

INDIGENOUS KNOWLEDGE
AMONGST THE THARUS OF
THE TERAI REGION
OF
UTTAR PRADESH

2000



GENE
Campaign

J - 235/A, SAINIK FARMS
KHANPUR,
NEW DELHI - 110 062

LIST OF CONTENTS

	Page No
CHAPTER I	1
Objectives of the study	
Background	
CHAPTER II	6
Information about the Area of Study and the Tharus	
CHAPTER III	14
Forest wealth: A tale of destruction	
CHAPTER IV	16
Methodology of study	
Villages studied	
CHAPTER V	21
Findings & Analysis	
CHAPTER VI	23
Tables	
- Human diseases	
- Animal diseases	
- Colouring and others	
Appendix	

The belief of Indian tribal peoples..... that their culture was born and nourished in the forest, and their dependence for survival upon its continued existence has imbued in them a respectful attitude to nature, and given rise to the development of the most basic principles of forest management. Around the world, the encyclopaedic knowledge of indigenous people on local plants and their applications is an important basis for the development of medicines for the wider good of mankind.

F.M. Strong

CHAPTER I

OBJECTIVES OF THE STUDY:

The purpose of this study was to document the knowledge that the Tharu *adivasi* community has about the biodiversity in the Terai area of U.P. The area chosen was the old district of Nainital, parts of which have been carved out to form the new Udham Singh Nagar district of Uttar Pradesh. The premise was that the bulk of this knowledge would be about the medicinal uses of plants.

The intention was to establish and place on record that this body of knowledge exists in the public domain and is the property of the indigenous people of India, belonging to the Terai area. Placing this knowledge in the public domain and / or establishing the source of this knowledge as that belonging to local communities could be the strongest evidence against the illegitimate and unjust patent claims made by the private corporations, as happened recently with *Neem, Jamun, Karela and Haldi*. This step assumes importance, as it would help prevent Life sciences corporations from stealing the knowledge/ technology of indigenous communities without paying them anything. It is necessary to establish their claim to share in the profits made from products like herbal drugs and cosmetics, which uses indigenous knowledge.

It is known that many *adivasi* areas in UP and elsewhere in India have been studied to some extent and the local flora is better recognised. However, the Tharu dominated Khatima and Sitarganj Blocks in U.P's Terai area has remained quite unexplored. That explains why we chose to conduct our study here.

BACKGROUND:

The development of medicine as a social science occurred over many centuries. Every culture has influenced this development, particularly the evolution of the many different methods of healing. There is evidence of plants and animals having been used in the treatment of diseases and for revitalising body systems in almost all civilizations – the Indian, the Egyptian, the Chinese, the Greek and the Roman

civilizations. Plants were the mainstay of medicine and were credited with mystical and almost supernatural powers of healing.

In India, the records indicate that plants and animals have been in use for treating diseases since ancient times. India has presented to the world a rich and elaborate alternative system of medicine in the form of *Ayurveda* and *Siddha*. *Adivasi* communities in India have developed their own healing system based on their knowledge of the flora and fauna amidst which they live. Although indigenous healing tradition of the *adivasis* developed independently but it also drew from and contributed to the encoded Indian systems of medicine – *Ayurveda* and *Siddha*.

The subcontinent's wealth of flora derives from the wide variations in geo-climatic and ecological endowments - tropical, temperate, alpine and arid zones, fluctuating factors such as relative humidity, temperature, monsoon etc. The sheer variety of medicinal plants, herbs and spices available to early shamans and village physicians and their rich herb mythology and herb lore lured human migration not only from her neighbourhood but also from distant lands.

The hereditary household remedial system handed down often by unlettered women, the village *vaids*, *hakims* and *ojhas* represent the fragmentary remnants of systems evolved to perfection to meet the needs of localized communities, drawing on familiar plants, animals, insects and other locally available material to treat ailments.

The ancient methods designed for optimum beneficial use of local resources are in danger in ways that classical systems such as *Ayurveda*, *Unani* and *Siddha* have overcome. These classical systems have been elaborately documented in the form of verses, which survive as manuscripts in the written form, or are passed on from generation to generation orally. *Adivasi* or rural folklore however continues to be unrecorded and as a consequence, endangered.

