SIKKIM

SOCIETY	
POLITY	
ECONOMY	
ENVIRONMENT	

Edited by MAHENDRA P. LAMA



SIKKIM Society

Polity Economy Environment

Edited by Mahendra P Lama

> STATE CENTERL LIBRARY GANGTOK

Acc. No. 17189 Call No. 5-5416f Lam Sik



INDUS PUBLISHING COMPANY **NEW DELHI**



Contents

	Preface		9
	Editor's Note		11
	List of Contributors		21
		Section I OCIETY	
1.	The Bhutia-Lepcha Wome Tradition and Response to —Aparna Bhattacharya		25
2.	Plainsmen in Sikkim and t —Nilotpal Sarma	their Occupational Structure	39
3.	The Vow Fulfilled: Saga of Historic Association —Chandrakala Cintury	of Sidkeong-Alexandra	48
4.	Panchayati Raj Institution Participation and Develop —Ranju R Dhamala		59
5.	Ethnicity and Resource M —Amal Datta	anagement in Sikkim	68
6.	Science and Technology E —G S Yonzone	Education in Sikkim	82
K.Z.	11.49	ection II POLITY	
7.	Sikkim's Identity as an Ind—B S Das	dian State	89
8.	Government and Politics i —K R Chakaravarthi	n Sikkim	92

Section III ECONOMY

9.	—Mahendra P Lama	115
10.	Agriculture in Sikkim —Debashis Das	134
11.	Informal Bazaars in Sikkim —K K Bhatnagar	146
12.	Technology Transfer in the Livestock Sector: Key Issues in Sikkim —N Balaraman	164
13.	Watershed-based Participatory Development Strategy in Sikkim —R C Sundriyal, S C Rai and E Sharma	178
14.	Sustainable Energy Development Strategies for Sikkim —K Sudhakar	195
15.	Development without Shocks: A Himalayan Experience —Jeta Sankrityayana	208
16.	Assessment of Tourism in Sikkim —Pranab K Chakravarti	221
17.	Dynamics of Tourism Development in Sikkim —R L Sarkar	228
	Continuity	
	Section IV ENVIRONMENT	
18.	Sikkim Himalaya: Geo-Ecological System, Socio-Economic Change and Peoples' Perception —R B Singh and B W Pandey	241
19.	Forestry and Conservation Issues in the Sikkim Hills —Lalit Kumar Rai	255
20.	Forestry and Wildlife in Sikkim —S S Negi	272
21	Medicinal Uses and Folklores of Plants of Sikkim —R C Srivastava	283

Preface

HIMALAYA TODAY SOCIETY was founded in 1988 by a group of independent thinkers drawn from public and academic life with its registered office at Gangtok, Sikkim. It is a non-profit, research organisation with distinct emphasis on culture, society, economy and environment of the hills and the Himalayan regions of India and its neighbours. The Society aims at creating a larger awareness, encouraging research and analysis and bringing about a deeper understanding of the dynamics of diverse aspects of the hills and the Himalayan regions, their life styles, development perspectives, and their social and cultural conditions. It further aims at bringing the Himalayan life system into the national mainstream. This includes making people aware of such needs and studies and involving the local people in the process of conservation and promotion.

Himalaya Today, a quarterly journal, has been the mouth piece of this Society. In its sixth year of publication, Himalaya Today has been able to bring together a wide spectrum of scholars, experts, professionals, social activists and policy-makers from various corners of India and abroad to deliberate on the four most critical areas of concern viz., society, culture, environment and economy of the Himalayan regions of India and its neighbours. They have not only contributed well researched and policy-oriented articles but have also shown their ready willingness and eagerness to support all our activities.

With this strong support of experts, resource persons, professionals and social-cultural-environmental activists and the varied collection of views, experiences and analysis that we have at our disposal today, the HIMALAYA TODAY SOCIETY is fully poised to undertake research projects on the issues that are of direct relevance to the economic and socio-cultural sustainability of the



1

The Bhutia-Lepcha Women of Sikkim: Tradition and Response to Change

APARNA BHATTACHARYA

Introduction

The Bhutia of Sikkim are the people of Tibetan origin having almost same physique and feature, way of living, cultural pattern, language and scripts and also the same religious faith. It has evidently been accepted that the people from "Kham" province of eastern Tibet first started to come down and to settle in Sikkim from about 10-11 centuries, due to various socio-political, economic and religious reasons. Shortly, Sikkim became the colony of the Tibetan settlers. By the middle of the 17th century, three venerable Lamas of Tibet came to Sikkim and established the "Namgyal" dynasty in 1642 just as the proto-type of the Lamaist Tibet. This Namgyal Dynasty ruled Sikkim through 12 succeeding "Chogyals" or the "Dharmaraja" of Bhutia lineage till its merger with Indian Union in the year 1975.

During that period, Lepchas were only and the aboriginal inhabitants of Sikkim. The Lepchas call themselves as "Rong-pa", a totem which means people living in ravines or Rong-Folk. When the Tibetan immigrants started to settle in Sikkim, these Rongs or Lepchas easily accommodated them with peaceful submission by enjoining perpetual friendship. The Tibetans, who came down to Sikkim from the upper region of Tibet, were devout Buddhist and brought with them the Tibetan Mahayana Buddhism, known as

"Vajrayana" sect, which ultimately was recognised as the state religion of Sikkim. The Lepchas, who were the Nature and Spirit worshippers, were gradually brought under the fold of Vajrayana Buddhism by the help of the Bhutia Lamas.

The Bhutias and the Lepchas are considered as belonging to the same ethnic group as they have had centuries old contacts and relationships founded on the social, marital and religious intercourse. The Government of Sikkim Act, 1974, finally, provided political recognition to the common ethnicity of the Bhutia-Lepcha people by grouping them as the "Sikkimese of Bhutia-Lepcha Origin". After the merger of Sikkim to the Indian Union, the Sikkimese of Bhutia-Lepcha category including Sherpas, have been declared as the scheduled tribe under the Scheduled Caste and Scheduled Tribe Order (Amendment) Act, 1976.

The lives of the Bhutia-Lepcha women of Sikkim are also unique in more ways than one. Like everything else in Sikkim they also truly manifest the influence of the silvan serenity of the august hills of the Himalayas and the deep pervasive influence of the quintessence of Buddhism. These influences have made their lives free from many discriminatory inequalities from which the women suffer elsewhere. The scenic beauties and grandeur of the Himalayas have inculcated in them an inherent sense and aptitude for beautification. And the great faith that in anything and everything around them, the will of the Buddhas will be fulfilled and demonstrated, has made them amenable to the new influences of modernity, accepting them as the will of the Lord. As a result they have never been hostile or averse to the influences of modernity whenever those were not incompatible with their traditional faith and creed. The lives of the Bhutia-Lepcha women have, therefore, become shining examples of the confluence of the old and new, the traditional and the modern.

Position of the Female Child

Bhutia-Lepcha girl-child enjoys same position and attention in the family as well as in the society. There is no visible distinction between a daughter and a son, regarding sex superiority either in the family or in the society. Girls are equally accepted and welcomed. Rather, the parents, who are going to have the first issue, become happier if they get a daughter. Because they have a faith if the first child is daughter, she will bring good luck to her parents. The Bhutia-Lepcha parents, in general, take equal care for the daughter and give them equal protection and affection as that of a son.

Both boys and girls of a family do some light domestic works in the rural areas such as looking after the animals, collecting wood pieces and dry leaves for fuel from the nearby forest or carrying water from a rivulet. But the parents never make any difference by asking the daughter only to do such works. It depends on the age, health and capacity of the child as to whom they would ask to work. Hence the girls never become jealous of their brothers and hardly fight among themselves. The children can enjoy their childhood. The girl-children are never oppressed or neglected by the family. Rather, they are better looked after than the boys.

