Ecological and Environmental Concerns Amongst the Buddhist Communities of Ladakh: A Case Study

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Ladakh, a Shangri La or pod yul or khong yul (land of snow) is situated between the Indus and the Shyok rivers in the Trans-Himalayan region bordering Pakistan and China. It derives its name from numerous darras (passes) comprising two words la i.e.: pass and dakh meaning series of mountains. It stretches from the Shyok-Indus confluence up to the western border of Tibet where the Indus separates it from the Zaskar range in Pupshu. The Ladakh with the enormity of its size and paucity of human resource in the rugged landscape of the Himalayas invites challenging problems-geo-political, socio-religious and economic in nature (Singh, 1994: 354-355). This area is inhabited by number of tribes of which majority are Buddhists. The Ladakhi Bodh or Bhot, Gara, Mon, Beda, Changpa and Broq-pa are settled in the different part of Ladakh. (Bhasin, 2005: 3) These tribes are living here since hoary past and their settlement pattern, economy and society shows a harmonious co-existence with nature. In an attempt to bridge their society with the rest of the country number of the developmental works are taking place which adversely affect the socio-cultural ecology of the region of Ladakh. The paper attempts to trace the cultural ecology of these Buddhist tribes, efforts to integrate them with the great tradition of India, changes and adjustment in their cultural pattern and economic settlement. For the study of their socio-economic and medico-religious dimensions a brief description of Buddhist communities in Ladakh is also essential. In the Ladakh every Buddhist village has a sizeable population of the Ladakhi Bhots, supported by one or the two families of the Garas, Mons and Bedas. The Changpas are the semi-pastoral tribes scattered in upper portion of the Ladakh. These tribes are shown through a table.

Buddhist Tribes in the region of Ladakh

Serial no.	Buddhist Tribes	Religious Affiliations	Language groups	Occupation
1	Ladakhi Bodh	Geluka, Drokpa & Naima	Bhotia (Tibeto- Burman)	Agriculture
2	Broq-pa	Geluka	Brok, Shad, Dard (Indo-Aryan)	Agriculture
3	Gara	Geluka, Drokpa	Tibeto- Burman	Blacksmith
4	Mon	Geluka, Drokpa	Tibeto-Burman	Musicians
5	Beda	Geluka	Tibeto-Burman	Musicians
6	Changpa	Drokpa	Changkyet	Animal Husbandry & Cattle Farming

The Bhots, Ladakhi Bodh, Ladakshpa or Bodriksha are the dominant communities of Ladakh and socially stratified into gyalpo (rulers), kahlen (bureaucrats), mangrikas (peasants), rengon (artisans), serger (goldsmith) etc. They reside in the Zanskar and Nurbara region of Ladakh on high mountains with scanty rainfall, copious snow and semi-arid plateau. They can be identified by their flags, caps, charms, armlets and long plaits. Their staple diet is ngamphu (roasted flour) of barley. They also grow wheat, peas, rai (mustard seed), turnips and have orchards of apricots and walnuts. They also partake non vegetarian foods including the flesh of yak, goat and sheep but fish is a taboo. The gur-gur (salty tea) and lipton (sweet tea) are daily drinks. On festive occasions chaang and arrakh (barley beer) are privileges. The Bhots maintain phasphun a brotherhood exogamy but now they permit intra-phasphun marriages. They used to practice the fraternal polyandry but now are in favor of monogamy. The agriculture is their primary economy supported by the fruit orchards, domestication and handicrafts. The Bhots are the followers of the geluka, drokpa and naima sects of Buddhism Chaskut and Shingmala are their family deities. The lamas pray for the well being of the whole community (Singh, 1994:193-194).

The Broq-pas or Shin, the survivors of the pure Indo-Aryan group settled in the lower Indus valley from Leh to Kargil. They are divided in *gatti* (patri-lineage) and socially stratified in the priest, *ram* or *raj ram* (nobles), *shin* (peasants). Levirate is allowed among them. Barley is their staple food and barley, wheat are parched and used as *tsampa* (roasted). The potatoes, radishes, turnips supplement the regular diet. They also eat non-vegetarian foods but fish and eggs are a rarity. The *chaang* is consumed on festive gatherings. The *gur-gur* tea mixed with saffron and almond are their regular drink (Eichstedt, 1923:200-202). A special piece of land *newne* is assigned for producing barley for preparation of the *chaang*. (Bhasin, 2008: 86)