Systematic documentation of this knowledge becomes an urgent necessity in the face of such onslaughts, as it becomes clear to any discerning social scientist, who has had opportunities to visit remote tribal and rural areas. There has been a massive erosion

in the prestige attached to the local and regional healing methods. A pointer to the erosion of this system is the fact that even the government favours allopathy and has discarded Indian system of medicine (ISM) in its formal health care system. As a result of this, society attaches greater value to an MBBS doctor whereas similar value is not accorded to a BAMS doctor. The disparity in salary and other benefits enjoyed by the two is also loaded in favour of allopaths. The result of this preferential treatment to allopathy is that the youth has lost confidence in ISM. They view this tradition as redundant and devoid of efficacy. Some even view the ISM and indigenous healing traditions as a vestigial part of great Indian culture. The Kotas of Nilgiri hills are best representative example of a tradition that is in disarray. They have all but lost their familiarity with their native medicinal plants and medicines.

Today it is easy to forget that the original sources of modern medicines are unsung folk prescriptions: morphine from poppy, quinine from cinchona, ephedrine from ma-huang, digitalin from foxglove. Today too, our *adivasi* people treat ailments inexpensively with remedies taught to them by their forebears. The body of information accumulated in these and other systems of medicine has been tested innumerable times over the millennia in actual practice.

Extensive research in allopathy has produced many new healing and surgical methods and hundreds of medications for the treatment of human illnesses. The result has been the development of enormously successful treatments for acute infections and for illnesses that can be treated surgically. On the other hand, in spite of these improvements in modern medicine, the treatment of chronic and systemic illnesses remains unsatisfactory. Moreover, as has been seen in the case of public health, the so-called modern health care system based on allopathy is unable to serve the basic health needs of majority of the people. The Indian reality is that the modern health care system serves the needs of about 30% of the rural population. Revitalisation of indigenous health systems based on locally available biological resources and local knowledge thus holds the promise of providing health security to millions of underprivileged Indians having little or no access to the basic health facilities.

Realising an urgent need to put the facts into perspective and to bring about a desired shift in societal thinking about the ISM and the local healing methods, Gene

Campaign undertook an extensive awareness generation programme in the terai area of Uttar Pradesh. The programme was successful in demystifying some of the unfound beliefs prevailing in the minds of young village people. There was a greater realization among youths about the strength and sophistication of ISM and the local healing tradition as also the inadequacy of allopathy.

Gene Campaign has extensively worked in some regions where *adivasi* communities have a strong numerical presence. Our long experience of working in *adivasi* areas has helped us understand that the indigenous knowledge base among the Tharu *adivasi* communities of Terai area has perhaps eroded much faster than anywhere else in India. The process of erosion is an ongoing process and has accelerated at an alarming pace in the last three decades. The reasons attributed for the shrinking knowledge base are many. First, the large-scale influx of Sikh peasantry into the Terai area in the aftermath of partition led to ruin and unprecedented destruction of forest wealth owing to clearing of lands for agriculture. With the waning of forests with which Tharu culture is closely intertwined, the long oral tradition of indigenous healing became a casualty. The saying in Terai area goes: “*No jungles, no healing*”.

Second, the immigrant Sikh farmers quickly adopted the mechanized farming techniques and yielded a fortune, not witnessed before in the area. The newly rich farmers attracted Sikh farmers from Punjab, which led to a fresh wave of immigration by the enterprising Punjab farmers. These immigrations into Terai, more particularly in Khatima and Sitarganj led to industrialisation and urbanisation. As is the case with all urban areas, these Terai areas witnessed the domination of modern health care system (allopathy). The domination of allopathy led to an established pattern of loss of confidence in traditional healing system especially among rural youth.

While some of these causative factors behind the erosion of faith and shrinking knowledge base of indigenous healing methods is true on a pan-India level, the pace and nature of erosion in Terai area is remarkably different from other *adivasi* areas. A clear co-relation between development and indigenous knowledge base is an established fact. Unfortunately, the more backward the area, the higher the knowledge base. Of the three studies conducted by Gene Campaign - Chotanagpur, Jhabua and

Terai - the Terai area was found to have suffered most in terms of loss of knowledge and the prestige accorded to the local healing tradition. Pertinently, Terai has witnessed more development than most other adivasi inhabited areas, more so when compared to Chotanagpur and Jhabua. In fact, it was this uniqueness of the area that prompted Gene Campaign to choose Terai (U.P) for the documentation of indigenous knowledge. It was also perceived that if the present rate of erosion continues unabated, the entire knowledge base would be wiped out by the year 2015 A.D and therefore, a documentation exercise at this stage would greatly help to record the already shrunk knowledge base.

