CHAPTER III
CHANGE FROM SUBSISTENCE AGRICULTURE TO MARKET ECONOMY

Man has an ability to manipulate and transform nature to serve his own interests. With advancement in science, there has been a technological breakthrough in the agricultural development. As a result of that, there has been a change from subsistence agriculture to surplus production that has eroded the myth of economic backwardness. In our country, as a result of scientific cultivation, green revolution was brought about in the States of Punjab and Haryana. In this direction, people in the State of Jammu and Kashmir followed the process of surplus production, and increased their standards of living as well as general well being of people but Ladakh did not benefit much from this as agriculture was hard and unrewarding due to sub-zero climatic condition and a difficult terrain. Further, lower land holding size did not spark any enthusiasm among the Ladakhis. With changing times, there has been a shift in the agricultural processes in Ladakh. But subsistence agriculture and animal husbandry continue to be of vital significance to the indigenous people of Ladakh in providing food, sustaining social relationships and a cultural identity. Ladakh has a dual sector economy based on traditional subsistence farming, mostly in the rural areas, and a market-oriented economy in urban area. The purpose of this chapter is to give a brief overview of the economic condition of Ladakh including subsistence agriculture and cash economy. Though subsistence activities are mostly invisible in official statistics, due to lack of data and lack of acknowledgment of how they contribute to livelihood and well being of people but a general overview of subsistence economy based upon literature has been discussed in this chapter along with how in the recent years, market cash economy has replaced the traditional economic ways in many parts of Ladakh. This chapter also give a brief outline of the factors for slow economic process in the region and discuss various other developmental programmes as inputs for progress.

Ladakh’s slow Economic Development and forces behind it

It is an established fact that mountainous rugged topography coupled with unfavourable agro-climatic conditions has largely contributed for the backwardness of agriculture in this part of the country. Ladakh, located in the strategic penumbra, has
struggled for its status for better economy, and has political forces behind its slow economic development.

Ladakh, an independent kingdom till 1834, became a dominion of Dogra Ruler and by the late 1920s and early 1930s; the rule of the Maharaja in Jammu had begun to show serious weaknesses. Exorbitant taxation, forced labour and increasingly troubled relations between landowners and tillers had led to protests and demands for revision of the political and economic structure of Jammu and Kashmir. (Van Beek, 1999) The commission on this enquiry was set up, which was known as the Glancy Commission.

Economically, the condition of Ladakhi Buddhists was described as one of “wretchedness”, allowing only a minimal agricultural produce to be extracted. Hence, the Kashmiri Raj Maha Bodh Sabha which represented Ladakh to the commission called for the following:

1. A Commission to explore the natural resources of Ladakh to find employment possibilities for the people.
2. The advancement of loans to Ladakh’s people and
3. The state government to take steps to provide facilities for the establishment of colonies of Ladakhi Buddhist in the valley

Later Karan Singh, the first member of the royal Dogra family after his visit to Ladakh, wrote a letter to the first Prime Minister Pt Jawahar Lal Nehru urging him to accommodate the spirit of the people and shield them from the exploitation or discontent in view of the region’s strategic importance to India. Pt Jawahar Lal Nehru in response to Karan Singh Dogra’s letter replied that “the real difficulty with Ladakh is its economic backwardness” (Aggarwal, 2004:38). However, there were no strong steps taken for betterment of Ladakh’s economic condition.

With the visit of our first Indian Prime Minister Pt Jawahar Lal Nehru in 1949, along with his daughter Indira Gandhi and Karan Singh, son of Maharaja Hari Singh of Dogra Dynasty, three major conceptual frameworks shaped the manner in which Ladakh was perceived nationally. First, Ladakh’s geography was strategically important for the maintenance of the nation’s territorial integrity; the second that it

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1 Named after the chairman Bertan Glancy, who was a senior official on deputation of government duty.
2 An organization founded by Kashmiri neo-Buddhists in 1931.
was an economically backward area; the third that its culture was diverse but essentially Indian in spirit. These perceptions played a significant role in the policy making at the state and central level. But Ladakh, being part of Jammu and Kashmir was affected till today at every level of development due to religious and regional causes for Kashmir’s insurgency, that overlapped with the political instability in Kashmir valley (Bose. 1997).

There was a slow economic growth in Ladakh till 1960’s. With the Sino-Indo war in 1962, Indian government for the first time thought about Ladakh and sanctioned many development plans for Ladakh. Central and State government drew their attention towards Ladakh and opened offices in Ladakh, thus migration activities started from rural to urban areas of Ladakh. Two airports at Leh and Partapur were opened for air traffic. In summer 1974, Ladakh was opened for tourists, and then Leh-Manali road was opened in 1988 for civil traffic. Agricultural products increased two times in 1986 as compared to 1960. Many villages were linked with roads and transport system was improved.

Though things were improving in Ladakh but the people were not getting what they were assigned to. The feeling of discontent led to the desire for local autonomy which had been aired from time to time by Buddhist political leaders ever since the accession of Jammu and Kashmir to India in 1947. It was argued that the Buddhist population had been given a raw deal following the transfer of power from the Maharaja to the democratic institution of Federal India, without consulting people of Ladakh. This discrimination was seen as early as 1952, in a famous speech delivered during the discussion of the budget in the State Assembly, the Ladakhi representative, Kushok Bakula Rinpoche, who alleged that the state government was purposely neglecting the region:

> If you look at this budget estimate from end to end, you will not find even a single mention of Ladakh.... The government seems to have decided not to spend even a single paisa in this area.... At the present moment, the world is moving towards a delicate situation, when independence and self-determination is being promoted all over and these ideas have found a place in people's thinking and aspirations. When the New Kashmir and the New China are also looking towards this new dream, they are feeling it and they are trying to put these ideas into practice. To expect that the people of Ladakh can remain unaffected and unaware of these global and

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3 He is an emanation of the Buddha Amitabha and was one of the 16 disciples of Buddha. The 19th Kushok Bukla Rinpoche was born in 1971 and died in November 2005.
The demand for the succession from Kashmir and direct association with India has been heard again and again. Several investigations into this allegation have been carried out. For example, Gajendra Gadkar Commission was constituted to investigate regional imbalance within Jammu and Kashmir State which gave a report comparing the relative share of Ladakh in the total plan allocation in the state government, (Government of J & K 1968, 24-25). Its figures show that in the First Five Year plan, (1951-1955), it was more than 115 million rupees but Leh was allocated no plan funds. In the Second plan, Leh was allocated Rs. 8.5 million, out of a total state expenditure of Rs. 312 million. By the Third plan (1961-65), the total budget for development in the state rose to Rs. 640 million, out of which Leh was allocated less than 15 million (Van Beek. 2000: 537).

In August, 1989 a series of protests were again launched by the leaders of Ladakh Buddhist Association (LBA) for Union Territory status to Ladakh. Although the initial demand to secure Union Territory for the Ladakh was not acceptable to the Central Government, given the complexities of Kashmir issue, but LBA has played an active role in securing an Autonomous Hill Development Council for Ladakh. The Ladakh Autonomous Hill Development Council (LAHDC) Act of 1995 was enacted by the President of India, Shanker Dayal Sharma, on May 9, 1995. According to the Act, the legislative and executive powers and functions allocated to LAHDC were considerable. They included the formation of the budget, a tribal status, five years and annual plans for the district, allotment of land, promotion of language and culture of the region and education, desert development, measures for employment generation and alleviation of poverty, and the power to levy specified taxes and fees.

At the same time after a series of negotiations, The President of India, passed the constitution (Jammu and Kashmir) Scheduled Tribe order in October 1989, whereby eight tribes from Ladakh were listed Scheduled Tribes. For Ladakhis, tribalization was a radical step in constructing their political and economic identity. Scheduled Tribe status carried the potential of placing Ladakh under greater political control by the central government. Though the slow economic process started gearing up, but

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4 It is an organization earlier known as young men Buddhist association formed in 1938. Works in different villages' against the social evils such as polyandry, dowry, caste discrimination.