The Garas or the Garabas live in the Leh and Kargil district of Jammu and Kashmir of India. They are divided into *gayuts* or *rigs* (lineage) which are recognized into four *phuds* or generations. They are known as *regnum* i.e.: the lower strata of society. Married women wear a special dress goncha. *Relchang* (tonsure) is performed to male child. The Garas are the blacksmiths who make iron implements for the fellow villagers and in reciprocation get the fixed amount of grains from each family. The Gara does not hold any position in the village community or the monastery... The *Gompas* are their sacred centers. They celebrate the Buddhist festivals like Losar, Buddha Purnima etc. (Singh, 1994: 280-281).

The Mons are the professional musicians and flute players of the Ladakh region who roam in the company of the Bedas. They belong to the Indo-Aryan groups with the admixture of the Mongoloids. They inhabit along the course of the river Indus. High altitude, absence of natural vegetation and heavy snowfall are the characteristics of their natural environment. Their gayuts or rigs are exogamous and their married women wear goncha and firoja. They live in the nuclear and extended families and are patrilinial. On the festive occasions the Mons provide music to their fellow villagers and in reciprocity receive cereals from them. On the day of Losar a man gifts arrow to a Ladakhi male and a spanner to the female he serves. The return gift is given in form of food and other necessities. They are supposed to be the real contributors of the innovative irrigation system of Ladakh. (Singh, 1994: 816-818)

The Bedas are the semi-settled and semi-nomadic community of Ladakh who reside in the old desert region at the high altitude with heavy snowfall. They speak the Ladakhi language of the Bhotia group of the Tibeto-Burman family and like the other communities of Ladakh they also wear *goncha*, *shakten*, *sherak* and long boots. Though wheat and barley are their staple food, they are also growing paddy. *Gur-gur* is their daily drink and *chaang* are taken on the

festive gatherings. They are divided into exogamous *gayuts* or *rigs* which are recognized into four *phuds*. They are strictly Buddhists and never marry outside their religious community. They practiced fraternal polyandry at early stage but now prefer monogamy. They perform the music for the Bhots, Mons, Baltis and even some of the Islamic tribes. Some of their performances are only restricted to the Lamas and the *gompas* (Singh, 1984:102-104).

The Changpas, Champa, Fangpa or Phalpa derive their name from *Chang* i.e. north and thang, i.e.: plains. They are inhabitants of the northern plain of Ladakh and are divided into two groups –the sedentary Fangpa and the nomadic Phalpa. The leadership among them belongs to nono. The polyandry is now replaced by the monogamy. During the child birth the elderly women of the community helps in the delivery of child and the village Lama performs ritual for the safety of the child and makes his zatag (horoscope). The radag (tonsure) is performed after three years. The Changpas lived in the *reboo* (tent made by the yak skin) and majority of them are nomadic who roam in the different part of Rukshu, Kharnak and Kharzok. In first two areas they spend transhumant lifestyle while in the last one majority of them are transhumant but some follow a settled life. Their staple diet is tsampa (barley), meat of yak and wild horses (kiang). The chura (dried cheese) and meat boiled with barley flour are their favorite dishes and chaa (tea) is regular drink. Chaang is taken to celebrate festivals. Their major economic resources are yaks and goats. The goats are the source of world famous pasham or pashmina wool. They usually live on the land owned by the *hemis gompa* and follow the drokpa sect of Buddhism. Each reboo has the portraits of kula deity Donag and the Dalai Lama. Chakman Paldon Lhamo is worshipped for protection against the epidemic. Losar and KunchYut are their major festivals (Singh, 1994: 206-220).