Veterinary Care

The *adivasi* community in Khatima and Sitarganj blocks of Nainital (now Udham Singh Nagar district) like others has a long and continuous tradition of veterinary health care dating back to antiquity.

Unlike many other *adivasi* regions in India, there are no specialist *adivasi* medicine men in U.P. terai specialising in veterinary health care. The *adivasi* medicinemen of the area called the *Vaidyas*, practice cure for both human beings and animals. We are aware that the Oraons of Chotanagpur region in Bihar have many specialist veterinary *Vaidyas* apart from those who treat both human beings and animals. In this sense, the Tharus can be compared to the Bhils of Jhabua who also do not have specialist folk veterinarians.

As in most other *adivasi* communities all over India, ritualistic and superstitious beliefs are an integral part of veterinary health care system of the *adivasi* communities of U.P's terai area.

CHAPTER II

Information about the area of study and the Tharus

Origin

There are several theories about the origin of Tharus, all of which remain unproved. According to one popular theory, Tharus are considered the descendents of Rajput clans of Rajasthan, while some assert that they have Mongoloid origins basing their premise on physical features.

The Tharus of Khatima and Udham Singh Nagar trace their descendance from Maharana Pratap. They opine that they had settled in the jungles with Rajput women and their servants to escape the tyranny and oppressive designs of the Muslim rulers during medieval age. In course of time these Rajput women had offspring from the accompanying servants who later came to be known as Tharus. This theory is supported and held valid by many because the women in Tharu community enjoy a status of pre-eminence. The custom of men eating outside the kitchen and women eating inside the kitchen is cited to prove the point.

Some other thinkers hold the view that the word “Thar” in *adivasi* dialect means forests and since they are basically forest-dwellers, they came to be denoted as Tharus. However, the fact remains that their origin is mired in controversy and nothing can be said with certainty.

In Uttar Pradesh, the Tharus have five main sub-divisions, known as Rana, Katharia, Dangaria, Jogia and Pacchima. Of these, the Ranas enjoy highest social status. They

consider themselves to be the direct descendents of Maharana Pratap. They are the dominant community mainly in Khatima and Sitarganj tehsils of Udham Singh Nagar and some areas in Lakhimpur Khiri district.

The Government notified the Tharus as scheduled tribes in 1967. They are the largest of the five scheduled tribes of the state of U.P. They are spread over a vast tract between Nainital and Janakpur in sub-Himalayan Terai region. They inhabit Udham Singh Nagar (Khatima and Sitarganj tehsils) Lakhimpur Kheri, Pilibhit, Gonda, Bahraich and Gorakhpur districts in Uttar Pradesh. Their population in Nepal is higher than in India where about four lakh of them live in bordering areas. According to the 1991 Census their total population was 1,18,558. In khatima and Sitarganj tehsils, Tharu population is 32,704 and 21,200 respectively and the total number of households is 3,853 and 2,540 respectively.

Dwellings

There is a distinct pattern and style of house making in Tharu villages. Their houses are built on large wooden pillars and the walls are made up of wild grass thickly coated with fine black mud. The roof is constructed with bamboo and grass with slopes on either side. Their dwellings, though in close proximity, are not joined together with adjacent ones. They earmark a separate place to house their animals either on one side of the house or in the courtyard in front. Agricultural implements, husk and animal feed are also housed there. The Tharus accord a special place to the kitchen in their houses. The kitchen in a typical Tharu house is constructed on the northern end of the house.

Food and clothing

Tharu women steadfastly wear their traditional attire- *Ghangharia*, *Choli* and *Udhania*. Their *Ghangharia* (skirt) is knee-long and are heavily pleated. *Ghangharias* are made with dark and bright coloured clothes. *Cholis* (blouses) have their back open and are tied with cloth tapes. *Udhania* is tastefully decorated on borders with *Gota*, a

decorative cloth lining. Some women also wear short-sized coats over *Choli*. Tharu women are fond of tastefully decorating their clothes.

Tharu men sport their traditional dresses, *Dhoti-kurta*, *Pyjama* and shirts with a white cap. Due to ever-increasing interaction with non-tribals and also as a consequence of urbanisation, many Tharu men have begun wearing trousers and shirt while young *adivasi* women show a preference for *Salwar-kameez* and *Sari*.