58
still Ladakhis believe that they are denied their share and have once again come together for UT Status demand for Ladakh, (this issue will be discussed in detail in next chapter). Let us now move towards Ladakh’s long traditional subsistence system and other economic prospects:

**Traditional Economic System of Ladakh**

Though there are scanty references regarding the ancient economic settings of the people of Ladakh. However, information available in the form of secondary literature is quite revealing. This harsh Himalayan land did not only offer survival but Ladakhis were able to live comparatively cheerful and prosperous life than their counterparts in other regions, where natural resources were more in abundance and the climatic conditions were less severe. Barring the capital town of Leh which formed as the nerve –centre for the Central Asian Silk Trade Route, the vast majority of the Ladakhis lived by subsistence farming in small village communities having working plots of land measuring between two to four acres. Households in Ladakh had a mixed economy of agriculture and animal husbandry with a few involved in horticulture as well as, in addition to subsistence economy there were others who were engaged in subsidiary labour work and services. Regarding agricultural production, the cereals like wheat, and barley were the subsistence crops of the people of Ladakh. Village communities were sustained largely by raw material available in the local environment and by an intricate nexus of reciprocal exchanges of labour and goods.

Though agriculture was then the mainstay of the people, but Ladakh enjoyed the reputation of being the nerve–centre of the Central Asian Silk Trade route as mentioned earlier. Ladakh used to act as an active centre for commercial link between Tibet, Armand, Persia and China on one hand and the plains of India on the other hand. A complex internal trade network of salt and wool had enabled farmers to diversify their lifestyle. The items exported from the region primarily comprised of wool, sulphur, borax and dry fruit. The dry fruits exported comprised apricots and currants or small seedless raisins, the Baltistan variety of these fruits being superior in quality and thus in greater demand. A salt of soda from Nubra and Rupshu was exported to Kullu and Kashmir for bringing out pinkish colour out of gur gur tea. (Kaul. 1998 ; 179) International trade involved products such as cotton, silk, brocade, western medicine from India, and charas, and carpets silk from Sinkiang. The
overland route between the plains of India and Sinkiang, a branch of the silk route, enabled Ladakhis to earn some cash income by renting their horses, donkeys and yaks as pack animals. The cash thus earned was utilised to purchase other basics necessities of life and some luxury goods (Dawa, 1999). As the Chinese communist sealed Sinkiang’s border with Ladakh, the Central Asian Trade via Leh and Kargil became a thing of the past. The trade which was valued at Rs 93 lakhs in 1920 fell to a little over Rs 78,000 in 1939-40. Sinkiang fell and Tibet too fell in 1957 to China (Perie, 2007: 44-45).

As a consequence of these economic conditions, Ladakh was adversely affected. District geography was one of the main reasons for its low subsistence economic system where the snow led streams and rivers were laboriously drained to cultivate fringe areas of villages. In 1974, Ladakh was put on the world tourist map, which resulted in boom in the economic sector. But on the other hand, tourism, hiking and trekking etc have the potential to alter the fragile environment as well as subsistence agriculture and social system of Ladakh considerably. To understand economic changes in Ladakh, there is a need to analyse the contemporary economic condition of Ladakh.

**Revisiting Economic Condition of Ladakhi in Contemporary Times**

**Agriculture**

As mentioned earlier, agriculture is the backbone of the district economy. Though, it has engaged over 70% of the work force mostly as cultivators, agricultural labourers and livestock reapers, yet this sector has now been affected by the service sector especially tourism that attracts the people towards it increasingly. According to 2001 Census, the work participation has been reduced by 0.3% (Official website of Leh district. Leh.nic.in.).

According to village records, the district has a reporting area of 51359 hectares of which 10193 hectares have been brought under cultivation. Difficult terrain of region determines the choice of crops. No region is below 10000 feet. Many valleys are situated at the elevation of 12000ft to 150000 ft (average elevation of the mountain ranges from 170000ft to 210000ft and many peaks rise upto 25000ft high). Thus the high elevation of the land has caused rare air medium (Jina, 1996; 63). This is one of the main factors that there are no monsoons and as such there is scarcity of water,
which makes it look like a desert. The entire cultivated area is irrigated and mono
cropped. The main source of irrigation is canal water. But what affects most from this
high elevation and scarce water resources, is the limited agricultural crops that are
cultivated in a limited span of period with a low agricultural productivity. Horticulture, mainly apricots and apples are concentrated to three blocks of the
district that is Khaltsi, Leh and Nubra. The fruits produced are either marketed in Leh
town and other places or supplied to the defence forces stationed in the region.

About two thirds of fields were planted with barley earlier, but now barley and wheat
has been replaced by peas and potatoes and other vegetables. There are farmers who
are growing large number of vegetables as that becomes an extra source of income for
them. The vegetables produced here include cabbage, cauliflower, radish, turnips,
spinach, beans, tomatoes and onions for commercialization. The production of all
vegetables is done at Leh and in the villages in its nearby vicinity, whereas the far off
areas are still practicing their subsistence agriculture of barley and wheat. Other than
agriculture, Horticulture has assumed a great importance in Leh district in recent
years. It plays a major role in supplementing the income of the farmers. In the valley
below 11,000 feet, there are orchards of apricots and walnut trees. Dried apricots are
the product which Ladakh exports to other parts of country (Hodge, 1991). The fruit
produced are marketed in Leh town, other places and supplied to the defence forces
stationed in the region through cooperative marketing societies. Poor agricultural
production in Ladakh has led to a shift from the traditional subsistence agriculture to
market based economy.

Tourism economy

In India, tourism is the second largest source of foreign currency behind the gem and
jewellery business. (Ted. 2001; 8) Economy of many remote-yet-beautiful places has
been dependent on tourism owing to their unique geographical setting, geomorphology, landforms and culture. The dawn of tourism era in the Himalayas
had an enormous influence on the local economy. Tourism in the Himalayas, seen
from a chronological viewpoint, can be divided into three distinct categories; the
religious pilgrimage, British hill stations of the 19th century and modern mass tourism
of the 20th century. Modern tourism in the Himalayan region includes activities such
as trekking, mountain climbing and sightseeing that have been introduced in 1950s,
when Sir Edmund Hillary and Tenzin Norgay climbed the Mt Everest and made the
Himalayas popular in other parts of the world, that had until then, more or less ignored (Walder. 2000: 9)

Ladakh neither falls under the religious pilgrimage nor British hill stations of the 19th century. It is the mass modern tourism that has taken the lead in this Himalayan region. Soon after the Sino-Indo war in 1962, a large number of roads were built in this part of the Himalayas. Although the purpose was primarily a military one, soon after in 1974, Ladakh was opened for the international and domestic tourists and the region experienced an enormous growth in tourism via air and road. Tourism is primarily concentrated in the Buddhist settlements of the Indus valley, of which Leh is the hub except for a few other sites. Many areas of Ladakh are still barred for foreign visitors owing to its proximity to the Chinese and Pakistan borders.

Leh figures on the international tourist map and attracts a large inflow of tourists both from home and abroad. Economy of the region is, therefore, to a large extent is based on tourism. This is the reason why Leh has a number of Hotels, Guest Houses, travel agencies and taxis. There are more than 300 hotels and Guest houses of different types in Leh. Tourist arrival in the very first year (1974) counts to be 527, while its number has increased to 1, 78042 in ending of October 2011 (Tourism Reception Centre, Leh). The Pangong lake and the world highest motorable road Khardongla (18350 fts) are the main attraction for domestic tourists, while monasteries and mountains attract foreign tourists.

