

INDIGENOUS KNOWLEDGE  
IN  
THE JHABUA DISTRICT  
OF  
MADHYA PRADESH



2000



**GENE**  
*Campaign*

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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***

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# CHAPTER I

## **OBJECTIVES OF THE STUDY:**

The purpose of this study was to document the knowledge that *adivasi* communities have about the biodiversity of the Jhabua district. It was anticipated 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 Jhabua area. Placing this knowledge in the public domain and / or establishing the source of this knowledge as that belonging to local communities will be the strongest evidence against patent claims by the corporate sector, as happened recently with *Neem, Jamun, Karela and Haldi*. This step is extremely important to prevent private companies 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 use indigenous knowledge.

While many *adivasi* areas in MP and elsewhere have been studied to some extent and the flora is better recognised there but the Bhil dominated Jhabua remains quite unexplored. That is the reason we chose to locate our study here.

## **BACKGROUND:**

The science of using natural resources like plants and animals, even insects, as well as minerals and metals to cure human and animal diseases, has been developed in several old civilisations. In India, there is a rich tradition encoded among others in *Siddha* and *Ayurveda*. *Adivasi* communities in India and aboriginal communities of other lands have developed their own healing systems based on their knowledge of the flora and

fauna amidst which they live. These traditions have developed independently but have sometimes also been influenced by the Indian system like *Siddha* and *Ayurveda*.

Through the Indian System of Medicine (ISM) we know that there are a number of medicinal plants that can be utilised for curing physical ailments and diseases. It can be seen that in the indigenous health system of the *adivasi* communities in India, there are several levels of health traditions. Their scope ranges from therapeutic understanding of the value of local food resources and the management of common ailments of humans and animals. It also includes ritualistic and superstitious beliefs.

In viewing any indigenous tradition of healing, there are three aspects that need to be examined. One is the structure of its knowledge base, which includes its worldview, its philosophical foundations, its logical framework, its categories, principles, concepts methods etc. The second important aspect is the diversity of its natural resource base viz., plants, animals, insects and minerals. Another important aspect is related to the human carriers of the tradition. This can be understood in terms of their numbers, social background, indigenous institutions, their vitality and spatial distribution etc.

In the context of developing countries in Asia, Africa and Latin America, there is also an urgent social reason to promote and place far greater reliance on indigenous knowledge systems. 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.

#### Veterinary Care

The *adivasi* community in Jhabua like others has a long and continuous tradition of veterinary health care dating back to antiquity.

Unlike many other *adivasi* hinterlands in India, there are no specialist *adivasi* medicine men in Jhabua specialising in veterinary health care. The *adivasi* medicinemen of Jhabua called the *Barwas*, practise 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.

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 Jhabua region.

## CHAPTER II

### **INFORMATION ABOUT THE AREA OF STUDY:**

#### **LOCATION OF THE PROJECT AREA:**

Jhabua with an area of 7533 square kilometres, is the western most district of Madhya Pradesh. It is about 320 Kilometres from the state capital, Bhopal. The district falls within region 5 (Central Malwa Highlands and Kathiawar Peninsula) of the national Bureau of soil and Land Use Planning system of ecological zones. The area lies between 22.5 and 23.8 north of equator.

#### **CLIMATE:**

The climate in this area varies from dry sub-humid to moist sub-humid. The rainfall is erratic, unimodal and is spatio-temporally variable. About 90% of the annual rain falls in the *Kharif* and wettest month of the year is July or August. The coefficients of variation for the average weekly rainfall vary from about 300% at the beginning and end of the monsoons to about 100 % in July and August demonstrating a large amount of uncertainty associated with the beginning and the end of the monsoons. Storms intensities at the peak of the monsoons are especially high. January is the coldest month (Mean Minimum temperature varies between 9 degrees c to 15 degrees c and Mean maximum temperature varies from 23.6 degrees c to 30 degrees c) whilst May is the hottest month

(Mean maximum temperature 39 degrees c to 41 degrees c and Mean minimum temperature varies between 21 degrees c to 26 degrees c). The average rainfall of five tehsils is given in Table No. 1.

**Table No. 1: Average Rain fall (Tehsil-wise)**

<b>Sr. No.</b>	<b>Name of Tehsil</b>	<b>Average Rainfall (in mm)</b>
1.	Jhabua	734.00
2.	Thandla	759.00
3.	Petlawad	911.00

4.	Jobat	774.00
5.	Alirajpur	756.00

### **CROPPING PATTERN:**

The region in general and Jhabua in particular recognises three seasons, the *Kharif* season from June to September, the *Rabi* season from October to March and the summer or *Zaid* season from March to May. The important crops sown in the district are wheat, gram and sorghum as major *Rabi* crops while maize and paddy are major *Kharif* crops. Crops like Black Gram, Pigeon pea, Cotton, Tobacco, Soybean, Pearl millet, Hill millet, Horse gram, Bengal gram and groundnut are also grown in this region.

### **LAND USE PATTERN:**

Total geographical area of the district is 7533 Sq. Kilometres, of which 17% is forest land, 41% is cultivated area, 21% is uncultivated waste land and 12% is cultivated waste land including pasture and fallow. Out of this total cultivated area, only 7% area is irrigated in the *Rabi* season according to 1991 census.

**Table No. 2: The land use pattern in Jhabua District**

<b>Sr. No.</b>	<b>Distribution of land use</b>	<b>Percentage</b>
1.	Forest	17
2.	Uncultivated waste	21
3.	Cultivated waste including follow and pasture	12
4.	Cultivated area	41
5.	Other cultivated area	6

**Source - Census 1991**

Out of 41% of total geographical area (Cultivated area), only 16.44% of cultivated area is under irrigation (Statistical report 1995-96). This indicates that there is immense scope for the development of irrigation facilities in this tribal district. Table no. 2 below shows the area under irrigation.

**Table No. 3: Area Irrigation (season wise)**



Season	Area irrigated in (Ha)	
	Food	Non-food
<i>Kharif</i>	285758	73497
<i>Rabi</i>	77732	1864

**Source - Statistical report (1994-95)**

This table shows that the area of non-food crop is more in *Kharif* season while area of food crop is more in *Rabi* season.

