-December	<i>Rate-Rale</i>	Busy in domestic affairs	

Source: Field survey

Table No.1.5

Cycle of Sedentary Cultivation Winter Crop (*Mipun* and *Kamti*)

Month	Polo (month) in Galo	Stages of settled type of cultivation	Stages of sedentary cultivation in Galo
April	<i>Luchir</i>	Cutting of small grass	<i>Himi-Teb-Bin-Nam</i>
May	<i>Luyo</i>	Broadcasting of grains	<i>Kotiya-Pinnam</i>
June	<i>Tenlo</i>	Preliminary tilling	<i>Pata-Tagnam</i>
July	<i>Hiyo</i>	Final tilling by spade or hand crawler, Levelling of the soil of a plot	<i>Gimik or Tagmik,</i> <i>Moi-Nar-Nam</i>
July-august	<i>Hite</i>	Planting	<i>Amo dinam</i>
September	<i>Pira</i>	Weeding	<i>Pe-ra monam</i>
October	<i>Lubo</i>	Twice weeding, Taking care of the grains from birds	<i>Lenyi-Be-Pe-Ra Monam,</i> <i>Peta Kanam</i>
November	<i>Rate</i>	Reaping	<i>Amo lanam</i>

November- December	<i>Rate-rale</i>	Threshing of grains,	<i>Amo-Hignam,</i>
		Carrying of grains,	<i>Amo-Gesinam,</i>
		Storing of grains in granary	<i>Nasu-Tol-Amo-Lenam</i>

Source: Field survey

Rituals associated with sedentary cultivation

Among the Galos the rituals of *jhum* and sedentary cultivation is almost similar, except the *pombek* rites, which is performed in *jhum* cultivation before felling the big trees like *Hillok* but not in sedentary cultivation. Also for both wet rice cultivation and terrace cultivation all rituals are the same. Following are the rituals performed in the sedentary cultivation

A. *Hingi-Genam* (to bear the gift of god)

This ritual is performed to receive the blessing of

Ayi-Agam (diety) during the sowing, weeding and harvesting process. This ritual is performed by the *Nyibo* during the process sowing of seed in the field. The priest and the male members of the family prepare a representation of the deity *Ayi-Agam* (who is considered to be the giver of good luck and good harvest) .The representation is made from bamboo and varieties of the grass such as *Enshi*, *Hika* are used to make images of the spirits.¹⁵⁵ During the rituals the priest chants some hymns and sacrifices of fowls for invoking the diety is done. A small quantity of rice powder and blood of the fowls are sprayed over the representation of the diety and other agriculture tool.

B. Aampu-Yule

This ritual is performed before harvesting of the crop, usually in the month of July. This is a community initiated ritual where the priest prays for the good harvest for the entire village as a whole as well as for the protection of the crop from being destroyed.¹⁵⁶ Sometimes matured crops suffer from various diseases, namely paddy blast, root knot etc. The Galos believe that such diseases are caused by the various spirits like *Yapom-Yaje*. Thus, in order to protect the

¹⁵⁵ Extract from an Interview with Mr. Kitum Ete, Aged 69, Priest of Bene village, on 12/08/2014.

¹⁵⁶ Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

crops and to appease these spirits they perform this ritual. In every village of Galos this ritual is performed for a bountiful crop. After performing this ritual the entire village people have to follow a taboo for an entire day i.e. next day after the ritual is performed. According to the taboo people of the village have to stay in their own village and are not allowed to go outside the village neither are outsiders is allowed to enter the village.¹⁵⁷

C. Amo Mamnam

Amo-Mamnam is the rituals associated with the storing of the freshly harvested grains of the season. This ritual is performed when the crop has been cultivated and is going to be stored in the granary.¹⁵⁸ The ritual is performed by the head of the family and generally priest is not required. In this ritual the newly harvested grains are stored in the granary and are covered with a carpet like object made out of bamboo ropes called *Upo*. The head of the family then smears ginger paste, rice paste and *Poka* (rice bear) on the *Upo*. Through this ritual is a way of showing gratitude to the god for a good harvest and also a prayer for protection of the grains from rodents etc during storage in the granary. In this ritual people are praying the deity *Ayi-Agam*, who is considered to be the giver of good luck and good harvest). In the evening domestic animals are sacrificed and there is a

¹⁵⁷ Extract from an Interview with Mr. Emmi Riba, Aged 65, Priest of Regi village, on 23/07/2014.

¹⁵⁸ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

small feast with friends and family.

D. Yojir

Yojir is another important ritual associated to with cultivation. It is not associated with any particular process of cultivation but is performed for good harvest and good luck for the whole family.¹⁵⁹ *Yojir* is a very costly ritual and not everyone is able to perform it. It takes more than a year for its preparation and is generally performed in the month of September. It is generally performed by well to do families of the village. The family with the means and having the desire to perform the ritual "*Yojir*" conducts a *Roksin Kanam* (chicken liver divination) at the family level to determine if it is in their luck to conduct the ritual or not. If through the test it is established that it is not in their luck to conduct the ritual *Yojir* then they cannot perform the *Yojir*. But if the test result indicates that they can conduct *Yojir* then another *Roksin Kanam* (chicken liver divination) is performed to select the priest who will perform the *Yojir* for the family.

Male folk and children from every family participate in these rituals. For the ritual *Yojir* idols of diety "*Mopin Ampir*" is prepared using bamboo, and different types of locally available grass and shrubs. For preparation of a symbol of the diety two night and two days are required. On the day of the ritual the *Nyibo* and his assistant

¹⁵⁹ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

Bo (co-priest) chants hymns and animals like Mithun, cows , pigs and chicken etc are sacrificed .womenfolk of the villages pay visit with rice beer in a *Komtu* (bamboo tube) and they serve all the members present at the rituals.¹⁶⁰ This act is termed as *Opo-Hika*. On the following day of the ritual *Aar* (taboo) is observed within the village. The following day women of the village are invited by the owner of the house and are served with the food and rice beer. On the third following day of the sacrifice the *Nyibo*, the *Bo* (co-priest) and some family members visit the paddy field of the one who performed the “*Yojir*” to spread the good luck and for good harvest of the field.

E. Mode

Mode is one of the big rituals of the Galos that is associated with cultivation and this ritual is generally performed in the month of April.¹⁶¹ Like *Yojir* it is not associated with any particular process of cultivation. *Mode* is performed in both *jhum* and settled type of cultivation. In Galos society it is a matter of great pride to perform this ritual as it is difficult and highly expensive. Everyone wants to perform this ritual, but sometimes even though the person is very rich he is unable to perform this ritual as it is believed that god's gives symbols to the person (or the family) who are suppose to perform this ritual. Whether a person can perform this ritual or not is

¹⁶⁰ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

¹⁶¹ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

determined through *Roksin-Kanam* (chicken liver divination). If through the *Roksin-Kanam* indication for *Mode* rituals are found then only this ritual can be performed. The procedure of this ritual is similar to that of *Yojir* but with more number of sacrifices and a bigger feast. When a person performed this ritual they have to follow certain restriction for a year like they are not permitted to give grains to any one from their granaries.¹⁶² These restrictions are laid out by the priest. Also for five days following the performance of the ritual the members of the family observes taboo and accordingly remain restricted in their own houses, neither do they allow anyone to enter their houses. For five days they will only eat the meat left over from the *Mode* ritual. Some of it is smoked and they generally avoid consuming green leafy vegetables during those five days. *Mode* is usually performed for ensuring prosperity and as a celebration everyone smears each other's face with rice paste. It is one of the big rituals in Galos where Mithun is sacrificed.

F. Hoorin

Like *Mode*, *Hoorin* is another important ritual of Galos associated with cultivation where the Mithun is sacrificed. *Hoorin* rituals are performed in *Nasu* (granary) in the month of April. *Nasu* is a separate building constructed away from the house for storage of

¹⁶² Extract from an Interview with Mr. Meken Ete, Aged 52, Co-Priest of Darka village, on 17/07/2014.

grains. This ritual is dedicated to the goddess of wealth i.e. *Mopin*, *Pinku-Pinte* and those who perform this ritual seek wealth and prosperity.¹⁶³ Like *Mode* everyone wants to perform this rituals but everyone is not lucky enough. For *Hoorin* also it is believed that gods reval to the person (or the family) if they are supposed to perform the ritual. Whether a person can perform this ritual or not is determined through a *Roksin-Kanam*. If through the *Roksin-Kanam* indication for *Hoorin* rituals are found then only this ritual can be performed. The procedures of *Hoorin* are similar to that of *Mode* and *Yojir* but only the chants and hymns of the *Nyibo* and *bo* change. Also the number and types of animal sacrifice differs in the three rituals (*Mode*, *Yojir*, *Hoorin*).

When a person initiates the ritual of *Hoorin* they have to follow some restriction for a year as specified by the priest.¹⁶⁴ Also for five days after the rituals they will be confined in their own house and no one is allowed to enter their house. For five days they will only eat the meat left over from the *Hoorin* ritual. They are to generally avoid consuming green leafy vegetables during those five days. Those who observe the ritual are not allowed to eat some specific local vegetables like *Hibe* for the entire year. However they are allowed to consume ginger. Like *Mode*, in *Hoorin* also people make merry by smearing rice paste on each other's face.

¹⁶³ Extract from an Interview with Mr. Remo kamsi, Aged 66, Priest of Doyor village, on 23/08/2014.

¹⁶⁴ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

G. Mopin

Mopin is the biggest ritual of Galos, associated with agriculture. The *Mopin* has been derived from the two words *Mo* and *Aapin*, *Mo* and *Moko* carries the meaning of whole earth and *Aapin* means pollen.¹⁶⁵ Thus, it carries the of flowering earth, *Aapin* (pollen) which is the main source of fertilizer. The genesis of the celebration has been traced back to the legends of *Abo-Tani*, the mythical ancestor of *Tani* group of tribes including the Galos. So, the celebration remind the days of *Abo-Tani* when mother *Mopin* herself led *Abo-Tani* from dream to world of realities in everything he do. Accordingly, *Abo-Tani* celebrated *mopin* every year during the time of sowing seeds for good harvest. Subsequently, people celebrated *Mopin* as *Abo-Tani* had started but truth is beyond the reach of the history of mankind.

It is observed by the whole community in the form of a festival. *Mopin* is observed for wealth and prosperity. It is celebrated for five days usually in the month of April beginning from 5th of April. For different villages date is fixed by village members within the month of April. This festival is to be celebrated within the month of April because it is the month of sowing of seeds and through *Mopin* the people pray to *Diggo-Pirne* (goddess of sowing) and *Mopin* (goddess of

¹⁶⁵ Extract from Article "Origin of *Mopin* Festival in Broad Perspective" by Gumken Bagra, published in *Diggo-Yamo Mopin Souvenir* 2014, Published by Central *Mopin* Celebration Committee, Aalo , 2014,p.12.

wealth and prosperity) for a good harvest and prosperity.¹⁶⁶

For observing *Mopin* all the members of the community conduct a meeting to plan the celebrations. During the meeting one family is selected to be the one who will sacrifice the Mithun during the celebration of the *Mopin* ritual. The family is named as the *Pingi-Neri*. In some villages *Roksin-Kanam* is also conducted to decide who will become the *Pingi-Neri*.¹⁶⁷

During the *Mopin* ritual, the *Nyibo* makes prayer to *Mopin* (goddess of wealth and prosperity) and mithun, pigs, cow, fowls etc are sacrificed to please the goddess. In this festival people play with *Itee* (rice powder) by smearing it on each other's faces. The fifth day of the festival is marked with a farewell feast in honour of the *mopin*.

Conclusion

The introduction of sedentary cultivation (both wet rice cultivation and terraced cultivation) among Galos was a result of government action. Traditionally *jhum* cultivation was the only method of cultivation practiced by the Galos but because of its hazardous effects on environment due to deforestation, soil erosion, etc

¹⁶⁶ Extract from an Interview with Mr. Binge Ete, Aged 56, Head Gam of Bene village, on 11/08/2014.

¹⁶⁷ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

Government started discouraging *jhum* cultivation and encouraging sedentary cultivation. The government created a separate Department of Agriculture in 1955. It also appointed many village level workers to educate the farmers about benefits of sedentary cultivation. Because of such Government efforts Galo farmers started sedentary cultivation. Some Galos also learned the methods of sedentary cultivation from neighboring Assam.

There are eight stages of sedentary cultivation practiced by Galos from sowing till reaping of crops. There are also many rituals and taboos observed by Galos during these cultivation stages. Galo farmers are an intelligent and innovative lot. They have their own methods of protecting crops from birds, animals and pests. Traditionally there is no concept of use of fertilizers and pesticides among Galos. These are practice of recent times.

Since sedentary cultivation started because of government intervention a lot of high yielding varieties of seeds are being used by the Galos such as *Jyoti, IR8 (Indian Research no.8), IR-20, IR-64* etc along with traditional seeds like *Lemuk, Tapa, Pau*. Because of these productivity of sedentary cultivation is higher than *jhum*.