Tourism, a major contributor to Ladakh’s cash economy, has brought clear economic benefits. The field around Leh got transferred into hotels, guest houses and restaurants and in many homes; a few rooms were set aside for tourists. The monasteries, started earning money through tourist entry fee and by shifting their annual festivals from winter to summer, when the tourist season is on, thus through the change, they have been able to make money, which they utilize for their maintenance and monastery upkeeping. The two royal palaces which offer rich cultural attraction to the tourist are also able to earn some money through tourism. The traders of Leh dealing in souvenirs and ordinary handicraft also stand to benefit through tourist’s influx. To meet the growing demand for such items these are partly got manufactured from Kashmir and Nepal while the artists from these places commendably cater to the western and Indian taste in a commendable manner. The tourism in Ladakh, besides construction of building and roads has led to increased production of food including
vegetables, expansion of marketing facilities, setting up of travel agencies and expansion of means of transportation. As tourism in Ladakh is rapidly developing into a potential industry, the necessary tourism infrastructure needs to be developed there to attract more tourists.

Tourism has won a wide recognition as an important industry in the district in view of its potential for creation of employment opportunities and generation of income on a large scale. This industry has a direct bearing on the socio-economic scene of the district. Tourism industry provides employment to a large number of people engaged in the related sectors like transport, hotels and catering service, cottage industry etc. and also promotes economic activities in the remote areas.

Ladakh region, due to its varied and interesting geology, inherent beauty, geomorphology and above all an eye-comforting panoramic landscape need to be further harnessed in exploring the wonder world of Geo-tourism. Geo-tourism is a term coined in 1997 by Jonathan B. Tourtellot and his wife, Sally Bensusen (Smith, MacLeod, Robertson. 2010) The National Geographic Society classifies Geotourism as tourism that sustains or enhances the geographical character of a place – its environment, culture, aesthetics, heritage, and the well-being of its residents. Consequently, the role of geology in evolving, defining and shaping the local geography has assumed significance. Realizing importance of Geotourism, in the tourism industry, Geological Survey of India has taken the initiative in the right earnest and the thrust is being laid to look for identifying Geo-tourism-specific geological signatures during the routine field investigations. With its vast but largely untapped potential, Geo-tourism can help blossom the local economy. Expectedly this would have a twin-effect – development and promotion of local tourism and dissemination and knowledge-sharing in the field of earth science in general and geology in particular. There are a number of geo-tourist corridors in Leh area, the important ones are: Leh – Mahe – Puga – Tso Morari; Leh – Mahe – Nidar – Kuyn Tso – Mankang Plain – Hanle; Nyoma – Chushul –Phobrang – Muglib – Tangtse – Changla; Changla – Tangtse – Pangong; Khardungla Pass – Panamic – Sasoma; Khardungla – Nubra (Diskit) and Kargil.

The money spent by the tourists has diverse effects on the local economy of Ladakh. It stimulates the economy and induces the so called multiplier effects of capital that
gets accumulated. Local subsistence farmers have started their own business that has aided the tourists; selling or renting supplies, providing guides etc. They indirectly benefited the locals. The tourism economy is centred in Leh and a very little benefit of tourism is accrued to more than 90 percent of Ladakhis who live outside this area. The only benefits outside the Leh, people get is through trekking and by renting out their ponies or by providing home stay scheme. Historically, all houses and habitation in Leh were confined to the area around the Leh palace, while all the other areas were agricultural lands. Over the years, as the population has increased and land fragmentation has begun to take up, houses have spread and come up on the agricultural land in the other parts of Leh. Furthermore, in order to cater to the demand of the tourist industry, a lot of infrastructure has come up in the form of hotels and restaurants and guesthouses, leading to the conversion of agricultural plots to other use.

In the light of the above analysis one may suggest that the economic changes through tourism affected the way of people. Our hypotheses in this regard get confirmed.

**Role of army in economic development**

The Line of Control (LoC) casts a long shadow over Ladakh; those who dwell in this shadow are separated from the rest of the Nation and from central regions of Ladakh by another boundary called the “inner line”. Police checkpoints, restricted travel permits, and other such rituals of surveillance monitor the movement of foreigners and Indians from outside the Jammu and Kashmir, who seek to venture into these areas.

The Sino-Indo war of 1962 resulted in the loss of more territory in the Aksai Chin area of Changthang, Ladakh, which India had claimed as a part of its territory. Grounds on which pastoral nomads had camped in search of green pastures and salt and paths through which monks had set forth to glean knowledge from the great monasteries in Tibet, became bone of contention between India and China, littered with military camps and outposts. With the 1962 war, a large numbers of troops were stationed in Ladakh and the concerned improvements were made in transport and communication links. After Indo-Pakistan war of 1965, a development committee was constituted to intensify work on electrical power, education and irrigation and to rectify regional imbalance within the state (Kaul and Kaul, 1992). In 1971, India and
Pakistan went to war again, this time to decide the fate of Eastern Pakistan, which would later become Bangladesh, but even though the bone of contention was at a sizeable geographic distance, Ladakh was not spared from a battle. Border skirmishes does not cease here, however, in 1984, in a planned mission called “Operation Megdoot”, Indian troops set up posts in Siachen Glacier, the highest battlefield in the world, on the North-Western border of Ladakh and finally the more latest Kargil war of 1999. Ladakh has experienced it all, which no other Indian state has witnessed in Indian history.

With these wars, Ladakh’s significance as a border area increased and subsidized food flooded in, making subsistence agriculture less necessary and generating a culture of dependency. The completion of Leh- Srinagar highway in 1976 for army purposes also brought travellers looking for adventure and spiritual peace. Due to strategic reasons, infrastructural development was given high priority, and the construction of roads and bridges improved mobility within the region. The military and civilian authorities promoted the introduction of new crops, fertilizers in the agriculture to reduce the dependence on food imports from the plains. Much of the surplus is purchased by the army, which has personnel stationed in Ladakh in large numbers which are equal in number if not exceeding the local population. Especially in the border areas like Changthang and Nubra, the livelihood of locals are heavily dependent on the presence of army. Government and army intervention has been generally regarded as positive among the rural population (Van beek, 2000). The presence of army gave a boost not only to vegetable production but to employment as well. Ladakhi soldiers had served in the home guard and Jammu and Kashmir militia, and now they were incorporated into a paramilitary outfit called the ‘Ladakh Scouts’. The Ministry of Defence, DRDO (Defence Research Development Organization) has set up a Field Research Lab. (FRL) in Leh to do research on new techniques in the agriculture and allied activities with a view to propagate the same amongst local farmers so as to satisfy maximum needs of army from local supply in Ladakh itself.

The army is also extending necessary exposure and training to rural youth and women folk to help them to take up income generating activities. The presence of Army units in District Leh is a boon for the local population. The Army is virtually bringing about a socio-economic revolution in the region.
Animal husbandry

Animal husbandry is of sizeable economic value employing around 18% of population of Leh district and generates substantial income to the rural population (District Statistics and Evaluation Agency Leh). The rearing of livestock is a core activity in the economic profile of the District. Although it is adopted as a subsidiary occupation by a majority of the rural population, yet it constitutes a vital activity for economic welfare of the farmers. Animals play a central role in the subsistence economy. The most common domesticated animals are sheep, goats, donkeys, cows, dzo and ponies. Dzo’s are the most important animals in agriculture processing. They provide the dung used for fuel, manure, transport, labour, wool and milk. At the busiest times of agricultural year, farm tool and draft animals are shared (Hodge.1991:53). However, the nomadic population of Ladakh depends exclusively on sheep and goat rearing for its livelihood, as they provide wool and Pashmina respectively and locals earn their living from selling these resources. While donkey and ponies are used for portering in trekking activities and are also useful in snowy winters for household affairs that are dependent upon them. Ladakh, being a cold desert does not easily provide grazing ground for animals, so a vast number of grazing lands, lie in the vicinity of the glacier at elevation of 15,000 to 18,000 feet. In villages like Sku-Markha, from June to October, one of the family members spend time in these pasture lands, caring for animals, gathering dung, collecting Pashmina, and making butter and cheese for the long winter months.

These animals furnish folks with meat and milk, butter and cheese, draft labour and transport, wool and fuel. Wool for spinning and weaving of cloth comes from the sheep. Coarse wool for weaving blankets, rough mats and sacks come from goats and yak. In a treeless land, the dried dung of these cattle, gathered all the year, are a precious resource, supplying not only cooking fuel but heat in the long winters, when temperature falls to -30 degree Celsius.