The social structure of the people of Ladakh is based on the multilayered beliefs and cultural traits which has been evolved over the centuries through the process of experimentation and refinement as a response to the peaceful co-existence with the climatic and environmental conditions. (Rizvi, 1998: 173, Crook and Sakya, 1983: 213). Because of the high peaks of mountains all around and heavy snowfall in the winter season Ladakh remains inaccessible to the outside world for nearly six months in a year. A traditional family and social structure have been evolved to suit these ecological conditions. The nuclear as well as joint family norms exist and well guarded both by the social taboos and their indigenous legal regulations. precautions to safeguard their organization from all possible breakdowns. The Ladakhis adopted fraternal polyandry which played a vital role to check their population. Their family structure, marital system and mode of inheritance were based on the polyandrous marriage. In the traditional family structure the eldest son would marry and rest of the sons would be the cohusbands of his wife. The youngest of them goes to the gompa. The inheritance of the family property will go from father to the eldest son. This primogeniture not only regulated the growth rate of the population but also stopped the disintegration of the property. The *gompa* often plays an influential role in the socio-cultural context (Singh, 1993: 242). They have evolved a self supporting social structure conditioned with their environmental necessities. After independence especially in decades after the Chinese war rapid development in Ladakh accompanied by the wanton destruction of indigenous socio-economic fabric and an array of ecological problems occurred. The Indian army connected the region of Ladakh with the mainland to stop the future An airport at Leh has also been built. All these new amenities such as communication and transport facilities opened new opportunities for Ladakh (Crook, 1994: 814). The increased contact with the outsiders caused widespread disruptions in their lifestyle and culture. Before such opening of communication it took more than a week to reach Leh from

Kashmir and in winter because of heavy snow all the passes were snow-fed so were inaccessible to travel. But rapid development in transportation has changed the eco-system. This area is grappling with its own type of air pollution where the combustion of motor fuel leads to emission of more carbon particles due to high altitude. The growing urban structures, administrative buildings, hotels, restaurants etc are adversely bleeding the traditional structure of the society. It is now facing stringent task to cope up with the modern challenges due to contact with the outside world. Their social structure is fast changing due to spread of industries, communication technologies and globalization of economy. The rank outsiders saw the practice of polyandry and law of primogeniture of inheritance as a primitive institutions and root cause of their social backwardness. The consumption of *chaang* is seen as a response to the depressing nature of the society and was understood that production of the *chaang* is taking a large toll on limited barley stock apart from having ill effects in case of excessive drinking. Consequently the polyandrous marriages were declared illegal by the Buddhist Polyandrous Marriage Prohibition Act, 1988 (Laws of J. & K, III: 878-881). But in the social panorama of Ladakh the fraternal polyandry is seen as a practice for keeping their population in control in the hostile climate. It was a nature's call to limit the population and is accepted as a logical ecological response by the Buddhist communities. The right of primogeniture to the eldest son of the family is seen to be a cause to a limited growth of the Buddhist population. Since there is no hereditary right to younger brothers in a family so all of them are unable to establish their separate households (Bertelsen, 1997: 134-135). Now the polyandry is thought to be a primitive institution and abolition of it led to the disintegration of the joint families and increase in nuclear families without sufficient infrastructure for them (Hay, 1999: 179-182).

The new urban environment previously unknown to the society of Ladakh has led in an increased level of uncertainties. The traditional institutions are treated as the 'cultural survival'. The prohibition on polyandrous form of marriages without any suitable alternative arrangements prelude to population explosion and cultural transition. The breakdown of the mono-marriage system and declining tendency to join the monastery has led to the rapid growth of Buddhist communities in Ladakh. But recent trends regarding modernization and education are perceived to be positive. With the modern education they are also taking up the traditional education and religious learning, the 'indigenous syndrome' has created a positive outlook for the culture of Ladakh. They are also availing the various facilities for their development provided by the government, NGOs and other local organizations. But the attitude of policy makers and implementing agencies towards the people of Ladakh should be as for the people of 'distinct cultural ethnicity' rather than 'cultural survival' as they are not primitive, uncivilized or the aboriginals but the people showing the sustainable lifestyle at the difficult high altitude terrain of the Himalayas. It is necessary to encourage and balance the local values and tradition to protect and preserve the cultural heritage so as to ensure the appropriate model of development.

The economy of the people of Ladakh is self-sufficient subsistence type. In the hilly terrain of high Tibetan plateau it has a sparse population scattered in the small clusters and villages eventually separated by the pasture and waste land. The size of the each village depends upon the availability of the sources of the water often accrued by the manmade channels. The agrarian land is held by the individual farmers as well as the *gompas*. The Ladakh has short growing season because of heavy snowfall in the winter. On the high altitude of 8000 mts. wheat, barley, potatoes, turnips, and peas are the major crops where as on the lower terrains the orchards of apricots and walnuts are also grown. Their economic life is well supported by domestication of sheep, goat, cow, yak and dzoes. Their economic structure show exceptional

sensitivity towards environment. Even the human waste is mixed with the sand and is used as manure. Their agrarian system is based on the coexistence of the nature-man-spirit complex balancing all aspects of life. The Changpas has a pastoral economy. The yaks, dzoes, and sheep are their major economic sources. The yaks are for the beast of burden and their hide for making of *reboo*, and their goats are yielding the world famous pashmina wool.