Chapter 4

Pattern of Cropping, Ownership of Land, Labour And Technology

1. Pattern of Cropping

The term “pattern of cropping” in simple term refers to the types or variety of crops cultivated in an area at a point of time. In west siang thirteen circles are inhabited by galo population namely, darak, kamba, liromoba, yomcha, aalo, tirbin, basar, dari, gensi, sibe, likabali, kangu and bagra.¹⁶⁸ The total geographical area of west siang district is 8324 sq. Kms. And the net cultivated area is 31,486 hectares.¹⁶⁹ They practised broadly two types of cultivation that is, *jhum* cultivation and sedentary cultivation. Sedentary cultivation is further classified in terraced cultivation and wet rice cultivation.

Wet rice cultivation and terraced cultivation are the two types of sedentary cultivation. The cultivation time of the *jhum* as well as wet rice cultivation and of terraced cultivation is different in different galo dominated areas. This difference is due to the variation in

¹⁶⁸ Extract collected from the Statistical Department of Itanagar, on 16/01/2014.

¹⁶⁹ Extract collected from District Agriculture Office, Aalo West Siang District, 11/8/2014.

temperature. The average rainfall of west siang is 4000 mm, average temperature in summer is 22 degree celsius, and average temperature in winter is 18 degree celsius. In the areas with low temperature like Basar, Darak Dari, Yomcha etc farming season starts late as compared to areas with higher temperature like Likabali, Aalo, Bagra etc farming seasons comparatively starts early. Time of sowing and harvesting of different varieties of paddy in *jhum* plot shown in table number 1.6 and different types of crop grown in *jhum* field in table number 1.7.

Table No.1.6

Time of Sowing And Harvesting of Different Varieties of Paddy In <i>Jhum</i> Plot					
Paddy varieties		Month of sowing		Month of harvesting	
Local name	Scientific name	Local name	English name	Local name	English name

(a) Early variety	Oryza sativa	Later part of Lumi and first part of Luki	February and first part of March	Late r part of Hiyo To first part of Hite	July to first part of August
(i) <i>Mede</i>					
(ii) <i>Dangum</i>					
(iii) <i>Yamuk</i>					
(b) Late variety	-do-	Later part of Luki to Luchir	Later part of March to first part of April	Late r part of hite to first part of pira	Later part of August to first of September
(i) <i>Kimin</i>					
(ii) <i>Bali</i>					
(iii) <i>Anker</i>					

Source: Field survey

Table No. 1.7

Crops Grown on *Jhum* Field

English	Local name/ types	Month of sowing	Month harvesting of
Paddy	Amo Kamti Ampu Amka	March-April	November-December
Seasame	Namdu Dupu Duke	March/April	December, January
Maize	Tepe Pede Peli Perik	March/April	August, September
Laipatta (Brassica species)	Giyi Yika Yite	March/April	July, August
Chilly	Yaluk Lukchi Man yaluk	March/April	December, January
Ginger	Takee Kekir	February, March, April	December, January

Cucumber	Maku Mebe	March	June, July onwards
Beans	Peren Peyak(soy a bean)	March-April	November, December, and January
Arum	Enghe Ngepop Nyete Ngegu Nyebuk	March-April	December-January
Solanum species	Bake Hote bake	February-March	May,June
Yam	Enghin Nghinte Pakli Hiju	March, April	December, January
Sweet potato	Mali	March, april February	November,decemb er July

Brinjal	Bayom		
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Source: Field survey

I. Crops of *Jhum* cultivation

Under *jhum* cultivation the main variety of paddy cultivated is *bali*, a local variety of rice which is red in colour when cooked. It has been observed that *Bali* and its varieties is the major paddy seeds which is used in whole area of west siang district for *jhum* cultivation. Varieties of *Bali* are namely *Yaber*, *Yamuk*, *Kimin*. Some of the other varieties of paddy cultivated in *jhum* fields are *Aamro*, *Jiko*, *Kecha*, *Dame*, *Yali*, *Kuro* , *Aanker*, *Ahu*, *Dajhi*, *Pasok*, *Sarli*, *Patu* etc. Their cultivation and reaping time are different in whole of West Siang district due to variation in temperature as explained above. Besides the paddy crop a lot of vegetables are also cultivated in the *jhum* field such as *Mardam*, *Onyor*, *Oyik*, *Aksap*, *Ogen*, *Oyin*, *Obur*, *Marsa*, *Bake*, *Kope*, *Yaluk* (chilly), *Bayom*(brinjal), *Meku* and *Mebe* (varieties of cucumber), *Geyi* (brassica), *Tuko*, *Namdu* (sesame), *Patum* (pumpkin) etc. Vegetables like brinjal, *Kope*, *Bake*, *Yaluk* (chilli) are sowed on seedbeds in swamp areas of the *jhum* field and the seedlings are later on transplanted to the main *jhum* plot. If swampy areas are not available within the *jhum* field then seedbeds are sometimes made in

the kitchen garden and later on transplanted to the main *jhum* field. The vegetables are generally grown in between the paddy crops. *jhum* fields are the major source of vegetables for Galo population especially in villages as only paddy is cultivated in sedentary type of cultivation.

For sowing of seeds in *jhum* field Galos follow their local calendar which is based on the cycle of moon. Besides the local calendar traditionally the singing of a bird called *Takom-Papok* signals the beginning of sowing season. In most of the areas of west siang, sowing of seed start from the month of *Luchir* (April).¹⁷⁰ Those areas having high temperature starts sowing early as winter ends early. Such places include Aalo, Kamba, Likabali, Tirbin, Liromoba, Darak, Bagra, Kangu, Yomcha circle which starts sowing seeds from the month of *Luchir* (April) and Basar, Dari, Gensi, Sibe circle starts sowing seeds from the end of *Luchir* (April) or some time from the beginning of the *Luyo* (May) month. Harvesting of paddy in West Siang starts from the month of *Hite* (August). In Aalo, Kamba, Likabali, Ttirbin, Liromoba, Bagra, Kangu circle harvest their crops from the month of August (*hite*) while in Darak, Yomcha, Basar circle harvesting begins by the end of *Hite* (August) and continues till *Pira* (september). In Dari, Gensi and Sibe circle, harvesting of crops commences at the end of the month of *Pira* (September) and continues till the month of *Lubo* (October).

¹⁷⁰ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

II. Crops of Wet Rice Cultivation And Terraced Cultivation

For both types of sedentary cultivation terraced cultivation and Wet Rice Cultivation seeds used are the same. There are varieties of paddy seeds which are cultivated in settled cultivation which include indigenous seeds namely *Lemuk, Tapa, Pau, Dhan-Aambin (Mipun) and Kamti*, and hybrid seeds like *Jyoti, Ir8 (Indian Research no.8), Ir-20 and IR-64*. Seeds like *IR8, Jyoti, IR-20, IR-64* were introduced by Government after 1975. Among these *Ir8* seeds is the most popular variety of hybrid seeds largely adopted by the Galo farmers. *Mipun* seeds are used for the preparation of the *Itte* (rice cake) during various occasions. It is also found that *Basmati* and *Joha* seeds are also cultivated in some of the area like Aalo, Basar and Likabali. Its production is not so high in west siang due to which people prefer to do cultivation of other rice. Cultivation of *Lemuk, Tapa, Pau* seeds begins in the month of January-February and their harvesting is beginning from the month of August- September. The cultivation of *Mipun* and *Kamti* seeds begins in the month of July and its harvesting starts from november and continues till december.¹⁷¹ Cultivation of *Mipun* seeds is done in all areas of West Siang, mostly in Basar, Dari circle and cultivation of *Kamti* seeds is done in Dari circle.

2. Homestead Gardens

¹⁷¹ Extract from an Interview with Mr. Emmi Riba, Aged 69, Priest of Regi village, on 23/07/2014.

Like every tribe in arunachal Pradesh Galos also plant crops in their kitchen garden. Kitchen garden called *lupa* forms an integral part of village life of all Galos.¹⁷² traditionally crops cultivated in kitchen garden were mainly for daily consumption but since last few decades it is also used for commercial purpose. Generally only vegetables are grown in kitchen gardens. Traditionally local vegetables were grown in kitchen garden such as *Oyik*, *Aksap*, *Ogen*, *Oyin*, *Obur*, *Marsa*, *Bake*, *Kope*, *yaluk* (chilly), *Bayom* (brinjal), *Meku & Mebe* (varieties of cucumber), *Geyi* (brassica), *Namdu* (sesame), *Patum* (pumpkin), etc. But now a day's along with local vegetables others such as gourd, *Gore* (sweet potato), cabbage, cauliflower, pea, maize, lady finger etc are grown. In Basar it is found that in their homestead gardens area people also cultivated paddy for making *Amchi* (beaten rice). Varieties of crop cultivated in homestead garden are shown in table number 1.8.

Table Number 1.8

Varieties of crops and vegetables grown in the *Lupa* (Homestead gardens)

Names of crops and vegetables (english and local)	Month of sowing and reaping
Maize :	
i) <i>Tepe</i>	Sowing : March

¹⁷² Extract from an Interview with Mr. Binge Ete ,Aged 56, Head Gam of Bene village on 12/08/14.

ii) <i>Pedi</i>	Harvest : August
Brinjals:	Sowing : February
i) <i>Bayom</i>	Plucked all the time after mature
ii) <i>Kope</i>	
iii) <i>Bakh</i>	
Chillies :	Sowing: March
i) <i>Yaluk</i>	Plucked on July
ii) <i>Luksi</i>	-do-
iii) <i>Maan yaluk</i>	Any time sowing and plucking after the fruit
iv) <i>Napau yaluk</i>	-do-
Cucumber:	Sowing: March
i) <i>Meku</i>	Plucked on July
ii) <i>Mebe</i>	-do-
Bitter gourd	-do-
Gourd	-do-
<i>Giyi(Brassica)</i>	All the time
<i>Enyo (arum)</i>	Burried: March, Taken: january
<i>Engin (yam)</i>	-do-

<i>Mali</i> (sweet potato)	-do-
<i>Tuko</i>	April
<i>Oyin</i>	Any time
<i>Oik</i>	-do-
<i>Marsa</i>	-do-
<i>Aksap</i>	-do-
<i>Raro</i>	-do-
<i>Hibe</i>	-do-
<i>Ogen</i>	-do-
<i>Delap</i>	-do-

Source: Field survey

3. Customary Land Laws And Ownership of Land

In Arunachal Pradesh there is a unique system of land ownership and land management system prevalent among the different tribes. In each tribe there are local customary laws that govern the ownership and use of lands. These customary laws are tribe-specific, where each tribe or even a village has its own unique customary laws and traditions. These customary laws are usually not codified and do not exist in written form. The enforcement of these customary laws and practices rests on traditional village's

institutions such as village councils i.e. *Keba* headed by the *Gam Burah*.

Galo society is based on patriarchal principle and people usually live in the joint family structure. When children grow up and get married they set up their own household. The ageing parents generally stay with either the eldest son or the youngest son but there is no hard and fast rule and they can stay with anyone of the sons. Generally the parental house is kept by the eldest son and all other sons gradually move out to set up their own household in due course of time.

Like other tribes of Arunachal Pradesh Galo people also practice customary laws and practices of inheritance of land and property. It is usually same in all Galo inhabited areas. As per the customary law only sons can inherit father's immovable assets, for the reason that sons maintain clan lineage.¹⁷³ It has been followed from time immemorial to see that continuation of clan lineage is maintained and care is taken to see that generation is not broken. For that matter one must have son or sons. As the society is based on the patriarchal system the daughters are not allowed to claim a right over the landed property as it is felt that if daughters are allowed to inherit parental land then the ownership of parental land will go *Rumtum* (paternal

¹⁷³ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

relatives) i.e. to the husbands clan.¹⁷⁴ It is widely believed that the daughters after their marriage come under the care of her husband's clan and family. Largely because of this, in practice, no landed property was gifted to the women.

In Galo society traditionally, property is owned in common by the family members. After the death of the head of the family, the eldest brother takes the rein in his hand. If the brother wishes to divide the property, the largest share goes to the eldest brother and balance is equally divided among the rest.¹⁷⁵ But this traditional practice has undergone considerable change in modern times. Now a day's parents usually divide their property before their death and it is equally divided among all their children's. When the parents get old generally a meeting is called to divide the property in presence of village elders, clan members and *Gam Burah*. Property is divided on that meeting which is known as *Rikpen-Nampen-Pennam*.¹⁷⁶ Landed property are usually divided and distributed among the brothers of the family by the head of the family i.e. Father and in his absence the mother or the eldest son among the brothers. All the properties like the *jhum* field, bamboo groves, cultivable field, *Tayek* (*Livistona-Jenkinsiana-Griff*) groves, hunting and fishing spots are

¹⁷⁴ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹⁷⁵ Srivastava, L.R.N., *op.cit*,p.92.

¹⁷⁶ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

inherited by the sons. Wet rice field is generally given to the youngest son, if there are two wet rice field then other is given to the eldest son. Even if the parents have the terraced fields in absence of wet rice field it is also given to the youngest son and if there is two terraced fields then the other is given to the eldest son. Rest of the property is divided among all the brothers equally. During the meeting for division of property, if required, the site of the land is visited by the members of the meeting and boundaries of division of land are marked by burying stones on the boundary. This is called *Elli-Dinam*. After the division of the property a feast is called by the family members. In that feast the announcement of the division of the property of the family is made to the public at large, including which property is given to which son. Usually animals are sacrificed during the feast like Mithun, pig, cow etc and no rituals are performed during the division of the property.

