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ADIVASI

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EDITORIAL

The current issue of the journal contains papers on "Tribal Medicine and Medicinemen" in consonance with theme of ethnomedicine which has assumed a very significant dimension in the contextual frame of medical pluralism. Professor Dr. N. K. Behura's paper on "Cultural Dimensions of Diseases and the Treatment (case studies from Tribal Societies of Orissa)" is an extremely useful contribution as it touches the socio-cultural aspects of epidemiology, cultural correlates of health and ill health, ethnomedical specialists and the like, besides its theoretical thrust. The paper contributed by Biswal, A. K., A. Rath and Dr. N. Patnaik, depicts the interrelationship between culture and environment (with special reference to ethnobotanical aspects) and with the case study of the Juang Tribe of our State, identified as a Primitive Tribal Group. In addition, there are two papers of the Institute and they examine the theme through exploratory studies among the Bondo and Didayi, the two Primitive Tribal Groups of our State.

It is apt to mention here that studies of Tribal Medicine and Medicinemen in Orissa are few and far between. It encompasses such significant aspects as, pre-literate indigenous medical system and configurations especially of health status, illness, diagnosis, healing practices, etc. A cursory look into the genesis of indigenous medicine indicates that interest in the study goes back to late nineteenth century and early twentieth century, although the illness and healing were given priority attention. The cross-cultural research in anthropology further enhanced the scope of the study of biosocial aspects, such as health and nutrition, social demography, ageing, ethno-psychiatry, social-epidemiology and the like. In a nutshell, the studies on ethno-medicine ranges from paleopathology to recent studies within the sub-field of medical anthropology. [See: Kleinman in Kuper and Kuper (eds) 1985: 511-12]. Rethinking in Tribal Medicine/Ethno-medicine/Indigenous Medicine/Folk Medicine shows that it is not contradictory to the modern medicine in complex societies but very much complementary. Some scholars, although, view the two as separate both conceptually and empirically and suggest them to develop independently, others plead for their simultaneous operationalisation, supplantive and integrative entities, as both have the similar goal-orientation. Swain states, "Traditional medicine has been defined as that whole, which includes a holistic knowledge and practice, oral or written functioned in diagnosis, preventive and curative aspects of illness and disease to promote total wellbeing. Hence, the approach is holistic and blending of physical, mental, social and spiritual wellbeing. Its use is global. Even in the face of sophisticated western system of medicine it has thrived and is the only system available in the undeserved areas of the country. Some of the methods practised by them, even though,
are harmful by our understanding, some have been found to be positively beneficial and scientifically sound. They represent an autonomous system supported by the community. While the Allopathic Drugs are only not available but have been found to be very expensive" (1993:34).

Emphasizing on a number of key questions Kleinman states, "Both ecological and culturist models of these interactions have thrown useful and divergent light on a number of key questions. These include, how cultural meanings and social uses of chronic sickness amplify symptoms and disability in oscillating cycles of socio-somatic amplifications and damping, how symptom terms form culturally constituted idioms of distress that 'conceal core societal symbols and psychosocial problems; how culture-bound disorders are caused; how efficacy is constituted and assessed in healing relationships and how symbols heal. We now possess, for example, systematic outcome studies of indigenous healing practices that disclose how these practices produce their effects and how effective (and toxic) these effects are. We are increasingly sophisticated in understanding problems in the integration of these practices and their practitioners with orthodox biomedicine. And we are making headway on both psycho-biological and social levels in understanding the antecedents and consequences of sorcery, shamanism and religious healing cults" (Kuper & Kuper eds, 1985:512). It transpires from the above statement that there is need for holistic approach for integrating the indigenous medical practices for health care with that of the modern medical practices, both from conceptual and methodological perspectives.

"Health services—promotive, preventive, curative and rehabilitative—form but one of the means of improving the health status of a society..... The intrinsic dynamics of a society, which are so important in determining status of health and health services, have their roots in the ecological and historical background of the society.... Human groups interact with their surroundings to develop their own way of life—their culture, which includes modes of production and their social relations. The history of these groups is a record of this interaction over time and space. Consideration of the social ecological setting is also important in analysing the health problems within a human group, social ecological conditions also mediate between the disease causative agents and individuals and are often direct causative agents." (Sahu, 1991:4) The tribal's concept of disease, health, medicine, traditional health institutions, practices and overall health behaviour are in fact manifestations of their cultural response to this dimension of their material and non-material existence.

With this background traditional tribal health care
III

System needs to be studied under the field of medical anthropology to find answers to the following questions:

(i) How do the people perceive their health problems?

(ii) What do these problems mean to them socially and culturally?

(iii) What do these problems mean to them in terms of suffering caused by them?

(iv) To what extent do these problems cause economic sufferings?

(v) What types of cultural institutions, do the people have evolved indigenously to such problems as perceived by them?

(vi) What are the people's responses to these problems?

The common customs, traditions, values, beliefs and practices associated with the tribal's health and diseases have a direct bearing with their treatment of physical ailments, besides other sociopsychological reasons. From a traditional medicineman or witchdoctor a tribal patient does not merely receive a physical health treatment but something much more than that. He gets sociopsychological reinforcements which he cannot get from modern medical practitioners. These reinforcements are based on the understanding of traditional beliefs and practices of the community. In this set-up introduction of an alien health care system having its roots in exotic culture bound to create conflicting and confusing situation. Choudhury feels "In fact it is a debatable question that the tribals always go for indigenous practices where both traditional and modern facilities are available. The patient-doctor relations are important...in this context......Besides these, a knowledge and documentation of traditional tribal medicine are also urgently necessary. A study of indigenous method of treatment may help to identify new methods of treatment of various diseases with certain modifications. In fact a number of ethnobotanical studies have helped to identify a number of medicinal plants used by the tribals to treat different types of diseases in many parts of India. Many of them may be very useful to treat diseases and it is urgently necessary to document them and try them after proper scientific experiment" (1986:XXX). In the context of Orissan tribes, this exercise appears to be more expedient.

TRIBES OF ORISSA:

The ethnic personality configuration of Orissa State includes the Scheduled Tribes, Scheduled Castes and Other Caste communities. The Scheduled Tribes consisting of 62 ethnic groups with a population of 7,032,214(1991 Census) constitute 22.21 per cent of the total population of the State. Although Orissa occupies the third position in so far as the numerical strength of the tribal population is
concerned, next to Madhya Pradesh and Maharashtra, it occupies the second position next only to Madhya Pradesh in terms of its percentage to total population. The Scheduled Tribes are found distributed in varying degrees in all the 30 districts of the State, maximum and minimum being recorded in Malkangiri and Puri districts, respectively. Among them there are very large communities, like the Khond, the Gond, the Santal, the Saora, the Munda, etc. who are widely distributed.

Each tribal group is unique in terms of its society and culture. In general, they represent simple societies which are relatively encysted and non-hierarchised. Their societies are patriarchal, patrilineal and patrilocal. The tribal families are usually nuclear and most of them live in settled villages/hamlets. There are several ways of acquiring mates but marriage by negotiation is considered most prestigious. The kinship ties, both consanguineal and affinal bind them into a cohesive unit and kinship plays the pivotal role in their socioeconomic and cultural life. Majority of tribal communities have exogamous social units, called clan which are totemic. They usually practise monogamous marriage although polygyny is not entirely ruled out. In their societies divorce and re-marriage are socially permissible. The tribal societies have non-kinship organisation, called Youth Dormitories. The tribal people are mostly polytheists and animists and they have belief in magic, witchcraft and sorcery.

The tribal economy in Orissa may be broadly classified into such categories as food-gathering and hunting, shifting cultivation, settled agriculture, industrial and mining works. Their economy and technological base are very simple and mostly at the subsistence level.

Out of the 62 tribal communities, 13 communities have been identified as Primitive Tribal Groups (PTGs) because of their low level of literacy and pre-agricultural level of economy and for them 17 Micro-Projects are functioning for their overall development. During the post-independence period the tribal societies in the State are experiencing rapid transformation due to planned development intervention and welfare measures. In spite of the induced change there is persistence of their rich cultural heritage with unique ethos, ideologies and world view.

Since time immemorial, the tribal people have their indigenous practices of healing diseases with the help of their own healers/medicinemen, as the aetiology and cure of ailments are part and parcel of their socio cultural system.

**TRIBAL MEDICINE**

The tribal medicine has its own aetiological aspects which may be classified into two broad areas, such as supernatural and physical. The supernatural causative agents of diseases form a part of the belief system of the people and they accordingly take resort to magico-religious practices.
of healing. In tribal societies, the aetiology includes breach of taboo, supernatural vengeance of demi-gods, ghosts and evil spirits, ghost/spirit intrusion, evil eye, witchcraft and sorcery, etc. The causes for some diseases are also attributed to physical factors such as, hazards of weather, wrongful intake of food and beverages, etc. The disease causation and healing practices differ from one society to other because of human diversity and variation of sociocultural factors. It is not desirable to question the belief system of the people but to examine the rational, irrational, non-rational aspects of human behaviour pertaining to health and ill health.

The principal ingredients of tribal medicine are derived from plant source. Various types of plants and herbs available in the nature are collected for medicinal purposes, rather than, culturing or domesticating them. Such medicinal plants and herbs are identified and collected by medicinemen themselves in order to maintain the secrecy involved in medicinal preparations. Various parts of plants and herbs such as branches, fruits, buds, flowers, leaves, bark, root, offshoot have specific use for treatment of diseases. There are prescriptions, prohibitions and taboos for collection of plants and herbs on specific day and time. It is also believed if a particular plant or herb or part thereof is not collected on prescribed date and time, it loses its medicinal value. Some plants and herbs are stored and preserved for future use whereas some others require fresh applications. The plants and herbs are often semi-processed for medicinal use. The medicinemen are conversant with the preparation of a single or a multiple number of plants and herbs for preparation of medicines. As per the disease some such medicines are administered orally, or applied externally. Some parts of plants and herbs are kept outside/inside the house for their repellent effect to prevent certain diseases. Besides plants and herbs, the tribal medicinemen also utilise objects of animal origin and mineral origin to treat various types of diseases.

Tribal medicine is classified under the sub-section of "Folk-Medicine" in the domain of "Traditional Medicine" as distinguished from the modern medicine. Its "concepts and practices ....... are based upon the humoral theories, cosmological speculations, magic in learned/oral medicine and religion. The practice field of this medicine is mid-wifery, bone-setting, supernatural cures of various types with main emphasis on utilising natural herbs, roots, plants and other natural things, in a given ecosystem." (Reddy, 1986:16).

Tribes of Orissa living in diverse ecocultural settings endowed with a veritable treasure of medicinal herbs have unfortunately escaped the attention of medical anthropologists and medical scientists in a time when their natural and cultural environment is seriously affected by the external agencies and their traditional knowledge and expertise as well
as the medicinal plant species are in a state of decline and decay. There is dearth of information on the tribal medicine of Orissa because very few studies have been conducted on this topic. Now there is the urgent need to study and document the traditional tribal medicine of Orissa and especially, the medicinal herbs before they are lost in antiquity.

TRIBAL MEDICINEMEN:

The tribal medicinemen are regarded as traditional healers in their respective societies, enjoying neither the role of secular nor sacerdotal chief. From a cross-cultural perspective, the role of medicineman may coincide with that of an astrologer, a sorcerer, a witchdoctor, a divinator and the like, depending upon the social structure of an ethnic group. For example, in Lusaka (Zambia) the traditional healer is known as ng'anga who practises herbalism and believes that sickness is a social phenomenon. Frankenberg and Lesson recognises both similarities and dissimilarities between ng'angas and doctors practising Western medicine and their following table is self-explanatory:

<table>
<thead>
<tr>
<th>Doctors</th>
<th>Ng'angas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian or European</td>
<td>African</td>
</tr>
<tr>
<td>Bureaucratic</td>
<td>Informal</td>
</tr>
<tr>
<td>Specialised locales</td>
<td>Home</td>
</tr>
<tr>
<td>Payment in advance</td>
<td>Payment by results</td>
</tr>
<tr>
<td>(Or not at all) Cheap</td>
<td>Expensive</td>
</tr>
<tr>
<td>Defined illness</td>
<td>Misfortune</td>
</tr>
<tr>
<td>Acute</td>
<td>Chronic</td>
</tr>
<tr>
<td>Injections</td>
<td>Scarification</td>
</tr>
<tr>
<td>Surgery</td>
<td>Superficial invasion</td>
</tr>
<tr>
<td>Mechanical &amp; manufactured drugs</td>
<td>Inhalation</td>
</tr>
<tr>
<td>Ignorance of local language</td>
<td>Social arrest</td>
</tr>
<tr>
<td>Physiological aetiologies</td>
<td>Consulted by survivors</td>
</tr>
<tr>
<td>Consulted first</td>
<td>Knowledges of languages</td>
</tr>
<tr>
<td></td>
<td>Awareness of local idioms</td>
</tr>
</tbody>
</table>
The traditional healers do not belong to any specific school, such as Ayurvedic/Acupuncture/Moxibustion, etc. Further, there is no body of written body of knowledge, no systematic instruction method and no unanimity in theory and practice [In Loudon (ed) 1976 : 237-39]. Jaspan while discussing the Rejang in South-West Sumatra, characterised by 'loosely-knit, accephalous, non-centralized political system based on patriclans states that they do not have any explicit theory of medicine or pathology. The Rejang folk doctors, known as the dukuen, attach more importance on holistic medicine. The dukuen is more concerned with holistic medicine-life-history of patient, his extended family, his spatio-temporal base, natural ecosystem and metasomatic world (Ibid, 1976 : 259-284).

A study of 86 tribal medicinemen conducted by the Scheduled Castes and Scheduled Tribes Research and Training Institute explores their typical characteristic features. Out of 86, there are 50 tribal medicinemen, the practitioners of indigenous medicines in their respective societies, as given below:—

1. Gond ... 3
2. Santal ... 6
3. Bathudi ... 4
4. Bhuiyan ... 2
5. Kisan ... 1
6. Kolha ... 2
7. Holva ... 1
8. Bhottoda ... 18
9. Omanaty ... 3
10. Kandha ... 1
11. Sabar ... 9

The tribal medicinemen are from different districts, such as Keonjhar and Mayurbhanj (7), Sundargarh (3), Nowrangpur (22), Phulbani (2) and Rayagada (9). It is evident from the above sample that 20 per cent of tribal medicinemen are illiterates and 8 per cent can read and write although they have not attended any Educational Institutions. Those who have read up to L.P. and M.E. level constitute 50 per cent and 20 per cent have read up to the secondary level and rest 2 per cent have read above the secondary level. Out of the total sample 4 are Government servants and the rest depend upon traditional occupation to earn their livelihood. The study further shows that 32 per cent of medicinemen depend upon collection of herbs for the preparation of medicine and the rest 68 per cent collect medicinal plants and herbs from forests and also purchase them from markets. It is seen that 46 per cent of tribal medicinemen attend upon 50--100 patients per month, followed by 26 per cent attending 1--50 patients and 26 per cent attending more than 100 patients. As many as 42 per cent give medicines to patients either free of cost or
for cash and 26 per cent completely free of cost. The rest
4 per cent of tribal medicinemen receive remuneration in kind,
16 per cent in cash and 12 per cent in both cash and kind.

The tribal medicinemen in the sample study cure various
types of diseases, such as headache, stomach pain,
rheumatic pain, asthma, T.B., bone fracture, skin diseases,
hernia, jaundice, 'snake-bite, fever,' eye-diseases, piles,
dysentery, fits, diarrhoea, diabetes, etc. Further, each
medicineman is a specialist in one disease or a combination
of other diseases.

The following table shows the nomenclatures of medicinemen and magicians prevalent among the Orissan tribal societies:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Tribes</th>
<th>Medicineman</th>
<th>Magician</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bhumia</td>
<td>Disari</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Bondo</td>
<td></td>
<td>Sisa</td>
</tr>
<tr>
<td>3</td>
<td>Dal</td>
<td></td>
<td>Jhankar</td>
</tr>
<tr>
<td>4</td>
<td>Didayi</td>
<td>Palasi</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gadaba</td>
<td>Disari</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ho</td>
<td></td>
<td>Dehuri</td>
</tr>
<tr>
<td>7</td>
<td>Jatapu</td>
<td></td>
<td>Jani</td>
</tr>
<tr>
<td>8</td>
<td>Kandha</td>
<td></td>
<td>Jani</td>
</tr>
<tr>
<td>9</td>
<td>Kisan</td>
<td>Disari</td>
<td>Disari</td>
</tr>
<tr>
<td>10</td>
<td>Kotia</td>
<td>Kabiraj</td>
<td>Pujari</td>
</tr>
<tr>
<td>11</td>
<td>Koya</td>
<td>Wadde</td>
<td>Wadde</td>
</tr>
<tr>
<td>12</td>
<td>Paroja</td>
<td>Gunia</td>
<td>Gunia/Disari</td>
</tr>
<tr>
<td>13</td>
<td>Santal</td>
<td>Disari</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Saora</td>
<td>Disari</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Oraon</td>
<td>Bhagamati</td>
<td>Bhagamati</td>
</tr>
<tr>
<td>16</td>
<td>Paroja</td>
<td>Disari</td>
<td>Disari\ Beju, Gurumai</td>
</tr>
<tr>
<td>17</td>
<td>Juang and Bhuyan</td>
<td></td>
<td>Raulia, Gunia</td>
</tr>
</tbody>
</table>

To quote Chaudhuri's observations, which seems relevant
in this context and which holds good in respect of Orissan
tribes: "All tribes have a group of sacred specialists—the priests and/or magicians or medicineman, the services of whom are taken depending on the cause of illness". The Ho have traditional priest-cum-headman called Deuri and medicineman-cum-magician, called Deonwa. Deuri is entrusted with the responsibilities of appeasing the benevolent deities by regular worship and periodic sacrifices and thereby saving the village from epidemics and other calamities. Deonwa deals with malevolent spirits and renders diagnostic and curative services against diseases and calamities. Similarly among the Oraon, Pahan is the religious headman of the village and Bhagamati and Kushrain are the male and female witchdoctors-cum-healers. In some tribal groups one functionary discharges both functions, i.e., the priest, and the witchdoctor-cum-medicineman.

"When a Kutia child of Orissa has its first serious illness, it is generally decided that it is now time for its naming ceremony to be performed". Their village priest-cum-medicineman is called upon to perform the magical rite. Their tribal spiritual doctors and medicinemen and their co-villagers "have a common faith in techniques used, as quite often both share the same cultural traditions. Elwin has also noted the role of male and female shamans among the Hill Saoras (1955). The services of them are taken in the treatment of disease, for the protection of crops and in the rites for the dead.... The dependence and confidence on traditional medicinemen or magicians and shamans are again often responsible for non-acceptance of modern medicine as traditional medicine establishes faith and assurance in the patients, while modern medicine lacks this aura of conviction". "As the traditional medicinemen or magicians share the common cultural traditions of the patients, naturally the (tribal) patients have more faith in them" (Ibid; 1986:7-8). In this context brief notes on few selected tribes of Orissa derived out of the studies conducted by the S.C. & S.T., R. & T.I. Orissa, at different times are presented hereunder.