Percentage of irrigated land of total cultivated land was 20.71% in 1994-95 while it was 16.44% in 1996, as per district statistical report, while census Report 1991 it was only 7% which is reliable needs to be ascertained.

**Table 4: Area under Irrigation-Source wise**

Source	Nos.	Irrigated area (Ha)
Canal	323	11986
Tube well	383	7272
Total	--	12713

**(Source - Statistical report 1995-96)**

#### **PHYSIOGRAPHY, SOIL PROPERTIES AND DRAINAGE:**

Large portion of the district consists of undulating hills. The perennial river Narmada flows through the area and the important tributaries are Anas and Hoandi (of Mahi). Most of the cultivated area is trapped between the hills forming the valleys. The area is well water divided and criss-crossed by a number of streams, rivers and rivulets. Topography and soil priorities are given in below table No. 5.

**Table No. 5: Physiography and soil types**

Topography: Physiographical Unit	% of Area	Soil type
Steep hill slopes or ridges with abrupt slopes	45	Skeletal soils, shallow; yellowish brown; sandy loam's to sandy clay loam's; slightly acidic
Piedmont & undulating upland	30	Shallow to medium depth; sandy to sandy loam's; yellowish brown to reddish brown slightly acidic.
Valleys	10	Medium to deep, pale to dark greyish brown, almost black in places; clay to

		clay loam's (40-60%) alluvium of basaltic origin reaction neutral to slightly alkaline.
Plateau	15	Deep to very deep, dark, black cotton clay soils on elevated plateau in north-east of district.

#### ADMINISTRATIVE UNITS:

District Jhabua is situated in extreme western part of Madhya Pradesh state touching the borders of Gujarat, Maharashtra and Rajasthan. For administrative work, the district has been divided into seven tehsil, viz. Jhabua, Thandla, Petlawat, Jobat, Meghnagar, Ranapur and Alirajpur. These have been further divided into 12 development blocks. Tehsil and Development Blocks are given in Table No. 6.

**Table No. 6: Tehsil and Development Blocks**

Sr. No.	Tehsil	Development Block
1.	Petlawat	I. Petlawat
2.	Thandla	I. Thandla
3.	Jobat	I. Jobat II. Bhabra III. Udaigarh
4.	Jhabua	I. Jhabua II. Rama
5.	Ranapur	I. Ranapur
6.	Meghnagar	I. Meghnagar
7.	Alirajpur	I. Alirajpur II. Sandwa III. Kathiwad

#### POPULATION:

The total population of the scheduled caste and scheduled tribes as per the census 1991 is given in table No. 7.

**Table No. 7: Total Population and Schedule Castes and Scheduled tribes Population**

Name of the Developme	Area of the Block (Ha)	No. of H/H	Population		
			Total	Scheduled	Scheduled

nt Block			Population	Castes	tribes
Thandla	44753.81	15803	97353	10044(1.07)*	91270(93.75)
Petlawat	88528.19	22614	126559	2396(1.89)	101255(80.0)
Meghnagar	32058.13	15608	98116	1589(1.61)	85559(87.20)
Jhabua	43942.48	14655	103465	1025(1.00)	98095(94.80)
Rama	59784.23	12333	83713	1158(1.38)	78978(94.34)
Bhabra	31554.09	10356	63672	839(1.31)	61758(96.99)
Udaigarh	36763.23	8834	58757	1251(2.13)	55502(94.46)
Jobat	39335.29	9039	60580	1722(2.84)	57900(95.57)
Kathiwad	71969.42	11811	72317	8721(1.20)	59314(82.01)
Alirajpur	62095.43	12503	84247	3461(4.10)	77266(91.71)
Sondwa	90031.84	16187	106450	9579(9.00)	98716(92.73)
Rampur	38781.23	11363	77367	897(1.15)	75416(97.14)
<b>Jhabua</b>	<b>639597.35</b>	<b>161106</b>	<b>1032866</b>	<b>33682(2.39)</b>	<b>941029(91.72)</b>
<b>District</b>					

(Census 1991)

\* Figures in the parenthesis shows the percentage of total population

Above table reveals that nearly 92% of total population of the district is scheduled tribes. The district is inhabited predominantly by Bhil *adivasi* communities. Over 90% of scheduled tribes are Bhil. However, two other *adivasi* communities – Bhilalas and Patliyas, inhabit the area. Together, they constitute less than 2% of the total population of the district.

## Forests

The state government owns most of the forest. There may be few instances of privately owned small areas under forest but such forests are under the administrative control of the land revenue department. The forest department does not have information about the existence of such forests, if any.

### Forest composition and classification:

Division	Geographical area	Forest Composition Teak	Sal	Misc.	Bamboo	% of forest
Jhabua	6781	961.16	----- ----	940.44	833.73	28.04

The district, which once had large areas under forest cover, today resembles a lunar landscape at most places. The denudation has been so complete and devastating that it has few parallels. The destruction of trees has been so massive and indiscriminate that when one raises his head to locate a cluster of trees, the possibility of finding one is very minimal. The only blocks where one can find a semblance of regular forest patches is Alirajpur and a couple of small patches in Jobat, Kathiwad and Sondwa.

The elders everywhere in the district narrate with nostalgic pride the glorious forests that the area had till 40 years back. But, the stark difference between then and now becomes amply clear when one talks to a 25-30 year old *adivasi* youth. These youths have absolutely no idea of what their forest once looked like. All they would say is that they have heard stories and folk tales from their grandparents and great-grandparents about the forest and the wild species of plants and animals that was once found in the area and how the lives of *adivasi* communities was intricately woven around these forests.

#### **Deforestation and scarcity of water**

Jhabua district has been witness to widespread and wanton destruction of forest wealth in the post-independence era. The local inhabitants point out that since a proportion of forest was privately owned, the private owners of forest feared its nationalisation and consequently loss of ownership over this sizeable wealth of resources. These fears led them to indiscriminate cutting and felling of trees to earn as much revenue as possible in shortest possible time. This wanton felling of trees and timber sale resulted in near total depletion of green cover. Today the entire Jhabua district barring some isolated areas in remote parts bears testimony to this frenzied and wanton destruction of forests. The vegetative cover has been irreparably damaged which has resulted in soil erosion in large tracts of land. One thing has led to another. The loss of topsoil has further led to sinking ground water table. Jhabua has, for the past several decades, been in the grip of serious and unmitigated water shortages.