Ladakhi believes that animal husbandry and more so herding has become a sporadic activity now. Villagers distribute the responsibility of herding among those households who cannot afford to go or have not enough members to look after animals, with only one or two villagers taking out the stock of animals, out for

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5 Cross breed between yak and cow. Dzo is a male and dzomo is a female counterpart.
grazing at the high elevation. Wolves are constant threats at the pastures land, more for sheep and goats than for the larger animals. Even during the day, when flocks of two or three hundred animals are taken for grazing, the shepherds have to keep a careful watch. The small stone house up at the pasture, though owned by one household, is used by many for keeping their livestock, usually in exchange for some work, or milk or cheese. Because of the above difficulties such as wolves’ threats to livestock and low economic outcome in herding, has, replaced portering as an everyday occupation (Bhan. 2009: 142).

Time has changed now, the number of donkeys have grown steadily and maximum number of goats that any household now has dropped to 20-30 from 70-90.

The department of animal husbandry is engaged in the development of livestock especially the rearing of sheep’s and goats. The department has launched various development programmes for their overall improvement of livestock in the district with the major objectives, such as enhancing the magnitude of production, improving quality of produce and reducing the cost of production. Animal Husbandry is working for the development of these livestock with the objective to improve production of Pashmina, wool, meat etc. by genetic upgradation of animals, to find out ideal management techniques suited to increase production- reproduction traits, to reduce mortality and improve pasture as well as increase fodder production. This shows that local government administration has brought changes in the life pattern of people.

**Small scale economy**

Other than agriculture and animal husbandry, there are few who are involved in industrial sector. The Industries department has registered 690 small-scale units by March 2009. These are generating employment opportunities to the extent of 1839 persons. The Department of Handicraft functions in the district with the main objective of imparting training to the youth (males and females) in various crafts, enabling them to establish their own unit to minimize burden of employment and to manufacture end products for the realization of the revenue. The Handicraft Department is running 39 training centres of various crafts and had trained 189 candidates during the year 2008-09.
Ladakh has its own traditional handicraft economy such as shawl weaving, wood carving, and most famous thangka painting\(^6\), pottery, and carpet work. It is not feasible to set up large scale industrial units there for reasons like, region’s inaccessibility during winter months, lack of proper communication and infrastructure facilities. There have been recent developments of handicraft for production of carpet, nomad shawls, sweaters, socks, wood carving, fresco painting etc. These are receiving attention of the government through the planned initiatives but there is considerable room for improvement and expansion. Therefore, it is necessary that the basic structure of Ladakh’s economy which envisages cottage industries for which raw material and talent are locally available, need encouragement.

The primary occupation of the people of Ladakh is agriculture, though it does not give any economic benefits as it is a traditional sustainable source. Other than agriculture, people of Leh and Sku-Markha have been following various occupations such as government jobs, working in tourism industry, business and working in NGO’s. In order to get the insight about their seasonal pattern of occupational status and a shift in their occupation will be discussed in the following paragraphs.

**Land Use Pattern and Seasonal Pattern of ceremonies**

Tribal economy is mainly dependent upon agriculture. In fact, the economic activities in Ladakh move around land relationships. Although, in the recent years, the dependence on land is on the decline yet land and subsistence farming still holds society back in its position. Research in all Ladakhi traditions reveals that land is regarded as a non-alienable resource that cannot be parted with. Under traditional land tenure, most land utilizations are held and looked after collectively by the members of families and clans.

On an average family holding is between 2-4 acres; occasionally a household might have as many as five acres. In Ladakh, the agricultural cycle starts sometimes between April and May, depending upon altitude. Sowing is a time of lyrical beauty. Before sowing, feast is prepared in the honour of spirits of earth and water. For an entire day, a group of monks recite prayers; no one eats meat or drink *chang*. Some weeks earlier, manure brought on the backs of donkey is placed in heaps in the fields.

\(^6\) A Tibetan silk painting with embroidery, usually depicting a Buddhist deity, famous scene, or mandala. These thangka served as important teaching tools depicting the life of the Buddha, various influential lamas. One popular subject is The Wheel of Life, which is a visual representation of the Abhidharma teachings (Art of Enlightenment).
On the day of sowing, women quickly spread it in the furrows. As the sun appears the whole family gathers and the work starts. Once the sowing is completed, the crop does not need much care, only watering, which is usually done on a rotational basis. Households are allotted certain period of time every week or 15 days, when they can divert the main channel of water stream into their own fields.

Harvest is another festive occasion. A line of reaper, old and young men and women, sing as they cut the crop low to the ground with sickles. In the evening, people gather to sing, drink and dance. Crop is piled in sheaves and is then carried off in back-load to be threshed. In a large circle about thirty feet in diameter threshing floor is joined. A number of animals are attached in a line to a central pole. They trample the crop, bending down to crush on the grain as they walk. Dzos are the best animals for this purpose. Winnowing is extraordinarily graceful, the crop is scooped up into air; the chaff blows away the wind, and the grains fall to the ground. Even during the harvest season, when the work lasts long hours, it is done at a relaxed pace that allows an eighty year old as well as a young child to join and help. People work hard but at their own pace, accompanied by laughter, play and song (Hodge.1991:21). There are work-songs which are sung to lighten the stress involved in an arduous work. The ploughman sings a song in praise of the yak that helps in sowing the seed and yet there is a song propitiating Gods to hasten melting of snows and releasing water for irrigation of fields. The harvest songs are sung in praise of a crop and a sickle used in cutting it whereas there is a song sung for separating chaff from the grain (Kaul.1998:159).

Over the years, the land under agriculture operations has declined considerably. The cropping pattern under the subsistence agriculture got shifted over to the market based agriculture production of vegetable selling in Leh and around and to the use for tourism purposes. Although the situation in rural parts still remains the same but this slow change is heading its winds towards rural parts as well. Regarding the transition from subsistence agriculture to tourism industry, respondents were asked about their family occupation since 1991.
### Table 3.01. Distribution of respondents on the basis of change of their family primary occupation over the years

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</tr>
<tr>
<td>2</td>
<td>Government jobs</td>
<td>9(9.38)</td>
<td>-</td>
<td>50(52.08)</td>
</tr>
<tr>
<td>3</td>
<td>Tourism</td>
<td>10(12.50)</td>
<td>-</td>
<td>18(18.76)</td>
</tr>
<tr>
<td>4</td>
<td>Shopkeepers</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Working in private sector</td>
<td>-</td>
<td>-</td>
<td>7(7.30)</td>
</tr>
<tr>
<td>6</td>
<td>TOTAL</td>
<td>96(100.00)</td>
<td>98(100.00)</td>
<td>96(100.00)</td>
</tr>
</tbody>
</table>

♦♦♦ Figures in bracket represent percentages

Table 3.01 clearly shows that before 1991, majority of Ladakh population both in urban as well as rural, was dependent upon subsistence agriculture and animal husbandry, while there were 9 (9.38%) families in Leh, whose primary source of income was government jobs, there were 10 (12.50%) families involved in tourism. However, all the families in Sku-Markha were dependent upon subsistence agriculture and presence of tourism and any other source of income were totally absent in the region. From the years 1991-2001, a large number of families 50(46.86%) of Leh started working in government departments while there were still 21(30.20%) who were dependent upon subsistence economy and 1(1.04%) household each had opened a shop and was working in NGO respectively. In case of Sku-Markha, there were still majority, 94(95.96%) of households who practice subsistence ways of economy and only 3(3.06%) household started exploring new venture of tourism. Only 1.02% families were dependent upon government jobs. The transition from agriculture to tourism appears more staggering in the years from 1991 to 2011, when the majority of the respondents have converted some portions of their agricultural land for tourism industry purposes. It is astonishing to note that there was no family left in Leh who

70
practiced subsistence agriculture as its primary occupation in the recent decade. Majority of them, 83 (86.46%) of the respondents have started working in government departments and that has become their primary source of income and occupation. Besides, there were 6 (6.25%) families practicing tourism and 4 (4.17%) families were following occupations such as working in NGO's and finally 3 (3.12%) families were running shops as a primary source of income and occupation. On the other hand in Sku-Markha, an overwhelming majority of the families 94 (95.92%) have shifted their occupation from agriculture to tourism industry. Only 2 (2.04%) households are left on subsistence agriculture and there is only one family which is dependent upon government job.