THE KOYA:

The Koya constitute a major Dravidian speaking tribe of South Orissa. They are mainly concentrated in the Malkangiri district. They thrive on a subsistence economy of shifting cultivation and cattle rearing. The tribesmen strongly believe that diseases and other kinds of human miseries and sufferings are caused by the action of supernatural agencies. A Koya family continuously suffering from diseases over a period of time usually takes recourse to magico-religious diagnostic and curative practices and if unsuccessful, finally shifts residence from one site to another to get rid of the evil influence of malevolent supernaturals.
The Koya have their own traditional way of dealing with the problem of diseases. Wadde—their traditional magician-cum-witchdoctor-cum-medicineman specialises in handling this problem. "It is a common sight in the Koya area to find a 'Wadde'... engaged in chanting incantations either to ward off the evil spirit or pacifying a God who might have made an aggression against the person. In each village 'Waddes' are found more than one in number. Among these some specialise in giving medicines 'Mat' for different diseases and others cure by way of divination." (Mohapatra, 1969-70 : 14).

The wadde occupies an important position in the Koya society like the village headman (Peda) and priest (Perma). He is believed to possess powers to communicate with and control the supernatural beings and therefore capable of doing both good and evil to human beings by using his magical powers.

"The Koya word for disease is 'nopu' which is distinguished from the wounds, cuts or burns though they would take the help of the same 'wadde' to get medicine for their cure. The Koyas explain the symptoms of their disease to the 'gunia' who after his own diagnosis gives medicine which consists of the roots, leaves or barks of wild plants and trees. The knowledge is kept as a secret because the practitioner thinks his medicine will be fruitless if secrecy about it is divulged to anybody else." (Ibid, 1969-70 : 14-15). This secret knowledge is transmitted orally from generation to generation along agnatic hereditary lines. A father passes his knowledge to his son only, not to his daughter, sister or wife.

The common physical ailments of the Koya are Dur—a burning sensation of legs, Toita—swelling of foot, Daipara—a biting sensation inside the leg, Edek—fever with shivering of body and high temperature, Kank—a burning sensation on body, Pulas—swelling of body, Talanota—headache, Orgoba—migraine, Potomandia or Matia—colic pain, Netur Pota—blood dysentery, Mosa Nopu—yaws, Netur dogg—T.B., Rompa dogg—common cold and cough, Parsa Pandto—jaundice, Pandanad—chronic anaemia and weakness of children, Pram nopu—urinary tract problems, Gajji—itches, Akkanad Gajji—ringworm, etc. These diseases are treated in two ways: (i) by divination called uditan or "blowing off" and (ii) by administration of herbal medicines.

The traditional Koya medicinemen are reputed for their skill in treating severe types of wounds, cuts and fractures by application of herbal medicines. If this precious knowledge and skills are patronised and promoted, it will be very helpful in soothing the human sufferings.

THE PAURI BHUYAN:

The Pauri Bhuyan, a section of the wide spread Bhuyan tribe living in Bihar, Orissa, Bengal and Assam are considered as a primitive tribal group in Orissa and are
chiefly concentrated in Bhuyanpirh of Keonjhar district and hilly tracts of Bonai in Sundargarh district. The Pauri Bhuinya theological pantheon includes a large number of deities and spirit-benevolent, malevolent and ambivalent and they have belief in religion and magic. The Dihuri is the sacerdotal head of the priest of their society and the sccerer is known as the Bejuni. The Raulia is the witch-doctor-cum-medicineman who is connected with magico-religious procedure of treatment, substantiating medicine as a social institution. They believe that illness and disease are caused by evil spirits and vengeance of supernatural elements. The performance of magical rites leads to appeasement of evil spirits and thereby the disease is cured. Currently, their society is in a state of flux and they are showing inclination towards modern therapeutical system. They generally suffer from diseases of gastro-intestinal tract, respiratory system, worm infections, ear-nose and throat diseases, cold, cough and influenza, skin diseases, malaria and nutrition diseases. It has been suggested that the traditional medicinal system should be studied and scientifically analysed in order to determine its efficacy.

THE DIDAYI:

The Didayis consider themselves as the younger brothers to the Bondos, the Gadabas and the Parojas. They are found only in Konda Kambaru hill ranges of the Eastern Ghats. The whole of the Didayi habitat is located in the Kudumulguma Block of Malkangiri district. The tribe is a strong believer of the life after death and unseen forces that control all the human activities. The unseen forces and the spirits-both benevolent and malavolent, according to them are the cause of misfortunes, diseases, etc. Palasi is the medicineman of the tribe. He is not only a medicineman but also a magico-religious practitioner. He diagnoses the disease and prescribes the medicine mostly obtained from the herbs. Use of wine, oil, etc. are not found in the Didayi medicine system. On the other hand, the Palasi uses smoke as an item to cure certain seasonal diseases. At present the Palasi has enriched his knowledge about the diseases, its treatment and the aftercure of the patients by observing the activities of the Kabirajis, mostly the non-tribal educated ones. As a result, use of betel leaves, arecca nuts, coconut shell are being incorporated into the Didayi materia medica.

THE BONDO:

The Bondo is found in two clusters of villages belonging to the Mudulipara and Andrahal Gram Panchayats of the Khairput Block of Malkangiri district. The tribe is known for pursuance of primitive economic activities, like shifting cultivation and food gathering. The Bondos pay little attention to their personal hygiene and food habits. Consumption of excess food when it is available and intake of little water into the body system has made this tribe exposed to a variety of ailments relating to stomach. Malnutrition, poor eye sight, fever, pain in joints, etc. are the common diseases round in the Bondo highland. They believe
the ailments and diseases are nothing but caused by the spirits—both benevolent and malevolent. However, they believe that the seasonal diseases are the outcome of the activities of the patient himself. The sisá is the medicineman of the Tribe. He diagnoses the disease and prescribes the medicines. Most of the medicines are prepared from locally available herbs. He too fortifies it with chanting of mantras before administration to the patients. Now-a-days, the Bondas show more inclination towards the medicinemen, who are educated, have clean habits and practices. It seems that the so called Bondo medicineman has a great future in Bondo highland.

POLICY ISSUE AND OPTIONS:

1. Since indigenous/primitive/traditional/folk/tribal medicine, a social institution and an integral part of the whole culture, includes a number of medical practices which are often employed in modern medicine, assimilates several drugs used in modern medicine and resemble each other in psychotherapeutic modalities, there is enough scope for both the medicines to operate simultaneously.

2. Since the medical beliefs and healing practices in Tribal medicine are crystallised in ethnoscientific knowledge acquired by men through historical created designs for living within their ecocultural system, the indigenous medical practices could perpetuate as rational and efficacious methods.

3. Since modern medicine is costly, its network has not reached the interior-most areas, the Tribal people will not be able to get the benefit at their door-steps, hence there is need for the patronisation of Tribal medicine.

4. Since the current approaches to medical pluralism (Allopathy, Ayurveda, Homoeopathy, Unani, etc.) will perpetuate, the support for revival and rejuvenation of Tribal medicine, except its spurious magicoreligious aspects, are advantageous to cater to the needs of the denizens of hills and forests.

5. Since Tribal medicine is integrated in other cultural elements of a society, its concept and practice are epistemologically transmitted from generation to generation orally in the absence of written language in non-literate/pre-literate societies, there is need for documentation of such languishing tradition, notwithstanding the secrecy, discretion and confidentiality maintained by traditional healers who prefer to transmit along the lines of descent in kinship configuration.

6. Since Tribal medicine needs perpetuation, there is expediency in research and training for consolidation and conservation, thereby aiming at the well-being of the
people and the enhancement of the quality of life, a much awaited goal of the planned development intervention.

7. Since the tribal medicine and medicinemen are to be safeguarded for their dedication to the suffering humanity, there is need for legal provision to protect their intellectual property rights under the General Agreement on Tariffs and Trade (GATT) and other allied international agreement.

BIBLIOGRAPHY


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K. K. Mohanti
Editor and Director
CULTURAL DIMENSIONS OF DISEASES AND THEIR TREATMENT
(Case studies from Tribal Societies of Orissa)

N. K. BEHURA

PROLOGUE:

The foundation of human life and other forms of life on Earth is the varied bounteous nature itself. Humans transform the natural order of their habitat into a moral order or natural ecology to 'cultural ecology' by means of their culture. Culture comprises the integrated sum total of learned behaviour traits characteristic of the members of a society. The manner of coping of the members of a community with their environment is largely dependent on the type of technology they possess and its efficacy. Variability of the physical environment, of course, necessitates differential adaptation. Technology is crucial in man-nature relationship, and thus environment does not fully determine the culture of a human community, although it influences (Environmental possibilism rather than determinism) to a certain extent.

Biological needs are common to all humans, and these are satisfied through the imperative cultural responses, which are indicative of the type of technology, nature of social structural and ideological endowment of a community. In this regime, technology occupies primary of importance.

PARADIGM OF MAN-NATURE RELATIONSHIP

CULTURE NATURE

1. Techno-economic subsystem

2. Social-structure subsystem

3. Idological subsystem

The first determines the second and first and second together determine the third. All the three constitute the domain of human culture, and the latter determines the trend and tenor of articulation with natures as well as harmonious continuity of the former two. Culture is the sum total of integrated responses to the basic or biological needs of humans, which are common to all, and vary from society to society.
<table>
<thead>
<tr>
<th>BASIC OR BIOLOGICAL NEEDS</th>
<th>CULTURAL RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Metabolism</td>
<td>Food acquisition and arrangement including production, distribution, processing and consumption.</td>
</tr>
<tr>
<td>2. Reproduction</td>
<td>Regulation of sex through socio-cultural institutions of marriage, family, kinship, juridical machinery and overall political organisation.</td>
</tr>
<tr>
<td>4. Safety</td>
<td>Socio-cultural mechanisms for protection and designing of instruments of law and order.</td>
</tr>
<tr>
<td>5. Growth</td>
<td>Mechanism of enculturation, socialization and training.</td>
</tr>
<tr>
<td>6. Movement</td>
<td>Participation in socio-cultural activities as defined and delineated by society. Functioning as a member of a society.</td>
</tr>
<tr>
<td>7. Health</td>
<td>Adoption of organic welfare measures, abiding by culturally defined, hygienic practices, steadfastly following ethnic healing methods of sickness and reposing faith in cultural beliefs regarding health and sickness.</td>
</tr>
<tr>
<td>8. Fatigue</td>
<td>Rest and relaxation</td>
</tr>
<tr>
<td>9. Fright, Pain &amp; Tension</td>
<td>Riddance of the cause, Equanimity is achieved through extrication.</td>
</tr>
</tbody>
</table>

*Bronislaw Malinowski's formulation, 1931.*
CHARACTERISTICS OF TRIBAL COMMUNITIES

Tribal communities generally inhabit forest and hilly areas. Some also live in rural interiors. The hallmark of their life is that it is shut off from intense interaction with numbers of other communities. Their technoeconomic level being low and simple they live under marginal and sub-marginal economic conditions. They depend on more than one economic pursuit. Hunting and gathering activities are inalienable components of their economy. Their respective cultures are homogeneous, social structures are segmentary, kinship systems are tempered classificatory, and villages are, by and large, of uni-clan composition. Their ideological system centres round supernaturalism, and they are animists and fatalists. They believe that everything is predetermined, and all that happens are inevitable. Gods, goddesses, presiding deities and spirits determine the nature of things that happen to human and there are specialists who intermediate between the supernatural beings on the one hand and the humans on the other. The levels of their awareness and aspiration are comparatively lower because they lack education and exposure. After fifty years of independence, the nation has not been able to achieve total literacy. 'Education for all and health services for all' has remained as a hollow political slogan. Literacy is not education, and in spite of this the literacy figures are dismal and appalling. As per the 1991 census figures, the rate of general literacy in the State of Orissa is 48.55 per cent (population includes the age-group of seven and above) with male literacy being 52.5 per cent and female literacy 29.1 per cent, as against the literacy rate of Scheduled Tribe Population of the State being 18.10 per cent (male 27.93 per cent and female 8.29 per cent).

In general the tribal population, which lacks education and material resources, suffers from low nutritional status. The rate of infant mortality is 80 per 1,000 among them. Their life expectancy is lower than the national average of 60 years. As per Government record by 1990, about 54 per cent of tribal people had access to safe drinking water. But the reality situation in the State of Orissa seems to be different. Most of them live in sub-human physical condition. They often live in the same house alongwith their livestock which does not have ventilation facility. In many villages both humans and cattle bath in the same pond or stream.

Tribal people have adapted to their environments by means of their biological and cultural endowments. Their health and sickness are influenced by a combination of biological, cultural and environmental factors.

ENVIRONMENTAL SANITATION (Lanjia Saora and Koya)

Humans everywhere as per their cultural knowledge, have developed the indigenous methods of preventing, diagno-
singing, alleviating and curing of various diseases. In this context environmental sanitation and personal hygiene have emerged as important considerations. While growing up humans progressively realize the dialectics between health and sickness, which operationally is dependent on certain variables like social circumstances, cultural habits and physical environment. The State of public health can be measured not merely from the incidence of diseases, but from the conditions of life of people, which encompasses the physical environment, sanitary habits, food patterns and practice of personal hygiene.

Tribal people inhabiting forest and hilly areas mostly depend on small perennial hill streams for their water requirement. As safe drinking water is not available in Koya and Saora territory, the State Government have installed tube-wells to solve the problem. The tube-wells do not yield adequate water during summer months, and about fifty percent of them remain dysfunctional always, may be due to improper handling. They are some dug-wells in the Saora and Koya villages, which have been sunk by the State Government agencies to ease the water scarcity problem. The surroundings of the tube-wells as well as wells are swampy, dirty and utterly unhygienic as the used water stagnates and becomes sullage and people throw all sorts of rubbish around them. People do take both sometimes, housewives clean utensils and dirty linen, and anal washing of children is done after defecation around the tube-wells and wells.

The streams are used for bathing of humans and livestock. Dirty clothes are cleaned in the stream water directly. Buffaloes lie down in the stream water most often. Women wash their menstrual linen directly in the stream water. Men and women defecate on either side of the stream and wash the rectum directly in the stream water. Beside the stream water always carried decomposed leaves and other vegetative matter, which provide appropriate milieu for the breeding of various kinds of parasites. Polluted water spreads water-borne diseases. The Koya and Saora frequently suffer from intestinal diseases, like diarrhoea, dysentery and dyspepsia and polluted water is said to be the cause of these.

Adult Koya and Saora, both male and female, usually defecate near the stream and in the vacant field surrounding the village habitation. Children below 7 to 10 years of age defecate within the village settlement, and roaming pigs usually eat of the excreta. The excreta of babies are disposed of in the garbage heap located at the backyard of almost every house. The accumulated garbage decomposes, emits foul smell and functions as a favourable receptacle for breeding of varieties of parasites.

The environment of tribal villages remains polluted and dirty for a variety of reasons. The village street is littered with animal dung, household refuse, excreta of children and swamps of human and bovine urine. There is no arrangement for the disposal of household sullage water. The water
used for such domestic purposes as washing of utensils, cleaning of food materials, occasional washing of clothes and bathing of children, sick and old persons is released to a pit located outside the house, where it is allowed to soak into the ground or remain stagnant and become a favourable cradle for various types of parasites.

PERSONAL HYGIENE

Unlettered tribal people steeped in traditional practices lack an understanding of environmental sanitation and personal hygiene in the context of health and prevention of diseases. When 70-4 per cent tribal people in the country are illiterate, half-fed, ill clothed and mostly live in unhygienic conditions, their attitude towards environmental sanitation and personal hygiene is bound to be archaic.

Educated tribals as well as those who have been converted to Christianity have better sense of personal hygiene. For tradition bound tribal people cleanliness is more a matter of ritual purification. They believe that health is ensured by supernatural entities and factors like regular bathing, washing of clothes, cleaning of head-hair, regular washing of mouth, regular clipping of nails and toes are not considered as essential from the point of view of good health.

They eject out tobacco saliva everywhere. The inside walls of their houses are littered with saliva. As they lie down on untidy floors and do not regularly wash their bodies most of them suffer from various types of skin diseases.

FOOD HABITS AND FOOD TABOOS

In tribal areas of India, the larger part of the diet is obtained from locally available and produced food materials. Religious customs, and local traditions relating to feasts, fasts and food taboos do have a bearing on the dietary pattern of the people.

There are three major sources of food for the tribal population, these are: (i) their own crop fields, (ii) local forest and water resources and (iii) local market. There is of course seasonal variation of food for the majority of the tribal people as they cannot ensure steady supply of food materials for the consumption of their family. Their harvest and post-harvest period extends from November to March, during which they depend on the crop-yields of their lands. Hereafter they become dependant on the nearby forest for food. From April to June they almost completely depend on various types of wild berries, palm fruit and juice, date and date-palm juice, cashew fruits, mangoes, jackfruits, pineapple, orange, banana, papaya, kendu (dispyros ambriyopteris), Sago palm juice (caryotaureus) etc. And from August to October, the acute lean period for most of them, they depend on seeds of tamarind, mango, jackfruit, palm, bamboo-shoot and wild yarns and tubers. In the past forest was the reservoir of their food materials. They used together, hunt and collect materials as and when necessary. Now their entry into forest is considered as an encroachment and moreover, forest resources have been greatly depleted.
The nutritional value of their food items and the calorific units of their food intake have not been analysed here. The tribal people eat three times a day when food is available. During morning and midday they take millet or rice gruel and eat a simple meal of cereals before dusk, this is the usual pattern.

A detailed list of food materials of the Orissan tribes is furnished below, which are not always available to them. They are aware of these items.

