THE CHANGPAS
OF EASTERN LADAKH

AN ENQUIRY INTO SURVIVAL STRATEGIES OF NOMADIC PEOPLE IN COLD DESERTS

AJIT CHAUDHURI

I. THE BACKGROUND

It would be difficult to exclude a certain autobiographical element while describing the means by which this study came into being.

My first contact with Ladakh, as such, was in 1985 when an old school friend mentioned a huge salt water lake at fourteen thousand feet which extended into China which he had been to, which had my travel genes salivating. I worked on his father, a General in the Indian Army, for a letter of introduction to the Army boss in Ladakh, which from Leh would give me a free ride, boarding and lodging included, to a variety of exciting and unusual places not normally accessible to the hoi polloi. He obliged!

In trying to reach Ladakh that April of 1985, I learnt some important lessons the hard way. That the route that looks shortest on a map is not necessarily so in actuality. That one never paces oneself with locals on difficult mountain tracks. That one never goes alone on a tough route. That April is much too early in the year to be crossing passes of over 4000 meters. In the process of learning these, however, I only reached Darcha at the southern foot of the Baralacha pass separating Ladakh from Lahaul in Himachal Pradesh - my experiences while crossing the earlier Rohtang pass, which was under thirty or so feet of snow at that time, broke my resolve. I abandoned expedition and, after a bit of tourism in the Lahaul valley, ventured back across the Rohtang to Manali. I was not the only person disappointed; the General gave me a curt lecture on the importance of reaching somewhere if one has decided to do so.

The next contact was during my stint as a field worker with the Urmul Trust, a development organisation working in the border regions of Bikaner district in Rajasthan, India's arid western state. We were visited in 1991 by a delegation of Ladakhis from Leh Nutrition Project (LNP), who were on a visit to Save the Children Fund (SCF) sponsored development projects in Rajasthan, of which Urmul was one. Their description of the area in which they worked, so similar to ours in many ways and yet so different, fascinated us. We prevailed upon the SCF office in Delhi to send an SCF sponsored return delegation of Urmul-wallahs to Ladakh, a promise they made and have not yet, at the time of writing, kept.

I left the Urmul Trust in 1992 to join SCF at their Delhi office, where I worked under its Project Director, Mr. G.M Sheikh, a Ladakhi himself. In the seven months that I was there I got to know a fair bit about Ladakh, the land – the people, its agricultural and water sharing systems, and its contrast to western Rajasthan. Called GM by all, he was later to play a key role in formulating this study.

It was in 1995 that I felt that enough was enough, one either has to go there or stop dreaming about the place. My friend Vikram Verma, an unlikely choice for a partner in a venture such as this in that he is a sober, city-type architect, and I set off for Leh by bus via Manali. Upon reaching Leh we met the then-Director of LNP, Mr. Sonam Norbu, who made us an offer that we could not refuse - to join his field team on a tour of the Changthang. We thus spent a few days roaming around the Rupshu Kharnak region with a gang of LNP people, including Mr. Thinlis Namgyal who became a good friend and was later to be an important member of the study team. They dropped us off at Korzok, on the banks of the Tso Moriri lake, from where we headed south across the Parang La into Spiti on foot, and then across the Kumzum and Rohtang passes back into Manali and Delhi. The journey, once we were safely back in Delhi, became exhilarating, exciting, beautiful, the experience of a lifetime, etc., quite different from when we were on the route, when it was a major test of endurance in which, after day three, all we wanted was to get back to our respective homes and wives.

It was during this visit that I also got a first-hand exposure to the nomadic pastoral communities of the Changthang. These were people moving from place to place across this harsh, forbidding region in search of grass for their livestock. The similarities in landscape and people with western Rajasthan was, to me, striking - the arid environment, the shortages of water and fodder for a significant portion of the year, and the practice of transhumance as a livelihood strategy. It was then that the idea of studying survival strategies in this region was born. What was it about them that enabled them to stay here? What did they do, and why? How were these interrelated? Were these seemingly mad acts, such as being in an open-top tent during a -40 winter and taking one's livestock out to graze in rain, shine and blizzard, rational if they were looked at from the people's perspective? Were they the best possible options? How had life changed from the past, and how did people react to change? What were people's views of the outside world, and what were their expectations from it? What did 'development' mean to them? Ideas and thoughts were churning in my mind for over two years before the project formalized.

In the meantime, an important parallel development was taking place. A large British donor organisation, ACTIONAID, began considering investment in the development of Ladakh. They held a workshop at Leh in October 1996 to discuss possible options for intervention with Ladakhi intelligentsia, which I was fortunate to attend. The upshot of this was recognition that rigorous and relevant development information on Ladakh was not available and there was a need to collect this to facilitate strategizing and planning of development activities[1]. A possible financial supporter had been found.

Most of 1997 was spent in discussions streamlining the study - identifying possible partners to the project in Ladakh, focussing the project objectives and methodology, matching interests of the various stakeholders to the project, and selecting specific geographic areas and communities to study. Those involved were the ACTIONAID people in Delhi, myself, people at LNP and SCF in Ladakh, and individuals such as Dr. Nila Mukherjee of the Lal Bahadur Shastri Academy at Mussoorie. Others consulted were Max Steuer and Tim

1. [1]The minutes of the workshop, entitled "Development Scenario in Ladakh and Opportunities for Community Based Action", are available with ACTIONAID Delhi.

Besley at the London School of Economics, Thupstan Chhewang and other members of the Ladakh Autonomous Hill Development Council, Mrs. and Mr. Rizvi in Delhi, the district administration in Leh, and a significant proportion of ACTIONAID's vast countrywide intellectual resources. Slowly but surely, things fell into place, culminating in a detailed project proposal that was subsequently approved by ACTIONAID towards the end of 1997. We began in December 1997.

The study has taken shape due to the combined efforts of many people and organisations.

ACTIONAID prides itself upon being more than just a passer of money to projects, and I can vouch for that. The level of involvement of Sandeep Chachra, Meenu Vadera and Madhavan at various stages (with Shankar Venkateshwaran silently in the background) was high right through the study. One coup engineered by them was the recruitment of Mohamed Hasnain, a Ladakhi working on natural resource management with an NGO in southern Rajasthan. He joined ACTIONAID in December 1997 and was deputed to the study as the project co-ordinator. They put their weight behind this study in other ways as well, such as getting the ACTIONAID Delhi office to be the implementing agency, thus enabling us access to office space when required and, importantly, accounts and administrative support. Having people so involved led to a better quality of discussion and support, as well as to much argument. The study would have been worse without the personal involvement of individuals from within ACTIONAID.

The other institution that was crucial to the study was LNP. The level of contact that LNP has with communities in Rupshu-Kharnak is astounding – the field team knew each and every household, and had an old relationship with all of them. They were important members of the teams that undertook field exercises for many reasons - their knowledge of the community, their expertise in the field, and the fact that the conditions, even in winter, were not new to them. The personal support extended by the organisation head, Mr. Tsering Samphel, at the conceptual level was of immense value.

The only non-Ladakhis directly involved in the study apart from me were the four resource persons. Each of them was a character and added to the project in their own way, intellectually and otherwise. Anand Kumar, a livelihoods expert from Triratna Consultants, Lucknow, came to Changthang and Batalik in February 1998 and worked right through his difficulties with the altitude and the cold. His *kurta pyjama* was possibly the most unsuitable dress for the occasion. Ranjan Verma from TARU, Delhi, came to train the field teams in participatory research techniques. His photographs capture the essence of winter along the Indus. Dhruv Mankad looked at the health situation in the region in August 1998 and set a record by having the only bath in our approximately 250 person days in the field. Shumita Ghose came to look at gender issues in the Changthang in November 1998, right in the middle of a cold wave she was neither physically nor mentally prepared for. All of them were first time visitors to Ladakh, they gave the project generous helpings of their time without any mention of payment.

In most studies of this nature, one has to go through the formalities of thanking the district administration irrespective of whether their role has been constructive, indifferent or

destructive. This study was fortunate in that we have much to genuinely thank the administration for - they, especially the District Collectors (there was a transfer during the study) Mr. Goyal and Mr. Basharat Ahmed Dar, were not only supportive but also actively interested in what was happening. They provided much of the substance to the consultation and the feedback sessions at Leh. Mr. Goyal's generosity with his petrol supplies in the winter of 1997-98 was crucial to our field visits at the time. We also met many people from the administration individually, and important inputs came from Dr. Deen of Desert Development, Mr. Lundup who is in charge of the administration at Nyoma, Mr. Majid of Animal Husbandry and personnel from the district health department.

This was also our first experience of dealing with an autonomous district council, and it was very positive. The councillors brought in a lot of knowledge of the region (especially the Chief, Mr. Chhewang who, in an earlier incarnation as President of the LBA, was responsible for drawing village boundaries in Rupshu, Mr. Dawa and Mr. Jora) and a perspective on what should be done. The council is light years ahead of its counterpart in other parts of India, the Zilla Parishads.

It would be impossible to conclude without a mention of Sriparna Chaudhuri and Rustam, who managed the home front without me for long periods while I was off gallivanting in Ladakh.

Ajit Chaudhuri
Chief Researcher

CONTENTS

II. A BRIEF DESCRIPTION OF THE STUDY

II.a Background

There are several reasons for undertaking a research and documentation of the survival strategies of the Changpa community.

The first is that development thinking is changing. India's experience has been that centralised development schemes and policies are not efficacious, more so in remote areas and where communities are 'different'. Effective development planning has to cater to the specific requirements of the community with whom development is being planned. Crucial to this is good information - information that is specific to the community, and which has been compiled with its knowledge and participation.

A major constraint for development planners in Ladakh, both within and outside the government, has been the lack of information as described above, especially on the remote communities of this huge region. The need for such information was articulated at a consultation entitled "Development Scenario in Ladakh and Opportunities for Community-based Action" in October 1996. The study expects to facilitate effective development planning for the Changpas by development actors in Ladakh, both within and outside the government.

The financial support for this study has come from ACTIONAID, an international donor organisation with considerable involvement in development activities across India. They are contemplating a development intervention in Ladakh and expect to use this study to focus on issues upon which to possibly work in the future.

The Changpas are of special interest because they are unique in many ways. They are among the few communities in India for whom nomadic pastoralism is a livelihood strategy[2]. They are the only producers of cashmere in India, and among the few in the world. They are the only residents of Rupshu-Kharnak, a high-altitude cold desert that provides among the harshest possible terrains for human habitation on Earth. There is a need to understand what makes the community choose to stay here, and to adopt the combination of economic, social, and cultural systems that they do. The way in which these systems are interrelated and how they integrate into the environment in which the Changpas reside are of especial relevance. The study is therefore an enquiry into what enables the Changpas to cope in the Changthang.

The concept of rationality of coping strategies of communities residing in remote harsh regions requires addressing. Traditional enumerations of costs and benefits pertaining to these strategies render them irrational - yet efforts by planners to bring in change towards more 'rational' lifestyles are unsuccessful. And these efforts continue despite their lack of

[2]In fact, they are possibly the only one. Most other herding communities practice transhumance from a permanent base village.

success, thus wasting resources and creating social tensions. The study is an attempt at looking at such a community's coping strategies from a viewpoint that reflects their priorities, which 'internalizes the externalities' of their lifestyles, and therefore which re-looks at the concept of rationality for them.

Survival strategies of communities across harsh regions are related to each other, whatever the conditions of the specific region. A comparison across different harsh regions would enable an understanding of the degree of commonality across regions. Learnings from, say, the Changpas in Ladakh, could then be applied to, say, the Raikas in western Rajasthan or the Saami in northern Scandinavia. Successful programmes in one region could be selectively applied to others if a common set of parameters can be established. It is felt that the study could be a step in this direction.

II.b Aims and Scope

The focus of the study is on understanding the following:

a) the mix of economic, social, political, and religious systems that the Changpas adopt and the relationship between these systems,
b) the process of change and its effects on the Changpas and
c) issues of poverty, vulnerability and the development process as seen by the community.

The study has been conducted in the Rupshu-Kharnak region of Ladakh, falling southeast of Leh and about a day's drive from it (subject to weather). This region is a nomadic pastoral economy of about 8,000 square kilometres, most of which falls in Nyoma block of Leh district[3]. People in Ladakh refer to this region as Changthang (it is also the western corner of the Tibetan Changthang) and its people as Changpas. All five villages falling in this region, namely, Angkung, Kharnak, Korzok, Samad and Sumdo, and all three hundred households, have been covered in the study.

The study has been undertaken by a large team of people drawn from NGOs in Ladakh, (LNP, LDO and SCF), students from educational institutions in Leh, resource persons from across India and a core group consisting of the author and Mohamed Hasnain (who was deputed from ACTIONAID). Appendix I has a detailed listing. Responsibility for co-ordinating the project rested with the core group, who were supported by an advisory group consisting of the heads of LNP, LDO and the SCF office in Leh. Consultations have been had with executive council members of the LAHDC, especially with the Chief Executive Councillor, Mr. Thupstan Chhewang, and the local administration in Leh.

[3] The land under Kharnak village falls into Leh block.

II.c Activities

The study was for a year's duration beginning in December 1997. Over two hundred and fifty person days have been spent in the Changthang by the team in six phases across the year. These were for scoping the study and testing the research techniques (December 1997), a baseline survey (February and August 1998), depth studies (February, May and August 1998) and feedback to the community (November 1998). PRA specialists from TARU (Delhi) and Triratna (Lucknow) conducted a basic training over five days for all study team members in February 1998 at Dharsiks village in Kargil district.

The quantitative aspect of the study has been covered under a series of activities which, for want of a more suitable term, we have called a baseline survey. A field team consisting of five to six members, including two ladies, spent one to three days in four of the villages (Kharnak was left out for logistical difficulties) and carried out the exercises described below.

i. Household Listings: This 10 to 15-minute questionnaire was administered on any adult member of all households in the village. It encompassed demographic details, education levels, occupation profiles and asset ownership particulars of the individual households.

ii. Settlement Schedules: This pertained to details on each individual village unit. Information on the availability and status of basic services in the village, land and asset ownership patterns, the relationship between the village and the outside world, daily and yearly activity patterns and the social structure of the village was obtained through PRA techniques with groups within the community.

iii. Detailed Household Questionnaires: Households in the village were categorised into three or four different economic strata. A 45 to 55-minute questionnaire was then administered to a sample number of households in each category, covering details on household health, expenditure, income, and debt. Each questionnaire was administered by two members of the field team on a senior member of the household.

The qualitative aspect of the study was covered under a series of activities termed as depth studies. The field team spent a number of days in Samad, Sumdo, Korzok and Kharnak in three spells across the year - February, May and August 1998. The activities covered in the depth studies were general group discussions, focus group discussions, interviews, and walking with the herds. An overall analytical framework of the study has been included as Appendix II.

Specialist resource persons inquired into specific issues of relevance to the study. They accompanied the team while depth studies were being conducted, conducted parallel investigations, and wrote papers. Anand Kumar from Triratna (Lucknow) covered the

livelihood aspect, while Dr. Dhruv Mankad of VACHAN (Nashik) covered health. Shumita Ghose looked into gender relations within the Changpa community. Ranjan Verma of TARU (Delhi) provided training on enquiry techniques to the study team.

Consultations

There were two large consultations held during the study period. The first was in April 1998 at the ACTIONAID Delhi office and was attended by the AA team, the Executive Director of LNP and Dr. Neela Mukherji, a PRA specialist from the Lal Bahadur Shastri Institute at Mussoorie. Its focus was on research techniques and their relationship with the proposed output. The second consultation was in May 1998 at the LNP office in Leh and was attended by NGOs in Leh and the local administration. Its focus was on the findings thus far. Individual consultations in connection with the study were also had with a large number of people within and outside the government in Leh and Nyoma.

Feedback

Two feedback sessions were held after the fieldwork, both in October 1998. The Delhi session was held at the India International Centre and was attended by individuals and representatives of NGOs with an interest in Ladakh. The Leh session was held in LAHDC's conference room and was attended by the DC (Leh), executive councillors from the LAHDC, and members of the district administration and NGOs in Leh.

A short feedback session was held with the Samad Changpas at Thukshey in November 1998. An attempt was made to do this in greater detail and with the other Changpa communities as well. Unfortunately, this session coincided with early, heavy snowfall and large-scale death of livestock due to cold and inaccessibility of fodder, and the team was forced to cut it short and concentrate on raising awareness of the extent of the disaster with the powers in Leh. The budget for this was diverted to bringing two truckloads of fodder into Samad. It is hoped that a translation of the report into Ladakhi and its distribution among the Changpas will serve as feedback to the community.

II.d The Report

This report has taken a long time to see the light of day. The fault lies entirely with the writer. It incorporates the findings from the field, data generated by the baseline survey, papers written by the resource persons and others, and suggestions from the feedback sessions. Fragments of this report have been passed to various individuals with an interest in pastoralism or Ladakh from around the world, and their comments have also been noted.

The layout of the report is as follows. A short recounting of how this study came into being is followed by this description of the study and an introduction to Ladakh. The write-ups on change, livelihood systems, social systems and poverty and development follow in that order. These are followed by a narration of the experiences the field team underwent in carrying out the study and, finally, the appendices.

It is hoped that the report does justice to this tough and resourceful people who have earned the respect and admiration of all of us associated with this study.

III. A BRIEF INTRODUCTION TO LADAKH

The northern Indian state of Jammu and Kashmir actually consists of three parts - Jammu, Kashmir and Ladakh, of which Ladakh is by far the largest in area and by far the smallest in population. Before partition, Ladakh had three major divisions - Leh, Kargil and Skardu (Baltistan) - and a headquarters that alternated between Skardu in winter and Leh in summer. In 1947, Baltistan went to Pakistan, leaving Ladakh a strategically crucial area for India as the only part of the country sharing borders with both China and Pakistan.

Ladakh consists of 97,000 square kilometres of area and has a population of approximately 1,70,000. It is bound in the east by Tibet, in the north by the Xinxiang province of China, in the north west by Pakistan, in the west by Kashmir and in the south by the Lahaul and Spiti valleys of Himachal Pradesh. Administratively, Ladakh is divided into two districts, Leh and Kargil. Kargil district includes several distinct regions in Dras, Kargil and Zanskar, while Leh district is divided into Leh, Nyoma, Nubra, Khaltse and Durbuk.

The natural environment governs life in Ladakh. The entire region is an elevated territory with a system of alternating valleys and mountain ranges, except the eastern part, which is a plateau. The nearly parallel mountain ranges extend in a south-easterly direction, with the valleys in between supporting human habitation in some places. The important ranges are the Zanskar range, the Ladakh range, the northern face of the Great Himalayan range, the Saltoro range and the southern slopes of the Karakoram range. All these ranges provide barren rocky surfaces largely devoid of soil and vegetation cover and human settlements.

Nearly 68 percent of the total land of Ladakh lies over 5000 meters above mean sea level and is unfit for vegetation and human life. Land lying between 4500 and 5000 meters constitutes less than 10 percent of the total area and permits some pastoralism. Settled agriculture is confined to areas below 4500 meters in altitude.

A major constraint to life in Ladakh is imposed by the cold and arid climate coupled with the altitudes. The mean temperature in the hottest months of July and August is 19 degrees centigrade. January and February are the coldest months with mean temperatures of -20 centigrade. Daily variations in temperature are high thus rendering averages meaningless. The region falls into a rain shadow, with large parts receiving less than 100-mm annual precipitation. Most of the precipitation is in the form of snow during the winter months, the agricultural off-season. Ladakh is therefore considered a 'cold desert'.

As a result of the above constraints, only 0.6 percent (577.16 square kilometres) of the total geographic area is inhabited.

The south-eastern portion of Ladakh is a plateau region called the Changthang, which extends eastwards from here for a thousand miles across Tibet into the Qinghai province of China. The Ladakhi Changthang is a distinct high-altitude region lying between the Indus and the Sutlej watersheds. It consists of wide valleys (upto 13 kilometers in width) of between 4200- and 5200-meters altitude, with mountains rising another 2000 meters above the valleys. It is bordered on the south by the Lahaul and Spiti valleys of Himachal Pradesh, separated from them by a series of high passes of which the Baralacha La and the Parang La are better known. In the north lies the Indus valley, with the Taklang La, the Tiri La and the Kyare La passes dividing the regions. To the west lie the Zanskar mountains. Precipitation is approximately 50 mm annually, most of which is in the form of snow in winter. That water that does not evaporate in the sharp sun (the Changthang has over 3,000 hours of sunshine a year) drains into one of the series of large blue water lakes that dot the region.

The region provides among the harshest habitations for humans in the world, with a sandy gravelly soil, heavy winds, and an extended winter in which passes out of the regions are blocked for seven months of the year and temperatures dip below -40 centigrade. The region is also among the most beautiful places on earth, with its wide desert valleys, snow-capped mountains, and blue-water lakes. This is the home of the Changpas.

IV. CHANGE

"Kuchh baat hai, ki hasti mithti nahin hamari
Sadiyon rahan hai dushman, daurein zaman hamara"

(There's something about us, our footprints do not get wiped away,
Our enemies have been around for generations, and yet we flourish)[4]

Mohamed Iqbal's immortal words could well have been written with the Changpas in mind. These groups of people have braved the elements of the Changthang from time immemorial, the cold, the snow, the high altitude and the volatile weather. Time has also put them through a series of human related events, such as the movement of agricultural people from other areas into Ladakh, the Tibetan, Mongol and Dogra invasions, Indian independence, the 1962 war between India and China, modern communications, the Leh Manali road, the accent on 'development', and tourism. And yet, they go about doing what they do, roaming the Changthang with their goats, sheep, and yak, in much the same way as their ancestors did a millennium ago. A cursory look would give the impression that they have not changed along with the world around them, and, even, that they are immune to change. But is that really the case?

This paper looks at change within the Changpa community. A historical background to change is initially discussed. Important changes over living memory are then described. An analysis of change within the community is then undertaken, and predictions regarding the possible future directions of the community are attempted.

IV.a A Historical Background

Nomadic pastoralism, as an occupation, developed relatively late in human history. In south-west Asia, it is estimated to have developed about 9000 to 10000 years ago, at roughly the same time as agriculture[5]. In the Changthang, it is unlikely to have taken place prior to the domestication of the wild yak (Bos mutus)[6], which roughly corresponds to this time. The Changpas are said to have moved into Ladakh from Kham province in Tibet, though the time of this migration is unclear.

Francke mentions an ancient tribe of Tibetan nomads who tended their herds on the plains and hills of western Tibet (see box below) before the first recorded arrivals of people from India and Dardistan[7]. It is unclear whether the arrival of Mons and, later, Dards into Ladakh led to conflict. Francke says that a mutually beneficial relationship developed between the Mongoloid nomadic pastoralists and the Aryan agriculturists, in which products from the fields were traded for produce of the flocks. Matrimonial alliances between the two peoples

[4]The words are by Mohamed Iqbal. The translation is by me.
[5]M. Bisig, "An Introduction to Anthropology"
[6]This information is from Chapter 2 of "The Nomads of Western Tibet" by Goldstein and Beall.
[7]Page 18, "A History of Western Tibet" by A.H Francke

also developed. Competition for territory may not have been severe as land was plentiful and agriculture could only be practised in the irrigated valleys that formed a minuscule proportion of the total land available. And yet, there are signs of a typical clash of cultures and values between the two systems. The result appears to have been that the Changpas gradually got pushed eastwards into their current abode, the highlands of Rupshu-Kharnak where the extreme climate and altitude effectively precluded agriculture as an economic alternative and therefore no farmers encroached upon pasturelands. That the territory is fiercely protected from all forms of possible encroachers today may well be a result of this clash, despite the community not remembering a time of movement from the western parts of Ladakh. Groups who have faced the wrath of the Changpas in recent times while trying to get a foothold into Rupshu-Kharnak include mining companies, who were forced to leave, and Tibetan refugees, who were not. The increasing number of trekking groups criss-crossing the region, whose horses graze on carefully protected grasslands, are the next likely target of the turf-protecting instincts of the Changpas.

> Philological reasons compel us to believe that in the times of Herodotus, when the Dards and Mons had probably not yet left their original homes, an ancient tribe of Tibetan nomads tended their herds on the plains and hills of western Tibet. Cunningham believes them to have extended as far as Gilgit. Their life probably in no way differed from that of Tibetan nomads of the present day. They lived in tents of yak hair, on the produce of their numerous herds of yak, goats and sheep, and chased the Kiang, the wild sheep and the wild yak; for in those times all these animals seem to have had their feeding grounds a long way further west than they do now.
>
> Page 18, “A History of Western Tibet”, A.H Francke, 1905

IV.b Some Major Changes

The Indo-China War of 1962

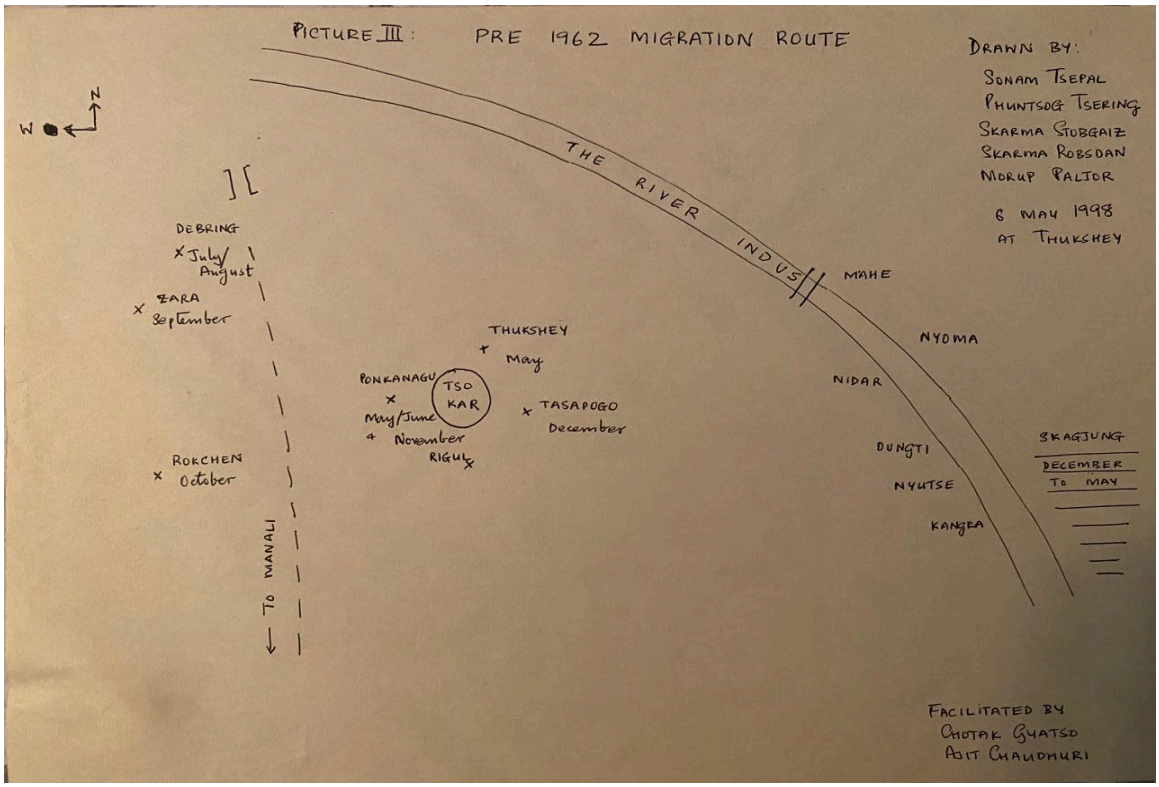
In 1959, Mao's China annexed Tibet. In 1962, Chinese troops invaded India along two fronts at different ends of the Himalayas, the North East Frontier Agency (present day Arunachal Pradesh) in the east and Ladakh in the west. And while they moved back from the former, a large chunk of Ladakh is still in Chinese hands. The war had three major repercussions on the Changpas of Rupshu-Kharnak. These were:

1. The loss of the winter pastures at Skagjung.
2. The influx of refugees and their livestock from Tibet.
3. The loss of access to Tibet for salt.

The Changpas of Rupshu used to winter north of the Indus and about 150 to 200 kilometers upriver from Nyoma at Skagjung. This was a huge pastureland, ideal for winter grazing because it was low in altitude and had less snow and plenty of grass. Livestock mortality in winter was near negligible - in fact livestock would fatten up over the six months spent at Skagjung in those days. The attached map (Diagram IV.1[8]) describes the annual migratory cycle followed by the Samad Changpas before 1962, the notable features of which, when compared with today's cycle, are the small number of moves made (three to five) and the staying together of the entire community across the year. Thanks to the Skagjung grasslands, every family was able to keep 500 to 1000 heads of livestock. About 80 households from Rupshu would congregate there over winter. One or two families would stay over summer by rotation to protect the grassland from encroachment.

[8]The map was drawn by a group of five old (60 to 80 years) men at Thukshey. They also provided most of the facts regarding the effects of the Indo-Chinese tensions of the early 1960s during a focus group discussion on 6th May 1998. Their memory of these events was crystal clear. It was difficult to verify with other sources, except for the most basic facts such as that they used to go to Skagjung for the winter and into Tibet for salt.