The unmarried girls have full right of protection and of being cared for in their father's house. If the father is not there then they are looked after either by their uncles or brothers whoever be the head of the family. Even after their marriage the relatives of their paternal house keep an eye to watch on the welfare of the girls and their children and come to their assistance whenever necessary. If some one becomes widow or deserted by her husband then the parents or other relations give her shelter and protection without any hesitation.

Family System

The Bhutia-Lepcha people follow the patriarchal family system i.e the father is the head of the family. He is the decision maker and his word is final regarding the family matters. But the mother also occupies a respected position in the family. She is the centre of the household. The wife is never exploited by the husband. Both husband and the wife share the responsibility of the maintenance of the house and children equally.

It will be interesting to note that in the Bhutia-Lepcha community no family surname is used as strictly as in the other parts of the world. They use the first name only which is selected by the

Lamas. The women, therefore, have no obligation to use the surname of her father in her maidenhood or of her husband after marriage. They are identified by their own name.

Both men and women of Bhutia community are tall, well built, robust and fairer in complexion. They are a finely made race, Tibetans in their feature, language, culture and religion. Their general character is somewhat inaccessible. The Bhutias are more industrious than the Lepchas and being better cultivators are in a sense better off. The women in the rural areas take part in cultivation in the land by sowing, reaping and plucking fruits.

The Lepchas, on the other hand, are a short but well built race, mongoloid in feature and not very handsome. They are very polite, humorous, good natured and open hearted people. Before the Tibetans came and settled in Sikkim, the Lepchas had no proper idea of agriculture and being the skillful woodsmen they used to live in the products of the wood. Cultivation of patches of land, where they grow dry rice, millets, buckwheat and marwa, is now improving in the Lepcha village. The Lepcha women also take part in that kind of cultivation.

In Sikkim both Bhutia and Lepcha women in the rural areas work in the fields and there is no hard and fast division of labour between the sexes, although the heavier works are done mostly by men. There is with them practically no such distinction as men's work and women's work. Both men and women run small business or shops. The women never feel any disgrace in maintaining a shop in the market place or in the road side. The women also work as porter and any outsider will be surprised to see the Bhutia or Lepcha women carrying heavy load on their back walking the upward slope of the mountain road. Rearing the animals is another common livelihood of the Bhutia-Lepcha people in Sikkim. In each and every house in the villages herd of cattle or piggery or poultry can be seen under the room they live. The Bhutia-Lepcha women are strong and hardworking. Practically they constitute the main power force in the family as well as in the society.

Health Care

The Bhutia-Lepcha women living in rural areas are still not

very much aware of their health care. Shortage of time, family problems and communication difficulties are the main reasons of avoiding modern treatment in the health centres. Moreover the Bhutia-Lepcha people are used to follow the Amji system i.e. a type of Ayurvedic System of treatment done by the Lamas by herbal medicine. But the aptitude is changing, no doubt, and they are responding to modern treatment and coming to hospitals or health centers in general for medicine and child birth etc. There are 20 primary Health Centres and 127 Primary Health Sub-centres all over the state. These centres are also providing health education and awareness among the villagers.

The Bhutia-Lepcha women are found to be less fertile as compared to their Nepalese counterparts in Sikkim. The average child birth to Bhutia-Lepcha women, even in the rural areas, is 3 to 4. The husband and other members of the family take special care for the woman who is pregnant. They give her good food, proper nutrition and rest so that she can give birth to healthy baby. She is never allowed to do hard work during her confinement. She is expected to lead a quiet homely life and not to go out much, specially at night. The Bhutia-Lepcha village folk have great faith on the auspicious power of the Lamas. The Lamas in the village do some special puja for the pregnant woman and give her some stones and thread to wear to facilitate child birth. After the birth of a child the position of the woman in the village improve considerably, the mother acquires more authority in the social life.

Marriage System and Conjugal Life

The social norm regarding sex and marriage seems to be very elastic among the hill tribes of eastern Himalayas. The Bhutias. specially known as Lachung-pas and Lachen-pas of North Sikkim, are in general polyandrous i.e. the system of sharing one common wife by all the brothers is followed by them as strictly as before, even today. If the eldest brother takes a wife, she is common to all his younger brothers. Some times two brothers can marry two common girls for both. But the eldest brother is not allowed to co-habit with the wife of his younger brother. In the case of that common wife, whoever may be the progenitor, the children are named only

There is, therefore, no hard and fast rule regarding the custody of the children when the marriage is broken. The elders of the family or of the society settle the issues relating to the custody of the children as they think suitable as to whom the children should go. If there is more than one children then both father and mother may take one or two children of them as the elders direct. The question of the maintenance of the children is also decided by the elder. The children may stay with their grand-parents, if they so desire. The divorced wife is also free to get married again with whom she likes. She can take the children of her first marriage along with her secand husband's house.

Child marriage, widowhood and dowry system, which are the main instruments of the women exploitation in other parts of India, are completely unknown to the Bhutia-Lepcha society. They do not recognize any inherent distinction between the temperament of the sexes. So the women folk also enjoy equality in matters of sexes. The marriages between Bhutia and Lepcha and other communities like Nepalese are being gradually recognized while the marriages between Bhutias and Lepchas were prevalent from long time. These type of inter-community and inter-religious marriages, therefore, are giving rise to some family law complications and requiring legal protection in recent times.

Education and Professional Facilities

There are two parallel educational system prevailing among the Bhutia-Lepcha community in Sikkim, viz, religious education and modern English education. Modern English education was introduced in Sikkim after, it became the protectorate of the British Government in India in 1890. Education, apart from religious instructions at the monasteries, was unknown before that. The religious education is intended for the benefit of those who are preparing for the priesthood i.e. Lamahood under the monastic order in the Lamasaries. It was an unwritten law in Sikkim that every Bhutia-Lepcha family must send at least one son for Buddhist religious education as well as to accept Lamahood in the monasteries.

Bhutia-Lepcha women are also admitted as nuns to a few monasteries in Sikkim, but their number is extremely small and most of whom are quite aged. Some of the nuns, known as "Lamani" are learned in Tibetan Mahayana Buddhist philosophy and preside over the young disciples. But most of them have had no real training and cannot read or write properly. They do not perform religious rituals or ceremonies for private individuals, nor are they given a place inside the main hall at monastic services. Their devotions are confined almost entirely to the turning of prayer wheel and counting the beads. They usually spent few hours in the monastery by turning the prayer wheels.

But women of the elite landlord class started to get modern education since the beginning of the 20th century. The Tashi Namgyal Academy, the first English School, was established in the year 1906 at Gangtok. It was purely a boys school at the beginning. Later, it was converted to a co-educational institution and the girl students were also permitted to study in that school. Some ambitious women had their higher education upto Master's degree level from the colleges and universities in India. No doubt, the number of the highly educated women in the Bhutia-Lepcha community was very few till merger of Sikkim in 1975. There was no degree college in Sikkim till then. The Government Degree College, affiliated to North Bengal University was established in 1978 at Gangtok. Then a Government Law College had also been set up under the same University. The number of the Bhutia-Lepcha girl students studying in both the colleges are nearly 30 to 35 per cent in each.

Response to Modern Education

Education upto school level has been widely spread in Sikkim. There are more than five hundred school all over Sikkim most of which are co-education school. Moreover, education is free upto class XII for both boys and girls. Hence, the children of the rural areas are also getting interested to have minimum school education. In Sikkim educational enterprise is almost nationalized. The state offers a common school system of uniform quality to all children irrespective of caste, creed and sex. About 98 per cent of the educational institutions are managed and solely funded by the state which provides universal free education including free supply of textbooks and mid day meal to primary school children. Only girl

students at primary stage were exempted from payment of tuition fees prior to 1979. At present both boys and girl students are exempted not only from the payment of tuition fees but from other charges like examination, library, games, science fees also.

As a result, a very significant achievement in the sphere of education has been witnessed in the tremendous increase in the number of girl students as well as their percentage of participation at the various stage of education. The following chart of the Scheduled Tribes students in Sikkim during the period 1990-91 will give an idea of their response to education.