Thus, in an overall analysis it is observed that there has been a sudden change in the source of income and occupation of locals has drastically occurred in last decades after tourism invaded the region. It clearly shows that there is a change from the subsistence agriculture to government jobs in Leh but in case of Sku-Markha, there is change from subsistence economy to tourism. There are no significant changes in the government jobs as there was only one household involved in government job. Tourism has become a dominant economic activity mainly in Sku-Markha but in case of Leh it is still taken as secondary source of occupation. There are changes in agricultural production as well. The higher commercial value of some of the agricultural crops and some of the horticultural crops like apricot etc seems to be a motivating factor for the people of Ladakh to go in for this kind of transitional shift from the traditional economy. It is difficult to get an accurate and quantitative account of the economic condition of the people in this part of country. However, the sudden process of economic development during the past three decades and especially in the last decade has made Ladakhis economically sound. This again confines our hypothesis that tourism has resulted in a shift from subsistence level agriculture to a market based economy.

**Income**

Income in the context of this study refers to returns on economic activities that the family members are engaged in. Since land is the main source of income, most of the family members are engaged either in government jobs or tourism industry besides
one or two members who are either engaged in agricultural activities or in petty business. It is apparent from the above observation that people living in Leh (urban sector), enjoyed a higher income status as compared to those living in Sku – Markha (rural sector) in Ladakh. There is a sharp contrast between the annual incomes of both the areas as a higher proportion of those living in urban area (Leh) have their annual income between Rupees 2,50001-3,50000/- while those living in rural (Sku-Markha) have their annual income upto 1,50000 Rupees.

This shows that the economic condition of people living in rural parts of Ladakh is not that prosperous as it is in urban parts of Ladakh. It is astonishing to note that as compared to people of Leh, only one family is into government jobs. This difference is attributed to low level of literacy rate in Markha valley that has hampered their job prospects there.

For two thousand years in Ladakh, a kilo of barley has remained a kilo of barley, however, now money, which was never important earlier, has taken an important place in people’s lives (Hodge.1991;102). In the traditional subsistence economy, money played a minor role, using primarily for jewellery, silver and gold. Basic needs such as food, clothing and shelter were provided without money. The labour one needed was free of charge, part of an intricate web of human relationship. In the traditional Ladakhi villages, every family owned the land and labour. Disparities of wealth were minimal. About 95 percent of population belonged to what one might call middle class. The remaining ones were split more or less evenly between aristocracy and a lower class. But there have been changes in the economic status of people and there are different factors related to that. There is tourism, which has been considered as the main contributor of the changed economic situation atleast in the two selected areas, that is, Leh and Markha. Another main factor which led to better economic condition of the region was due to increase in government jobs, LAHDC, initiated various schemes etc for improvement of economic condition of the Ladakh which have been discussed later in details.

Role of education in the economy

Education in every sense is one of the fundamental factors of development. It plays a very crucial role in securing economic and social progress and improving income.
Economic backwardness among the Ladakh Buddhists was prevalent as a result of educational insufficiency. Since Buddhists were poorly educated, they were eligible only for menial work. The quality of public education was poor. As a matter of fact, a more than 90 percent of students failed in the matriculation exam till 1990’s (Wangchuk, 2007). Improvement in education has played a major role in getting better jobs for Ladakhis. But on the other hand, there are educated young men of the region who study outside the region like, Chandigarh and Delhi or in Leh as well, and they are not willing to go back to farming and herding.

**Introduction of new techniques in agriculture and animal husbandry**

The traditional feature of Ladakh’s agricultural activity has, however, undergone some changes with the introduction of improved means of production, introduction of chemical fertilizers and the availability of food through imports from Kashmir state and the plains of India. DRDO has successfully introduced high-yielding varieties of potatoes, tomatoes, cabbage, cauliflower, turnip etc. DRDO has also made much progress in the development of poultry and cross breed cows yielding more milk than local cows in the district of Ladakh. The army scientists not only conduct research and supply the seedlings but also visit private farms.

In recent times, subsidized rations, of rice and wheat, new commercial market for fruits like apricots, and increasing employment in the armed and civil services had begun to compete with older habits of food consumption, causing the declining importance of barley in urban areas and among the youth (Aggarwal, 2004). The harvest has also improved better farming practices. Let us analyse the various factors responsible for the change in the economy:
Table No. 3.02: Views of respondents regarding factors responsible for changes in economy of Ladakh

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Factors</th>
<th>Leh (Urban) (Mean Score Value)</th>
<th>Rank</th>
<th>Factors</th>
<th>Sku-Markha (Rural) (Mean Score Value)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction of tourism</td>
<td>1.52</td>
<td>1</td>
<td>Introduction of Tourism</td>
<td>1.08</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Increased Government jobs</td>
<td>2.00</td>
<td>2</td>
<td>Introduction of new techniques in agriculture and better animal husbandry</td>
<td>2.14</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Introduction of Indian army</td>
<td>3.10</td>
<td>3</td>
<td>Introduction of army</td>
<td>2.80</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Role of education</td>
<td>3.73</td>
<td>4</td>
<td>Role of education</td>
<td>3.31</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>Introduction of new techniques in agriculture and Better animal husbandry</td>
<td>4.83</td>
<td>5</td>
<td>Increased Government jobs</td>
<td>4.90</td>
<td>5</td>
</tr>
</tbody>
</table>

An attempt has been made to analyse the various factors that has brought out the changes. A set of six factors was provided to the respondents and they were asked to rank these in order of their preference. A factor ranked first, was given a score of one while that ranked second was assigned a score of two. In the same way, the other factors were ranked and the scores were assigned according to their ranking position till the last factor, which was assigned the score of six. A mean score value was worked out for each of these factors separately for Leh and Sku-Markha. The lower the mean score value, the higher was the rank assigned to that factor.

Table 3.02 brings out that the respondent’s priority to these factors for change in the economy in Leh (Urban) and Sku-Markha (Rural), shows that the “introduction of tourism” (1.52), (1.08) respectively is at the top in the priority list while “introduction of new techniques in agriculture and better animal husbandry” (4.83) in Leh and “introduction in government jobs” (4.90) in Sku-Markha stands at the bottom of the list. Analysis of data above shows that in Leh (urban), “introduction of tourism” (1.52), is followed by “increase in government jobs” (2.00) and then followed by “introduction of Indian army” (3.10), these were ranked higher at first, second and
third places respectively in the list. At the fourth rank, “role of education” (3.73) followed by “Introduction of new techniques in agriculture and better animal husbandry” (4.83). When we asked the same question to our respondents in Sku-Markha (rural), there are completely different responses given for changes in the economic system of Sku-Markha except that they believed that “introduction of tourism” (1.08) has brought changes in their economic system as people of Leh also ranked it in the top position, followed by “introduction of new techniques and better animal husbandry” (2.14), and “introduction of Indian army” (2.80) at the third place followed by “role of education” (3.31) which was ranked fourth in the priority list. According to respondents “Increased government jobs” (4.90) is stated to be last in their preference. From the above data, it is quite evident that introduction of tourism in both the places has played a significant role in the changes that have occurred in their economy. It is also clear from the above data that increased government jobs in Leh (urban sectors) have been a driving force in their economic status while in Sku-Markha it is the factor which is least changing their economic conditions. This confirms our hypothesis that tourism has led to better economic life of the people, but at the same time it is surprising that rural parts of Ladakh are completely dependent upon tourist industry;

As one of the respondent stated:

Tourism sector is also an extremely unpredictable one; the earning out of this sector is also extremely fluctuating. This became obvious on several occasions like the 1989 agitation and Kargil war in 1999 and more lately after the 2010 cloudburst. Not only had this but the Indian airlines hijacking in 1999 also led to decrease in the arrival of tourists. However, tourism industry has acquired the position of generating main source of income at least in Sku-Markha, while avenues like education and employment are not given that importance, which in long run will affect the cultural scenario of the region.