Diagram IV.1: Pre-1962 Migration Route of the Samad Changpas



The war changed that! Skagjung went under Chinese occupation in 1962 and remains so to this day. The pastures, therefore, were lost to the Changpas, resulting in major adjustments in the annual migratory cycle. The people of Samad, for example, had to divide themselves into smaller units and shift oftener from place to place. Today, they shift eight to fifteen times a year depending upon pasture and water availability. The increased frequency of shift, a burdensome and exhausting task, put additional pressure on the women of the community. Winters are spent around the Tso Kar lake, at an altitude of 14900 feet and in extreme cold[9], where the pastures are sparse, snow covered and difficult to reach[10], and livestock mortality is high during a bad winter. The people of Korzok adjusted in different ways. Most of the Korzok Changpas found alternative winter pastures in Thagajung. Others moved to Sumdo and took up agriculture[11]. Herd sizes have also adjusted themselves to the circumstances - today a rich household is one with three hundred heads of livestock.

[9]The research team spent five days in early February along the Tso Kar lake. Temperatures dipped below -40 on every night except one, during which a snowfall took place. Daytime temperatures ranged from -12 c when snowing to -30 when the sun was out.

[10]Snow is blown from the heights to the valleys. Therefore, the better pastures in winter are all higher up, and access requires much climbing by livestock and herders. Winter is a time when the heads of households take over the family herds from the younger generation, as they can go higher to better grass.

[11]The current residents of Sumdo do not see the move as a result of the Chinese aggression and the loss of Skagjung. But the timing of the move, the early sixties, has led me to believe that it is more than the need to settle down that caused it.

The competition for pastures and water, made intense due to the loss of the traditional winter pastures, were exacerbated by the influx of Tibetan pastoralists and their animals. It is estimated that about one hundred families came in to the Rupshu region, along with between two and three hundred head of livestock each. About half of them were sent off to Kharnak, while others moved to Leh, Delhi and Bangalore. Today, four decades on, there are about one hundred Tibetan refugee families in the Rupshu-Kharnak region[12]. The two communities share a strange relationship. They have a common religion with a common religious head, and (possibly therefore) the Changpas have a deep empathy for the problems the refugees have faced. At the same time, conflict over access to pastures is considerable and has even resulted in violence[13] in the early 1980s. Matrimonial alliances between the communities do not take place[14], amazing between groups with a common religion, ethnic background and occupation. The Tibetans cling to their belief that they will return to Tibet some day and the Changpas do not want to (and do not want their sons and daughters to) join them there. There is an element of jealousy and envy in the relationship as well, because despite looking down on them, the Changpas see that the Tibetans are doing much better for themselves (i.e., they are richer) due to being hard working, more aggressive and getting better support from their government-in-exile[15].

The other effect of the war on the Changpas was that movement into and trade with Tibet came to a sudden end. This influenced the entire Ladakh as economic, religious and cultural ties between the two regions were strong. For the Changpas, the war brought about a change in the traditional activity of salt collection. The Rupshu Changpas had an agreement with the government of Tibet that allowed them to collect salt from the Mindum and Gyaltse lakes in Tibet. Permission for individuals was available in the form of permits (made in the name of the Rupshu *Goba*) that required renewal every three years in Rudok, the nearest town of Tibet. Salt collection required a 45-day round trip from Skagjung, usually done between February and May. Payment for the salt collected was made to the Tibetan government in the form of an official posted at the site of the lakes at the rate of 50 paise per 500 kg (just before 1960). In addition, passage money had to be negotiated and paid to local chieftains along the route. The salt was taken, along with wool, to Zanskar to be traded with the agricultural communities there for barley, wheat, and peas[16].

[12]This is from two separate group discussions with Changpa men, in Thukshey and Sumdo.
[13]This is rare among the Changpas, for whom even showing anger is seen as a weakness.
[14]There have been romantic alliances between Changpas and Tibetans, but few have ended up in marriage, socially sanctioned or otherwise. It seems that Changpa youth, even if in love with a Tibetan, would hesitate to marry and someday have to live life in a faraway land. The team did not get a Tibetan viewpoint on this issue.
[15]For example, the Tibetan government-in-exile provides free boarding school facilities for children at Sumdo, and facilities for the old in Choglamsar (Leh). This enables the productive members of the Tibetan nomads to concentrate on their work and use surpluses for accumulation and not subsidizing the unproductive.
[16]This information is again from the five old men of Thukshey, all of whom had been to Tibet to collect salt before 1962.

Post 1962, the Changpas adjusted by refining the salt available in the Tso Kar Lake. This was not easy, as the Tso Kar salt was rancid to the extent that people had preferred to travel for 45 days rather than collect salt from there. Much effort was made to separate bad water from good in the Tso Kar and then to make salt from the good water. Competition for salt among the Changpas increased, and, even today, salt is an issue that leads to fights between the Samad and Kharnak people.

Ladakh as a whole benefited immensely because of the war of 1962. The area gained national attention. Development money poured (and continues to pour) in, roads were built, and communications systems were set up. The Indian Army maintains an enormous presence and is a big spender in the region, making available defence contracts and jobs for Ladakhis. Even villages on the present China border, who earlier used to act as servants to the Changpas on their move to and from Skagjung (according to the Changpas), have enriched themselves 'trading' along the border. Among Ladakhis, it is only the Changpas who have lost.

The Advent of the Public Distribution System or 'Food Rations'

Most sections of Changpa society identified the advent of rations as a major change. Earlier, the Changpa diet had consisted of meat from goat, sheep and yak which was (and still is) freely available and barley, wheat and peas that was obtained through trade with neighbouring agricultural communities. Some barley was grown in parts of Rupshu-Kharnak more conducive to minimal agricultural efforts, such as Korzok and Nurbuchan. Rice was a delicacy, eaten rarely and obtained through trade with Kashmiris.

In around 1983 rations started coming in to Rupshu-Kharnak as part of a huge effort to bring the people of Ladakh within the ambit of the Public Distribution System. The details of commodities supplied are as depicted in table IV.1[17] -

Table IV.1: Commodities Covered Under PDS

Commodity	Amount per person over 8 years per month	Price before Dec 1997	Price from Dec 1997
Salt	2 kg		Rs. 6.10 per kg
Rice	8 kg	Rs. 6.23 per kg	Rs. 7.80 per kg
Wheat	6 kg	Rs. 3.80 per kg	Rs. 6.00 per kg
Sugar	425 gms	Rs. 9.05 per kg	Rs. 11.40 per kg
Kerosene	20 litres	Rs. 3.00 per litre	Rs. 3.00 per litre

The advent of rations changed the trading pattern of the Changpas. Commodities which, earlier, were obtained by trading meat, wool, and salt with farmers in Zanskar, or by purchase from Leh town, were now available for cash at one's doorstep. The unpleasant tasks of leaving home and hearth and haggling with strange people in annoying places (to most Changpas Leh is a hot place palatable only in winter) did not need doing any more.

[17]From an interview with Mr. Shabbir Hussain, a storekeeper based at Leh, on 14th May, 1998.

The rations, being highly subsidized, were cheap. Delicacies such as rice became everyday items on the household menu. The time spent grinding the grain, usually done by women, was saved; only *tsampa* still requires grinding.

But rations have their downside. The main one is that rations are available for cash and cash only, replacing a traditional and evolved barter system and putting households with less access to the cash economy at a disadvantage. The Changpas have become increasingly dependent upon outside forces over which they have little control. For example, revenue to families in 1997 from the sale of *pashmina* dropped because the rate fell by fifty percent from 1996 due to factors extraneous to the Changpas[18]. In the same year, the prices of rations were increased significantly, the details of which are in Table IV.1. Self-dependence is a very basic feature of existence in the Changthang. The process of gradual loss of control over basics and increasing dependence on decisions of faceless, anonymous, and faraway people who may or may not know the local situation have contributed to increasing insecurity within the Changpa community.

The Introduction of the Smokeless Chulla

The women of Samad saw the smokeless chulla as a major lifestyle change[19]. Each household used to have three stoves, which had the multiple tasks of cooking the food and keeping the *rebo* warm. The result was lots and lots of smoke; which hurt the eyes, was bad for the lungs and caused cough and blindness. In summer it was possible to leave open the top of the *rebo* and enable some of the smoke to escape, or (for the men, who were not involved in cooking) to simply hang around outside. But come winter, when the top of the *rebo* had to be closed because of outside temperatures and, for the same reason, hanging around outside was unpleasant, the Changpas had to take the smoke. People say that their sputum would be black in the mornings.

The smokeless chulla is a stove that directs the smoke through a pipe into the atmosphere. Leh Nutrition Project, an NGO working with the Changpas in Rupshu-Kharnak, introduced these into the community. Initially, a doctor came along with medical assistants and spoke to the community about the harmful effects of their current cooking and warming system. This was followed up by provision of a smokeless chulla to all the households in Samad (obtained under a government scheme to popularize smokeless chullas). The pipes required to release the smoke into the air were provided to half the households, and, a few months later, to the other half. By that time, the first half were singing the praises of the new system to the others. The entire community adopted the innovation.

The positive effects of the smokeless chulla are that there is less smoke and related health problems, as well as cleaner utensils and surroundings. No negative effects are seen. The new technology was diffused in a systematic manner, an important cause of its

[18]These include the failure of the Cooperative Department's intervention in the pashmina trade and the availability of smuggled Chinese pashmina to the weavers.
[19]Discussed with a group of women in Tibra on the morning of 7th May, 1998 by Mr. Chotak of LNP and myself. The discussion was interrupted by a wolf attack in the settlement, adding to our list of exciting experiences while conducting fieldwork in the Changthang.

effectiveness. Today, none of the initially provided chullas in Samad are operational. Families have spent their own money buying unsubsidized smokeless chullas, usually better and more solid models, from manufacturers in Manali. This speaks for effective adoption of a new technology.

Migration to Leh

A recent phenomenon in the history of the Changpas is that of families leaving the Changthang and settling in Leh. It began some thirty years ago when Me-me Tsetan[20], a rich man from Kharnak, sold most of his animals, bought land in the neighbouring Rong region of the Indus valley and settled his elder son (whose wife was from there) there to practice agriculture. He left his younger son and about 200 animals in Kharnak, but himself moved in with his elder son away from the Changthang. People do not recall any social pressure to influence his decision either way. There was none then and there is none now, according to the people spoken to, as social pressure would leave people free to blame society for their failures. The decision to move is taken at the household level - as far as Kharnak the village is concerned families are free to move to Leh and free to come back when they wish.

Most of the movement out of Rupshu-Kharnak has happened from Kharnak, where about twenty of the village's seventy main households[21] and ten subsidiary ones are settled in Choglamsar, ten kilometers upriver from Leh, in a locality appropriately called Kharnakling. This locality has become a congregating place for visitors from Rupshu-Kharnak[22] who have come to Leh for whatever reason; to settle, to visit family here, to educate children, or for medical purposes.

Migration from Samad to Leh is marginally different in nature. The phenomenon of giving up the nomadic lifestyle, selling the livestock and moving to Leh began in the late 1970s, when some poor families were given cheap land in Leh and made the shift. They became wage labourers, educated their children, and integrated with the people in Leh, as a result of which they are fairly successful today. In 1993 another group of families shifted to Leh, richer families who moved with lots of capital and set up businesses in trade and transport. About twenty families have left Samad completely, twelve or thirteen in the first two shifts and another seven or eight in the past four years.

As a community, Samad took a less laissez-faire approach to households leaving. Any village, as an institution, survives because members carry out duties, take on responsibilities, and pay taxes to society. In Samad these include the following -

---

[20]The case, and all the information relating to migration to Leh from Kharnak, was discussed with a group of senior men in Spangchen (Kharnak) on 7th August 1998.

[21]People here generally differentiate between the main household or the *khangchen*, whose head represents the family at village meetings and who pays taxes to the village, and the subsidiary household or *khaun*, which is attached to the *khangchen* and houses retired parents, unmarried sisters and third/fourth brothers.

[22]And a reliable source of information. For example, while planning a field trip into Rupshu-Kharnak, one needs to know exactly where the community is at the time, how much snow is on the pass in, or the weather conditions _ a visit to or message to Kharnakling gets one the latest information available.

a) Revolving duties such as being the *Goba*, fetching water, giving meat and providing transport for visiting government functionaries, grazing the *Gompa's* livestock and keeping a watch over the agricultural lands at Nurbuchan,

b) Per household and per livestock owned financial contribution for the upkeep of the *Gompa*, for expenses incurred during religious festivals and for activities of the *Goba*, members and *kotwal* in village administration, and

c) Making up the numbers during fights over encroachment with neighbouring villages.

It was decided that leaving Samad should be, as in Kharnak, a household level decision. There would be no social pressure either way. However, if the household severed links with the village in the process of leaving, in that they stopped taking on their dues to the community, they did not have the option of returning to Samad. The reasoning is very clear - that village dues are unpleasant but necessary, and administration expenses do not vary significantly with number of households. Households leaving therefore result in more pressure of dues on those staying. The increased load would be partially offset by less competition for limited pastures. The best case would be if some (but not too many) households leave but continue their dues, and this is what the policy tries to ensure.

It has worked! Of the seventy main households in Samad, about twenty-five have a set up in Kharnakling with some or all members of the family staying for studies, work, or retirement. But they continue paying their dues - when the entire family is away (see the adjoining box) friends and relatives are requested to take them on, often for payment. The option of returning to a familiar lifestyle in case the migration experiment fails is seen as important.

Some of the twenty households who severed links have tried to come back. The government, in an attempt to crack down on overcrowding at Kharnakling and stem the tide of migration to Leh, gave incentives in the form of grants and subsidized loans for purchase of sheep/goats to Changpas wishing to return to Samad. These were fought tooth and nail by the Samad Changpas, who did not allow their brethren to return and compete for pastures, despite pressure from the Ladakh Buddhist Association. They ultimately forced the government to withdraw the scheme.

Korzok, the largest village, has only one case of migration to Leh - the household failed in its venture and returned after three years to much sarcastic comment but no penalties or barriers[23].

Shifting to Leh constitutes a dramatic change in lifestyle for a Changpa family, with many interrelated dimensions to it.

[23]Rinchen Tsering, to quote a group of Korzok Changpas, left for Leh three years ago thinking that he would sit there, make lots of money and live in style like the Leh-wallahs. He has recently returned to tough, cold Korzok having lost all his money and needing to rebuild his herd from nothing.

The first is a change from a peripatetic existence to a settled one. To a people used to the nomadic way of life, with its inherent features of few possessions and frequent shifts, it is difficult to remain in one place for a long time and accumulate[24]. The changed concept of territory also requires tremendous adjustment - for example, land becomes individually owned and fixed from being community owned and flexible.

Along with this is the occupational shift. Those shifting usually sell their animals in order to raise capital for a life in Leh. The better-off invest in the trade or transport business, while others stop at buying a house and living off daily wage labour, educating their children in the hope that they qualify for a government job later. Life is tough! Changpas, like most herding communities, make lousy labourers and are not in demand unless the prospective employer is really desperate[25]. And buying a bus or truck is not enough, the fundamentals of the transport and trade businesses have also to be learnt from scratch. Not many Changpas are really successful in Leh.

The rural to urban shift is another dimension. Leh today, to the Changpas, is similar to the concept of USA in TV serials to most Indians - full of well-dressed beautiful people living fancy lives, cinema halls and other (darker) forms of entertainment, access to amenities such as health and education and easy money to be made. To the young, the confident, and the dissatisfied, a life in Leh holds many attractions. Others have a more difficult time adjusting to the crowd, the hustle-bustle and the lack of community feeling, and miss the thinner, cleaner air and the cold of home. They also face a superior attitude from the residents of Leh, and, in fact, the entire Indus valley region, who look down on the Changpas as simple people who do not bathe[26]. The term 'Changpa' has gradually taken on a derogatory intonation with a negative stereotype in Leh, and many Changpas prefer to call themselves the more general 'Drokpa'[27].

The change from an exchange to a cash economy is the fourth dimension. The exchange economy of the Changpas is characterized by strong social safety nets that ensure that everyone eats, and the availability of loans from others in the community at no interest. In Leh, on the other hand, everything has to be bought for cash, and fallback options are fewer and limited. For example, mutton, which is freely available in Rupshu-Kharnak, costs over one hundred rupees per kilogram in Leh. This is invariable a rude shock to families who make the shift - and calculations on survival costs go haywire.

---

[24] Much as, I suppose, it would be difficult for you or me to shift establishment from place to place owning only what we can carry.

[25]Some villages in Leh district are famous for the quality of their labourers and some the opposite. Normally, an employer asks the prospective labourer his/her village, and hiring is done on the basis of the answer. So people from Igoo, for example, stand a higher chance of finding work than others. The villages of Rupshu-Kharnak have the worst reputation as labourers because they have never handled a spade or plough and they do not have the habit of working continuously for a fixed number of hours a day.

[26]That the Changpas do not bathe often is a fact. Traditionally, baths were had twice in one's lifetime, after birth and before marriage. It is considerably more often now, especially among younger women who average one every fifteen days in summer (Korzok). But then the project field team, which spent over two hundred and fifty person days in Rupshu-Kharnak in winter, spring and summer, had a sum total of one baths while in the field, by a fastidious doctor from Maharashtra who made use of the tourist facilities at Korzok in summer. In winter none of us even put a hand to water.

[27]Changpa translates as 'person from Changthang'. Drokpa or Brokpa is 'person from the high lands'.

Why, then, do people move to Leh? The question was put to a group of six men in Kharnak, all of them heads of households, of whom one had shifted to Leh and returned, and one was visiting from Kharnakling. They were then asked to grade each reason, giving the most important ten points and the least one. What they had to say is as follows –

Comparative Chart of Reasons for Leaving Kharnak

The singularly most important reason was for **children's education**. Facilities for education are non-existent in Kharnak. The nomadic nature of the community and the extreme climate make it impossible for teachers, all of whom are from more pleasant parts of the state, to function for at least seven months in the year. Youth from the village who have received an education prefer to work in Leh. Given the way the world is changing, education is a must for people to face the world of tomorrow.	10 points
Access to **health facilities** is next. As in education, the government is unable to provide basic health facilities to the scattered and mobile population.	7 points
Shortage of manpower in a household is rated next. Animal husbandry in the Changthang requires plenty of manpower - people to herd, people to look after the home and children, people to go to Leh and trade, people to take care of village dues. With the change from polyandrous to nuclear families that has taken place in the community, shortage of manpower has become a very real problem[28], leaving people with no option but to shift.	5 points
Excess snow is another reason. It has two effects. First, large snowfalls in late winter or spring result in many animal deaths. Maintaining a herd at these times requires harder work - they must be taken to higher and further pastures. Secondly, the passes into the region get blocked, leading to communications problems with the outside world for about eight months a year.	5 points
Enabling the **old to lead a comfortable retired life** is next. The old and the retired have it rough in Kharnak, a nomadic existence is not easy. Leh is warmer, staying is settled and easy and health facilities are accessible.	3 points
Some people get **dissatisfied or bored with life** as a nomad in Changthang and leave for better and more exciting opportunities in Leh. Coupled with this is the pull of relatives in Leh who glamourize their lives during visits to Kharnak, and look down on those herding for a living.	2 points
Last and least was the large number of snow leopard and wolf **attacks on livestock herds**, which make animal husbandry a risky proposition in the Changthang. A person can sleep at night as the owner of a hundred and fifty animals and wake up the next morning as the owner of thirty. However, nobody leaves the lifestyle for this reason alone, wild animals have been part of the Changthang for as long as the herding activity.	1 point

[28]A typical example is that of the current Goba of Kharnak, Sonam Gyaldan. He was a younger brother who married separately. His wife died early, leaving him to look after two small children. He was simply unable to do that and herd his livestock, and was forced to sell off and move to Kharnakling. He came back after marrying again, when his children were older.

The Case of Urgain Tsering

Me-me[29] Urgain is a man of 57 years. He is married with four daughters, and owns 30 to 40 sheep and goats, 5 yaks and a horse. His elder two daughters are married in his own village, Samad, the third is married in Ankung and the youngest is still with him. He had a large herd some time back, but this got gradually depleted to pay for his daughters' weddings and to build his house in Choglamsar, near Leh.

He decided to build a house to give himself a base in Leh when he went there to trade or for medical reasons, and spent about Rs. 45,000/- constructing three rooms and a toilet. This was five years ago. Two years later, he decided to shift to Leh permanently, which he did along with his wife and youngest daughter. The decision was taken on the advice of his friends who had made the shift before him - they said he would do well because he knew tailoring. It was also easy to get work as a coolie, which he was quite willing to do. He gave his livestock to his daughters in Samad, and instructed one of them to ensure that his commitments in the village were kept up. This would give him the right to return if he so wished.

Me-me Urgain enjoyed his first two months in Leh, but after that was desperate to get back. Leh was extremely hot, and he missed the open spaces of the Changthang. It was also expensive; everything had to be bought and one required lots of money to survive. His skills as a tailor were not in demand, and he had to do daily wage labour. His daughter was sent to work as a servant with a family in a village near Leh. He took it for two years before deciding to come back again.

His wife went along with his decisions to both go and return. She did not like Leh, especially the food there, which she felt tasted different to that of Changthang, and she also did not like the constant change taking place in their lives. She is happy that they are back. His daughter, on the other hand, loved Leh and did not want to return to Changthang. "I know that you are going to send me back to grazing the herd," she said while refusing to return. They had to force her to come back by applying heavy emotional blackmail. Sure enough, she is grazing the herds. His sister, who is a nun, now stays in the house. The friends on whose advice he went, are still in Leh. "It's not that they are doing great," says Me-me, "they do not have the option of returning because they cut of all links with Samad."

His advice to others contemplating a shift to Leh is to take into account all the pros and cons, especially when shifting to a cash economy. But people don't take his advice seriously, they feel that he spent two years lolling around in Leh, blew up all his money and was forced to return. "People will do what they want to do," says Me-me, "let them learn the hard way, like I did."

[29]Me-me translates as Grandfather, and is used, along with Azangle or Uncle, to convey respect for age along with affection. We spoke to Me-me Urgain on 4th February 1998 at his Rebo near the Tso Kar lake.

Given that most of these factors have been around for generations, why is migration to Leh such a recent coping strategy? Possibly because Leh has changed at a rapid pace after 1962, and the Changpas have been exposed to this in their occasional interaction with the city. They see that facilities and options available to others are not to them. They then see their own way of life as it is seen by others, as 'tough'. Those who have shifted to Leh, in some of the villages, often come back for short durations on holiday, making them something of non-resident Changpas. They are invariable more sophisticated, educated, and fashionable than the resident Changpas[30], and become role models for the young. The old Indian saying which roughly translates as "the sweets on another's plate always look tastier than those on your own" applies itself to this situation. Additional to this is the recent availability of an option. Nomadic pastoralism in the Changthang is not the only livelihood choice available to the Changpa, and living in Leh is not an unknown quantity anymore.

Which leads to the question - given this situation why have more families not moved to Leh? Firstly, this movement has been taking place long enough for people to be aware of the difficulties and pitfalls of the move. The failures who return to the Changthang are there in society, and their experience is common knowledge. Secondly, it is that older, more staid, responsible and risk averse element in society, the heads of households, who actually make the decision to shift, and they are less enamoured of the bright lights of Leh. In fact, it was their opinion that nobody moved to Leh because of the pull of the possibility of 'making it' and leading a fancy lifestyle in the city (as borne out by the analysis above which gives pull factors a low weightage), it was a move made in *majboori*[31]. Thirdly, they see their identity as Changpas as enmeshed with the practice of nomadic pastoralism. And finally, most do well from herding livestock in the Changthang, enough for life as a wage labourer to be an unattractive alternative unless individual circumstances are difficult.

Policy towards rural-urban migration issues such as this invariably must decide whether to encourage the movement or to try to stem it. This is worth a short discussion.

The Indian experience is that people are better off where they originally are, where the familiarity factor is high and social support systems are in place, and therefore migration should be discouraged. This translates, at the policy level, into making available basic facilities at the village. Relief during migration-causing disasters such as drought usually takes the form of making available wage labour and cheap foodgrain in the villages affected, thus stemming the tide of movement outwards. In the Changthang, having primary schools and medical aid facilities operational throughout the year would remove a significant proportion of the grounds for moving to Leh. This is, however, easier said than done given the scattered and mobile nature of the population, the terrain and

[30]Their existence helped the field team enormously. For example, we (a group of three men) were able to discuss marriage and courtship with a group of four young girls because one of them was home on holiday from Leh. To her, interacting with older non-Changpa men was no big deal, few topics were taboo, and she spoke Hindi. She facilitated the discussion by being free and frank, and emboldening her friends to be so as well. As the only non-Ladakhi, I had to answer many questions from them on courtship and marriage in Delhi, not exactly an area of expertise for me.

[31]This roughly translates as difficult circumstances.

communication systems of Rupshu-Kharnak, and the capacity and capabilities of the district and state government. Chapter VII discusses these issues in greater detail.

Encouragement, on the other hand, can be in two forms - a policy to ignore and a policy to provide incentives to encourage movement. Ignoring effectively means paying lip service to the importance of nomadic pastoralism to Ladakh but continuing to have ineffective education and health services in Rupshu-Kharnak. According to the Kharnak Changpas this will result in Kharnak emptying first followed a little later by Samad. The Korzok Changpas, being further from the influence of Leh, will last longer.

Provision of incentives has a precedent - an earlier movement of Changpas to Leh was caused by the provision of subsidized land at Kharnakling. Future options could include provision of land along the Igoo-Phey canal, which has recently been constructed in the Indus valley in Leh district. Land irrigated by the canal will soon be available to the residents of the region, and this is likely to be extremely lucrative to those farming on it. There is a movement among the Changpas of Rupshu-Kharnak to be among those allotted this land, and there is much debate in local circles as to whether this should be conceded.

The advent of a canal in an area invariably changes the relative attraction of livelihoods in favour of agriculture, even in surrounding areas. The Changpas may not get irrigated land, but highly remunerative wage labour will always be available and a movement away from Rupshu-Kharnak will happen irrespective. But will nomadic pastoralism as a practise survive this?

The Change in Marital Systems

The Changpas, like all Buddhists of Ladakh, have traditionally been a polyandrous community. The way this works is that, in a family, it is only the eldest brother who marries. The next brother, and may be a third, live with the eldest brother and his wife. One brother goes into the religious system, i.e. becomes a monk. Any further brothers are free to do what they like – marry and form a separate family, or live with the parents in the subsidiary house. All household property and children are in the name of the head of household, the eldest brother. Sisters are married into other families. Households with only daughters usually marry one of them off to a free boy, such as a fourth/fifth brother, who then comes in to manage the property. The system raises many questions, such as what happens to the extra females, which I propose to avoid by focussing on change.

Polyandry, which had the approval as well as encouragement of the local religious system[32], was important for several reasons. It was a form of population control in an area in which population had no space or resources to expand into[33]. It ensured against division of households and fragmentation of property. It provided the manpower that is so crucial to nomadic pastoralism at the household level.

[32]Though nowhere is polyandry a part of Buddhism.
[33]Desmond Morris, “Manwatching”

The system is gradually changing in favour of monogamous marriages that are the practice in most parts of the world, over Ladakh and in Rupshu-Kharnak as well. In Samad and Kharnak, polyandry was less prevalent among the younger people. Korzok was a complete contrast - polyandry is still universally practiced there[34].

The reasons for this change are as follows.

Education and exposure. These have had three effects. First, polyandry is now seen as a weird practice with an amoral undertone and not as a crucial survival strategy. Second, the concept of love, and, more importantly, its connection with marriage, has been introduced into the community. While premarital and extramarital sex and unwed motherhood are age-old to the Changpas, love marriages are a recent phenomenon. And finally, younger brothers, especially smarter and more capable ones, are less keen on subservience to the head of the household and have started striking out on their own.

Democracy. It requires groups to have the numbers to push for their interests, and measures that control population are gradually being seen as anachronisms. The Changpas see the need to have the numbers to influence the district administration at a time when the population of Leh district is growing rapidly. And, at the Ladakh level, the competition between the Buddhists and the Muslims for resources in the region have led to a perceived need for an increase in numbers among the Buddhists. The traditional approval/encouragement of the religious system to polyandry has been withdrawn, possibly due to the latter.

The two factors combine to divide a household - the first by providing a reason and the second by reducing religious and political resistance to it. Social resistance, on the other hand, to a house breaking up still exists. This is because it results in an increase in the number of households (and population) in the village, which increases competition between households for pastures and water. Division of assets between households formed of a breakup result in less assets (read livestock numbers) and manpower for each household, and therefore increased poverty. Poorer households tend to find nomadic pastoralism a difficult livelihood option as viability in livestock numbers and manpower is crucial to success, and they are invariably forced to migrate to Leh.

[34]This came up in discussions during fieldwork and was confirmed by the baseline survey data.

IV.c Change Analysis

Five examples of change have been described above. These vary in many ways. The first was essentially an event that had taken place, a war, the cause of which was extraneous to the community in every way. The community was forced to adjust to a new situation, which was difficult initially but has gradually been internalised. What stands out is the resilience of the Changpas' coping strategies due to the flexibility of systems adopted by them. The sudden loss of six months of pasture did not break their backs.

The second is similar. Again, due to decisions extraneous to the community, food supplies started to pour into the community. This, however, has been seen as a positive event. Systems and practices of the community changed to adjust to the new situation.

The third, that of the smokeless chullas, is an example of change in the form of a technological innovation introduced and diffused by an outside agency, Leh Nutrition Project. A problem, that of too much smoke in the *rebos* causing discomfort and health disorders, existed and was recognised as such. Everyone was affected, women and children more so. Yet nothing was done about it from within the community. This could be because problems of women and children are not very important, or because the technology of the region was not of a level that could provide a solution. There are three reasons for the latter; a sparse and dispersed population provides unfavourable conditions for development of specialization and hence technology improvement, isolated regions such as Rupshu-Kharnak provide few opportunities for technology transfer or learning, and the nomadic lifestyle requires keeping tools and equipment to a minimum[35].