Response to Education Scheduled Tribe students-1990-91

S. 1	No. Stage	Boys	Girls	Total
1.	Pre-Primary Stage	1619	1339	2958
2.	Primary Stage (I-V)	8250	7218	15468
3.	Middle Stage (VI-VII)	1728	1657	3385
4.	Secondary Stage (IX-X)	746	716	1462
5.	Higher Sec Stage (XI-XII)	292	176	468

Higher Education Facilities

Besides the above mentioned facilities, the Government of Sikkim has been providing Scholarship and Post-Matric Education. A sum of Rs. 850/- per student per year is given to the tribals for Pre-Matric education. The Post-Matric Scholarship are centrally sponsored. There are certain quotas of seats for the tribal girls of Sikkim at the Banasthali College at Rajasthan. The Bhutia-Lepcha girls who are studying in that college also get financial assistance from the Government of Sikkim.

For higher education there is no specific quota of scholarship for the Bhutia-Lepcha women students. But, of course, they get some kind of privileges. For example, where minimum 45 per cent marks is necessary for the general students to be eligible for the stipend for higher education, it is only 40 per cent for the Bhutia-Lepcha students. The Bhutia-Lepcha students also enjoy 5 years age relaxation for admission in the colleges and universities. 30 to

35 Scheduled Tribe students out of 95 general students, get yearly stipend for higher studies. Bhutia-Lepcha girls are also studying Medicine, Engineering, Law and other professional and technical subjects in various universities in India. Most of the girls studying in Higher School level are interested in studying medicine. Two Bhutia girls have joined as Junior Engineer in Electrical Department. Another Bhutia girl is studying Agriculture Engineering.

Vocational Training Facilities

There are various vocational training facilities for the girls including Bhutia-Lepcha girls both in urban and rural areas. A very large number of young women are engaged as trainee in the Sikkim Institute of Cottage Industry (SICI), Sikkim Lime Corporation and Sikkim Jewels at Gangtok. Half of the trainees, no doubt, belong to Bhutia-Lepcha community. As the urban girls are getting more and more interested in so-called white collared jobs, training in typing and stenography has become very popular among the girls. Khadi Board is also providing vocational training in weaving, knitting etc.

In the tribal belts like Lachen, Lachung, Chung-thang populated mostly by Bhutias, SICI has centres for carpet and blanket weaving. The Bhutia-Lepcha in Sikkim are also benefited by the Integrated Rural Development Programme and allied programme which includes (a) Training of Rural Youth for Self-Employment and (b) Development of Women and Children in Rural areas. Womens' income is known to have positive co-relation in nutritional and educational status of the family and in the building up of a positive attitude toward the financial status of women. Hence, the above programme aims at the necessity of ensuring more income earning avenues for rural women.

The programme is imparted through Gram Sevikas by training in carpet weaving which is one of the traditional crafts of the state of Sikkim and another handicrafts like wood carving, painting etc. In the programme the women are also helped in self-earning through poultry farming, piggery and goatery and rearing of cows. It is reported that programmes have proved to be very lucrative and popular with the women beneficiaries, since rearing of such animals is not much time consuming and can be done simultaneously

with their house-hold work. In order to market the products of rural artisans, the Sikkim Rural Development Agency is sponsoring the Rural Artisan Marketing Centres. The programme has covered more than 10 villages known as tribal pockets since 1985 to 1990.

Economic Independence and Property Rights

It is said that the Bhutia-Lepcha women in Sikkim have a major role in the earning of the family. Sikkim was a feudal state till the recent past and the main source of income was the land and forest. Cardamom plantation is the prime cultivation dominantly possessed by the Bhutia-Lepcha landlords. Other crops like rice, millet etc. are also grown simultaneously. The Bhutia-Lepcha women in the rural areas take an active part in cultivation of the land. Besides, they always utilize other avenues for self-employment. Almost in each house both men and women spend their free time in carpet weaving or knitting the wool. Lepchas, on the other hand, are very efficient in bamboo work and make various things out of bamboo like containers, hats, mats etc.

Bhutia-Lepcha women also run small business. It is very often seen that they use the front room of their house as tea stall or grocery or stationery shops. Even in the market place, most of the shops are run by the women and out of that a large number of shops are owned by Bhutia-Lepcha women. But it is very unusual to see any Bhutia-Lepcha women working as labourer at the road making or building construction. The women working as labourer are mostly Nepalese in origin, coming from the neighbouring state of Nepal.

The Bhutia-Lepcha women, either in rural or in urban areas, are seen to be very much inclined in niceties and fond of dress and ornaments. They wear their traditional dress and heavy ornaments made of precious stones and metals. The women of the rich Bhutia-Lepcha families possess a good number of valuable jewelleries which can be described as their personal assets.

Employment Opportunities

To conform with the changing situation and social develop-

system, all the property either movable or immovable, belong to the father or head of the family. After the death of the father, the eldest of his sons becomes the head of the family as well as takes charge of the property. As far as the property matters are concerned, the women, except for their movable personal belongings, ornaments and utensils etc., have no locus standi, i.e. any legal right in the family property. But according to unwritten norms of the society, there are ample provisions for safeguarding the interests of the female members of the family. This is the social principle that has to be followed by every family head.

Though the Bhutia-Lepcha women have no legal right in the property, usually, the daughters, sisters, aunts and near cousins are given gifts of immovable assets in the form of livestock, domestic animals, utensils, ornaments etc. Rich and well-to-do people sometimes may give a piece of cultivated land or a house to the daughter or sister. But that they give out of compassion, not as per law. The daughter or sister can take those gifts along with them when they marry and go away from her paternal house.

It may be mentioned here that the Indian Hindu laws of succession, inheritance or marriage which govern other religious communities like Sikhs, Jains and Buddhists in India, are not applicable to the Bhutia-Lepcha people in Sikkim though they are Buddhist by religion barring a handful of Christian Lepchas. Because Hindu Laws, except Hindu Marriage Act of 1955, have not been extended or enforced in Sikkim even after its merger into the Indian Union in 1975. So the Bhutia-Lepcha people in Sikkim are still governed and guided by their customary laws in respect of succession, inheritance and also of marriage.

Under the laws governing them, the Bhutia-Lepcha daughters in Sikkim have no right to inherit the properties of their fathers, even when there are no sons. If a Bhutia-Lepcha man dies leaving behind him his widow and daughter only and no sons, the widow shall inherit the property only for her life and on her death, the property shall revert back to male agnates of her late husband, but not to the daughter. She is not entitled to sell, transfer or mortgage that property of her late husband.

The Bhutia-Lepcha women may, however, acquire property by way of gift or under a will from her father or other relations. But

2

Plainsmen in Sikkim and Their Occupational Structure

NILOTPAL SARMA

Introduction

Sikkim has occupied the centre stage in the Himalayan trade and politics during the period that began in 1888. It was during 1890s that some people from the places like Bengal, Bihar, Haryana, Rajasthan, Uttar Pradesh and other places of India, who are generally referred to as "plainsmen" began to migrate to Sikkim. They were essentially traders participating in the then famous trans-Himalayan trade. There were a few from Bengal serving as tutors to the royal family members. Their flow to Sikkim became more noticeable after Sikkim became a protectorate of India in 1950. The second large influx of plainsmen was noticed after 1975 when it became a part of the Indian Union.

This paper attempts to present the occupational structure of the plainsmen in Sikkim with a theoretical discussion on the sociological significance of occupation. It is divided into two main sections. The first section deals with the relationship between occupation and ethnic structure in Sikkim till the end of monarchy and the second section provides an analysis of the factors responsible for the phenomenal diversification in occupational structure after 1975.

Before going into details it is necessary to give a little idea about the sociological importance of occupation. 'Occupation', as defined by Arthur Salz, is important because 'it determines an

fits into the other three models also. The plainsmen in Sikkim not only occupy the top occupational strata but also some of the lowest strata. There are traders among the hill people also but there is a segmentation within trade and the plainsmen and hillmen are concentrated in different segments of trade. Occupational segmentation of various ethnic groups may take place due to linguistic, cultural, or racial factors or historical circumstances or even governmental policies.