The Buddhist communities of Ladakh developed a highly efficient and ecologically sound irrigation system and due to their indigenous effort which culminated into highly mechanized channelization of water probably was the first to be evolved in the early medieval age (10th century A.D.). The people of Ladakh built canals with locally available materials, stone pieces and boulders. The accumulated snow started melting as kang-chhu (ice water) in the rivulets merging at some focal points and forms a togpo (stream). The togpo flows in the valley touching the settlement clusters and the villages and are connected by the ma-yur (mother channel). The channels are built along the mountain which works as a retaining wall and at some point the rocks are cut or drilled for free flow of water. From the ma-yur number of sub channels are developed-yu-ra (intermediate channels), nang-yur (field channels), yi-hu (side channel), star (middle channel for large tracts), nang (contour bunds), tomik (gaps on the lower side of nang), ha (rka) i.e. control sluice, hardo (rKardo) i.e.: boulders for blocking the sluice (Angchok & Singh, 2006: 397-398). The water from the channels among the large villages like Hunder, Shimo, and Leh are distributed on share basis. Their records are maintained by the village committee on a special silk document known as bandabas and the distribution of share in the village is supervised by chhur-pon a village authority. He has a divine status in the village and should possess certain attributes like ska-tsir shes-kan (how to divert water), chhu-tsir shes-kha (to divert water to a particular crop), yul-dat-chan (lordship over all the village fields), chhu-a sta-thog gya-la cho shes-khan i.e. knowledge of sustainable use of water in scarcity (Angchong & Singh, 2006:399-400).

The agrarian and irrigation system of Ladakh is guided by the zodiac movements as the time cycle for sowing, irrigation, harvesting and winnowing varies from region to region depending upon the altitude and calendar devised by the villagers. The shadow cast by the solar movements or *nyitho* determines their season for the crops like the shadow of the sun in an auspicious condition is supposed to be the sign for the sowing of the crops. The Lama of the village is consulted for the conducive-day to begin agrarian activities. The Lama pacifies the spirits of water, earth, hills, the worms of the soil and the soul of the land and the sowing season starts with recitation of the hymns by the monks to placate the Gods for high yield. The meat eating and drinking of the *chaang* are prohibited on this pious day. The milk and other offerings are thrown in the streams as a tribute. On the auspicious day the as per instruction of the Lama the whole family assembles in the field at sunrise. The dzoes are yoked with wooden plough and sowing starts with enchanting of festive songs and prayers. One such prayer can be enumerated here.

Manjusri embodiment of wisdom, Hark!

The gods, the nagas, owner spirits of the mother earth, Hark!

May a hundred plants grow from one seed!

May a thousands grow from two seed!

May all the grains be twins!

Please give enough that we may worship the Buddhas and Bodhisattvas,

That we may support the sampha and give to the poor (Norberg-Hodge, 1992: 44).

With the beginning of the *sa-ka* (festive gathering) the village *onpo* (astrologer) decides the date for first watering of the field as on that day the peasants also decides the cultivation schedule, repair and maintenance of *ma-yur*, *yu-ra* etc. The village land is divided on basis of fertility where the wet land is known as *ser* or *chhu-ser*. The agrarian field with appropriate moisture ready for crop is known as *ser-phar-fog* (gold is ready). When land became moist because of snowfall it is known as *kha-ser*. The second, third, fourth and last stages of irrigation are known as *dol-chhu*, *sak-chhu*, *non-chhu*, and *do-chhu* respectively (Angchok & Singh,2006:401). After ripening of the crops *skangrol* or harvest festival is celebrated at the village and family shrines. The villagers make columns of barley flour and butter decorated with flower petals and offer it to dharmapala and spirits. The prayers are offered for abundance of the crop, prosperity and health of the family, village and every sentient being on this earth. The fellow villagers eat festive foods and drink *chaang* on this occasion. The crop is threshed with the help of the wooden pole and dzo. The ladakhis pray for flowing of the wind for winnowing of the crops.