The staple diet of an average Tharu comprises mainly of rice, wheat, maize, *masur* and locally grown vegetables. Tharus are fond of eating fish and small birds. In addition, they also eat wild poultry, pork and *Cheetal*. Self-brewed liquor is widely consumed by adults in Tharu communities.

Social organisation

Tharu *adivasis* are patrilineal, patriarchal and patrilocal. Extended family system is the norm in their society. Lineage (*Gotra*) is considered an entity bigger than family. They term lineage or *Gotra* as '*Kurma*', which is exogamous. In other words, marriage is performed outside the '*Kurma*'. A '*Kura*' is an even bigger entity that is composed of several '*Kurma*'. A *Kura* is an endogamous group, which means that one has to marry within his or her *Kurma*.

The head of the family is almost always the oldest person in the family. Tharu women enjoy high status in the family. A system of bride price is prevalent among them. A negotiator called *Manjhpattia* fixes marriages. Both the bride and bridegrooms family trusts him and he supposedly knows both the families inside out. Though marriages are contracted in childhood, the marriage ceremony and *Gauna* (consumation rites) are performed when the couple attain adulthood. Child marriage is not prevalent in Tharu society. Serial monogamy is the norm with some exceptional cases of polygyny. A few exceptional cases of marriage by capture or elopement have been reported when a prospective groom is unable to pay the bride price.

In Tharu society, divorce is permitted which they term as *Urari*. It is often easier for women to give divorce than men. Men are required to pay compensation whereas women do not have to pay up anything. This custom is also an indicator of high status enjoyed by women in Tharu society.

The kinship system among Tharus is very akin to Hindu kinship system. Joking relationship obtains in brother-in-law – sister-in-law (*Jeeja-Sali & Dewar-Bhabhi*) relationships as also in maternal uncle-nephew relationships. But, in the case of a few specified relatives, a woman does not even mention their names e.g., her husband, husband's elder brother, father-in-law, mother-in-law, and husband's elder sister. In Tharu families, reverence and respect is accorded to some relatives which include mother-in-law, husband's elder brother, husband's elder sister and her husband, daughter-in-law, wife's elder brother, son-in-law, paternal grandparents, uncles and aunts.

Political organisation

The Tharus have a democratic broad-based social order. They have no pyramidal class structure. They have a traditional community-based governing organisation known as *Biradri Panchayat*, headed by a *Pradhan*. A *Biradri Panchayat* usually intervenes and settles disputes relating to elopement, distribution of property, engagement, marriage and conjugal disharmony, moral turpitude, infidelity, addiction etc. The decision of *Biradri Panchayat* is final and binding on all concerned parties.

In recent past, elections to *Gram Sabha* have started taking place and 10 members along with *Pradhan* are elected. There is widespread discontent against the functioning of *Gram Sabhas* and it is often accused of biased and prejudiced decisions and willful wrongdoing. As a result, a growing number of Tharus are approaching modern courts of law in search of justice and fairplay.

Economic organisation

The Tharus are basically an agriculturist tribal community. They grow rice, maize, wheat, barley, lentil, peas, potatoes, sugarcane and mustard as their main crops.

Vegetables, tobacco and bananas are grown in kitchen gardens along with chillies and spices. They are also expert in fishing. However, their fishing is not for commercial purposes but only for domestic consumption. The Tharus living along forest are also expert hunters. Domestication of Pigs, Goat, sheep, buffaloes, cow and fowls and pigeons is common among Tharus. The Tharus are gifted craftsmen and they are known for making baskets, mats, fishing nets and ropes etc. Their skill as *Mahout* is well known as also the art of catching and domesticating the wild elephants.

Though mainly agriculturists, their economy is of a mixed kind. Foraging and gathering is done extensively to collect wild berries, nuts, wild bulbous and tuberous roots and leaves as vegetable food, and a variety of herbs and plants for medicinal use. They collect a variety of grasses and woods for various purposes like weaving of baskets, mats, construction of houses, herbs for brewing drinks, and for religious ceremonies.

It is an undisputed fact that the Tharus occupy some of the most fertile tracts of agricultural land in Uttar Pradesh but the productivity from their fields is comparatively much lower because they have not fully taken to modern means of cultivation despite lots of incentives. New market forces have still not been able to fully replace the old ones. They are, therefore, not able to generate surplus. Their economy can at best be described as subsistence economy. However, under the growing influence of their non-tribal neighbours, mainly Sikhs, the Tharus have progressively started taking to modern farming practices.