The problem has lately become so difficult to manage that to avoid drinking water shortages, the district administration has resorted to issuing orders in villages falling within the municipal limits forbidding them from drawing water from the *nallahs* and other water sources for irrigation purposes. Realising that the water shortages are becoming alarmingly difficult by the day, Indian space Research Organisation (ISRO) and a few NGOs have embarked on watershed management programmes to deal with the grave situation. ISRO has met with some success in its watershed management programmes in the district.

The NGOs usually undertake very small watershed management programmes with each programme covering a target village or two where water shortage condition is stark and often lasts for longer periods. Some NGOs who have managed to arrange sufficient funds have done a remarkable job whereas some others have to struggle for funds and technical support.

With limited yet meaningful water conservation efforts, some exciting changes have become evident. In an area where a decade ago almost nothing except scanty wheat, maize and *tur dal* could grow, we today find that the *adivasis* are able to grow some cotton, vegetables and surprisingly also a small amount of rice.

The forest department under its social afforestation programme has been working towards an afforestation drive. In its farms in Jhabua, varieties of *Eucalyptus* and a few other trees are being grown with drip irrigation facilities. But, many of the local people are sceptical of the efficacy of forest departments' efforts with the emphasis unduly on *Eucalyptus*, which can deplete and create havoc with an already low water table.

The NGO community and the local Christian missionary institutions have also made some afforestation efforts. These efforts have met with mixed success due to limitations of financial resources and expert technical guidance.

## CHAPTER III

### **METHODOLOGY OF STUDY:**

The research work was carried out by staying in the midst of the local *adivasi* communities in their remote villages in Jhabua district, Madhya Pradesh. The study covered 30 villages falling under two blocks. Every possible care was taken to ensure that the villages selected for the purpose of the study were representative of the whole district. It is sociologically confirmed that the entire Jhabua district and to a larger extent even the surrounding areas have one homogenous culture in terms of traditions, practices, customs, beliefs and the overall worldview.

*Adivasi* boys and girls who had finished school were selected for training to conduct the survey. Two teams of two each (a boy and a girl) 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 they questioned that the knowledge obtained from them would remain their property and it would not be misused for commercial interests. No use would be allowed without obtaining 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 programs were held in various villages of the region about the new national and international developments in the field of biodiversity, about biopiracy and how this violated the rights of communities. Information was also imparted 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 groups as well as in individual homes. In addition to the general questions, the boys asked men about treatments pertaining to sexual organs or fertility. Likewise the girls individually questioned women about sexual problems and those related to pregnancy and pre and post-natal care. Wherever possible, the *adivasi vairs* 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.

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

Note: The questionnaire is part of the appendix.



## Experiences

Our associates had to undertake a rapport-building exercise with the help of local *adivasi* boys and girls some of who later worked as enumerators in this survey work. We also took help from the priest and nuns from some of the prominent catholic churches in the areas of survey. These priests and nuns have 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 co-operation. It was, therefore, possible for our associates in Meghnagar and Petlawat blocks to establish open channels of communication with the respondents and the villagers at large. Many a times, the priests and the nuns would accompany the enumerators to reassure the villagers that it is in the interest of *adivasi* communities of Jhabua to extend all possible help to the survey work.

The enumerators and associates of Gene Campaign had to often sit with the elders for hours together to get them to speak without any 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. In group situations, the participants often used to get cue from one another and this led them to provide more information and sometimes, even add to the available information. For instance, if somebody in a group used to provide some knowledge about the use of *Mahua* flowers for a particular disease, another person would get prompted to throw new insights into the medicinal properties of the bark or leaves of *Mahua* tree 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.

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 MEGHNAGAR AND PETLAWAT BLOCKS:**

<b>Sl.</b>	<b>Names of Villages</b>
1.	Panchkui
2.	Rosodi
3.	Nawagoan
4.	Dundka
5.	Nawapara
6.	Phuledi
7.	Khartodi
8.	Naharpura
9.	Gosalia Bara
10.	Jamania
11.	Kishan Pura
12.	Dadhania
13.	Rambhapur
14.	Kachaldara
15.	Kajlidugri
16.	Unnai
17.	Kotnai
18.	Mohankot

19.	Jhawalua
20.	Charan Pura
21.	Gopal Pura
22.	Ralyaman
23.	Soyla
24.	Dudwas
25.	Ratamba
26.	Babari
27.	Jamali
28.	Mowai
29.	Padal
30.	Berda
31.	Dungralalu
32.	Mod (Petol)
33.	Dadhiya
34.	Morjhariya
35.	Kodli
36.	Ramnagar (Raipuria)
37.	Khoria

38.	Pipalia
39.	Maandal
40.	Haaman
41.	Asliya
42.	Malkhandvi
43.	Jhosar
44.	Karpatia
45.	Antarkhelia
46.	Khalkhandvi
47.	Chapner
48.	Bawdi
49.	Patdi
50.	Kudvas
51.	Chayan
52.	Chikalia
53.	Vaniapada
54.	Junirammapur
55.	Jhawalia
56.	Japadara
57.	Parvalia

# CHAPTER IV

## **Socio-economic Description of the Area and its people**

### **Demographic profile**

The demographic profile of Jhabua district is an interesting mix of three *adivasi* communities. These are:

- i. Bhils
- ii. Bhilalas and,
- iii. Patliyas

These *adivasi* communities share the region with a substantial number of non-tribals mainly comprising scheduled castes and caste Hindus.

The Bhil Population in Jhabua is 90% while the other two *adivasi* communities, namely, Bhilalas and Patliyas have a combined population of a little less than 2%.

The rest of the population comprises of SCs, caste Hindus and Muslims. While a substantial number of SCs live in villages, Caste Hindus and Muslims are mainly concentrated in small towns and other urban areas.