I

OCCUPATIONAL AND ETHNIC STRUCTURE

Both the ethnic and occupational structure in Sikkim have been gradually growing more and more complex and diversified. By the end of the rule of the Chogyals these structures were fairly complex but after 1975 they seem to have grown even more so.

Lepchas are the earliest inhabitants of Sikkim. Subba 4 (1988) has added that Tsongs or Limbus and the Mangars were also there from the earliest times. All these three communities were agriculturists. The Lepchas and the Limbus did some trade with the Tibetans and Gorkhas respectively. The Mangars are reported to be the expert in mining activities. There was no concept of occupational hierarchy among those tribes until at least the end of the seventeenth century. Next in the line of immigration were the Khamps from the Kham province of Tibet, who are known as Bhutias. Agriculture is their main occupation. Besides agriculture, they also depend on pastoralism and trade.5 The Tibetans occupied a dominant economic position vis-a-vis the Lepchas until the end of the nineteenth century mainly because of their expertise in trading activities.6

The British Connection

The British connection with Sikkim began in the early 19th century. However, the influence of the British in the affairs of Sikkim was noticeable only after the posting of J.C. White as a Political Officer at Gangtok. He encouraged the migration of the

The Vow Fulfilled: Saga of Sidkeong-Alexandra Historic Association

CHANDRAKALA CINTURY

"Because of the intention with which the statue was given to me, I received it with much emotion and promised myself to send it back to its country, when I died . . ." (from Alexandra David-Neel's letter to her husband, Kalimpong, October 10, 1912).

The bronze statue of Buddha, six inches in height, filled with the prayers and blessings (Koo in Sikkimese) and blackened with age was brought to Sikkim from Tsorphu monastery in Kham in eastern Tibet by the 9th Karmapa Lama, Wang-Chuk Dorji and enshrined in Phodong monastery in north Sikkim some time in 1851. The original monastery was built in 1740. The present monastery was rebuilt in 1978 at the old site keeping in view the architectural design of the original monastery as much as possible. The first Karmapa monastery called Gompa in Sikkimese, was built at Ralang in South Sikkim about 1730 A.D. by the Chogyal Gyurmed Namgyal at the special request of the Ninth Karmapa during the pilgrimage of the King of Tibet. The third monastery of this sect is at Rumtek built in 1740 A.D. This is the old monastery (not to be mixed up with the Rumtek monastery) built by the 16th Karmapa in 1968 when he left Tibet after Chinese take over. This monastery has now become the world famous seat of Karmapa in exile.

The statue of Buddha mentioned above was given to Alexandra David-Neel of France by the Crown Prince of Sikkim, Sidkeong

Tulku, in 1912 at Rinchenpong in west Sikkim as a token of friendship, respect and admiration. They had first met in Kalimpong in 1912. She decribes Sidkeong Tulku in her book, "this short Yellow-skinned being clad in a rope of orange brocade, a diamond star sparkling on his hat, rather a genie come down from the neighbouring mountains. They say he is an 'incarnated lama' and heir prince of a Himalayan throne, but I doubt his reality. Probably he will vanish like a mirage, with his caparisoned little steed and his party of followers, dressed in all the colours of the rainbow. He is a part of the enchantment in which I have lived these last fifteen days. This new episode is of the stuff that dreams are made of" (Magic and Mystery in Tibet, page 1).

Sidkeong-Alexandra Association: The Initial Years

Sidkeong Tulku was regarded as the reincarnation of his uncle by the same name who became the Eighth Chogyal of Sikkim (born 1819-1874). He had spent part of his youth in the monastery at Phodong of which he was the abbot. Though youngest of the three sons of Sir Thutob Namgyal, the Ninth Chogyal, he was chosen to be the Crown Prince and was put in charge of an anglicised Indian as guardian and teacher. Sidkeong Tulku knew English better than his mother tongue Tibetan and was educated in Oxford also for some time. As a Crown Prince, he was very much interested to bring reforms in Sikkim. He was impressed by David-Neel and her deep knowledge of Buddhism. The young prince was very open minded and immediately became interested in her researches and facilitated her task with great zeal.

Alexandra David-Neel had already travelled in many parts of India including Benaras and Calcutta studying Vedanta and Buddhist philosophy. She was a great scholar, explorer and traveller. She had come to Kalimpong to meet the 13th Dalai Lama and to get information from him about the special type of Buddhism that prevails in Tibet. This interview with the Dalai Lama proved to be of far reaching consequences that involved her in wanderings and kept her in Asia for full fourteen years. The Dalai Lama told her to learn the Tibetan language and gave her a long written explanation of the various subject they had discussed. "However, a western



4

Panchayati Raj Institution in Sikkim: Participation and Development

RANJU R DHAMALA

Introduction

Development generally implies change for betterment though the search for suitable strategy for effecting such change continues till this day. 'Participation' has become key element in development process in recent decades. It is mainly related with rural development, on the assumption that effective participation of people would ensure equal distribution of fruits of development thereby developing our villages at a faster speed. However, there does not appear to be conceptual clarity about nature of participation. It rather presents divergent range of interpretations.1 It is taken to mean (i) voluntary contribution to any public programme; (ii) the initiative and involvement of people in any development programme of the area and (iii) involvement of people in the decision making process while enjoying certain autonomy. While the first interpretation recognizes the participation of people in development only as an agency of government or administrative machinery where people are expected to cooperate with the government administered programme, the last two emphasizes the people centred approach. Here, the emphasis is on the people, their initiative to identify the problems and needs and initiate actions for meeting the challenges of development. The government's role is oriented towards encouraging and facilitating their initiative and action by providing organizational setting.2

Participation and Development: Indian Experience

In India, the idea of participation was first mooted in the early 1950's when the Community Development Programme was launched. It was initiated with the sole objective of developing villages with the active participation and involvement of local people. However, it failed to achieve its objective. Instead of involving people in the development process it 'created an enormous bureaucratic superstructure'. Consequently, the programme came to be identified with the administrative machinery than with the people.

After this, the emphasis shifted to the establishment of Panchayati Raj Institutions (PRIs) which would ensure the involvement of people in the local area as well as in the nation building process. With 90 percent of the Indians residing in rural India, the PRI would, it was argued, prove to be an important vehicle for transforming our villages. Thus, participation of people in the management of their affairs and their involvement in development process were the objectives of PRIs during 1960s. Initiative, participation, auto-nomy became key words to development.

Notwithstanding these, the apathy of various state governments towards these institutions and the inherent weakness of these institutions resulted in reconsideration of development strategy. Development was considered too technical a matter to be left with panchayat leaders. Accordingly, during the 70's there was increasing reliance on the centrally administered schemes like CADP, SFDA or Small Farmers or Marginal Farmers Development Agencies etc. The panchayats were left to perform smaller functions like construction of village roads, bridges, minor irrigation channels etc. The financial powers were kept to the minimum with a wide provisions of government supervision and control.

In the shift in the development paradigm from growth oriented target approach to human development with emphasis on social development, the issues of sustainable development drew the attention of policy planners once again to the question of people centred development strategy. The viability of PRIs as instruments of development acquired more importance. Thus, during the 80's the issue of revamping the PRIs in order to make them effective part-

ner in development process was discussed at length. The 62nd Amendment Bill, 1989 and the Constitution 73rd Amendment Act, 1992 on the Panchayats clearly underline this attitude of the policy planners.

Panchayati Raj Institutions in Sikkim

Against this background, it would be interesting to examine the evolution and role of panchayati raj institution in Sikkim. Sikkim became one of the states of the Indian union only in 1975. Owing to the historical antecedent, Sikkim did not experience the community development phase of early 1950s. Interestingly, it was during this phase only that the institutions of local self government known as Local Area Panchayat was introduced. Under the Indo-Sikkim Treaty, 1950 both parties agreed on 'progressive association of the people with the governance of the state', for that matter in the formation of village panchayats at the local level on an elective basis. The Local Area Panchayats were established in 1951 but the then Government of Sikkim did not show any interest in the proper functioning of these bodies. These institutions became defunct as soon as they were established.