Religion and festivals

Social anthropologists believe that the Tharus are greatly influenced by the Hindu way of life. They are strong believers of *Narayan* or *Bhagwan*. They believe in the existence of spirits. They also believe that the souls of their ancestors could be both benevolent and malevolent, depending upon one's deeds in present life.

They revere and propitiate many gods and goddesses from the Hindu pantheon, like, *Durga*, *Parvati*, *Shankar* and *Hanuman*. Different Tharu villages can have different deities. It is generally the duty of women to keep the places of worship clean and tidy.

A married does not offer prayers to the deity of her parents' family or village. Instead the deity in her in-laws' family or village becomes her object of propitiation.

The Tharus believe in the powers of magic and sorcery. They are known to invoke or propitiate the soul of an ancestor through magical rites. Each village usually has one sorcerer, who is called *Bharra*. A *Bharra* is a respected person in whom people have abiding trust. He also offers sacrifices to the deities during religious rituals and festivals. Tharus are known to offer prayers to crops, animals and agricultural implements.

The main festival celebrated by the Tharus is known as *Charai*. This festival is celebrated twice a year during *Chaitra* and *Vaishakh* months. During *Charai*, prayers are offered to *Bhuiyan Devi*, a goddess. Apart from *Charai*, Tharus also celebrate with joy and fervour Hindu festivals like *Holi*, *Deepawali*, *Dussehra* and *Nagpanchmi*.

Recent changes and problems

The Tharus are primarily forest-dwellers. Therefore, they had limited opportunities to come into contact with the outside world except for a few forest department functionaries, timber merchants, petty contractors and traders. However, the Tharus living in Khatima and Sitarganj have had many opportunities to be in contact with the non-tribals. That is why, the Tharus living in these areas have undergone far too many rapid socio-cultural changes whereas changes elsewhere in Tharu hinterlands have often been slow and unnoticeable.

In Khatima and Sitarganj, the impact of Sikhs and progressive-minded Hindus on Tharu population is evident. The Sikhs in particular have made a deep and lasting impact on the Tharu way of life. In the post-partition phase, a large number of Sikh families migrating from the west Punjab (now in Pakistan) were rehabilitated here. These uprooted Sikh families had lost their fertile agricultural lands at the altar of partition. As part of India government's efforts to rehabilitate these migrating families, land was allotted in the terai area. This area was then known for large and diverse forest wealth. Those who had suffered greatly immediately went on to rebuild their lives by converting forests into agricultural lands. They worked hard to convert

the potentially fertile terai areas into one of India's better known grain producing areas. Many others who had preferred to settle elsewhere returned to till their lands and even acquire more lands in the hope of repeating the success story of their Sikh brethren. The region, though reckoned as fertile with ample irrigation facilities, was underexploited. The immigrant Sikh communities made full use of the available opportunities and resources to put this region on India's agricultural map. The Sikh farmers were distinct from their *adivasi* neighbours because the former was open to new ideas and far more receptive in adopting modern farming techniques. Their neighbours – the Tharus were often apprehensive about the modern farming techniques. Wherever they made efforts to catch up with their advanced Sikh fellow farmers, they were found to suffer from the time and technology lag. The hard work and willingness to adopt new techniques has paid rich dividends to Sikh farmers and they have become a symbol of prosperity. The Sikh farmers went on to occupy large farms employing both the Tharu *adivasis* and the migrant labourers from Bihar and eastern U.P.

Having lived in close proximity with them, the Tharu way of life has been transformed enormously. Their traditional dress, means of transport, agricultural implements have all undergone fundamental changes. Tharus living in these two tehsils attach significant importance to the education of both boys and girls that is not to be seen in other Tharu inhabited areas. Khatima and Sitarganj tehsils have several government and private affiliated/recognised schools while other areas lack in basic infrastructure. The reason for educational backwardness of other Tharu inhabited areas, as highlighted by Tharus themselves, is greater contact with the outside world and large concentration of non-tribals in these two tehsils. Tharus living in Khatima and Sitarganj have had the opportunity to establish and remain in constant touch with the outside world due to availability of better road/rail links, means of transport and communication facilities. Despite visible improvements in these two tehsils, the overall rate of literacy among Tharus is abysmally low. It is borne out by the fact that the total literacy rate among Tharus is close to 16 per cent. The female literacy rate is even less at around 5 per cent. More and more Tharu *adivasis* living in Khatima and Sitarganj are now taking to professions other than agriculture. There is a distinct tilt toward government and public sector jobs.