### 1. CEREALS

<table>
<thead>
<tr>
<th>Oriya Term</th>
<th>English Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Dhana</td>
<td>Paddy</td>
</tr>
<tr>
<td>(b) Makka</td>
<td>Maize</td>
</tr>
<tr>
<td>(c) Mandia</td>
<td>Millet</td>
</tr>
<tr>
<td>(d) Bajra</td>
<td>Spiked millet</td>
</tr>
<tr>
<td>(e) Kangu</td>
<td>Large millet</td>
</tr>
<tr>
<td>(f) Ghantia</td>
<td>Dwarf millet</td>
</tr>
<tr>
<td>(g) Jawar</td>
<td>Oat</td>
</tr>
<tr>
<td>(h) Gahama</td>
<td>Wheat</td>
</tr>
</tbody>
</table>

### 2. PULSES

| (a) Mugo   | Green gram         |
| (b) Biri   | Black gram         |
| (c) Harada | Red gram           |
| (d) Buta   | Ground gram        |
| (e) Bargudi| Dwarf gram         |
| (f) Kolatha| Horse gram         |

### 3. VEGETABLES

| (a) Baigana| Brinjal           |
| (b) Kakharu| Pumpkin           |
| (c) Lau    | Gourd             |
| (d) Kakudi | Cucumber          |
(e) Panikakharu  
(f) Kalara  
(g) Bhendi  
(h) Kandamula  
(i) Alu  
(j) Matialu  
(k) Khara  
(l) Kanta saga  
(m) Kosala  
(n) Mula  
(o) Poi  
(p) Sorisaga saga  
(q) Chhachindra  
(r) Jonhi  
(s) Shamba  
(t) Kadali  
(u) Leutia saga  
(v) Sajana chhuin  
(w) Bilati baigana  
(x) Potala  
(y) Kunduri  
(z) Beans

White pumpkin  
Bitter Gourd  
Lady's finger  
Sweet Potato  
Potato  
Yam  
Tall spinach  
Thorny spinach  
Spinach  
Radish  
Onctuous greens  
Mustard greens  
Snake gourd  
Luffa acutangula  
Country beans  
Plantain  
Amaranth  
Drum stick  
Tomato  
Parbol  
Creeper gourd  
French beans

4. FRUITS

(a) Aamba  
(b) Lankamba  
(c) Aata  
(d) Pijuli  
(e) Khajuri  
(f) Kamala  
(g) Sapuri  
(h) Panasa  
(i) Kadali  
(j) Talo  
(k) Nadia  
(l) Kendu  
(m) Jamukoli

Mango  
Cashew fruit  
Custard apple  
Guava  
Date  
Orange  
Pine apple  
Jackfruit  
Banana  
Palm fruit  
Coconut  
Blackberry
(n) Papaya  
(o) Barakoli  
(p) Tentuli

5. SPICES

(a) Piaja  
(b) Rasuna  
(c) Kanchalanka  
(d) Sukhila lanka  
(e) Dhania  
(f) Sorisa  
(g) Juani  
(h) Mahuri  
(i) Ada  
(j) Haldi  
(k) Luna  
(l) Labang  
(m) Dalchini  
(n) Alaicha  
(o) Methi

6. MUSHROOMS

(a) Uuihunka Chhatu  
(b) Balli Chhatu  
(c) Nada Chhatu  
(d) Baunsha Chhatu  
(e) Salagachha Chattu  
(f) Aambagachha Chhatu  
(g) Jammugachha Chhatu  
(h) Matti Chhatu  
(i) Karanjagachha Chhatu  
(j) Katha Chhatu  
(k) Patra Chhatu  

Papaya  
Berry  
Tamarind  
Onion  
Garlic  
Green Chilli  
Dry Chilli  
Coriander  
Mustard  
Thymol  
Aniseed  
Ginger  
Turmeric  
Salt  
Clove  
Cinnamon  
Cardamom  
Tenugreek  
Ant-hill mushroom  
Sand mushroom  
Straw mushroom  
Bamboo mushroom  
Sal-tree mushroom  
Mango tree mushroom  
Black berry tree mushroom  
Field mushroom  
Wood mushroom  
Leaf mushroom
7. HONEY
(a) Machhia
(b) Baghua
(c) Pania
(d) Kharadinia
(e) Sheetadinia
(f) Baramasi

8. MEAT AND FISH
(a) Goat meat
(b) Lamb meat
(c) Deer meat
(d) Pork
(e) Beef
(f) Chicken
(g) Rabbit meat
(h) Reptile
(i) Birds
(j) Eggs
(k) All sorts of fish and
(l) Snakes

METHODS OF COOKING

The method of food preparation and cooking is an important factor in determining the level of nutrition in take of people. The absorbability of the essential food constituents in the diet depends on the method of cooking to a desired extent. Tribal people mostly take boiled, baked and parched food items. They always under cook, that is, they do not make any cooked food too soft. They eschew over-boiling and complete baking. They have a habit of eating some food items raw. They even eat fish and meat raw. They prefer below normal boiled meat. They love to masticate food items.

They sometimes peel off the vegetables, but usually cook them with their rinds. Ripe fruits are eaten after peeling off the outer covers. Before cooking food materials are not meticulously cleaned and washed. They believe that through washing essential food values are lost. They do not have any concept of vitamin. They, therefore, say that washing spoils the taste. They highly relish baked food, be it vegetable, meat or fish. They also consume viscera of animals and large fishes.

9. OIL SEEDS
(a) Sorisa—Mustard
(b) Tila—Niger
(c) Rasi—Sesamum
(d) Joda—Castor
(e) Khasa—Linseed

10. BEVERAGES
(a) Sago palm secretion—Caryota urens.
(b) Mahuli—Distilled bassia Latifoliapulp.
(c) Date palm secretion—Borassus flabelifer.
(d) Palm tree secretion—palmyra palm.
ecology and socio-cultural factors influence diseases. Social and cultural distinctions associated with variations in age, sex, ethnicity, class and community can have significant bearings on epidemiological phenomena. Sex and age differences have a correlation with the incidence of certain types of diseases.

Among non-literate and tradition-bound tribal people certain cultural habits, such as, bathing in the same pond or stream water along with their domestic animals, non-use of water for anal-washing after defecation, non-washing of menstrual fluid, non-washing of hand before eating food and non-washing of mouth after eating the principal meal of the day do have some sort of adverse impact on their health. A peculiar cultural practice is found among the Orissan tribes, that is, when a person is suffering from malaria and running high temperature, he/she is made to lie down under the sun. Their logic is that high temperature of the body would be neutralised by the heat of rays of the sun.

Social and cultural factors are casually connected with disease occurrences indirectly, when poverty is linked to malnutrition, and malnutrition induces a number of diseases among children, or directly, as in the case of some people using their own utensils for feeding the domestic animals, particularly pig, dog, eat and mongoose.

Social and cultural distinctions associated with differences in age, sex and occupation do have significant effects on epidemiological phenomena.

AGE DIFFERENCES

Due to lack of physiological resistance tribal children are susceptible to several diseases, such as, diarrhoea, dysentery, dyspepsia, common cold, fever, jaundice, scabies, ringworm, anaemia, etc. Death rate is relatively high among infants. The incidence of numerous acute infections is highest among children in general, but is more among tribal children. As people grow older they develop immunities that decrease their vulnerability of these diseases.

SEX DIFFERENCES

Biological factors play a large part in sexual differences in mortality, with females having longer life expectancy. However, women frequently suffer from reproductive diseases, sustain ovary and breast ailments. Men on the other hand are affected by rural and cardiovascular diseases. More tribal women suffer from arthritises as they are frequently anaemic and always carry heavy loads on their head. Several tribal women, after child birth, suffer from gynic and obstetric problems.

OCCUPATIONAL DIFFERENCE

There is a correlation between occupation and disease. Effects of occupation on disease have been an important aspects of epidemiology, because social aspects of pathology indicate that susceptibility to disease varies in accordance with the means of gaining a livelihood. Tribals who raise pigisty suffer from worm infection. Likewise, tribals working in cement factories suffer from thoaracic diseases.
SOCIAL STATUS AND ETHNIC DIFFERENCE

Influence of social status and ethnic differences on disease occurrence has been established by several studies. This influence is significant in nutritional maladies and in infectious diseases, where occurrence is dependent on material conditions of life. Malnutrition is almost nil among the secular-sacred functionaries of tribal communities as they are materially well off. Whereas the commoners mostly suffer from this malady. Infectious diseases occur more among the uneducated persons in tribal societies.

Difference in disease rates of ethnic groups have been an important problem in epidemiology. Occurrence of sickle cell anaemia has been investigated in this light, and inter group variations in its prevalence have been found in Orissa. Tribes belonging to Dravidian language family have reported positive, and their neighbouring tribes belonging to the Mundari group have reported negative.

CULTURAL CORRELATES OF HEALTH AND SICKNESS

Health, hygiene, sickness, diagnosis and disease-treatment comprise a vital sector of human society everywhere. In tribal India not much has been done in this important sector. And whatever little has been done, it is always from the viewpoint of modern medical science. Modern allopathic treatment presupposes certain conditions which go along with it and follow it too. Such conditions are almost totally non-existence in tribal societies. However, all tribals, primitive or advanced, consider disease as pernicious and detrimental to normal life. It is certainly a departure, temporary or permanent, from the normal state of health.

Tribals do not consider any disease as the cause of neglect of body or its organs. They consider disease as an integral part of the life process. They believe disease causes both transient and intransient illness, and disease means unhappiness, fear, tragedy, expenditure, suffering and ultimately death. They assert that most diseases are caused by supernatural entities, but there are other factors too, such as environmental.

ETIOLOGY OF ILLNESS

Tribals usually attribute (i) wrath or displeasure of supernatural entities as the cause of disease and sickness. One incurs the displeasure of ethereal beings for breach of appropriate rules of conduct, (ii) commitment of sins through breach of taboos, (iii) non-fulfilment of obligations towards masses, (iv) magico-religious or occultism as the other cause, when sickness is believed to have been caused by the machinations (including evil eye and spirit intrusion) of witches and sorcerers, and (v) physical or environmental causes, which include accidents, venomous snake or insect-bite, attack by ferocious animals, eating of inappropriate food, contact with poisonous insects and plants, effect of changing weather and environmental factors.
EMIC CLASSIFICATION OF DISEASES

Tribal people classify diseases as per the dictates of their culture.

1. COMMON OR FREQUENT DISEASES

(a) Fever: It causes body temperature. Sometimes, temperature is accompanied by body rigor or spasm. It alternates with fall of temperature and accompanied by perspiration and body pain and headache are common symptoms. The tendency of nausea persists, and the patient does not like to eat or drink anything. Long suffering causes swelling of face, abdomen and limbs. THERAPY: Magico-religious and administration of herbal medicine.

(b) Filariasis: The patient sustains high temperature with rigor. Limbs swell and become tender. It causes weakness and constant headache. THERAPY: Magico-religious and administration of herbal medicines.

(c) Common Headache: Irresistable pain in the head. The whole head or any one side may ache. THERAPY: Magico-religious and administration of herbal medicine.

(d) Swelling of the body: Loss of body weight, general weakness, complete loss of appetite, change of complexion and occasional nausea are the symptoms. THERAPY: Magico-religious and administration of herbal medicines.

(e) Swelling of Inequal Lymph glands: Lymph glands swell. Body temperature rises and headache is common. THERAPY: Magico-religious and administration of herbal medicine.

(f) Nephrotic syndrome: Body swelling is accompanied by mild fever, herbal medicine and general weakness and complete loss of appetite occur. THERAPY: Magico-religious and administration of herbal medicine.

(g) Colic pain: It is a common disease and many people suffer from this ailment. The patient often experiences excruciating abdominal pain. General weakness develops and loss of appetite occurs. Some patients life long suffer and ultimately die of it. THERAPY: Magico-religious and administration of ethno-medicine.

(h) Malnutrition: It is extremely common. Its symptoms include dehydration, physical weakness, nausea, loose motion with mucus discharge, and abdominal pain. THERAPY: Magico-religious and administration of valia seed oil at the navel point.

(i) Hookworm infestation: It is a common disease and many people suffer from this. One of its causes may be eating of raw meat and fish. Its symptoms include abdominal pain, loss of appetite and itching sensation. THERAPY: Application of ethno-medicine.

(j) Roundworm Infestation: It is a common disease and is believed to have been caused by witchcraft. Its symptoms include abdominal pain, fast appetite, physical fatigue and occasional body temperature. THERAPY: Magico-religious and administration of occult herbal medicine.

(k) Amoebic Dysentery: It is a common disease. Believed to be caused by inappropriate
food, over-eating of chillies, summer heat and by occasional starvation. Its symptoms include pain in the abdomen, discharge of blood and mucus along with stool and mild body temperature. THERAPY: Administration of ethno-medicine by the Shaman.

(i) Blood dysentery: It is caused by spirit-intrusion and by blackmagic. It is also caused by over-eating unhealthy food and chillies. Its symptoms include frequent motion of blood and mucus, body temperature and growing weakness leading to death. THERAPY: Spirit exorcism by the sorcerer, shaman administers ethno-medicine (Barks of tamarind, mahua, black berry and piasala are boiled and residual water mixed with honey is given to the patient).

(m) Jaundice: Its cause is believed to be spirit-intrusion. Its symptoms include retina looking yellow, urine colour becoming yellow and body appearing bloodless. The patient runs slow, temperature and experiences pain in the upper abdomen. THERAPY: The sorcerer exercises the spirit. The Shaman administers ethno-medicine which juice of a creeper or ground-seeds of custard apple.

(n) Piles: It is a non-contagious disease. It is believed to be caused by a malevolent spirit. Its symptoms include acute pain during defecation, discharge anal blood after defecation, loss of body weight and growing weakness. THERAPY: Exorcism of the spirit by the sorcerer. Shaman prescribes a finger ring made out of the scale of the Bajrakapta (scaly ant-eater reptile).

(o) Diabetes: It is caused by the wrath of supernatural entities. It is considered as a disease inducing syndrome. Its symptoms include frequent urination, fast appetite, quick thirst due to dehydration, perspiration, headache, pain the limbs and anaemia. THERAPY: Black berry free bark is boiled and the water is taken thrice a day.

(p) Discharge of Blood with urine: Its cause is believed to be supernatural wrath. Some also believe that drinking of tube-well water also causes this disease. Hence, those who suffer from this disease do not take tube-well water. Its symptoms include abdominal pain, mild body temperature, blood discharge along with urine and head reeling. THERAPY: The patient is administered juice of thalkudi (consella asiatica) and sugar-cane juice.

(q) Goiter: Supernatural wrath is believed to be its cause. Some Shaman also maintain that is caused due to spirit intrusion. Its symptoms include swelling of thorax and pain in the swollen portion. Sometimes it bursts, which causes sudden death. THERAPY: Magico-religious rites performed by the Shaman and he also prescribes herbal ethno-medicine. A paste is prepared out of the roots of three plants available in the forest (Bajramuli, nardi and mustumir) of Koya area.

(r) Lumbago: It is caused due to malnutrition on the one hand and excess physical labour on the other. Its symptoms include pain in the waist region as well as in major joints of the body. THERAPY: The Shaman administered ethno-medicine prepared
out of Karanja (Carisea carandas) and kendu (diospyrus ambriyopeteris).

(s) Rheumatoid Arthritis: The belief is that it is caused by spirit intrusion. If symptoms are swelling of body joints and decline of strength. The joints pain with little pressure on them; and thus the patient becomes immobile. THERAPY: Massaging of neem oil (azadirachta indica) on joints and application of red sandal wood paste over the joints.

(t) Syphilis and Gonorrhoea: It is believed that these are caused by the wrath of God. These are contagious and incurable. The symptoms include discharge of whitish fluid and emission of foul smell from the genitals. Both vagina and penis become ulcerous. THERAPY: The Shaman performs a cathartic or purgative rite for the patient. The patient is advised to take juice of Capparis horrida, termenalia balerica and ambe- lica myrobalan. Besides the patient is advised to apply oil extracted from Karanja seeds (Carisea carendes).

(u) Hysteria: It is believed that the disease is caused by spirit intrusion. Its symptoms include loss of skin sensitivity, and acute sensitivity to light. Partial paralysis of various parts of the body, impairment of hearing and inability to stand and walk. The patient experiences fouts of convulsims, tremors and vomiting. THERAPY: The sorcerer is engaged to perform a prophylactic rite for the exorcism of the spirit from the body of the victim.

SEASONAL DISEASES

Occurrences of certain diseases are tuned to specific seasons. Common diseases of the summer season are amoebic dysentery, malaria, chronic headache, lumago, bacillary dysentery and summer boils. The diseases of the rainy season are: diarrhoea, cold and cough, cold fever, bronchi- tis, maum and enlargement of tonsils. Common diseases of the winter season include scabbles, ring worm, chicken pox and fever.

Tribal people conceptualise some diseases are peculiar to man, some others as peculiar to women. They consider physiological (sexual) immaturity as a male disease. Similarly, they consider inflammation of breast as an obstetrical disease and melancholia as a disease common to grown up girls.

Tribal people consider some diseases as child-specific, which occur in childhood. They believe that children are vulnerable to the inauspicious factor of evil eye. As a consequence of this factor children suffer from loss of appetite, vomiting, malnutrition, fever, diarrhoea and rickets. Tribal people make dichotomous distinctions between diseases, such as curable and incurable and hereditary and non-hereditary. They consider leprosy as incurable and tuberculosis, diabetes, file- ria, colour blindness and epilepsy as hereditary. They too consider arthritis as old-age specific disease. This sort of knowledge is part of their cultural heritage.

ETHNO-MEDICAL SPECIALISTS

When some sort of affiliation or sickness occurs, it may be ignored and tolerated or treated with or without the help of a specialist. If remedy or treatment is sought from a native magico-medical
practitioner. Amongst them there are specialists, such as diviner, ethno-medicine man, shaman, midwife, masseur and sorcerer. Therapists may have specialization in one type of skill or in more than one trade. Several years of training and apprenticeship in an integral attribute of a specialist. Besides, spiritual accreditation is a further attribute of indigenous medical roles.

In a tribal society there is a general lack of finer specialization of roles. Therefore, a particular functionary normally combines in himself several functions, such as, divination, exorcism, medicine-prescription, performance of cathartic rites and shamanism. But there is no justaposition of the roles of shaman and sorcerer in one man. Shamans have multiple functions and their services are always sought for. Their operations cover a wide range of activities, which include omen-reading, sooth-saying, divination for detection of the cause of suffering, exorcism, removal of the harmful effect of evil-eye, nullification of the influence of witchcraft or sorcery, propitiation of deities and manes, control or appeasement of malevolent spirits, preparation of magico-religious charms for clients, prescription and administration of ethno-herbal medicines, cure of snake-bites. All their activities centre round cure of diseases, amelioration of sufferings and removal of socio-personal maladies. They are always held in high esteem. Their conduct is never suspected or questioned as in the case of witches and sorcerers. He is regarded as a benefactor and friend of his society. He enjoys the confidence of his clientele.

CULTURAL ASPECTS OF THERAPEUTICS

Ethno-medicinal beliefs and practices are influenced by culture. The relationship between human sickness, treatment, healing-medicines and the rest of culture in a society is intimate. Concept of disease, classification of diseases, procedures of diagnosis and therapy are all influenced by culture. Indeed concepts of disease are cultural classification of illness. They do not, of course, cover the whole range of misfortune a community may face over a long period of time and in a general sense.

Studies, conducted among the Koya and Saora of Orissa, suggest that they make an emic classification of disease into eleven broad categories apart from the physical disabilities and deformities. The categories are: (1) common diseases, (2) seasonal diseases, (3) hereditary diseases, (4) skin diseases, (5) contagious diseases, (6) dental diseases, (7) mental diseases, (8) child diseases, (9) masculine diseases, (10) feminine diseases and (11) old age diseases.

Diagnosis of a disease is done through the identification of symptoms, which are culturally influenced. A grown of person report the symptoms to the kins and the shaman, whereas parents and kins decipher the symptoms of the disease of child. Though the symptoms of a disease are
physical and mental, their comprehension is cultural.

Medicinemen and Shamans possess a comprehensive knowledge about the medicinal plants, herbs, tubers, roots, barks, leaves, flowers, seeds, fruits, birds, reptiles and animals in their environment from which extract medicines. They have over the years, generation after generation, through personal experience have established correlation between the properties of various ethno-medicinal elements and amelioration of particular diseases. Such knowledge is, of course, eco-culture specific. Therefore, it varies from tribe to tribe in details, but may not be in gross.

The following list provides an idea of ethno-medicinal elements among the tribal communities.