Panchayat Act, 1965

The Sikkim Panchayat Act, 1965 was, in fact, the first attempt at establishing PRIs in Sikkim. The Act stipulated for a non-hierarchical panchayat with block panchayat at the village level. The Block Panchayats constituted under this Act continued till 1981 during which period four elections were held viz., 1966, 1969, 1972 and 1976. This Block Panchayats were given wide range of functions which may be grouped under three heads, (i) developmental, (ii) welfare and (iii) agency. Under the first category the functions included were viz., (a) development of agriculture, establishment of agricultural farms, grow more food campaign, crop experiment, digging of compost pits etc., (b) promotion of dairy farming, (c) embankment against flood, minor irrigation, and (d) promotion of cottage industry and cooperatives.

The welfare functions were: (a) construction of public latrine,

Ethnicity and Resource Management in Sikkim

AMAL DATTA

Introduction

Ethnicity is a complex phenomenon that refers to the sense of peoplehood or the feeling shared by the members of the group. An ethnic group has its own sub-structure and sub-culture parallel to the larger society (Punekar 1974: 3). The affective dimension of ethnic identity is also emphasized by Cohen (1974) in the African context. In this modern phase of world, ethnicity may be understood in two context. Firstly, ethnicity is understood through the caste/religion/culture/language background in particular cases of a single group. Secondly, in larger context, it is defined as comprising of more than one and many groups on the basis of privilege realisation reserved for that combined/composite group which has been in reality the imposed identity.

Ethnicity affects the life of the individuals and groups in many ways. Indeed, ethnicity has become a 'resource' affiliations to which ultimately involves the realisation of 'privileges' for a section of the society. Role played by the constitutional provisions strengthens the ethnic identity. Ethnic groups have over time become strong 'interest' group and ethnicity a 'resource'. This dimension has created conflict situations. Ethnic conflicts, are basically, conflicts of interest group (for example, African studies of Epstein 1978; Charsley 1974; Cohen 1974). Which identity will be

stressed in a given situation depends on the situation itself (Caplan, 1981) These conflicts in turn heighten the ethnic identities (Punekar 1986: 112).

Indeed, the society in Sikkim may be conceived as 'ethnically diverse' and in poly-ethnic society like Sikkim, political and economic interests in terms of privileges shapes ethnic inter-group relations. So, the ethnicity in Sikkim may be envisaged between 'them' and us for the purpose of identification. This has been according to Wallman's definition of ethnicity in which he says that "... ethnicity is the process by which 'their' difference is used to enhance the sense of 'us' for purpose of organization or identification" (Wallman 1979: 3).

In the light of above definition the ethnicity in Sikkim may be revealed by discussing the three following perspectives.

- 1. Ethnicity on the basis of particular tribal identity
- 2. Ethnicity on the basis of combined tribal identity vis-a-vis non-tribal identity.
- 3. Ethnicity on the basis of socio-political identity—a large combined identity of various ethnic groups.

The identity here in this study may be envisaged as the consciousness of any ethnic group which in reality is the outcome of the idea of common origin with a view to gain opportunities for realising the country's resources. In brief, this study attempts to present an introspective anlaysis of how the particular ethnic affiliation vis-a-vis common origin has been important in determining the position of the people in the resources management in Sikkim.

Pre-Merger Period

The population of Sikkim is primarily constituted by Lepchas, Bhutias and Nepalese ethnic group. The oldest inhabitants of Sikkim are the Lepchas (Coelho 1970: 18). It is only a notion and no historical records exist as to show how they came to inhabit this region. They are believed to have migrated via Assam. There was no central political power and the country was ruled by local Lepcha chiefs (Shukla 1976: 7). Apart from the Lepchas however, there is a considerable size of Limbu (who are also known as Yak

Science and Technology Education in Sikkim

G S YONZONE

In view of Sikkim's vast natural wealth of physical and biological resources, science, technology and environment education on a planned framework should form the basis for the region's environmental and economic development. We must think of science and technology education in relation to a holistic concept of the region's environmental characteristics and of its natural resources.

Existing environmental problems which are common to both Darjeeling and Sikkim include, overpopulation, depletion of forests, soil erosion, overstocking of cattle, destruction of scientifically unstudied flora and fauna, lack of post-harvest technology and poverty. The total population in the Sikkim has reached a figure of 4,06,457 in 1991 as against 30,458 in 1891. The wanton clearance of forests for short-term commercial gain, major dependence on forests for fodder and fuel, uncontrolled grazing, theft and pilferage of trees, and extension of cultivation into forest areas due to population pressure have made the degradation very alarming. Although a perennial feature of the hilly terrain, soil erosion has been accelerated by a faulty traditional agricultural system, random construction of roads and house without scientifically examining the stability of the soil, and indiscriminate tree-felling without considering the concomitant environmental hazards. Overstocking of cattle by almost every rural family, without adequate fodder resources have compelled people to plunder the reserved and sanctuary forests. Lack of responsibility and of the knowledge that survival of man depends on the survival of plants and animals have made the situation more vicious.

These problems are swelling in dimension as they threaten conservation and sustained development. The conservation and development are mirror-images of each other and this deserves widest possible propaganda. What is called development has resulted in ecological backlashes. It is a double tragedy, since not only is the money spent on some development works lost through bad investment, but additional money has to be spent to correct the new problems created. Only careful study, research and prior planning can ensure a net benefit to the people. Otherwise it will only be a temporary economic benefit for a vested interest. One could visualize a great deal of science and technology education within the body of the environmental problems enumerated above.

The region is very rich in resources viz., humid climate which favours the cultivation of a large number of agro-horticultural plants; forest vegetation, although it has now declined to less than 30 per cent against a minimum requirement of 60 per cent of the total geographical area in the hills; diversity of flora and fauna which is a valuable genetic asset, perennial rivers; tropical, temperate and alpine climatic zones and beautiful natural landscape.

Need for Changes in the Existing Curricula

The existing curricula of graduate and post-graduate courses of teaching under the University of North Bengal falling within the region offer only fragments of the physical and biological aspects of science specific to the region, while technology education with the aim of developing a pool of skilled human resources has been totally omitted. Certain science courses lack qualified teachers to teach them. There also appears to be very limited scope for teachers to receive adequate training in the subject. As the curricula are not issue-based, the students become helpless onlookers on the growing socio-economic problems that have vastly engulfed the local society.

Therefore, we must develop science and technology education

Section II

_____Polity_____

7

Sikkim's Identity as an Indian State

B S DAS

It is difficult to interpret the events of 1973 correlating them to 1994 in the context of Sikkim as an integral part of India. Many unexpected changes altered the basic character of Sikkim's unique personality as one knew it in 1973. This factor, the very nature of Sikkim polity began to be viewed delinked to its past and a new content was added to it.

The post merger era brought about a painful process of conversion to the political and economic culture of an Indian state. Traditional Sikkim with its age old culture and of which the Nepalese Sikkimese had become a part began to be perceived more and more as a Nepalese speaking State of India somewhat akin to other linguistic States. While Kanchenjunga remained the symbol of the people of Sikkim, the merger brought in a system of governance and institutions which were foreign to the Sikkimese traditional past.

However painful this process was, specially for the ethnic minorities, its economic advantages and larger role in the national context made Sikkim's transition a smooth one. Aberrations are normal in any political process. But, these did not vitiate the environment to a point of ethnic or political conflict. Credit for this must go to the people of Sikkim specially the Nepalese majority which exercised a healthy restraint in its newly established power.

Mr. Nar Bahadur Bhandari, the Chief Minister also deserves credit for this. He while highlighting the Nepalese identity, was

Government and Politics in Sikkim

K R CHAKARAVARTHI

Sikkim¹ the erstwhile sovereign monarchical country became the 22nd state of the Indian Union in May, 1975 as a result of a referendum by the people of Sikkim and an agreement signed between Chogyal Palden Thendup Namgyal, the then Maharaja of Sikkim and Government of India.