One interesting factor observed during this study is that the old customary laws, practices and tradition of Galos including those related to land ownership and inheritance of properties has been codified and written in the form of a book called *By Laws of Adi Bane Keba (Bogum Boka) West Siang district, Aalo, Arunachal Pradesh* in the year 1997 . This has been done as earlier customary laws existed only in the oral form which was passed on from generation to generation orally and no written record existed. Through this document an attempt has been made by the galo community to sum

up all the customary laws practised by the Galos since time immemorial and create a written and unified code of customary laws and traditions. This document has been approved by deputy commissioner, west siang dated 08/04/1997 and is now legally recognised. This by law contains almost all the customary laws and traditions of the Galos including those related to marriage, inheritance of property, penalty for murdering of people, stealing etc.

4. Inheritance of Property

As per Galo customary laws parental properties are inherited by the sons of the family. Traditionally major share of the property use to be given to the eldest son and the youngest son.¹⁷⁷ But now a day due to advent of modern thinking and education the properties are generally divided equally among the brothers. While dividing properties including land, the *jhum* field, bamboo groves, cultivable field, *Tayek* (*Livistona-Jenkinsiana-Griff*) groves, hunting and fishing spots etc are divided among the sons. The son who takes care of the parents during their old age gets compensated in division of property. Also the son who carries the dead body of the parents is entitled to be compensated. This particular compensation is termed as "*Hima-Gejo*".¹⁷⁸ if the dead body of both the parents are carried by two

¹⁷⁷ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

¹⁷⁸ Extract from an Interview with Mr. Goto Basar, Aged 67, Gam of Gori village on 22/08/14.

different persons then they both are entitled to "*Hima Gejo*". It is important to note that any person who did not take care of the aged parents is not allowed to carry the dead body of the parents. Sometimes the aged parents themselves decide in advance who will carry their dead body after they are gone.

a) Inheritance Rights of Women In Customary Laws And Practices

As per the Galo customary laws daughters have no right to inherit father's immovable property and even if the daughter is the only children of the parents she is not entitled to inherit the landed property of the parents. The girl child is however entitled to inherit movable properties of the parents such as costly ornaments, beads, brass plates etc. This system of no right of inheritance for daughters is an old customary practise of the glao society. Although majority of the galo community still practise this customary law especially in villages.

b) Inheritance of Property In Case of *Tirna-Tumbo-Maye* Couples Who Do Not Have Any Children or Have Only Daughters And No Sons.

The term *Tirna-Tumbo-Maye* refers to those couples who do not have children or those who only have daughters or whose all sons die. According to galo customary laws *Tirna-Tumbo-Maye* couples cannot sell, gift or dispose of their landed or movable

properties without consulting their nearest clan members.¹⁷⁹ On necessity of selling of such properties the couple will consult the immediate clan members and they along with *Gam Burahs* will decide. If such properties are sold without consulting the clan members then they can be taken back and the buyer has to bear the loss as he (buyer) will be not able to own the property. When *Tirna-Tumbo-Maye* couple dies then the person who had taken care of the old couple (generally a member of the clan) during their old age gets to inherit the property of such deceased.¹⁸⁰ Here also the concept of compensation for carrying the dead body (*hima gejo*) as explained earlier applies. However if non of the members of the clan takes care of the *Tirna-Tumbo-Maye* couple then they are not entitled to inherit their properties. In such a case any person even from outside the clan who has taken care of the couple is entitled to inherit their properties and no clan member can object to this. If the *Tirna-Tumbo-Maye* couple adopts any boy as their son and the adopted son takes care of the couple then he gets to inherit their property. However the adopted son is not allowed to carry the dead body of the couple. For couples having only daughters and no son the same customary laws explained above applies. Such couples are not allowed to give any properties to their daughter before consulting their clan members. The nearest clan members, village elders and *Gam*

¹⁷⁹ Extract from an Interview with Mr. Bajum Karlo, Aged 56, *Gam Burah* of Gogar village on 11/06/14.

¹⁸⁰ Extract from an Interview with Mr. Nyado Riba, Aged 52, *Gam Burah* of Regi village, on 22/07/2014.

Burahs will decide whether any property is to be given to the daughters or not.

c) Selling or Disposing of undivided Paternal Property

As per Galo customary laws and practise selling of undivided paternal property without consulting the family members are not allowed as the property is deemed to be jointly owned by the father and the grown up sons of the family. If any member of the family sells any property confidentially or without consulting the other members of the family, then such sale can be withdrawn by the family members. In case of such withdrawal the buyer has to bear the loss as he is not allowed to own such property.¹⁸¹ If any person secretly stands witness to such a sale then the person is liable to be fined Rs 500/- by the village council (*Keba*).

d) Settling of Disputes that Arise During Property Division

In today's modern world with the advent of information, technology etc there has been a huge shift in the mindset and lifestyle of the people. The traditional value system of family bonding, kinship, and respect for elders etc has been considerably eroded leading to increase in materialism. This increased materialism in human life has affected every society and galo society is no different. In earlier days disputes during division of family properties were very few and

¹⁸¹ By Laws of Adi Bane Keba (Bogum Boka), op.cit., p.119.

negligible as everybody respected community elders and whatever the community elders decided nobody objected to it. But in the modern times during the division of properties disputes and quarrels are very common among the brothers as well as within the extended family members for the major share of property.¹⁸²

As per customary law and practices if any dispute arises among the brothers or clansmen relating to the inheritance of property then a mediator called *Lampo* is appointed by the disputing parties to help settle the disputes.¹⁸³ The *Lampo* is generally a village elder who has vast knowledge and experience about division of properties and who is respected by all the disputing parties. The *Lampo* mediates between the disputing parties and tries to settle the dispute amicably. If the *Lampo* (mediator) fails to settle the disputes then it will be referred to the village council that is the *Keba*. Earlier during the ancient times people had great respect for customary laws and practices as such the decision of the village council was considered to be the final and binding. However these days' people have more knowledge about laws and legal aspects. They have access to advocates and courts of law and as such many disputes go to the courts if one or more party is not satisfied with the decision of the village council (*Keba*).

¹⁸² Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

¹⁸³ Extract from an Interview with Mr. Nyai Riba, Aged 62, Gam of Paagi village, on 24/07/2014.

5. Pattern of Land Ownership

(i) Evolution of The Concept of Land Ownership Among The Galos

For any tribal population be it Galos or others land is the most valued form of property for its economic and symbolic significance. It is productive, wealth creating and livelihood sustaining asset. It also provides a sense of identity and rootedness because it has durability and permanence, which no other asset possesses. Land is an important element in the life of the people particularly for the tribal people. It is an area of ground, where vast majority of human activity occurs. Land is especially used for the purpose of habitat and for the purpose of farming. It is also one of the factors of production. For a countless generation, all human beings were dependent on the nature for its every necessity is it is for livelihood or for food.

According to Galo oral tradition earlier people lived the life of hunters and gatherers. They migrated in groups from one place to another in search of food and water or due to the clash with other hostile group. During these times there was no concept of ownership of land as there was no permanence of settlement.¹⁸⁴ People moved to a place, exploited the resources of the area by hunting wild animals etc

¹⁸⁴ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

and when resources got exhausted moved to another place.¹⁸⁵ As the time progressed and people learned to cultivate food and domesticate animals they started to settle down at convenient places and started living a settled life. During this period also there was no concept of ownership of land as land was vast and unlimited while population was very few. At that time land belonged to the nature and there was no restriction for anyone to settle at the place where they want to settle. However as population started to grow and availability of suitable land to settle down and cultivate began to shrink the concept of ownership of land developed. Initially it was not individual ownership of land but community ownership of land. Lands and other resources like water etc were owned by the village or community as a whole and members of other villages or community were not allowed to use it. There are many old stories prevalent about fighting between different settlements/village or clan for occupation and use of land and other resources. According to one *Gam Burah* of Pakam village of West Siang district aalo his father told stories about clan wars between members of Pakam village and Riga village, between Mori village and Jommo clan etc. The most recent clan wars that happened in the recent past for land and other resources were fought in late 1990s between Darka village and Bagra village under Aalo circle. As time progressed and population within the settlement increased concept of

¹⁸⁵ Extract from an Interview with Mr. Bajum Karlo, Aged 56, *Gam Burah* of Gogar village on 12/06/14.

individual ownership of land began to develop. Individual ownership of land was based on first come first serve basis i.e those who captured or cleared the specific portion of the land first then that portion of land became his part of land. Land among the Galos are mainly used for the purpose of habitat and for the purpose of farming. Among the Galos following pattern of land ownership are evident.

I. Individual Ownership of Land

In individual ownership, lands are owned absolutely by the single individuals. They have the all kinds of right over their own land and they can even sell their land without consulting the family/clan members or village elders. The following types of land are generally held under individual ownership. First land is acquired by an individual through purchase from others and second land inherited after division of property among the family members.¹⁸⁶ Individual ownership can include cultivated land, such as *jhum* land, wet rice land, terrace land, tree groves, fruit gardens etc.

II. Clan Ownership of Land

In clan ownership of land, land belongs to a single clan and all members belonging to that clan utilise and enjoy that land. The land is shared and passes on to the members of the clan from one

¹⁸⁶ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

generation to another generation.¹⁸⁷ In this type of ownership, land does not belong to a single individual, but rather land is for common use of the single clan. Members of other clans are strictly not allowed to use such land. Meadow, burial ground, forest and etc come under clan ownership of land. The members of the clan inhabiting in that particular area inherit that land. They can transfer the land with the consent of all members of the clan and permission of the village council *Keba*. During this study it has also been observed that there exists the practise of clan ownership of rivers (or stretch of river) among the Galos tribe. In many places like rivers are owned by clans and only members of that particular clan is allowed to catch fish from that river. If anybody does not belong to that clan for fishing in that river (stretch of river) fines are penalties are imposed by the village council.

III. Village ownership of land.

Village land usually includes the common land, a few stretches of meadows and forest tracts in the periphery of the respective villages that all the residents of that particular village own and enjoy together. Such lands also include community ground called *Tarpom*, festival ground like *Mopin* ground community hall called *Dere*

¹⁸⁷ Extract from an Interview with Mr. Nyado Riba, Aged 52, Gam *Burah* of Regi village, on 22/07/2014

*etc.*¹⁸⁸

Thus among the Galos, the ownership of land either belongs to the community/village, clan or the individual. Some lands are also owned by the Government especially in district headquarters and circle head quarters. In most of the community land, all members have a right to use it freely but with prior consent of the custodians. There is restriction on transfer or even use of traditional land by the outsiders. Outsiders are people who do not belong to the community or clan. *jhum* lands are usually owned by the community, clan and privately gifted down by the fore-fathers but regulated by the respective village council for any disputes on the account of boundary or ownership. Now a day's due to influence from outside, among Galos the concept of clan ownership and community/village ownership is decreasing day by day and individual ownership is increasing.¹⁸⁹ There is increased privatization and ownership of land is majorly individual especially of land under permanent cultivation such as wet rice cultivation, terraced lands, orchards, gardens, tree farming, bamboo grooves, etc.

6. Labour

Labour in the simplest of term refers to the aggregate of

¹⁸⁸ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

¹⁸⁹ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

all human physical and mental effort used in completion of a work. Galo society is an agrarian society which means that physical labour is an important component in the livelihood. In fact in every aspect of life in a village, be it building of house, marriage, agriculture or any type of celebration or festival, physical labour is an omnipresent element.

Among all agriculture is the field in which maximum labour is utilised. From early times when there was no machine, tools etc, Galos have been using their physical strength to cultivate their field. Traditionally both male and females participate and help each other in agricultural work. The work in agriculture is broadly divided among the male and the female work force. In *jhum* cultivation works such as clearing of forest, felling of trees, construction of farm hut, fencing, thrashing of grains and carrying of grains to the granaries are performed by the male workforce while work like sowing, weeding, reaping, and winnowing are performed by the female work force.¹⁹⁰ While in sedentary cultivation (both wet rice cultivation and terraced cultivation) works performed by the women are wetting of paddy, broadcasting, planting paddy, weeding, reaping etc. Clearing of canals, tilling, levelling the soil, construction of plot boundary, threshing of paddy, winnowing of paddy etc, are mainly done by the male members. None during the survey was able to pinpoint the exact reason and basis

¹⁹⁰ Extract from an Interview with Mr. Nyado Riba, Aged 52, Gam *Burah* of Regi village, on 22/07/2014

for this division of labour in Galo agricultural practices. but a logical explanation can be that this division of labour is based on amount of physical strength required to perform the task. If we observe carefully all those tasks that require higher physical strength like clearing of jungles, felling of trees etc are done by the male while the work that require less physical strength is done by the female. However it is important to note that this division of labour is not rigid and in actual practise the work is overlapping and both male and female perform all agricultural work depending on the requirement of individual situation.¹⁹¹

Among Galos one important phenomena related to agricultural labour that was observed during the study is the system of exchange of labour. Under this practise agricultural work is carried out by way of exchange of labour among the farmers in a reciprocal way. There are three type of labour exchange depending on its nature, these are:

(i) *Rigur*

Rigur is a kind of labour exchange in which relatives help one other in performing agricultural tasks. Here exchange of labour is free of cost and need based. This practice is based on mutuality and feeling of brotherhood nuanced by kinship ties among the

¹⁹¹ Extract from an Interview with Mr. Karnya Kamsi, Aged 81, Gam of Doyor village, on 18/02/2014.

relatives.¹⁹² Sometimes a family in the village is not able to complete their agricultural works due to various reasons such as a debilitating disease, death in the family or old age. In such a situation the close relatives help that family in completion of these cultivation activities by way of *Rigur*. A village society is very tightly knit and people live with lot of bonhomie among them as such many a times the practice of *Rigur* is not limited to family members only but other people of the village who are not relatives also undertake *Rigur*.