Their customs and rites, such as those relating to marriage have seen significant changes. In Khatima and Sitarganj tehsils, the practice of marriage by capture has become extinct. The effects of Hindu and Sikh traditions are evident in their religious rites and rituals. Religious offerings and fasts on the lines of Hindu tradition have gained currency and social acceptance. Interestingly, like some of the caste Hindus, they take pride in mythically tracing their lineage with Rajputs and some have become assertive in convincing the non-tribals that they are actually descendents of Maharana Pratap.

Despite some advancement after independence, Tharus are still steeped in widespread illiteracy and alcoholism. They have not been able to free themselves from the clutches of moneylenders, greedy forest produce merchants and grain traders. The stranglehold of these unscrupulous elements is widespread and deeply embedded in Tharu communities because of the custom of bride-price and the tendency to profligate during religious ceremonies and festivals. The lack of awareness in Tharu society about the government welfare schemes for the scheduled tribes is all pervasive. They either do not know about the existing soft loans offered by the public sector and cooperative banks or are reluctant to avail the benefits due to procedural hassles involved.

It is seen that the Tharus are simple people who are often misguided by the local government functionaries and the non-tribals. These people instill in them a sense of fear and skepticism about the new knowledge and new technologies. This leads to indifference and sometimes even a sense of contempt towards the modern means of development.

CHAPTER III

Forest wealth: A tale of destruction

Khatima and Sitarganj, in the newly carved out Udham Singh Nagar district, was part of the erstwhile Nainital District. The area once had rich forest cover with innumerable plant and animal species. After 1947 the area witnessed large-scale migration from the then west Punjab (now in Pakistan). The settlers exploited the fertility of the soil to the hilt and the region gradually became one of the best-known wheat, rice and sugarcane producing areas. The local inhabitants followed suit under the influence of their new neighbours who had migrated from the areas that are now in Pakistan. After the green revolution, both the settlers and the locals took to modern farming techniques and started sowing HYVs. The irrigated conditions coupled with the use of HYVs brought unprecedented financial gains to the farmers. This newfound success led the farmers to acquire more and more land for farming purposes. There was a growing pressure on agricultural land owing to ever-increasing demand for land. The demand for land expanded even more rapidly after the setting-up of several rice and sugarcane mills in the area. This intense pressure soon started taking its toll on the forest. Tracts of forest patches, large and small, were razed to the ground and converted into agricultural farms. This indiscriminate destruction forever changed the landscape of the area.

When one talks to the elders of this area about the forest resources they once had, the remorse over loss of trees becomes amply clear. They say that the trees were their most precious possession. They rue the fact that they have lost their forest and wild due to uncontrolled human greed. Delving deep into the past, these elder village people narrate with a sense of pride that thick forest patches once surrounded all Tharu *grams* (villages). They say that not only Tharu *grams* but also the Pahari *grams* (villages of the hill people) in the area were also surrounded by forest. As examples, they cite an existing cluster of villages or two, surrounding which is a thin forest patch. These villages are specimens of what the area once looked like.

Many youths in the age of 35-45 have fond memories of their association with the nearby forests during their days of childhood and adolescence. They remember how they had internalised conservation of Bioresources during the process of socialization itself. They say that the elders in their families and the village cautioned them to guard against the destruction of forests by unscrupulous and greedy elements, both within the Tharu community and outside. The forests were treated as a common property resource, the destruction or loss of which could bring ill luck to the entire community or the wrath of supernatural powers.

The Tharu village people resent the fact that the felling of trees and illegal trade in timber still continues though not as openly as in the past. They say that enforcement of strict conservation measures is urgently required otherwise some of the invaluable flora and fauna could be lost forever. People of this area believe that if the remaining forests were wiped out, it would change the way they have lived. In other words, the destruction of biological resources would alter the cultural landscape of the area, to the detriment of local communities. This must not be allowed to happen.

CHAPTER IV

METHODOLOGY OF STUDY:

This research work was carried out by staying in the midst of the local *adivasi* communities in their remote villages in Khatima and Sitarganj blocks in the terai area of Uttar Pradesh, which is now a part of newly constituted Udham Singh Nagar district (formerly Nainital district). The study covered 50 villages falling under two blocks. Care was taken to ensure that the villages selected for the purpose of the study were representative of the Tharu community inhabiting the district. It is sociologically confirmed that the entire Tharu community living in this district has one homogenous culture in terms of traditions, practices, customs, beliefs and the overall worldview.