Constitutional Position

The Constitutional status of Sikkim is made clear under article 371.F. of the Constitution of India and it runs as follow:

371.F. Special Provisions with respect to the State of Sikkim²: "Notwithstanding anything in this Constitution:

(a) The Legislative Assembly of the State of Sikkim shall consist of not less than thirty members;

(b) As from the date of commencement of the Constitution (36th Amendment) Act, 1975 (hereinafter in this article referred to as the appointed day)

(i) The Assembly for Sikkim, formed as a result of the elections held in Sikkim in April, 1974, with thirty-two members elected in the said elections (hereinafter referred to as the sitting members) shall be deemed to be the Legislative Assembly of the State of Sikkim duly constituted under this Constitution;

Government and Politics in Sikkim

K R CHAKARAVARTHI

Sikkim¹ the erstwhile sovereign monarchical country became the 22nd state of the Indian Union in May, 1975 as a result of a referendum by the people of Sikkim and an agreement signed between Chogyal Palden Thendup Namgyal, the then Maharaja of Sikkim and Government of India.

Constitutional Position

The Constitutional status of Sikkim is made clear under article 371.F. of the Constitution of India and it runs as follow:

371.F. Special Provisions with respect to the State of Sikkim²:

"Notwithstanding anything in this Constitution:

(a) The Legislative Assembly of the State of Sikkim shall consist of not less than thirty members;

(b) As from the date of commencement of the Constitution (36th Amendment) Act, 1975 (hereinafter in this article referred to

as the appointed day)

(i) The Assembly for Sikkim, formed as a result of the elections held in Sikkim in April, 1974, with thirtytwo members elected in the said elections (hereinafter referred to as the sitting members) shall be deemed to be the Legislative Assembly of the State of Sikkim duly constituted under this Constitution; (iii) The said Legislative Assembly of the State of Sikkim shall exercise the powers and perform the functions of

a State under this Constitution.

(c) In the case of the Assembly deemed to be the Legislative Assembly of the state of Sikkim under clause (b) the references to the period of five years³ in clause (1) of article 172 shall be construed as references to a period of four years⁴ and said period of four years⁵ shall be deemed to commence from the appointed day;

(d) Until other provisions are made by Parliament by law, these shall be allotted to the State of Sikkim one seat in the House of People and the State of Sikkim shall form one Parliamentary constituency called the Parliamentary Constituency of Sikkim;

(e) The representative of the State of Sikkim in the House of People in existence on the appointed day shall be elected by the members of the Legislative Assembly of the State of Sikkim;

(f) Parliament may, for the purpose of protecting the right and interests of the different sections of the population of Sikkim make provision for the number of seats in the Legislative Assembly for the State of Sikkim which may be filled by candidates belonging to such sections and for the delimitation of the assembly constituencies from which candidate belonging to such sections alone may stand for election to the Legislative Assembly of the State of Sikkim;

(g) The Governor of Sikkim shall have special responsibility for peace and for equitable agreement for ensuring the social and economic advancement of different section of the population of Sikkim and in the discharge of his special responsibility under the clause, the Governor of Sikkim shall subject to such directions as the president may from time to time, deem fit to issue, act in his discretions;

(h) All property and assets (whether within or outside the territories comprised in the State of Sikkim) which immediately before the appointed day were vested in the Government of Sikkim or in any other authority or in person for the purposes of the Government

Section III ____Economy____

Sikkim: Agenda for Sectoral Priorities and Resource Management

MAHENDRA P LAMA

One of the youngest states of the Indian Union, Sikkim has reached a distinct level of economic development in a brief period of twenty years of its merger with India. Even a cursory look at some of its major development indicators reveals that the progress has been comparatively a much steady and rapid phenomena in Sikkim. This has been a case in all the sphere of economic and welfare activities varying from agriculture to industry, health to education, roads to power supply, housing to market infrastructure and revenue mobilisation efforts to private investment. Though the present day Sikkim inherited a feudal and medieval authorities both in terms of political culture and economic management, it was the post-merger democratic political system which has really ushered in a new development perspective in Sikkim. The subsequent political stability has strengthened the various economic, social and political institutions which have largely contributed to Sikkim's steady economic growth.

It is in Sikkim, where the fruits of economic development and social change have perceptively percolated down to the mass. Almost every household has got the basic needs such as drinking water, electricity, shelter, health and schools. In fact this has been widely supplemented by the ever growing roads and communication. With the improving infrastructure and State Government's

10

Agriculture in Sikkim

DEBASHIS DAS

The state of Sikkim is located in the Eastern Himalayan range with a varying elevation, within the state between 300 metres and 8400 metres. The land area is divided into four groups according to the variation of elevation. Teesta and Rangit are the main rivers of Sikkim, both having their origin in glaciers from the north. The entire state is constrained by adverse physiographic conditions and socio-cultural complexes

The soils of the state are derived from the rock like shales, schisms and conglomerates. The soils are largely sandy and clayey in the lower reaches of the valley. Soils are acidic, caused by leachthick layer of leaf mound rich in organic matter, but as a result of alluvial in nature being either loams or sandy loams mixed with valleys are clayey, alluvium and rich in organic content.

Irrigational Facilities

Rainfall is the main source of moisture in the soil. In spite of that the only source of irrigation is the spring water which is avail-suffers from the basic defect that this is not supported by reservoirs and therefore flow of irrigation water is restricted to kharif season only. Since kharif season receives most of the rainfall, irrigation

water may not be necessary. Irrigation water is provided mainly to paddy fields.

A study reveals that between 1976-77 and 1980-81, although absolute number of holding received irrigation increased by 32 per cent and total irrigated area increased by 7 per cent, the percentage of holding received irrigation decreased from 46 per cent to 34 per cent and percentage of net irrigated area to net sown area also decreased from 16 per cent to 14 per cent. That means although small amount of irrigated area has increased, yet at the same time large amount of unirrigated plot was devoted under multiple cropping which became 14 per cent in 1980-81. This further implies that gradually the farmers moved towards irrigating their multiple cropped areas for ensuring higher productivity of crops.

Percentage distribution of holdings under irrigation and percentage of irrigated area by size classes of holding depicts the fact that large sized farms although possess higher percentage of holding under irrigation, they have smaller proportion of area irrigated to net sown area. That means large farms have large number of irrigated holding, but have smaller spatial extent of irrigated area than the small farms: at the same time the smaller farms have small number of holding which are irrigated, but these have large spatial extent of irrigated areas within net sown area. In terms of absolute size of irrigated area big farms have larger size than small farms (Table 1).

Table 1
Percentage of holding and area irrigated by size-classes of holding in Sikkim

Size-class	% of holding under irrigation	% of area irrigated
D.L 1 ha	32.02	23.71
Below 1 ha.	46.78	13.84
1-2 ha	46.96	15.59
2-4 ha	50.15	12.34
4-10 ha 10 & above ha.	46.46	4.89
Overall	46.24	15.85
Overall		- Commence

Source: Sikkim Agricultural Census-1976-77.

Informal Bazaars in Sikkim

K K BHATNAGAR

The study was undertaken to examine the potentiality of marketing operations in Sikkim, and more specifically, the "Informal Bazaar" which also acts as an employment generator. Historically, there is no planned or formal market in Sikkim. Marketing operations have been unplanned, scattered and confined to areas, now notified for this purpose, under the provisions of Sikkim Allotment of House Sites and Construction of Building (Regulation and Control) Act, 1985 (Act no 11 of 1985). Mixed land use is quite common and with necessary permission from the Housing and Urban Development Department, commercial buildings can be constructed. A mixed land use has obviously been considered necessary because of paucity of developed land which is a common texture of the entire state.