(ii) *Rige*

Rige is the most popular and most widely used form of exchange of labour among the Galos. In *Rige* there is reciprocal exchange of labour between two families. Both the families work in each other's field for an equal number of days decided by mutual consent.¹⁹³ In this, labour is equally reciprocated unlike in *Rigur* where labour is free. *Rigur* is sometimes practised by a group of families whereby all the members of the group works in the field of each member for an equal number of days. This form of *Rigur* is more popular because when work is done by a group it is easier than when it is done alone or by two to three persons.

¹⁹² Extract from an Interview with Mr. Kitum Ete, Aged 69, Priest of Bene village, on 12/08/2014.

¹⁹³ Extract from an Interview with Mr. Hilem Loyi, Aged 62, *Gam* of Pakam village, on 19/08/2014

(iii) *Riglap*

Riglap is the type of labour exchange which is done on the basis of payment either in cash or kind. Here people work in the field of others in return of payments. In galo areas payments in kind was the major medium of payment until recently as money was not available and generally people were paid in *Amo* (grains), traditional utensils like *Iggin* (a cylindrical basket made of bamboo used to carry things) , *Uppo*(bamboo mat used to keep grains) , *Opop* (traditional fermenting medicine used in making local alcohols *Apong* and *Nyogin*) , vegetables and animals etc. There are different nomenclature of *Riglap* based on the payment such as *amo riglap* (for paymen made in grains) , *Iggin-Riglap*, *Opop-Riglap* etc. The practise of *Riglap* is more prominent among the female workforce than in male.¹⁹⁴

In olden days another source of labour among Galos for agricultural work was slaves called *Pakbo* (male slave) and *Pagne* (female slaves). During those days prosperous and powerful villages use to attack smaller village and capture people to be used as slaves. These slaves were used by the rich and powerful people of the villages. Sometimes slavery was also imposed as punishment for stealing or other crimes. During the field study one shri Hiem Loyi *Gam Burah* of pakam village narrated a century old story of two brothers called Dani

¹⁹⁴ Extract from an Interview with Mr.Goto Basar, Aged 67, Gam of Gori village,on 19/08/2014.

and Dasok who served as slaves in one family in the village. The brothers plotted to kill their old and aging master who was a very rich man of the village. When the master found out about their plot the younger brother ran away but the elder brother Dasok was caught. Dasok was punished with death by the village council. He was tied up and thrown down a water fall located near the village. From that day the name of the water fall was kept *Dasok Lelo* (the place from where dasok was thrown.) The water fall exist even today.¹⁹⁵

7. Tools and Technology

A tool is an instrument or a device that facilitates performance of a mechanical or physical work. For centuries the Galos have been living closely with nature and forest. This close association and interaction has helped them in acquiring deep understanding of nature which they have used to acquire and develop various tools and techniques that facilitate their day to day lives. All these tools and techniques are made from locally available indigenous materials. Since life in Galo society mainly revolves around agriculture, most of the tools are developed for use in agricultural works. The tools and techniques used by Galos can be classified into two groups: one set of tools used in agriculture and other tools use in normal day-to-day activities. Agriculture implements of Galos can be classified according

¹⁹⁵ Extract from an Interview with Mr. Hilem Loyi, Aged 62, *Gam* of Pakam village, on 19/08/2014

to the nature of its use under three sub-heading:

(a). Tools used in *jhum* cultivation.

(b). Tools used in sedentary of cultivation.

i) Tools used in wet rice cultivation

ii) Tools used in terraced cultivation

iii) Tools used in both settled cultivation and *jhum* cultivation.

i) Tools used in *Jhum* Cultivation

From the time of our mythical forefather *Abo-Tani* who was the first to start cultivation on earth, tools have been used for agriculture.¹⁹⁶ It is believed among the Galos that the first agricultural tools were given to *Abo-Tani* by *Nyir-Poro* the god of tools and implements on exchange of skin of *Horam* (ottar) and since that day agricultural tools are being used by the Galos. Traditional tools are very some of the tools used for *jhum* cultivation are:

a. *Banggi*

It is type of walking stick but here a specific walking stick made of cane bamboo fitted with iron cap at the bottom end and bending handle at the top. Usually cultivator used to carry this to

¹⁹⁶ Extract from an Interview with Mr. Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

the *jhum* field. Such a stick is having both functional and symbolic value.

b. *Hingi*

Hingi is a tool made of small wooden stick or a bamboo stick which is about 3 to 4 feet in length and is pointed at one end. It is used for sowing seeds by digging holes in the field to put paddy seeds on it.

c. *Drey*

Drey is a long-handled bamboo broom of about 5 to 6 feet. It is used to sweep the dibbled ground during sowing of seeds so as to cover the grains with soil to protect the seeds from devouring of birds.

d. *Ebar*

Ebar is a conical shaped basket made of *Oso* (bamboo ropes) or *tar* (cane) . It is made by women and is used for carrying various objects such as firewood and vegetables etc. It is attached to a strip made of bamboo ropes using which womenfolk hang it on their backside.

e. *Eegi* (axe)

It is a multipurpose tools used for variety of purposes. The main use of the axe among Galos is for felling and splitting of big trees or woods. Axe is also used to sacrifice *Hobo (Bosfrontail)* and big cows. As a custom Galos never use a *Oyok* (machete/dao) to sacrifice *Hobo (Bosfrontail)* and only use an axe. It is made by the iron-smith as well as available in the market.

f. *Eek*

Eek is a small instrument made of bamboo. Here a sharp bamboo strip is twisted in such a way that it resembles the shape of the english alphabet x. It is used for scrapping the soil in order to loosen it or to remove smaller weeds. It is used during the weeding season. It is locally made by the Galos.

g. *Hilek* (bamboo jug)

Hilek is a big and long sized bamboo tube used for collecting and storing water for drinking and other purposes. It is about 3 feet long .during cultivation time it is used for carrying water to the field.

h. *Huchak*

It is a small basket made of bamboo rope or cane. It is used for carrying paddy seeds at the time of sowing or dibbling. It is hung at the waist by the females during sowing or dibbling. It is also used by the women while fishing for keeping the fish caught.

i. *Lelli*

Lelli is a bag that is carried on the back by males during hunting, fishing, working in the field etc. It is made out of cane ropes.

j. *Lolom*

It is a weeding knife made of iron fitted with bamboo handle. It is about one foot in length and has a blunt head. It is purchased from the market and it is also used during sowing or broadcasting the seeds, weeding etc, in the field. *Lolom* is made by the iron-smith.

k. *Oyok* (machete/dao)

Oyok is made of iron and it is fitted in the bamboo handle for ease in carrying. *Oyok* is the most important tool for Galos. It is also the most multipurpose and widely used tool. It is used during clearing of forest, felling of trees, fencing, construction of farm hut etc.

l. *Pekkok*

It is 'y' shaped stick made of branches of tree and used during clearing of debris. It protect farmers hand from thorns, insects, etc

m. *Uddu*

It is a small sized bamboo tube used for drinking purpose during working and for keeping seeds, etc. It is of about 1 feet length.

Uddu is traditionally made by the Galos.

ii) *Tools used in sedentary cultivation*

Implement used in Sedentary Cultivations are as below:

A. *Bersa* (shovel)

It is a tool with a long handle that is used for lifting and moving earth. Shovel is used for clearing of canal, levelling etc. It can be procured from the market.

B. *Danggi* (jumper)

It is a thin and long piece of iron which is used for digging holes in the soil, stone, etc. Interestingly in aalo circle people call it *Jampor*. It is found in the market.

C. *Moi-Narnana*

It is an instrument made of wood that is used for the levelling the soil and clearing the debris. It is a locally made by the Galos.

D. *Kutar* (spade)

It is used to prepare the cultivable land, clearing of canal, for digging of land etc. Spade is a flat metal blade with a long handle. It can be procure from the market.

E. *Patti*

Patti is an instrument made of iron and it is made by the iron-smith. It is about 3 feet in length, has a machete shaped front end and a thin elongated handle. It is used for cutting grass during clearing of the field.

F. *Nangol* (plough)

It is a large farming tool made of wood and it is locally made by the people. It has a shape of English alphabet I with sharp blades which is pulled by two oxen across the soil for ploughing, usually before seeds are planted.

iii) Tools used in both Sedentary and *Jhum* cultivation

There are certain tool which is commonly used by the Galos in Wet Rice Cultivation, Terrace Cultivation and *jhum* Cultivation. They are discussed below.

a) *Apum*

Apum is a large sized cylindrical basket made of bamboo. It is used for storing of grains and other essential items.

b) *Ankur*

It is a conical shaped bamboo basket used for collection of harvested grains and for carrying those from the field to the farm hut.

c) *Ekken*

It is also a conical shapped bamboo basket but it has large pores in it unlike *Ankur*. It is made of bamboo. *Ekken* is used for keeping weeds during weeding.

d) *Gedak*

Gedak is a medium sized conical bamboo basket for carrying goods etc. It is used generally for carrying grains from field to granary.

e) *Uppo*

Uppo is a large sized spreading mat made of *Tai* (bamboo rope) used for storing or keeping of grains in the field or granary.

f) *Pече*

It is also kind of spreading mat made of bamboo but is smaller in size than *Uppo*. *Pече* is used for drying paddy inside the house as well as in the sun light.

g) *Poa*

Poa is the smallest sized conical basket made of bamboo. It is used for carrying small items which are essential in the field during weeding, scrapping, etc.

h) *Obo*

It is kind of traditional local umbrella carried on backside made of bamboo and *Toko* leaves. It is used by the farmer to protect himself from rain or sun.

i) *Op-po*

Op-po is used as winnowing fan and it is made of bamboo.

j) *Kosap* (tongs)

It is a bent bamboo or cane tongs. Now iron tong is also available in the market. It is usually used for roasting and picking up materials from fireplace in farm hut, house, fireplace in the field during burning of debris etc, besides where it is applicable.

k) *Iki*

Iki is a cylindrical bamboo basket of very large size used for keeping or storing of seeds.

l) *Keepe*

Keepe is a thorny cane stick used for grinding the ginger for making a ginger paste.

Thus we can see that Galos have a large number of tools and techniques at their disposal .although these instruments described above are very simple but they are very handy and by using these have lived their life conveniently since the early times. In modern time with the influence of new technology and thinking many of these are either being innovated or replaced by more convenient ones. Also in most of the areas of west siang districts machines are used being

used for the cultivation. And instead of plough, crawler tractors, hand tractor, *kubota* (power tiller) etc is using, which consume less time and energy than plough.

Conclusion

The staple food for Galos is rice and because of this their principle crop of cultivation is Paddy. But besides paddy the Galos cultivate a variety of crops in their fields specially in *jhum fields*. The diversity of crop cultivated in *jhum* is more than in sedentary fields. The various vegetables cultivated in *jhum* fields are *Mardam, Onyor, Oyik, Aksap, Ogen, Oyin, Obur, Marsa, Bake, Kope, Yaluk* (chilly), *Bayom (brinjal), Meku and Mebe* etc. Besides *jhum* and sedantary cultivation the Galos also undertake kitchen garden called *Lupa*. *Lupas* are generally made in the vicinity of the house. It is used for growing of vegetables for self consumption and paddy is not cultivated in *Lupa*.

Like all tribe in Arunachal Pradesh Galos also maintain customary laws and practices. These are enforced by the village council called *Keba*. Galo society is a patriarchal society and as such sons inherit parent's property while daughters are not allowed to inherit any share in landed property of the parents. She inherits ornaments, traditional beads etc. In Galo society there exist three types of land ownership Individual ownership, clan ownership and village ownership. With the passage of time clan and village ownership is decreasing in

Galo society. Also many lands are owned by the Governments specially in district headquarters. These government lands are either donated by Galo people for setting up of township areas or acquired under land acquisition acts.

Agriculture is the main activity in Galo society and as such organisation of labour is mainly related to agriculture. Among Galo there exist three types of exchange of labour, *Rige*, *Riglap* and *Rigur*. Galo farmers are very progressive and they use different types of agricultural tools and techniques. There are tools used in *jhum field* and tools used in sedentary cultivation at their disposal. Some of the tools are indigenously developed through experience while some tools like *Kuttar* (*spade*), *Bersa* (*shovel*), *Dangi* (*jumper*) are adopted by Galo farmers from farmers neighboring state Assam.