<table>
<thead>
<tr>
<th>Oriya term (1)</th>
<th>Botanical term (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anla</td>
<td>emblica myrobalan</td>
</tr>
<tr>
<td>2. Bhada</td>
<td>terminalia bellerica</td>
</tr>
<tr>
<td>3. Horida</td>
<td>caparis horrida</td>
</tr>
<tr>
<td>4. Saparkachu</td>
<td>colacasia</td>
</tr>
<tr>
<td>5. Pippala</td>
<td>ficus religiosa</td>
</tr>
<tr>
<td>6. Kendu</td>
<td>dyospyros ebenum</td>
</tr>
<tr>
<td>7. Limba</td>
<td>azadirachta indica</td>
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<td>8. Sirisa</td>
<td>albizzia lebbek</td>
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<td>9. Dimiri</td>
<td>ficus glomerata</td>
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<tr>
<td>10. Kaitha</td>
<td>limonia acidissimo</td>
</tr>
<tr>
<td>11. Sal</td>
<td>shorea robusta</td>
</tr>
<tr>
<td>12. Kusuma</td>
<td>catharmus tinctorius</td>
</tr>
<tr>
<td>13. Sisu</td>
<td>dalbergia latifolia</td>
</tr>
<tr>
<td>14. Baragacha</td>
<td>ficus bengalensis</td>
</tr>
<tr>
<td>15. Tentuli</td>
<td>tamarindus indica</td>
</tr>
<tr>
<td>16. Haladi</td>
<td>carcuma domestica</td>
</tr>
<tr>
<td>17. Babul</td>
<td>accasia arabica</td>
</tr>
<tr>
<td>18. Khaira</td>
<td>accasia catecium</td>
</tr>
<tr>
<td>19. Baruna</td>
<td>cratera religiosa</td>
</tr>
</tbody>
</table>
1. Bassia latifolia
2. Balsam impatiens
3. Balsam siricola
4. Bombax malabaricum
5. Gesalpinio bonducella
6. Calamus viminalis
7. Callophylhum inophyllum
8. Lutee monosperma
9. Rauwolfa serpentaria
10. Artocarpus integrifolia
11. Lumini
12. Hebsicus annabinus
13. Ginger dehydrate
14. Piper longum
15. Brassica compestris
16. Myristica fragrans
17. Antheephellus cadambher
18. Zyzyplus jujuba
19. Cynodam dactylon
20. Nauclea parvifolin
21. Araca indica
22. Plamneria acutifolia
23. Cedrela toona
24. Datura ferfuture
25. Citrus aurantam
26. Clitoria ternatia
27. Coxx lachrymajoib
28. Dendra calamus strictus
29. Bambusa arundinacca
48. Bedu
terminals tomentosa
caryotaurens
kochilakhai
contella asiatica
andrographis paniculata
masua ferra
carisea carandus
micholia champaca
allinum cepa
allinum sibira
anonna reticulal
anonna squama
citrus aurantam
carum capticum
mimusops elengi
anthocepalus cadulia
recimus communis
ocimum sanctum
eaegle marmelos

50. Bhalia
51. Thalkuni
52. Kalamanga
53. Nagakesara
54. Karanja
55. Champa
56. Piaja
57. Rasuna
58. Neua
59. Aata
60. Jambila
carisea carandus
micholia champaca
allinum cepa
allinum sibira
anonna reticulal
anonna squama
citrus aurantam
carum capticum
mimusops elengi
anthocepalus cadulia
recimus communis
ocimum sanctum
eaegle marmelos

61. Juani
carisea carandus
micholia champaca
allinum cepa
allinum sibira
anonna reticulal
anonna squama
citrus aurantam
carum capticum
mimusops elengi
anthocepalus cadulia
recimus communis
ocimum sanctum
eaegle marmelos

62. Bakula
63. Kadambä
64. Jada
65. Tulasi
66. Bel

MODERN PATENT MEDICINES AND TRIBAL CULTURE, INTERFACE

Under the impact of State Sponsored Economic Development Programmes and processes of modernization traditional cultures of tribal communities have started changing. Ongoing literacy programmes, systems of education and general administration have increased the level of awareness of tribal communities to some extent, although the slogans "education for all, health care facilities for all, safe drinking water for all, communication facility to all Pachayat Headquarters, and more edible oil (raising of per capital consumption) for the country" still seem to be hollow. However, something has been achieved.

Primary Health Centres, Dispensaries and Small Hospitals have been established in tribal areas or scheduled areas but often doctors and paramedical personnel are not there. Doctors rarely stay there because there is no scope for private practice. Under
These pathetic conditions primary health care services do not reach the entire tribal population. Consequently quacks and medical mafias are indulging in drug-peddling and sale of suprious allopathic medicines and ampoules of distilled water. The situation is painful and appalling. Tribals are eager to use modern medicine for its quick results. Under these circumstances a new system be designed to cater to the needs of tribal people.

Medical science recognizes that there are three levels of treatment as ailments or sicknesses are classified into (i) minor, (ii) medium and (iii) major depending on the gravity of suffering of a patient. Minor ailments can be attended to by trained health workers, the second category of sickness can be handled by general physicians, and the third category certainly requires the services of specialist physicians/surgeons. If the literate shaman, shamans and tribal medicine men are imparted training in primary health care services, then they can serve the tribal people better and the present ugly scene can be obviated. This suggestion need be debated and conclusion be arrived at.

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TRIBAL CULTURE AND ETHNOBOTANY
(A STUDY OF THE JUANG AND SOME USEFUL PLANTS)

This paper on tribes of Orissa and their development has three parts. The part one highlights the symbiotic relationship between the tribal communities and the forest, which is being depleted at an alarming rate resulting in crisis in the life not only of the tribal communities but also of the entire population of the State. This part also gives a glimpse of the problems faced by the tribal communities resulting from their underdevelopment and their deprivation from the rights and privileges.
The second part deals with a case highlighting how the Juang community lead their life and how they have adapted to their ecosystem through their ingenuity and intelligence. This part gives an account of their present perception regarding different aspects of their society and culture and their knowledge and practices.

The third part gives a short account of vegetation of the Juang area and utilization of some specific plants in their material culture, culinary practices, oil yielding seeds and socio-economic life.

Orissa is a land of tribes and one of India's most important forest States providing home to a very large forest-dependent tribal population. Represented by 22.5% of the total population of the State the tribes of Orissa, which are scheduled as 62 different ethnic groups, can broadly be classified into six socio-economic categories. These are 1. Hunters and Food gatherers, 2. Pastoral tribes, 3. Artisans, 4. Shifting cultivators, 5. Agriculturists and 6. Industrial workers. Of the 62 tribal groups numbering about 7,032,214 in population seven groups and five sub-groups have been declared as primitive tribal communities. The seven main groups are the Birhor, Bonda, Didayi, Juang, Kharia, Lodha and Mankidia, and the five sub-groups are the Dongria Khond and Kutia Khond of Khond tribe, Lanjia Saora and a backward section of the Saora tribe and the Paudi Bhuinya of the Bhuinya tribe.

These primitive groups and sub-groups are all forest dwellers. From, administrative and developmental point of view they are regarded as primitive. But by the term 'primitive' it does not mean that they are poverty stricken in the sense as we understand it. It only relates to an earlier stage of economic evolution as distinct from a lower level in economic structure which is coterminus with the stage of poverty. The primitive tribes may belong to the pre-agricultural level of technology but they are not necessarily poor. They are as intelligent and skillful as those occupying the higher level of economic development are. It has been our observation that the more primitive a community is the more adaptive capacity the community has to master its surrounding environment for its livelihood.

Numberless examples can be cited to substantiate the above observations. Mentioning only a few, the Andamanese objects inducing the outrigger canoes used for killing aquatic animals; various types of traps operated by different mechanisms including torsion, gravity and other forces, for catching birds and wild animals are some of the best examples of the ingenuity and intelligence that the hunters and food gatherers are endowed with. Similarly the icons and wall paintings, engravings and wood carvings speak volumes of artistic talents and imaginative power specific to the primitive tribes.

The indigenous knowledge and practices of the forest dwelling tribal communities are unfathomable. They have a vast store of knowledge about every nook and corner of the

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forest with which they have a symbiotic relationship. They live in harmony with their environment, their life way incorporating all that promotes preservation of resources and sustainability.

Being the sources of their livelihood the primitive tribes draw from the forests what they need to satisfy their immediate needs. Their customs and religious belief have taught them not to abuse the Nature's generosity by exploiting the plants and animals beyond the limit of what they need for their sustenance. They lead a kind of life free from pollution crisis as is the case in the life of the urban people. They collect fruits, nuts, leaves, roots and shoots from the forests which comprise their food. Similarly they hunt animals and birds and catch fish in the hill streams to supplement their vegetable diet. They are knowledgeable about which plants are sources of fibre, which are good for fuel and lighting and which have medicinal value. They are so much aware of evil consequences of over exploitation of forest resources that the conservation of the plants and animals rather than misuse and over exploitation has been a part and parcel of their culture and practices.

The forests which are the very life of the primitive tribes is on the process of decline at an alarming rate. This State's total forest area was estimated to be nearly six million hectares in 1981. By 1989, the satellite imagery indicated that this had decreased to 4.7 million hectares, that is, a decline by 22%. What are the reasons for shrinkage of the forest?

It is a common thing that the tribal communities are blamed for such deforestation. It is true that to some extent the practice of shifting cultivation has been one of the causes of deforestation. But the major causes are commercial logging, mining operations, expansion of commercial plantation crops, land speculation, population pressure, annual burning of forests, exploitation of forest for wood fuel, indiscriminate tree felling by contractor-official-politician nexus, cattle and goat browsing, drought condition forcing people to exploit forest, land settlement projects requiring clearing of forests, encroachment on forest lands by subsistence farmers and shortening follow period are some of the major causes of deforestation. The insensivity of the past National Forest Policies and disregard to the customary rights and symbiotic relationship between the tribal people and forests have done more harm than good in the matters of protection, regeneration and conservation of forest wealth.

Orissa's forests are very rich in Non Timber Forest Products or Minor Forest Produce. There are plants/trees yielding resin, wax, gum, bark, edible fruits and oil seeds. Medicinal herbs are plentifully available. Kendu leaves, Sal seeds, Broom grass and many other types of NTFPs are great sources of income in the form of revenue to the State exchequer. In a land of plentiful forest products of great value there is stark poverty among the tribal forest dwellers who collect such products to supplement their income from
other sources. According to the National Commission on Agriculture, the earning of tribal people from the MFP constitutes 30 per cent to 50 per cent of their total income.

There are many reasons for the tribals not getting maximum benefit from this source. First is that there is no optimum collection of such products. The tribals do not get either a fair price for what they collect or are not provided with technical know-how for undertaking simple preliminary processing of the products for value addition. The LAMPS and the TDCC, which have been set up for the marketing of the products, are not functioning properly for multiple reasons. No serious attempts have been made to organize Co-operative Societies among the tribal people at the grass-root level and helping them to start processing and marketing of the finished products. Wherever such indigenous initiatives have surfaced, these have been entangled in the politico-legal nexus resulting in troubles and discouragement.

The most important issue is in respect of intellectual property right of the indigenous and tribal communities over the natural resources of their habitat. The adoption of Agenda 21 at the United Nations Conference on Environment and Development in 1992 was aimed at supporting self-reliance of indigenous and tribal communities through Co-operatives and other self-help organisations with the objective of promoting preservation of sustainable indigenous knowledge systems and practices, particularly regarding environmental protection and natural resource management. The ILO convention 169 enjoined on the member States to enable the indigenous and tribal populations to pursue the material well-being and spiritual development without any hindrance and discrimination. The convention also speaks of special measures to be adopted for safeguarding the persons, institutions, property, labour, culture and the environment of the peoples concerned.

Long ago Pandit Jawaharlal Nehru had enunciated the five Fundamental Principles of the State's Policies towards the tribal people of India. One of the principles was that tribal rights in land and forests should be respected. Later the Constitution of India enshrined several provisions for the protection and promotion of educational and economic interests of Scheduled Caste and Scheduled Tribe and other weaker sections. In spite of these safeguards and constitutional provisions, there seems to be no spectacular change in the quality of life of the tribal communities. In a small State like Mizoram where the level of literacy among the females is 78.09 per cent which is next to Kerala where the corresponding level records at 86.93 per cent. As against this Orissa records at 34.40 per cent among the females in the general population in TSP areas. The corresponding figure for tribal women in the same TSP areas stands at 4.76 per cent. If a small primitive tribe of Arunachal Pradesh, namely the Apatani of Subansiri district, could achieve spectacular development in their economic condition and educational standard, why can't the tribes of Orissa reach this standard?
Some are of the opinion that the Sixth Schedule which apply to the North-Eastern States has helped in the development of the tribal communities of this region. In view of this, it is recommended that the Sixth Schedule of the Constitution be made applicable to the compact regions inhabited by the tribal communities in the States and Union Territories where the Fifth Schedule of the Constitution is in operation at present. With an amendment of the Constitution the tribal people will find ample scope for the proper management of forest and forest products, management of water resources, regulation of practices connected with shifting cultivation, effective implementation of local customs and customary laws, control of money-lending, trading by non-tribals and land alienation and promotion of partnership in enterprises based on local natural resources.

Part-II

The Juangs, who are considered one of the most primitive tribes of India are exclusively distributed in the State of Orissa. Because of their unique way of life, i.e., thriving on shifting cultivation—they have attracted the attention of a number of social scientists, over the past century. Few significant ethnographic studies among them have been that of Dalton, Meik, Elwin, Bose and Rout, besides a number of piecemeal studies. What is so notable about studying these hill dwellers, however, is the constant change in their cultural life. Although we are also into knowing this change up-to-date, our aim in this paper is to highlight some hitherto unreported Juang perception and indigenous knowledge regarding various aspects of their way of living.

1. JUANG ORIGIN

Juangs consider themselves to have been born from a Rusi (saint) and Rusiani (wife of the saint) who roamed in the Jungles of Gonasika, the birth place of Juangs. As Laxman Juang of Gupta Ganga village puts it "Janqha ru jaata jie se Juang" (Juang is born from the thigh) which has the connotation that they are born from the sexual intimacy of Rusi and Rusiani. Interestingly, the Rusiani is described to have been a demon and that is responsible for the Juangs being born into such a community. Although there have been a number of previous documentation of stories about Juang origin, the present one is a new perception.

2. SHIFTING CULTIVATION

Shifting cultivation or slash and burn, or podu cultivation, as is popularly known, is the lifeline of Juang economy. The entire year is spent cultivating the toila (swidden plots), which yields hardly 4 months food for them. This labourious and expensive practice, however, has not deterred the Juangs from finding out suitable and profitable alternatives, which have, time and again, been intimated and demonstrated to them, by the Government Agency. This is because of a strong religious attachment towards the toila land. The Juangs believe that their creator, the Rusi, was doing podu cultivation, while moving from forest to forest and that he,
was given a Ganar (hoe) by Dharam Deota, for this purpose. Generations since have adopted this practice and how can they leave it now? Doing so they may invite the worth of their ancestors (Juangs are strong practitioners of ancestor worship). More modern and practical Juangs, however, feel that lack of better and irrigated plots have forced them to stick to swidden cultivation.

Even practising this cultivation, the Juangs apply common sense. The process involves main stages such as slash, burn, sow, plough and harvest.

Slash involves cutting of trees on a plot which has enough forest growth to preserve soil (the rotation of a plot for cultivation has come down from 10–15 years to 3–4 years in Gonasika region, due to pressure of population on land and therefore forest growth in the Toilas of Gonasika region, is mainly in the form of bushes; however, there are dense patches of forest on Toila lands in villages such as Upara Bali and Upara Panasanasa, as the rotation period is still more than 8 years in these areas.

After cutting the trees, they are heaped in patches and left for some days to dry up, after which they are burnt. There are two reasons cited by the Juangs for doing so. First, burning the trees there itself would save them some energy which would have been required to carry the trees out of the plot. Second, burning would mean mixing of ash with the soil and thus, fertilising it.

Then ploughing is carried out in order to loosen the soil and to evenly mix ash with the soil. Ploughing is done in two ways by means of bullock-driven plough and hand-operated hoe. Plough is used only where the soil depth is more and hoe is used where the soil cover is extremely thin. While ploughing the bullocks are moved horizontally along the contour (on the hill slope Toila) so that the bullocks can do ploughing with ease: "if moved up and down, the animals would get tired very soon", the Juangs say.

Sowing is done before the second phase of ploughing so that the seeds mix with the soil and remain within it for sprouting when the rains come on. The type of paddy and other varieties of pulses and millets selected for cultivation, suit perfectly to such conditions and will not grow healthily in any other conditions, i.e., valley bottom or irrigated plots. Seeds of millets and pulses are mixed and sown broadcast.

The women play a major role in harvesting the crops. The crops being different from one another, ripe one after another with a certain time gap. This sequential cropping needs the crops to be harvested not in one time but in a period of times. The difficulty of storing is overcome by this process of sequential harvesting and food becomes available for a longer period of time.

The Juang women carry drinking water in a gourd (kanchu) of.....whenever they visit their Toila. Although pitchers of earthen and brass varieties are available, water is
carried in a kanchu for the simple reason that it keeps the water cool which is the most suitable way to quench thirst.

3. LIQUOR

Like in all other tribal societies, liquor is central to Juang life. Handia (parched rice beer), as it is locally called, is served in a marriage occasion, is offered to the Basuki Maa (mother earth), Dharam Deota and the ancestors during a settlement shift (although non-existent today), during a funeral, during Pus Punei festival marking the beginning of new agricultural year) and during Amba Nuakhia (when the Juangs start eating mango, an important summer food for them and also when new entries are made into the youth organisation--the Mandaghar). Liquor is also offered to the deities for any untoward incident in the village. Liquor is a must for a guest or a dance party visiting a Bandhu village. It is regarded minimum courtesy on the part of the host to offer Handia to the guest(s). In case of a village dispute, the parties and the village council consisting of the Dehuri (religious head), the Padhan (political head) and the Bhadarlok (respected elder) sit together at the Mandaghar and swear by liquor, while finalising the dispute.

Although we have not marked or heard women taking Handia, we do believe they take other forms of liquor such as toddy, as once we saw the wife of Gupta Ganga Dehuri taking 3 full glasses of date-palm toddy, on their way to a Bandhu village.

So indispensable is liquor in Juang life that they can't think of their socio-cultural-religious activities without Handia. The amount of respect or awe they attach to liquor can be judged from the statement given by Khinjiria Juang (Dehuri of Jantari village), who said "liquor is our brahmin and without it our deities including ancestors cannot be propitiated".

4. JUANG COMB

Like the Santal flute or Saora art, the Juangs' have their indigenous craftsmanship in comb making. Bamboo combs of various shapes and designs was an important form of cultural exchange between the boys and girls of Bandhu villages (villages having marital alliance). When the Selans (unmarried girls) of a Bandhu village visit their Kangers (unmarried boys) in another village, they are offered a comb each by the Kangers. Fixing this comb on their head, the Selans dance to the beating of Changu (musical instrument) by the boys. Offering a comb is also considered an expression of love for a girl. The more beautifully carved or painted a comb the more deep is considered the feeling.

However, the rationale behind making bamboo-toothed combs lies in the belief that the comb would remove dandruff from the hair and would keep the hair safe and healthy.
A glimpse of Ethnobotany of Juang area

Part III

The diversified vegetable wealth of the Keonjhar district in general and of Banspal Block in particular provides a congenial niche and sustenance of life for the Tribal people. Banspal Block is dominated by the Juang and the Bhuinya Tribal groups. The Juangs are found in great concentration in the Juangpirh of which Gonasika is the central village and the Bhuinya are found in great compactness in Bhuinyapirh of which Banspal is the central village. The areas have been taken for an Ethnobotanical study.

Tribal groups are categorised as follows:

1. Edible plants
2. Lesser known food plants
3. Oil producing plants
4. Plants used for house-hold materials and other articles.