Sikkim has been undergoing significant changes in its demography and settlement patterns after its merger with India in 1975. The subsequent action to relax the need of entry permit for Indian citizens and to simplify the procedure for entry of foreigners has furthered the influx of permanent as well as floating population. The existing legislative framework for development of settlement and the infrastructure has been finding it difficult to cope with this increasing pressure on population and activities.

The broad areas of the study were to assess the present status of activities in the "informal bazaars", their operational mechanism, the assessment of manpower absorption capacity of the bazaars and potential for growth and finally a strategy for their development.

Profile of Sikkim

According to 1991 census, the total population of Sikkim is 4,06,457. It is a thinly population hilly state. The density of population works out to 57 persons per sq km as against 45 in 1981. The percentage growth of population during the last five decades has been following:

 $Table \ 1 \\ Decadal \ growth \ of \ population \ in \ Sikkim \ (in \ \%)$

1951	13.34	
1961	17.76	
1971	29.38	
1981	50.77	
1991	27.57	

There was only one town—Gangtok till 1961, but the number of towns have increased to 8 in 1981. Since there are no large plain areas in Sikkim and also because nearly two-third of the total areas remain snow covered throughout the year, only 16 per cent of the total geographical area is under operational holding and out of this only 11 per cent of the total area is under cultivation.

i) Population

The population of Sikkim is distributed in 440 villages and 8 towns. There are 11 uninhabited villages. As per 1991 census, 90.8 per cent of the population resides in villages and proportion of urbanization in the ratio is 9.2 per cent. The bulk of the rural population (61.7 per cent) lives in small villages having population of less than 1000. 29.7 percent live in medium sized settlement (1000-1999) and a small proportion (8.6 per cent) in settlements having a population of 2000-4999. With a higher growth rate of 4 per cent, the medium sized settlements should now be on the verge

Technology Transfer in the Livestock Sector: Key Issues in Sikkim

N BALARAMAN

Sikkim is predominantly peopled by a rural population which has registered a rise from 83.85 per cent to 90.90 per cent during the decade, 1981-91. There has been a substantial growth of population in this tiny state which recorded a 28.47 per cent rise during this period, causing an increase in the population density from 45 to 57 per square kilometer and a corresponding reduction in per capita land availability during this span of time. The land under operational holdings forms 15.37 per cent of the total geographical area and the net area under cultivation constitutes only about 11.04 per cent with hardly any further scope for increase. If the developmental programmes have to achieve their desired objectives of improving the economic well-being of the common man, reducing drudgery in the day-to-day life and bringing about an improvement in the quality of life, it is essential that a technological transformation is brought about in the rural scenario.

In the farm front, the livestock sector continues to occupy a subsistence and subsidiary position and the vast potential in intensifying and commercializing this sector remains unexploited.

In a land-locked situation such as prevailing in Sikkim, with obvious limitations on field crop production imposed by the conditions of soil and climate, animal husbandry may be expected to play not just a supplemental role, but a pivotal substitute farming enterprise. The moderate, cool climate of Sikkim favours the rearing of high producing livestock. The capacity of the local soil to

ages. Such extension should be organized in a local decentralized manner and work on the farmers' need and should individually be adopted to each block/village/household. Considering this, a study dealing with farmers' participatory developmental priorities was undertaken in the Mamlay watershed of south Sikkim after completion of a resource identification survey (Sharma et al. 1992). The main objectives of the study were to know the priorities of the people/farmers, officials of various developmental interventions and researchers for the area development. The ultimate aim being to prescribe policy actions at a watershed level.

The Area of Study

Mamlay watershed is located in the south district of the Sikkim state. It extends from 27°10′8"-27°14′6"N to 88°19′53"-88°24′43"E. A comparative characteristic of the watershed with that of the Sikkim state is given in Table 1. The watershed comprises of 0.42 per cent of the total area of Sikkim. Population density is 2.24 times higher in the watershed in comparison to the state average. The watershed has 9 revenue blocks consisting of 34 villages. It is an agrarian watershed having 62 per cent area under agriculture land use with more than 95 per cent of total population engaged in farming. Agricultural practices in the watershed are being done between an elevational range of 400-1900 m. Agriculture is rainfed (99 per cent) and most of the cultivable lands are having 30-35° slope.

The watershed area is geologically typified by folded structure and varied lithology with older rocks occupying the upper structural levels. It bears the evidences of two persistent thrusts viz., the Sikkim and the Tendong. The major rock formations are Damuda and Daling. Drainage network is dendritic type and it merges in the great Rangit River (Sharma et al 1992). Major part of the agricultural zone is under water scarcity during lean period from December to March due to sub-surface flow resulting from the two thrusts in the watershed (Bhatt et al. 1993).

Sustainable Energy Development Strategies for Sikkim

K SUDHAKAR

Development experts and decision makers increasingly recognize that destroying natural systems to meet current needs or to make a quick profit is short-sighted and potentially disastrous for future generations. The alternative—meeting people's current needs while preserving nature's productive capacity for the future—has been termed Sustainable Development.

Adopting the principle of sustainable development requires a fundamental change in thinking. The data presented for decision-making must reflect the true costs of resource depletion and pollution as they affect future generations rather than just the short-term costs and profits of depleting income-producing resources. They must take account of future needs alongwith current needs, not "discounted" in a way that weights decisions in favour of short-term results. Sustainable development is an alternative to the "development at any cost" ethos identified with the "drive to modernization" or earlier decades.

The concept of sustainable development rejects the conventional view that economic development is a necessity but environmental protection is a luxury. Instead, it argues that long-term economic development and environmental protection are inextricably linked. In fact, continued economic development requires the continued productivity of farmlands and forests, adequate and safe water supplies, efficient energy use, and preservation of natural

Development without Shocks: A Himalayan Experience

JETA SANKRITYAYANA

The Himalayan community is a land-locked one, which has survived amidst the rigours of living in high mountains, evolving a fabric of traditions—both social and cultural that have maintained its integrity. For a very long time, its very isolation was a protector of this integrity, shielded as it was from incursions of flux from the vast waves of trade and commerce in the distant plains which had overwhelmed the past with such rapidity. In a nation-state, particularly one with monarchistic trappings, protection of that past often became obsession, because of the preservation this afforded to the socio-political dispensations that ruled the community. The anachronisms which resulted—into the theocratic state, its closed frontiers, its feudalistic carryovers—were seldom cause for any perturbation, given the paramountcy of social order which had to be preserved at every cost.

To a world outside, the community became an artifact—a kind of left-over from an archaic past, a museum-piece. A mystique attached to prolonging its survival in changing times. It became an idyll, a Shangri-La, lending a sydromic sentimentality to one aspect in the development debate. As long as changes were dictated by those outside, the community displayed a remarkable resilience in its reluctance to cast aside its isolation. Cosmetic changes, such as the introduction of a few development projects on the pressure of patrons outside, were tightly circumscribed in the impact they had—

Assessment of Tourism in Sikkim

PRANAB K CHAKRAVARTI

Tourism, as an economic activity, is a recent phenomenon in Sikkim. The landlocked Kingdom was slowly opened to out-side world from the mid sixties and since its annexation, as an Indian state, in 1975 the flow of tourists started to pour in slowly. There was a sudden spurt in tourism since the late eighties when Darjeeling, the cynosure of the Eastern Himalayas was reeling under the violent Gorkha National Liberation Front agitation. Mountain lovers and nature seekers turned their attention towards this tiny landlocked state.

Nearly 82 per cent of the visitors, in Sikkim, are Indian nationals while the remaining come from outside India. Greater amount of leisure period, paid annual holiday, more availability of disposable income, faster means of transportation, increased state of knowledge, organised tour packages offered by government and private agencies, good accommodation and cuisine along with other amenities (shopping arcade, local transport, amusement etc.) have encouraged tourism, in Sikkim, in recent years.