The existence of a genuine problem was not the only reason for change, as seen from numerous examples of failure in similar exercises[36]. The introduction of the new technology was well planned and executed. A doctor went around the community talking about the problems of excess smoke, and the agency provided the equipment and helped set it up, seeing to it that it worked. The fact that people are now willing to pay, and have paid, market rates for equipment that was once supplied free speaks for itself.

The fourth and fifth examples, that of migrating to Leh and the changing marital systems, are largely economic and social changes that are taking place from within the community. They represent a change from one way of life to another. In both, new systems are competing with old ones with huge implications for the future direction of the community. The two are interrelated to some extent, in that changed marital systems are a cause of movement to Leh and the existence of an option to move to Leh emboldens a younger brother to marry separately. However, they are fundamentally different from each other in that, in the long run, movement to Leh can co-exist with nomadic pastoralism (as illustrated later) whereas the change in marital systems is moving slowly but surely away from polyandry to other forms.

---

[35] Anand Kumar, "Livelihood Systems in the Changthang", 1998

[36] Such as the attempted introduction of a new design of loom to replace the ones in existence which cause severe back aches and are bad for pregnant women.

These examples enable a look at who and what effects change. In a community, education and exposure levels, experience, and a changed external environment are all factors that cause change. Among individuals, the ability to cause change is a function of a combination of two factors, risk aversion and influence. Willingness to take risks without influence does not bring about change, and vice versa. An example is that of young girls, quite the least risk averse section of Changpa society (possibly because of the aversion to being one of the extra girls in a polyandrous community) whose lack of influence at the household/society level do not make them vehicles of change. The most important vehicle of change in the community are capable younger sons, who have an interest in breaking primo genitive traditions[37] and whose influence within the family and community have increased considerably in recent times. Heads of households, risk averse but with enormous influence, are another vehicle of change.

IV.d Possible Future Directions for the Community

Pessimistic predictions regarding the future of nomadic pastoralism in Rupshu-Kharnak abound, within and outside the Changpa community. The existence of attractive livelihood alternatives in other parts of Ladakh, the lack of basic services in Rupshu-Kharnak and the increasing insecurity of the herders are seen to be hastening its demise. Whether nomadic pastoralism in this region will actually die out is a subject worthy of discussion, and it is proposed to examine this using the services of a model[38].

The assumptions are as follows.

1. Nomadic pastoralism is the only viable livelihood option in Rupshu-Kharnak. The only other livelihood option available is to migrate to Leh. The livelihood strategy of each Changpa household involves a choice between one and the other of these alternatives.
2. For a household, choice of strategy is changeable without huge costs.
3. The Changpas are able to protect Rupshu-Kharnak from encroachment by others.
4. The payoff, a vague combination of financial returns, quality of life, and happiness, from a strategy is the guiding principle for adoption of the strategy.
5. Pastures in Rupshu-Kharnak are limited, and less households in the region results in more pastures per family, leading to a better payoff for those who remain.
6. There will always be demand for pashmina.

[37]According to Martijn van Beek, an anthropologist who has worked in Ladakh since the late 1980s, this is true in all of Buddhist Ladakh. He feels that all major changes that have taken place from within in Ladakh have been pushed by younger brothers.

[38]The concept of evolutionary equilibrium, taught by Max Steuer during a course entitled Economic Perspectives on Society at the London School of Economics, 1997, and adjusted for the situation.

If **p** = proportion of Changpa households who choose to migrate
(1-p) = proportion of households who choose to herd
a = payoff (or returns) from migrating
b = payoff from herding

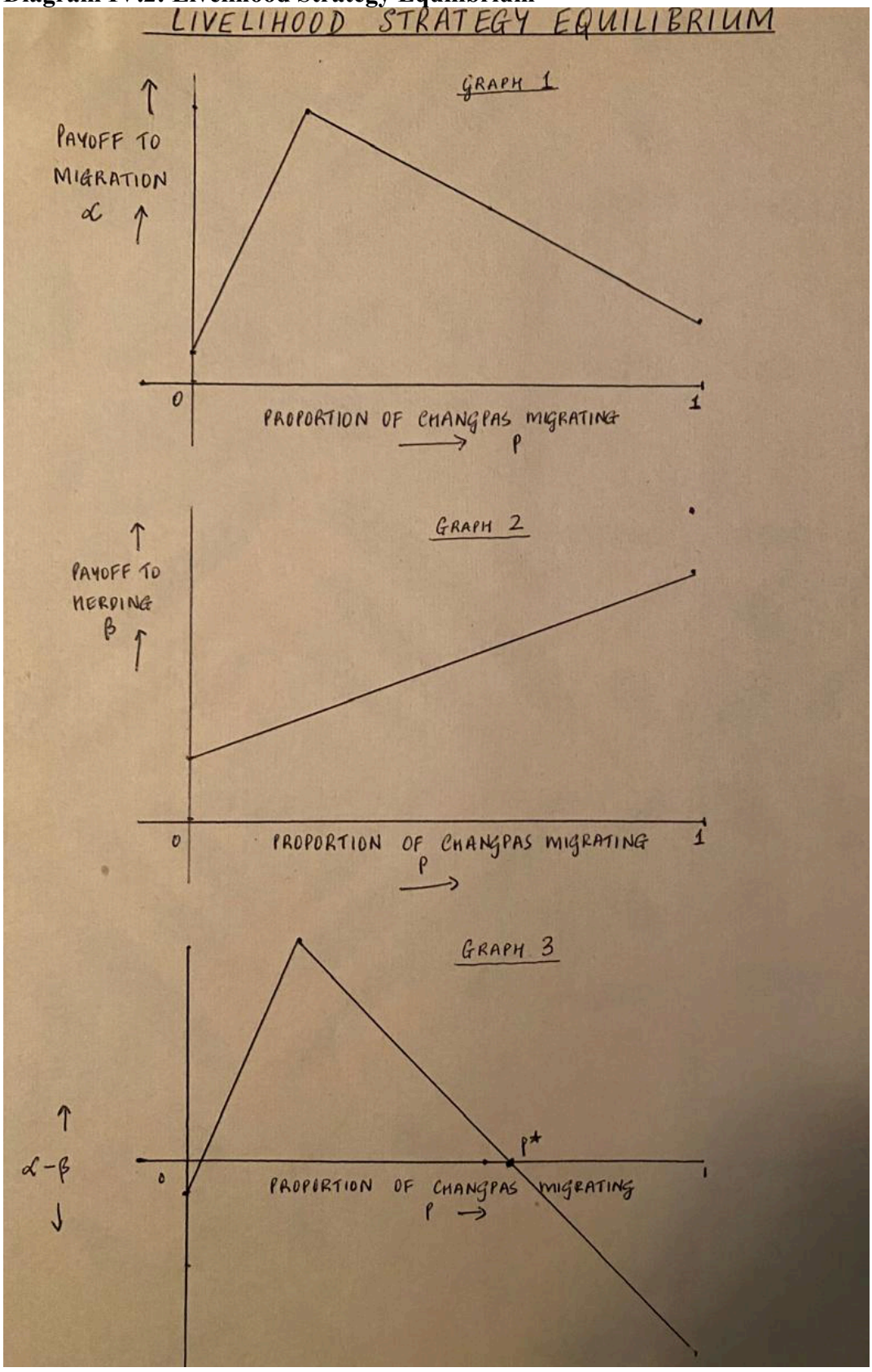
Then

Graph 1 in Diagram IV.2 below depicts the change in **a** as **p** changes from 0 to 1, indicating that once an initial number of households have migrated (enough for support systems to establish there and a minimum community learning to take place), the payoff for a strategy to migrate gradually decreases as more people migrate - it gets crowded in Kharnakling and labour supply increases, depressing wage rates.

Graph 2 depicts the change in **b** as **p** changes from 0 to 1. As more households migrate, the payoff for a strategy to herd increases - more pastures per household enable households to keep more livestock. The payoff for those who stay is very high when there are few, because pashmina supply is less and the Changpas' collective bargaining power with pashmina buyers increases dramatically.

A household would choose one strategy over another based on the respective payoffs of each alternative. If **(a-b)** is positive it would choose to migrate, and if negative it would choose to herd. Equilibrium is reached when a household is indifferent between the two strategies, i.e., when the payoffs to both are equal. This is depicted as point **p*** in Graph 3, which establishes the proportion of the community following each strategy.

Diagram IV.2: Livelihood Strategy Equilibrium



The model indicates that no matter what the attractions of migration, there will always be Changpas practising nomadic pastoralism in Rupshu-Kharnak, because increased migration would increase the payoff from herding. Even if a major change occurs, such as that caused by allotment of land along the Igoo-Phey canal, a new equilibrium will be reached (**p*** would shift to the right or left respectively) with a changed but existent proportion of Changpas still in Rupshu-Kharnak. This is indicative of real life. Nomadic pastoralism will continue.

Which brings us back to Mohamed Iqbal's words.

V. LIVELIHOODS

"The old Changpa has forgotten more about herding than what the so-called experts will ever learn in the course of their careers"[39]

Rupshu-Kharnak is a unique part of Ladakh. Its high altitude, extreme climate and remoteness render the region unsuitable for agriculture, which is otherwise Ladakh's predominant occupation. Pastoralism, practised in various forms, is the only source of livelihood here. It is eminently suited to the region; the extreme cold, exacerbated by strong winds that blow across wide valleys, and the low precipitation make Rupshu-Kharnak a natural habitat of the goat, sheep, and yak. The people who made this their home, the Changpas, have adjusted to the elements and successfully eked out an existence for thousands of years. The purpose of this chapter is to look at how they do this today.

V.a The Animals

The main natural resource available in Rupshu-Kharnak is pastureland. This supports many animals (Table V.1 lists animals kept by the Changpas and their products) upon whom the economy of the region is based. Other natural resources available are wild bushes and plants, natural springs, wild vegetables (such as garlic), aromatic plants, and salt.

Table V.1: Animals Kept by the Changpas and their Respective Products/Uses

Sheep	**Goat**	**Yak**	**Horse**	**Donkey**	**Dog**
Wool	Wool	Wool	Transportation	Transportation	Herding
Meat	Meat	Meat	Status		Protection
Milk	Milk	Milk			
Butter	Butter	Butter			
Hides	Skin	Hides			
Lambs	Kids	Calves			
	Pashmina	Transportation			

The Changthang is one of the few regions in the world in which the *pashmina* goat, whose soft wool is famous the world over as cashmere, can survive and flourish. The other regions are Mongolia, China, and Russia. Despite the fact that *pashmina* production in Rupshu-Kharnak (about 30 metric tons annually) is a miniscule 0.06 percent of the world's total production, the *pashmina* from here has its own special niche.[40] It is longer and thicker than elsewhere, thanks to the Changthang's long and cold winter, and is therefore preferred

[39] Daniel J. Miller

[40] Quality of *pashmina* is a function of two factors, the length and thickness of the staple. Whether *pashmina* from the region is of better quality than others is debatable. An argument broke out at a meeting organized by us in Leh to present our work to the local dignitaries - Dr. Md. Deen of the Desert Development Agency felt that this was the best *pashmina* in the world, whereas Dr. Martijn van Beek begged to differ, saying that it was among the worst.

by Kashmiri weavers who hand spin the wool and require a minimum 5-centimeter staple.[41] It is also pure - in most other regions the goat is interbred with other breeds of goat such as the Angora to change the thickness, length and quantity of wool and the proportion of soft to coarse wool on the goat.[42] *Pashmina* forms the mainstay of the cash economy of Rupshu-Kharnak.

Typical of nomadic pastoralists, the number of sheep and goat owned measures wealth among the Changpas. The average household owns over one hundred, with proportions of sheep usually slightly more than goats in each herd. This was not always the case. Sheep used to outnumber goats in the average herd by about 4 to 1 till recently - the increasing returns from *pashmina* vis-à-vis sheep wool changed this[43]. The attached case study contains a detailed analysis of livestock holding in Samad, a typical Changpa village. Shearing of the sheep and goat is done in the early summer (May-June), thus giving sufficient time for the wool to grow back before winter sets in. Sale of animals to butchers for meat is done in the early winter, reducing pressure on the pastures during the scarce winter period and bringing in cash for provisions to last the difficult months ahead.

There is little doubt that the presence of the wild yak and its later domestication was the single most important factor in the adaptation of civilization on the Changthang. The yak (in which are included interbreeds between yak and cow such as the *dzho* and *dzhomo*) is probably the best adjusted animal to the Changthang's geography and climate - yak deaths due to winter are near negligible because their thick coats form a formidable barrier against the cold and wind. They are the main load carrier of the region and are also used for riding. Every part of the yak is useful for human survival – its soft wool is made into blankets; its coarse wool is made into waterproof tents (*rebos*); its hide is used for shoes; its meat is eaten; it provides milk; its dung is an important source of fuel in an area where firewood is not available; only the horns, hooves and skeletons are not used. Most families among the nomadic Changpas own at least one yak.

The horse is used mainly by adult males on their forays to other settlements or villages - adding to the status of the rider much as arriving by car instead of public transport does in Leh town. In fact, Goldstein and Beall have likened the relationship between the Tibetan Changpa man and his horse to the American man and his car[44]. Much like the Tibetans, the Changpas of Rupshu-Kharnak invest in expensive (and beautiful) saddle rugs and gear for their horses and spend their spare time combing and grooming them, reminding one of an old joke regarding a woman's wish to be born again as a man's new car. Horses are not native to the Changthang and require considerable additional care in the form of blankets in winter, special pastures, and grain supplements, all of which are ungrudgingly given. Horses are not being crucial for survival as the Changpas do not (unlike herders in Mongolia) eat horseflesh, milk mares, or herd on horseback. They are also not luxury items

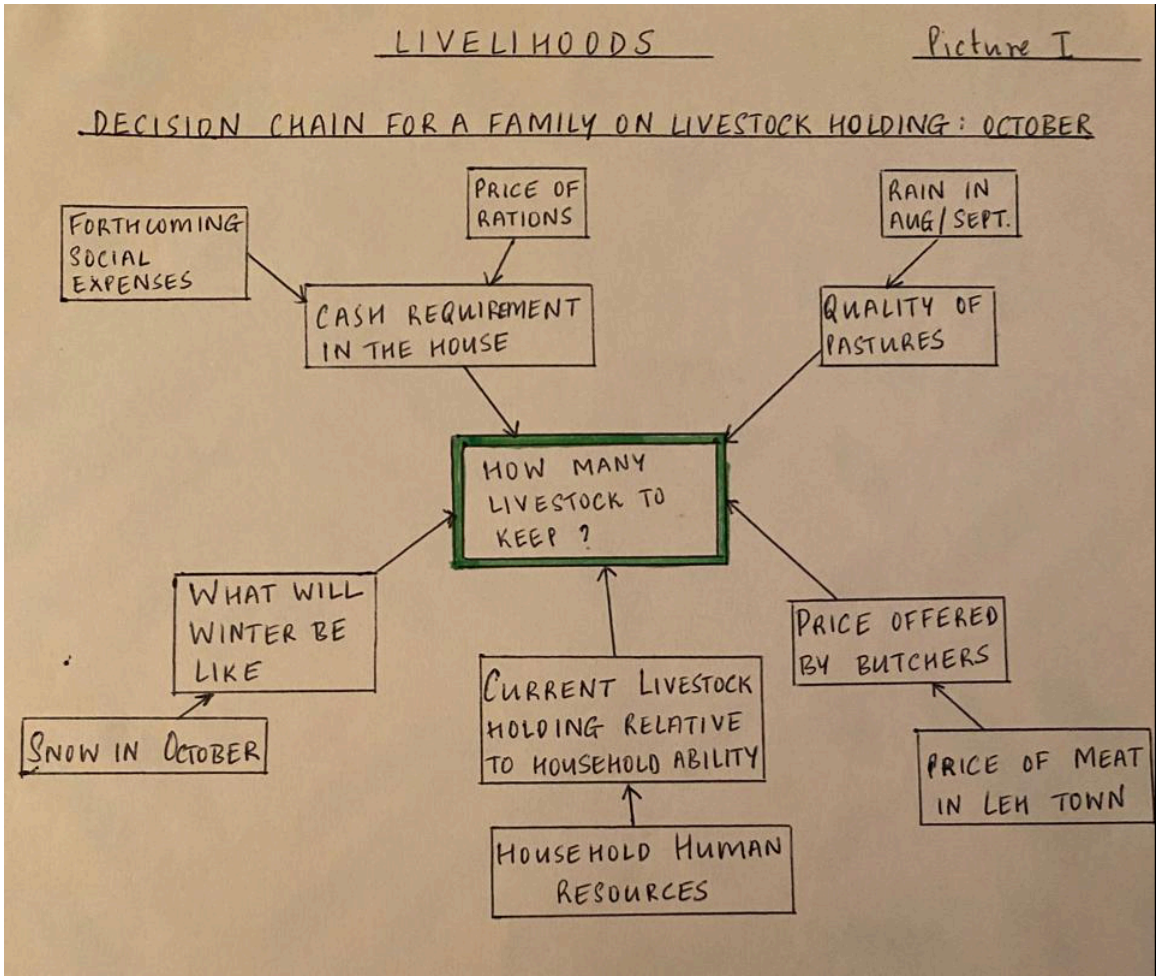
[41]International procurers of *pashmina* prefer thinner varieties because they machine spin and can use staples of down to 2 centimeter lengths.
[42]These facts have mainly been gleaned from an interview with Dr. Md. Deen at his office on 1st May 1998 and his article published in Recent Research on Ladakh Vol. 6.
[43]Group discussion in Samad on 3rd February conducted by Rinchen and Hasnain.
[44]"The Nomads of Western Tibet", Goldstein and Beall.

as in Tibet, as they serve for transportation and as pack animals. The comparison with Americans and their cars is probably applicable here in a different sense - most households, even the poorer ones, own at least one horse. Wealthier households own more than one, their horses are of a higher quality, and they spend more money on gear and decorations.

Maintaining a diverse herd composition for each family is seen as important to its survival. Different animals graze on different plants, and therefore a diverse herd makes more efficient use of vegetation on the pastures. Different animals have different uses, and they provide diversified products for the household to consume. A diverse herd also minimises risk of losses from disease and harsh winters. The actual composition of each household's herd is governed by natural factors which are common to the community, such as availability and quality of pastures and the suitability of the landscape, and by factors specific to the household such as labour availability, skills, and preferences. The appended case study describes herd compositions in the Samad Changpa households.

The need to make a decision on herd size is thrust upon every Changpa household in October and November, when an estimate of how many are likely to survive the winter has to be made. The butchers of Leh scout around the region for livestock at this time and thus represent a profitable culling mechanism to the Changpas. There are five factors that effect this decision. The first two are natural factors - the quality and carrying capacity of the winter pastures (which are in turn dependent upon rainfall in the months of July, August, and September) and the community's assessment of the severity of the coming winter. The next two are economic factors - the price offered by the butchers and the requirement of cash in the household due to purchase of rations, forthcoming social expenses, inter alia. The final factor guiding the decision on household herd size is the number of head of livestock the household feels it is confidently able to maintain, which I have called its herd maintenance capacity. This is largely dependent upon the number of working age members of the household and their skills and preferences. A pictorial depiction of the decision on household herd size is available as Diagram V.1.

Diagram V.1: Decision Chain on Livestock Holding



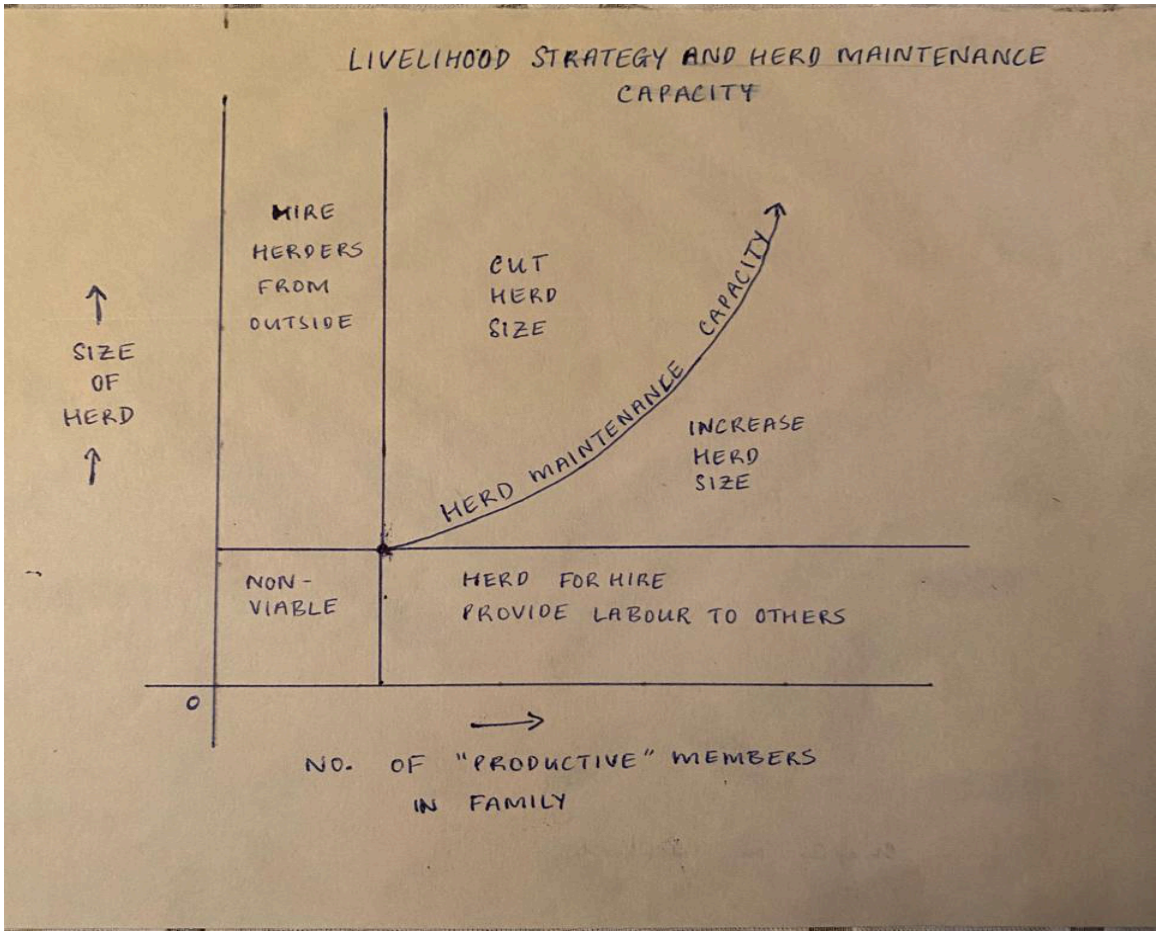
The last is important, because maintaining a herd (and surviving on the Changthang) entails a lot of work (a list of seasonal and daily activities is attached in appendices IV and V of this report). The volume of much of the work is dependent upon the household herd size. To be able to look after its herd effectively, a household requires numbers. The following table (Table V.2) explores the relationship between the number of adults in the household and the household herd size in the villages Samad, Sumdo and Ankung. The general trend observed is that households with larger herds have more adults in the family.

Table V.2: Relationship between No. of Adults in a Household and its Herd Size

	No. of Sheep and Goats in the Family							
No. of Adults	**0**	**1-25**	**26-50**	**51-100**	**101-150**	**150-200**	**>200**	**Total**
1	5	1	3	0	0	0	0	**9**
2	0	1	4	11	14	2	0	**32**
3	0	2	6	8	3	2	2	**23**
4	0	0	1	6	1	5	2	**15**
5	0	0	1	2	0	1	2	**6**
6	0	0	0	0	1	0	1	**2**
7	0	0	0	0	0	3	0	**3**
8	0	0	1	0	0	0	0	**1**
Grand Total	**5**	**4**	**16**	**27**	**19**	**13**	**7**	**91**

The relationship between herd size and herd maintenance capacity goes a long way in explaining the livelihood strategy of the individual Changpa household. There are four variations of this. These are pictorially depicted in Diagram V.2.

Diagram V.2: Livelihood Strategy and Herd Maintenance Capacity



a. Small Family Small Herd

The fixed costs incurred for a household to merely exist in Rupshu-Kharnak, and the number of tasks that must be undertaken irrespective of herd size, render a small family with a small herd a non-viable proposition. The few such families that exist are invariably dependent upon the largesse of others or are in a grim (and usually losing) struggle for survival. Some are able to build up their herds over the years with a lot of hard work, but most are prime candidates for migration to Leh.

b. Small Family Large Herd

Small families with large herds have it easier, but not much. They invariably have to choose between hiring labour from surplus households and working much harder. Nomadic pastoralism is especially viable at the household level when a large proportion of labour inputs are from within the family (and therefore free) as the cost of labour is high in Ladakh. Such families are therefore invariably forced to exercise the latter option and thus live a life of stress and strain. They are also candidates for migration, but under pleasanter circumstances than a. above – sale of livestock gives them a comfortable financial cushion for life in Leh.

c. Large Family Small Herd

Large families with small herds have it considerably easier. They are able to graze and maintain others' herds along with theirs. They are also able to provide labour to other households in the community and elsewhere, such as in the neighbouring Rong region or for the Indian Army and the Border Roads Organisation. They are able to gradually build up their herds to match their maintenance capacity, and, with hard work and a bit of luck, invariably do over the long run.

d. Medium Family Medium Herd and Large Family Large Herd

These combinations reflect a harmony between herd size and herd maintenance capacity in the household. Most Changpa households fall into this category in the long run. Short-term dislocations are adjusted to by culling or not culling herds in late autumn and early winter when the butchers are scouting for livestock.

Herd reductions at the household level are of three types – planned, unplanned but foreseen, and unforeseen. Planned reductions take place by selling off those head which are unlikely to make it through the winter to the butchers and slaying for household food requirements across the year. Large, planned reductions through sales also take place when a household is migrating to Leh. Unplanned but foreseen reductions take place due to cold in winter, when a certain number of livestock die[45]. Unforeseen reductions take place due to abnormal weather conditions, due to wolf and leopard attacks (which can, for example, reduce a

[45] For example, during the team's February fieldwork in Rupshu-Kharnak, there were three consecutive nights when the temperature dropped below –40. This period coincided with the lambing season, and about two hundred lambs died during these three days. We were horrified, but the Changpas said that this was just a little worse than par for the course.

hundred head herd to thirty overnight) and because the household has been over optimistic in estimating its herd maintenance capacity.

The importance of having sufficient numbers of working adults in the household comes across very clearly within the Changpa community. In fact, the Korzok Changpas felt that herd maintenance capacity was as important as herd size as an indicator of wealth (or lack of it). While herd size fluctuates according to weather, season and the quality of the year, the ability of the household to maintain a herd is more stable and more reflective of the household's wealth in the long run[46]. Traditional social systems of the Changpas, such as the polyandrous system of marriage and the retirement system for elders, have a basis in the need to have sufficient numbers of working adults in the household.

V.b Pastoralism

Pastureland is sparse in Rupshu-Kharnak, because the altitude permits only a single, short growing season. Regeneration of pasture is slow on account of the meagre precipitation. One pasture does not support grazing all the year round, and therefore rotation of pastures is necessary. The Changpas have evolved systems for herding their livestock that involve movement from location to location within their village boundaries over an annual cycle with well-defined rules for staying and grazing at each location.

These systems vary from village to village.

The simplest are those evolved by the Sumdo Changpas. They are a small community of eight households, originally from (and still officially part of) Korzok, who have settled permanently at Sumdo[47]. They have a perennial source of water, have built stone and mud houses, and practice a minimal form of agriculture. Herding for them involves taking their three hundred or so head of livestock up the south valley every day in summer, and similarly up the east valley in winter, enabling a complete regeneration of pastures during the half of the year the valley is not in use. As individual households do not have large livestock holdings[48], herding is collectively in nature - a team of six or seven women and young boys are pooled in from the community, and they take everyone's livestock for their daily walk.

Herding is nomadic in all other villages, with a well-defined and functional system of rotating grazing locations that is borne out of hundreds of years of experience and is designed to make optimal use of pasture lands in a sustainable manner. The communities shift residence from location to location, depending upon the availability of pastures and water. Within each major location shifts are made to minor locations, again based on availability of pastures and water. The timing and duration of each stay is influenced by

[46] Discussion with women and men of the Korzok Changpas at Foo on 6th August 1998.
[47] Sumdo literally means three valleys, and therefore there are many Sumdos scattered across Ladakh. The paper uses Sumdo for Ribil Sumdo, about 25 km. from Mahe bridge south of the Indus.
[48] The field team's impression was that this was the poorest village we came across in the study area.

the quantity, quality and accessibility of grass and water at a particular location, the regeneration rate of the pastures, the suitability of that location in relation to other locations, the condition of the livestock, and historical factors.

The Samad Changpas shift location eight to fifteen times a year, depending upon the quality of year (Diagram V.3 is a depiction of their migratory pattern on a map). While a few of their locations support the entire community, most require them to scatter. The extent of scatter, a critical issue for agencies tasked with providing basic development services to the community, is depicted in Diagram V.4.

The Korzok Changpas shift less (Diagram V.5) - they spend six months at their winter pastures at Thagajung where they are all together. They separate out into two groups thereafter, one moving around the Tso Moriri lake and the other heading south towards Manali. The Kharnak Changpas move throughout the year in one group.

These are reflections of the general movement pattern across the year in the average year for each community. Considerable variation in movement patterns is seen across years, depending upon the quality of the year in question. The factors outlined in Table V.3 below differentiate a good from a bad year. It can be seen that the quality of winter is the crucial causal factor for quality of year.