Bhilalas and Patliyas, like Bhils, are settled agriculturists. However, these two *adivasi* communities are perceived as very hardworking farmers and the ones who have no inhibitions in using modern agricultural tools and implements. These two *adivasi* communities hold a very insignificant proportion of the total arable land in Jhabua district but they interestingly occupy one of the most fertile patches of agricultural land. Patliyas and Bhilalas have, of late, been growing lucrative cash crops such as cotton. The bulk of vegetable production in the area comes from their fields. In recent times, they have specially made a mark in the production of tomatoes. These are supplied to Indore, Bhopal, Ratlam, Baroda and Ahmedabad among other towns.

Since Bhils are numerically the most dominant adivasi community with a very long, continuous and sophisticated tradition of indigenous healing tradition, we shall concentrate here on them.

### **The Bhils – a brief profile**

The Bhils are considered as the largest tribe in India. The Bhils inhabit substantial area of Madhya Pradesh, Maharashtra, Rajasthan and Gujarat. They also occupy some of the border areas of Karnataka and Andhra Pradesh. However, their highest concentration is in the state of Madhya Pradesh.

From the point of view of their economic life they should be considered as settled cultivators although they are traditionally known as excellent archers. Geographically speaking, their traditional habitat has been the hills of Aravalli, Vindhyas and Satpura and Rewakantha plateau. It is believed that the word Bhil has been derived from the word *Bil* from Dravidian language, which means bow. Hence the people with bow are Bhils.

Bhils speak a variety of dialects resembling each other but with the respective regional tinge. Collectively speaking, all these dialects may be put under the linguistic category of *Bhilli*, this collection of dialects contains substantial number of *Mundari* and Dravidian words but due to regional variations the impact of Gujarati, Marathi, and Marwari may also be seen. Among the traditional neighbours of Bhils who have influenced them are the Gond, Bhuiya and Kolar tribes.

The Bhils prefer to make their settlements on the small hillocks and live in huts. Most of their houses are built from wooden poles and wooden logs with the traditional *Khaprail* or clay slabs providing the ceiling. These houses lack the provision of windows, which is a striking feature of their settlement pattern. In cases where windows are built in the house, their number is usually not more than one or two.

However, in recent years, the impact of non-tribals living in neighbouring small towns is evident on the methods of construction of houses on *adivasi* village people of

Jhabua. The use of cement, sand, mortar and bricks in the construction of houses is now an evident feature in *adivasi* villages.

### *Social Organization*

The Bhils are divided into two exogamous moieties. These moieties in turn, are divided into numerous exogamous clans or gotras which are further divided into lineages composed of several families. The lineage may go back to 5-6 generations. The traditional family unit of Bhil is called as Vasilu. A family consists of male, his wife and their unmarried children. With the addition of some other kin it becomes an extended family. The head of the family is usually the eldest male member and all the earning members deposit their incomes in the common pool managed by the head of the family. They have a strong patriarchal setup and the eldest males' authority is unassailable.

The Bhils are strictly endogamous and those marrying outside the tribe may be excommunicated or penalized heavily or may have to undergo both. They are largely monogamous but a few of them may have more than one wife. However, polyandry is not practised at all. They practice cousin marriage as a 'preferential' form of marriage. Widow remarriage is common and usually the widow marries her deceased husband's younger brother. If she wishes to marry anybody else, she is free to choose her life partner again. Likewise a widower usually marries his deceased wife's younger sister. Thus levirate and sororate both are prevalent. Divorce is also common and in case of dissolution of marriage the children usually remain with their father.

The rules of succession are such that the eldest son of the deceased gets the largest share and the youngest gets the smallest with property being distributed proportionately according to age. The liabilities left by the deceased are also distributed in the same order. The daughters do not have any claim over the father's property.

Generally speaking they cremate their dead while the children and those dying of unnatural causes are buried. The religious beliefs of the Bhils are largely based on animism or animatism. They also believe in spirits and ancestor worship is also popular among them. After coming into contact with the Hindu society they have started observing festivals like Holi, Diwali, Dussehra, etc. but they continue to observe their traditional festivals. The Ojhas or sorcerers occupy a special place in their society.

### *Economy and Ecosystem*

The economy of the present Bhil society is based on agriculture though the outsiders tend to view them in their traditional image—the nomads with exceptional hunting expertise. Earlier they used to do shifting cultivation but now they have switched over to settled cultivation. Their staple diet is maize while cotton is grown as cash crop. Besides these they also grow paddy, pulses, sugarcane, oilseed and wheat. The spirit of co-operation they display in various agricultural chores has to be seen to be believed. The mutual co-operation at the time of harvest is known as *helma*.

The occupations related with forests are an important aspect of the Bhils' economy. By being basically forest dwellers they are expert hunters and they are able to hunt even ferocious animals through very ordinary weapons. Perhaps that is why, they still carry an image of a tribe of expert archers. They are also woodcutters. They have no parallel in extracting honey, procuring the edible roots and fruits and gathering *mahua*. They also do fishing and practice poultry farming. They do not weave their cloths but purchase it from the market.

The pressure of population, land grabbing and alienation of their land by the neighbouring peasantry, harassment and exploitation by the lower level forest officials, contractors and money-lenders have made their life miserable. Though certain schemes of tribal development have made some dent, the life is still harsh.



### **Indebtedness among *adivasis* of Jhabua**

Majority of the household requirements, both seasonal and annual, are met through the borrowings from moneylenders and through a network of kin groups. Deficit agriculture is the primary cause for the households to borrow for consumption and productive investments. Indebtedness among tribals of Jhabua indicates that loans are taken mainly for agriculture (35-50%), house holds consumption (30-40%) and for social and religious purposes (10-15%), generally in that order of importance. The need to borrow for consumption and for production and social purposes is highly seasonal. The monsoon season (June-August) when land preparation, sowing and weeding are at a peak, are the times of greatest shortage. At this time the price of staples is almost double the selling price at harvest. The social expenditure, which is at the peak during March till onset of monsoon, contributes largely to the total house holds borrowings.

### **Land holding pattern**

Available data reveals that land holdings in the project area are generally small, averaging between 2 to 3 ha. The proportion of small and marginal farmers (with land holding less than 2 ha.) in Jhabua is 50% and between 75% to 88% with land holdings less than 4 ha, which is not a large holding considering the topography of the area. A significant proportion of landholding is less than 0.5 ha due to population pressure and land fragmentation. These very small holdings constitute an increasing proportion of holdings. When holdings are very small they are sometimes not further divided formally although social adjustments are strictly followed. The structure of land holdings too varies between villages. Studies indicate that there is a significant concentration of land into the hands of a few families (the dominant family lineage has or had dominant rights over the best land, best trees).