**Impact of changed economy**

Tourism is widely acknowledged as having both advantages and disadvantages. It is not only that the sudden economy growth has better side to flaunt about but there has been an impact on the lives of local population by the fast and easy money flowing in Ladakh. The most important and visible impact of modern tourism is that, it has itself changed the structure of society as certain groups of the population interacted with the
tourists by providing services to them while others are clueless about tourism. There are many Ladakhis who have married foreigners and who now live abroad leaving behind their families. However, the social and cultural effects of tourism are more complicated to isolate from the consequences of development program and broader pressures of modernization. The lack of information and inadequate communication among Ladakhis, to those who were involved in tourism, had also an influence on the local culture by introducing new elements and showing the people different modern ways of living. Some Ladakhis especially in villages do not comprehend why tourists visit Ladakh while on the other hand some tourists tend to be uninformed about the culture of Ladakh. They tend to see themselves as observers catching up a glimpse of an exotic preindustrial culture. Just as the Ladakhis do, tourists make judgements based upon physical appearances and unexamined preconceptions. Influenced by the western stereotypes of the Third World, tourists see Ladakhis as poor, dirty and deprived peasants, in need of development. The other impact of tourism is that the region has also witnessed a major shift of population from the villages to the urban centre of Leh. The migration of educated people from the villages to Leh in search of job opportunities or work at various sectors, mainly tourism industry has put tremendous pressure on the inadequate infrastructure of the Leh area, which has now become disorganised and badly designed city. There is an explosion of construction in Leh, forcing many temporary residents for rural parts of Ladakh, drained by the tourist economy, to live in a rented house without basic amenities of water and sanitation facilities. This migration deprives the villagers of labour power, thereby adversely affecting agricultural sector. This has upset the entire social structure, especially the elders and women who experience great hardship in villages. The reciprocal relations of mutual aid are worn out by the expansion of monetary economy. Labour is hired for agricultural work due to large urban migration from the rural parts of Ladakh.

One of the major and direct negative effects of tourism has been on environment. Eckholm describes the Himalayas as a fragile ecosystem, where “forces of ecological degradation are building so rapidly and so visibly’ (Eckholm.1975:765). Another severe problem related to tourists and trekking in the Himalayas is that of waste disposal. Despite a law from 1979 onwards, that requires trekkers to bury or carry out their
waste, the amount of waste left behind on the trails and camp sites is tremendous. The garbage left behind may one day prove fatal if not checked.

The fragile ecosystem of Markha is already endangered, as a consequence of tourist activities largely stemming from trekkers coming into the region. Although restricted trekking on well-defined and narrow routes may cause immediate damage to the ground cover, and certainly rise in the number of animals grazing in the locality, hundreds of incoming trekking equines are pasturing out overnight; which affects Markha as a whole. However, in past few years there has been a decline in the wildlife, due to increase in trekking and their pack animals. A significant decline in the quality of pasturage, a loss of habitat for indigenous species, and decline in its bio diversity is part and parcel of increasing tourist activities (Morup.2009:152).

Another problem that arises with the increasing number of tourists in the Himalayas is trail degradation. When trails are not maintained properly, soil erosion and deep ruts along the trail will occur because of heavy use by the tourists and local people. These obstacles make it difficult to walk on the trails, thereby inducing people to seek alternative paths and leave the formal routes. These informal paths, in consequence, lead to increased damage of the vegetation cover through trampling. The damage to the vegetation cover, in turn can lead to habitat loss and a change of species composition (Walter.1999; 17).

Most of the benefits of tourism in Ladakh are accrued to the small groups. The significant amount of money does not stay in Ladakh. Increased inequality and a commitment to a westernizing development have led to many social and environment problem. Although, inspite of the influence of tourism, they have been able to maintain their distinctive lifestyle and customs. The narrative given below will support these observations.

One of the respondents stated:

Ladakhis have become less sensible, with this sudden inflow of cash economy. There was no term rich and poor earlier but now not only such terms are often used in vogue but there has been increased gap between the ‘rich ‘ and ‘poor’. And this unexpected sudden rich class is nurtured through the tourist economy. Those involved in this industry suddenly got impetus in their economic wealth while others are still living their lives on the subsistence agriculture. But what one has to understand here is that Ladakh is situated at very strategic location, if something goes wrong
tomorrow with China or Pakistan, tourism will be shut down. There is lack of policies in Ladakh, government has to look for better economic polices so that Ladakhis are benefitted equally. Other than tourism Ladakh is full of recourses such as raw pashmina that is regenerated here only. Government has to look for setting up a small scale industry for processing of pashmina within the region, so that locals can benefit as much as they can. Secondly, Ladakh is full of minerals like magnesium, iron; sulphur and scientist are still searching for uranium. It would be great if our land can provide reliable sources to the country other than only tourism.

Another respondent’s believed that:

It is economy that has changed Ladakh both in better and worst ways. With the increased option of source of income, no doubt local’s living standard of the local has increased but the crisis faced is the traditional subsistence agriculture. Customary subsistence practices of sowing and harvesting are not only culturally but also locally important, although they do not provide any economic benefits but that does not mean that they relate to a waste of time. Subsistence agriculture has been practiced in Ladakh since time immemorial, from generation to generation and has been maintaining ecological balance. There are households in rural parts of Ladakh who have left their fields and shifted to city for so called better life. But shift to Leh in search for better income opportunities is not the solution. Region has started facing problem of unemployment and the State government is unable to make relevant economic policies. On top of that LAHDC has got minimal powers and is unable to generate work for Ladakhis.

DEVELOPMENT PROCESS

For Ladakhis, securing Ladakh Autonomous Hill Development Council (LAHDC) and tribalization was a radical step in constructing their political and economic identity. People were concerned over the rapid decline of the region's resources - natural, social and cultural have witnessed in the recent past. To follow the change with continuity but without compromising on its identity, the Ladakh Autonomous Hill Development Council (LAHDC) had come out with "Ladakh 2025 Vision Document"7 which emphasizes the need to integrate the old with new and to deal with the problem of decline in its resources. The LAHDC's Vision Document 2025, suggests a more detailed set of strategies to help Ladakh find its place in the modern world. The need of the hour is to put an immediate stop to the shocking deterioration of our rich heritage by developing an appropriate set of preventive measures."

7 the document is said to be the brain child of Rigzin Jora, the State Minister for Science and Technology, the document deals with Leh district only since Kargil has a separate Autonomous Hill Council.

78
The Vision statement envisages that Ladakh will emerge as country's best model of hill area development, contesting with an environment and its sustainability rooted in ecological protection, crucial heritage and human development. However, the document was divided into four sections, Traditional Economy, New Economy, Physical Infrastructure and Social Infrastructure. Besides land based economy, the Vision Document lays thrust upon Information Technology and Tourism. The Vision Document stresses upon marketing Ladakh as a tourist destination separate from Jammu and Kashmir.

Vision 2025 document statement says:

To develop rural Ladakh in such a manner that the disturbing rural-urban migration scenario is arrested – by strengthening block headquarters, making current public works functional, and constructing new works that are needed – while at the same time giving due emphasis to the preservation of traditional Ladakhi monuments, cultural practices and the environment.