Oh pure goddess of the wind!
Oh beautiful goddess of the wind!
away the chaff!
Ongsla Skyet!
When there is no human help
May the god help us!
Oh beautiful Goddess!
Ongsla Skyet! (Norberg-Hodge,1992:45)

The crop pattern shows the vitality of the Buddhist institutions and traditions to adopt sustainable system in an environment with limited resource base on high altitude Himalayan ranges. It guides and ensures the maintenance of the production equilibrium of the region. In the past three decades the economic face of Ladakh has been changed. The establishment of army, opening of the administrative offices, schools, hospitals, influx of tourists in the summer and consequent commercialization of the economy in place of the subsistence economy have deeply affected their traditional economic structure and has resulted in breaking down of their celibate institutions. The establishment of Ladakh as a tourist haven and increasing guesthouses, restaurants and intermingling of the natives with the outsiders especially Sikhs and Kashmiris not only lead to contamination of local tradition, food habits and life style but also the pattern of the settlement and land structure (Singh, Jena, 1993:158). Now the young generations of the Ladakh perceive their traditional economy as primitive and are staying away to work in the fields for little or no money and have started considering their culture inferior and trying to reject the traditional lifestyle and economy. These new changes are degrading the fragile environment of Ladakh and brewing the religious and ethnic conflict (Maan, 2002) This new trend of urbanization, competition, and deteriorating environment were previously unknown to them. All these factors have brought about changes in their personality as the peace loving, docile and humble Ladakhis are now more aggressive, materialistic and vulnerable. Some of them desire to earn money to adopt western lifestyle and possess modern equipments and consumer items. In the tourist season many of the rural folk migrate to Leh from neighboring villages to seek employment as a guide, as workforce in hotels when their participation and labor are most needed for agrarian economy. (Rizvi, 1998: 196). This new cosmopolitan culture and continuous interference with the fragile ecology of the Ladakh led to the catastrophe. On 6 August 2010 the paradise of Ladakh was inundated by a monster cataclysmic cloudburst killing more than 160 people in Ladakh. This mud tsunami has two centimeter deluge only in two hours in contrast to traditional rain pattern of Ladakh i.e.: nine centimeter per year. Within two hours it wiped out the three decades of infrastructural growth unleashing the fatal effect of the pollution and shortsighted ill fated economic development on millennia old sensitive ecological system. The cloudburst seems to be nature's furious response to a fragile ecosystem where the ill conceived development projects, experiments of green Ladakh, private entrepreneurship like tourism have fractured the simple, traditional nomadic lifestyle of Ladakh and its sensitive Indo-Tibetan culture.

The little tradition of Ladakh should not be homogenized with the great tradition of the rest of civilization. These little traditions should be protected from further encroachments and interference from the alien culture. They should be integrated with the rest of the culture judiciously and cautiously. Many of such efforts are made by the government of India, the royal family of Ladakh and some social workers like Helena Norberg-Hodge. The royal family of Ladakh is instrumental in opening of the Namgyal Institute for Research on Ladakhi Art and Culture (NIRLAC) in 1985 to protect the cultural heritage. The royal family also opened up the Stock Palace Museum to document, preserve and protect the artifacts, handicrafts etc. The awareness and training programs are organized by the government to plant trees, fruit orchards, vegetables, and herbs. The cooperative societies are also formed for the purchase and marketing of the pashmina wool.

Buddhism has spread its wing in Ladakh and Tibet in the 7th century A.D. onwards and absorbed many of ritualistic and superstitious features of Samanistic Bon cult of Tibet and Vajrayana Buddhism. Later on it developed into four important sects- Nyingmapa (red hat), Sakyapa, Kagyupa, and Geluka (yellow hat) sects (Dutt, 2004:201-204). The villages of Ladakh and the gompas maintain economic and cultural reciprocity among themselves. It is almost obligatory for the every family to send the youngest son to join the monastic life. The monks of the village gompa provide all the religious obligations and services to the village folks as per their social, economic and religious requirements. The monastery also supports non-producing groups, sick people, elderly persons and children (Greenshaw, 1983). The monasteries protect the socio-ecology of Ladakh. They own majority of the agrarian land tilled by the villagers in lieu of the religious services. These establishments also function as the grain banks and provide economic help to the people from time to time (Norberg-Hodge,1992:48-49) Most of the houses of the villages are full of Buddhist religious symbols such as chapels, text, thangapas and other religious symbols passed from generation to generation (Norberg-Hodge, 1991:34). The sacred complex of Ladakh includes a multiplicity of benevolent and wrathful spirits and deities. *Ihu* is spirit associated with water and pollution of outer environment and the chopping of the trees, polluting the streams, water points can anguish her. The shepherd of the Broq-pas who do not care of their flock and show negligence to their duties or allow them to damage the fragile ecology invite the wrath of the mountain sprit. To placate them the altars are adorned with sacrificial offerings, juniper leaves and blood of goat. These spirits are symbolic of natural spirits showing the life supporting and life threatening attributes of the mountainous terrain.