Land type is equally or more important to holding size. Land is broadly distinguished into four categories-uncultivable hill top, the sloping land, the more fertile low lying land and homestead plots. There is frequently unequal access to the better quality, irrigated or low lying land. Ownership of such land is considered an important measure of social status. In addition to land, fruit trees (especially *Madhuca Indica*, Phoenix, Palm and Mango) and cattle are important productive assets. Most

households own a pair of ploughing cattle. Smaller farmers usually have fewer inferior animals. Lack of bullocks is serious economic and social handicap.

These assets play an important role in obtaining loans from moneylenders or to arrange a marriage. Ownership of goats and hens are also part of investment strategy which are sold in local markets to meet urgent and un called occasions.

### **Social Organisation of Agriculture**

In tribal villages title to land is usually in the name of married male of the households. Sons (barring the youngest) live independently of their parents after marriage. But the process of handing over the responsibility of productive assets may usually take place much earlier. Land may be in the name of elder brother or all brothers jointly after the father's death. All households meet their own labour needs although peak labour demands are met through reciprocal labour exchange. The tribal practice two traditional systems of labour sharing, (a) reciprocal labour exchange (for sowing and harvesting) and (b) guest labour used for house construction in which kin group members offer labour in return for a meal and liquor at the end of the day. Usually family members between 8-13 years and older men are engaged in cattle grazing. Most of the tribal families have skills to manufacture and repair agriculture implements.

### **Human Migration**

The phenomenon of seasonal migration is very much in vogue. Few families stay in the village for the whole year. They are the ones who have had a good crop in the preceding year or have better-located and irrigated land. In families that do not have access to irrigation sources, generally, the eldest couple remains at home while the rest of the family, males and females, married and unmarried alike migrates to urban area for a period of around eight months from October to June. The number of people per household migrating and the period of migration are lesser for households owning irrigated land. The lucky few get hired on contracts while the majority is fated to search for work in these cities. The lucky few get hired on contracts while the majority is fated to search for work in these cities. Those who manage to get

employed on contracts are the fortunate ones, for they can be sure of their next day's meals. The wages vary from thirty to sixty rupees a day. In the non-irrigated villages, the migration rate may go up to 70% of the population during the summer season.

### **Traditional Leadership**

The village headman called *Tadvi* usually comes from the dominant lineage and this position is normally hereditary. During the pre-independence period the village was under his administrative control and he was the only official link between the community and Government. He holds an important social position in the village. His presence is a must in social functions (religious rituals and *rites of passage* like, matrimonial). He is usually a part of the *Bhang Jaria*. A *Bhang Jaria* is an arbitrator who plays an important role in inter-village dispute resolution and such other disputes as bride price, land disputes or disputes relating to animal grazing.

### **Social status of women**

Bhil women's daily work varies with the season, but includes the regular task of food preparation, water and fuel collection, cleaning the house and yard, lifting cow dung, washing, pounding and grinding corn, fodder and MFP gathering, as well as agricultural activities. Large-scale seasonal migration of the male work force also increases the range and intensity of women's work on farms.

Women generally get married after they reach puberty and have an average of 4-5 children by the time they reach 35 years.

Bhil women have a liberty in movement and greater role in decision making when compared to women generally elsewhere in India. However, the women are excluded from property rights.

### **Fairs & Festivals**

The most important fairs of the Bhils are the *Singhasan Mata Ka Mela*, and the *Bhagoria Mela*

### ***1. Singhasan Mata Ka Mela:***

At the time of rains, five *Badwas* (tribal medicinemen) from different villages gather together at the abode of Singhasan Mata. They keep fast for a few days during which period they take only a preparation of milk and *kola* (Pumpkin). At nights, they remain near the Mata and keep singing throughout the night. On the fifteenth day of the first fortnight of *Bhadrapada* (September), the worship is performed. People coming from the nearby villages bring goats with them. These goats are sacrificed and the offerings are taken away by those who bring them. It is believed that this worship brings goods rains.

### ***2. Bhagoria Mela:***

Bhagoria is a Bhil word that means *to run away with the would-be life partner*. It starts a week before Holi. It is held at the market places on the market day. It is one of the main attraction in the lives of the Bhils; it is actually a mass *Swayambara* (Wedding) where the young people choose their life partners. Bhagoria is the venue of the run away marriages. The unmarried boys and girls come to the fair with great expectation of finding out a mate. On mutual approval the girl absconds with the boy she likes. Sometimes, the boy and the girl have an earlier liaison and only abscission takes place at Bhagoria. The Boys and girls who are unable to find out a mate try other Bhagoria.

On the day of Bhiagora the menfolk wear their best clothes, carrying bows and arrows reach the hat. They join the dance in circle. Dancing is always performed in two groups, men in one group and women in the other. The movements are rhythmic and in many cases accompanied by the beat of sticks in time to the somewhat monotonous chant to which the dance is performed. The musical instruments like Drums and flutes are played. The boys and girls keep dancing throughout the day with their flutes and drums.

### **Relationship with the forest**

The Bhils have a symbiotic relationship with the forests. They derive their basic needs of survival from their host i.e. food (leaves, fruits, nuts, underground plant parts etc.) for themselves; fodder for their livestock; fuel for cooking; fibres for clothing; timbers, ropes, barks, wood, bamboo, and grasses for housing and farming; herbal medicines for health, and economic goods like gums, resins, waxes, honey, silkworm cocoons and several other valuable forest produce. In turn they protect the forest and also enrich its fertility through their various cultural activities, beliefs and practices. The forests not only give livelihood to them but they also provide them with a social bonding and a culture reminiscent of their ancestors. The Bhil culture is inexorably woven around the forest.