There are quite a few number of programmes that are working on the lines of development in Ladakh; these programs are coordinated by the Department of Rural Development. The Department of Rural Development is one of the premier live departments of the Ladakh Autonomous Hill Development Council (LAHDC), Leh. The main mandate of the department is to implement centrally sponsored schemes which include Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA), Indira Awaz Yojna, and Total Sanitation Campaign (TSC). The department is also having the Programme implementation agency of 40 projects under Haryali and watershed scheme. Besides that the Council has also assigned the department with various works under the Community Development Normal (CDN), Development of Panchayats, and other department works under plan funds. Another important scheme is the Border Area Development Fund (BADP) aimed at the development of the border areas. The majority of works under this head are also implemented by the department. One time programme sanctioned to the LAHDC being implemented by the department is the Model Village scheme under the Prime Minister Reconstruction package in which five model villages have come up in five blocks. LAHDC is also collaborating with the National Mission on Bamboo Applications (NMBA) where pre fabricated structures are being erected for
Anganwadi Centers, Primary Schools and Community Halls. The Rural Development
Department is also the custodian of the Five Community Information Centers being
operated in Leh District.

Some of the schemes that are currently running in Ladakh are being presented below;

Central Government Schemes:

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREG)

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was
launched in Leh district from April 2008 onwards. During 2008-09 an amount of Rs.
183.42 lacs was released by the Central Government while Rs. 20.38 lacs were
released by the State government. The opening balance as on 01-04-2008 from the
unspent balance of Sampoorna Grameen Rozgar Yojana (SGRY) was Rs. 6.62 lacs.

Table 3.03: Distribution of Funds received incurred under MGNREGA from
2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>Opening Balance (in lacs)</th>
<th>Funds received (in lacs)</th>
<th>Centre Share</th>
<th>State Share</th>
<th>Misc</th>
<th>Total (in lacs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 2008-09</td>
<td>6.62</td>
<td>183.42</td>
<td>20.38</td>
<td>6.18</td>
<td></td>
<td>216.60</td>
</tr>
<tr>
<td>2. 2009-10</td>
<td>114.878</td>
<td></td>
<td></td>
<td></td>
<td>2.498</td>
<td>117.376</td>
</tr>
<tr>
<td>3. 2010-11</td>
<td>10.085</td>
<td>115.94</td>
<td>40.00</td>
<td>2.866</td>
<td></td>
<td>168.891</td>
</tr>
<tr>
<td>4. 2011-12</td>
<td>18.536</td>
<td>106.88</td>
<td></td>
<td></td>
<td></td>
<td>125.416</td>
</tr>
</tbody>
</table>

The total funds available under the scheme during the year 2008-09 were Rs. 216.60
lacs. The expenditure incurred during 2008-09 was Rs. 101.632 lacs. During the year
2009-10 the department had an opening balance of Rs. 114.878 lacs. During this year
no funds were received from the Central government. The expenditure incurred
during 2009-10 was Rs. 106.535 lacs. During the year 2010-11, opening balance was
Rs. 10.085 lacs. An amount of Rs. 115.94 lacs was received from Central
government while Rs. 40.00 lacs were received from State government as matching
share. An amount of Rs. 150.348 was utilized during the financial year 2010-11.
During the 2011-12, the opening balance is Rs. 18.536 lacs. An amount of Rs. 106.88
lacs has been received from the Central government. The total funds available with
the department were Rs. 125,416 lacs. The Utilization Certificates and audit reports of all the financial years that is, 2008-09, 2009-10 and 2010-11 were submitted to the Central government as well as State government well in time.

It is ensured that there has been no misappropriation and diversion of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) wages in Leh district and as such no complaints have been received from any sources.

The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) guidelines suggest that Districts develop a District Perspective Plan (DPP) so as to facilitate advance planning and to provide a development perspective for the district. The aim is to identify the types of MGNREGS works that should be encouraged in the district, and the potential linkages between these works and long-term employment generation and sustained development. According to our understanding, Leh is the first district in J&K state to carry out this exercise.

In Leh District the District Perspective Plan for five years has been prepared for the years 2011-12 to 2015-16. The District Perspective Plan (DPP) has been prepared through the innovative process of Micro Level Planning (MLP) involving all the stakeholders. It has been prepared under the aegis of Ladakh Autonomous Hill Development Council (LAHDC) with institutional assistance from the Tata Institute of Social Sciences (TISS) and the District Rural Development Agency Leh (DRDA) as the nodal agency.

**A brief outcome of the exercise is as follows.**

A total of 16,524 Households are entitled to wage employment of around Rs 83.03 lacs person days for 5 days at 100 days per Households per year. The seasonality of the wage demanded is estimated at an average of 33 days in spring, 23 days in summer, 29 days in autumn and 6-15 days in winter. A total of 5598 projects/works have been proposed for a 5 year period by Gram Sabha. Thematically, top three priorities for works are development of household land, irrigation and rural connectivity.

**Total Sanitation Campaign (TSC)**

Total Sanitation campaign (TSC) is a comprehensive programme to ensure sanitation facilities in rural areas with broader goal to eradicate the practice of open defecation. TSC as a part of reform principle was initiated in 1999 when the Central Rural
Sanitation Programme was restructured making it demand driven and people centered. It follows the principle of “Low to no subsidy” where a nominal subsidy in the form of incentive is given to rural poor households for construction of toilets. The key intervention areas are Individual Household Latrines (IHHL), School Sanitation and Hygiene education, Community Sanitary Complex, Anganwadi toilets and rural sanitary marts. In Leh District Total Sanitation Campaign was launched in the year 2004-05. The National Scheme Sanctioning Committee has approved an amount of Rs 724.65 Lacs for the whole life of the project which also includes the state matching share of Rs 153.77 lacs and the beneficiary share of Rs 113.10 lacs. The target set has been 6090 for Individual Household Latrines (IHHL), 230 units for Sanitary Complexes, 351 units for School Latrines and 400 units for the Anganwadi toilets.

No funds have been released in this scheme from Govt. of India so far. However an amount of Rs 25.00 lacs has been earmarked as State Share by the Council.

**Indira Awaaz Yojana (IAY)**

Indira Awaaz Yojana is a flagship scheme of the Ministry of Rural Development Department to provide houses to the Below Poverty Line (BPL) families in the rural areas. It has been in operation since 1985-86. The funding of IAY is shared between the Centre and State in the ratio of 75:25. The objective of the scheme is primarily to help construction or upgradation of dwelling units of the community living below the poverty line by providing a financial assistance dully recommended by the elected representatives of the area. The financial assistance provided under IAY for construction of a new house was revised from Rs. 38, 500/- pr unit to 48, 500/- per unit with effect from 01-04-2010. During 2008-09 additional Central Assistance under IAY was released for rehabilitation of BPL displaced families in the border area. It was to be utilized for rebuilding the dwelling units of selected BPL families who have not received any assistance for this purpose from any other source.

**District Plan (Community Development):**

The funds for the community development are provided from the District Plan and the works mainly taken up under this head are the various small infrastructure and other facilities that need to be given at the village level.
**Model Village:**

Five villages have been identified in five blocks in Leh District to portray as a model village. An outlay of Rs 120.00 lacs for each model village have been sanctioned for the Prime Minister reconstruction plan. 98% physical and financial progress has been achieved so far.

**Community Development Fund (CDF)**

In Leh District, the Community development funds of 1 Member Parliament, two member Legislative Assembly, one member Legislative Council, and 30 Councillors of LAHDC allocate their community development funds for various developmental works. On an average, 90% of the community development works are assigned to Rural Development Department for execution.

**Border Area Development Programme (BADP)**

A special allocation is given to all the blocks bordering other countries so that the border areas develop at par with the other areas of the country. Leh District has two blocks of Nubra and Khaltisi which share the same border with Pakistan (BADP Indo-Pak) and another two blocks of Nyoma and Durbuk bordering China (BADP Indo-China).

**Prefabricated structures**

Ladakh Autonomous Hill Development Council in a special initiative is experimenting with the Pre-fabricated structures made of Bamboo material to be used for Anganwadi Centres, schools, community hall and toilet blocks. The materials are being provided by the National Mission on Bamboo Applications (NMBA) Department of Science & Technology (DST), Government of India.

**Watershed and Haryali Projects:**

Some of the watershed and “haryali” schemes having objectives taken up are harvesting rain water, restoring ecological balance, employment generation, community empowerment and development of human and other economic resources of the rural areas.
Community Information Centers

Under the Community Information Centre project the state of the art, computer communication, infrastructure has been set up in the six blocks of the district which are Nyoma, Durbuk, Kharu, Leh, Nubra, and Khaltsi.