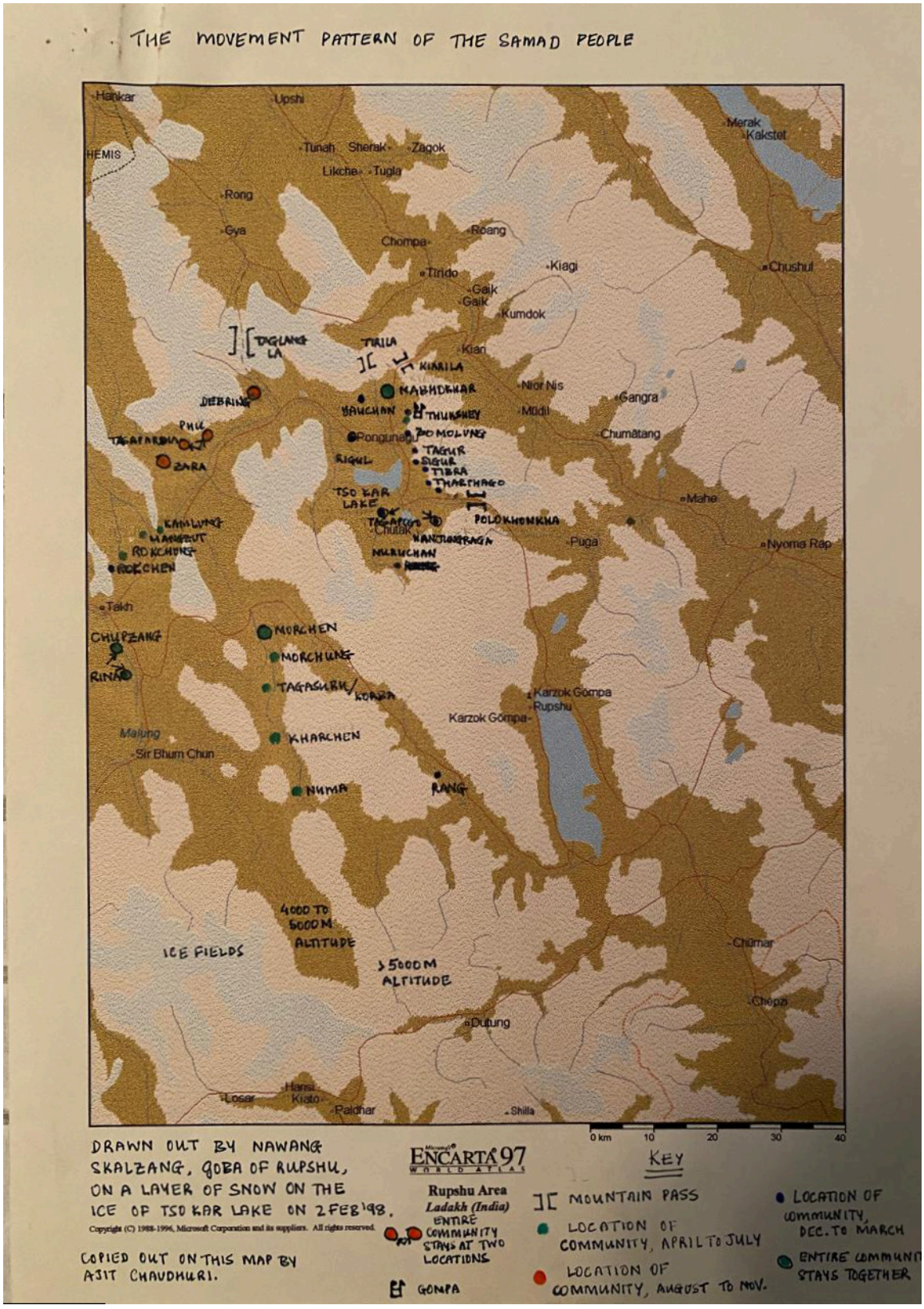
Table V.3: Perceptions of Good and Bad Years[49]

Good Year	**Bad Year**
Limited snowfall in winter.	Heavy snow in winter.
Good rainfall in summer.	Poor rainfall in summer.
Less mortality of livestock.	High mortality of livestock.
Good growth on the pastures.	Poor growth on pastures.
Good production of milk and milk products.	Poor production of milk and milk products.
Less illness and death in the community.	Illness in the community.

Bad years require survival strategies that include more frequent changes in location, more spread at each location and in groups of lesser numbers, and application of pressure on the LAHDC and government for emergency supplies of fuel and fodder.

[49] This is a direct translation of a table prepared by a group of Samad Changpa men on 6th May 1998.

Diagram V.3: A Map of the Migratory Pattern of the Samad Changpas



Survival Strategies of Changpas – Ajit Chaudhuri

Diagram V.4: Locations and Scatter Across the Year for Samad Changpas

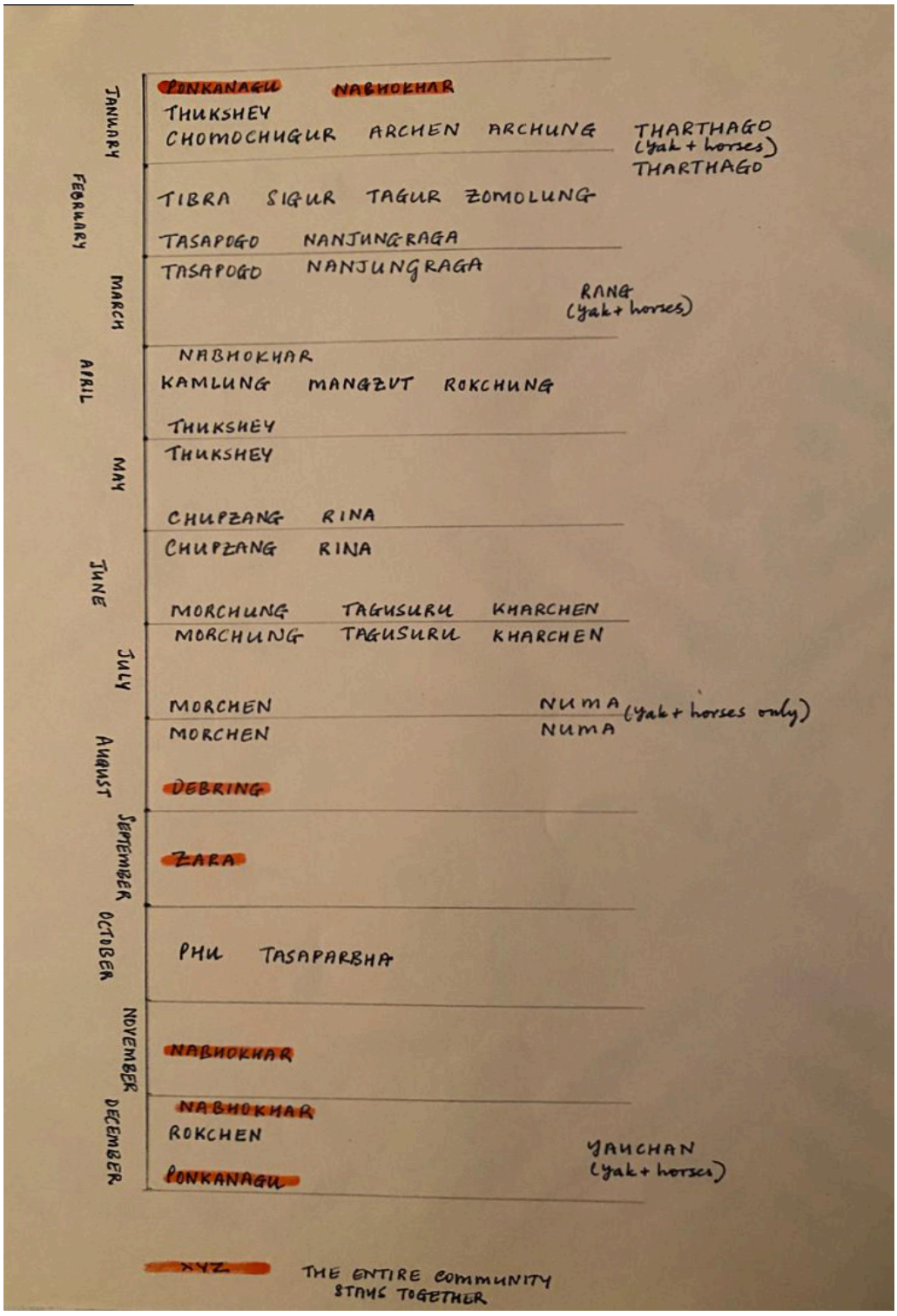
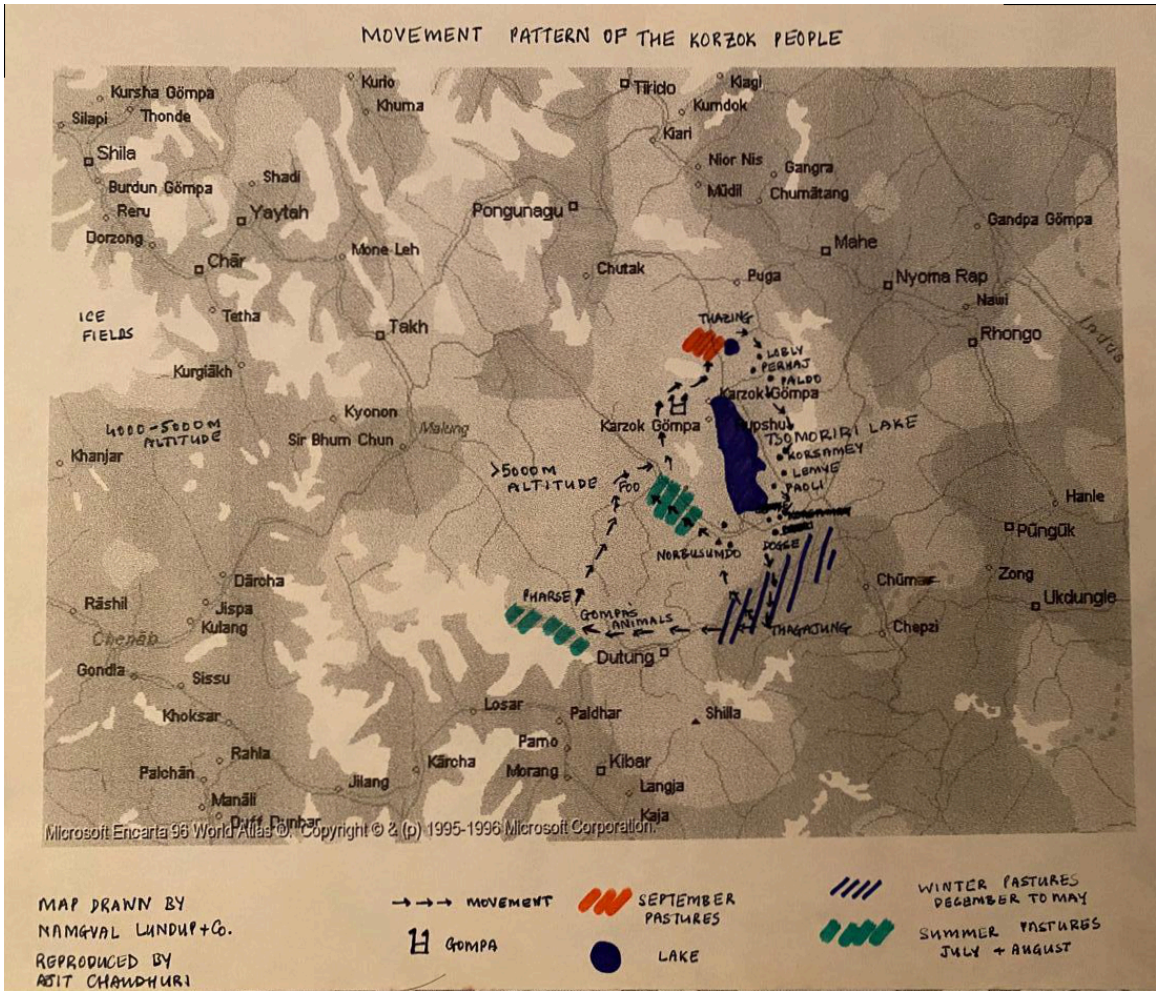


Diagram V.5: A Map of the Migratory Pattern of the Korzok Changpas



V.c ‘Disasters’

The term ‘disaster’ for excessive snowfalls that makes pastures inaccessible is a misnomer, these are natural events of the environment and should be seen as a part of the ecology of Rupshu-Kharnak. They form an important natural regulatory mechanism in the region by reducing the number of livestock and wild ungulates grazing on the pastures. Unlike drought, they do not negatively effect vegetation on the pastures – in fact grass grows better after excessive snow because of increased water infiltration into the soil.

Attitudes to excessive snowfalls vary. The Changpas see them as a cyclical phenomenon that makes nomadic pastoralism the high-risk proposition that it is. An example of one such excessive snowfall (a once-in-thirty-years phenomenon, according to the Samad Changpas), is described in the appended box. Others see them as disasters. This could be because there is a shortage of good data on the Changpas’ production systems, which makes it difficult to separate fallacy from facts. Development agencies tend to find it easier

to obtain funds if pastoral development projects are presented as disaster prevention, and therefore the term is used somewhat freely.

Questions arise on the manner in which authorities should react to situations of excessive snowfall in Rupshu-Kharnak. Should a large number of trucks loaded with fodder and other essential items criss-cross the region at such times? Or should the Changpas be left to cope on their own, as they would have a thousand years ago?

This enlarges into a wider debate, that of the way the government and intellectuals in Leh and outside view the Changpas and their livelihood systems. There is a school of thought that believes that livestock is lost in severe winters because the Changpas are backward and do not practice modern animal husbandry methods. The structure of their herds is irrational and uneconomic, with too few breeding females and too many unproductive animals because of the social status attached to large numbers of livestock. Migratory grazing is seen to be an improper use of pastures, as it does not provide incentives for the individual herder to either manage them or invest in their improvement, leading to their being overgrazed and degraded[50]. The scattered and mobile nature of existence of the Changpas also makes it extremely difficult for the LAHDC and the government to make available basic social services, such as education and health, in Rupshu-Kharnak. They feel that, for development to be achieved, the Changpas must be settled, that houses should replace *rebos*, and that pastures in Rupshu-Kharnak should be divided and parcelled out to all Changpa households.

This viewpoint tends to discount the fact that the Changpas' very existence in this region, one of the world's harshest human-inhabited areas, is in itself proof of the rationality and efficacy of many aspects of the traditional survival strategies that they adopt. On the basis of their knowledge and understanding of the environment and their animal husbandry skills, they should be considered experts even though they may be illiterate. Whether mismanagement of pastures to the extent described above actually takes place is also a matter of considerable dispute – the Changpas have strong systems to regulate access to pastures (described in the following section, Section V.d), and migratory grazing enables the land to carry more livestock than would be possible under a ranch-style of pasture management as is advocated by holders of the above view.

[50] Mainstream thinking on this issue still largely holds the views articulated by G. Hardin in "The Tragedy of the Commons", 1968.

The Anatomy of a Disaster[51]

The Samad Changpas were scattered around Zara in mid-October of 1998 when two days of continuous rain (beginning on 14th October) were followed by three or four days of continuous snowfall and then extreme cold which prevented the snow from melting. The pastures got completely covered, and the rebos began collapsing in the snow. The rainwater froze over, forming a hard crust over the pastures that prevented even the yaks accessing the grass. At the same time, foot-and-mouth disease was rampant among the livestock. The result of this was widespread death of livestock. The study team's estimates are that 10 percent of the total livestock with the Samad Changpas on 14th October died over the next two weeks. This does not include distress sales of livestock to Leh.

On the 17th evening the community held a discussion on possible means of coping. On the 18th, a group of better-off men (i.e., those with good boots) headed eastward to the Leh-Manali road with a hundred yak and sent the yak on to Thukshey while they returned to Zara. This was to carve out a path in the snow for the sheep and goats. On the 19th, all the men came with the sheep and goats up to the road, spent the night in the open without provisions, and then moved ahead to Thukshey on the 21st. Some then returned to Zara, while some stayed with the sheep in Thukshey. The families moved to Thukshey between the 23rd and 26th of October. Their coping strategies included re-locating to Thukshey, where they have *pucca* houses and supplies of fuel wood, clothes, and rations; accessing their winter pastures (which are around Thukshey) early; attempting to access grazing lands in the Rong region; and distress sales of livestock in Leh.

The main problems associated with this strategy are that accessing winter pastures two months earlier than normal will result in them being depleted by mid-winter – where will they go then? Distress sale of livestock have also brought their value down, in the first week of November they were about a third of their beginning-October rates. Villages in the neighbouring valleys are reluctant to let the Changpas use their pastures as their carrying capacities are limited and it would result in their long-term degradation.

The Changpas' worries are more for human beings than cattle in this situation, they feel that whatever will happen to the cattle will happen. With the cold already being intense[52] in early November and likely to get considerably worse as winter wears on, and with fuel supplies being limited and firewood being inaccessible under the snow, it is the children and the old who are going to have severe difficulties in the coming months.

[51] The Study Team had come into Rupshu-Kharnak in early November 1998 for the purpose of sharing the outcomes of the study with the Changpas. We arrived in the middle of this difficult period for the Changpas and spent our time studying their means of coping. An out-of-budget grant of Rs. 20,000/- was made for the immediate purchase and supply of fodder from the Indus valley region was made from the study funds courtesy ACTIONAID, which enabled four trucks of fodder to reach the region three days later thanks to the efforts of LNP. LNP and LAHDC bore the transportation cost.

[52] The team's measurements for temperature on 5th November were (in centigrade) –12 to –15 at midday, -30 by 1900 hours, and minimum estimates at below –40.

V.d Conflict

The land area in each Changpa village is huge, especially if looked at in comparison to villages in the valleys of Ladakh. Rupshu, for example, is about eight thousand square miles in area and houses the villages Samad and Korzok. Yet, availability of grazing area puts a very real limit on the number of livestock that a community can keep[53]. At the same time, there are no formal decision-making systems at the community level for regulating the total livestock with the community - it is only at the household level that decisions on herd size are taken. The total livestock with the community at the beginning of winter is thus the result of summation of all household level decisions. As described earlier, household level decisions on herd size are governed by several factors, of which only two (albeit important ones –the quality of pastures and the forecast of severity of winter) have a direct relationship with the carrying capacity of the region. There are, therefore, occasions when the total livestock with the community is more than the carrying capacity of the region, which results in adjustment mechanisms such as unforeseen livestock deaths across the community and encroachment into the pastures of other villages. This usually happens when forecasts on the severity of winter go awry. A description of such situations and response mechanisms of the Changpas is undertaken later in this paper. On the whole, however, total livestock with the community is a good estimation of the carrying capacity of the region, and the mechanisms by which they arrive at this are efficient.

Other forms of pressure on pastures abound. The Indo-China War of 1962 resulted in an influx of about one hundred families of Tibetan Changpas into Rupshu-Kharnak along with their animals (two to three hundred head each) at a time when traditional winter pastures near the Tibet border were closed. Stable pasture-sharing strategies that had been developed over hundreds of years went haywire as the local Changpas struggled to accommodate the refugees, which they did because of the enormous goodwill and sympathy the Tibetans enjoyed at the time. It is a measure of this goodwill and sympathy that it was only in the early 1980s that the first serious conflict over pastures between the Tibetan Refugees (TR) and the Samad Changpas took place. When it did, exchange of angry words was followed by that of stones. The block administration arrived at the Tso Kar Lake to separate the warring parties when the guns began coming out. They did this by arresting and locking up two of the leading TR, which brought the Tibetan administration[54] into the conflict. Once the guns were back in place, long and protracted negotiations with much mutual distrust (some more TR were locked up in the process), took place to address the issue of sharing of pastures between the TR and the Samad Changpas. Party to these were representatives from the two communities, the Assistant Commissioner (Nyoma), the Assistant Commissioner (TR), the Chief Settlement Officer

[53]This is because communities graze and shift locations only within their own village limits, unlike nomadic pastoral communities elsewhere. In southwest Asia, for example, nomads typically move hundreds of miles in winter, crossing district, state and even national borders, to lower lands where fresh grass is available.

[54]The Tibetans are administered in a parallel fashion by the Tibetan Administrative Service, which is headquartered in Dharamshala in the neighbouring state of Himachal Pradesh. They have their own education and medical services, assistant commissioners, settlement officers, etc. posted with each of their settlements.

and the Settlement Officer (TR). The team visited the pastures of the region and took two decisions - to distribute the pastures between the two communities, which was done, and to set a limit to the number of livestock the TR could keep, which was set at thirty sheep/goat per head. The agreement resulted in the reestablishment of an equilibrium that stands to this day.[55]

Interestingly, this battle was not seen as one between Tibetans and Indians, or even Tibetans and Changpas. It was purely one between the Samad Changpas and the Tibetans, with the Korzok and Kharnak Changpas not being, and not being asked to be, involved at all. The Korzok and the Kharnak communities knew about the battle and the issues behind it, but both saw it as the Samad community's affair. This reflects the fact that, while they present a united front in Leh and inter-marry, there is no love lost between the various communities of Rupshu-Kharnak, especially when it comes to pastures. Incursions into each other's pastures take place often, (high mountains do not lend themselves to convenient delineation of village boundaries) and is a major and regular source of inter-village conflict. Much effort has been made by the Ladakh Buddhist Association (LBA) to mark out the dividing lines between Korzok and Samad, with the then President of the LBA (and current Chief Councillor of the Leh Autonomous Hill Development Council), Mr. Thupstan Chhewang, being directly involved.

The worst inter-village conflict in living memory was only indirectly about pastures. This took place between the Samad and Kharnak Changpas in the nineteen eighties over access to salt in the Tso Kar Lake. The Tso Kar is a part of Samad, and the Samad Changpas use the land around it for grazing. The Kharnak Changpas have a right to collect salt from the Tso Kar, but would bring their animals along while exercising that right and thereby access prime pastures belonging to Samad. This flared up, and words and stones were exchanged before the block administration stepped in to resolve the conflict. Some shuttle diplomacy by a team consisting of the assistant commissioner and the concerned *patwaris* was done between the Kharnak Changpas at Zara and the Rupshu Changpas at Thukshey before an agreement was drawn up, signed, and witnessed. The compromise worked out was that the Samad Changpas would collect a fixed amount of salt (8,000 kg), transport it to Zara and hand it over to the Kharnak Changpas there for a payment of one thousand rupees. The agreement has been in force for over ten years now and has only recently been broken by the Samad Changpas, who unilaterally reduced the salt quantity to 5500 kg. Another round of conflict is gradually brewing up on this issue.

[55]There are, of course, accusations that the TR avoid the limit by moving their excess livestock to relatives in other regions during the counting time, which is every three years, and little niggling fights take place over pastures every now and then. But the agreement is in place, and has been seriously violated only once which resulted in the permanent expulsion of two TR from Rupshu (one was later revoked). The facts are from interviews with the then AC (Nyoma), Mr. Yakub, and older members of the Samad community who were in the thick of the action at that time.

As inter-village conflict over pastures in Rupshu-Kharnak is regular, effective resolution mechanisms are also in place. The respective village *Gobas* meeting up, identifying the wrongdoers, and levying punishments, sort out minor problems. When the *Gobas* are unable to come to a decision, or when the issues involved are particularly contentious, the matter is taken up to the LBA in Leh. Conflict is rarely taken to the administration or the judiciary.

A future source of conflict in Rupshu-Kharnak is likely to be the region's new-found glory as a tourist destination. Being a "high altitude desert moonland dotted with beautiful blue-water lakes"[56] and having recently had its protected status revoked[57], it is criss-crossed by trekking groups whose horses graze on carefully protected pastures. As this is a recent phenomenon there has not yet been an organised backlash, but matters are building up.

V.e Herding

The goats, sheep, yak and horses are taken from the camps to the pastures in the mornings and are brought back in the evenings. An exodus of animals takes place in different directions in all Changpa villages between 0730 and 0900 every day, throughout the year, irrespective of the season and weather. They reach their respective pastures in about two or three hours, graze, and start for home by middle afternoon. The herds are back at the camps by about 1630 to 1800 hours. There is not much change in this pattern between spring, summer, and winter[58]. Each household is responsible for the livestock that it owns, only Sumdo practices a collective form of herding. Families with sub-optimal herds often pool together resources with each other, especially among relatives/kinship groups, and those with large herds use the services of people from families high on human resource but not livestock.

The actual task of herding is usually done by young men and women, who can take over the task any time from the age of ten onwards depending on the human resource availability at home. Young girls and boys tend to consider it an honour to be given charge of the household herd, gradually changing their opinion as they grow older and see it for the tedious, boring, and repetitive job that it is. Senior adults consider it a necessary but unimportant task and avoid herding themselves to the extent possible. Despite being tedious, boring, etc., herding is not easy - the weather conditions are often extreme, and it requires experience to keep herds together during difficult climbs. The consequences of screwing up are catastrophic - there have been many cases of herds separating, especially when tended to by someone young and inexperienced, and one group of animals remaining in the mountains to end up as meals for predators such as the snow leopard and wolf.

---

[56]Exotic descriptions of the region abound in the tourist brochures. However, in my opinion, there have been none to quite match the actual beauty of the place.

[57]With the problems in Kashmir, the government had to allow access to Leh from Manali. The route cuts through Rupshu-Kharnak. Areas east of the road, such as Tso Kar and Tso Moriri lakes, have been open to tourist groups through a permit system since 1994.

[58]This was observed by members of the field team who would move along with a selected herd for a day during the field studies.

There are two conditions under which senior adults take responsibility for herding themselves. The first is when the human resource availability in the family is low, and therefore they do not have the option of avoiding the task. The second is in winter, when the better pastures are higher up (wind blows the snow from the upper reaches to the valleys, leaving the former's grass more accessible to livestock) and need stronger legs to reach. February/March is also the lambing season, and an experienced person is required at the helm of the herd.

V.f Finished Products

The following table (Table V.4) describes the products produced in Rupshu-Kharnak.

Table V.4: Products of the Changthang

Raw Material	**Final Product**	
	Local Name	**Equivalent**
Sheep Wool	Goncha	Woolen Robe
	Tsogdhan	Local Rough Carpet
	Tsogthul	Blanket
	Kangtse	Woolen Trousers
Goat Wool (Rough)	Chaili	Rough Blanket
	Thagpa	Rope
	Phatsa	Sack
	Tagal	Sack
Milk	Mar	Butter
	Churpey	Cheese
	Tara Churkey	Lassi (Yoghurt drink)
	Zjo	Yoghurt
Yak Wool (Soft) *Khulu*	Chaili	Blanket
	Tsogdhan	Local Rough Carpet
	Nugal	Good quality Sack
Yak Wool (Rough) *Tsitpa*	Rebo	Tent
	Tagal	Sack
Goat Skin	Shanglag	Robe
Sheep Skin	Shanglag	Robe
	Thulu	Sleeping Robe
	Yogar	Short blanket worn by women and also used for carrying children
Lamb Skin	Tsarlag	Good Quality Robe
	Yogar	Short Blanket
Yak Hide	Tatpa	Shoe Sole
	Pabu	Shoe Upper

All wool is processed in the following way -

Collection ==> Softening ==> Cleaning ==> Spinning ==> Weaving ==> Tailoring

Shearing of wool is undertaken in the early summer. Naturally fallen wool is also collected throughout the year when the animal pens are cleaned during the day. The *pashmina* (soft wool of the goat) is separated out at this stage and stored for sale. The other wool is first beaten with sticks so that it softens, and then elements sticking to the wool are removed. Spinning is done using old-fashioned weighted devices, with the same technology for yak, sheep, and goat wool. Men and women both weave, each using different types of looms. The women's loom is especially inefficient and harmful to the pregnant, as it requires use of body weight to keep the warp stretched. All looms are light, not cumbersome, and easily carried around while shifting. Finishing and tailoring are done at home using manual processes.

Skin from sheep, goats and lambs are used to make several garments for men and women. No mechanical or chemical processing is done to increase the life of the skin or improve its quality. Repeated rubbing and beating of the skin by hand serves to soften it, after which pieces are joined together and made into garments. Yak hides are similarly processed for making shoe soles and uppers.

Technology used in Rupshu-Kharnak is inefficient and labour intensive. Reasons for this could be:

a. The population is sparse and widely dispersed - unfavourable conditions for development of specialization and hence technology improvement.

b. The region is remote and isolated - there are few opportunities for technology transfer or learning from more developed regions.

c. The Changpas' peripatetic existence requires equipment and tools to be minimum.

V.g Markets

Only three products are sold – *pashmina*, sheep wool and meat from sheep and goat. No finished or processed products are sold. *Pashmina* and sheep wool are extracted and sold in a raw form. Animals are sold for meat live.

The *pashmina* market is an interesting one. The end products are shawls and sweaters sold to high-end customers - people in India and abroad with high quality expectations who are willing to pay high prices. Indian cashmere products are distinct from others in that they are hand spun and hand woven, and the only people with the traditional expertise to do this

are Kashmiri weavers[59]. The relationship between the weavers in the Kashmir valley and the growers in Rupshu-Kharnak is one of mutual dependence. It has stood the test of time because, until recently, there were no other sources of *pashmina* which were suitable to the weavers (who need long staple wool that a Changthang winter is able to generate) and no other markets for the Changpas.