### ***Ecological awareness and biodiversity conservation***

'Animism' and 'naturalism' are part of the cultural life, beliefs and practices of the Bhils in Madhya Pradesh. Plants, animals, trees, rivers, ponds, stones and mountains are all considered sacred. 'Nature worship' is a form of belief and all nature's creation has to be protected. The faith of these aboriginal people in Nature's 'creation has greatly helped in the preservation and protection of many natural ecosystems in India. Such beliefs have helped protect several 'virgin forests' in Jhabua in its pristine glory which have been termed as the 'Sacred groves' (Forests of God). Sacred groves are patches of forest or a part of the large forest left untouched by the local inhabitants and all interference into it are a taboo. It is usually dedicated to a deity or a 'mother goddess' who is supposed to protect and preside over the grove and the intruders will be punished. In a sacred grove the patch of vegetation can range in extent from a few trees to forty hectares or more which is left undisturbed because of its association with a deity. All forms of vegetation in such a grove are supposed to be under the production of the reigning deity of that grove. In its original form this protection forbade any external interference with the biota of the grove whatever, and even leaf litter was not removed from it, nor was grazing or any hunting permitted within the grove. Even when the protection is less stringent, any removal of live wood continues to be taboo.

Many plants which otherwise have disappeared from the region due to biotic and other factors are still found in many saved groves. Thus it is important for us to preserve this diversity for posterity, as they form the potential sources of significant and valuable genetic traits for the future tree breeding programmes besides their aesthetic and scientific value.

It is believed that such a virgin forest dates back to several thousand years when human society in India was in its primitive state i.e. in the hunting-gathering stage. Hence it is believed to be 'Pre-Vedic' in origin (about 3000 BC). The degree of sanctity of these sacred forests varies. Sacred groves are found all over India in the tribal zones. They represent the only surviving examples of climax vegetation.

At present there are over 400 such groves in Madhya Pradesh alone. Such virgin forests are usually located at the origins of forest water springs in the catchment areas of river basins that are potential source of 'hydro-power' today. Ironically dams for electricity generation are being built in these areas only much to the great disadvantage of the poor tribals who have preserved this natural heritage for centuries. Thousands of *adivasis* have been uprooted to become 'ecological refugees' for dam construction in India. Sardar Sarovar and Narmada Sagar Projects of Madhya Pradesh and Gujarat in India are prime examples. This also means that the functional relationship between the forest cover, rainfall, water percolation and soil conservation was known to these aboriginal people since times immemorial. All these combined together are basic variables of the 'hydrological cycles' and that must have been another reason why they protected these forests and forest patches by declaring them sacred.

These primitive virgin forests of Jhabua were home to enormous diversity in flora and fauna in their native state. Since many of them are on the extinction list of nature their survival in these sacred groves is of great ecological significance for the biosphere. Prime example is the prized medicinal plant *Rawolfia serpentina* yielding 'reserpine' drug for the treatment of high blood pressure and which has disappeared from nature except for these sacred forests preserved by the *adivasis*. These virgin

forest patches contribute significantly in the maintenance of biological diversity and ecological balance.

The States with larger *adivasi* populations have greater number of biosphere reserves in the form of Wild Life Sanctuaries and National Parks. Madhya Pradesh with the largest tribal population alone has 42. The sacred groves of *adivasis* should be declared as the 'national sanctuaries' and protected through special legislative measures. This has assumed special significance because the non-tribals are now eyeing these groves for timber trade. If urgent legislative and administrative measures are not taken, we would soon be witnesses to the indiscriminate and mindless destruction of whatever is left of sacred groves.

### **The ethnobotanical legacy of *adivasis***

The ancient literature of India and world on medicine suggests that the primitive people of antiquity have been using several kinds of medicinal plants for combating diseases. The ancient Indians used the 'Snake root plant' (*Rawolfia serpentina*) about 3000 years ago to treat several diseases from mental disorders to insomnia and snake bite. They also used the poppy juice (*Papavar somniferum*) to relieve pain and anxiety.

Some knowledge of the ancient Indian medicine and the medicinal herbs has descended through generations and survived through times among the tribal communities of India. The circumstances under which these people lived - abject poverty, disease and hunger combined with their natural curiosity towards their closest neighbour - the forest in which they lived and sought its help in mitigating their woes and sorrows must have been an essential factor in preserving the knowledge of plants and their utility to mankind. This wealth of knowledge about the medicinal plants and their healing properties has been inherited from their forefathers and also by their own experience after centuries of trial and error.

The tribal medicinemen of Jhabua, called *Barwas* in *Bhilli* language, give traditional treatment with medicinal herbs for a wide variety of ecological diseases and ailments ranging from Rheumatism, Paralysis, Epilepsy, Leprosy, Jaundice, Diabetes and Malaria to Syphilis, Gonorrhoea, Chronic constipation, Dysentery and Diarrhoea. They also treat various skin diseases, women's diseases and bone ailments. And above all, one interesting thing is that they claim to use some kind of a 'herbal oral contraceptive' for the females to regulate their fertility. This is very significant for a country like India where population control is of primary concern for the health authorities.

The plants, which are commonly used by Bhil *adivasi* community for preparation of herbal drugs frequently, grow in their own geographical area. Some important medicinal plants used by them are:

Sarpgandha (*Rawolfia serpentina*)

Sanai (*Cassia angustifolia*)

Asvagandha (*Withania somnifera*)

Satavari (*Asparagus racemosus*)

Giloy (*Tinospora cordifolia*)

Mulethi (*Glycyrrhiza glabra*)

Brahmi (*Centella asiatica*)

Shankpushpi (*Evolvulus alsinoides*)

Sanjiwani (*Selaginella bryopteris*)

Amaltas (*Cassia fistula*)

Amla (*Phyllanthus emblica*)

Bahera (*Terminalia bellerica*)

Kutki (*Picrorhiza kurroa*)

Dhak (*Butea monosperma*)

Castor (*Ricinus communis*)

Lajwanti (*Mimosa pudica*)

Barahmi (*Bacopa monniera*) and,

Poppy (*Papaver somniferum*).



However, it is observed that they mostly use *Bhilli* names for these plants while in some cases they are found to use both the popular Hindi, Gujarati and Sanskrit names.

The forest cover and the hills from where these people originated and brought the wealth of medico-botanical and agro-botanical knowledge and the cultural and ecological heritage are fast disappearing under the impact of industrialisation and urbanisation of so-called modern human civilisation. As a result, the Bhils are also becoming acculturated and losing their knowledge and experience. Hence, what really concerns the human ecologists, anthropologists and policy planners today is how to salvage some of those valuable legacies of the *adivasis* before they disappear forever with the culture that gave them birth.