Chapter 5

Continuity And Change Among The Galos

The term continuity and change refers to long-term continuities and discontinuities in the structure of the past societies. The progress and decline may be used to evaluate continuity and change. **Human beings are created in such a way that they can adapt themselves in any environment and they can create, learn, share, and adapt to a culture.** Change is one of the few constants in a living

culture. The change is evident not only in the physical environment but also in their social, economic, political and cultural system. No culture continues the same for any considerable period of time.¹⁹⁷ The magnitude of the change has been illustrated by comparative study of the past and present stages of social, economic, political and cultural system. The historical experiences of societies, peoples and nations reveal patterns of continuity and change. Historical analysis enables us to identify continuities over time in core institutions, values, ideals, and traditions, as well as processes that lead to change within societies and institutions, and that result in innovation and the development of new ideas, values and ways of life.

1. Continuity and Change Among The Galos

a) Social Life

The Galos are also in a state of transition like other tribes of Arunachal Pradesh. The close interaction with nature and the ability to adapt and adjust with the surroundings have considerably influenced the life style of the Galos. Changes can be seen in the every aspect of Galo society whether it is in economy, polity, education, material or other elements of culture, religious belief and practices.

¹⁹⁷ Roy, Sachin, op.cit., p.254.

And such changes collectively made an impact on the traditional socio-cultural structures.

Traditionally Galo society is based on patriarchal system, where all the major decision is taken by the husband.¹⁹⁸ However some positive changes have been observed in the last few decades. Currently in some educated families decision of both father and mothers equally matters. Still, society of the Galos is male dominated. They usually live in a joint family. Earlier family size was large but nowadays parents are left alone in the village because their grown up sons and daughters stay away from the village for their education, job, and business. In spite of that, their son's and daughter are taking out time to care and love their parents and to do all their duties toward them. Still, some parents are left alone in the village and they remain helpless. In such families, society or community be it clan based or village based play an important role in supporting them.

Marriage

Marriage is a relation of one and more men and women which is recognized by custom and law and involves certain rights and duties both in the case of the parties entering the union and in case of the parties entering the union and in the case of children born of it.¹⁹⁹ The institution of marriage is said to have existed from time

¹⁹⁸ Riba,Tomo, op.cit., p.53.

¹⁹⁹ Doshi,S.L., and Jain, P.C. Social Anthropology, Rawat Publication, New Delhi, 2001, p.2000.

immemorial. Almost all the system of marriage such as monogamy, polygamy, exogamy, and polygyny exists in Galo society. Earlier, exogamous marriage was discouraged and still it is discouraged in the society. Nowadays endogamous marriage are not tolerated and considered incestuous. There is no strict age limit for marriage. And still season for marriage are always taken into consideration.²⁰⁰

In Galo society marriage is a long process. It is performed in two ways that is with Mithun sacrifice and without Mithun sacrifice. The first one is known as *Layap* and it is the first marriage ceremony performed by the boy's parents where the acceptance of the girl as a daughter-in-law is recognised.²⁰¹ According to the Galo custom, performing of *Layap* in summer is regard as inauspicious. As such traditionally *Layap* is to be done in the winter season but nowadays *Layap* is performed even in the summer season depending on the requirement of individual situation. The second one is *Hobo-Panam*, it is the marriage in which Mithun sacrifice is involved with a series of activities. It is not compulsory and is very expensive to perform. Not all members of Galo society is able to perform this. Only wealthy and capable families perform this marriage ritual. It is considered a matter of great pride for Galos who are able to perform *Hobo-Panam* during marriage ceremony. Another type of marriage prevalent among Galos

²⁰⁰ Extract from an Interview with Mr.Gumken Bagra, Aged 62, Retired Government Teacher,on 11/08/2014.

²⁰¹ Riba, Tomo, op.cit., p.45.

is the system of *Neph-Nyida* (child marriage). This system was actively practised by Galos in olden days but since the last two to three decades it is no more prevalent in the Galo society except for in rare cases.

As compared to olden days marriages in Galo society are more costly and troublesome nowadays. Now old materials like *Ame, Batti* (brass plates), *Tadok, Dokso, Dogne, Dokpin* (types of traditional beads), *Yokso* (a knife or ceremonial machete) etc which are used in marriage rituals are not easily available and if available they are very expensive. Even then these materials are regarded as valuable and necessary items among the Galos during marriage. Earlier old materials like *Ame, Batti, Tadok, Dokso, Dogne, Yokso* etc were available with majority of Galo people as they were procured through the border trade with Tibet. With the passage of time poor people had to sell their old materials for variety of reasons such as for their children's education, for medical treatment etc. As such today these old materials are only available with the rich Galos. In spite of that, marriage rituals are performed with full enthusiasm. Earlier almost all the marriages in Galo society were arranged marriages. But these days the society has opened up more and the recent trends indicate that love marriages are more among the Galos. Still love marriage and arranged marriage both take place in the society of the Galos.

The society of the Galos is structured on the basis of

clan organisation. In other words, the entire social structure rests upon clan system. Still sexual relation between the members of a clan and sub clan is considered as incest and anybody involved in such are strictly punished and even ex-communicated.²⁰² After adopting Christianity also no specific changes occurred in clan ties. But, only in the religious ceremony they do not participate.

Religion

The Galos believe in indigenous faith and practice of nature worship. They are characterized by hereditary shamanism where they believe in the spiritual qualities of nature and at the same time had the concept of a supreme being. In Galo belief system there are number of benevolent and malevolent god and goddesses who bless and punish the people according to their action.²⁰³ Some of the malevolent spirits are *Yapom* (jungle's evil spirit), *Urom* (souls turn into evil spirit), *Aggo- Hune* (accidental evil spirits), *Hupo* (accidental evil spirits), and *Huro-Hule* and *Yalu-Yasu* (accidental evil spirits) and so, on. The benevolent spirits are *Pinku-Pinte*, *Pirku-Pirte* and *Liku-Lite* (gods of grainaries), *Diggo-Pirne* (creator), *Mopin-Moji* (god of wealth and prosperity) etc.

Galos believe in the concept of *Donyi-Polo* (sun and

²⁰² Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

²⁰³ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 25/02/2014.

moon). Here *Donyi*, the sun is considered as the mother of all human beings and *Polo*, the moon as the father. Nobody among the galos is able to pin-point the exact time period to specify when this concept of praying of *Donyi-Polo* started.²⁰⁴ But it is believed that since early time Galos has been praying to the combined divine figure of *Donyi (the sun) and Polo (the moon)* to obtain their blessings. According to Galo belief *jimi* is the Supreme Being, who has created this world and who rules over it. *Jimi* is also the creator of *Donyi-Polo* as a guardian of the people, who has to keep a watch on the duties of all living being.

It is important to note here that this belief and praying of *Donyi-Polo* among Galos is not exactly in the nature of a true religion like Islam, Christianity etc. This is because traditionally there is no concept of idols, temple or pujas in Galo society. There is also no fixed days of praying to *Donyi-Polo* like going to church on Sunday etc but Galo people remember and pray for blessing from *Donyi-Polo* in their day to day life. As such traditionally belief in *Donyi-Polo* was more of a way of life than a religion among Galos. This has undergone some change in recent years. Due to the influence of various other religion mainly Hindu religion and Christianity, nowadays purity of old traditional way of remembering and praying *Donyi-Polo* is slowly diminishing. Some reformists among Galos have tried to

²⁰⁴ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 25/02/2014.

institutionalize tribal religion by inventing images of gods and goddesses, constructing temples, and textualizing religious chants or oral traditions in a manner very similar to that of Hinduism. They are using incense stick, candle stick, flower etc., to pray and they also go to *Gannge* prayer house on sundays .With the influence of other religions on Galo population increasing reformist movements have been gradually gaining ground among the tribes in order to protect and preserve their indigenous religious beliefs and practices. Such reformist movements have generated new taxonomies, such as *Donyi-Poloism*, *Intyaism*, *Rangfraism*, and so on.

Today many Galos have embraced Christianity either due to the loss of relevance of their traditional ritual or influenced by missionaries and other institutions.²⁰⁵ This conversion has had a profound effect on their religious as well as cultural life. Now due to this conversion Galos participation in celebration of their own festival such as *Mopin* and other local rituals is becoming less. Similarly the celebration of Christmas festival is gaining popularity in Galo inhabited areas specially in Likabali, Basar, Angu Village, Pagi village etc. As the number of Galo Christian is rising.

Mopin is the biggest festival of the Galos and it is celebrated for five days from 5th of April every year. There has been a

²⁰⁵ Extract from an Interview with Mr.Gokar Basar, Aged 62, Retaired Forest Guard, on 22/07/2014.

gradual change in the celebration of *Mopin* both in the way it is celebrated and the reason for which it is celebrated. Since olden days Galo society was agrarian in nature. The main activity for livelihood was agriculture and there was no other economic activity among the Galo tribe. In those days *Mopin* was celebrated by Galo people mainly for getting a good harvest.²⁰⁶ But today besides agriculture, Galos are engaged in various other activities such as government jobs, business, government contractors etc to support their livelihood. Because of this today *Mopin* is being celebrated not only for a good harvest but for prosperity and wealth. Today celebration of *Mopin* is not limited to Galo inhabited areas only, but *Mopin* is celebrated in many parts of the state as Galos reside in different parts of the state for their job, education etc. There are various *Mopin* celebration committees prevalent today such as ziro *Mopin* celebration committee, Itanagar *Mopin* celebration committee, and Naharlagun *Mopin* celebration committee. Also except for *Mopin* celebration in district headquarter aalo other *Mopin* celebrations be it in Itanagar, Naharlagun, Ziro etc do not strictly follow the traditional rituals of *mopin* celebration.

People celebrated *Mopin* because they believe that it is started by the *Abo-Tani* and it is not possible to specify the exact time period of when *Mopin* become a festival. But, the celebration of *Mopin* as a festival remind the days of *Abo-Tani* when mother *Mopin* herself

²⁰⁶ Extract from an Interview with Mr.Gumken Bagra, Aged 62, Retired Government Teacher, on 11/08/2014.

led *Abo-Tani* from dream to world of realities in everything he do. Thus, according *Abo-Tani* celebrated *Mopin* as a festival during the time of sowing for good harvest and prosperity.

Earlier taboos were strictly followed by the Galos but now social taboos are not followed like before. For instance traditionally among the Galos the carrying of the dead body is specified within the nearest relatives and others were not allowed. But now both among the Galo Christians and some Galos in common do not observe this tradition strictly. Also they have started the making of cemented burial ground which was not there earlier.

Earlier the birth of twins was believed to bring bad luck and whole family member of twins child had to follow strict taboos *Aare* like they will be not allow to give *Aali-Aanyo* (seedlings) to any member of the village , no one will share food with them.²⁰⁷ But, now birth of twins is regarded as good luck and Galos are even happier to have a twin child. Not even single taboos are followed by any families of Galos when they have twins.

But still Galos are following some age old taboos like girls are not allowed to touch the tools like *Issak* (arrow) and *Upuk* (bow) of hunter. Even during the menstruation time girls are strictly prohibited to enter front side of the house that is *Bago* and are made to

²⁰⁷ Extract from an Interview with Mr. Remo Kamsi, Aged 66, Priest of Doyor village, on 19/02/2014.

maintaining separate utensils during menstruation. Also during menstruation time girls are not allow to go near by the *Nyibo* (priest).

In olden times the *Nyibo* (the priest) was a highly envied profession among Galos and it was considered extremely lucky and proud moment to be a priest. However now a day's numbers of *Nyibos* are declining day-by-day and they have a very mediocre life, not very rich not very poor. They are very busy in performing rituals and curing people and are not able to undertake other economic activities to improve their living standards or to take care of their families. Because of this concept people even ignore the calling of the spirits and do not want to choose this profession. The practice of slavery was prevalent in the Galo society but they were actually not born as a slave.²⁰⁸ Slaves in Galo society were either people captured during village war, people caught stealing or committing other crimes etc. But today the practise of slavery does not exist in the society and it is strictly prohibited by the *Adi-Bane-Keba* (the supreme village council among Galos) to distinguished people on this basis or even to call them as *Pagne*, *Pagbo* (slaves) and if someone calls them with such word then they are liable of fine.²⁰⁹ Traditionally during the practise of slavery some restriction were observed i.e. a master or general people cannot have a marriage relation with the slave family. But they can enjoy food with

²⁰⁸ Extract from an Interview with Mr.Lizar Yomcha,Aged 68, Village Elder of Yomcha village on 02/08/14.

²⁰⁹ Extract from an Interview with Mr.Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

them, stay together and so on. Now there is no such marriage restriction between master and slave family. But still some people don't want to tie up any relation with the slave family.