This trade has always been important for Kashmir and Ladakh. It generates a livelihood to thousands of weaving families and traders[60] in the Valley. It brings significance as a region to Ladakh, whose sole other source of importance in earlier days was its position as a crossroad between Tibet, Kashmir, central Asia, and the plains of India. The consequence of the trade to the two regions has diminished in recent times. Ladakh has more to offer the world now, tourism and religion, and is of geo-strategic importance with Leh being the only Indian district to have an international border with Pakistan and China. And while the trade is still important to Kashmir, it is a region with other issues to occupy its mind these days. To the Changpas, on the other hand, who earlier herded their livestock in their own remote world blissfully unaware of the importance of their activities, the trade has become crucial for two reasons. First, the increased worldwide demand for cashmere products have driven prices obtained by the Changpas for raw *pashmina* considerably upwards, and second, this is their main source of cash in a world of increasing cash transactions.

The mechanics of the trade are as follows. *Pashmina* is sold by the Changpas to traders from Himachal Pradesh, Kashmir, or Leh for cash. They come individually between July and November every year to the Changthang, see the quality of the *pashmina*, offer a price, and try to come to a deal. Each Changpa village usually bargains collectively, which makes for a protracted negotiation process. The Changpas know that the individual trader has invested considerable resources in reaching them and therefore has much to lose by not coming to an arrangement. They do not know, however, how many traders will follow and what prices they will offer - the next one may offer much less, or there may not be any more traders. There is therefore an incentive for both parties to the process to come to an arrangement. Price setting is quite an intricate exercise. In 1994, it was between Rs. 800 to Rs. 1000 per kilogram of *pashmina*.

Whether this is an exploitative price is a matter of debate. The economics is fairly simple.

One kg. *pashmina*	==>	Two shawls
Rs. 1,000/- for the raw material	==>	Rs. 12,000/- for the final product[61]

For the entire *pashmina* production in Rupshu-Kharnak, approximately thirty m.t -

Rs. 30,000,000 to the Changpas	==>	Rs. 360,000,000 is the final value of produce

[59]The term "Cashmere" is a corruption of "Kashmir".
[60]Dr. Salim Beg, in a book on the *Pashmina* business in the Kashmir valley, has delved into issues of its employment generation.
[61]At the rate of Rs. 6,000/- for a *pashmina* shawl.

This translates as - the Changpa earns one out of every twelve rupees generated by the sale of *pashmina* products, and Rupshu-Kharnak earns a total of thirty million rupees (a little less than a million dollars) every year in a three hundred- and sixty-million-rupee (ten million dollar) market.

The Co-operative Department of the government has made several well meaning attempts to intervene in this trade based on the assumption that the price is exploitative and with the aim of ensuring fair returns to the Changpas[62]. The latest began in 1995, when they set up the All Changthang Pashmina Growers Pashmina Marketing Society and decided to buy at Rs. 1750/- per kg. of *pashmina* against the prevailing rate of Rs. 800-1000/-. The decision was taken late in the season when most of the *pashmina* was already sold, they were therefore able to procure only a little which was sold onwards to traders at Rs. 1800/-. In 1996 they offered a price of Rs. 1500/-, which drove all the traders out of the market and enabled them to corner the entire available *pashmina* that year. And that was the end of the intervention - the department is still (at the time of writing in middle 1998) trying to offload this *pashmina* at Rs. 1200/- or even less, and not succeeding. In 1997, stung by their unsold inventory, they decided to withdraw from the intervention. The traders, who had been driven out by the pricing policy of the department and who had therefore cut links with the Changpas, were also not in the market. The end result of the intervention was the distress sale of *pashmina* at Rs. 650/- per kg. to a few TR traders at the end of 1997, i.e., the returns per kilo *pashmina* to the people the intervention was ostensibly protecting dropped from pre-intervention levels.

There are lessons to be learnt from this. The reasons offered for the unsold inventory are many - the glut of smuggled Chinese *pashmina* reaching the Kashmiri weavers from Nepal and Delhi which reduced demand for the local *pashmina*, the low quality of *pashmina* procured by the department, etc., etc. While these may have an element of truth, they divert from the key issues, that price fixation was political rather than commercial in nature, and that agencies without business background or intention do not have the efficiencies required in this tight trade. Interventions of this nature screw the very people whose livelihoods they intend to protect.

This is put strongly because, as the saying goes, those who forget history are condemned to repeat it. Some NGOs in Leh are already considering an attempt to intervene in the *pashmina* trade with the aim of ensuring better returns to the Changpas, and it is hoped that they do a serious reality check on their plans before proceeding.

Another form of intervention in the trade aims at keeping more of the 360 million rupees generated from Rupshu-Kharnak's *pashmina* within Ladakh by doing value added processing such as de-hairing, spinning and weaving, as well as by accessing finished goods markets directly. De-haired *pashmina*, for example, has a value of Rs. 4,000/- per kg. Attempts along these lines are being pioneered by some NGOs and are still in infancy. Any such activity will be Leh-centric in nature and is therefore unlikely to involve the Changpas at levels more than as suppliers of raw material.

[62] An interview with Mr. Majid of the Cooperative Department on 1st May 1998 at Leh revealed that this was first attempted in 1958, and then again in 1968.

Sheep wool is rarely sold for money. It is normally bartered for barley or wheat with villagers in the neighbouring Indus valley. A kilo of wool would be exchanged for approximately fourteen or fifteen kilos of barley or wheat. When sold for cash it goes for between Rs. sixty and Rs. seventy a kilo.

Meat, the other source of cash in Rupshu-Kharnak, is sold in the form of live sheep and goats to butchers from Leh. The average rates in 1997 are described in Table V.5 below.

Table V.5: Average prices for goat and sheep in 1997

Animal	**Price**
Sheep, male, large	Rs. 2,000/-
Sheep, male, medium	Rs. 1,600 - 1,800
Sheep, female	Rs. 1,100 - 1,700
Goat, male	Rs. 1,400 - 1,900
Goat, female	Rs. 700 - 1,000

As in the *pashmina* trade, the butchers arrive individually in the Changthang to buy animals. This is typically done just before the onset of winter, in November, though sporadic buying trips take place through the winter. They negotiate individually with Changpa households who want to sell livestock. The butcher looks at the livestock, does a rough estimate on how much meat there would be, does some quick calculations, and then makes an offer for all of it. The Changpas whittle it up knowing that the butcher has invested a considerable amount in reaching their village and would go back empty handed only if even his sunk costs were not being recovered in the deal.

The prices offered for livestock by butchers had dropped considerably in the 1997-98 winter from the previous year, leading to a rumour that the butchers had come to some price fixing arrangements between themselves. The actual culprits were the district administration, who had put a ceiling for the retail price of meat in Leh town at Rs. 100/- a kilo at a time when the market price would have been in the region of Rs. 130/-. This was a political decision to appease town lobbies in Leh, as both Id and Losar (the Ladakhi New Year) occur over winter and much meat is consumed. As a result, margins for everyone in the supply chain were squeezed, and the axe fell most on the primary producer.[63] The resultant costs to the Changpas have not yet been understood or studied.

[63]There are many many major differences between Ladakh and the rest of the country. One is that the public distribution system genuinely works here. Another is that when the government sets a price ceiling on a food item, no individual would be willing to buy at a higher price (the restaurants might, but the individuals would not) and therefore there is no scope for a black market in meat. I thank Mr. Jumma Malik, a butcher in Leh and a regular purchaser from Rupshu-Kharnak, for information on the business.

V.h Scope for Intervention in Livelihood Systems

An interesting commonality of the *pashmina* and meat markets is that the buyers come to Rupshu-Kharnak, to the villages of the sellers. The Changpas are thus spared long and unpleasant visits to Leh or wherever to sell their produce and obtain cash, which is seen as a major advantage by them. The problem with this system is that the goods are not valued in a competitive market. Traders/butchers come to purchase one by one, not together. The Changpas have to negotiate with them with very little idea of prevailing market rates, and with the constant danger that if they refuse an offer, the next buyer may offer even less or, worse, may not come at all. The mechanisms by which prices are set are therefore not advantageous to the Changpas.

The main scope for a development intervention in livelihoods would be to facilitate more open market mechanisms, especially for *pashmina*. Setting up of a *mandi* or marketplace system for *pashmina*, along the lines of grain markets or cattle fairs elsewhere, would enable many buyers to meet many sellers at one place and thus enable efficient market transactions to take place. The marketplace need be operational for only a short time during the selling season, possibly two weeks in July or August. Such an intervention would be possible only if the LAHDC and the government backs it to the hilt. It would require allotment of a suitable place in Rupshu-Kharnak (conveniently accessible to all Changpa communities and to traders from Leh, Kashmir and Himachal Pradesh), extensive publicity within the trading community and the Changpas, and the setting up of basic facilities for boarding and lodging. An intervention to stabilize prices or maintain a minimum support price could then be undertaken by the LAHDC.

Other interventions in *pashmina* could be aimed at increasing its value to the Changpas. Changpas currently sell *pashmina* without grading it according to length of staple, thickness, or colour, leaving this activity to the buyer. Grading of *pashmina* by the community, and arriving at separate prices for each grade, is likely to increase total returns to them, and, over a longer period, encourage the production of better-quality *pashmina*. Similarly, de-hairing *pashmina* at the village level would increase its value considerably. This activity, however, requires considerably more investment in time and capital (smaller de-hairing machines are available for about Rs. 40,000/-).

Survival strategies of the Changpas, especially those relating to livelihood, are heavily dependent on the severity of the winter. So far, the Changpas have relied upon traditional methods to forecast this and plan their responses and get caught out by sudden and extreme deviations from the forecast. If meteorological forecasts of the coming winter in Rupshu-Kharnak, or even forewarnings of bad weather ahead, are made available to the Changpas it would enable responses within and outside the community to be planned rather than reactive.

Among the main developmental demands of the Changpas themselves has been fodder development programmes. This could be done through watershed management schemes that supply the pastures with water from the rivulets and *nallahs* that flow across the region, and thus enable grass growth to be independent of the scanty rainfall.

The opening of the Changthang to foreign tourists could be an opportunity for 'off-farm' income generating activities among the Changpas. There are two types of tourists who visit - trekking groups who walk through the region spending at least a week at a time, and visitors to the Tso Moriri and Tso Kar lakes who drive through and spend a maximum of three days at a time. The money that they spend is mainly earned by tourist agencies in Leh or Manali, and none of it percolates into the Changthang. It is important to ensure that the region and its people gain from tourism so that losses and disturbances are offset and profits made. There are several ways by which this can be done, such as -

a. Encouraging the Changpas to set up teashops, restaurants, tent camps and hotels at strategic locations, such as along the Leh - Manali road. This can be done through basic training and giving of small bank loans. The Leh Nutrition Project has demonstrated such possibilities with a group of women in Sumdo, which is described in the following box.
b. Ensuring that each trekking group and vehicle pay a fee into the general fund of the villages they pass through, which allows them to pass, stay and graze their horses on the village pastures.

THE TEA STALL AT SUMDO

The Tso Moriri is considered the most beautiful of the Changthang's many blue water lakes. The government allowed access to the lake only in 1994, and it has since become among Ladakh's most popular destinations, especially among the more adventurous. Between 5 and 20 vehicles a day visit the lake in the three-month tourist season. All these vehicles pass through Sumdo.

The women of Sumdo set up a tea stall for the tourists in 1997 in a tent along the road, just across the river from their settlement. The idea and the start-up capital came from Leh Nutrition Project. In the first year they had several problems, including the fact that most of the women did not know how to make tea as per the likes of outsiders, and managed to break even. In 1998 they also began serving beer at the tea stall and have managed to make a profit of Rs. 2,000 that they will be sharing between them.

This is the poorest Changpa village and the money made has made considerable difference to the women. They plan to continue the stall but will be careful not to make too much money so that the men are not tempted to take it over. They do not see a moral dilemma in serving beer at their tea stall (and this makes them possibly the only NGO-sponsored women's group in India that is involved in the liquor business) but propose not to ever serve hard liquor. The reason, again, is purely pragmatic - they foresee that their men will drink the liquor and add water into the bottles, and they would lose goodwill by serving customers watered-down liquor.

So if you are ever on route to Tso Moriri, look out for the tea stall. Beautiful location, friendly service, and cold beer! The first two are a first-hand recommendation.

Case Study: Profile of Animal Ownership in Samad

Samad is a typical Changpa village consisting of 69 households. They are all nomadic pastoralists. The project field team surveyed them over three days in February 1998. The total numbers of each animal owned by the community at that time is indicated in Table V.6. The livestock holding of the average household is also indicated.

Table V.6: Livestock Holding in Samad

	Total Holding	Average Hh Holding
Sheep	4385	64
Goat	3232	47
Yak	597	9
Horse	115	1.6
Donkey	10	

Table V.7 depicts the number of sheep and goat owned by the households against an economic categorisation decided upon by the research team (using observation, discussion and ranking techniques), clearly indicating a positive relationship between the two factors.

Table V.7: Sheep and Goat in Samad by Economic Category of Household

	Total Goat and Sheep						
	0-39	40-79	80-119	120-159	160-199	>200	Grand Total
Econ. Category							
1 (Richest)	0	0	0	3	5	7	15
2	0	1	11	8	3	0	23
3	1	6	7	3	0	0	17
4 (Poorest)	9	5	0	0	0	0	14
Grand Total	10	12	18	14	8	7	69

An indication of the mix of goats and sheep kept by families in Samad is depicted in Table V.8. There is a bias towards keeping around the same number of both. Households with more of one are very likely to have more of the other and vice-versa. Interestingly, those who own no sheep do not own any goats either.

Table V.8: No. of Goats vs. No. of Sheep owned by Households in Samad

No. of Sheep	No. of Goats 0	1-30	31-60	61-90	91-120	>120	Grand Total
0	3	0	0	0	0	0	3
1-30	0	14	1	0	1	0	16
31-60	0	4	12	2	0	0	18
61-90	0	2	8	5	1	0	16
91-120	0	1	5	5	0	0	11
>120	0	0	0	2	2	1	5
Grand Total	3	21	26	14	4	1	69

Most households own a yak as well (Table V.9), only the very poorest do not. Households with many yak are richer, though all the richer households do not own many yak.

Table V.9: Yak Ownership by Economic Category in Samad

Eco. Category	No. of Yak 0	1-5	6-10	11-15	16-20	30	Grand Total
1	0	0	2	7	5	1	15
2	0	1	12	8	2	0	23
3	0	9	7	1	0	0	17
4	4	10	0	0	0	0	14
Grand Total	4	20	21	16	7	1	69

Horses can not be considered a luxury item in Samad, with most of the poorest households owning at least one (about the same ratio as the second poorest category of households). The richest households own at least two horses - but then, so do some of the poorest, as seen in Table V.10.

Table V.10: Horses Owned by Economic Category

Economic Category	No. of Horses 0	1	2	3	4	Grand Total
1	0	0	7	6	2	15
2	0	8	12	1	2	23
3	6	5	3	3	0	17
4	5	6	3	0	0	14
Grand Total	11	19	25	10	4	69

VI. SOCIAL SYSTEMS AND GOVERNANCE AMONG THE CHANGPAS

"When mobility and livestock dependence coincide, they produce complexities which are both fascinating and difficult to unravel."[64]

The Changpas are primarily dependent upon livestock. The Changthang, in which they live, is a harsh area with marked seasonality in its environment. Their basic livelihood strategy is that of movement of livestock to different pastures throughout the year, which requires a lifestyle of constant transit in difficult conditions. The social systems that have evolved within the various Changpa communities in Rupshu-Kharnak draw from Ladakhi Buddhism and therefore have similarities with Buddhist communities all over Ladakh. Yet they are distinct, as they have been adapted to the requirements of each Changpa community's specific livelihood strategies. This chapter looks at social systems and institutions of governance amongst the Changpa communities in Rupshu-Kharnak and examines the suitability of these to the livelihood strategies that they adopt through a description of the two main social institutions of the Changpas, the family and the village.

VI.a The Family

The family, or the household, is the most basic social unit of the Changpas. Family types found in the Changthang vary considerably. Most fall into one of the following categories - the polyandrous family, the nuclear family, and the woman-headed household.

The traditional family form of the Changpas is the polyandrous family. In a polyandrous family with many sons, only the eldest marries and brings a girl into the family. The second son, and sometimes the third as well, have the right to stay with the family and have sexual relations with the wife. At least one son is absorbed by the religious system and becomes a Lama. Any additional sons are free to do what they wish - marry and become a son-in-law in another household or live with and look after the parents. A variation of the polyandrous family is the joint family, distinctive only because the head of the household and his wife have an exclusive relationship (brothers do not exist, have died, or have separated out). Daughters are highly valued, possibly because they take on a significant proportion of household activities, including housework, looking after other children, herding the livestock, and even helping their mothers in childbirth. They are married off only upon receipt of a bride price. Some girls are absorbed by the religious system and become Chomos. The wife, children, and all family assets are in the name of the head of the household, who is always the oldest brother. In a family with only daughters, it is done for one of the girls (usually the youngest) to marry a boy without responsibilities, such as a fourth or fifth son, and bring him in to the family. There is no social stigma attached to being a 'son-in-law', or a man living in his wife's family (the local term is 'Magpa') when there are no males to take on responsibilities - it is seen as a practical arrangement that ensures continuation of the household.

[64]Rada and Neville Dyson-Hudson

Polyandrous families consist of two establishments, the *Khangchen* and the *Khaun*. The *Khangchen* consists of the head of the household, his wife, his brother/s, the children and, if they are married, his daughter or son-in-law. The older generation, consisting of the parents and uncles, and others such as unmarried sisters and additional brothers live in a subsidiary household or the *Khaun*. The *Khaun* is separate from the *Khangchen*, and dependent upon it for its survival. The number of *Khangchens* within a village determines its size.

Movement from the *Khangchen* to the *Khaun* is a painful process for the head of the household and his generation, because it is also a process of relinquishing all authority and responsibility and passing these on to the new head of household, the oldest son, and to his wife. The socially acceptable time for moving from *khangchen* to *khaun* is upon the birth of the first grandchild or after about 5 years of the sons' marriage, whichever is earlier[65]. The older generation often make this move with great reluctance, understandably so because one is likely to be in the prime of life upon the birth of one's first grandchild and therefore not quite ready for life as a retired person. Delay in the move is a cause of considerable tension between generations within the family - sons and daughters-in-law want the responsibility of running the house at the earliest. A process of signalling, in which plates are thrown, shoulders collide, and space within the *rebo* is demanded, lets the older lot know that its time to move on to the *khaun*. If this fails, the daughter-in-law moves to her parents' house, ostensibly for a holiday, to pressurize the elders to move. Gossip also acts as a form of pressure on the parents - neighbours start talking when they stay too long and the Changpas, like most people, do not like to be a topic of conversation within society. Division of property takes place when a household separates into a *khangchen* and *khaun*, with the *khangchen* retaining three-fourths of the livestock holding of the household and the main *rebo*.

The traditional polyandrous family has been an important enabling factor for the nomadic pastoral livelihood strategy of the Changpas. Polyandrous families have sufficient 'in-house' labour to maintain large herds - and pastoralism is not cost effective if labour is paid for at market rates. The relationship between herd maintenance capacity and herd size for a household has been examined in the chapter on livelihoods. Polyandry also acts as a population control mechanism in an area that does not have the resources to support an increasing population. The number of households in a village does not change over generations in a community practicing polyandry, and household assets are not divided over generations.

The polyandrous family is still widely prevalent in the Changpa community. It is seen that they are usually more prosperous (they own more livestock) than other family forms. Changpa women say that this is the best system for women because they (the women) are under tremendous strain with the constant movements that a nomadic lifestyle imposes

[65] The current record in Korzok, where we studied this issue, is held by the *Kotwal*. He has only one daughter, and therefore took in a Magpa seven years ago. So far there have been no problems, but he is ready to move with his wife to the *Khaun* once these begin.

upon them, and they get more help if they have more than one husband. However, it is important that the brothers get along and are not jealous[66].

There is a gradual shift away from the polyandrous system of marriage, especially among the younger generations in Kharnak and Samad villages. The reasons for this are described in the chapter on change. There is perhaps a need to describe one of these, the changing concept of love among the Changpas and its relationship with marriage, in greater detail.

Love and its subsidiaries attraction, liking, and lust, have traditionally not been factors in making up marital alliances in Changpa society. Decisions regarding marriage are in the hands of parents, who decide the time for marriage of their sons, select a girl and negotiate the bride price with her parents. Usually, the sole criterion in selection of a girl is her ability to take on the household workload - other factors such as her wealth, age, looks, and reputation, or the wishes of the prospective husbands, are relatively immaterial. This explains the fact that, in most families, the wife is a fair bit older than her eldest husband.

Matrimonial alliances are usually arranged within the Changpa community, across villages or within the village, and also between Changpas in the Changthang and those settled in Leh. Marriage to non-Changpas is acceptable and quite common between the Changpas and Yulpas in Korzok. There are also many alliances between Changpas and Rongpas from the neighbouring Rong region. Brides coming in to the Changpa community usually have difficulty in adjusting to the Changpa way of life. They are invariably distinguishable, no matter how long they have been married into the Changpas, by their personal cleanliness, the tidiness of their homes, the emphasis they give to education of their children, and their overall dissatisfaction with their situation[67]. There are also instances of outside men marrying into the community and becoming Changpas themselves[68].

It is acceptable to kidnap a suitable girl from her home, and then negotiate bride price with her family. The attached case study, 'The Case of Sonam Tsomo', describes such incidents. Divorce is fairly simple and easy to obtain. In cases where both parties are amenable and there are no children, the families of the man and woman merely get together and pull apart a woollen thread. In more complicated cases, the *Goba* and members get involved in deciding whether it should be granted and, if so, issues such as the level of maintenance payable and responsibilities towards children. When mutually acceptable agreements are not reached, the Ladakh Buddhist Association gets involved.

---

[66] This was confided by the Samad Changpa women to Shumita Ghose, a gender expert who accompanied the research team in November 1998.

[67] This is an observation of the field team in the course of the research. A typical case was the wife of the member from Sumdo, who was from the Rong. Despite having been married into the Changpas for 14 years, she retained dissatisfaction with the cards fate had dealt her. We met her often, as Sumdo was a stopping point on the way in and out of the Changthang and she was always on hand with a cup of tea for us.

[68] The current Goba of Korzok is one such person. He is originally from Spiti, and came to the Changthang as a boy along with his uncle, who was a Lama in the Korzok Gompa. He married a girl from Korzok, an only daughter, and thus became a Changpa himself. He retains his Spitian looks and business mind.

The traditional marriage systems of the Changpas can be seen to be simple, flexible, and pragmatic. They, however, have little space for the expression of feelings of love and its subsidiaries which, notwithstanding the extreme climate, the altitude, the nomadic way of life and other factors, happen here just as they do everywhere else.

Courtship rituals among the young are quite typical. Social intercourse is conducted through a dance called the *jhabroo*, wherein young people of both sexes get together, the males and females form separate lines, hold hands, and then move alternatively towards and away from each other, singing loudly right through. These happen at night and carry on till late, more often in summer, and quite spontaneously[69]. The singing also helps in keeping wild animals away from the livestock. Married and unmarried people have separate *jhabroos*, and it is at these occasions that romances blossom.

The male has to make all the moves. When a boy likes a girl, he is expected to tell her so. If she throws a stone at him, or hits him, he can safely assume that she does not like him and that he would be well advised to direct his attentions elsewhere. If she says nothing (Changpa girls are ladies and do not say yes), chances are that some pursuance can bring about acquiescence. He does this by taking his livestock in the same direction as she does until she agrees to a relationship. This could take a long time, sometimes years, because the girls like to make a boy run around. They then meet at nights in the village, or else get close while herding their livestock. The tables get turned in the waiting period if an offer comes for the girl from someone else through formal channels - she then goes to her admirer and begs him to marry her. The ball is then in his court - he can agree and approach the respective parents or make plans to run off together, or else can indulge in filmi dialogues such as 'you made me wait 3 years, now I'm not interested'. All cases have happened often.

Girls, to indicate an interest in a boy, take their herds in the same direction as the object of their interest. If he takes his herd high towards the mountaintops she too would attempt to follow, giving new meaning to the words 'I would climb mountains for you'. It is then up to the boy to take the hint and make a move[70].

It is therefore seen that knowledge of natural resource management developed by the community over thousands of years of nomadic pastoralism in this region is not the sole factor in regulating access to pastures - romantic interests also play a role in deciding whose livestock goes where. Romantic interests, however, have little role in the formation of marital alliances among the Changpas, because it is the parents who traditionally take all decisions regarding this. And the parents rarely know what their children want. There is little free flowing discussion between generations, and few processes by which the hopes and aspirations of children are communicated to the parents. The two main means by which parents get to know that their children are in love are if they run away together (appended is 'The Case of Tharchen's Daughter' describing such a situation) or if the girl gets pregnant.

There were several occasions that the team had to participate in *jhabroos* in the course of the research, and I always enjoyed them. The physical activity always helped me acclimatize to the altitude and cold.

[70] We are indebted to Konchok Dorje, 21, of Kharnak who discussed courtship patterns among the Changpas with us one August evening.

The Changpas, like most nomadic pastoralists, are a pragmatic people and children, whether from an unmarried daughter or a married daughter-in-law, are seen as a blessing in a labour-short economy. There is little stigma attached to unwed motherhood. If the 'culprit' is unable or unwilling to marry the concerned woman (or vice-versa) she may have some difficulty in making another match because of the liability of a child, but she is able to stay within society and as a part of it. An unmarried mother has the right to stay in her father's home, and the child is brought up in this home. When her parents move to the *khaun*, she can move with them or else take a share of the property and set up her own household. She is not ostracized or shunned in any way, and the local word for bastard does not have negative connotations[71].

Major changes in the way younger people look at love have begun taking place over the last decade. The major causal factor is the increased exposure people have to the outside world, especially to Hindi films and to a way of life outside Ladakh where love is more than mere sexual gratification - it is making a life together, and it is exclusive. This has had two effects. The first is that young couples who fall in love expect to get married. And more young people want to marry for love, especially young girls. The older generation is hard pressed to understand these changed attitudes (communication between generations remain stilted)[72]. The other is that the exclusivity element has begun to creep into relationships. Elder brothers are less willing to share their wife with younger brothers (see the appended Case of Skarma Irshey) and younger brothers are less willing to accept the situation. These factors have led to households separating.

The effects of the shift away from polyandry have been twofold. The first has been a population increase - the number of households in Samad and Kharnak, which had been stable for a long time, has begun increasing with the decline of polyandry[73]. The second has been increasing poverty within the community, as household assets and people are divided across generations leading to uneconomic herd sizes and low labour availability within households. This, in turn, is a major cause of increasing migration to Leh. It can be seen that Korzok, which is still predominantly polyandrous, does not have a record of permanent migration to Leh.

Nuclear families are a recent trend in Rupshu-Kharnak, and are a direct result of the breakup of traditional polyandrous households. They tend to find survival in the Changthang more difficult for two reasons. First, family labour is especially short in such families, and this puts tremendous strain on the existing adult family members. Second, in the process of splitting away from the parent polyandrous household, the nuclear family

[71] These facts were gleaned from a conversation with four middle-aged women in Kharnak in August 1998. One of them is an unwed mother of a 19-year-old boy.

[72] A group of Mothers in Kharnak (August 1998) told us that their daughters as harder working than they were at that age, clearer about what they want in life (which is much more than the Mothers wanted), and less willing to accept what God and Parents have ordained for them. They saw love marriages as an undesirable phenomenon because, in the case of an arranged marriage going wrong the community is duty bound to back and support the girl. In a love match the community would have no such responsibility.

[73] F.Drew mentioned 100 households in Rupshu in 1875. The figure given by the old folks in describing their pre-1959 migration pattern was about the same.

usually comes away with precious little in terms of assets but with all the responsibilities of any *khangchen* towards the village. These combine to make many nuclear families unviable as economic units, and such households wage a grim struggle for survival in the Changthang or else look to shift to Leh.

The other important family form in the Changthang is the woman-headed household. These are formed either by male members of the family being unavailable (through death, divorce or not yet being of age) or by an unwed mother separating from her parental home. They are clearly skewed towards the poorer side of the community (see Table VI.1), though there are exceptions. Women-headed households are given some special considerations within the village, such as not having to pay dues or undertake certain tasks towards upkeep of the village.

Table VI.1: Family Type by Wealth Category in Samad

	Family Type				
Wealth Category	**Female Headed**	**Joint**	**Nuclear**	**Polyandrous**	**Grand Total**
Rich	0	3	8	4	15
Upper Middle	0	3	18	2	23
Lower Middle	1	1	11	4	17
Poor	6	0	8	0	14
Grand Total	7	7	45	10	69

The other variations of family type among the Changpas are as follows.

Single person households
Head of household, wife, and unmarried daughter with her children
Old head of household with unmarried middle-aged daughters
Unmarried middle-aged brother and sister who have adopted a child
Head of household, second wife and widowed daughter from first marriage

The Changpas have a two-tiered form of retirement. The first is upon movement from the *khangchen* to the *khaun*. At this stage, the person's leadership of the household along with its accompanying authority and responsibilities is passed on to the next generation. The person's say in village affairs is also deemed to end, as he loses the right to represent the household at village meetings. For women, the responsibility for home and hearth passes on to the daughter-in-law. The younger brothers also move to the *khaun* along with the retiring head of household. This form of retirement is invariably undertaken before old age and is usually done reluctantly.