Adivasi men and women, who had good knowledge about the area, were selected for training to conduct the survey. Two teams of two each (a man and a woman) were trained in an orientation program. They went to the villages and did the questioning in teams of two. During training they were told at length about the purpose of the documentation and the persuasive and patient methods that would be needed to extract information. The survey was conducted using a standardised and tested questionnaire. The *adivasi* youth were also asked to assure the people that the knowledge obtained from them would remain their property and it would not be misused for any commercial benefits, whatsoever. The use of knowledge obtained

from them would not be allowed without seeking permission from them. They were also informed that the entire data would be stored with the Department of Science and Technology but this would not confer ownership on the Department or the government.

Along with the training, awareness generation programmes were held in various villages of the area about the new national and international developments in the field of biodiversity, about biopiracy and how this violated the rights of indigenous communities. Information was also disseminated about the rights of local communities to share in the benefits derived from the commercial use of biological resources using indigenous knowledge.

Questioning in villages was done in groupings as well as in individual homes. In addition to the general questions, the respondent menfolk were asked about their knowledge of treatments pertaining to sexual organs or fertility. Likewise the women respondents were questioned about sexual problems and those related to pregnancy and pre and post-natal care. Wherever possible, the *adivasi vaidyas* were questioned at length.

Subsequent to training lectures and discussions, a survey form in Hindi was prepared after consultations with experts and forest department officials. The first versions of the survey form was field tested by the principal investigator and the *adivasi* teams. Once the field test was done, the duplications and shortcomings of the questionnaires became apparent. These were corrected and the final version of the forms were printed and distributed to the teams for conducting the survey.

During the research work, a variety of research techniques like, questionnaire - structured and semi-structured, informal interview, group discussions, direct observation and participant observation were employed.

All the above techniques were used to collect the information about the plants and their uses in different diseases including methods of uses. These techniques were also employed to know about the people by staying with them in their own land and house,

especially to know about the plants and their uses, their livelihood and related activities.

Questionnaire Method

The questionnaire method was the base and was used to collect information from the individual respondent, which was based on the purposive sampling. Respondents were carefully selected to ensure that they fall in the age group of 40 and above.

Questions were formed by the Gene campaign and had been previously put to test in a similar survey work in Chotanagapur region of Bihar and Jhabua district of M.P.

The content of the questionnaires was on the basis of following variables:

Variables

1. Personal data - name, Address etc.
 2. Family Occupation - Main and subsidiary
 3. Land holding pattern
 4. Availability of Trees and Animals
 5. Human diseases and their treatment with the local herbs
 6. Animal diseases and their treatment with the herbs
-
1. Miscellaneous use of the plants, trees and herbs e.g., colouring, art & crafts etc.,

Note: The questionnaire is part of the appendix.

Experiences

Our associates had to undertake a rapport-building exercise with the help of local *adivasis*, some of who later worked as enumerators in this survey work. We also took

help from those who have been doing voluntary and charitable work in the areas of survey like, running a home for lepers or a residential school for poor *adivasi* children. These people had a fairly good idea about the places and the people. They are highly respected by the local villagers and they often have long association based on mutual trust and co-operation. If was, therefore, possible for our associates in Khatima and Sitarganj blocks to establish open channels of communication with the respondents and the villagers at large. Many a times, these people would accompany the enumerators to reassure the villagers that it is in the interest of Tharu *adivasi* community to extend all possible help to the survey work.

The enumerators and associates of Gene Campaign had to often sit with the elders for long hours before they opened up and were willing to share their knowledge without inhibitions.

Although individual discussions with villagers used to throw many insights into the richness of the local healing traditions, it was found to be lacking in one aspect when compared to informal group discussions. The participants, in group situations, often used to get cue from one another and this would lead them to provide more information and sometimes, even add to the available information. For instance, if one person in a group used to provide some knowledge about the use of *Chaulai Saag* (Amaranth) for a particular disease, another person would get prompted to throw new insights into the medicinal properties of the *Bathua Saag* for some other disease.

The villagers would often first discuss among themselves the various diseases and their alternative treatments and would then share their experience with us. Sometimes repeat group discussions were organised to extract more information, if it was felt that the villagers have not been forthcoming for some or the other reason.

As in the case with earlier surveys conducted by Gene Campaign in Chotanagpur and Jhabua, Group discussions were also organised exclusively for the women. In some villages, it was found to our utter surprise, that women were more curious and enthusiastic about the survey work than their male counterparts. It was our experience that filling-up of questionnaire after the informal group-based discussions was a

relatively profitable exercise from the standpoint of amount and quality of information.