The Botanical names, Juang (J), Bhuinya (B) and Oriya (O) names (wherever available) of the plants and utility of such plants are listed below:

For the sake of convenience the plants which were observed and studied in relation to the

I. Edible plants

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Botanical Name</th>
<th>Local name</th>
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<tr>
<td>1</td>
<td>Artocarpus Panas</td>
<td>Heterophyllus Anasam</td>
<td>The unripe fruits are an important source of vegetable of the Juangs during the month of March-April. The ripe fruits are eaten as such and also sold in the market for cash. The seeds are roasted, boiled and eaten. The plant yields wood with which different house-hold articles are made.</td>
</tr>
<tr>
<td>2</td>
<td>Buchanania Chara</td>
<td>Lanzan Tarap</td>
<td>The ripe fruits are edible.</td>
</tr>
<tr>
<td>3</td>
<td>Diospyros Kendu</td>
<td>Melanoxylon Teren</td>
<td>The ripe fruits are, edible. The Kendu leaves are used to make 'Biri'. The timber is used for making posts, shafts and carrying poles. The wood is also used for making cot frames, walking sticks and the frame of changu (a type of drum used by Juang).</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Botanical Name</td>
<td>Local Name</td>
<td>Uses</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>------------</td>
<td>------</td>
</tr>
<tr>
<td>4</td>
<td>Mangifera indica</td>
<td>Amba (O)</td>
<td>Both ripe and unripe fruits are eaten. The kernels inside the seed is sundried, boiled and eaten. Mango is used for the preparation of Pickle, Blossoms are the good source of nectar for the honey bees.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ale (J)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Spondias Mangifera</td>
<td>Ambo (O)</td>
<td>The unripe fruits are eaten as vegetables. The ripe fruits are eaten as sub.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and (J)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Syzygium cumini</td>
<td>Jamu (O)</td>
<td>The ripe fruits are edible and occasionally sold in the local market. The honey bees collect nectar from the flowers. The berries are being eaten by different animals and birds. It gives a chance for the tribals to traps them for meat.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and (J)</td>
<td></td>
</tr>
</tbody>
</table>

II. Lesser known food plants *

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Botanical Name</th>
<th>Local Name</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alternanthera sessilis</td>
<td>Muduranga (J)</td>
<td>The leaves are taken after roasting.</td>
</tr>
<tr>
<td>2</td>
<td>Artocarpus lakoocha</td>
<td>Deuncha (J)</td>
<td>The ripe fruits are edible</td>
</tr>
<tr>
<td>3</td>
<td>Bauhinia vahlii</td>
<td>Landam (J)</td>
<td>The kernel of the seed is roasted and eaten as nuts.</td>
</tr>
<tr>
<td>4</td>
<td>Capparis sp.</td>
<td>Asadhu (J)</td>
<td>The fruits are edible after boiling.</td>
</tr>
<tr>
<td>5</td>
<td>Celosia argentea</td>
<td>Nahanga sag (J)</td>
<td>The plant is a source of leafy vegetable.</td>
</tr>
</tbody>
</table>

* There are certain plants, the products of which are eating by the Juangs but these products are not used as food by the non-tribals because of the fact that these are unknown to them. Therefore, these plants have been mentioned under a special category as lesser known food plants. Moreover, of the lesser known food plants listed below those of Sp. (Kantua, J) Solanum ferox and Solanum are not found everywhere, therefore, many peopole do not have any idea about these two plants.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Botanical Name</th>
<th>Local Name</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Centella asiatica</td>
<td>Dukur (J)</td>
<td>The leaves are used as vegetable.</td>
</tr>
<tr>
<td>7</td>
<td>Dioscorea ssp. Ajang (J)</td>
<td>Ajang (J) mean Alu (O)</td>
<td>The tubers of this species are called Ajang. There are different types of tubers obtained from the forest which are used for food by the Juangs.</td>
</tr>
<tr>
<td>8</td>
<td>Colocasia sp. Gadira (J)</td>
<td>Gadira (J) sag</td>
<td>The leaf is used as vegetable</td>
</tr>
<tr>
<td>9</td>
<td>Ficus sp. Pudei (J)</td>
<td>Ripe fruit - edible</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Indigofera cassioides</td>
<td>Silim (J)</td>
<td>The petals of the flowers are used as curry and the Juangs are fond of this preparation.</td>
</tr>
<tr>
<td>11</td>
<td>Polygonum sp. Kansida (J)</td>
<td>The young leaves serve as vegetables.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Putranjiva roxburghii</td>
<td>Anala pacheri (B)</td>
<td>The ripe fruits are edible</td>
</tr>
<tr>
<td>13</td>
<td>Rubus ellipticus</td>
<td>Sindhkoi (J)</td>
<td>The ripe fruits are very sweet to taste. It can be developed as a potential fruit plant.</td>
</tr>
<tr>
<td>14</td>
<td>Solanum ferox</td>
<td>Katabaji (J)</td>
<td>The ripe fruit is edible</td>
</tr>
<tr>
<td>15</td>
<td>Solanum sp. Kantua (J)</td>
<td>The unripe fruit is used for making chutney and curry.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Woodfordia fruticosa</td>
<td>Dhataki (O) Suijiang (J)</td>
<td>The flowers serve as a reservoir of nectar. The children relishes greatly by sucking the nectar stored in the flowers.</td>
</tr>
</tbody>
</table>

**III. Oil producing Plants**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Botanical Name</th>
<th>Local Name</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Azadirachta indica</td>
<td>Neem (O) and (J)</td>
<td>Young leaves and flowers are fried and eaten. The oil extracted from the seed is used to message on head and also used to cure skin diseases.</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Botanical Name</td>
<td>Local Name</td>
<td>Uses</td>
</tr>
<tr>
<td>--------</td>
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</tr>
<tr>
<td>2</td>
<td>Madhuca longifolia</td>
<td>Mohul (O)</td>
<td>The flowers are eaten as raw on boiled or roasted. It is also used for distillation of Mohwa Liquor. Seeds are crushed and processed to yield edible Oil.</td>
</tr>
<tr>
<td>3</td>
<td>Pongamia pinnata</td>
<td>Karanj (O) and (J)</td>
<td>The seeds are collected and sold to local traders for cash. The oil is used as hair oil. Before going out on field work in rainy season the oil is massaged on head to protect the body from cold.</td>
</tr>
<tr>
<td>4</td>
<td>Schleichera oleosa</td>
<td>Kusum (O) and Bangrur (J)</td>
<td>The oil is extracted from the seeds. It has local use to cure skin diseases and also used to message on the body.</td>
</tr>
<tr>
<td>5</td>
<td>Semecarpus anacardium</td>
<td>Bhalia (O)</td>
<td>The oil extracted from the fruit is used to cure swelling of shoulders of draught animals. The ripe fruits are also eaten.</td>
</tr>
<tr>
<td>6</td>
<td>Shorea robusta</td>
<td>Sal (O) and Sargiya (J)</td>
<td>Sal is an important source of timber, wood fuel, house building materials, resin and oil. The fruits of the sal are roasted, boiled and eaten. Seeds collected and sold to traders for cash. Oil is extracted from the seed. Leaves are used to make leaf cups and plates.</td>
</tr>
</tbody>
</table>

IV. Plants used for household materials and other articles

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Botanical Name</th>
<th>Local Name</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bauhinia vahlili</td>
<td>Siali (O) and Landam (J)</td>
<td>The stem fibre is used for making ropes and cordages.</td>
</tr>
<tr>
<td>2</td>
<td>Dendrocalamus strictus</td>
<td>Baunsha (O) and Hala (J)</td>
<td>The stem is used for making baskets and containers of food grains, traps are made to catch birds and animals. Combs and walking sticks are also made out by bamboo.</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Botanical Name</td>
<td>Local Name</td>
<td>Uses</td>
</tr>
<tr>
<td>--------</td>
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<td>------------</td>
<td>------</td>
</tr>
<tr>
<td>3</td>
<td>Heteropogon contortus</td>
<td>Alang (J)</td>
<td>The grass is used for thatching house. It is more durable than the paddy straw. It lasts for 3-5 years and the rats do not eat them up.</td>
</tr>
<tr>
<td>4</td>
<td>Holarrhena antidysenterica</td>
<td>Kuluchi (O) Kiring (J)</td>
<td>The stem of the plant serves as backbone for the mud wall.</td>
</tr>
<tr>
<td>5</td>
<td>Ipomoea sepiaria</td>
<td>Paninai (J)</td>
<td>The stem of this climber is used for tying.</td>
</tr>
<tr>
<td>6</td>
<td>Phoenix acaulis</td>
<td>Pala (J)</td>
<td>The leaves are used for mat making locally known as Atia(J).</td>
</tr>
<tr>
<td>7</td>
<td>Shorea robusta</td>
<td>Sal (O) Saragiya (J)</td>
<td>The mortar used for husking is made of Sal wood, besides beams, rafters, poles etc., which are needed in building houses.</td>
</tr>
<tr>
<td>8</td>
<td>Sida acuta</td>
<td>Saraka (J)</td>
<td>The stem of this herbaceous plant is used for making broom. This broom is used to sweep outside the house as the ground is uneven and rugged.</td>
</tr>
<tr>
<td>9</td>
<td>Terminalia alata</td>
<td>Asan (O) Antanak (J)</td>
<td>The wood of this tree provides shafts, rafters, beams and other house building materials.</td>
</tr>
<tr>
<td>10</td>
<td>Thysanolaena maxima</td>
<td>Jenak (J)</td>
<td>The local name of the plant is derived from the article Jenak which means broom. The inflorescence of the plant is used for broom making.</td>
</tr>
<tr>
<td>11</td>
<td>Xylia xylocarpa Kangada (O) Kathasiali (B) and Kolianni (J)</td>
<td></td>
<td>The poles and shafts are made from this plant for house building. The stem is also used as handle of implements.</td>
</tr>
</tbody>
</table>

Conclusion

Most of the Tribal areas are rich in forest wealth which includes food and fodder plants, medicinal herbs, plants yielding fibre, oil, gum, resin, dye, daunin, perfume, paper pulp and timber and various types of grasses. This wealth is being exploited with little benefit to the
Tribals. The knowledge regarding the use of the plants which are numberless is the intellectual property of the unlettered Tribal communities. It is the Tribal communities who bred and conserved many valuable medicinal and food plants and whose knowledge is being exploited without any compensation whatsoever for their contribution. The urgent need of the hour is to arrest further genetic erosion and vegetative depletion in Tribal areas and conserve the indigenous knowledge and develop a legal system for intellectual property protection.
TRIBAL MEDICINE AND MEDICINEMEN
AN EXPLORATORY STUDY OF THE BONO OF ORISSA

Scheduled Castes and Scheduled Tribes
Research and Training Institute, Orissa,
Bhubaneswar-751003.
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CHAPTER-I
INTRODUCTION

1.1. The Habitat—Like other primitive tribal groups of the State of Orissa, the upper Bondo inhabits a contiguous area in the Khairput Block of Malkangiri District. Their greater attachment to the natural environment, simple lifestyle urge to fulfil basic needs and limited world-view have made the Bondo to carve out a niche for themselves in the tribal landscape and the tribal societies of the country. The Bondo habitat popularly known as the Bondo country consists of two clusters of almost uni-ethnic villages situated on an appendix-like hill range of the Eastern Ghats mountains that act as a boundary between Malkangiri plains in the east and the Machhund river valley in the South-east.

1.1.2—The Bondo country is a high land rising in most cases to 3,000 feet in height. It is covered with thick vegetation of subtropic and semi-evergreen type. The climate of the habitat is characterised by pleasant summer, cold winter and heavy rains during monsoon with almost no soothing touch of autumn. The rain-gauge stationed at Patraput—the periphery of the Bondo country, records the average annual rainfall as 2096 mm. and the number of rainy days a year as 81. The natural drainage system of the area consists of Bisawakunda and Banapacherinalla—the two perennial streams that also meet the potable water requirement of the people. A natural barrier Banapacheri by name, was guarding the Bondo area from onslaught of modernity and civilisation.

1.1.3—From among the two clusters of Bondo villages the Bara-Jangar cluster has retained greater homogeneity with 14 uni-ethnic villages and only two villages with a few Dom settlers. The Andrahal group of villages are multi-ethnic in character with the majority population belonging to the Bondo. The other ethnic groups found in these villages are the Dom, the Biso, the Gadaba and the Didayi. Both the clusters come under the jurisdiction of Khairput Block with the Block Headquarters stationed at the foothill of the Bondo hills. The Block comprises the eastern part of the Malkangiri District. Mudulipada is the nerve centre of the whole Bondo country. A High School, a Dispensary, a Police Station, a Post Office and the most important of all the Headquarters of the Bondo Development Agency (BDA) are situated here at Mudulipada. The agency is meant for the socio-economic development of the Bondo.

1.2. Demography and Economic Profile.—According to 1981 Census the total Bondo population was 5,895 and was higher by 557 souls in comparison with the 1971 Census figure of 5,338. The decadal growth rate was calculated at 10.43 per cent. The decadal growth rate for the period 1961-1971 was calculated to be 14.13 per cent with the total population of 4,677 recorded in 1961 Census. The decrease in growth rate indicates that despite exposure to modern medicines and health care practices the tribe is conforming to other factors responsible for low population growth, like depletion of life support—
ting natural resources and increase of homicidal tendency among the Bondo males. The other reason behind the decrease in population growth rate might be due to the age-old customary rules regarding marriage among younger males and elder females.

The 1961, 1971 and 1981 Census figures lead one to infer that there was no steady increase in the literacy rate of the tribe. It was 2.1 per cent in 1961 and decreased to 1.4 per cent in 1971 but again increased to 3.61 per cent in 1981. During the same period the general tribal scenario reflected the literacy rate as 7.3 per cent in 1961. It increased to 9.46 per cent in 1971 and increased still further to 13.96 per cent in 1981.

1.2.2. The Bondo economy is centered round rudimentary agricultural pursuit. The agricultural practices of refined form are adopted by a few privileged ones with plain wet land at their command. Most of the Bondo families supplement their family income with sale-proceeds of Minor Forest Produce (MFP) collected by them and rearing and selling of domestic animals and birds. No Bondo, as a matter of fact, pawn their labour for wage earning. However, at present a few Bondo individuals—both males and females—earn hard cash from the contractors and the Government officials handling developmental works. Agricultural labour as a source of income is non-existing in the Bondo country. Very little gender specific division of labour is noticed in Bondo economic life. The Bondo villages situated near the Machhkund reservoir have acquired a new economic activity. Able Bondo males catch fish from the reservoir not only to supplement their principal diets but also to sell the surplus in nearby villages. Supply of medi-care services is still considered a charitable activity and income derived from this sector is almost insignificant as it is confined to a few consumables: like cloths, fruits, cereals and domestic birds and animals either dead or alive.
The 'Bondo' is one of the primitive tribal groups (PTG) of Orissa State. They identify themselves the 'Remo' which means man. This Austro-asiatic Mundari language speaking tribal group lives in hilly and mountainous region located in the North-west of Machhkund river. The Bondo highland as it is known is located between 18°15' to 18°30' North latitude and between 82°10' to 82°30' East longitude respectively. The Bondo habitat is easily approachable through a 14 Kms. long road constructed by the Government in order to connect the Bondo high land with Khairput Block Headquarters located at Khairput.

2.1.2. Since time immemorial Bondos have been depending on food gathering as a source of subsistence. Food gathering in the forest is done by both male and female members of family. They use various implements for collection of tubers. From among the implements special mention may be made of the digging stick having an iron piece at the working end. They collect everything which are edible and available in their respective growing seasons. The Bondo women collect more than half of their food materials from forests surrounding their habitats. They depend on forest for several necessities such as food, fire-wood, fodder, fibres, leaves, herbal medicines, small timbers for making agricultural implements, musical instruments, household effects, etc.

2.1.3. Bondos are famous for their practice of slash and burn type of cultivation. The efforts made and energy spent after it are much greater in proportion to the yields obtained. They cultivate more than one patch of land and in each patch under shifting cultivation they raise different crops.

2.1.4. The land is an important asset of the highland Bondo. The land can broadly be divided into three categories, namely (i) Agricultural land, (ii) homestead land and kitchen garden within the village boundaries and (iii) forest and waste land over which the Bondo exert communal ownership. Land ownership is also inclusive of the possession of trees such as Sago-palm, jack fruit, pappaya and tamarind standing on it. Some families have traditional right over trees in the jungle and unoccupied lands because they have been using them since their forefathers. A member has the liberty, to a limited extent, to pluck fruits from the trees belonging to a member of his lineage. The rightful owner seldom protests, as this advantage is reciprocal and mutual.

2.2. The Crops — The Bondo has an idea of festive food comprising delicacies of larger quantities along with non-vegetarian items. Few special types of foods like 'Kirmoor' cakes are offered to children in special occasion. They do not have any conception regarding better, nutritive, hygienic and sacred food. They do not know or even feel the deficiency of vitamins and minerals in their daily menus. A few food taboos are observed with regard to observance of socio-religious rites or ceremonial consecration of new crops.
2.2.2. Food items are grown in two crop seasons. In rainy season lands are used for Kharif crops. Paddy and smaller millets like mandia, suan, maize, kangu, kankadanki etc., are grown in Kharif season. Moreover vegetables like bean, gourd, pumpkin, brinjal, yam, anum and cucumber are also grown as Kharif crop. The rabi crop also known as dry crop or Chait crop or winter crop is grown in the month of October and November and is harvested in the month of February and March. The Bondo raises niger, kandul, dangarrani and other pulses, like horsegram and blackgram in this season. A number of Bondo families grow vegetables, like, brinjal, chilli, tomato, longbean, etc., both for own consumption and for cash.

2.3. The Food Items - Ragi gruel is the staple food of the Bondo people without which a day is very difficult for them to spend. When there is a stock of ragi inside the house the family members never fail to relish it. Rice is the second important staple food of the community. Usually they consume boiled rice prepared from paddy. The smaller millets, like, suan, kangu, etc., are husked to obtain rice. It is relished by the tribe to a great extent.

2.3.2. Bondos are very fond of non-vegetarian food items. They often consume beef. Meat of the rat or the mouse is very much sought after by them. Apart from that pork, meat of fowl and mutton are equally important to them on different occasions. Egg, fish, insect and meat of different kinds of birds are additional non-vegetarian items which they eat when it is available.

2.3.3. Not only the surplus grains are preserved on the ceiling rack of the house but also a number of other food items like pith of the sago-palm, seeds of the jackfruit, kernel of the mango, dry karid etc. They also preserve certain kinds of leaves like vendee mot for future consumption. It is dried, powdered and preserved. Tender leaves of the tamarind are also kept in the same process but 'ranuliamont' leaves are first boiled, then dried and powdered before storing. Mango pickles are kept in earthen pots. Dry fish and dry meat are usually used after two to three months of storage. Beer and sago-palm saps cannot be preserved for more than a week. Wine is kept for special occasions. It can be kept without any wastage for months together. Females keep an eye on the preserved food materials.

2.3.4. Consumption of intoxicated liquor is a noteworthy characteristic feature of this highland community. They consume it in enormous quantities. The whole social system of the tribe is intimately linked with this habit since time immemorial. It is the essence of labour, festive occasion, dispensing hospitality, to satisfy the magico-religious heads and witch doctors. It is an ideal offering to their spirits and guests. On festive occasions the Bondo keeps sufficient quantities of intoxicated liquor for own consumption and for entertaining the guests. The commonest intoxicant in the Bondo hill is the fermented juice of the sago-palm. Traditional rice beer is another type of drink favoured by almost all Bondos belonging to different age and sex groups. Two types of beer namely 'Pendum' and 'Li' are consumed. Pendum is prepared by mixing rice along with sprouted millet. It is
easier to prepare whereas 'Li' is comparatively difficult to prepare and needs special training.

2.3.5. All over the Bondo area tobacco is grown abundantly. The tobacco leaves are used for both smoking and chewing. Both men and women smoke. They powder it on the left palm through the right thumb and put it in their mouth. When guests arrive they are offered tobacco leaves. Apart from this tobacco paste (Gudakhu) is purchased from market and used by young ones and adults alike.

2.4. Material culture —
Since time immemorial, the material achievement of men reflects the advancement in social life and culture. The highland Bondo is far behind the acculturated tribes in this regard. Their material culture is primitive but very effective in yielding results. Their hunting and agricultural implements, food and culinary practices, musical instruments and dancing gears as well as other household assemblages are very simple and inexpensive.