### **Gene Campaign's herbal garden**

Gene Campaign has set-up a herbal garden in Jhabua with the aim of protecting the local flora of medicinal plants. Two local *adivasi* youths have been employed to collect the plants, about which the local communities have knowledge on their medicinal properties and application, apart from maintenance and upkeep of the garden. They also collect seeds from the plants that grow in the garden.

Although the emphasis is on the collection of local flora, some species that are economically useful have been brought from institution like central Institute of Medicinal and Aromatic Plants (CIMAP), National Botanical Research Institute (NBRI) and Regional Research Laboratory (RRL), Jammu and planted in the garden.

This herbal garden has become an attraction for some of the catholic mission hospitals in Jhabua that provide herbal treatment to the patients. The herbal garden is also very popular among the local medicine men, the Barwas. They frequently visit the garden to procure these species of plants that cannot be found easily in their vicinity. But more than anything else, the garden has helped to generate a sense of pride among the *adivasis* that their traditional system of medicine based on plants is recognised as sophisticated and much importance is now being attached to it. There is a growing

appreciation in the nearby villages that their local flora is in danger and that some conservation efforts at the individual and group level should be made.

The plants that are available in the herbal garden are:

1. Cloumum – seeds
2. RRL OC – 11 Kattrallai (Tam) *Aloe barbadensis*
3. Kadhangkattri (Tam) *Solanum surattense*
4. RathanJothi (Loc) *Jatropha curcas*
5. Haivel (Loc)
6. Nannari (Tam) *Hemidesmus indicus*
7. Megandhi (Hin) *Lawsonia inermis*
8. Raamacham (Mal) *Vetiveria zizanioides*
9. Nilapanna Kilanghu (Mal)
10. Lime grass (Eng), Rhio (Loc) *Cymbopogon citratus*
11. Bella (Mal) *Sida caprinifolia*
12. Arugampull (Tam) *Cynodon dactylon*
13. Arali (Tam) *Nerium indicum*
14. Unknown Croton
15. Vadhakolli (Mal)
16. Poovadhia (Loc) *Cassia senna*
17. Haldi (Hin) *Curcuma domestica*
18. Agathi (Tam) *Sesbania grandiflora*
19. Kella (Hin) *Musa paradisiaca*
20. Karipatta (Hin) *Murraya koenigii*
21. Vouch (Mal) *Acorus calamus*
22. Began (Hin) *Solanum melongena*
23. Mirch (Hin) *Catharanthus pusillus*
24. Caster (Eng) *Ricinus communis*
25. Drum Stick (Eng) *Moringa concanensis*
26. Thumbhai (Tam) *Leucus aspera*
27. Bindhi (Hin) *Abelmoschus ficulneus*
28. Millagu thakkali (Tam) *Solanum nigrum*

29. Bhadhi Dhoodhi (Loc) *Euphorbia hypericifolia*
30. Tomater (Hin) *Lycopersicon esculentum*
31. Jungli Ghobi (Loc)
32. Karella (Hin) *Momordica charantia*
33. Keelanelli (Tam) *Phyllanthus niruri*
34. Kella (Hin) *Musa paradisiaca*
35. Adusa (Loc) *Adhatoda vasica*
36. Sadhaverri (Mal) *Asparagus racemosus*
37. Motodian cheera (Mal)
38. Pappaya (Hin) *Carica papaya*
39. Ellaiperukki (Mal) *Bryophyllum calycinum*
40. Paadhai Ellai (Mal)
41. Mallai Engi (Mal) *Zingiber officinale*
42. Haldhi (Hin) *Curcuma domestica*
43. Koovai (Tam) *Coccinia Indica*
44. Nimboo (Hin) *Citrus aurantifolia*
45. Tridax (Bot) *Tridax procumbens*
46. Dhathura (Loc) *Argemone mexicana*
47. Chotti Dhoodhi (Loc) *Euphorbia hirta*
48. Akal Karra (Mal)
49. Karinochi (Mal) *Vitex negundo*
50. Pool Kaneer (Loc) *Ervatamia coronaria*
51. Lal Kaneer (Loc) *Nerium indicum*
52. Adusa (Loc) *Adhatoda vasica*
53. Vadhakolli (Mal)
54. Safedh Kaneer (Loc) *Thevetia nerifolia*
55. Velli paruthi (Tam) *Pergularia daemia*
56. Akkdha (Loc) *Calotropis gigantea*
57. Hibiscus (Bot) *Hibiscus rosa-sinensis*
58. Hadi Jode (Loc) *Cissus quadrangularis*
59. Neemgloei (Loc) *Tinospora cordifolia*
60. Karrisalanganni (Tam) *Eclipta alba*
61. Naai (Loc)

62. Pullialla (Mal) *Oxalis corniculata*
63. Kudhakam (Mal) *Centella asiatica*
64. Aprajit (Hin) *Clitoria ternatea*
65. Ajwaine (Hin) *Coleus aromaticus*
66. Karghosh (Mal) *Emilia sonchifolia*
67. Khabhda (Loc)
68. Bharani (Mal)
69. *Abrus precatorius*
70. CKP-25
71. Bhooi ringni (Loc)
72. Pitchi poove (Tam) *Jasminum grandiflorum*
73. Naaiuroovi (Tam), Quarpatta (Loc) *Achyranthes aspera*
74. 4 'o Clock Plant (Eng) *Mirabilis jalapa*
75. Aswagandha (Mal) *Withania somnifera*
76. Tagra (Mal) *Cassia senna*
77. Gharki (Loc)
78. Thademo (Mal), Dhakni (Loc) *Boerhaavia diffusa*
79. Pudhina (Hin) *Mentha piperita*
80. *Asperagus* sps \*
81. Anar (Hin) *Punica granatum*
82. Chameli (Hin) *Jasminum multiflorum*
83. Kalluruki (Mal)
84. Cheraiitha (Mal) *Andrographis paniculata*
85. Nithya kalyani (Tam) *Catharanthus roseus*
86. Doodhakkda (Loc)
87. RRL – 16
88. *Ocimum basilicum*
89. *Psoralea* sps
90. Macuna (Black)
91. Chooimui (Loc) *Biophytum sensitivum*
92. Nagthumdi (Loc) *Aristolochia bracteata*
93. *Ocimum sanctum*
94. Kuker kandha (Loc)