VILLAGES STUDIED IN KHATIMA AND SITARGANJ BLOCKS

SL. NO.	<i>VILLAGES</i>
1.	Bari
2.	Bhuraria
3.	Chanda
4.	Teraghat
5.	Charuveta
6.	Mudeli
7.	Mahuhat
8.	Santhana
9.	Khetalsanda
10.	Pakariya
11.	Amaun
12.	Gosi Kuan-Bhurai
13.	Pachauria
14.	Sil Pudia
15.	Kutri
16.	Tarai Nagla-II
17.	Chakarpur
18.	Budebag
19.	Ainjanja

20.	Bichpuri
21.	Naugwan Nath
22.	Bisauta-I
23.	Alavirdi
24.	Chinki
25.	Kutra-I
26.	Chatia
27.	Sripur Bichwa
28.	Uin
29.	Viria
30.	Dian-I
31.	Dian-II
32.	Gidhaur
33.	Khassi Bagh
34.	Bhilaiya
35.	Bandiya
36.	Bhakchuri
37.	Naushar Patiya
38.	Nagra
39.	Mohammadpur
	Bhuria – I

40.	Mohammadpur Bhuria – II
41.	Mohammadpur Bhuria – III
42.	Kutra – II
43.	Mohanpur
44.	Gangapur
45.	Jadipur
46.	Bhara Bhuria
47.	Uldan
48.	Bisauta – II
49.	Ainchta
50.	Bihin

CHAPTER V

FINDINGS & ANALYSIS

The survey yielded some interesting insights into the indigenous health system of the Tharu *adivasi* community of Khatima and Sitarganj blocks in the erstwhile Nainital district. It has become amply clear that there are several levels of health traditions in the Tharu community. Their scope ranges from therapeutic understanding of the value of local food resources and the management of common ailments of humans and animals.

The data on the precise use of flora and fauna were classified from all the survey forms. The information on the use of Bioresources has been organised in a table under various heads as below.

Human Diseases

Animal Diseases

Colouring & others viz., crafts

Identification of many of the specimens of plants was a particularly difficult exercise. It was very difficult to establish link between the local name and the botanical name. It is felt that more taxonomic studies are needed in this region to identify the flora for both its conservation and sustainable use.

One remarkable feature of the outcome of this survey was the documentation of strong tradition of craft among the Tharu community. The study clearly establishes that the Tharu *adivasis* are expert craftsmen and weavers. They have an unbroken tradition of making baskets, rope, *Dalia*, mat, brush, *Dholak*, rugs, fishing nets, chair, brooms and fans among others. This knowledge is listed in the tables under “Colouring and others”. These crafts have been an alternative source of livelihood for

the Tharus besides according them recognition and prestige among their non-tribal neighbours in the area. It is seen that while the healing tradition has suffered a major blow, crafts and other traditions have been able to survive the test of time, though not without some loss. The loss to crafts has been due to shrinking forests, limited access to forest produce used in crafts, dominance of middlemen and the difficulties in accessing remunerative markets for their produce.

Adivasis and the natural resources: The challenge of re-establishing age-old bond

The Tharus, like other indigenous people elsewhere in the world, have for long insisted that their identity be closely linked to the natural resources and the environment amid which they live. They had developed and nurtured cultural traditions, an economy, social control mechanisms, religious myths, beliefs and techniques of production geared to retaining this close link. Their cultural systems ensured that the resources continued to be their livelihood for several generations. They did this by using them judiciously to live on, while at the same time ensuring their renewability. But today the mainstream society views their resources such as forests only as a raw material to produce other consumer articles for the urban middle and upper classes. This society, therefore, tries to acquire monopoly over them. In the process, control over these resources is transferred from the communities to whom they were their very livelihood, to the corporate sector to which they are only a source of profit and to the urban middle and upper classes to which it is one more raw material to cater to their consumer needs.

The close identity between indigenous communities and the natural resources has to be re-established in some form, since their identity as a group is closely linked to these resources. They have either lost their identity or are in the process of losing it because of the loss of control over the natural resources and their wanton destruction by the mainstream. The tribal culture, in which resources were firmly under the control of the community, is no longer recognised. The challenge before us seems insurmountable but some urgent and meaningful action is warranted to redeem a great loss.