2.4.2. Bondo huts usually stand on slop or at the top of the hill and are seldom within a hill pocket. No particular system is followed in constructing a hut. It reflects the economic condition of the owner. Almost all the materials required for construction of a hut is collected from the forest either by the owner himself or by a band of labourers who are usually treated with a drink or a feast. A Bondo house is always rectangular or square in size and the roof is covered with a typical jungle grass locally called 'Pirhi' or 'Dab Pirhi'. Leaves of datepalm tree may be substituted for the grass. Bamboos and strong logs needed for the house are obtained from forests. A Bondo hut consists of one to two rooms. The walls are made of mud. In some cases it is reinforced with bamboos and twigs. Strong wooden pillars are installed to support the roof.

2.4.3. Verandah is closed by mud wall or bamboo strip fence. Door of the main house is closed by a shutter made out of heavy wooden planks. Shutter attached to a wooden frame of rectangular size, stands vertically on the floor. The verandah of the hut is spacious and is used for sitting, drinking, enjoying the heat of the fire and cooking. One or two holes are made on the floor to husk the grain. Almost all the families have their family courtyard fenced by bamboo strips. Presence of a Sindibor, consisting of a few flat stones arranged horizontally and vertically indicates the presence of the house of a respectable person nearby. Married sons have their own huts, A little kitchen garden is attached to a Bondo hut. The hut not only provides shelter to man but also to pigs and fowls.

2.5. Dresses and ornaments—
Bondos are very traditional in their dresses and ornaments. A Bondo male uses a loin cloth (Gosi) of about 3 to 4 ft. long and more than half a feet wide. Women use a type of skirt called 'Ringa' which has vertical coloured strips. At the time of pregnancy a Bondo woman wraps her stomach with a piece of plain cloth. Latter on it is used for carrying baby.
Their ornaments are heavy and simple but are more enchanting and fascinating. Starting from the head up to the neck they put on a few kilograms of ornaments made out of aluminium, brass and beads. According to the Bondo, a girl having a strong and stout body, breasts like woodapples and covered with many traditional ornaments and dressed with a well stripped Ringa can win the heart of a toughest boy. A Bondo woman does not wear but hang the skirt by means of a strong thread or chain around the waist. A headband made of a typical thin grass and thin fibre is used by a girl. Few other ornaments used by the females are sunuanqmi, usuruli, same, orti, sumure and lubidaq. A Bondo male uses small rings in his nostril. He puts on a loin cloth around his waist.Usu, a narrow sharp knife is tucked to the waist cloth.

2.5.3. Hunting Weapons — Socio-religious compulsions and special interest in non-vegetarian diet, compels the Bondo to depend on forest games. Hunting implements are made of bamboo, wood, creeper, fibre, latex and iron. From among all the weapons special mention may be made regarding bow and arrow. An arrow with a blunt wooden head is known as 'Bita'. It is used to shoot birds. Their sharp knife Usu with a peculiar bent handle is quite helpful at the time of hunting. The list of hunting weapons include rat trap- 'Tunarkum', snare-'Urat', axe, tangi, and a bamboo strip container.

2.5.4. Musical Instruments — Very limited number of musical instruments are used by the Bondo. They are made of bamboo, string, cattle skin, wood and brass. These musical instruments are played on different festive occasions or in the youth dormitory at night.

2.5.5. Agricultural Implements — A limited number of agricultural implements are used by the highland Bondo. These implements include plough, yoke, sickle, hoe, axe and land leveller. Most of them are either made by the users themselves or purchased locally.

2.5.6. Almost all except a few Bondos know mat-making out of thin bamboo splits. A Bondo meets his extra expenses by selling mats. Baskets of different sizes are prepared for different purposes. Traditional measuring baskets like Padi, Karli adore the raft of every Bondo house. Baskets are also made from creepers, fibres and leaves.

2.5.7. Other Household Effects — The Bondo household effects are usually made of leaves, bamboo, wood, creeper and earth. Utensils are made of aluminium and occasionally of brass. Baskets of various sizes heavy wooden grinder (puniri), heavy grinding stone for powdering ragi (janta), husking pestle (tinga), a few gourd shells (gurab), wooden planks, leaf made umbrella and a few long sticks are found in a house. In a few houses cattle skins and bamboo mats are also found.

Partition and Inheritance — No dispute is recorded regarding partition of property among brothers. As a rule, after the death of the father, the sons have to distribute all the paternal properties among themselves
equally. The 'Beda' and 'Pada' lands are shared but the 'Dangar' land and trees are communally owned. In few cases the produce is shared. Widows have an absolute authority on the personal property of the deceased husband till she leaves the family. The orphans are given the rights to enjoy the properties of the deceased father by their blood relatives. When a man dies with no children the property goes to the nearest consanguineal relative of the deadman. Regarding inheritance of material goods and house, the needy among all the brothers is given preference. But all these are done after the death of parents. Regarding the inheritance and partition rarely a conflict or a quarrel occurs among brothers or relatives.

2.6: Political Life of Highland Bondos—The political life of the highland bondo is based on democracy and veered around certain hereditary and elected political posts. The latter is an outcome of the Panchayati Raj System. Among the traditional political power holders, mention may be made of Naiko (the secular head), Chalan (the deputy chief) and the Barika (peon-cum-helper to Naiko and Chalan). The legal authority is vested on Naiko. The post is hereditary in nature. He may be impeached for non-compliance of duties and responsibilities. These village officials regulate and work for the people under their jurisdiction. As a rule, these persons are not associated with the magico-religious practices but they help the magico-religious specialist in different spheres. Very often this judicial machinery, in presence of other magico-religious heads, discuss the cases against an individual or a community. It has some social control over the villagers. Disputes regarding property, quarrels and conflicts are also discussed in the traditional council.

2.7: Inter-Ethnic Relation—On few occasions when highland Bondos go to the tribal markets situated in distant plain areas, they meet few other tribal and scheduled caste people. Apart from that a few Dom families live in some Bondo villages. In some villages a few Kamar families also live. They make agricultural as well as household implements. Near Machhkund river a few Bidai families are found. They have very less cultural contact due to inhospitable behaviour and hostile nature of highland Bondos. The main business of Dom is to supply basic necessities to the highlanders at a higher cost. Apart from that they purchase skins of the dead domesticated animals and surplus food stuff from highland Bondos at a cheap rate and sell the same in the lowland at a higher price. There are a number of Bondos with reputation for their magical and medicinal expertise.

2.8: Modern Panchayat System—About a decade ago, Government has introduced Panchayati Raj System among highland Bondos. This new polity is headed by a Sarapanch as the head who is assisted by a number of members. These Panchayat authorities are acting as the administrative agents and playing the intermediary role between the Government and the people. But nowhere in the highland it is running with real power and objective. Impact of this system is quite
negligible in other village in comparison to the Grama Panchayat headquarters.

2.9: The Religion—The striking characteristic feature of the Bondo religion is its distinctiveness and belief in mystical power. They have immense faith in spirit world. The religion is the hard core of the life and no one in the Bondo community ventures to trespass the regularities and social controls laid down. Breaking of the social traditions and costumes invites a lot of social hazards and puts the victim in unavoidable peril. According to the diagnosis of the traditional astrologer-cum-medicineman prescribed ritualistic observances are performed. The spiritual and emotional life of these people control the day to day life. Magic and religion are followed simultaneously. No religious deeds can be performed without magical deeds and magic is performed for religious purposes for appeasement of the deity.

2.9.2:—Maha Prabhu is considered most powerful. He is permanent, unchallenged, always benevolent and impartial. He is never feared but propitiated and evoked according to the necessity. Bondos have unlimited faith on the benevolent actions of the Sun. The Sun hardly puts somebody into difficulty. He rather creates a lot of opportunities for the people. Sindi bore is the magico-religious centre of a Bondo village. It has considerable importance. The unknown spirits, it is believed, take shelter here. The importance of a Sindibore varies from one village to other.

2.10. The Magico Religious Specialists:—Bondos appease their Gods and Goddesses as well as the spirits of the ancestors by offering sacrifices and observing rituals. The community level magico-religious head known as 'Sisa' is responsible for offering such sacrifices. The post is hereditary. If the acting 'Sisa' does not have a son the post may go to some other person from his own lineage and clan.

2.11. Feasts and Festivals:—Feasts and festivals among Bondos are always celebrated at village level. Different deities of their territory are given sacrifice and a number of spirits are propitiated too. Although personal observances of different feasts and festivals vary, the social importance all over the community is equal almost everywhere.

2.11.2:—The most exciting and colourful ceremony is Chaitparb, locally known as 'Giaigie'. Most of the festivals are observed in the early summer when the people are free from agricultural pursuits and the houses are packed with food stuffs and the streams are teemed with fish and the forests with hunting games. In the summer people ceremonially eat mango after observance of first fruit eating rite. This is an occasion to celebrate and go for ritual hunting of animals apart from mango eating. This ceremony has great ritualistic value for food gathering, fishing and shifting cultivation operation too. This ceremony starts on a suitable Sunday in the month of April and continues for a fortnight. A lot of Gods and Goddesses are propitiated on this occasion and people enjoy dance, good food and intoxicating drinks.

2.12. Ailments and Curing Practices:—The cause and cure of a disease the Bondo believes, is interlinked with Magico-religious deeds. They believe
that their evil ancestral spirits, if annoyed, destroy standing crops, kill cattle, destroy wealth by sending tigers and natural calamities to the family and the lineage. They believe the sickness is due to faults against rituals and spiritual orders. Diseases caused by the ancestral spirits and other spirits are very troublesome. The rituals associated with this to be followed incur heavy expenses. The Bondo observes a lot of taboos in life which vary from individual to individual, occasion to occasion and place to place. The elements of Bondo Magico-religious practices are very strong and they treat their spirits very carefully with respect and honour. The active intimacy of the people with different Gods, Goddesses, deities, spirits and unseen world is revealed from expression of reverence and respect.

213: The quality of Life—
It is a well known fact that Bondos are dirty and object to washing. Most of them lay on the ground covered with ash of fire and dust. Very often their body is smeared with mud while working in the field. They do not either brush their teeth or take bath, neither wash their bodies nor change dressess frequently which they use. According to their traditions there is a celebration known as head washing (Mond dhowani) on occasion of Dashara. Till recent past Highland Bondos were not using soap but a type of bark is used for washing the head. They do not wash with water after defecation but wipe with leaves. Village streets are very often used as public latrine and cow-dung heaps are found in almost all villages. Courtyards and sometimes houses of Bondos are also quite dirty.

It is observed that the highland Bondo women do not keep hair on their heads. The head of children of three to four years are also found shaved leaving a tuft of hair at the top. In every family they have their own razors and scissors and the women are very quick and careful with these instruments. Young boys keep bobbed hair to make them attractive. They wear plastic combs and head bands to make them more attractive.
The World Health Organisation (WHO) has endorsed health as one of the fundamental human rights. It can be defined as a state of complete physical, mental and social well-being and not mere absence of disease or infirmity (Deodhar-1969:1). A person cannot always inherit but acquire it through culture, a learned process which has no relationship with biological inheritance. Absence of a perfect harmony between the internal environment of man and the external environment consisting of physical, chemical and biological surroundings causes a disease to occur. Disease is a departure from a state of health and has been defined as a state which limits life in its power, duration and enjoyment (Deodhar-1967: 2).

The ailment and the illness are the various forms of a disease where as the deficiencies of any sorts in the body system either induct a disease at first stage or make it easier for some other diseases to affect the body in the second or subsequent stages.

3.2. The Bondo concept of disease is as primitive as the tribe itself. Anybody who is incapable to perform work i.e. income-linked work, according to them, is supposed to suffer from disease. They believe ailment as a physical condition that requires rest for recoupment. They do not consider deficiency as a form of disease. On the contrary, it is termed as non-availability of sufficient food to fill the belly. Certain gender and age-group orientation is noticed in the Bondo School of thought regarding disease and its various forms. A male with open wound on his body or with pain in joints, if attends to economic pursuits uninterruptedly, he cannot be considered as a diseased person. Similarly if a young man with a muscular body capable of consuming a lot of food and fails to give the desired work output due to certain unseen reasons is branded as a lazy man rather than a diseased one. If a man delivers goods in lesser quantity he is considered as an ailing person. With the same yardstick a Bondo does not measure the health of the Bondo women belonging to various age groups. Output not only in terms of goods but also of services determine the health of a Bondo woman. She may not assist her husband in the agricultural field, to the full extent but non-performance of not economic but household work proves her as a diseased person and little work output or seeking the assistance of the additional hands renders her as an ailing woman. The mentally retard persons, the lunatics, the insomniacs, the xanophobists and the polio-sticken persons are not considered as diseased ones but regarded as recipients of divine curses.

3.3. The technological base of the Bondo society is simple but its concept about diseases is more or less the same as other Indian tribes. Though they do not agree with the Santal views of the diseases cause by a 'Tijio' which may be large or microscopic (Basu-1994: P-317), they believe in occurrence of diseases as the work of evil spirits, anger of
clan Gods and bongas, breach of taboos etc. They believe in the existence of malevolent and benevolent powers that guide the human fate to adversity or prosperity. In case of accidents and seasonal bodily disorders the Bondo points its accusing finger to the whim of nature or carelessness of the persons. "Disease, in general usage, is a disorder in organism. Disorder may either be somatic or psychic (Deb Barman 1986: 185) and the Bondo belief regarding disease almost confims to the above opinion. When accidents or body disorders occur repeatedly and in a cyclic order the Bondo turn their belief from human error and whim of nature to wrath of angry benevolent Gods or mischief of the malevolent spirits.

3.4. The Bondo not only classifies the diseases according to causes by which it occurs, but also categorises the body maladies according to the response to the treatments. Their classification may not vary as wide as (a) Natural diseases (arthritis, obesity, liver, 'fallen fontanel' get obstruction, 'airs' etc.), (b) Supernatural diseases (Gods' will, punishment of Gods or God; Saints will), (c) Interpersonal diseases (Sorcery, evil eye) and (d) Emotional diseases (susto, bilis the former results from a fright or emotional shock, the latter from uncontrolled anger) (Pross-1982: P-185) but based on certain observations. As both the folk curer and the patient have common belief system and are at the same level of socio-cultural as well as economic caustions their inferences about the diseases are the same. Although the emic classification of diseases is emphatic among the Bondo highlanders, the same can be ethically interpreted and classified broadly into two categories such as (a) the Physical diseases and (b) the spiritual diseases. The natural diseases, as Pross interrupted are the physical diseases and the spiritual diseases are the supernatural, interpersonal and emotional diseases.

3.5. The Bondo believes that the physical diseases respond to the medicines that includes certain materia medica of animal, vegetable or mineral origin (Vaid -1979: P-144) but the spiritual diseases respond either to sorcery; black magic, evil eye, spirit intrusion, etc. the unseen medicine which is rarely assimilated to the body system through external application or internal administration or to above said unseen medicines coupled with visible medicines that can be administered to the patient either externally or internally.

3.6. Both the folk curer as well as the lay men of the Bondo highland are yet to visualise the role of the vitamins and minerals to ward off diseases. Indirectly they admit that fresh vegetables, meat and fish have more 'LIFE' than their stale counterparts. They also believe that overcooked and overspiced food lacks vitality, -potency to supply energy against all clinical odds. Though they do not know that certain minerals are essential to body metabolism and growth as well as creation/secration of body fluids, They do prescribe certain cereals and food items in connection with certain diseases/ailments. Thus they prescribe animal proteins, chiefly meat to a patient suffering from excessive bloodlessness. They
too provide dishes with cereals rich in iron and calcium such as ragi to the lactating mothers. While administering such food they fail to take an account of the capability of the digestive system of the patient.

3.7. Bondos have a soft corner for green and leafy vegetables as well as semi-ripen fruits. The green tinge of these edibles, they believe, retains 'LIFE' from the plants from which it is obtained. Similarly the quality of the meat is measured in terms of redness it possesses. They do not hesitate to consume caked blood and swallow pieces of lever raw for the reason that these items are more red than the meat. It is one of the ways of intake of colloidal iron into the body system.

3.8. Apart from the causes the response to the therapies adopted, makes the Bondo to believe the existence of two broad categories of diseases namely (a) the physical diseases responding to 'material medicines' and (b) the spiritual diseases responding either to psycho-somatic medicines or psycho-therapy. It is interesting to observe that there exists a thin flexible boundary between the two systems of treatment. At present, due to greater culture contact, Bondos do not hesitate to add the names of more and more diseases into the physical category. However, the diseases from which the women and children suffer are clubbed into the spiritual category.

3.9. Many diseases and ailments which are found in the highland are due to imbalanced interaction between the body and natural environment. This imbalance is not so acute to usher in diseases, like yaws, leprosy, filaria, venereal diseases etc. The Bondo though have earned notoriety for not caring for their personal hygiene, the above listed diseases are not reported among them. Epidemics, like cholera and smallpox very rarely break out in the Bondo hills. The common ailments among them are malaria, skin and eye diseases, gastrointestinal disorder, worm infection, cuts and wounds and bronchitis (Patnaik-1989: P-76). The modern or civilised diseases, like sexually transmitted ones, AIDS, nervousness, insomnia, etc. and the rich-men's diseases, like cardiac failure, blood pressure, diabetics, etc., are not reported in their habitat. However, the lower Bondo and a few individuals from among the upper Bondo with greater socio-economic as well as symbiotic contact are quite aware of them. The change in food habits and adoption of life style which is still a taboo in the Bondo society, has increased the incidence of ailments.

3.10. The Bondo tribe may not be considered as a 'declining one but as more or less a static tribe'. This may be due to the prevailing social practice of marriage between elderly women and younger men. The Bondo are so much individualistic that the society as a whole fails to exercise any influence for a change in their temperament from aggression to peacefulness (Patnaik-1989 P-77). The strong-sex of the tribe succumbs to this temperament leaving the family members to lead an insecure life devoid of adequate nourishment for the
body and mind. The women folk, though have voice in family affairs, at times act as the mute spectators to the deeds of their husbands, fathers and brothers. Loss of male life partners due to homicidal activities often leads the female life partners to choose the path of committing suicide. This tendency was unknown in Bondo country in the past but is becoming an issue of great concern today. The so-called physical and spiritual diseases have another partner now-a-days. It is the social disease—the disease that requires the panacea like social and economic security and peaceful environment conducive to develop both mind and body.
If medicine is a social institution (Encyclopaedia of Social Sciences) then a medicine man is an office bearer in the society. He diagnoses the patient and prescribes medicines. A Bondo medicineman knows the medicinal qualities of different parts of the plants the matters of animal origin and abiotic objects. He acquires the knowledge either from his father or from an elderly person of his tribe. The tribe has a pharmacopoeia of its own for diseases that occur commonly in its habitat. However, the medicineman have little knowledge about occurrence of different diseases. For example, all sorts of pains are considered as similar in their origin and their antidotes are the same. Their power of reasoning towards fever is limited to one cause. Thus, the diseases may be many but the medicinemen of the area club them together because the ailments have similar visible effects on body system and they start treating them accordingly.

4.2. Different schools:—The Bondo medicinemen can be divided into three schools according to their methods of identification of the diseases and the medicines/antidotes prescribes. The first school of medicinemen are the shamans who strongly believe the diseases as the work of evil spirits and unsatiated spirits. They are addressed as 'GURU' and are easily identified by their body appearances and abnormal activities. The second school of medicinemen are the expert artists who intermix medicine and sorcery. The Dissari as they are called by others, give 'SHORENG' the medicines and prefers to conceal the composition of the medicines prepared. The third school of medicinemen consider medicine as a matter and not as a social institution. These three schools of medicinemen trade their compartment because of their common belief system of diseases caused by malevolent supernatural beings.