The second tier of retirement is due to old age, and the inability of the individual to take on the rigours of a nomadic lifestyle. Systems that enable the old to opt out of moving around the Changthang with the rest of the community differ across Changpa villages. The Samad Changpas, for example, encourage the old to shift to Thukshey, where each household maintains a permanent accommodation for storage of valuables and rations. Despite having to separate from the family, retirement for the Samad Changpas is not

particularly unpleasant. There are quite a few old people staying in Thukshey[74] (economists would say that a critical mass exists) and they provide each other company gossiping, gambling, and drinking through the day. Thukshey is central to the migratory routes followed by the Samad Changpas, and there is a lot of coming and going. The family ensures a regular supply of food to the old, and many families keep one grandchild to be looked after by them (or to look after them). The community spends about a month every winter there, so major festivals such as Lo-Sar are celebrated with them. The *Gompa* is situated at Thukshey, and the religious system too acts as a source of support to the old.

While most of the Korzok Changpas have a permanent accommodation at Korzok, it is not accessible to them for the six months in the year that they are in Thagajung. No community mechanisms to look after the old exist at Korzok, and caring for them there is a huge burden on the individual family. The Korzok Changpas therefore prefer not to separate the old from the community, and this is done only in extreme cases. Even the completely immobile are carried on the backs of their children during moves rather than having separate arrangements made at Korzok.

Most of the Kharnak Changpas have family staying at or near Leh, and those who are unable to take the rigours of constant movement invariably shift from the Changthang to the more comfortable climes of the Indus valley.

The aged are a vulnerable group of people in the Changthang, and there is need for an intervention aimed at making their life more comfortable. This could be in the form of provision of simple facilities for health care and recreation along the lines of similar programmes run by organisations such as Helpage India. Such an intervention would be most convenient at Thukshey and Sumdo, where old people stay round the year, and could then be expanded to the other Changpa villages.

VI.b The Village

Rupshu-Kharnak was originally made up of two villages, Rupshu and Kharnak. Despite being similar people who practise a similar profession in a similar land area, the Changpas of Rupshu and Kharnak have maintained a separate identity as far back as people remember. The distinctiveness was originally religious - Rupshu falls within the jurisdiction of the Korzok *Gompa*, while Kharnak is within the Thiksey *Gompa's* region. Today, they fall in separate administrative divisions within Leh district as well, with Rupshu falling within Nyoma Development Block (and therefore having to run to Nyoma for dealings with government) and Kharnak within Leh (and therefore to Leh). Rupshu broke up into Korzok and Samad after independence, with Angkung and Sumdo remaining as hamlets of Korzok.

[74] The count in February 1997 was 14. The study team spent time with them in February and May 1998.

The mechanisms by which Changpa communities govern themselves, relate to neighbouring communities, and control the use of their land, have evolved from physical and political factors. The logistics involved in imposing formal systems of governance on the Changpas are so arduous due to physical factors that most rulers of the region, from the old kings of Ladakh to the government of India today, have preferred to let traditional mechanisms remain. Some have even recognised, formalised, and supported these mechanisms by means such as, for example, the traditional leaders of each Changpa village are given a government stipend and are vested with considerable authority by the state. The difficulties the Changpas face in accessing formal systems of governance have led to the evolution of systems from within, systems that suit their lifestyles and are simple, flexible, and pragmatic. The main political factor is the existence of the Ladakh Buddhist Association. The Changpas, along with a majority of Ladakhis, are Buddhist while the state government's administration is largely Muslim. There was a feeling among Buddhists that they were not given a fair hearing, especially for internal conflicts and grievances, by the state administration, and that there was a need for a parallel judicial system for them. This evolved into the LBA. New political fora, such as the Ladakh Autonomous Hill Development Council in 1995 and the movement towards *panchayati raj* (village self-governance), are still to influence governance systems of the Changpa community.

Each Changpa village has two synonymous identities. The first is in terms of its physical space. Each village has a distinct land area, which includes mountains, valleys, water sources, pastures and all other resources that fall within it. The second is in terms of its people - the number of *khangchens* that constitute the village community.

Each khangchen has fixed and clearly defined duties and responsibilities towards the village unit. The nature of these and how they are decided, allocated, and enforced differ across villages. Most duties fall in the following categories.

a) Regular duties such as fetching water, giving meat, and providing transport for visiting government functionaries, or grazing the *Gompa's* livestock are revolved among households in the village. The turn is usually decided by the throw of dice. Some villages include identification of leadership and office-bearers under this category of duties as well.

b) Financial contributions for the upkeep of the *Gompa*, for expenses incurred during religious festivals, and for activities of the village administration, are made on the basis of number of livestock owned as well as on a per household basis.

c) Participation in meetings wherein decisions pertaining to the village are made. Such meetings are of two types. The first are meetings for regular decisions, such as office bearers for the year or level of per household contribution to be made for a festival. The second are meetings under extraordinary circumstances, such as to decide the course of action during an early cold wave.

d) Households have to contribute people to make up the numbers during turf wars with neighbouring villages.

As described in Chapter IV, these duties are not easily foregone, even temporarily, as the undertaking of the allocated duties is often indicative of membership of the community. When a household does not have the financial capability to undertake a duty, it is expected to borrow. Loans for most purposes are available from within the community and are usually paid back upon the sale of *pashmina* in June/July or the sale of livestock in October/November. Interest is conspicuous by its absence. When a household is unable to repay on time, a rescheduling of the loan is requested from the lender. This is usually granted once.

Leadership of a village is in the hands of a headman, or a *Goba*. This is a traditional institution of the Changthang and of Ladakh, and a historical aspect is described in the box entitled "The *Goba* of Rupshu". The *Goba* is supported by Members (who are effectively assistant *Gobas*, and whose number is dependent upon the size and spread of the village) and a *Kotwal* (or village crier). The *Goba*, Members and *Kotwal* constitute the office bearers of Ladakhi villages.

The mechanisms by which the office bearers are selected, and their duration of office, differ from village to village. In Korzok, an upstanding member of the community is nominated as *Goba* for a period of three years. He then has the right to appoint his members (four of them, including one each in Sumdo and Ankung) and *kotwal* as per his wishes. In Samad, on the other hand, being an office bearer is a compulsory rotational duty that the head of every household has to undertake for a period of one year. The reason is that there are no volunteers for the posts, especially that of *Goba* which is seen as a time-consuming task with huge responsibilities, little authority, and no remunerative value. Only female headed households are exempt[75].

A *Goba* is paid Rs. 900 per year by the government. In addition, the community pays him - each household contributes on the basis of number livestock owned[76]. The members do not get a payment. Interestingly, it appears that the *kotwal* does the most work of all the office bearers, for which he gets a small stipend.

The routine work of the village leadership can be broadly categorised into administrative, judicial, and representative functions. These are described in Table VI.2. Non-routine functions, such as planning a response to a disaster situation, are undertaken with greater involvement of the village community as a whole and the leadership is mainly expected to provide a forum for participation.

[75] The study team were witness to a hilarious situation in which the turn to be *Goba* fell on the poorest household in the community. The head of the household ranted and raved at the village meeting about how he was much too poor, the household was struggling to survive, and he did not have the time to be *Goba*. The others agreed with him, but said that rules were rules and he had to abide by them just as everybody else did. He threatened to leave the village, and go to the LBA with the problem. He finally did become the *Goba*, and made a particularly bad one.

[76] In Samad, this works out to about Rs. 400 per annum according to the Goba in February 1998.

Table VI.2: Work of the Village Leadership

Function Type	Activities	
Administrative	Migration routine - deciding when and where to move.	
	Pasture allocation - allocating available pastures to households at each location	
	Ensure that village meetings are conducted and recommendations are followed up upon.	
	Duty allocation - ensuring that village duties are duly allocated between households and that the selection mechanism is fair and transparent.	
	Ensure that adequate care is taken of visitors to the village, especially government officials.	
	Coordinate with the *Lamas* of the local *Gompa* for religious matters.	
Judicial	Ensure appropriate resolution of conflicts within the village.	
	Take forward conflicts that are not resolved to the appropriate stage, i.e., LBA or block/district administration.	
	Cooperate with leadership of other villages in conflicts that cut across villages.	
Representative	Represent the village's interests in fora such as the district and block administration and the LBA.	

Conflicts are common within the Changpa community, and their resolution is a delicate exercise that expends considerable time and effort of the leadership. The most common sources of conflict are fights while drunk and marital strife. The *Goba* is expected to meet all parties in a conflict, decide whether an offence has occurred and, if so, who the guilty party is. He then has to declare a punishment and, finally, enforce it. Most offences have norms for punishment, which vary from village to village. A listing of these is attached in the table below (Table VI.3). When a conflict is not resolved to the satisfaction of all parties concerned, the *Goba* is expected to forward it to the Ladakh Buddhist Association for resolution. The LBA meets every Sunday in Leh to resolve such conflicts and does not agree to arbitrate a conflict unless the concerned *Goba* has forwarded it. Most parties to a conflict, especially guilty ones, prefer not to have to go to the LBA because it is far away in Leh and because the fines are considerably higher.

When a conflict cuts across villages, such as someone surreptitiously grazing livestock on pastures belonging to another village[77], the respective *Gobas* meet up and follow the same resolution procedure. A *Goba* has the right to summon a resident of another village to a hearing if required and such summonses are usually respected. If it is not, the concerned *Goba* has the right to go to the LBA or the civil administration who are far more difficult to deal with - the major cause for a *Goba's* summons being respected.

It is difficult, in some conflicts, to clearly allocate blame, classify into right and wrong, and find clear solutions. Typical examples are those that are described in the section on conflicts (chapter on Livelihood Systems). For these, intricate conflict resolution exercises are conducted by the LBA or the district administration.

Table VI.3: Offences and their Punishment

Offence	Common Punishment
Verbally abusing a person while under the influence of liquor.	A public apology along with a *khatak*, and sometimes a monetary compensation as well.
Physically beating up a person.	The punishment is according to the level of the beating. Whether the person was drunk or not is not a factor.
Getting an unmarried girl pregnant	If both parties are willing and able, the boy and girl get married. Else the punishment differs from village to village. In Samad, the boy gives the girl 8-10 sheep or goats, a *rebo*, some kilograms of barley or *sattu*, and helps her with three moves. In Korzok, the boy has to put out the flags in the Gompa for one day and give the girl Rs. 1,000/-, a sheep and 40 kg. of grain.
Stealing	Differs from village to village. In Samad, the thief has to return ten times the value of the stolen items. In Korzok, the thief gets a beating and has to return the goods.

An analysis of the punishments for offences within the Changpas (Table VI.3) is interesting, especially if they are seen as a reflection of the value systems of the communities. Most nomadic pastoral communities see family labour as a valuable commodity, and this is reflected in the extent of punishment for getting an unmarried girl pregnant. The aim is to humiliate the boy[78] rather than punish him in Korzok, whereas it is to compensate the girl and enable her to get on with life in Samad. In Korzok, the

[77] Which is quite common according to both the Samad and the Angkung Changpas, who are regularly in such fights along the Polokhonkha pass.

[78] Apparently even the boy's future grandchildren will be told that their grandfather spent a day putting out the flags at the *Gompa*.

punishments have not changed over time except for some adjustments for inflation[79] whereas in Samad the punishment for this offence has increased significantly compared with punishments for other offences, reflecting the community's greater exposure to Leh.

VI.c Conclusions

The social systems and the institutions of governance of the Changpas have been described above. An examination of these reveals three qualities that cut across these systems and institutions - simplicity, flexibility, and pragmatism. It is perhaps these characteristics that enable the survival of the Changpas in this remote and inhospitable region.

[79] The rupee fine for getting an unmarried girl pregnant used to be Rs. 200 when the current *Kotwal* was a young blade.

THE *GOBA* OF RUPSHU

There was a time, many years ago, when Rupshu was just one village and the *Goba* was a powerful hereditary institution. His headquarters were in Korzok, and his area of authority included the current villages of Korzok and Samad and some parts of the Rong region in the Indus valley, including Nyoma. The institution of the Rupshu Goba was at the height of its powers early in this century when Tsering Stopdan, also called Khanchen, was the Goba. He was a great leader, and also a man of great physical prowess who could cut a willow tree with one swipe of the sword.

The decline of the institution began when Tsewang Yurgial, Khanchen's grandson, was the Goba. At that time[80], Rupshu was in a conflict over grazing pastures with the neighbouring region of Kharak in Tibet, which was referred to the King at Leh for resolution. The King judged in favour of Kharak, upsetting Tsewang Yurgial no end.

It was a tradition that the Goba of Kharak would stop by at Rupshu on his annual visit to Leh every winter. He decided to continue the tradition after the conflict, and mend relations with Rupshu in the process. When he did, however, Tsewang Yurgial had him murdered. In retaliation, his family in Kharak put a curse on the Rupshu Goba. Tsewang Yurgial fell ill and died soon after, and the institution of the Rupshu Goba gradually declined. The Goba became a selected post after that and continued as such for the Samad Changpas when they separated from Korzok for some time. More recently, it has become a compulsory rotational post. The descendants of Tsewang Yurgial stay on at Korzok, but do not have a role in leadership of the region.

[80]Older Changpas remember this time from their childhood, and I would place it at about in the 1930s.

THE CASE OF SONAM TSOMO

Sonam Tsomo is a pretty Changpa woman of about 25 years of age. Her parents' home is Samad, and she is married to a man from Kharnak. She lives in Choglamsar, near Leh, along with her husband and a small child, and works as a loader on daily wages with the Indian Army. Her husband works with her. She is uneducated but speaks excellent Hindi, which she says one learns if one works with the Army. We met her in Kharnak in August 1998, when she was visiting her in-laws. She talked to us about her own marriage.

About three years ago, while Sonam was visiting relatives in Leh, her husband's people came to her parents in Samad to offer for her. They were refused! They then came to Leh and forcibly took her away with them to Kharnak. She tried to escape, screamed, shouted, etc., but was unable to get away. They kept her for two days, and then went to her parents again and offered a *khatak*, which was subsequently accepted. She still wanted to get out of the marriage and told her parents so. They then put pressure on her, with her mother threatening to kill herself if she (Sonam) walked out of the match. As she is an only daughter (she has brothers) she felt she had to accede to their request to stay on, and therefore did so.

Is she happy? She says her husband is no better and no worse than she could have done anyway. She is happy that she has managed to move out of the Changthang with her family, to a place where this sort of kidnapping is not done. She likes her job, which she finds interesting and in which she earns about Rs. 2,000 every month. She wishes, however, that she was more beautiful because the better looking and cleaner women get to serve in the Officers' Mess, where the earnings are better.

Had she been adamant about not staying with her husband after the forcible marriage, it would have been perfectly acceptable for her to leave. She cites the example of another case in which a girl was kidnapped and forcibly married and insisted on not accepting the match. After 15 days, her parents and the boy's family got together and performed a divorce. She later married a boy from the same village as her ex-husband, Kharnak, and is now his neighbour.

THE CASE OF THARCHEN'S DAUGHTER

Me-me Tharchen is a rich old man from Samad village. His only daughter, a lass of about 20 years, fell in love with a TR boy from one of the Tibetan encampments nearby. They used to graze their livestock together, and often spent the night out as well. Gossip duly spread about this, which reached Me-me Tharchen but which he chose to ignore.

He was forced to take notice of the couple when they ran away together in the summer of 1998. They went off for a few days into the mountains before being forced to come back into one of the Changpa villages due to lack of food. Me-me Tharchen, in the meantime, had gone all over the Changthang looking for his daughter. When they returned, he complained to the Samad Goba that his daughter had been forcibly abducted and requested for justice.

The Goba called the girl and boy, along with their families, for a hearing in which he asked the girl whether she had gone with the boy of her own accord. In the meantime, Me-me Tharchen had administered a sound beating to the girl, so she kept silent when asked this question. Had she said yes, or even nodded, the matter would have ended there. Instead, the boy was fined Rs. 5,000 and, if they were to speak to each other again, the person who spoke first would be liable to be fined.

THE CASE OF SKARMA IRSHEY

Skarma Irshey is a 35-year-old man from Kharnak village. He is a second son, and therefore when his elder brother got married he had the right, according to custom, to sexual relations with the wife. His brother, however, did not let him touch the wife.

This happens! According to Skarma, this is not anything to do with love or arranged marriages, it is about the elder brother enforcing his power in the household. His brother had had an arranged marriage, and Skarma knows of plenty of married couples who have had a love marriage and yet the younger brother gets to have relations with the wife.

In earlier days, Skarma would have had to like it or lump it. But times are changing. He decided that he would not accept the situation and proceeded to separate from his brother and get himself a wife of his own. The rest of the family moved in with him, and his house became the family *khangchen*. He allows his younger brother to have relations with his wife. His elder brother has since migrated to Leh and set up house there.

VII. POVERTY AND DEVELOPMENT

"Hagney jad aavey tho loto ro yaad aavey"[81]

("One thinks of toilet paper only when one gets the pangs for a crap")

The Changpas are quite unique to India. They reside in the Changthang, which could be considered among the harshest human-inhabited regions in the world. Their lifestyle, that of constant movement within the Changthang along with their livestock, makes them the only genuinely nomadic pastoral community in India. The remoteness of the region and the peripatetic nature of the Changpa's existence have ensured that their survival strategies have evolved with minimal interface with formal administrative and developmental forces. It is only recently that such forces within and outside the government have articulated a concern over poverty within the Changpa communities and the need to do something toward the 'development' of the Rupshu-Kharnak region. While undoubtedly noble, such concerns are hampered by two factors. The first is that there is very little quality information on the developmental situation in Rupshu-Kharnak. The second is that there are considerable differences in perception between planners/administrators/policy makers and the Changpas themselves on issues such as, for example, what is poverty or what are the people's expectations of the development process. These factors, when coupled with the geography of the Changthang and the lifestyle of the people, combine to bring to naught the best-laid plans for a development intervention.

The need for quality information arises from changes in the way development planning has evolved from the days when wise men in Delhi formulated policy for the entire country. It is now widely recognised that centralised poverty alleviation strategies such as growth with trickle-down or structural adjustment with safety nets have their shortcomings, and that the need is for a participatory and decentralised approach which involves people, local government and community organisations at the planning and implementation stages. Crucial to the processes that make up this approach is good information - specific to the communities for whom development policy is being framed, compiled with their knowledge and participation, incorporating their aspirations, and subject to the internal pressures within them. It is only then that development planning can lead to effective development action.

Such information is not easy to acquire. It is especially lacking with reference to communities living in the periphery of the country - who are 'different' from the national mainstream and who are out of the line of sight of the powers-that-be - communities such

[81] This is an old Rajasthani saying recounted to me by Kashyap Mankodi, a development activist, during a malaria epidemic in Rajasthan in 1994. It certainly typifies the Indian attitude towards development, in which things start functioning only in the middle of an emergency - be it the health department in an epidemic, the housing department in an earthquake, or the animal husbandry department in a bad winter.

as the Changpas. It is hoped that this chapter and, in fact, this entire report, goes some way towards addressing the information gap. The first section of this chapter describes the Changpas from a conventional 'development' angle. It is followed by an inquiry into perceptions of poverty among the Changpas, and then by an assessment of basic development services in Rupshu-Kharnak, especially in health and education. The chapter ends with some conclusions and recommendations.

VII.a A Brief Situation Analysis

A lifestyle that involves perpetual mobility in extreme conditions across a remote area has many difficult elements to it. Shifting home and hearth is hard work, especially for women[82], and frequent shifts put households under tremendous pressure. This is more so because community movements do not take into account the circumstances in individual households - if a move is planned the next day, it has to be undertaken whether a person is ill, or a woman is just about to deliver a child. Frequent movement also makes access to a development service, such as immunisation or schooling, difficult, and this is reflected in the poor health and education status of the people.

The overall health status of the Changpas[83] is a result of several factors, the most important of which are the geography, physiography, and climate of the Changthang and the resultant diet and lifestyle of the people. Temperatures in the winter months range from -10 to -45 centigrade, and in the summer from 25 to 5 centigrade. The high velocity winds bring about a wind chill factor that reduces actual temperatures significantly. The winds also force people to breathe the desert dust, whose particles are of less than three microns in diameter and can thus cause breathing diseases such as silicosis or environmental pneumoconiosis. Average altitudes here are at 16,000 feet and oxygen levels are at about seven-twelfths of their levels in the plains. The main illness prevalent in the region is respiratory tract infection caused by damage to the inner layer of the nose and the throat, a direct result of the cold and dry climate.

The traditional staple diet of the Changpas was milk and milk products (curds, buttermilk, butter, cheese, and whey), meat (including blood and organ meat), and *tsampa* (made of barley). Sugar, wheat, and rice have been added to the diet thanks to the effective supply of the PDS from 1983 onwards. The modern Changpa diet can be classified as high in fat and protein and is one of the causes of high blood pressure. This is exacerbated by the high daily intake of salt, which is mainly imbibed in tea and at 10 grams per adult is about three times higher than recommended intake. This is especially detrimental in old age if a person has high blood pressure. The main dietary gap is the lack of vegetables - no vegetables are grown in Rupshu-Kharnak and the Changpas do not have access to leafy vegetables of any

[82] Changpa women are strongly pro the polyandrous system of marriage mainly because of the additional help available in the form of multiple husbands. This is especially useful when shifting from one place to another.

[83] Most of the health-related observations have been made by Dr. Dhruv Mankad during a visit to Korzok in August 1998. He additionally observed that all the children he saw were malnourished to varying degrees.

sort. This results in vitamin C deficiencies such as scurvy, especially in winter. Some, but not enough, vitamin C is available from liver (sheep liver, for example, contains about 20 mg per 100 grams). The lack of vitamin C in the diet and its results are well recognised by the Changpas.

Hygiene habits and lifestyle also influence the health status of the Changpas. The low temperatures and the difficulty in accessing water (except in the summer months) make bathing difficult, and it is not a regular practice. Temperatures also require wearing several layers of clothing, which are not washed regularly for the same reasons as infrequent bathing. Insensible diffusion of fluid through the skin is a normal phenomenon, especially with the Changpas' workload, and mites and lice find such a situation conducive for their growth. Skin infections because of scabies, lice, and also ringworm are not uncommon.

Washing of hands is another activity effected by temperatures and access to water. It is rarely done, even before eating and after defecation. Cleaning up after defecation is done with soil and dust. However, since microbes are usually active in temperatures of above 3 centigrade, the danger of these practices resulting in outbreaks of diarrhoea and dysentery exists mainly in summer.

The practise of cleaning teeth is absent among the Changpas. This could be seen as related to climate, or as a cultural practise. This effects the gum and teeth of the people, causing carries and plaque and thus aggravating the effect of the vitamin C deficiency.

PREGNANCY, DELIVERY AND POST-DELIVERY

Women do not reveal that they are pregnant, and the fact is usually 'discovered' by the family around the third month. Preparations for the expected delivery are made through the purchase of new clothes to wrap the child in, and to tighten the mother's abdomen in the later period.

The delivery is conducted by the most experienced woman in the household and later blessed by the Chomo. Chomos have also been trained by the government (and by LNP) in ante and postnatal care, as they are often the only resource available in the remote regions. The child is kept on the ground after the delivery, and the umbilical cord is cut with any knife. Tetanus is unknown at this altitude, and therefore this practise is not as dangerous as would be otherwise considered.

Breast-feeding is a normal feature right from childbirth. In addition, barley soup is fed to children from the 15th day onwards, until the child is about a year old. After that, solid food is given to the children. There is no gradual weaning of children. Children are cleaned regularly and massaged in yak butter every 15 days or so till they are about three years old, after which cleaning is not a practice.

The above factors combine to cause the poor health status in the region, which is reflected in the high infant and maternal mortality rates[84] among the Changpas.

How do the Changpas see their own health situation today, and how do they compare it with the situation ten years ago? The attached table (Table VII.1) summarises the views of the Korzok Changpas on this question.

Table VII.1: Perceptions on Health Situation Over Time

Rank	Health Problem	Points in 1998[85]	Points in 1988	%age Increase	Perceived Reasons
1.	Acidity	20	13	54%	PDS rice replacing *tsampa* in the diet.
2.	Blood Pressure	15	10	50%	
3.	Scurvy	15	5	200%	PDS rice replacing *tsampa* in the diet.
4.	Cold, Cough, Fever	12	10	20%	
5.	Eye Sore	12	10	20%	
6.	Bodyache	10	5	100%	As woollens are replaced, the cold has increased.
7.	Difficult Labour	10	1	900%	Increased workload.
8.	Diarrhoea	10	6	67%	Change in diet.
9.	Worm in Liver	8	8	0	
10.	Headache	8	6	33%	
11.	Retention of Placenta	7	5	40%	
12.	Throat Pain	7	7	0	
13.	Teeth Problems	7	5	40%	
14.	Delayed Labour	5	4	25%	
15.	Ear Problems	5	3	67%	
16.	Mental Illness	3	1	200%	
17.	TB	3	0		
18.	Skin Problems	2	2	0	

It was uniformly felt that workload has increased considerably over the past ten years for both men and women, and this has resulted in increased incidence of difficulty in child delivery, body aches and mental stress. The incidence of scurvy has also increased considerably, with the perceived cause being the replacement of barley by rice and wheat in the diet. As the vitamin C content in these cereals is much the same, it is likely that there

[84] Exactly how high is unclear as government data is unavailable. Our survey in three villages (91 households) revealed that, out of 15 live births in the year preceding the survey, 4 of the babies were dead at the time of the survey. There were also 5 stillborn babies. While the denominators are too small for the numbers to be significant, the figures certainly point towards a problem.

[85] The participants to this exercise, a group of 15 men and women at Korzok, were asked to describe the major health problems and then give them points on a scale of 1 to 20 with 20 being most problematic. This was coordinated by Dr. Dhruv Mankad and Tashi Norbu in August 1998 at Foo.

is another reason for this. TB, which was unheard of ten years back, has been making its presence felt because of the exposure of the Changpas to TB patients in urban environments.

Daniel J. Miller, a researcher on pastoralism based in Tibet, once said that an old Changpa has forgotten more than what so-called experts in animal husbandry will ever learn on the subject in their lifetime[86]. The Changpas on this side of the border are not dissimilar in their knowledge of pastoralism[87]. Formal education, on the other hand, has traditionally been a low-priority area for the Changpas (though this has changed considerably of late, as can be seen in the attached box). Coupled with the indifference of the Changpas to education is the inability of the government, for reasons described in the section assessing the status of services in the region, to maintain basic education services in Rupshu-Kharnak. These combine to make for a poor formal education status among the Changpas[88].

Need for Government Intervention

Which are the areas that require government intervention the most? This question was posed to a group of Samad Changpa women at Tibra in May 1998, just after a long and harsh winter that saw considerable livestock losses.

Their views were as follows, in order of importance.

1. Make available education and health facilities.
2. Supply wood and twigs to households so that they can build one permanent home at Thukshey.
3. Make available fodder supplies in winter.
4. Compensate livestock losses in bad winters.
5. Provide rations to the community and build a common store for this at Thukshey.
6. Provide new style looms and combs.

The sex ratios within a community are considered the most sensitive indicator of status of women in the society. Sex ratios among the Changpas are unnaturally, and disturbingly, low[89], to the extent that they point to social practices that are harmful to women such as

[86] Daniel J. Miller, "Tibetan Pastoralism: Hard Times on the Plateau".
[87] The pashmina goat breeding station at Upshi, to the north of the Taklang La, was set up to enable the Changpas access the knowledge of animal husbandry experts in the state. So far, the knowledge flow has been the other way around - the wool production at the station increased and quality improved when the experts began observing some of the maintenance practices of the Changpas, such as keeping the goats in open air enclosures in winter.
[88] The baseline survey revealed that only 48% of the males over 7 years, and 25% of the women, have had access to even a day's education. The majority of these have been restricted to the initial years of primary education.
[89] In the baseline survey of three villages (91 households, 418 people), the overall sex ratio was 891 females to 1000 males. Among adults it was 936, in the age group 15 to 60 it was 929, and among under 15s it was 812. We rechecked for methodological errors (ensured that the *chomos* and *lamas* had been included, etc.) but found that the figures stand.

differing access to health services and nutrition and even female infanticide and feticide. Yet, no such practices exist[90]. Girl children are valued, and while there are differences between males and females in economic participation and access to services, they are not at levels that explain the sex ratios.

As in all desert regions, fresh water is a scarce commodity, especially during the long winter when the rivulets are frozen over. Access to water is one of the causal factors, along with access to pastures, for the nomadic lifestyle of the Changpas and often determines location of settlements and extent of scatter within the community. The attached box and map describe the differing perceptions within the Korzok Changpa community of difficulty along their migratory route.