Sikkim, is basically a natural paradise in the lap of the Himalayas. Except the north and western Sikkim there are few areas where the landscape remains in its natural condition. The degree to which the landscape has been altered depends to a very large extent upon its location, accessibility and utility. The landscape miniatures of Sikkim provide a varied scenery and exhilarating climate that charm the visitors. The majestic snow capped mountain chains standing as sentinel in the north, terraced fields with immaculately

Dynamics of Tourism Development in Sikkim

R L SARKAR

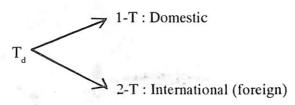
Sikkim is the holy land of Kanchenjunga. The magnificent Himalaya dominate the landscape. Monastery is here on every hill top—a symbol of Himalayan Buddhism. Trekking along five routes is an unique opportunity for energetic tourists. Its capital, Gangtok, is a picturesque hill station. It is surrounded by snow-capped mountains, and has all the magic and splendour of the Himalayas. Its exotic flora and fauna, colourfully dressed Lamas, mystery-laden prayer flags fluttering over the monasteries are worth-seeing. They all combine to make Gangtok a fascinating place for tourists. There is about a dozen of sight-seeing spots in and around Gangtok.

Conceptual Frame

Tourism depends on an interaction between demand and supply forces. Demand and supply functions are shown below:

a)
$$T_d = f(Y,L,E,Ag,P,t)$$

where T_d = Touristic demand. It is of two types:



- = Functional notation. T_d depends upon Y,L,E, etc.
- = Income, more specifically, discretionary spending goods and services outside the necessities of life such as food, clothing and shelter, i.e. for created wants rather than actual needs.
- = Leisure, resulting in holidays. Increased leisure associ-L ated with lengthening vacation. Leisure time is available when there is leave with pay for those in service, vacation for studies in academic institutions, and active life after retirement.
- = Education, more and more young people are completing E high school and college courses. Education increases the appreciation of art, history and culture and develops a sense of national identity. Better education is the main reason why a section of the public is motivated towards cultural tourism.
- Ag = Age, the young (when they have no family responsibilities) getting better pay scales are tempted to travel. Therefore, education and leisure have cumulative effects on the psychological propensity to travel for tourism. These factors cause the travel to become a status symbol.
- = Publicity, composed of leaflet, folder, brochure, and P poster regarding attractions and facilities. In a real sense, T (touristic supply) with all its components influence the demand for tourism. Mobility as a factor through the transport technology on the supply side affects demand. T_s and T_d are interdependent variables through P.
- = Time, planned promotion and development of tourism t depends on time. The time element is a vital factor on which the touristic demand depends.
- (b) $T_s = f(A_1, A_2, A_3, A_4, T_d, F, t)$, where

 $T_s = Tourist supply$ $A_1 = Attractions$

A₂ = Accommodation facilities

Sikkim Himalaya: Geo-Ecological System, Socio-Economic Change and Peoples' Perception

R B SINGH & B W PANDEY

Introduction

The state of Sikkim provides various ecological niches to the diverse population group inhabiting its hills and valleys. These groups are in different stages of contact with one another and with the outside populace. It is expected that the population will be able to end the relative isolation up to a great extent by the end of this century.

Forests are destined to play a key role in the socio-economic development of Sikkim. This fact is widely accepted by social and natural scientists, planners, and even the ordinary masses interested and involved in the process of regional growth and development. The integration of the views on forests and environment is a manifestation of the exploitative nature of capitalism that only takes the myopic view of profit maximization. But the overall development of environment seems yet to be unaccomplished because of the fact that the technological approach to forest conservation and development has not been reconciled to the social approach. It is therefore, imperative to clearly understand the option left before Sikkim and adopt pragmatic approach to resource utilization without further delay.

The paper aims to evaluate the socio-cultural and economic

Forestry and Conservation Issues in the Sikkim Hills

LALIT KUMAR RAI

The Sikkimese hills exhibit one of the finest pieces of green cover within the Indian Republic. Floristically, it is rich (more than 4000 flowering plants, over 450 species of orchids and one of the best habitats of rhododendron species which number more than 40) and density-wise too the forest cover is relatively significant. For a good many centuries this pocket of landmass was hailed as *Be-Yul* (or hidden land in Bhutia) due to its inherent isolation brought about by its remoteness and geographical terrains. Today's crowd was non-existent then and only a few dared to roam about in the wild. Not quite long ago the land possessed a continuous carpet of undisturbed forest mass. However, soon there began to appear canopy shrinkage, thinning density and the resultant land degradations. The whopping population growth in the last few decades and its associated ills were the cause of many a blisters on the face of this enchanted forest.

Cracks began to show virtually at every spheres of life due to the population pressure and forestry was not an exception. With further depletion of tree cover the land and the quality of life in these hills were affected—in several ways and at various degrees. The new situation gave rise to a ramifying network of new offshoots as alternative prophylaxis to the well-being of these hills and a significant development was witnessed in the agroforestry, agriculture and animal husbandry sectors.

Forestry and Wildlife in Sikkim

time sega bandana alia e S S NEGI

Sikkim is a mountainous state with about a third of its total land area under forests. The forest cover extends from the foothills to the snow line the north. Some of the densest forests of Sikkim lie in the Lachen and Lachung areas. These forests are largely inaccessible (Negi 1990). This state boasts of several hundred different kinds of orchids and has frequently been referred to as a botanists' paradise.

Forest Types

The state has a recorded forest area of 2650 sq. km. Which is approximately 37.3% of the total geographical area. All these forests have been constituted into reserved forests. These forests abound with floral wealth. The number of species of plants of different categories found in the forests of Sikkim are given below:

Plant category	Number of species
Flowering Plants	4000
Ferns	300
Bamboos	450
Orchids	50
Rhododendrons	100

The main forest type found in different parts of Sikkim are given below (Champion and Seth, 1968 and Negi, 1989).

Medicinal Uses and Folklores of Plants of Sikkim

R C SRIVASTAVA

The efficacy of Indian medicinal plants particularly of those found in Himalayan region is fairly well-known. Out of about 3000 vegetable drugs included in the materia medica of Ayurveda, quite a large number are found in the Himalayan region. It is also well known that in all the programmes like medico-botanical-surveys, pharmacognostic, phytochemical and pharmacological evaluations and cultivation aspects, the main thrust is on the identification of the plants.

Sikkim is floristically one of the richest and most interesting areas of the country. About one third species of the Indian flora are found in the tropical, temperate and alpine areas of the State. However, our information about the plant-resources of this State is just over a century old. The political boundaries of Sikkim State have also changed to a great extent since then. Many plants included by Biswas (1955) do not occur in present Sikkim. Several species have been recorded as new to the state as a result of the post-Independence explorations and of course the nomenclature concepts have also changed to a great extent. This article throws light on the uses of some medicinal plants which are used in day to day life by the people of Sikkim; and some folklores attached to them.

Medicinal Uses

Although the modern civilization is moving very fast to the

Other Books of Related Interest

- Sikkim: Problems and Prospects of Development By Manas Das Gupta
- Trees of the Sikkim Himalaya By Topdhan Rai and Lalitkumar Rai
- Bhutan: Society and Polity
 By Ramakant & R.C. Misra (eds)
- Mizoram: Society and Polity By C. Nunthara
- Darjeeling: A Favoured Retreat By Jahar Sen
- Social Movements in North-East India By M.N. Karna (ed)
- Ethnicity, Culture and Nationalism in North-East India By M.M. Agrawal (ed)
- North-Eastern Frontier of India: Structural Imperatives and Aspects of Change By A.C. Sinha
- Essays on North-East India By Milton S. Sangma (ed)
- Aspects of Indentured Inland Emigration to North-East India (1859-1918)
 By J.C. Jha
- The History of the Welsh Calvinistic Methodists' Foreign Mission By John Hughes Morris
- Origin and Growth of Christianity in Tripura By Sukhendu Debbarma
- Essays on Christianity in North-East India By Frederick S. Downs
- Ancient Communities of the Himalaya By D.P. Saklani
- Discovering the Himalaya By S.S. Negi

INDUS PUBLISHING COMPANY

FS-5, TAGORE GARDEN, NEW DELHI - 110027