Political Life

Traditionally among Galos *Keba* is the largest political body, it is the village council of the Galos and is responsible for settling all the disputes of the society. *Keba* was a highly respected and feared body in Galo society in old days. The decision of the *Keba* was final and no one dared to go against it. But now a days dispute get rarely settled in *Kebas*. Many people are taking even the minor disputes to the court of judicial magistrate and higher courts before any trial at *Keba*. This leads to delay of justice in many cases and even denial in few. Earlier people had less knowledge about the legal procedure. Also, there was only district court located at district headquarter Aalo and it was not accessible for everyone, only accessible for the people residing in villages near to district headquarter.²¹⁰ Earlier various types of traditional ordeals were performed, to decide all kinds of disputes such as *Roksin-Kognam* (chicken liver divination), *Pip-Chika-Nam* (egg examination) etc. Besides this the *adi bane keba* have approved the practice of *Nyodu*, *Taser Dinam*, and *Badu-Yunam*, as the final

²¹⁰ Extract from an Interview with Mr. Hilem Loyi, Aged 62, Gam of Pakam village, on 19/08/2014.

judgement of the disputes and critical *Keba*.²¹¹ This practice is still practiced in the *Keba* but not in every case. If the *Keba* members fail to give their final verdict in some cases after performing *Roksin-Kognam*, *Pipi-Chika-Nam* then they will look into the seriousness of the case and according to that they will suggest either for the *Nyodu*, *Taser-Dinam*, and *Badu-Yunam*. In this *Nyodu*, the person involve in the case will swear on tigers teeth that their cause are correct and if any of them found guilty their whole family will die slowly as a indication. In this ritual both the opponent will not eat or drink anything from each other's place till the case is solved. And in *Taser-Dinam*, lumps of zinc are heated in an iron pan till the metals melt and accused or suspected person are asked to hold the molten lead or zinc on his palm to prove his innocence. This practise is now abolished. It was believed that guilty is hurt by the heated molten but the innocent is not. In *Badu-Yunam* both the opponents hand are put in the boiling water and it is believed that if anyone is guilty their hand will be burned. Recently *Nyodu* was performed between two Galo clan that is Gangkak and Yomngam on a land dispute.²¹² Despite being educated galos are still believe in this.

Inheritance

As the society is based on the patriarchal system the

²¹¹ By the Laws of Adi Bane Keba (Bogum Boka), op.cit., p.99.

²¹² Extract from an Interview with Mr. Lizar Yomcha, Aged 68, Village Elder of Yomcha village on 02/08/14.

daughters are not allowed to claim a right over the landed property. The customary laws does not gives daughters the right to inherit father's immovable property because the clan members feel that if father's assets are given to daughter when she is married, the clan will lose asset for ever.²¹³ Nowadays this practise is still followed among Galos but there are some exception that are happening. Today due to influence of education and development in society many Galos are giving share of properties to their daughter also. However this positive change is observed in very few cases and only among the educated families in towns. In village and far flung areas old tradition of inheritance is strictly being observed. Also in rare cases today a girl child can claim the property of her parents in the event of being the only child. Some-times even though being only child a daughter are not allowed to claim the property of their father, and property falls in the hand of cousin brother's son. But, now some of the Galos have started to reject this belief and are giving some of the immovable property to their daughters also.

Economic life

Average rainfall of West Siang district is 4000 mm and due to this heavy rainfall the economy of Galos of West Siang district are very much dependant on agriculture, which is supplemented by

²¹³ Extract from Article, "Its Time to Introspect" by Mr. Dedo Ete Published in *Diggo-Yamo Mopin Souvenir* 2014, Published by Central *Mopin* Celebration Commitee, Aalo ,2014,p.2.

hunting and fishing. Earlier, people use to cultivate and produced goods either for the self consumption or for exchange at values equal to the values of means of production used up in the process of production. The basic organization of production was slash and burn system of cultivation, and free collection of forest products. Now, with the changing situation and necessities people produce not only for self consumption but also for the commercial purpose.

Another, source of surplus generation in the economy is from trade. Earlier trade was based on barter system, where people exchanged goods for other goods. Now barter system no more exist in the society as money as the common medium of exchange is being used extensively. Economy of the Galos has gone through various changes from the conventional barter and exchange system, to the monetizing of the Galo economy. With the monetizing of the Galo economy as well as with the introduction of weight and measure, things are sold and purchase at an equal rate and quantity using money as a medium of exchange.

Earlier tribal groups had a mutual economic dependence on each other for certain essential commodities.²¹⁴ But now this dependency is shifted from the tribal people to government as well as private sector. Galos had trade relation with the Boris, the Tibet, the plains of Assam and Bhutan. They generally exchanged their surplus

²¹⁴ Gazetteer of East & West Siang District, p.180.

produce with that of the tribes living north of their territory and re-exchange these procured item with that of the traders of the plains. Inter-tribal trade was also carried out in the interior villages. For instance the Apatanis produced surplus rice which they traded for salt supplied by the Nyisi, who got it from the plain and for surplus cotton produced by the Adi. Now all these trade relations no more exist in the society at barter level and people sell their produce for money and buy their required items by paying money.

The Galos of West Siang district is having a very rich tradition of handloom, handicraft and weaving. *Bolup* (cap), *Hobuk* (dao case), *Igin* (basket), *Lelli/Patu* (cane bags for carrying essentials things during journey), *Husak* (basket), *Opo* (tray), *Pejung* (basket for keeping vegetables), *Upo* (bamboo mate for keeping grains) are some of the handicraft product. *Gale*, *Galup*, *Shawl*, *Jepe*, *Likka*, *Beka* (hand-woven clothes) are some of the handloom products. Traditionally these items were traded under barter system mainly for exchange of grains. Expert artisan in the village would trade his produce for grains or for exchange of labour. But with the passage of time there has been slow but steady development in the field of handicraft and handloom. Many people are now setting up shops to sale local handicraft and handloom item. One of the major buyer of these products are the tourists both Indian and from abroad. As such this sector constitutes an important part of specialised economy of the Galo people. Carpet making, cane work,

wood carving, carpentry, etc are now widely practiced and this heritage is preserved by encouraging cottage and village industry.

Agriculture is the traditional subsistence economy of the Galos. It has been practised by Galos since time immemorial. Earlier shifting cultivation (*jhum*) was practised by Galos and with the passage of time they started the practise of sedentary cultivation (wet rice cultivation and terraced cultivation). In olden days agriculture was practised with the sole aim of self consumption and there was no concept of commercial agriculture. Sometimes even the surplus produce was not traded but was given free of cost to relatives or village friends. Also paddy was the primary crop cultivated as rice is the staple food for Galos. But nowadays there is diversity of crops being cultivated by the Galos. Even the concept of Commercial farming is being adopted by the Galos. Today Galos cultivate paddy as well as vegetables not only for the self consumption but also for commercial purpose and even their interest is shifting toward the producing commercial crops.²¹⁵ Galos are practicing dual citivation, after the paddy cultivation they are growing vegetables both in *jhum* field as well as in wet rice filed. Vegetables like potato, cabbage, cauliflower, carrot etc are being cultivated after the paddy season for selling in the market especially in Aalo, Basar, Likabali areas. With the changing times Galos many have shifted themselves toward the commercial farming.

²¹⁵ Extract from an Interview with Mr. Binge Ete, Aged 56, Head Gam of Bene village, on 11/08/2014.

Earlier the Government through Agriculture Department encouraged the people to adopt the wet rice cultivation as well as terraced rice cultivation. Government assigned the village level worker to do the duties to promote wet rice cultivation as well as terraced rice cultivation among the Galos.²¹⁶ They guided the villagers about various benefits of settled cultivation as compared to *jhum* cultivation and encouraged them to adopt the same. Due to this continuous effort many hills were converted into terraced and wet rice field. But in recent years the focus is shifting from paddy farming to commercial farming. Government is coming up with various measures to encourage Galos of West Siang to adopt cultivation of commercial crops. Many steps have been taken by Government of Arunachal Pradesh through the Agriculture Department to diversify the agriculture economy by encouraging cash crop like potato, mustard oil etc. Also through the Horticulture Department the Government is encouraging for horticulture crop like oranges, and pine-apples etc. These cash crops have been adopted in the right earnest by the Galo farmers also. For example in Bagra village under Aalo circle pineapple cultivation is a major source of income for people.

It has been witnessed that considerable changes have taken place in the current status of agriculture practises among Galos as compared to olden days. This change has occurred mainly because

²¹⁶ Extract from an Interview with Mr. Nitum Riba, District Agricultural officer, on 11/08/2014.

of influence of technology from outside. Some changes have been effected also due to social and cultural influence. As compare to the early times now agriculture is equipped with new technology and technique, which have ultimately raised the production.

Technology affects the agriculture a lot both in good and bad ways. As we know that shifting cultivation is the traditional method of agriculture among the Galos but its practise and technique is highly hazardous to the environment as it leads to large scale deforestation. But till today *jhumming* is heavily practised and it is supporting the majority of the population of Galos of West Siang district. But Government is also trying to convince the farmers to stop *jhum* cultivation because of its ill effects on the environment. Because of this continuous effort of the Government many suitable flat valleys and gentle slopes have been either converted into wet or terraced area. Today many people have adopted two new forms of permanent types of cultivation but suitable areas are very limited for wet rice and terrace field, thus all Galos cannot be accommodated in this and as such practise of *jhum* cultivation is still continuing among Galos. But, as compared to earlier little improvement can be seen in the method of *jhumming* and still better improved method is needed for future to control both the problem of environment and to continue the traditional system of cultivation without harming the environment.

Inspite of these entire thing Galos of West Siang is still

very much dependent on this tradition pattern of cultivation. Now they are growing vegetables also for commercial purpose. Earlier production is only for their consumption purpose but with times they have learned the economic values due to the changing situation and their needs. Today various vegetables are grown by them such as *Kope*, *Bayom*, *Bake* (brinjals), *Yaluk*, *Luksi*, *Maan-Yaluk* (chillies), *Meku*, *Mebe* (cucumber), bitter gourd, *Patum* (pumkin), bottol gourd, *Giyi*, *Tukho* (brassica), *Namdu* (sesame), *Igin* (yam), *Mali* (sweet potato), and *Takee* (gingers). They sell these in the market and earn handsome revenue. Now people have understood the value of the money and their mind is shifting from self consumption to economic purpose.

Now, good quality of high yield varieties of seeds are begin to introduced like, *Jyoti*, *Ir8* (*Indian Research no.8*), *Ir-20*, *Ir-64*, these are an improved variety of seed introduced by Government. But still some stick with the old seeds due to little faith on the new seeds. Different qualities of the seeds are also being used by the some of the farmers, which increased the production. Now Department of Agriculture and Horticulture also try to introduce the new varieties of the seeds and even introduced different medicine to farmers to help them to protect their field from pests, diseases and minor climate changes.

In the areas of wet rice cultivation lots of new development can be seen like use of power tiller instead of traditional

method of ploughing, tractor. Even the threshing of paddy is done through the help of machine which was earlier done with the help of the feet. Earlier it was very hard to open a new fields for both types of wet rice cultivation. And it needs large numbers of men and its labour. But now with the introduction of various machines many people are taking help of it to lessen the labour and to save time. But still there are some people which are not able to effort it and depends on traditional method of cultivation.

Due to all these new techniques production also increased as compare to early times, maybe it is still not good according to Department of Agriculture but better than the early days. Now galos are reaping paddy twice from a same plant. First harvesting is done in the month of august then second harvesting is done in the month of September. Second paddy is the next grain grown from a harvested plant of paddy, which is known as *Aam-Lebe* or *Aamte-Lebe*. Its production is lesser than the first harvest. Earlier there was no system of collecting the remaining grain or second time grown paddy due to its less production and fencing problem of the large areas. But now due to introduction of high yield varieties of seeds its production is increased and also because of the economic point of views they learned to save the wastage.

The farmers of West Siang also trained in the use of fertilizer, as they were trained by the Government official in

demonstrative farms free of cost due to which they know the use of fertilizer. Timely village level worker provided the farmers with dusters and sprayer, essential chemicals to control pests and plant diseases. Many farmers do not want to use the fertilizers and chemicals to control pests and weeds as they believe that it might affect their health and environment. Without using those chemicals some farmers used to produce huge quantity of product.

Earlier *Aam-yabnam* (winnowing) and *Aam-Hugnam* (threshing) is very time consuming as well as very laborious work. Winnowing is earlier done with the help of group of people or two people by using *Oopo*, a kind of tool used in cleaning rice. Generally female are standing at the edge of the hut and on the basis of blowing of the wind, she will throw the mixture in the air and male will blow air with the help of *Oopo*, so that the wind blows away the lighter chaff while heavier grains fall back down for recovery. The threshing is done with the help of the legs. But, now these things are done with the help of machine like power tiller for threshing and as stand fan as well as power tiller for winnowing. Even in some of the village it is found that cows are using for thrashing grains. Now for drying paddy plastic mat and tarpaulins are using instead of *peche* (local traditional mat). Now due to the nice transportation system it is very easy to carry grains to the granaries. Even plastic bag and jute bags are using instead of *Igin* (bamboo basket). Due to this distance is minimised as well as time is

saved for others works. Technique for protection of the crops is also improvised.

Education and Health

Education is the most essential element for the all round development of the society as well as for the human-being. In case of West Siang district it is an important issue. Earlier in 1947 the literacy percent of Arunachal Pradesh was below 1 percent.²¹⁷ Due to this it became a challenging task for the government to improve it, especially for prosperous tribal life. In the first five-year plan and second five year plan education became the top most priority. Under this education institutions was established and improvised. After that teachers training institute were established and English was installed as medium of instruction in 1971 for class I to XI. With this literacy rate was increased, but still lot more changes to do in the field of education.

Now a day's education quality was improvised much more than earlier. Many new schools were set up and now there are about twenty three Central Board of Secondary Education (C.B.S.E) affiliated schools in West Siang district and also there are many private schools in west siang. There are two colleges in West Siang and even many night schools were set up. According to 2011 there average literacy rate is 66.46 % ,earlier that is in 2001 it was 59.47%. Gender wise literacy rate of both male and female of West Siang is 72.81% for

²¹⁷ Pandey, Deepak, op.cit.,p.377.

male and 59.63% for female and in 2001 for male it was 66.63 and 51.56 for female. These all data shows an increase in literacy rate.