4.3. Gender specification:—Medicinemen of the Bondo are usually males. A good medicineman, for his ability to heal the ailing persons, attains the status of a folk hero. A Bondo woman may serve medicine—both material or institutional but she is seldom addressed as a 'GURUMAI' or Dissari. During pre and post-marriage period a female may learn the symptoms of the diseases and prepare prescribe antidotes (medicines). The enlightened medicinemen who have greater leaning towards material medicine do not hesitate to reveal the quantity and type of the ingredients used in medicine. Despite their revelation an ordinary Bondo fails to attain the status of enlightened ones because of long association of the latter with the 'materia medica' and scope of watching the activities of their 'GURUS' from close quarters. From among the three schools the former is exclusively hereditary and is good at spiritual medicine. The latter school is an enlightened one with strong belief on 'herbal medicines. In between these two extremes, the middle school prescribes herbal medicines under fortification with spiritual medicines.
4.4. Good and Bad Medicine-men:—Though there are two types of medicinemen—good medicinemen and bad medicinemen (Deb Burman-1986; 185) reports of existence of bad medicinemen are not available in the Bondo country. This shows that the primitiveness in belief about occurrence of diseases is not adulterated with thoughts of existence of agencies who induct ailments by introducing an evil spirit into the victims body. The good medicinemen of first two schools cure sickness using two sorts of materials (a) visible approach or medicine associated with the god or supernatural beings and (b) herbs (Ibid; 186). The latter is the weapon of the medicinemen belonging to the third school. The medicinemen of the highland particularly belonging to the first school, adopt exorcism to drive out devils but treatment of a disease supposed to be caused by the induction of an evil spirit through black magic is the belief that has been crept into the minds of the lower Bondo. In such case they do not hesitate to go to the non-Bondo healers.

4.5. Social Status:—The medicinemen have carved out a niche for themselves in a tribal society. They are respected, consulted for any abnormalities observed in the inner body as well as in the outer environment that influence the condition of the human body and at times an avoidance relationship is maintained for fear of possession of bad medicine. If the son of a medicineman has no knowledge of medicine, he cannot become a medicineman on hereditary basis.

4.5.2. In the Bondo country the medicinemen are classified into three broad groups namely the Guru, the Dissari and those laymen who have mastered the use of certain plants animals and minerals. No specific name has been given to the medicinemen of latter category. In a Guru one finds the heredity of both the medicinanship and the medicineman. A Dissari is an astrologer-cum-medicineman who prescribes indigenous medicines and performs magical rituals. He has a good knowledge about the causes of diseases and the treatments. He is a good psychopath too. He is more vigorous, vocal and action-oriented than the Guru. There is little transperancy in their curative practices. The Bondo traditional medicineman both the Guru or the Dissari are not selected out of the common lot for certain traits like being the twins, the seventh sons or babies who come into the world feet first. Clendering has recorded the existence of general belief among the aborigins that the persons having above traits possess healing qualities (Clendering-1961; P-10). The medicinemen of late are literate, widely travelled and are more open in their dealings. They may not have a social status at par with the Gurus and the Dissaris but have sufficient influence to stack their position in secular functions. Though their healing activities are quite transparent, they start their mission with the stories of instructions received in a vision from the deities and ancestral spirits to heal different diseases.
4.5.3. The Gurus and the Dissaris can easily be identified by their body appearance—lean and hungry like with unkempt long lock of hair. Strangely they are not habituated with attending to their personal hygiene. They have higher social status and are found not dependent on healing practices to earn a livelihood.

4.6. The Curing Practices:

The curing practices of the Bondo medicinemen are as varied as their schools. The GURUS hardly get themselves cleaned before attending to the patients. They chant mantras—a chain of words in poetic rhythm, nodding their heads and waving hands towards abode of village, forest, hill and stream deities and even towards the sun occasionally clapping and raising the pitch to high or low tone. During the process they use vermilion and incense sticks. They also draw lines on soft soil or sand in front of the house of the patient. After the completion of the ritual some GURUS touch the offering items to the patients. Others take out a little earth from the pooja site and apply on the body of the patient. The GURUS also promise offerings like black buck, black cock and coconuts to the malevolent spirits on behalf of the patients. The practice of the use of effigy (ibid:ii) is not in force in the highland but exorcism do occur among the Bondo. The GURUS are also good exorcists. They usually treat patients suffering from smallpox, chickenpox, high fever, loss of body weight associated with weakness etc. These diseases according to them are due to the wrath of deities and unsatisfied ancestral spirits.

4.6.2. The Dissari usually take care of seasonal and endemic diseases and body disorders caused by visible agents. When a person faces accidents repeatedly or in cyclic order the Dissari applies some herbal medicines but to boost the moral of the patient he performs some rituals too. These rituals may not have any clinical effect but boost confidence and build up the will to survive. They like Matis, combine the use of medicinal herbs and other substances with exorcism to cure diseases (Matis-Ojhas) (Roy, 1985:11). It is also learnt that like the Ojhas the Dissaris do not have any specially sponsored bongas (spirits) through which the forces of evil and sorceries are countered. (Troisi-1979:97).

4.6.3. A close observation of the 'Gurus' and the 'Dissaris' in action leads one to infer that the success of healing of magician in a tribal society lies on its valuable psychological functions and on its social acceptance (Roy-1989:95). The so called elit medicinemen of the tribe have a good knowledge about the materia medica in vogue among them. They are the real force behind the addition of the newer medicinal ingredients to their existing list. It is felt that supportive efforts to them, by Government, will make them able to transfer the spiritual medicine to physical medicine.

4.6.4. The folk curers as they are called, have little room for preventive medicines. They believe that efficacy of a treatment depends largely upon the belief of the patients on their modus operandi. The
Bondo medicinemen usually succeed in containing certain seasonal physical diseases due to development of "ethiological theories consonant with local world view, technological competencies and social structure." (Press-1980:45-57)
CHAPTER V
INDIGENOUS MEDICINES
Its preparation and administration

The Medicine: —Definition and types:—The main instruments of treatment of diseases, according to Brhat Samhita is Mani, Mantra and Aushadha. The utilisation of these three instruments to ward off a malady is nothing but an institution, in action. The Encyclopaedia of Social Sciences, therefore refers medicine as a social institution. Acker-knecht advocates that medicine should be studied as a social institution.

5.1.2. The indigenous medicines practised by different tribes of the country were more medicinal and less dietetic, more curative and less preventive by nature. Of late the acculturation process and entrepreneurial activities of certain individuals have painted the tribal medicine with the preventive hue (as in case of Santals) and with the dietetic hue (as in case of Saoras). The later version of tribal therapy has more restrictions—restrictions of assimilation of the foreign matters into the body system; than the allowance of use of the medicinal ingredients for fortification of body functions.

5.1.3. The Bondo medicine is not different from any 'primitive tribe medicine'. It is curative in nature and almost free from food and other restrictions. Like the medicine men of the tribe the Bondo medicine may also be classified as (a) Mantra, (b) Aushadha fortified with Mantra and (c) Aushadha. The 'GURUS' use Mantras, the Dissris both Aushadha and Mantra and the medicinemen only the Aushadha.

It is seen that the latter also go for a stage show of uttering a few words sometimes in Oriya and addressing even to non-traditional natual objects like stars and clouds in a low pitch of voice hardly audible to the patient or his attendant to arouse the 'will of survival'. The visual effect of their action may be the driving force for curing the patient from the body ailments. In general, medicines prescribed by the performing medicinemen are valued much by the Bondo than the medicines prescribed by their advisory counter parts.

5.1.4. The tribal people have pharmacopoeia of their own for their manifold diseases, like malaria, yaws, leprosy, scabies, venereal diseases, bowel complaints, influenza, ophthalmia, cholera, smallpox etc. (Roy-1989, P-85). The unhygienic living conditions and lack of personal cleanliness have not acted as agents for the spread of dreaded diseases in the highland. Absence of these diseases and the diseases of civilised man (Frazier. 1957; P-62) has not fattened the Bondo pharmacopoeia. On the other hand it is enriched with materia-medica suitable for treating common diseases and ailments. It also recognises psychotherapy but is totally silent about physiotherapy.

5.1.5. The Bondo indigenous medicine is diagnostic but not systematised and is confined to only one concept i.e. healing
the patients from his maladies. For this they use simple medicines derived out of different parts of the plant. For enriching the medicinal qualities or minimising the side effects due to existence of other ingredients with properties supportive to the existing ailment the indigenous medicine is mixed with other ingredients. The Bondo being a primitive society, is inclining very slowly towards complex medicines.

5.2. The Belief System:--The Bondo believes that plants or at least certain parts of it with strong or sweet smell, emitting resinous fluid or latex when hurt and producing white as well as striking odoured smoke on inceneration have medicinal properties. The ritual medicinemen also consider that a tree struck by lightening or having a luxuriant growth with good foliage, despite hostile natural conditions, acquires medicinal properties naturally. They also believe that any biological species with striking deviation in appearance, colour, foliage etc., from among their general counterparts can be used as a medicine. The potency of the freshly prepared medicine decreases on storage, they believe. Some of the medicinemen, the traditional ones in particular, believe that the medicine become ineffective if its ingredients are made public. Secrecy in selection of medicinal plants and in preparation of medicine is maintained by them.

5.3. The Medicine:--The plants used by the Bondo for medicine are never cultured but collected from nature. These plants have different properties but the medicinemen of the highland must have hit upon the utilisation of one or two properties. For example, the Adament creeper (Cissus quadrangularis Linn) is anthelmintic, digestive, deporative, haemostatic, aphrodisiac and union promoting but the Bondo medicinemen have recognised the last property and is exclusively used in curing bone fractures. A Bondo patient never uses prepared and stored medicines for long time. Fresh medicine is prepared to last for not more than three uses/applications. Strangely very few medicines used by Bondo are of animal origin.

5.4. Preparation of Medicines--The Bondo medicines, as mentioned earlier, are simple and never have the complex formulations. It is prepared by pressing, grinding, decanting, incenerating and filtering of medicinal ingredients. Very few medicines are mixed with additives to enrich the medicinal quality and the retainers to check the loss of potency due to long storage. Most of the Bondo medicines are water based and some of the medicines used externally are oil based. Though the Bondo are avid alcoholics, the alcohol is not used in any form of medicine. The usual tools/gears used by a Bondo medicineman consist of a knife, a digging stick and the grinding stone usually made of fine grained stone such as chloride stone or granite. The traditional medicinemen have gourd shell containers to store dried roots, barks, seeds and fruits with medicinal properties.

5.4.2. The simplicity of the medicine can be judged by the fact that the so called oil based medicines contain no oil at all. On the contrary the
affected area is massaged with oil and then the medicinal extract is applied there upon. No orally administered medicine has oil or essential oil in it.

5.4.3: A Bondo patient is treated at his/her home and a GURU, a Dissari or a secular medicineman never uses his house as a dispensary. The healing-man of the highland is yet to quantify the ingredients of the medicines. By sheer experience he decides upon the number or quantity of medicinal ingredients and prepares the medicine. Before the administration and preparation of medicine he also considers the body condition and body weight of the patient as well as the time of occurrence of the disease mentally. A good medicine, according to him, is one which yields positive results at the shortest time.

5.4.4: One of the basic goodness of the Bondo medicine is the absence of any side effect on the patient. If the advice of the medicineman is strictly followed, a Bondo believes, the patient gets cured. If he doubts about the medicine or if he has done any offence against deities the medicine fails.

5.5. Administration of Medicine—The traditional medicinemen administer the medicine in two ways. They transmit invisible medicine by uttering words addressed to unseen forces or by body gyration or by administering physical medicine (those 'having mass and volume) by external application or internal assimilation. The secular medicineman who chiefly deals with physical medicines also follow the path of the latter too.

5.5.2. The physical medicines applied externally are strong and have repeatative use. These medicines are made to assimilate with the body through massage, annointation and through 'pressure adhering'. These medicines are applied on the ailing affected part of the body. Sprain, wounds, fractures and body pains are treated by this method. Internal administration of the medicine is effected by inhalation and use of dietary track. The cold, and cough and headache of some kind are treated with inhalation of medicated fumes/smokes. The 'soft' medicines which are supposed to have capability of healing the internal body organs are taken orally. Needless to say that the medicines falling into the latter category are small in number.

5.5.3. The Bondo believes that the diseases are either superficial or deep. For the former, a wide variety of treatments are recommended but for the latter a Bondo resort to psychotherapy—that of exorcism and the like. They too believe that external administration of medicine is for superficial diseases and internal administration for grave or deep ailments. This belief system has led the Bondo medicineman to resort to a kind of surgery i.e., inflicting a minor wound above the bone fracture and filling it with the paste of 'adsang'. This intramuscular administration of semisolid medicine (Paste) is very uncommon among the other tribes of the State. A short list of the treatments prescribed for different diseases/ailments is annexed elsewhere.
Prescription--In rural and tribal India, the medicine as an institution, starts to work when a disease occurs. Diseases/ailments demand the services of the healers—the medicinemen who drive out the maladies from the body of the patient and at times fortify him against the recurrence of the body disorders while the great weapons of modern medicine are aimed at the patho-physiology of disease and its susceptibility to Pharmaceutical, Immunological or Surgical attack (Bryant-1969; P-59), the illiterate and improvised-medcinemen armed with crude medicines prepared out of dry matters of plants and matters obtained from animals. They mix pharmacy with psychopathy and they not only prescribe medicines but also deliver a few words as advice to the patients for leading a meaningful life.

6.1.2. A Bonda medicineman not only prescribes medicine but also acts like a chemist-cum-druggist. The traditional medicinemen are also the patent holders of certain formulations. They transmit the secrecy of the medicines eldest to their eldest sons or to the close confidants. The more open secular medicinemen deliver oral prescriptions to the patient or his relatives and instruct the method of preparation or use. Certain medicinal plants are only available in the deep woods and the secular medicinemen do not hesitate to tell the location of the plants where it exit.

6.1.3. The prescriptions are not only indicative of the medicines and their causes but also of other items which are also considered as medicines. The GURUS and the DISSARI ask for animals and birds; other edible items as well as utility items like inscence sticks, fruits, like coconut, arecanut, vermillion, turmeric powder, peacock feather, short fine towels and pieces of cloths. Their prescriptions also favour certain colours, patterns and the likes. Thus a black cock or a black buck is always preferred. Black or red cotton pieces have preferential acceptance than the cloths of other colour. Similarly striped cloths override plain or checked cloths. At present these preferential attitudes have been diluted by the easy availability of the substitutes.

6.1.4. The changed environment has ushered in some sorts of 'adhocism' in their prescriptions. The traditional medicine system at present is acting like a link between the disease and the clinical medicine. In certain places it is being utilised as the 'First Aid'. The sceptism has engulfed both the medicinemen (traditional or secular) and the patient. The Bonda is coming closer towards the broad definition of health and its maintenance, like 'health is maintained by certain regularities in behaviour regarding diet, exercise, rest and medication, when necessary' (Mutatkar-1979; P-360). It has culminated in phasing out of certain taboos, induction of some others but fortification of a whole lot of existing taboos.

6.2. Taboos--The regularisation of the human behaviour and patronizing it
culturally to suit the man and his outer environment has given birth to the institution of taboo. The taboo, is the stricter form of mana which is embedded to the human mind for ritualistic observation. These taboos are found more prevalent in stratified or complex societies. Being an unstratified and simple society, the Bondo observe a few taboos. These taboos are bi-faceted i.e., dietetic and behavioural and strictly adhered to by the elders and those who are yet to see or feel modernity through vertical and horizontal mobilisation of men materials and information.

6.2.2. The taboos in circulation among the Bondo are non-administration of medicines before spiritual submission of the medicineman. Before collecting the medicines from the natural surroundings the medicineman purifies his soul by chanting the names of the village dieties and spirits residing in their abodes, like hills, forests, streams etc. There is no taboo relating to consumption of food and human action.

6.2.3. Currently the consumption of stale meat, in case of patients suffering from skin diseases is tabooed. The change in the Bondo tradition also prohibits culturing of certain medicinal plant, like adsang near their houses. It is even not allowed to grow near their villages.
CHAPTER VII
An Overview—Resistance and Change

In and outmigration of human population to and from the Bondo country has widened the world-view of the tribe and their attitude towards the disease, treatment and the medicineman who attend to the diseased ones. Apart from it the arrival of goods and services aimed at enhancement of quality of life has opened a new chapter in Bondo lifestyle. On the question of acceptance or otherwise of the traditional herbal medicines, the Bondos are a divided house. The elderly ones and those living in remote villages have strong faith on indigenous medicines. Certain compulsions, like belief in age-old customs and practices, nonavailability of alternative medicines in and around their villages and excessive reliance on medicinemen of the locality have made people to desist from modern medical facilities. A microscopic group, mostly consisting of those who are out of their original habitats for earning bread from non-traditional economic pursuits are sceptic at least about the method by which the medicine is administered and the man who prescribes it. The majority of the Bondo population prefer to undergo traditional treatment when fell ill but switch over to the modern medicines when the latter fails to yield results. Almost all Bondo people have taken traditional medicines or consult traditional medicineman in one case or the other.

7·2. The herbo-based Bondo medicine is not only confined to the locally available plants, but also has assimilated the dry matters obtained from alien plant species into its healing practices. The coconut shell, betel leaf, lantana leaf and bark as well as the leaves of eucaliptus tree are being prescribed by the medicineman to treat appropriate ailments. Certain plants like Actinioptesis dichotoma-Bedd, available locally but not recognised by the Bondo medicinemen as a medicinal plant until first half of the eighties is now prescribed by the medicinemen for treatment of snake bite. It is due to interaction with a Government official hailing from Central Orissa. The Bondo materia-medica is also enriched by the inclusion of ingredients, like kerosene oil, white mud etc. The traditional medicines in vogue in the highland also incorporate the remnants of certain animals like snail, dog etc.

7·3. Despite the enrichment of the Bondo materia-medica with new medicinal ingredients the preparation of medicines, method of administration and rituals followed by the medicinemen remains the same. The Bondo medicineman still gives or prescribes simple medicines—pastes, extracts and powders of different parts of herbs, creepers, trees etc. Compound medicines obtainable from dry matters of more than two plants through processes of sublimation, distillation, absorption and adsorption are still unknown to the traditional Bondo medicinemen. A few Bondos old or middle aged ones with greater contact with the plains, have started preparing extracts of mixed plants through simple mechanical process. They also insist upon washing the ingredients in clean water and
process the same in precleaned utensils and in other household utility gears. One or two Bondo youths with school education up to class 9th standard, at present, act as medicineman purely on philanthropic basis. These people are not institutionalising the healing activities with customary rituals and offerings. However they believe in personal hygiene and prefer to go to the patient with clean body—particularly hands. They also advice the patient to maintain personal hygiene.