Perceptions of Difficulty among the Korzok Changpas

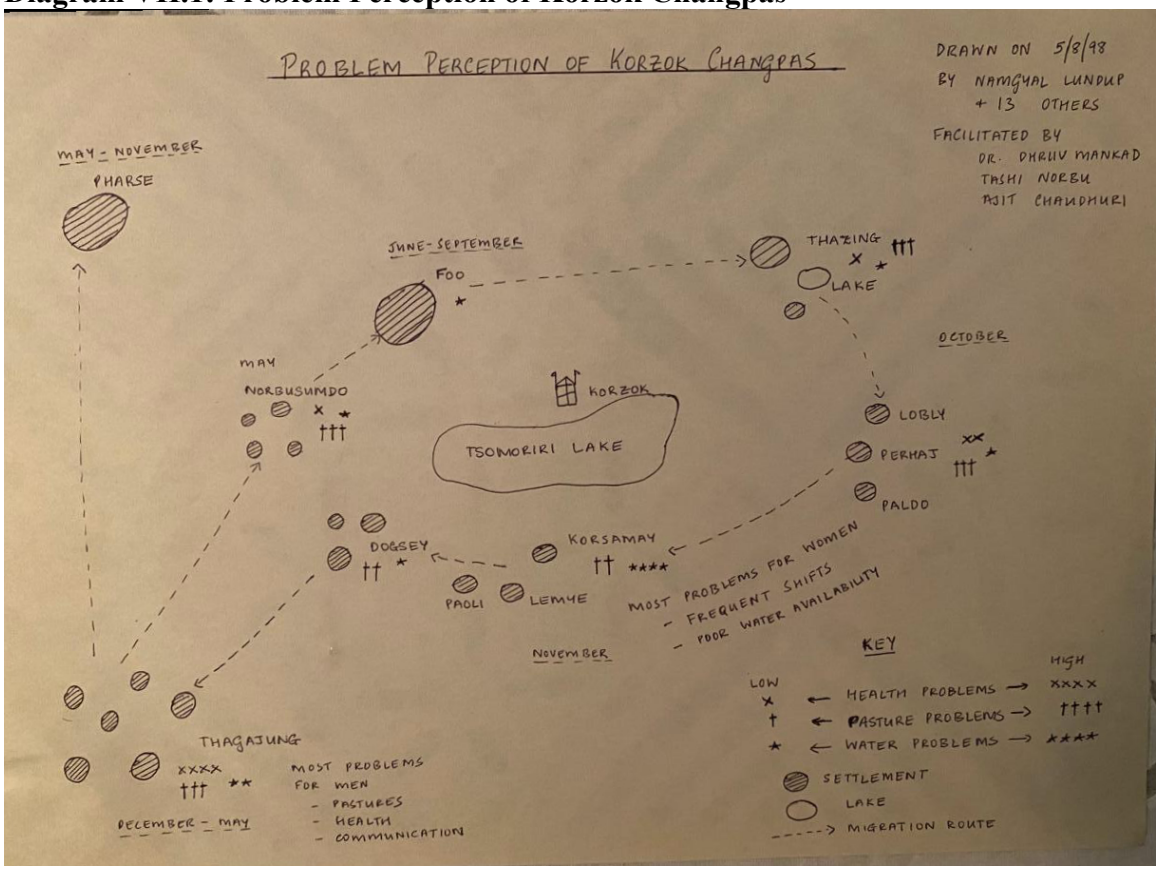
The study team conducted a group exercise with the Korzok Changpas in August 1998 with the aim of understanding perceptions of difficulty during the annual migration cycle.

First, Namgial Lundup drew out a map of the migratory cycle on a chart paper, with inputs from a group of 14 men and women. This has been reproduced onto a formal map in the chapter on livelihoods (Diagram V.5). Then, the levels of access to pastures at each location were marked out, followed by the level of access to fresh water and the extent of health problems at each location. This map is reproduced as Diagram VII.1 below. This was followed by discussions as to the reasons for the ratings at each location.

The women and men were then separately asked as to which points in the migratory cycle they felt the maximum difficulty, and why. The results were interesting. Women felt that the route between Paloo and Dogsey in October and November was the most difficult for them because it involved frequent shifts of location and because fresh water was not easily available on that side of the Tso Moriri. The men felt that the winter location at Thagajung was the most difficult because of health problems among humans (mainly RTIs and scurvy) and livestock and because they were cut off from the rest of the world during those six months. Both considered Foo the easiest location, the pastures were good, water supply was abundant, and they had access to basic services in Korzok village.

[90] The study team included a medical doctor with many years in community health and a gender specialist. We kept a hawk's eye for practices that could explain these figures and did not find any. Subsequent discussions with the local government and intellectuals also did not throw any light on this issue. There are some readings that indicate that low sex ratios have always been a feature of Changpa society, and that this is nature's way of adjusting for extra women within a polyandrous community. While gender specialists certainly ridicule this, there are people, including doctors with a development background, who believe that this is possible.

Diagram VII.1: Problem Perception of Korzok Changpas



VII.b What is Poverty?

This paper does not purport to inquire into the philosophical aspects of this question, except perhaps to liken definitions of poverty to the case of the blind men attempting to describe an elephant - they formulate themselves based upon specific areas, situations, and circumstances. Indian policy makers have the unenviable task of having to set a single standard to a country as vast and varied as this one and have drawn a 'poverty line' at the ability to imbibe at least 2400 and 2100 calories per day in rural and urban areas respectively. Anyone who can not is officially poor, and there are arguments as to whether this is 38 percent of the population, more, or less, depending upon factors which are beyond the purview of this paper. Economists, on the other hand, have two traditional views, which they call absolute and relative poverty. Absolute poverty, simply put, is the inability to earn enough to take care of basic minimum needs whereas relative poverty is the inability to earn as much, and therefore to subscribe to a similar (better?) lifestyle as one's neighbours. Modern definitions, especially among those with a development orientation, take into account concepts such as power, access, and the ability to make choices[91].

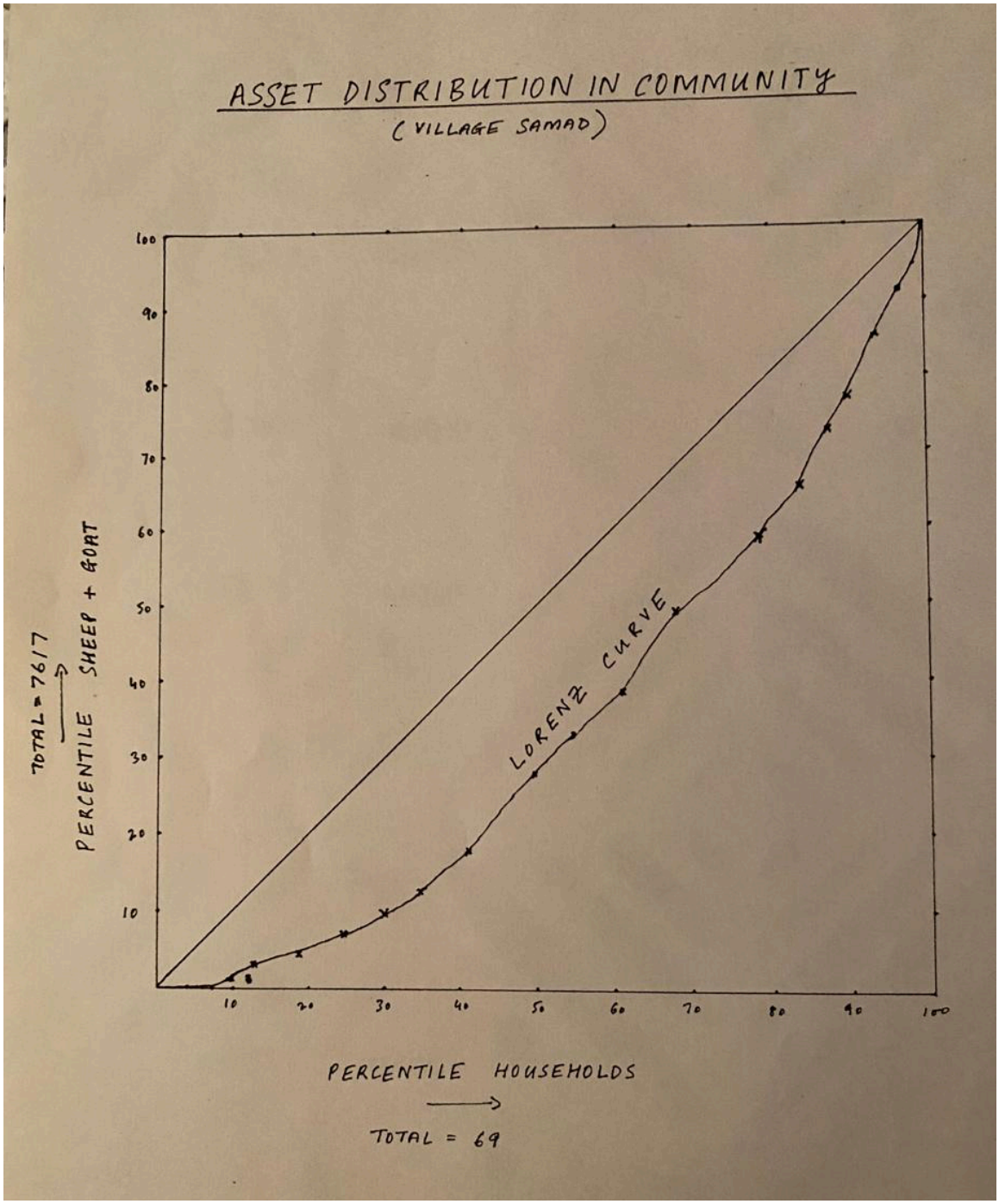
[91] For ACTIONAID, who have financed this study, the absence of choice is an important factor.

Wealth among the Changpas takes the form of livestock. The average family owns over one hundred head of goat and sheep, and several yak as well, which makes for an asset base of over Rs. 250,000 at prices of November 1997 - difficult to term as poor. The distribution of these assets is remarkably equitable, as can be seen from the attached Lorenz Curve (Diagram VII.2)[92] made from asset ownership patterns of the Samad Changpas. Moreover, wealth and poverty among the Changpas do not have complicated causes related to caste, class, and history[93]. Wealth is seen as something easily created - it merely requires hard work and good luck for a family to move from poor to rich within a few years, as many Changpa families have proved. It is also seen as easily lost - laziness has been the downfall of many households. Bad luck is also a factor - a miscalculated winter can deplete one's herd in one year, and an attack by a wolf pack can render a 200-head herd into a 30-head one overnight. Wealth, and the lack of it, is thus seen as a temporary phenomenon that makes for nomadic pastoralism being a cyclical profession. Wealth is not seen as connected with social development status or human happiness. An infant in a wealthy household has the same (low) chance of survival as one in a non-wealthy household. Children in all households have equal difficulty in gaining an education in the non-functional schools of Rupshu-Kharnak. Women in wealthier households do not lead better lives - they have to shift as often as the others, do as much work and face the same degree of danger of dying while giving birth. In sum, wealth per se is not perceived as being connected with poverty among the Changpas.

[92] Cumulative livestock (sheep plus goat) owned is plotted on one axis, and cumulative number of households on the other. The 45-degree line denotes a perfect distribution of assets. The deviation of the Lorenz Curve from this line is an indication of inequity within the community. As can be observed from the diagram, it is not much among the Samad Changpas.

[93] Ragnar Nurkse, a noted development economist, once said that the main cause of poverty is poverty itself. Poverty creates a 'vicious circle' that ensures its perpetuation.

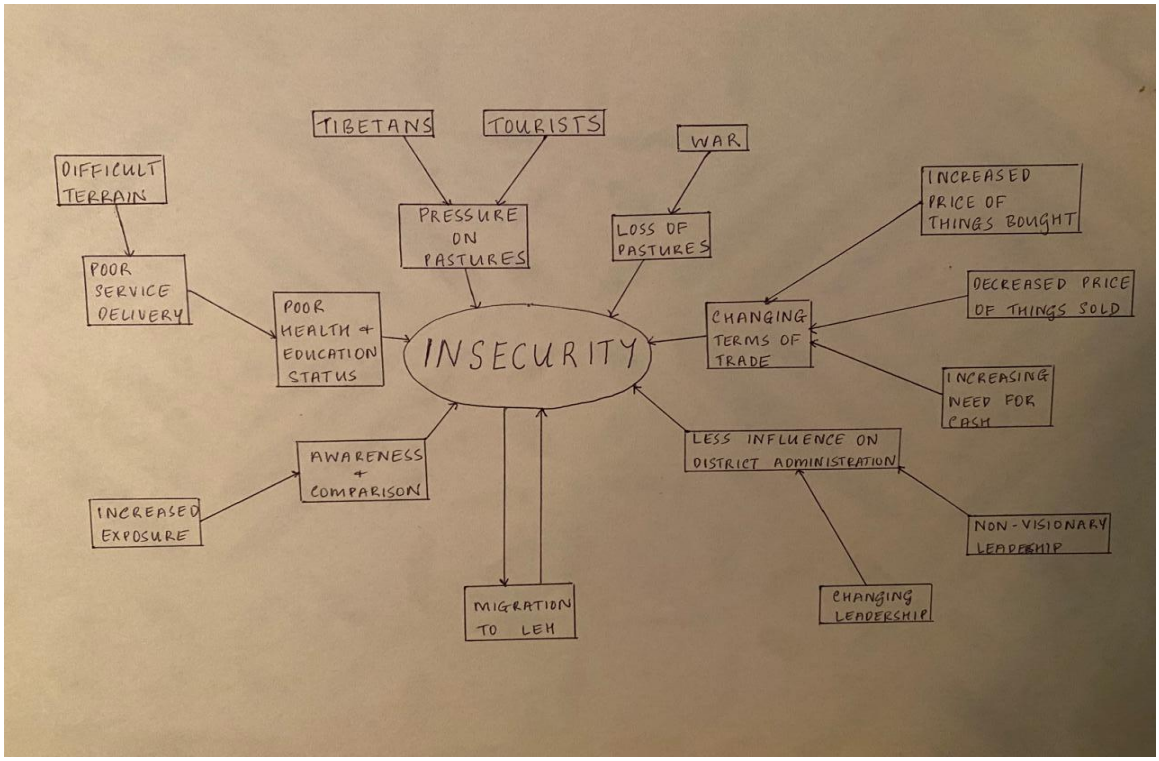
Diagram VII.2: Asset Distribution in Samad



Insecurity, on the other hand, is. And the nature of insecurity among the Changpas has changed considerably over the past few decades. The main causes of insecurity, the severity of future winters and the health of humans and livestock, remain and have been joined by several more factors. Their increased exposure to the outside world is one, wherein they see effective education and health services in Leh being transformed into a better quality of life, into access to government jobs and into gains from corruption that they are denied.

Life in Leh is especially dazzling to the Changpa youth, many of whom see existence as a nomadic pastoralist much as the 'civilised' folk in Leh do - as 'tough', dirty and degrading - and do not want a future in the profession. Allied with this is the decreasing control the Changpas have over their lives, and the increasing power of people in faraway offices to make decisions that affect them. This is re-enforced by the detrimental (to them) change in the terms of trade over the past few years, with *pashmina* prices dropping while prices of commodities bought, such as food rations, increase. The changing social norms, especially those relating to marriage and inheritance, have also created insecurity. The attached diagram (Diagram VII.3) denotes these factors pictorially.

Diagram VII.3: Causes of Insecurity



Poverty, to the Changpas, is not about money and material things. It is not about relative access and influence within the community. Poverty is about the inability of children to get an education. It is about the difficulty in accessing the most basic level of health care when ill. It is about the increasing levels of insecurity that are creeping into their lives, which thousands of years of existence in the Changthang have not equipped them to handle. Like most other facets of Changpa life, poverty is a community phenomenon.

VII.c Development Services in the Changthang

Development in the Changthang is best seen within the context of the overall development of Ladakh. Until independence, Ladakh's importance was based upon two factors - as a crossroad on an old but significant trade route connecting Tibet, Kashmir, central Asia, and the plains of India, and as a source of *pashmina*. The economic gains of being a crossroad were centred in Leh town and a few neighbouring villages - most Ladakhi villages were self-sufficient and self-sustained agricultural communities. *Pashmina* was (and is) centered in the Changthang and the gains largely by-passed the rest of Ladakh as the traders were from outside the region. Ladakh's importance as a crossroad diminished considerably with independence and the subsequent drawing of borders and resulting decrease in trade, and from 1947 to 1959 Ladakh became a remote and forgotten backwater of India. It was with the Chinese occupation of Tibet in 1959, the subsequent flood of Tibetan refugees into Ladakh, and the Sino-Indian war that followed, that brought attention back to Ladakh[94]. The 'development' of Ladakh can be said to have begun after the war in 1962, and three distinct phases followed.

The first phase saw the initiation of development activities and processes in Ladakh by government agencies. The emphasis was on communications and introduction of basic services for the people. During this period, the inaccessible region got connected with the rest of the world by road and air[95]. Modern amenities and services such as education, health services, electricity, new technologies, the public distribution system, and vehicular transport were introduced. Employment opportunities in the formal sector (especially the government and the army), availability of subsidies, grants and loans, and an increase in trade led to the introduction of a cash-based economy in Ladakh. Ladakhis gained access to higher education facilities in the state and in other parts of the country. These changes were, however, largely restricted to Leh town and its surrounding villages.

The second phase of development began in the late 1970s and was marked by an intensification of the process outlined above. Important features of this period were the opening up of Ladakh for international tourism, the breakdown of traditional survival sytems of the people, the increased dependence upon government action, and the emergence of NGOs on the development scene. The tourism industry has subsequently boomed - the region's high altitude and unusual terrain have created a niche in adventure tourism, while the western world's fascination with Tibetan Buddhism and Ladakh's position as the last genuine outpost of this has also led to a form of religious tourism. The effective implementation of the Public Distribution System and the resultant plentiful availability of cheap grain have undermined agriculture in Ladakh. Traditional agricultural systems such as the family-group interdependence (*churpon*) and community control over the glacier irrigation system (*larapa*) have gradually broken down and made way for dependence upon high-cost wage labour[96] and plans for irrigation canals from the Indus river. Farming is seen as a luxury in many Ladakhi households, especially those near Leh,

[94] Ladakh is the only part of India with a border with both Pakistan and China.
[95] No doubt the need to facilitate troop movements and supplies to military bases were motivating factors.
[96] Local agriculture competes with the Army, tourism, the construction industry and civil supplies for labour during the short growing season when wage rates are around Rs. 125/- a day.

with primary economic dependence being upon a government job or a business. In the process, the self-sufficient and self-sustained village has been relegated to history. Ladakh as a region has also changed from the self-dependent economy of 1947-1959 to a deficit and highly subsidised economy today[97]. Along with these changes has been the gradual mushrooming of NGOs in Ladakh, which have attracted considerable (foreign and, more recently, government as well) funds for carrying out development activities. The NGOs are quite different in organisation form, vision, mission, and methods from traditional Ladakhi CBOs such as the LBA, and (with some exceptions) they too have concentrated their activities in the villages in and around Leh.

The third phase began with the introduction of an autonomous system of governance for Ladakh with the formation of the Ladakh Autonomous Hill District Council (LAHDC) in Leh in 1995. The council is a political formation, and it has been vested with considerable authority for policy making and resource allocation. It has the potential to make a significant difference to the development status of Ladakh.

While development has brought about tremendous change in and around Leh over the last three decades, its effect in other parts of Ladakh is debatable. And this is especially so in the Changthang, which provides challenges to development activity that are extreme even within the Ladakhi context. The altitudes, for example, are considerably higher (the valleys are at about 15,000 feet as opposed to 11,000 feet in most other parts of Ladakh) and the temperatures are correspondingly considerably lower, especially in winter. The population is sparse, scattered and continuously mobile. The key question here is - how does one provide a basic service so that a community such as this in an area such as this is able to access it effectively so that it makes a difference to their development status?

The central, state and district governments, in fifty-two years of trying, have not found the answer yet. And the causes for this are not the usual sloth and corruption that tends to negate policy across India. Lower-level government servants who staff schools and primary health centres in Ladakh are mainly from the Kashmir valley or from in and around Leh because of higher education levels in these regions, and they are unable (and unwilling) to survive year-round in the Changthang. Even if some dedicated, motivated, and committed exceptions were found, they would be encouraged to leave by the community once the winter snows began. After all, who is going to provide food and fuel to these people for the seven months that the passes are blocked? How will they migrate with the community, who will carry their bags and baggage? And even if, hypothetically speaking, these problems are sorted out, the one insurmountable one remains - that when the community scatters over a large area, which group would the service remain with?

The status of development services in the Changthang reflects these problems.

---

[97] This has been of individual economic advantage to most households, more so for those in and around Leh, and therefore opposition to these changes has been muted. The lack of control Ladakh has over its own economy and the people's dependence upon central government largesse and international tourism occasionally comes as a rude shock. Two such occasions were when news of plague in faraway Surat resulted in a huge drop in tourist arrivals, and when the government arbitrarily raised the price of PDS supplies in 1997.

Samad does have a primary school, but it is open only when the region is accessible (for about three months a year), at a time when the Samad Changpas are nowhere near the location of the school. Needless to add, literacy levels among the Samad Changpas are low. Kharnak has had a supposedly functional middle school for the last twenty-five years, from which not even one student has completed eight years of education. Only the Yulpa population has access to the village school at Korzok, the Changpas have to make do with a mobile school that is not functional for most of the year[98]. Unlike these, a functional school that is accessed by all the children exists in Sumdo, but then this is a settled Changpa community in a relatively accessible location.

The story for health facilities is not dissimilar. Primary facilities, such as PHCs and sub-centres, do not exist in most of the villages in the region. Those that do, such as the medical sub-centre at Korzok, are understaffed and non-operational for most of the year. The nearest facilities functional around the year are the hospitals in Nyoma (a small facility with two doctors) and Leh, both of which are about a day away from Rupshu-Kharnak by motor vehicle if the roads are open. Of the two, people prefer the further option[99], Leh. Outreach facilities are quite poor, as the doctors in Nyoma and Leh do not have sufficient resources (financial and otherwise) to visit Rupshu-Kharnak and there are no support staff such as ANMs posted in the region.

This results in the Samad and Kharnak Changpas having no access to health facilities at all during winter. The Sumdo and Ankung Changpas have access to the hospital in Nyoma, as well as to a basic health centre in the nearby TR encampment that is also functional throughout the year. The Korzok Changpas, who are away in Thagajung for the entire duration of winter, are able to access a Indo-Tibetan Border Force[100] health facility at nearby Chimir. This facility has the additional advantage of a wireless, so a helicopter can be requisitioned from Leh in case of an emergency[101]. Immunisation levels are low for an interesting (and easily solvable) reason - the health worker is not given a vehicle to reach the villages of Rupshu-Kharnak. Without a vehicle, it takes too long to reach the settlements in the three summer months (when the communities stay together) for the vaccines' cold chain to be maintained. The health worker therefore has to conduct the immunisation after October, when it is cold enough for cold chain requirements to be met - but the communities are inaccessible then.

One of the interesting acts of the government on the health front is its recognition of and support to the traditional Tibetan '*Amchi*' system of medical treatment. The system is well known to and accepted by the Changpas. It recognises 421 diseases based on specific constitution and cause. Symptoms and signs are used in diagnosis - whether the illness is due to hot or cold constitution; whether it is due to acid or bile, etc. An understanding of

[98] The considerable differences in literacy rates (and, thereby, access to formal jobs) between the Changpas and Yulpas in Korzok comes across quite clearly in the baseline survey.
[99] If a patient is ill enough to warrant the expenses to move to hospital, s/he is usually so ill that the Nyoma hospital is going to refer him/her to Leh anyway. Much better to go there directly.
[100] A paramilitary force that has camps along India's border with China.
[101] According to the Korzok Changpas, 5 patients had been moved by helicopter to Leh until May 1998.

human anatomy is gained by Amchis through models, charts, and photographs, not through dissection of cadavers. The government has accepted that remote regions are easier accessed by Amchis on horseback, and it gives selected Amchis an honorarium of Rs. 1000 per annum to provide medical services to people in such regions. They report to and are supervised by a Chief Amchi at Leh[102]. Unfortunately, these services are also available mainly in summer, as most Amchis have an establishment at Leh and move there when the cold sets in.

VII.d Conclusions and Recommendations

It is clear that, despite having sophisticated, evolved and rational survival strategies, the development situation of the Changpas is quite pathetic and the status of basic services in health and education in Rupshu-Kharnak is abysmal. The questions that arise are - does this have to be so? Is the Changthang completely impossible to work in? Has nobody sorted out the conundrum of 'how to provide a service to a sparse, scattered and mobile community in a harsh region cost-effectively' as yet? Is the nomadic way of life the root cause of the problem, and should the Changpas be made to settle down?

The issues evolving from the last question have been debated in the chapter on livelihoods. For the others, it is useful to examine examples in similar settings around the world. There are several first- and second-world countries with pastoral nomadic communities in cold desert regions, and the manner by which their governments provide basic development services to them is interesting. The Saami in the Finnmark county of Norway have access along their migratory routes to a network of hospitals which are never more than 40 km. away[103], thus negating the need for outreach facilities. Wives and families do not accompany the herds along the migration routes, they remain behind in villages which have easy access to health and education facilities. The differences in migratory systems and the high costs involved[104] make such services difficult to emulate in India. Among herders in northern Russia, such as those of the Yamal peninsula, where families do move with the herds, children are placed in state-run boarding schools at an early age and return to the community only upon adulthood. Such a system, wherein an education is obtained and the children are able to keep in touch with the culture and lifestyle of the community, may well be worth consideration in Rupshu-Kharnak.

Closer home, the Tibetan Refugee administration maintains basic health and education services in Rupshu-Kharnak around the year by running a boarding school and health sub-centre at the TR complex at Sumdo. The complex is large enough, and with sufficient funds and infrastructure, to provide decent facilities and accommodation to the students, teachers,

[102] These facts were gleaned from a long conversation with an Amchi, Tsering Phuntsok, on his rounds at Sumdo in August.
[103] According to Regnor Jensletten, a researcher in Saami studies at the University of Tromso.
[104] According to health reports of the Royal Norwegian Government, the per capita cost of health facilities in Finnmark is considerably higher than that for the country as a whole.

health workers, etc. Whether the local administration can emulate such a structure is debatable - the TR administration is highly motivated[105] and well funded.

The local administration's main success story in Rupshu-Kharnak is the PDS programme - every family receives its quota of supplies in a timely and hassle-free manner. This has much to do with political will, availability of funds, and community awareness and demand for the service. However, unlike health and education, the service of distributing food supplies is not a continuous one.

On the whole, it can be seen that the conundrum mentioned above is yet to be solved, and there is scope therefore to do some pioneering work in Ladakh.

Which brings one to the first recommendation[106] - that of setting up boarding school facilities for Changpa children at one location in Rupshu-Kharnak. If the Hill Council set up proper facilities and infrastructure for enough teachers and students, it would be possible to keep the school functional around the year. Teachers would have an incentive to stay, with decent accommodation and sufficient company[107]. There is enough evidence to point to a huge demand for education among the Changpas, and it is unlikely that children of studying age would be unwilling to leave (or prevented from leaving by their parents) their homes for such a facility.

It would be pertinent to point out the inherent dangers of such a system. The main one would be - given that children contribute much of the labour inputs in nomadic pastoralism, it may be that parents send only selected children to the school and retain others for herding. A worst-case scenario would be if this results in only male Changpa children being educated, and female children being completely left out of the system. Regarding the latter, the government would have to send positive signals to the community regarding enrolment of female children in the school in the form of female teachers, specific facilities for boarding and lodging, and maybe financial incentives as well. Another danger is that such a school may alienate its students from the Changpa way of life. While care may be taken to ensure that the syllabus respects and reflects Changpa life, and that holiday periods are timed to coincide with periods of frenetic pastoral activity, the fact remains that every child has a right to an education for better or for worse. If this results in alienation, so be it. A minor problem, but one bound to crop up in this region of fierce inter-village rivalries, would be regarding selection of the actual location - all the Changpa communities would want it within their own vicinities.

---

[105] We visited the complex several times, including when the cold had already set in. All the employees were in place and all the facilities were fully functional. The concept of absconding from duty did not exist among them. We also took several Changpa patients to the health sub-centre during the winter of 1997-98.

[106] This is already under consideration by the Ladakh Autonomous Hill Development Council, and we had a long discussion on this when the study team presented its findings in Leh.

[107] The LAHDC does not have to look very far for an example. The Tibetan administration has managed to have a school run along these lines functioning effectively at Sumdo. We visited the school in November 1998 and were very impressed by the quality of education imparted.

This does leave the problem of education facilities for those children by-passed by the above intervention. Various non-formal options, tailor-made for each village separately, could be considered for them. In Samad, a facility could be set up in Thukshey wherein children could stay in their families' permanent accommodation, along with their grandparents, for the school term. One of the educated youth of the village, and there are several who have had eight years of education, could be given training in teaching methods and a stipend from the government or an NGO to run a non-formal school. Kharnak and Korzok hold possibilities for mobile schools run in tents, as has been successfully experimented by LNP. Several Kharnak youth have been educated in Leh, and some among them could be motivated to return and run the school. The community could make available a yak for movement of the school tent from place to place. Korzok has a mobile school that is functional during the summer. Facilities for the school to continue running could be made at Thagajung, and a teacher motivated to move there with the Changpas in winter. Some of the educated Yulpa youth from Korzok village would be good candidates for teachers. It should be noted that a crucial ingredient to success would be support in the form of training, stipends, facilities, and regular contact with schools and teachers from the agency that runs the non-formal education programme. It would therefore be advisable to have strong NGO involvement in this.

Health interventions could be formulated at different levels. At the community level, short term health training and training in basic diagnostics could be given to many adults so that, no matter what the level of scatter of the community, there is always someone on hand when a health problem takes place. They would then require communicating with a doctor, describing the problem, and receiving feedback on a course of action and, in a worst-case situation, arranging for evacuation of the patient. The communication process, whereby a Changpa in some remote corner can access advice from a doctor in faraway Leh in the dead of winter, would require use of modern telecommunications technology. Such an intervention would need to be undertaken by the Hill Council.

The insecurity that exists among Kharnak and Samad Changpas due to their being cut-off from any form of health facility in winter could be addressed by the Hill Council and NGOs through winter medical camps in the region. The region is difficult, but not impossible, to access in winter and good logistical facilities would enable periodical medical camps at fixed places. The financial outlays required for such an exercise could be provided by a donor agency, the doctors by the Hill Council and the arrangements and community contact by an NGO. The Hill Council and LNP have successfully held such camps in the winter of 1997-98 with support from ACTIONAID, and the Paul Hamlyn Foundation proposes to support such a venture in 1999-2000.