These spirits enormously safeguard their domain against the human encroachments but favors sheep or goat because of the resemblance of ibex, the live stock of mountain spirit. This belief provides the quasi-religious ties regarding the sacredness of goats and the pivotal role they play in their religious and oracular performance (Bhasin, 2008:87). It is believed that the terrible *Ihu* lives on *Ihu-bang* in and around the spring and water sources and the gods of mountain live on *Iha-singh* (god trees). The ritually unclean persons (ba-ngags-pa) are not supposed to cross canals or the water sources which could annoy the *Iha* or *Ihu*. To placate the water spirits *Ihu*stor ceremony is performed by the Buddhist community of Ladakh (Ekvall, 1964). At the entrance gate of the villages and on some vital points a special structure rig-sum-ngon-po consisting three *chor-sten* (stupa) painted in white, red and blue are built. The white *chor-sten* belongs to Avalokiteśvara or Padampāni who acts as a guardian watching and protecting interest of the people. He is white in color and always display Varadamudrā in his right hand and in his left hand he is holds the lotus. Another idea related to white color is *Iha-yul* which may be related to worshipping of goddess Tārā. The Tārā is worshipped in many colors-white, green, yellow, blue and red. She is the goddess bestowing prosperity and carries lotus in her left hand and show Varadamudrā in the right. Some of them displays Amoghsiddhi in her crown (Bhattacharya, 1968:306-307). The blue colored *chor-sten* represents Vajrapāni. His color is blue and symbolizes Vajra. He is the spiritual son of dhyanī Buddha Aksobhya and is supposed be the chief God of Vajrayana and is widely respected in Tibet and Ladakh (Bhattacharya, 1968:53). He symbolizes power and his pantheon includes *Ishu-vul* i.e. subterranean guardians and water spirits. The red color belongs to Manjusri who is considered to be one of the greatest Bodhisattvas and can confer upon wisdom, intelligence and eloquence. The Manjusri carries sword in his right hand and *Prajnapāramita* in his left hand. His one form is worshipped in the red color otherwise generally he is depicted in golden color (Bhattacharya, 1968:102-103). His domain includes bstan-vul i.e. the land of terrestrial deities and demons.

The holistic approach of their religion can be drawn in the framework of sacred complex in which their sacred beliefs and spirits i.e. Ihu, sacred geography i.e. chor-sten and sacred specialists and performers i.e. Lamas are influential components. The Lamas are their sacred specialists who propitiate their supernatural powers for the benevolence of the society and their religio-cultural complex of beliefs is based on the notion of purity, impurity, pollution and sacred. They worship nature, hills, various type of spirits and ibex horn as a natural outcome of their ecological conditions. The monasteries not only fulfill the socio-economic requirements of their people but also facilitate the festivities and entertainments. The Chaam dance is one of such religious dance in which all the folk members participate. The sound of drums, horns and chanting of hymns makes it humorous as well as religious. The Chaam is a mask dance in colorful costumes representing various pantheons and deeper symbolism (Norberg-Hodge, 1992:48). It is well choreographed secret Buddhist dance performed by the Lamas accompanied by the mystic music played on the monastic orchestra. The dance is purely religious in nature as only Lamas can perform in the dance wearing mask illustrating the previous birth of Buddhas. The aim of it is to symbolize the destruction of evil spirits and dramatize the illusions of life. The masks represent the various forms of Dharmapalas, Buddhas and Bodhisattvas in their wrathful tantrika forms. They wear costumes made of brocades, silk decorated with bones and horns. Historically this dance began to celebrate the death of king Langtarma, the formidable enemy of Buddhism in Tibet. Lama Lhalung Pal Dorji Zanak (black hat) killed the king wearing the black mask and black hat. This dance provides the psychological

strength to these people to cope up with the hostile environment of Ladakh and to eliminate the evils of the society. Recent changes in the infrastructure and growing outside influence have increased the rituals and religious activities in Ladakh as it gives a coping mechanism to deal with the rapid changes and pressure. In the past the religious rituals developed as a power transcending into a social power because people depended on them. The modern changes disturbed their peaceful and sedentary lifestyle which they thought as a wrath of supernatural and also their frequent visits to the Lamas offer one of the another possible coping strategies.