95. Kaneer (Loc) *Thevetia nerifolia*
96. Champa (Loc) *Michelia champaca*
97. Aprajit (violet) *Clitoria ternatea*
98. Macuna (white)
99. Vetiver (Hin) *Vetiveria zizanioides*
100. Arookyapattcha
101. Uttukattar (Loc) *Solanum xanthocarpum*
102. Bhadhithuvar (Loc), Kalli (Tam) *Euphorbia tirucalli*
103. Nagfani (Loc) *Opuntia dillenii*
104. Senna (Hin)
105. R.R.L – C.N Sarpghandha (Hin) *Rauvolfia serpentina*
106. Bixa orellana
107. Lemon grass (Eng) *Cymbopogon citratus*
108. Bryophyllum sps
109. Oomathai (Tam) *Datura metel*
110. Nochi (Mal) *Vitex negundo*
111. Jamrosa slips
112. *Ageratum conyzoides*
113. Safedh rigni (Loc) *Solanum surattense*
114. Puckli (Mal) *Aerva lenata*
115. Mudhakkatan (Tam) *Cardiospermum halicacabum*
116. Kattralai (Tam) *Aloe vera*
117. Kalmegh (Hin) *Andrographis paniculata*
118. Athrak (Hin) *Zingiber officinale*
119. *Acacia concira*
120. *Acacia catechu*
121. *Cassia fistula*
122. *Cordia dichotoma*
123. *Crataeva religiosa* var. *nurvala*
124. *Crescentia cujete*
125. *Putranjiva roxburghii*
126. *Tinospora cuttings*
127. *Santalum album*

128. *Sapindus saponaria*
129. *Saraca asoca*
130. *Soymida febrifuga*
131. *Strychnos nux-vomica*
132. *Terminalia bellerica*
133. *Terminalia catappa*
134. *Terminalia chebula*
135. *Terminalia muelleri*
136. *Toona ciliata*
137. Supari (Hin) *Areca catechu*
138. Amrood (Hin) *Psidium guajava*
139. Bhadam (Hin) *Prunus amygdalus*
140. Jamoon (Hin) *Syzygium cumini*
141. Imli (Hin) *Tamarindus indica*
142. Umri (Hin) *Ficus glomerata*
143. Pipla (Loc), Arasa Maram ( Tam) *Ficus religiosa*
144. Bhadam (Hin) *Prunus amygdalus*
145. Neem (Hin) *Azadirachta indica*
146. Mango (Eng) *Mangifera indica*
147. Eucalyptus (Eng) *Eucalyptus globulus*
148. Naariyal (Hin) *Cocus nucifera*

## CHAPTER V

### FINDINGS & ANALYSIS

The survey yielded some interesting insights into the indigenous health system of the *adivasi* communities of Jhabua. It has become amply clear that there are several levels of health traditions in the Bhil 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 and othersgents

As a separate collection, the cures for various disease that were obtained from the forest department's office in Jhabua and a local *adivasi* medicineman, Mikhu Barwa, is given in the annexure.

Identification of many of the specimens 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.

**Barwas:** The repositories and carriers of medico-botanical wisdom in Jhabua

Barwa, a Bhil tribal medicineman, is a highly respected person in his village and neighbouring areas. The authority and respect enjoyed by Barwas has considerably diminished in the past decades owing to deeper inroads made by allopathy. Their own *adivasi* folk in many areas view them as inward looking and as not being in tune with the modern practices. However, in most parts of the region Barwas are accorded high respect as carriers of a tradition that has withstood the test of time. Interestingly, they are revered not only by their own fellow Bhil *adivasis* but also by other neighbouring tribes like Bhilalas and Patelias as also non-tribals.

It is generally found that a group of village has to rely on the service of one Barwa, who often travels long distances on foot, bullock cart or bicycle to see his patients and dispense medicines. Barwas of Jhabua jealously guard their knowledge about preparation and dispensation of medicines. They generally do not teach the art of healing to anybody outside of their family. They pass on their knowledge to their children, usually their sons.

The Barwas of Jhabua are enormously knowledgeable about the economically useful plants. Not only this, they know about the major sites where such plants can be found, the collection methods, time of collection as also methods of preservation for use during off season.

Normally, a Barwa is found to know several plant-based remedies for the same disease, so that if one is not available in a particular season or locality, another can be relied upon.

Under the growing influence of allopathy, Barwas have begun to charge a small fee. This helps them augment their earnings, who otherwise would have to depend solely on agriculture for their livelihood. Almost all Barwas simultaneously practise agriculture for sustenance. Earlier, Barwas either used to dispense medicines free of cost or for some token consideration in kind.

An interesting feature of the local healing tradition as practised by the Barwas is that in some cases Mantras and incantations are used. It is observed that these are particularly used in complicated cases of epilepsy and other neurological disorders, small pox, dog bite and high fever with delirium. It is commonly observed that they ascribe and associate such difficult cases with black magic, witchcraft or the wrath of the supernatural owing to some alleged sin committed by the patient. The Barwas are often found to meet such challenges by organising a ritual to propitiate the supernatural or supersensory.



Despite the glorious achievements of the Barwas and the immense respect enjoyed by them in their own community and outside, it should not be assumed that the *adivasi* healing methods are secrets that are known only to them. Almost everybody in the area, young or old, has some knowledge about the medicinal uses of plants, insects and animals. Whoever one meets from the local community has some knowledge to share about the treatment that can be given for most of the common ailments. The one difference, however, is that the Barwas have tremendous knowledge about almost all common diseases afflicting local people in the area. A Barwa is neither a caste nor caste-like hereditary occupation. Any person from the local *adivasi* community who practises the traditional indigenous system of medicine is called a Barwa. In this sense there is no caste-like restriction on practising the art of indigenous healing. It is another matter that most Barwas have acquired this knowledge in a cultural setting where it is handed down from one generation to another and in this sense, the composite body of knowledge is limited to a few families or a group of families scattered all over the area.

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

The Bhils, 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.



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