In the field of Health also development were taking place to improve the existing facilities. Now there are many private clinics, health care centre in every villages and pharmacy to facilitate the people. Thus, the now government is taking every initiative step to improve the education qualities as well as to improve the health facilities.

Impact of Major Land Regulations

In Arunachal Pradesh mainly two major land regulation has been passed. Firstly the Balipara / Tirap / Sadiya frontier tract *jhum* land regulation passed in 1947 by government of assam in exercise of the powers conferred by sub-section (2) of section 92 of the Government of India act, 1935, as adapted by the India (Provincial Constitution) order, 1947.²¹⁸ These regulations was passed to safe guard and regulate the right of the tribes indigenous to the Balipara, Tirap, Sadiya Frontier tracts to *jhum* land in these areas. This land regulation was the first attempt to codify the various issues related to the practice of *jhum* land in arunachal pradesh. Under the provisions of this act a customary right to *jhum* land was deemed to be established in favour of a village or a community when such village or community has enjoyed the right to cultivate or utilise such *jhum* land for not less

²¹⁸ The Arunachal Pradesh Code, op.cit., P.73.

than five years prior to the making of this regulation. *Jhum* land was defined as “all lands which any member or members of a village or community have customary rights to cultivate by means of shifting cultivation or to utilise by clearing jungle or grazing livestock provided that such village or community is in permanent location”. This regulation also dealt with various other issues related to *jhum* land such as transferability of *jhum* land, forest produce, taxation, prevention of erosion, prevention of fire, setting up of tribal council and powers thereof, erection of houses, ejection of persons squatting without any authority on *jhum* land etc.

The land regulation of 1947 had a major impact on the practise of *jhum* land in the state. For the first time *jhum* land was legally defined and the rights of the indigenous people to *jhum* land was recognised legally. The provisions of this regulation also conferred upon the Government, right to acquire any *jhum* land for public purpose without any formal acquisition proceeding but an opportunity was to be given to those having rights in the land to show cause against such acquisition and reasonable compensation was to be paid for all land acquired. Land so acquired if relinquished by the Government at any time was to be returned to those from whom it was acquired on refund of compensation paid. This act also took an initiative to protect the environment from damages caused due to practise of the shifting cultivation. The land conservator was authorised to pass orders for

reforestation of the *jhum* land and could declare that “strips of reasonable width within any *jhum* land was not to be cultivated.” In case of excessive cutting of trees, soil erosion etc. The land conservator could also declare a part or whole of a *jhum* land as protected forest and no person was allowed to cut any trees from such protected forest without the permission from the land conservator. In extreme cases the land conservator could pass directions preventing cultivation of a *jhum* land for a period not exceeding 10 years. All this resulted in prevention of massive deforestation and soil erosion caused due to uncontrolled and unregulated practice of *jhum* land cultivation.

The land regulation of 1947 was a stepping stone for land administration in the state. Before this regulation was enacted there was no proper rule governing the practice of *jhum* land. This regulation defined all the major terms related to *jhum* land and formed the basis for other land regulations passed in the state.

The second major land regulation in the state was passed in 2000. It is known as the Arunachal Pradesh (Land Settlement And Records) Act-2000.²¹⁹ This act was passed to provide a comprehensive law for land revenue administration for whole of the state. It incorporates customary rights on the land and certain measures of land reforms. It covers almost every issue related to land

²¹⁹ The Arunachal Pradesh Code, Volume-vii, Government of Arunachal Pradesh Law and Judicial Department, 2001, p.202.

administration. It deals with rights over land, rights of land owners, rights of tenants, maintenance of land records, demarcations of boundaries, creation of revenue divisions, realisation of land revenue, survey and settlement of land revenue etc. Under this act all lands, public roads, lanes and paths are declared to be the property of the Government. The right to mines, quarries, mineral products, oil, natural gas etc are vested with the Government. All major land administration in the state is done through this act.

Chapter 6

CONCLUSION

On the basis of the field survey and discourses, an attempt has been made in this thesis to highlight about the history of traditional pattern of agriculture practice among the Galos of the West Siang district. Therefore, the study was intended to provide a basic idea on the changing nature in their agriculture, particularly on the practice of traditional agriculture system as well as sedentary cultivation.

The West Siang district covers an area of 8,325 sq. Km out of this the Galos occupy an area of 3,530 sq.km which consists the

40 % of geographical area of the district. The total population of the tribe for 2011 is not available but the Statistical Department has presented a rough estimate of the total schedule tribe population of West Siang district, according to which the population of Galos is 84,376 approximately, distributed in 260 villages of thirteen circles of district.²²⁰ Aalo is the headquarter of West Siang District.

According to my survey under studied area, it is found that the Galos are still largely dependent on agriculture. Agriculture is the traditional subsistence economy of the Galos. It has been practiced by them since early times and is the main source of livelihood for them. According to the myths they believe that the first seed of paddy and maize was given by the *Mopin* (goddess of cultivation, prosperity and wealth) to *Abo-Tani*, (the first man on earth) which was carried from the land of *Digoo Perne*, the heavenly land of *Mopin-Moji* to earth by *Kiipuu* (dog) on the back of its ear. Since then *Abo-Tanii* started the practice of agriculture which has been followed by Galos till today.

Traditionally Galos practiced shifting cultivation called *jhum* where they clear a forest, cultivated it for a season or two and leave it for another new forest. In olden times this practice was possible because the population was less and area available was vast. During those times the fallow period for *jhum* was very long about 20 years. As such fertility of soil was easily restored and there was not

²²⁰ Extract collected from the Statistical Department of Itanagar, on 16/01/2014.

much damage to the environment also. But as time progressed, population increased and the area available for *jhuming* started to decrease leading to shorter fallow period for *jhum* fields. This resulted in less productivity of *jhum* fields and greater damage to the environment through deforestation, soil erosion, ground water depletion etc. In the aftermath of India's independence and the introduction of planned economic development, there was a massive Government effort to restrict *jhum* cultivation and promote Wet Rice Cultivation and Terraced Cultivation. According to Mr. Nitum Riba, the District Agriculture Officer of Aalo this government effort of promoting of Sedantary Cultivation took place in 1950s and 60s. The government initiative and also of some individuals like that of Mr. Yomrak Yomcha who learned wet rice cultivation from Assam and introduce it in Yomcha circle in 1955, the Galo farmers started to adopt Wet Rice Cultivation and Terraced Cultivation. But even after introduction of both these forms of cultivation and realizing the fact that productivity is higher in sedentary cultivation as compared to *jhumming*, Galos are continuing with the practice of *jhumming* even today. This is because of a variety of reasons. The primary among them is non-availability of plain land for development of Wet Rice field and high cost of developing a Terraced field. The topography of west Siang is mostly mountainous and hilly except for some areas in Likabali circle bordering Assam, as such plain land for Wet Rice Cultivation is very

limited. Also it is very costly to cut out Terraced Field on the hills. Lack of irrigation is also a reason for people still continuing with *jhum* cultivation. According to Statistical Abstract of Arunachal Pradesh 2007, the total irrigated land of West Siang is only 22.21% of net cultivated area. Another reason for continued practice of *jhum* cultivation among Galos is that besides paddy *jhum* field provides local vegetables and more importantly firewood to the farmers. Because of the reasons mentioned above the practice of *jhum* cultivation is still widely prevalent despite its severe effect on environment. Yet the community has to realize that this large scale practice of *jhum* is not sustainable for near future and they must look for ways and means to either completely stop *jhumming* or deduce methods to minimize its harmful effect on environment. One possible method can be to compulsorily increase the fallow period of *jhum* fields to more than 20 years either through *keba* (village councils) or through government notifications. Also more and more area should be brought under Wet Rice and terraced cultivation. The government can bear the cost of converting hills into Terraced fields as poor farmers are not able to afford it. Also irrigation facilities can be improved and new and more efficient methods of irrigation such as tube wells bore wells, sprinklers etc can be adopted so that more area can be brought under Sedentary Cultivation.

Galo farmers traditionally had no concept of commercial

farming. Their agricultural practices were only meant for self consumption. But during my study I have found out that in almost all the circles of West Siang local market economy is prevalent and indigenous local produce are giving good competition to more established non indigenous agro products. Unlike in olden days the farmers of today have adopted commercial farming wholeheartedly. Nowadays they are also growing commercial vegetables together with the paddy in their *jhum* fields as well as Wet Rice and Terraced fields. After that they are selling their vegetable in the market at a very good price. It is one of the factors of earning income for them. Galos of Likabali, Aalo, Basar, Bagra and Dari circle are more advanced in this type of cultivation and every Saturday Galo women of nearby village of Likabali are coming to Likabali Saturday bazaar to sell their product, which gives handsome profit to them. Like this other circles of West Siang District are also practicing this kind of cultivation but not at the scale of Likabali, Aalo, Basar, Bagra and Dari circle. Commercial practice has greatly improved the standard of living of poor Galo farmers. During my interaction with the Mr. *Nitum Riba* I have also learned that in last few decades many steps have been taken by Government of Arunachal Pradesh through the Agriculture Department to diversify the agriculture economy by encouraging cash crop like potato, mustard oil etc. Also through the Horticulture Department the Government has provided encouragement for cultivation of horticulture

crop like oranges, banana, mushrooms, lemon, litchi, papaya, plum and pineapples plantation of cardamom, broom, rubber etc. Many Galo farmers have taken advantage of such government encouragement and done well for themselves. A case in point is the farmers of Bagra circle who have adopted pineapple farming on large scale and are earning handsome revenue.

Like other tribes of Arunachal Pradesh the Galos also have a belief system dominated by rituals to appease spirits. Their traditional belief has been a core of the community cosmology and identity passed on to them by their ancestors. In addition to the series of rituals, each of the rituals is succeeded by a number of taboos observed with outmost sincerity. All agricultural activities are associated with a myth of origin which define each ritual, which in turn is connected with various phase of the agricultural calendar. The belief system too insists on the timely performing all those rituals with their true faith. For instance *Pombak* , *Aampu Yule*, *Diir-Tachi* etc are performed by Galos during farming season. In Pakam village during my interview with Shri Hilem Loyi the *Gam Burah*, I was told that during his younger days while clearing jungle for preparing the *jhum* field he felled a big tree without performing the *Pombak* ritual and consequently he fell sick for many days. It was only after consulting a *Nyibo*(priest) and proper conducting of *Pombak* that he was finally cured. Here the interesting fact that I found out during my study is that

it is not only the individual Galo that believe in these rituals but the Galo society as a whole also believe in such rituals. Even today Galos conduct *Roksin kognam* (chicken liver divination) to settle cases of property disputes, theft etc. This faith in rituals and its continued practice was also observed among educated Galos many of whom are holding high government offices.

However this belief in traditional rituals and its practices are not followed by one group of Galos in West Siang. They are the Galos who have converted to Christianity and Hinduism. These Christian Galos and the Hindu Galo do not practice any traditional rituals and do not participate in the celebration of Galo festival like *Mopin*. They do not observe any taboos either.

During my field study I have found that Galos have adopted modern technology especially in the field of agriculture. In the field of agriculture (*jhum*, Wet Rice and Terraced) because of the open-mindedness of Galo farmers, technology and modern tools have made a tremendous impact leading to increased productivity of the fields and reduced labour requirement. In olden days farming was done using basic tools but today Galo farmers are using modern tools and machinery such as tractors, power tillers etc to minimize labour requirement and to get the work done faster. The Galo farmers are also a very innovative lot. They are finding out innovative local use of modern tools and techniques .For example in Darka village under Aalo

circle farmers are using power tillers for threshing of grains. While in Pakam village under the same circle farmers are using Table Fans for winnowing instead of depending on winds. Now for drying paddy too plastic mats and tarpaulins are using instead of *Pече* (the traditional mat), even plastic bag and jute bags are being used instead of *Igin* (bamboo basket). Also the traditional tools like *Eke* (bamboo scrapper), *Kosap* (tongs) are also replaced by the iron *Eke* and *Kosap*. It is also found in the some of the Wet Rice Field that the Galos are using tin metal for roofing *Nakum* (farm hut) instead of *Tayak* (*Livistona Jenkinsiana*).

In Galo belt modern machinery has also helped bring more area under settled cultivation as by using machinery like earth movers, earth cutters, etc., Galo people are opening new terraced fields in hilly area that were earlier considered inaccessible and uncultivable. Also new and better irrigation facilities are bringing more area under cultivation.