Buddhist medicine system prevalent in Ladakh is integral part of their culture. It has been evolved out of centuries of trial and errors and handed down from generation to generation. It is unique, reliable and effective. It not only treats sickness but also solve problems of culture bound syndrome, which was not considered as sickness by bio-medical sciences. This medical system is known as Amchi. The art of healing is evolved on the knowledge of medical system existing in the wide region of Asia especially in Buddhist countries. Probably it originated in Tibet-Ladakh region under the patronage of Vajrayana Buddhism. It underlines the socioecology of Ladakh and passed from one generation to next within the village commonly known as rGyupta lineage. The newly appointed Amchi has to pass test orally in front of the whole village and a panel of experienced Amchis from adjoining areas. The root of this system can be traced in a Tibetan medical work known as rayud-bsu. It says that the divine knowledge of medicine is given by bcom—ldan-das (Sakya) who transform himself into the shape of the physician in a forest of medical plants. He explained the medical formulas in a superb palace in front of Gods, sages and other followers. (Chattopadhyaya, 1992:258-259) A traditional Amchi act as a oracle, bonesetter, faith healer and also considered as a cultural psycho-therapist. The Amchis and the inhabitants of Ladakh intend to combine their traditional health system with the knowledge achieved through their first hand experience. They have the knowledge of the diseases, pattern and treatment which are pertinent to that particular culture. This integrates the prescription and attributes of the physical body with the concept of subjective entities that encouraged it, provide strength, vigor and sustenance (Bhasin, 2008:79). The Ladakhi oracles are the integral part of the society. They are known to us as *Iha mo* (female) and *Iha pa* (male).

It is believed that the oracles possesses the potential of *Iha* who then use their supernatural power to heal the sick or to predict the future. (Bray, 1991:28-50) According to the beliefs of Ladakhis the diseases are the product of causes and conditions. Ignorance or unawareness is the ultimate causes of all diseases may be the long term or short term. Because of ignorance or delusion people are failed to recognize the reality of the phenomenon and there by clings personal self or ego which in turns give rise to the three mental poisons i.e. desire, hatred and stupidity. The combination of ignorance with three mental poisons constitute the long term cause of disease. The short term cause of disease are rlung (energy), mkhris pa (bile energy) and bad kan (phlegm) all conceived by three mental poisons. The desire provides wind, hatred to bile and stupidity to phlegm. There three humors (NYESPA) which develop the elementary energy system of the body and are inter connected to all vital organs, seven constituents and three excretion of human anatomy. The seven constituents of the body are Dangsma (food), khark (blood), shad (flesh), tsil (fat), rus (bone), rkang (marrow), khuwa (semen). The three excretion are sweat, urine and feces. The healthy body represents the equilibrium in three humors, seven body constituents are three excretions. When these are not in proportionate forms, it leads to sickness.

The four factors responsible for the imbalance are inhospitable climate, influence of evil spirits, improper diet and unruly behavior. These imbalances are diagnosed by the Amchis. The

diagnosis has various stages of interrogation, visual examination and facial examination. The treatment can be given by the regulation of diet, behavior modification, medicine and physical therapy. The drugs are categorized in ten forms: decoction, pills powder, gruels, medicinal butter, medicinal calxes, concentrated extraction, medicinal wine, germ medicine and herbal medicine. The therapeutic techniques are classified in gentle and rough techniques, massage, hat and cold compressions, mineral spring bath therapy and medicinal bath are the gentle techniques. Blood letting, cauterization, cupping, golden needle therapy are considered as rough techniques. Some minor surgeries are preferred though Amchis avoid surgery. Their medical philosophy evolves around the harmonious operation and balance of all energies that constitute the human psycho-physical arena.