Project Objectives:

- ICT Infrastructure at the Block Level.
- Web access and Internet Services such as E-mail
- Market access and e Commerce
- E-Learning, E-Medicine and E-Consulting
- IT awareness among local populace
- Employment information
- Edutainment.

Multi Sectoral Development Plan:

The Multi Sectoral Development Plan for Minority concentration District (MCD), in Leh was approved during 2009. Under this scheme the department is constructing 40 Anganwadi Centres at an estimated cost of Rs. 4.40 lacs for each Anganwadi Centre. An amount of Rs. 88.00 lakhs was released during 2009-11 for this purpose and the expenditure incurred was Rs. 86.32 lacs.

Flood Damaged:

Leh District was hit by flood and cloud burst on the fateful night of 4th and 5th August 2010. The flood and cloud burst damaged life and property to a very large extent. It hit the entire nine Blocks of Leh district covering 93 Panchayts Halquas with 113 villages. Most of the Irrigation Khuls / head works and foot bridges were totally damaged.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Scheme</th>
<th>Financial (in lacs)</th>
<th>Physical Target</th>
<th>Achiev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allocation</td>
<td>Expdt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Flood damaged</td>
<td>160.50</td>
<td>160.50</td>
<td>891</td>
</tr>
</tbody>
</table>

Success Stories:

- Six Panchayat Halqas of the District have been conferred with the prestigious Nirmal Gram Puraskar by the President of India for achieving 100% sanitation coverage.
- CIC Nyoma has been included in the Limca book of records for the Highest Community Information Centre.
- Carried out awareness camps for the National Rural Employment Guarantee Scheme NREGA and Total sanitation Campaign in all the blocks and almost in every Panchayat halqas.

Respondents were asked about their awareness regarding different governmental development schemes. A brief account is given below.

There were mixed responses, in both the selected places. The majority of respondents in Leh, 55 (57.29%) stated that they were aware of few governmental development programmes or schemes. There were 41 (42.71%) persons who stated that they were unaware of the any governmental programmes and schemes running in Ladakh.

However, in case of Sku-Markha, out of total 98 respondents, the majority 95 (96.94%) mentioned that they were unaware of the any development scheme or programme for the area. There were 3 (3.06%) respondents who were aware of few programs that were running in Markha.

In an overall comparative analysis it became clear that the majority of respondents of rural Ladakh (Sku-Markha) were not aware of any government development programmes being run, whereas in the urban sector (Leh), there were still a majority who were aware of few programmes. One of the main reasons for this disparity might be the poor communication and poor education of the rural sector. Due to inaccessibility there might not be any worker may not be willing to go to Sku-Markha and make villagers aware of the various development programmes. On the other hand, low level of literacy might be a big hurdle in the awareness, as they may also not know that there exists any such plans.

Interestingly, there were few respondents who revealed that their village panch was man of no help. He has neither been helping them about various plans and nor he has communicated to the villagers about the funds and the development plans. They said that there was some ‘babu’ from nearby village kaya, who had been coming to
Markha and helping them in creating awareness and telling them about various development schemes.

When the respondents were further asked regarding their views on whether developing activities in their area are improving their economic status or not, the responses were as follows:

Out of the total 96 respondents of Leh (urban), 67 (69.80%) believed that development activities were improving the economic status of Ladakh, and there were 29 (30.20%) respondents who believed that there was no economic empowerment or improvement in economic status with these development programmes.

In case of Sku-Markha (rural), the majority believed that development activities were not improving the economic status of natives of Ladakh. As many as 97 (98.98%) believed that these development activities were not helpful in improving the economic status of rural Ladakh and only 1 (1.02%) stated that they believed that development activities were taking place in rural areas of Ladakh and thus improving their economic status.

In a relative investigation of both the urban as well as rural Ladakh, it is quite evident that development activities have not been of much use to them, more so to rural folks but in context of urban area, it is confirmed that local government/administration interaction has brought changes in the life of the people by generating employment opportunity of various sorts.

**Summary**

In short, we can say that today, people of Ladakh by and large are economically strong. While understanding the economic condition it can be concluded that political setup has played significant role in achieving the current status of Ladakh. Ladakh Autonomous Hill Development Council and tribalization of Ladakhi was a radical step in constructing their political and economic identity. But Ladakhi leaders still believe that the region has been given raw deal because of their transfer to the state of Jammu and Kashmir and they are still affected adversely for being a part of Kashmir state.

While discussing about the economic condition of Ladakh, scarce and limited resources has made Ladakhis self sufficient. The vast majority of the Ladakhis in the past lived by subsistence farming and had a mixed economy of agriculture and animal
husbandry with few involved in horticulture as well. Landholdings were generally small. Since every farmer was almost completely self-sufficient, and much of farming was shared, for instance, during the harvest, farmers used to help each other to gather their crop. The mode of cash in olden days was through providing help in trading avenues.

However, in recent years, new avenues of employment have opened up, including jobs in the army and vastly expanded local administration. These new options have helped to absorb a large part of the increasing population. This has also led to changes in economic system. New sources of livelihood have also led to a migration of people from villages to Leh town, leading to a shortage of household labour for agricultural activities. This has in turn led to farmers to hire labour. Previously, with cooperative labour sharing between people, a farmer had no need for money. But the changing economy has made it difficult for individuals to remain farmers. There has also been a concomitant reduction in livestock possession. This has led to shortage of manure and increased use of fertilisers. These changes in the livelihood options and in the agrarian system have affected land use pattern largely in the town of Leh. Historically, all houses and habitation in Leh were confined to the area around the Leh palace; all the other areas were agricultural lands. Over the years, as the population has increased and land fragmentation has begun, houses have spread out and come up on the agricultural land in the other parts of Leh. Furthermore, in order to cater to the demands of the tourist industry, a lot of infrastructure has come up in the form of hotels and restaurants as well as guesthouses, leading to the conversion of agricultural plots to other use. Most notably, with the influx of tourism and a general push towards development, there is threat posed to the traditional Ladakhi culture. Young men are lured away from their traditional avocation of farming by more attractive financial rewards which other avocations offer.

The modern mass tourism has an enormous impact on the economy, ecology and society in Ladakh. While tourism has been responsible for introducing large-scale commercialization into the economy, state investment has provided infrastructure and technological knowhow, such as the introduction of changes in cropping patterns, new breeds of livestock and small scale industries. In the last twenty years, secondary activities especially geared to tourism have become very important as providers of cash income. Most tourists make Leh city as their base and their number have
increased from 551 in 1974 to 1698692 in 2011. There is a shift in work force from primary to tertiary activities that is mainly due to tourism. The huge amount of money spent in the tourism industry makes the economy extremely dependent on the revenues made out of this sector. However, as the tourism sector is also an extremely unpredictable one, the earning out of this sector is also extremely fluctuating. This became obvious on several occasions like the 1989 agitation and Kargil war in 1999. Not only had this but the Indian airlines hijacking in 1999 also led to decrease in the arrival of tourists. However, tourism industry has acquired the position of generating main source of income atleast in Sku-Markha.

It is the growth of Indian army that has benefitted Ladakhis to a greater extent. In fact, for strategic reasons, infrastructural development was given high priority, and the construction of roads and bridges improved mobility within the region. The military and civilian authorities promoted the introduction of new crops, fertilizer, and pesticides in agriculture to reduce dependence on food imports from the plains. Much of the surplus was purchased by the army, which has personnel stationed in Ladakh. Their numbers is said to be equal or exceed that of local population. Government and army interventions generally have been regarded as positive among the rural population.

Ladakh’s lack of funds and delay in the release of the funds has also led to slow economic development of the region. One has to understand that Ladakh is opened to any kind of development only for five months of the year, if the funds for its development are not released in starting of the season that is, April-May, then they are of no use. Any fund released in or after August-September cannot be utilized as Ladakh’s winter starts from the ending of the September and the whole process of development gets shut down.