The farmers are also using High Yield Varieties of seeds such as *Jyoti*, *IR8* (*Indian research No.8*), *IR-20*, *IR-64*,. These seeds are being introduced by Government through the Department of Agriculture. Department of Agriculture and Horticulture is also providing farmers with pesticides and weedicide to help them to protect their field from pests, diseases and minor climate changes. The farmers are also being trained in the use of fertilizer by the Government official in

demonstrative farms free of cost. Also village level worker are providing the farmers with dusters and sprayer, essential chemicals to control pests and plant diseases. Galo farmers also have their own method of controlling pests and weeds and it is not only the modern tools and techniques that Galo farmers are using to cultivate their fields. They have rich traditional knowledge about agriculture acquired from experience over time and passed on from generation to generation of Galo farmers . They also have an assortment of agriculture methods and tools at their disposal. They have their own traditional techniques of sowing of seeds, fencing, protection of crops from birds, animals and pests etc. These methods are developed form hundreds of years of experience and are very effective. The Galo farmers have adopted a perfect blend of modern and traditional tools and techniques of agricultural practices and are using them both to increase productivity of their field manifold

Just like in the field of agriculture, the Galo society has a rich heritage of customary laws and practices. These customary laws and practice cover almost all aspect of life in a Galo society such as inheritance of property, marriage, death, punishment on committing a crime etc. Although Galo society is a very progressive society in other aspects of life as found during the study, it was evident that in terms of inheritance of property like other tribal society, the Galo society is not very progressive in its outlook. According to the Galo customary law

property is inherited by the sons only and daughters have not right to inherit their parents landed property. Even if a couple does not have any son their daughters are not allowed to inherit their property. This practice is not in line with the ideas of modern society and the Galo society should give serious thought about changing it. The changes in the thought process is already visible among the educated members of the Galo society as some educated parents are allowing their daughters to inherit some of their landed properties but the change is very slow and negligible.

Therefore in this proposed work, I have tried to high light the present situation of the agriculture practice among the Galos. And with the help of informants, I have tried to bring in light why they are still carry the traditional method of agriculture i.e. *jhum* cultivation and also about the problem they are dealing with. Thus, I believe that my work will help people in understanding the past and present scenario of agriculture practice among the Galos of West Siang district of Arunachal Pradesh.

GLOSSARY

<i>Donyi</i>	Sun
<i>Polo</i>	Moon
<i>Abo-Tani</i>	Fore-father of
Galos	
<i>Ato</i>	Father-in-law
<i>Ayo</i>	Mother-in-law
<i>Abo</i>	Father
<i>Ane</i>	Mother
<i>Asi</i>	Brother
<i>Abir</i>	Sister
<i>Ije</i>	Grandh-Father
<i>Ikam</i>	Grandh-Mother
<i>Yigo</i>	Brother-in-law
<i>Yigne</i>	sister-in-law
<i>Hobe-Panam</i>	Marriage
ceremony	
<i>Layap</i>	First marriage
<i>Opo</i>	Rice beer
<i>Jera</i>	A valuable cloth
<i>Hitak-Tagnam</i>	Cutting of <i>Hich-</i>
	<i>Pinyi</i>

tree.

Itee

Rice paste

Lisum , Likar, Dogne

Expensives Beads

Ali-Rumtum

Relation by common
blood.

Dolu Keba

Village council of
Galos

Bogum-Boka Keba

Council of whole

village

Bango Keba

Council of many

Villages.

Bogum-Boka Keba

Council of whole

village

Roksin-Kognam

Chicken liver divination

<i>pip-Sika-Nam</i>	Egg examination
<i>Hiku, Dasi, Barte-Barbe</i>	Brass plate
<i>Medo</i>	Sky
<i>Chichi</i>	Earth
<i>Taki</i>	Ancestor of spirits
<i>Tanyo</i>	Ancestor of tiger
<i>Nipe</i>	Human
<i>Yapom</i>	Jungle's evil spirit
<i>Urom</i>	souls of the dead
<i>Aggo-Hune</i>	Evil spirits
	causing misfortune
<i>Nyibo</i>	Priest
<i>Pinku-Pinte, Pirku-Pirte, Liku-Lite</i>	Deities of the
granary	
<i>Gir-Talle</i>	unnaturally
<i>Nyode</i>	west
<i>Udu</i>	East
<i>Nyosi</i>	south

<i>Bago</i>	North
<i>Aayap</i>	Every windows
<i>Koba</i>	Staircase
<i>Dotpuli</i>	Veranda
<i>Naka</i>	Ceiling
<i>Rapko</i>	Chimney
<i>Mane</i>	Fish
<i>Paata</i>	Birds
<i>Takop</i>	Grasshopper
<i>Bunikar</i>	Rat
<i>Nyime-Koba</i>	Stairs for female
<i>Nyilo-Koba</i>	Stairs for male
<i>Togu-Panna</i>	Big marriages
<i>Pakka-Panna</i>	Big rituals
<i>Uyi-Moko</i>	Spirits Place
<i>Ponu-Monam</i>	Local dance
<i>Dilik-Delek</i>	Boundary between living world and

	world of the dead
<i>Nyinyi/Sonyi</i>	Mithun
<i>Modi Rike</i> or <i>Tump Rike</i> cultivation	Shifting
<i>Isi Rike</i> cultivation	Sedentary
<i>Takom</i>	Fishing trap
<i>Ekkam</i>	Leaves
<i>Lidu-Tode</i>	A water bird
<i>Kome</i>	Bamboo stick
<i>Kolu</i>	Wild banana plant
<i>Kako-Tazhi</i>	squirrel
<i>Dumpu</i>	Deer
<i>Kipu</i>	Dog
<i>Agyaa</i>	Soya bean
<i>Nyir Poro</i> implement	God of tools and
<i>Danik</i>	Wooden post

<i>Payne</i>	Bamboo rope
<i>Oso</i>	Cane rope
<i>Morin and Moro</i>	<i>Weeding</i>
<i>Pese</i>	Local mat

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APPENDIX-I

HISTORY OF TRADITIONAL AGRICULTURAL PRACTICES: A STUDY OF THE GALOS OF ARUNACHAL PRADESH.

INTERVIEW SCHEDULE

DETAILS OF RESPONDENT:

1. NAME

:

2. STATUS

:

3. VILLAGE

AND

CLAN

:

4. SIZE

OF

FAMILY

:

5. AGE

:

6. GENDER

:

7. MARITAL

STATUS

:

8. RELIGION

:

9. EDUCATION

:

10.OCCUPATION

:

11.ANNUAL

INCOME

:

(a) RESPONDENT

:

(b) FAMILY'S

:

12.PROPERTY

13.ANY

OTHER

VALUABLE

14.DATE

15.SIGNATURE

APPENDIX-II

PART II

1. WHAT IS THE ORIGIN OF THE WORD ADI?
2. WHY DID THE GALO TRIBE SEPERATE FROM ADI GROUP.?
3. WHAT ARE THE ORIGIN STORIES OF EARTH, MAN, AND THE SPIRITS?

4. NARRATE THE HUNTING AND GATHERING ACTIVITIES OF THE GALO TRIBE.?
5. IS THERE ANY RESTRICTION IN HUNTING OF CERTAIN ANIMALS?
6. WHAT IS THE DIFFERENT METHOD OF FOOD PRODUCTION?
7. NARRATE MIGRATION LEGENDS.WHAT DOES ORAL TRADITION SAYS ABOUT MIGRATION AND WHICH ROUTE DID THEY FOLLOW. ?
8. NARRATE HOW THE GALOS SETTLED IN THE PRESENT AREAS?
9. HOW IS GALO SOCIETY ORGANISED?
10. WHAT ARE THE DIFFERENT CLANS OF GALO SOCIETY.?
11. WHAT ARE THE DIFFERENT PRIMARY SOCIAL INSTITUTION OF THE GALOS?
12. NARRATE THE MARRIAGE SYSTEM AMONG THE GALOS?
13. IS THERE ANY RESTRICTION IN MARRIAGE BETWEEN A SLAVE AND HIS MASTER OR PEOPLE FROM HIGH- STATUS.?
14. NARRATE A FEW CASES OF ENDOGAMOUS MARRAGE AND WHY IT IS NOT TOLERATED?
15. IS SLAVE SYSTEM STILL PRESENT IN THE GALO SOCIETY.?
16. WHAT IS THE POSITION OF SLAVE IN THE SOCIETY?
17. WHAT IS THE POSITION OF WOMEN IN GALO SOCIETY? ?
18. WHAT IS THE BASIC FEATURE OF GALO BELIEF SYSTEM?
19. WHO ARE THE IMPORTANT GOD AND GODESS AMONG THE GALOS?
20. WHO IS THERE SUPREME GOD?
21. HOW ONE DOES BECOMES A PRIEST? ARE THERE HEREDITARY DIMENSIONS?
22. NARRATE THE ROLE OF PRIEST IN GALO SOCIETY.?
23. HOW DOES THE PRIEST NEGOTIATE WITH SPIRITS.?

24. NARRATE ABOUT THE GALO FUNERALS AND WHAT ARE THE RITUALS FOLLOWED?
25. NARRATE ABOUT RITUALS JOURNEYS? WHAT DO YOU KNOW ABOUT THEM ARE THEY DESCRIBED REAL?
26. HOW DISPUTES ARE SETTLED IN TRADITIONAL GALO SOCIETY.?
27. HOW WAS JUSTICE ADMINISTRATING IN TRADITIONAL POLITY?
28. NARRATE THE BACKGROUND OF EVOLUTION OF TRADITIONAL AGRICULTURAL PRACTICE AMONG THE GALOS.
29. NARRATE THE MYTH ASSOCIATED WITH THE ORIGIN OF TRADITIONAL AGRICULTURE PRACTICES.
30. WHAT ARE THE VARIOUS RITUALS AND TABOOS ASSOCIATED WITH AGRICULTURE.
31. WHAT IS THE IMPORTANT OF MOPIN FESTIVAL AMONG THE GALOS.?
32. IS THIS TRADITIONAL AGRICULTURAL PRACTICE PROFITABLE OR IT IS ONLY TO SATISFIED BASIC NEEDS OF THE FAMILY.
33. IS THIS PRACTICE STILL CONTINUING LIKE EARLIER?
34. WHAT TYPES OF SEED THEY GENERALLY USED FOR *JHUM* CULTIVATION AS WELL AS FOR THE WET AND TERRACE CULTIVATION.
35. IN WHICH MONTH SEEDS ARE USUALLY SOWN IN *JHUM* CULTIVATION AS WELL AS IN THE WET AND TERRACE CULTIVATION.?
36. IN WHICH MONTH THE CULTIVATION GOT BEGIN AND END WITH RIPPING OF CROP?
37. ARE THEY MAINTAINING THE PRACTICE OF KITCHEN GARDEN?
38. NAMES OF DIFFERENT VEGETABLES CULTIVATED BY THEM?
39. WHAT ARE THE PATTERN OF THE LAND OWENERSHIP?
40. WHAT IS THE PATTERN OF THE LAND OWENERSHIP WITHIN THE VARIOUS AGRICULTURAL PRACTICES?

41. WHAT IS THE CUSTOMARY LAND LAW?
42. HOW LAND BOUNDARY ARE MAINTAINED AND WHAT NECESSARY THINGS ARE USED TO SHOW THE BOUNDARY DIVISION?
43. WHAT IS THE STATUS OF WOMEN WITHIN THE CUSTOMARY INHERITANCE PRACTICES AND HOW IT IS DEALT.?
44. NARRATE THE ORIGIN OF WET RICE CULTIVATION AND TERRACE CULTIVATION?
45. WHICH AREAS ARE USUALLY PRACTICE WET RICE CULTIVATION AND TERRACE CULTIVATION?
46. NARRATE THE MYTH ASSOCIATED WITH ITS ORIGIN AND THE VARIOUS RITUALS AND TABOOS ACCOSIATED WITH IT.
47. WHAT ARE THE TOOLS & TRADITIONAL PATTERN OF LABOUR USED IN DOING THIS?
48. TRADITIONAL PATTERN OF WAGES FOR THEIR LABOUR
- (a) MAN
 - (b) WOMEN
 - (c) AND OTHERS (YOUNG AND ADULT)
49. WHAT IS THE CURRENT STATUS OF AGRICULTURE AND HOW SOCIETY IS DEALING WITH THESE CHANGES?
50. WHAT ARE THE EFFORTS OF GOVERNMENT TO MAINTAIN ITS DEVELOPMENT?
51. WHAT IS THE IMPACT OF VARIOUS LAND REGULATION SYSTEM?
52. HOW SOCIETY IS DEALING WITH THESE CHANGES?
53. NARRATE EARLY STORIES OF GALO CONTACT WITH AHOMS AND BRITISH?
54. WHY GOVERNMENT ENCOURAGE PEOPLE TO DO SETTLED AGRICULTURE INSTEAD OF *JHUM* CULTIVATION.
55. WHAT ARE THE MAIN ECONOMIC ACTIVITIES OF GALOS?

56. WHAT IS THE IMPORTANCE OF BEADS AMONG THE GALOS?
57. WHAT IS THE ORNAMENT USED BY THE GALOS?
58. WHAT ARE THE CHANGES TAKEN PLACES IN GALO MARRIAGE SYSTEM?
59. WHAT ARE THE CHANGES YOU OBSERVED IN YOUR LIFETIME?
60. ANY CHANGES DUE TO CONVERSION INTO HINDUISM AND CHRISTINITY?
61. WHAT ARE THE EFFORTS OF THE GOVERNMENT ON PRESERVATION OF TRADITIONAL CRAFT? THE CRAFT CENTERS.
62. HOW THE PANCHAYAT RAJ SYSTEM WAS INFLUENCED THE GALO POLITY.?