The magico-religious medical system coupled with occult sciences and Tibeto-Chinese herbal medicine surely help them to cope with mortality risks and common diseases. The clinical tetanus in neonates and adults are practically absent among the Buddhist communities. They put their infants in *tsa-nu*, a wooden sack made up of sheep/goat skin. The sack is filled with powdered sieved dung and made it warm by placing a hot stone on it. The mothers generally treat common dresses like diarrhea of children especially related to growing stage such as teething, walking etc with these folk medicine tradition. The Amchis / *Iha pa / Iha mo* do not take any fees for that treatment but often helped by the villager in their agriculture especially in spring ploughing and autumn harvest seasons. They are not only physician but also the community leaders holding the position of the *Goba*, i.e.: the village head. They also predict future and experts in Buddhist astrology which has strong bond with Ladakhi medicine school.

With the old age folk medical system the Buddhist communities of Ladakh have been able to survive and maintain the ecological and socio-economic panorama. But with the advent and penetration of allopathy, an alien system has been introduced and the locals react pessimistically to this transplant system. The canopy of this cosmopolitan medicine which is different from traditional system is injuring their valuable social system (Manning & Fabrega, 1973).

Recommendations:

1. The grievances in Ladakh are supposed to be many fold such as socio-economic, religious and ecological. The construction of roads, development of transportation and opening of Ladakh to outsiders have eroded their traditional social and environmental balance. Initially when government launched the modernization program in Ladakh, it intimidated their socio-cultural milieu. But soon the fault was realized and the government declared most of the Buddhist communities as scheduled tribe in 1989. It does not solve the purpose. The term 'schedule tribe' gives them exclusive privileges but seems derogatory. In place of 'schedule' the word 'Ethnic Nationalities' will be more appropriate for them. It would give them their own pride as well as desire to join with national stream. The government and non government organizations dealing with the problems of Ladakh should act like a 'social doctor' or a 'community leader' to diagnose their problems to provide a suitable solutions and to monitor that the given solutions are effectively working or not. If it will not happen then the conflict stimulate surge up in term of unwholesome emotions and volitions. It leads to failure to see the problems and its causal arising and to comprehend its true nature. The same is happening in Ladakh for past three decades. The model of social doctor can be applied to such other communities of the world who are isolated and neglected.

- 2. Economically the geography of Ladakh is considered as hostile and barren allowing only minimum agricultural produce to sustain. Because of emergence of alternative economy i.e. tourism the traditional base has been eroded and in the newly emerging tourism industry the people of Ladakh are not getting their due share. The majority of restaurants, hotels, taxi operations etc. are owned by the outsides and Ladakhis are working only as laborers, guides etc. There is a need to explore the natural resources and employment opportunities of Ladakh and to protect them for the people of Ladakh. Helena Norberg Hodge, the Namgayal institute etc. are doing commendable work in this area. But there is need to give wider thought on this subject. The handicraft of Ladakh like *changpas* masks of *chaam* dance, the *pashmina* wool have global demand. Though the government has formed cooperative societies who are providing loan to artisans dealing with these handicrafts. But the people of Ladakh are not getting their appropriate share because of brokers and middle men. So more corrective and accurate measures should be explored.
- 3. The religio-medical system of Ladakh was considered as obsolete and full of superstitions because of demonology and spirits. But for the people of Ladakh it is a time tested therapeutic measures. The culture of Ladakh survived and flourished for thousand of years over this system. So, it has certain positive notions those are considered as essential for the society of Ladakh. Allopathy is not an alternative for them. Recently the government of India has appointed the Amchis in the villages of Ladakh on government payroll. There is need to integrate the traditional medical system with the modern medicine. Because this medical system is highly scientific and accurate and Tibeto- Chinese medicines is gaining wider popularity globally. Its origin could be sought in the Ladakh and Tibet plateaus.

To sum up it can be said that the people of Ladakh believes and perpetuates the interreligious, inter-communal harmony as it is represented in their popular eco-system and culture. The environmental challenges that Ladakh now grappling with will require technical expertise, well concerned policies, high degree of administrative skills and local engagement. It may be presumed that all the developments, policies, practices are local and ultimately all religions and cultural traditions are local as well. Ladakh needs political as well religious leaders who can put their own tradition for local development, economic sustainability, congruity and peace rather than conflict and ecological erosion.

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