An emphasis on decreasing the infant and maternal mortality rates in Rupshu-Kharnak is required. ANC/PNC training of Chomos is already being undertaken by LNP, and this can be formalised by the Hill Council. Immunisation requires urgent streamlining - Changpa communities should be accessed at convenient locations for three continuous months every year, and if this requires a vehicle it should be considered important enough for the government to make one available.

VIII. EXPERIENCES WHILE RESEARCHING

The Changthang is a forbidding place. Altitudes range from 14,000 to 18,500 feet above sea level - the air thus gives a person a little over half the oxygen that is available in the plains, making any form of activity, physical or mental, an ordeal. The sun's rays cut a swathe through the thin air in all seasons, burning any exposed skin with ultra-violet radiation. Temperatures drop to forty-five below in winter, and diurnal variation is high throughout the year. Temperature differences between sun and shade make it one of the few places in the world in which one can get chill blains and sun burn at the same time. The stark and barren landscape and the wide valleys provide little protection from the elements, especially the wind, which blows through at high speeds and enhances the cold with a wind chill factor that decreases the temperature by up to another forty degrees. The desert air is extremely dry and soaks up body water content without the person realising it. Weather is unpredictable and snowfall or landslides can block roads for weeks at a time. The main road through the region, the Leh - Manali highway, is blocked due to snowfall for nine months a year, and communications within the region are particularly weak. Field work in the Changthang, for all these reasons, plays havoc with schedules, PERT charts, and other project planning tools. The region also provides conditions that test the motivation, commitment, and endurance of any research team.

Most of this report is about the Changpas, and the means by which they eke out an existence in these conditions. In the process of compiling this information, a team of twenty people have spent a total of two hundred and fifty person days in the Changthang, working through the best and the worst the region has to offer, in winter and summer, through rain, snow, hail and shine and at altitudes of up to over 17,000 feet. Most of the team are from Leh and its surrounding villages, only four are from the plains of India. Six members of the team had been into the Changthang before the study, of which four (all from LNP) had previous experience of its winter. This chapter chronicles the experiences of the team in working in the Changthang, the difficulties faced, and the realities of collecting information with the communities here. It is hoped that others planning similar exercises in harsh regions can gain some practical advice from the team's experience.

The team's first experience of the Changthang was in December 1997, when five of us gave our baseline methodology a trial. We chose the small and relatively accessible village of Sumdo for this. The trial itself went like a dream. We reached the village easily. The listing averaged between 10 and 15 minutes per household, and the detailed questionnaire between 40 and 50, within the targets. The questions were easily understood, people were willing to give the time, and most of the information was readily forthcoming. The only problem area was the household wealth ranking exercise - the community were not willing to say that one household was richer or poorer than another. This was adjusted for by obtaining from the community a basis for categorising households into economic slabs, which we then used along with our listing data to slot households into economic categories. Our methodology held out, and we got that first experience of what genuine cold is like. The trial visit to Sumdo gave our confidence a great boost.

Needless to add, the actual baseline survey in late February was not quite as smooth. The logistics of taking a (much larger) team into the interiors of the Changthang were quite different from that of reaching the small and accessible Sumdo. It was considerably colder, and the passes had more snow. Much time was spent in carving a route through the snow along the Polokhonkha pass to reach and leave Samad. The researchers were of diverse backgrounds, and, despite the training they underwent, initial problems with the questionnaire were experienced. For example, the listings were taking too long - from 30 to 60 minutes each - apparently because they were too small to cover what a people who had not been 'surveyed' before had to share. Respondents were also unhappy with the detailed questionnaire because it began with household morbidity and mortality issues. The learning curve soon sorted these problems out.

Other problems relating to the baseline survey remained with us right through the study. It was decided to undertake baseline surveys in Kharnak and Korzok in the summer due to logistical difficulties - the road into Kharnak was completely blocked with snow and the Korzok Changpas were wintering in the remote and inaccessible location of Thagajung. This created three problems. The first was one of methodology – collating and equating data collected from different villages in different seasons. The second was that the same researchers were not available to us in summer, and we were unable to invest the same level of effort and resources in training the new researchers again. Our expectation that reduced training would be offset by the new researchers' higher qualifications and previous development experience in Ladakh (though not in Changthang) did not prove true. They brought stereotyped Ladakhi perceptions of the Changpas as being poor, miserable, and pathetic with them, which were played up by those being surveyed to the detriment of the quality of information collected, especially on assets. The third was that about sixty of the Korzok Changpa households were away with their herds towards Manali, and therefore fell out of the ambit of the survey. For these reasons, we decided to abandon the baseline survey of Kharnak and take our Korzok information with a pinch of salt. Therefore, while our qualitative information has been evenly collected from all the villages except Angkung, we back it up with quantitative information only from the first baseline survey.

A word about the training. It was held for the baseline survey team in early February at Dharsiks village (Batalik region, Kargil district), thanks to the hospitality of Kargil Development Project, a local NGO. The Dak Bungalow in which we stayed overlooked the Indus, whose waters were tinged with blue and whose banks were lined with snow - a stunningly beautiful location. The training was to familiarize the team with the objectives of the study, the research tools, and basic PRA techniques. The practical aspects of research were learnt in the adjoining villages of Dharsiks and Garkon, both of which were adversely affected by the war two years later. This was an interesting place to be in - along a hostile border where strangers are viewed with great suspicion. Discussions here often took a hilarious turn, such as one on the local community's pure Aryan antecedents and how neo-Nazi women from Europe come here to quote get crossed unquote. This was verified, to our surprise, by an article in an issue of The India Magazine around that time. Our heart goes out to the fine people we met at that time.

The baseline survey and a depth studies session were done in the worst of the winter, across February. The feedback session in the field was conducted in November, in the midst of an unprecedented cold wave. Dealing with the cold was thus an important component of our own survival strategies. More so because the Changthang has no staying facilities for outsiders - we stayed in open stone-and-mud huts or in community tents or *rebos* that offered little protection from the elements.

The first aspect of this was preparation. Finding out what extreme cold is and preparing oneself mentally and physically for it. It was difficult, in an office room in Delhi or even in the comfort of Leh town, to visualise what minus forty-five really meant. We located people who had experience of such temperatures, such as an ex-soldier who had done a stint at Siachen, a retired merchant navy man who used to do the Alaska-Seattle run in winter, and a Norwegian friend who had done his military service in the northern Finnmark region of his country. They gave us an idea of what extreme cold really is, how it effects one, and what protection mechanisms are necessary. Physical fitness was also worked upon, and heavy multi-layer jackets and sleeping bags procured.

And yet, nothing can quite prepare one for the biting cold in the Changthang. For the abrupt changes, from -13c when it is snowing to -25c when it stops and the sun comes out, all in the matter of half an hour in February. Or when the evening sets in in November, and the temperature drops from -15c to -35 over one hour. For the bright sunny days, when the sun is sharp and yet the temperature reading is -25c. For having to perform your morning ablutions in the open in -28c temperature, squatting in the snow and minimising the surface area of the bum that is exposed without impeding free fall of the matter. For fine tuning your body's water content before sleeping such that you do not require to urinate at night and yet do not let the dry air dehydrate you. And when you do have to urinate at night, to get out of three layers of sleeping bag, put on enough clothes and shoes to take on the -45c outside temperature, avoid the dogs, expose yourself, do the job, and then return and tuck yourself in once again. Experience is the only effective form of preparation.

In that, we were lucky. The LNP people knew the conditions well and influenced us accordingly. Each field expedition was accompanied by a cook, whose sole job was to ensure that the team was fed in style and plenty and that hot tea, coffee and goodies flowed through the day. This may come across as a luxury to the reader but, we assure you, this person made life in difficult conditions much easier and was worth his weight in gold. We also followed some basic principles, such as wearing as many layers of clothing as possible and tightening the ends so that air was trapped in between layers. These layers of air were most effective in keeping the cold out. A kerosene *bukhari* was used to bring warmth into the tent during crucial periods, such as when we got out of our sleeping bags in the morning (in February, it was -14c inside the tent when we woke up). Activities such as washing, brushing, and changing clothes were minimised, and bathing did not even venture into our imagination.

Being there in winter had its rewards. The Changthang is a different experience in different seasons, and winter gives it its harshest hue. The landscape, when combined with the elements, is so beautiful at this time that it defies description. Just standing outside in the

evening with three hundred and sixty degrees of white snow and clear blue sky, and taking in the cold, dry air with the sun going down, is an experience that makes one believe that God has to exist. The very exclusivity of the experience, the knowledge that few people from our world will ever be here at this time to take this in, enhances the reward considerably. Those of us who participated in the February field work walked taller upon our return and peppered our conversation in Delhi with snippets like 'oh, you know, minus forty'. Despite the difficulties, we all agree that we would not have missed this for the world. In addition to the experience of it, our work in winter gave the study considerable credibility, especially with the local government and with the Changpas themselves.

May had minimum temperatures in the region of -10c, with sudden snowfalls on most nights we were there. After February, we found this positively pleasant, and the more hardened among us slept outside in these conditions. The weather and the staying conditions made the August field work feel like a holiday. It was bright, sunny, and warm, requiring a little more than a T-shirt during the day. Being in the tourist season, a tent camp accommodation was available to us at Korzok with running water and showers. Our perfect record for not bathing was spoilt when Dr. Dhruv Mankad, one August morning, made use of the latter facility.

The general daily schedule followed by the team during field work was as follows. We were ready and breakfasted by 0930-1000 hours, and then broke up into smaller teams as pre-ordained in the team meeting of the night before to settle into allocated tasks for the pre-lunch session. Lunch would be taken between 1300 and 1400 hours, which was followed by undertaking tasks of the post lunch session. The evening programme involved a team meeting and dinner. The post-dinner period was reserved for non-work-related discussions on various subjects, and rendering of flowery Urdu poetry.

Group discussions with the community required a fair amount of innovation. Getting people together was not difficult, especially in winter and spring when we had some curiosity value, but keeping them there was. Groups broke up for the usual reasons, people had work or were getting bored, as well as some unusual ones such as when a wolf attack had us all scurrying for cover. Maintaining the focus of the discussion was often a problem, usually caused by a divergence between what we the researchers wanted to talk about and what the people we were talking with wanted to talk about. For example, when we talked with a group of women at Tibra on their understanding of poverty and development in May, just after a long and arduous winter in which livestock losses had been high, all that was on the women’s minds was compensation from the government. We managed to change the focus of the discussion to responsibilities of the government to the community and came out with an interesting analysis - that the important things the government should do were in the fields of education and health (more than compensation for livestock losses).

Map drawing with the community used to always be an interesting exercise, as they found this the best method by which to explain their migratory cycles. On one occasion in February 1998, Mr. Nawang Skalzang, the then *Goba* of Samad, drew out his village's migratory routes with a stick on the few inches of snow that covered the ice on Tso Kar

lake, out in the open during a snow storm and in temperatures of -13c. We managed to photograph the event - possibly one of the most exotic locations for a PRA exercise.

The field team's main assets were the members from LNP, who knew each and every household in the region by virtue of their ten years of work among the Changpas. Their rapport with the community had an immense benefit for the study, as contact and credibility were never an issue. Staying arrangements would be made for us by the community in all the villages we visited because LNP was with us. The goodwill LNP enjoys among the Changpas is despite them having pulled out from the Changthang due to funding shortages some years ago, they currently only maintain a basic community contact programme. They must have done some incredible work here.

Thanks to them, discussions on issues such as love, courtship and marriage were possible with both men and women. One such discussion, between us and a group of young girls, took place at Kharnak in August 1998. This turned quite frank, so much so that the younger children hanging around had to be turfed out because the girls were afraid they would tattle to their parents. The girls managed to turn the interview around by asking us about our work, and then about which of the Changpa villages did we find the girls the prettiest, and then about courtship practices in Delhi (none of which were areas of expertise for us). Our diplomatic skills were put to considerable test by them. Another discussion with a young boy of 20 had him reveal his love for a girl which he was sure was reciprocated but not yet expressed by the girl. We met the girl later during a night *jhabroo* session and looked for signs as to whether this was the case (and did not discern any). Yet, when he asked us the next day what we thought (being from Delhi apparently makes one an expert on such issues), we told him that she seemed to like him, and that he should go ahead and take a positive step. Hope he's OK!

Working with women was quite easy. There were no social barriers to discussions with us, though free time was a problem. Their level of participation in mixed groups was at almost the same level as in women-only groups, and age hierarchies appeared to be more constraining than those of gender. To those of us used to working in U.P and Rajasthan, where one has to meet the eyes only of the oldest women in group meetings, it was quite a new experience. In fact, in Changthang, there appeared to be few specific barriers to women in terms of mobility, economic participation, or access to services. It was therefore a considerable surprise to us when we analysed the listing data from three villages and found a sex ratio of Jaisalmeresque proportions, i.e., around 800 females per thousand males, which was even lower among children. Much time was spent searching for social practices which were female unfriendly, both in the field and during feedback sessions, but no serious explanations emerged. The most colourful one, offered by Frederic Drew in a book written in 1875, was that fewer women were born within the community, and this is nature’s way of adjusting for extra women in polyandrous communities. Any takers?

Good information often came from unusual places, such as the old folks of Samad. The Samad Changpas are permanently nomadic and have an unusual system of retirement for those past the age of being peripatetic. The old all stay in one location, Thukshey, around the year, apart from the community except for 15 to 20 days in winter when this forms the

village camp site. We stumbled upon them by accident, as we used Thukshey as a base for field work in Samad and generally chatted to them in the evenings until we discovered their potential as a source of information. They were a pleasure to work with, tuned in to the latest in village affairs, memories of past events crystal clear, untiring, and thrilled at the prospect of having a captive as well as attentive audience. The enormity of the Indo-China war of 1962 and its effect on the Changpas, the turf wars with Tibetan refugees over pastures, the inter-village feuds – these wizened old men and women were decision makers at the time of these events and they brought in a perspective and level of detail which we would have missed completely.

There were instances when the differences between us, the settled city dudes, and them, the nomadic free spirits, came across quite starkly. It was felt the most when we were discussing health problems in Korzok and touched upon the issue of mental health. We asked the group we were discussing this with whether anyone in the past ten years had committed suicide. They went into a discussion among themselves and then posed a counter question to us - do people actually die in such a manner? That sure gave us some food for thought.

While roaming around in August, we came across an Amchi on his rounds somewhere near Sumdo, along a stream with a fair amount of green grass. Dhruv Mankad, a medical doctor who was with us at the time, sat him down and they had a long discussion on the relative merits of the allopathic and Tibetan systems of medicine. As the two systems have a history of being conflicting and competitive in Ladakh, the rest of us were reminded of summit meetings between Reagan and Gorbachov in the eighties. Unlike them, mutual respect was achieved between Tsering Phuntsok and Dhruv at Sumdo.

As a topic of study, change was discussed in considerable detail by the project team and the advisory groups. We initially felt that we would study two changes in great detail for the Changpas, the first being the change from polyandrous to monogamous systems of marriage (a social change) and the second being the change from a nomadic to a settled lifestyle (an economic change). It was then decided that, in an attempt to be more participative in our approach, we would let the community define what they understood as change and study the processes involved in that change. This approach had interesting results - to the community, change was the Indo-China War of 1962, the supply of subsidized rations, or (in the case of women) the introduction of smokeless *chullas*. Change was essentially events which unfolded on the community to which they had to adjust; they had little role in the decision-making process that led to these events taking place. The processes by which adjustment took place and the effects on the community had immense learning value. On the other hand, we were not able to concentrate on processes which create change within the community. In a way, not thrusting our view of change on the study has been a loss as well as a gain.

Teamwork was an important factor in the field. The team for each field work session was made up of different people, with a core group who participated in every field work. The team would divide itself into several two- or three-person groups for the depth studies, with local language skills, extrovert personalities, and greater knowledge of the project being

shared across the groups. The same groups worked together for the duration of the field session, which led to each individual being able to make his or her own space within the group. The advantage of working with people experienced in the field of extension came to the fore during the field sessions, as a cheery and fun atmosphere was maintained throughout, and team spirits were never low. No doubt hot and tasty food played an important role. The only time of worry was when a team member had difficulty in adjusting to the altitude and dryness in May and had to be evacuated back to Leh.

A description of field work in the Changthang would not be complete without a mention of *jhabroos* and dogs. The *jhabroo* is a dance form wherein young people of both sexes get together, the males and females hold hands, form separate lines, and then move alternatively towards and away from each other, singing loudly right through. These happen at night and carry on till late, more often in summer, and quite spontaneously. Apparently married people have separate *jhabroo* sessions to that of the unmarried. We outsiders were always invited to the *jhabroos* if we happened to be around, and were encouraged to participate. We found that the vigour required to *jhabroo* invariably helped us adjust to the altitude and the cold, and always joined in whenever we could.

And the dogs, aah, the dogs! Large hairy dogs that are indispensable to the herders for controlling their livestock. They guard the village at night and warn the community of the presence of wolves or snow leopards. Unfortunately, as a breed they do not like (to put it mildly) strangers and are ready to tear them apart if they get a suitable opportunity, making simple activities like walking in the village, taking a leak, or going for a crap, a life-threatening exercise. Many close calls were had in the course of the field sessions.

Logistics was always a problem, and we were often in difficult situations regarding mobility. In February 1998, we spent considerable time clearing snow from the passes so that our vehicles could move onward. In August 1998, two researchers got thrown by their donkeys into a stream they were crossing. In November 1998, one vehicle packed up. Considering the conditions, maybe we do not have too much to complain about.

A word of advice on logistics to those planning excursions into Rupshu-Kharnak in winter. Use petrol vehicles with drivers who are familiar with winter conditions in the area. Carry everything you will possibly need for at least three additional days to the time you have planned. Have a few extra spaces in the vehicles as there will be patients who need a lift back to Leh and you will be their only source of transport. When members of your team show signs of difficulty with altitude, evacuate them immediately.

On the whole, the field studies in this beautiful region have been fun, though arduous, strenuous and, at times, exhausting. We all learnt a lot, including those who have been working in this region for over ten years. We take back a great deal of respect for the Changpas, for the great joy they derive out of a difficult life and for their dependence, for the important things, only upon themselves. We also take back some amount of respect for ourselves, that ordinary people like us have managed to go there, take the worst the region has to offer, and still be around in one piece to talk about it.

LIST OF APPENDICES

APPENDIX I

PEOPLE

Ajit Chaudhuri
Anand Kumar
Azangle Irshey
Azangle Rinchen
Chotak Gyatso
Dhruv Mankad
Mohamed Hasnain
Ranjan Verma
Sharif Bhat
Sumita Ghose
Sonam Stobgaiz
Stanzin Dawa
Tashi Namgyal
Tashi Norbu
Thinlis Namgyal
Tsering Chushkit
Tsering Mutup
Tsering Wangchuk
Yanchen Dolma
Yasir Arafat

Advisory Group
Azangle Rinchen
Feroz Khan
G.M Sheikh
Tsering Samphel

APPENDIX 2

ANALYTICAL FRAMEWORK OF THE STUDY

THEME	SUB-THEME	ISSUES	INFORMATION	TOOLS
Livelihood	Livestock	Availability	What is available? How many? - at Hh level - with community	Hh listing
		Raising practises	Pasture availability Access - sharing practices - conflict	GD Interviews with people in govt., LBA and LAHDC
		Processing	Products from each type of livestock and uses put to, both subsistence and market	GD
		Market	Buyer behaviour Seller behaviour Trends Negotiation practices Cartels Price, place and promotion practices	GD and interviews with buyers and sellers
		Income	Cash Barter Value of Hh consumption	DHQ
		Expenditure	Cash Barter Capital Formation	DHQ
	Labour	Demand and supply	Where is the demand? When? How much? Fluctuation in demand and supply Access	Interviews GD
		Returns	Labour rates Mode of payment Externalities/other benefits	FGD with labourers Interviews

	Business		Who does it? What business? Seasonality Asset ownership Income/expenditure	Interviews
	Employment		Nature of employment Who does it? Availability Returns	Interviews
	Household economics	Income	How much? Sources	DHQ
		Expenditure	How much? Where?	DHQ
		Savings	How much? What form?	DHQ
		Debt	How much? From where? Mode of repayment	DHQ Interviews with lenders
Poverty and Development	Poverty	Community perception of poverty	Who are considered poor? Why? Causal factors Movement across poor and non-poor	FGD with men, women, youth Interviews
	Development	Efficacy of development programmes	Which are they programmes and agencies? Success/failure and reasons thereof How could they be more effective?	FGD with men, women, youth Interviews with development actors
		Community perception of development	Impact of development programmes Communities' expectations of development Possible paths	FGD with men, women, youth Interviews with opinion leaders
Change	Perceptions of change	Major changes that have taken place	What is change - for men - for women - for youth - for old	FGDs with men, women, youth and old
		Effects of change	Positive and negative effects change	FGD

	Factors effecting change	Why does change take place?	External factors Internal factors	FGD with men, women, youth Interviews with development actors
		How does change take place?	Role models Optimisers Imitators Resisters Critical mass	- do -
	Good year v/s bad year	Good year	What is a good year? Why? Adaptations made	- do -
		Bad year	What is a bad year? Why? Adaptations made	- do -
Social systems	Demographics		Numbers Education levels Morbidity Mortality	Hh listings DHQ
	Community management	Leadership	Structure Role and responsibilities of leader Answerability Authority Mode of selection	Interviews with leaders and former leaders GD
		Conflict	Forms of conflict - household - intra-village - inter-village - others Modes of resolution Role of outside agencies	FGD with men, women, youth Interviews with leaders and concerned outside agencies
	Role of institutions	Which institutions?		FGD with men, women and youth

		Community involvement with each	Awareness of the institution Institution's hold over the community and vice versa	FGD with men, women and youth Interviews with representatives of institutions
		Participation in activities of institutions	Which activities? Level of participation Community issues addressed through institutions Institutional issues addresses at community level	- do -
		Community support to institutions	Financial Human resource Kind	- do - DHQ
	Historical context		Origins of the community	Background material GD Interviews with KIs
		Major milestones	What are they? effect they have had on the community	FGD with men, women and youth

APPENDIX III

Reading List

1. ACTIONAID, "Development Scenario in Ladakh and Opportunities for Community Based Action", minutes of the consultation at Leh in October 1996
2. Angmo, Spalzes, "Status of Women in Leh", written for the ACTIONAID Consultation, Leh, 1996
3. Bisig, M., "An Introduction to Anthropology"
4. Chaudhuri, A., "The Changpas Struggle with Progress", Exchanges, December 1997
5. Drew, Frederic, "Jummoo and Kashmir Territories", 1875
6. Dyson-Hudson, Rada & Neville, "Nomadic Pastoralism" on the Internet
7. Francke, A.H, "A History of Western Tibet", 1905
8. Fratkin, Elliot, "Pastorlism: governence and development issues", on Internet
9. Ghose, Sumita, "Conversations with Women in Ladakh", 1998, for the project
10. Goldstein & Beall, "At Home with Tibetan Nomads", National Geographic, June 1989
11. Goldstein and Beall, "Nomads of Western Tibet", 1989
12. C. Jayanthi, "Travails of Ladakhi Women", The Pioneer, Nov 16, 1996
13. C. Jayanthi, "Ladakhis Face Myriad Problems", The Pioneer, Nov 16, 1996
14. Jina, Prem Singh, "High Pasturelands of Ladakh Himalayas", 1995
15. Kavoori, P., "Pastoral Transhumance in Western Rajasthan", 1995, a doctoral thesis at the Institute of Social Studies, The Netherlands
16. Kumar, Anand, "Livelihood Systems in the Changthang", 1998, written for this project
17. Ladakh Autonomous Hill Development Council, 8th Five Year Plan and Draft Annual Plan, 1996-97
18. LNP Internal Document, "A Report on Baseline Survey of Korzok, Ankung and Sumdo Villages of Changthang Region", 1994
19. LNP Internal Document, "Reduction of Drudgery of Rural Women in District Leh Through Simple Technological Intervention", 1993
20. LNP Internal Document, "Notes on the Nomads of Rupshu and Kharnak", 1993
21. LNP Internal Document, "A Report on Provision of Smokeless Chulla Stoves to Nomadic Communities of Rupshu and Kharnak", 1993
22. Mankad, Dr. Dhruv, "Health Situation of the Changpas", 1998, written for this project
23. Mearns, R., "Community, Collective Action and Common Grazing: The Case of Socialist Mongolia", 1995, IDS Discussion Paper
24. Miller, Daniel, "Tibetan Pastoralism: Hard Times on the Plateau", Tibetan Studies Internet Newsletter, Vol. 1, 1998
25. Montague, F., "Surviving on the Arctic Tundra", National Geographic of March 1998
26. Norberg-Hodge, H., "Ancient Futures", 1991
27. Norwegian Board of Health, "Brief Introduction to Health Services in Norway", 1997
28. Pastures, issue of Jan 1996
29. Royal Norwegian Ministry of Health and Social Affairs, "Report on Public Health in Norway, 1996
30. Thayer, N., "Forward Steppes", The Far Eastern Economic Review, March 27, 1997
31. The Economist, "A Tale of Two Arctic Tribes", Nov 29, 1997

APPENDIX IV

SEASONAL ACTIVITY CHART
AND
DIVISION OF ACTIVITIES WITHIN A TYPICAL CHANGPA FAMILY

ACTIVITY DESCRIPTION	IMPORTANCE ON A SCALE OF 10	LOAD ON MALE (%)	LOAD ON FEMALE (%)	LOAD ON CHILDREN (%)
SUMMER				
Shearing of Wool and Pashmina	8	70	20	10
Milking and Churning	2	25	50	25
Weaving	6	33	67	
Spinning of Sheep Wool	5		60	40
Purchasing and Trading	5	80	20	
Seperating the Wool and Pashmina	4	50	25	25
Spinning of Goat and Yak Wool	2	75		25
Collecting Firewood	2	25	50	25
Grinding of Grain	3	17	66	16
AUTUMN				
Trading and Purchasing	5	80	10	10
Softening Hides	4	75	13	12
Preparing Clothes and Shoes	3	50	50	
Dyeing	2		100	
Tailoring	4	50	50	
Knitting	1		50	50
Making Rice Beer (*Chhang*)	1		100	
Cooking Food	3	17	66	16
WINTER				
Collecting Firewood	4	50	25	25
Distribution of Feed and Fodder from Thukshey	5	60	20	20
Collecting Yak and Horses from the Hills	3	67		33
Spinning	4		75	25
SPRING				
Compulory Community Service	5	80		20
Refining of Woolen Thread (after spinning)	3		67	33

Source: PRA with men and women in Ponkanagu settlement of Samad village on 3rd February 1998. Resource persons: Mr. Chotak Gyatso and Mr. Anand Kumar

APPENDIX V

DAILY ACTIVITY OF WOMEN AND CHILDREN

ACTIVITY	LOAD ON WOMEN (%)	LOAD ON CHILDREN (%)
Removing ash from stove	100	
Making tea and preparing breakfast	85	15
Preparing the herder's shoes	100	
Milking the animals	67	33
Feeding the lambs	67	33
Removing livestock from the pens		
Collecting fallen wool from animal pens	75	25
Collecting bushes and firewood	60	40
Collecting water	50	50
Roasting grain	100	
Grinding the grain	100	
Churning the butter	100	
Weaving (15 days a year)	100	
Spinning	60	40
Softening the wool (3 days a year)	60	40
Preparing feed for livestock	50	50
Feeding lambs and kids	67	33
Preparing dinner	75	25
Lighting of lamps to the Gods	100	

Note: The activity chart denotes activities of married women and children in a typical household.

The activities are denoted in order of their being undertaken.

Source: PRA with women in Ponkanagu settlement of Samad village on 4th February 1998. Resource Persons: Mr. Chotak Gyatso and Mr. Anand Kumar.

APPENDIX VI

LIST OF ACRONYMS

AA	ACTIONAID
ANC/PNC	Ante and Post Natal Care
ANM	Auxiliary Nurse Midwife
CBO	Communty Based Organisation
DHQ	Detailed Household Questionnaire
FGD	Focus Group Discussion
GD	Group Discussion
KDP	Kargil Development Project
KI	Key Informant
LAHDC	Leh Autonomous Hill Development Council
LBA	Ladakh Buddhist Association
LDO	Ladakh Development Organisation
LEDeG	Ladakh Ecological Development Group
LNP	Leh Nutrition Project
NGO	Non-Governmental Organisation
PHC	Primary Health Centre
PRA	Participatory Rural Appraisal
PDS	Public Distribution System
SCF	Save the Children Fund
SECMOL	Students Educational and Cultural Movement of Ladakh
TR	Tibetan Refugees

LIST OF LOCAL WORDS USED

Amchi	Doctor in the Tibetan system of medicine
Bukhari	Stove (Urdu/Kashmiri)
Changpa	Person from Changthang
Chhang	A local brew
Chomo	Buddhist Nun
Chulla	Cooking Fire
Churpon	A group of families who pool in labour for the agricultural season
Drokpa	Person from the highlands
Goba	Village Headman
Gompa	Buddhist temple and monastery
Jhabroo	A nighttime dance performed by men and women in the open
Khangchen	Main household
Khatak	A light scarf that is offered while making a request. Acceptance of it indicates an agreement to accede to the request.
Khaun	Subsidiary household
Kotwal	Village crier
Lama	Buddhist Monk
Larapa	The person entrusted by the community to maintain the village's irrigation system and enforce discipline while households take turns for water.
Magpa	Man who lives with his wife's family
Me-me	Grandfather
Rebo	Yak-wool tent in which people stay
Patwari	Revenue Official
Tsampa	A porridge-like food made of barley
Yulpa	Person from the settled community at Korzok