7·4. The belief on rituals and offerings to the deities as prescribed by very old and hereditary Bondo medicinmen are respected in cases like treatment of psychiatric patients and those suffering from unknown diseases. Their prescriptions are always accepted not only by the persons with little faith on herbal medicines but also by those who usually cut jokes at the ill clad, intoxicated and foul odour emitting medicinemen. It is strange to find that very little number of plants, animals and abiotic objects are identified by the Bondo medicinemen and the quantification of the ingredients for treating the maladies are yet to be done. Moreover, the so called enlightened medicinemen who by contact with non-Bondo population are adding up different plants to the short list of medicinal ingredients with the spread of story of seeing them in a vision. They also spread the rumour that their village deity or deities residing in the hills and forests came into their dreams and have commanded them to treat the ailing brethren as per their instructions. Induction of each new ingredient to the existing materia-medica force the medicinemen to create faith among the population. This is one of the case of observance of rituals and offerings to the deities.

7·5. Appeasing of angry deities or getting rid of evil spirits still makes a Bondo patient or his kith and kin to coughoff a fortune. The whimsical yet psychologically weak Bondos still express their gratitude to the unseen forces by offering them edible items. This act at present, is done at family level clandestinely to curtail expenditure. Curtail expenditure.

7·6. The driving force behind the persistence of the tribal herbal medicine is its availability in the locality and easy method of administering them into the body system. As a result only a few maladies have been invented by them. They are also yet to reason out the other medicinal properties of the known medicinal plants. Their concept about good health is confined to the body condition by which a person is able to do work. The so called new diseases that have invaded the Bondo belt are in existence since time immemorial but their indentification were not done by the local medicineman. The dreaded diseases like leprocy, yaws and veneral diseases are not found in this area so also the richmens diseases like high blood pressure, cardiac failure and diabetes. Changes in food habits, life style, cross culture contact as well as external attempts to make them free from tradition bound practices are ushering in new health hazards. The future health scene of the Bondo is very gloom. Unless attempts
are made to make them more health conscious and for proper utilisation of locally available 'cultured' and 'natural' goods for human consumption the Bondo will succumb to the advent of the ills of the modern civilization.

7.7. The right step towards the change of traditional medicine for the better management of health care practices is to document all the medicinal ingredients used in whole of the Bondo country and analyse the drugs giving due importance to the primitive knowledge of the traditional medicineman. There should be a drive for propagation of the existing knowledge in its refined form through trained resource persons belonging to the tribe. Preventive and after-care medicaments should be made available to as many Bondos as possible. This will enable a Bondo to get medicare facilities at a lesser cost and at a lesser 'waiting period' By this the Bondo on the other hand, will develop a sense of responsibility to save trees, bushes and herbs which they usually consign to the flames to practice shifting cultivation.

7.8. Apart from the streamlining of the medicine system the modernity should have its Mida's touch on the medicinemen. A code of conduct should be thrust upon them. Persons with acute homicidal tendency and habit of being intoxicated at the simple occasions should be debarred from prescribing the herbal medicines. Their wrong diagnosis and prescriptions may lead a patient to reap 'wrong fruits from the right medicinal plants' throughout his life time. The patient may succumb to the mistakes committed by them.

END NOTE

The paper has been prepared by Shri A. K. Maharana, Research Officer, based on fieldwork conducted by him among the Bondo of Malkangiri district. The Socio-cultural profile in Chapter II has been contributed by Dr. A. C. Sahoo, Officer-on-Special Duty. The study, an exploratory one, was conducted under the supervision of the Director.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Botanical/English</th>
<th>Local</th>
<th>Oriya</th>
<th>Parts used</th>
<th>Property of the parts used</th>
<th>Disease/Aliment</th>
<th>Method of Medicine preparation</th>
<th>Administration</th>
<th>Food &amp; other restrictions, if any</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>...</td>
<td>Buntame</td>
<td>...</td>
<td>Leaf</td>
<td>...</td>
<td>Burn wound</td>
<td>Fresh coconut shell is burnt to ooze oil. It is then rubbed with the leaf of Buntame. The paste like mass is used as medicine.</td>
<td>The wound is cleaned with a clean cloth to remove dead tissues. The paste is applied on it for two to three days.</td>
<td>...</td>
<td>Recommended by the secular medicinemen.</td>
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<td>2</td>
<td>...</td>
<td>Tasing bilei</td>
<td>...</td>
<td>Root</td>
<td>Bitter, in taste, sedative &amp; anodyne</td>
<td>Stomach pain</td>
<td>The root is chewed raw &amp; the juice derived is swallowed. The fibrous residue is applied on the stomach.</td>
<td>Oral administration and surface application twice a day in the morning &amp; evening after food (may not be the principal meal).</td>
<td>Hot foods &amp; fibrous foods are to be avoided.</td>
<td>Ditto</td>
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<td>3</td>
<td>Mimosa-pudica, Linn.</td>
<td>Lajkuli lata</td>
<td>Lajkuli lata</td>
<td>Leaf</td>
<td>...</td>
<td>Snake-bite</td>
<td>Handful of leaves are grinded with sugar and diluted with water to obtain a thin consistency.</td>
<td>The fluid is taken orally once.</td>
<td>The patient is not allowed to walk or run. Hot food is dissuaded.</td>
<td>Ditto</td>
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<td>4</td>
<td>Actiniochuria dichotoma, Bedd.</td>
<td>Mayurchulia</td>
<td>Mayurchulia</td>
<td>Root</td>
<td>Astringent, coating, acid, antel-mintic, etc.</td>
<td>Snake-bite</td>
<td>...</td>
<td>Seven hair-like roots are chewed and swallowed.</td>
<td>The patient is not allowed to run. Hot food is dissuaded.</td>
<td>Ditto</td>
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<td>...</td>
<td>Lue</td>
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<td>...</td>
<td>Resinous fluid is derived from the root.</td>
<td>One cupful of the fluid is taken orally only once.</td>
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<td>Ditto</td>
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<td>...</td>
<td>...</td>
<td>Praun</td>
<td>Headache</td>
<td>No medicine is prepared from the vine.</td>
<td>...</td>
<td>Recommended by the secular medicine men.</td>
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<td>7</td>
<td>(a) Tamarindus</td>
<td>(a) Tentulii</td>
<td>(a) Tentulii</td>
<td>(a) Root &amp; flower.</td>
<td>(a) Acidic</td>
<td>(a) Root</td>
<td>Difficult in delivering</td>
<td>The root, bark and flower of the same volume are mixed together and grinded to a paste.</td>
<td>The patient is made to inhale the paste. A little of it is applied on the forehead and a little is applied on the lids of vagina.</td>
<td>The grandmother of the patient applies the paste on body as mentioned.</td>
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<td>(b) Timan</td>
<td>(b) ...</td>
<td>(b) ...</td>
<td>(b) --</td>
<td>(b) --</td>
<td>(b) Bark</td>
<td>Delivering the child.</td>
<td>Equal quantities of tender Kendu leaves &amp; Amarapoli leaves are grinded and the juice is extracted.</td>
<td>Half a cup of the juice is taken twice.</td>
<td>Dry fish and dry meat is prohibited.</td>
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<td>(c) Apamarg</td>
<td>(c) Coagulant</td>
<td>(c) Root</td>
<td>(c) Germicide</td>
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<td>(c) Germicide</td>
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<td>8</td>
<td>(a) Diospyros</td>
<td>(a) Kendu</td>
<td>(a) Kendu</td>
<td>(a) Tender leaf.</td>
<td>(a) Diabetic</td>
<td>(b) Ditto</td>
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<td>melanoxylon</td>
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<td>(b) Ditto</td>
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<td>Roxb</td>
<td>(b) Amara</td>
<td>(b) Amara</td>
<td>(b) Ditto</td>
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<td>9</td>
<td>(a) Tridax</td>
<td>(a) Bisa</td>
<td>(a) Bisa</td>
<td>(a) Leaf</td>
<td>(a) Common</td>
<td>Four to six leaves are rubbed with two to three flowers on palm. The paste like substance is used as medicine.</td>
<td>The paste is applied externally on the wound and piece of cloth is tied on it.</td>
<td>Ditto</td>
<td>Ditto</td>
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<td></td>
<td>porcum</td>
<td>lya</td>
<td>lya</td>
<td>...</td>
<td>wound</td>
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<td>10</td>
<td>Vitis qua-</td>
<td>Adsang</td>
<td>Hadasim-Khala.</td>
<td>Root</td>
<td>Anodyne and union promo-</td>
<td>Deep wound</td>
<td>A piece of root about two inches long is washed &amp; grinded to a paste.</td>
<td>Half of the paste is taken orally in the name of God and other half is applied on the wound.</td>
<td>Acidic food is avoided &amp; the patient is advised to take complete rest.</td>
<td>Prescribed both by traditional &amp; secular medicinemen.</td>
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<td>drangularis.</td>
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<td>11</td>
<td>...</td>
<td>Tangia-sina.</td>
<td>...</td>
<td>Bark</td>
<td>Ditto</td>
<td>Well washed fresh bark is grinded.</td>
<td>It is pasted on the wound.</td>
<td>Prescribed by all medicinemen.</td>
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<td>12</td>
<td>Jatropha curcas, Linn.</td>
<td>Dumba-jada.</td>
<td>Baigaba</td>
<td>Tender branches.</td>
<td>Anodyne</td>
<td>Sprain</td>
<td>(1) The tender branches are heated and then rubbed against the sprained part.</td>
<td>(1) External massage with the warm twigs.</td>
<td>Complete rest is advised.</td>
<td>Prescribed by both secular and traditional medicinemen.</td>
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<td>(ii) The branches are sautéed &amp; twisted to ooze liquid.</td>
<td>(ii) The branches are gently rubbed against the affected part.</td>
<td>Ditto</td>
<td>Ditto</td>
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<td>13</td>
<td>...</td>
<td>Bali-sanda.</td>
<td>...</td>
<td>Leaf</td>
<td>...</td>
<td>Removal of evil spirit.</td>
<td>A handful of leaves are made into a thick paste.</td>
<td>The paste is placed before the patient's nose and is advised to inhale deeply.</td>
<td>Ditto</td>
<td>Ditto</td>
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<td>14</td>
<td>Kerosene</td>
<td>Kerosene</td>
<td>Kerosene Oil</td>
<td>Inflammable pungent &amp; disinfectant.</td>
<td>Lice Infection.</td>
<td>Half a cup of Kerosene oil is massaged on head.</td>
<td>After two hours the head is washed with soap.</td>
<td>Ditto</td>
<td>Ditto</td>
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<td>15</td>
<td>...</td>
<td>Sunugar</td>
<td>...</td>
<td>Leaf</td>
<td>...</td>
<td>Headache</td>
<td>A few leaves are pressed by hands and a crude paste is made.</td>
<td>The paste is applied on the forehead in the morning.</td>
<td>If the head reels castor oil is massaged on head.</td>
<td>Ditto</td>
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<td>Fever (not related to cold).</td>
<td>The Guru or Dissari takes out a little ash from the fireplace and applies it on the forehead of the patient. He also applies a little ash on patient's hand. He then holds the thumb of the left hand of the patient and evoke the Gods, Goddesses and deities calling by their names. He then promises offerings &amp; gives the patient his own medicine for use.</td>
<td>The patient is subjected to psychotherapy and is given the prepared medicine.</td>
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<td>The Guru or Dissari treats the patient.</td>
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<td>17</td>
<td></td>
<td>Gisinga</td>
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<td>Fever due to cold.</td>
<td>The Gisinga vine is tied around neck.</td>
<td>Light food is prescribed.</td>
<td>Ditto</td>
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<td>18</td>
<td>Tobacco (Nicotina tabacum).</td>
<td>Dokta</td>
<td>Dhuan</td>
<td>patra</td>
<td>Leaf</td>
<td>Stiffening of nose.</td>
<td>The tobacco leaf is made into fine powder.</td>
<td>The powder is inhaled.</td>
<td>Exposure to cold is prohibited.</td>
<td>Both traditional and secular medicinemen.</td>
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<td>19</td>
<td>Madhuca longifolia.</td>
<td>Mohul</td>
<td>Mohul</td>
<td>Oil of seed.</td>
<td>Emollient &amp; Laxative</td>
<td>Burn wound (superficial).</td>
<td>Dead tissues are removed &amp; painted with mohua oil. Then powdered charcoal is sprinkled over it.</td>
<td>Wound is kept open. Dry fish &amp; dry meat is prohibited.</td>
<td>Ditto</td>
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<td>20</td>
<td>Carica papaya, Amruta-bhanda, Amruta-bhanda, Fruit latex, Anthelmintic, Analynce and Digestive.</td>
<td>Ring worm</td>
<td>The unripe fruit is wound to ooze enzymatic milk like fluid.</td>
<td>The affected area is scraped with a clean dry stone or wood. When it emits blood or fluid the milk is applied.</td>
<td>Wound is kept open. Dry fish &amp; Dry meat is prohibited.</td>
<td>Both traditional &amp; secular Medicine.</td>
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<td>21</td>
<td>Non-biotic medicinal ingredients are used.</td>
<td>Tap/thread worm (In case of adults).</td>
<td>About half a cup of kerosene oil is taken orally before going to bed at night. It is taken about one hour after taking the principal food.</td>
<td>Prescribed by the Guru or Dissari.</td>
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<td>22</td>
<td>(a) Diospyres melanoxylon. (b) Psidium guyava, Linn. (c) Punica granatum.</td>
<td>(a) Kendu (a) Kendu (a) Leaf</td>
<td>(b) Pijuli (b) Pijuli (b) Tender fruit.</td>
<td>(c) Dalimba (c) Dalimba (c) Tender fruit.</td>
<td>Loose motion with blood &amp; mucos.</td>
<td>A few leaves of kendu is ground along with a tender guava and a tender punica. Granatum into a thick paste.</td>
<td>The paste is whipped with water to a thinner consistency. Half a cup of it is taken orally three times a day (morning, noon &amp; evening).</td>
<td>Heavy &amp; fibrous food is prohibited.</td>
<td>Prescribed by all types of medicinemen.</td>
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<td>23</td>
<td>Racenus communis (Castor).</td>
<td>Jada</td>
<td>Jada</td>
<td>Leaf</td>
<td>Hydrogel</td>
<td>The castor leaf is placed before live charcoal to make it wither. Castor oil is applied on it. It is then put on the swollen scrotum.</td>
<td>Surface application. When the leaf is not put the patient is advise to wear loin cloth tightly.</td>
<td>Advise not to do heavy work.</td>
<td>Ditto</td>
<td></td>
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<td>No.</td>
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<td>24</td>
<td>Banyan (Ficus bengalensis).</td>
<td>Bara</td>
<td>Bara</td>
<td>Latex</td>
<td>Refrigerant, Anodyne, Depurative, etc.</td>
<td>Boils</td>
<td>The latex is derived from the tree and used fresh.</td>
<td>It is applied quickly on the boil &amp; covered with a paper.</td>
<td>Advised not to do heavy work.</td>
<td>Prescribed by all types of medicine men.</td>
</tr>
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<td>25</td>
<td>Terminalia chebula.</td>
<td>Harida</td>
<td>Harida</td>
<td>Seed</td>
<td>...</td>
<td>Cough</td>
<td>The seed is roasted and powdered.</td>
<td>About quarter a palmful of the powder is chewed and taken orally during night.</td>
<td>Sago-palm juice is prohibited.</td>
<td>Ditto</td>
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<td>26</td>
<td>...</td>
<td>Tangiasina</td>
<td>...</td>
<td>Bark</td>
<td>...</td>
<td>Deep wound (by axe or arrow).</td>
<td>Freshly cut bark is rubbed against stone surface to obtain a paste.</td>
<td>The wound is applied with the paste. It stops bleeding.</td>
<td>By all types of medicine men.</td>
<td>Ditto</td>
</tr>
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<td>27</td>
<td>Vitis quadrangularis.</td>
<td>Adsang</td>
<td>Hada-sinkala.</td>
<td>Root &amp; branches</td>
<td>...</td>
<td>Bone fracture.</td>
<td>The root and branches are ground and made a thick paste.</td>
<td>A small cut is made near the fractured portion &amp; filled with the paste. It is then bandaged.</td>
<td>Ditto</td>
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<td>28</td>
<td>Tamarind (Tamarindus indica).</td>
<td>Tentuli</td>
<td>Tentuli</td>
<td>Root</td>
<td>...</td>
<td>Difficult in delivering the child.</td>
<td>A small root of the tamarind tree is fixed to the ear of the woman.</td>
<td>The patient is advised to sleep flat on a mat.</td>
<td>A Guru or a Dissari attends to the patient.</td>
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<td>29</td>
<td>...</td>
<td>Tentuli</td>
<td>Tentuli</td>
<td>Fruit pulp</td>
<td>...</td>
<td>Consumption of poison.</td>
<td>A thin paste of tamarind is prepared.</td>
<td>The patient is forced to drink the tamarind water till he vomits. It is done repeatedly.</td>
<td>All types of medicine men attend to the patient.</td>
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<td>30</td>
<td>Banana (Musa paradisiaca, Linn).</td>
<td>Kadali</td>
<td>Kadali</td>
<td>Shoot</td>
<td>...</td>
<td>Removal of placenta.</td>
<td>The shoot is tied loosely to the neck and the women is kept under observation. The shoot is removed as soon as the placenta comes out.</td>
<td>...</td>
<td>A Guru or a Dissari attends the patient.</td>
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<td>31</td>
<td>(a) Racenus communis</td>
<td>(a) Jada</td>
<td>(a) Jada</td>
<td>Oil</td>
<td>...</td>
<td>Coma</td>
<td>...</td>
<td>Equal volumes of castor and kusum oil is mixed and massaged on the body.</td>
<td>...</td>
<td>A Guru or a Dis-sari attends the patient.</td>
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<td>(b) Schleierchera trijuga.</td>
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<td>32</td>
<td>(i) Schleierchera trijuga.</td>
<td>Kusum</td>
<td>Kusum</td>
<td>Oil</td>
<td>...</td>
<td>Infection in between fingers of the foot.</td>
<td>...</td>
<td>The infected part is washed with warm water, wiped &amp; applied with kerosene oil. It is then painted with Kusum oil.</td>
<td>...</td>
<td>Prescribed by all types of medicinemen.</td>
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<td></td>
<td>(ii) Terminali chebula.</td>
<td>Harida</td>
<td>Harida</td>
<td>Fruit</td>
<td>...</td>
<td>Ditto</td>
<td>...</td>
<td>The fruit is roasted and rubbed against the infection.</td>
<td>...</td>
<td>Ditto</td>
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<td>33</td>
<td></td>
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<td></td>
<td>Piles</td>
<td>The fresh water snails are fried with edible oil.</td>
<td>The fried snails are eaten by the patient.</td>
<td>Mutton is avoided. Soaked rice is also avoided.</td>
<td>Ditto</td>
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<td>34</td>
<td>(a) Schleierchera trijuga.</td>
<td>(a) Kusuma</td>
<td>(a) Kusuma</td>
<td>Oil</td>
<td>...</td>
<td>Scabies</td>
<td>Both the oil is mixed and warmed.</td>
<td>The affected part is washed with hot water and painted with the oil mix.</td>
<td>Dry meat is avoided.</td>
<td>Ditto</td>
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<td>(b) Pongaemia glabra.</td>
<td>(b) Karanja</td>
<td>(b) Karanja</td>
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<td>35</td>
<td></td>
<td>Sawa</td>
<td></td>
<td>Twig</td>
<td>...</td>
<td>Pain on urination</td>
<td>The green twig is split and used for medicinal purpose.</td>
<td>The split is worn around waist and around left wrist.</td>
<td>...</td>
<td>A Guru or a Dis-sari attends the patient.</td>
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<td>36</td>
<td>Bamboo (Bambusa vulgarish).</td>
<td>Baunsa</td>
<td>Baunsa</td>
<td>Dust</td>
<td>...</td>
<td>Ear infection (causing pus formation)</td>
<td>Bamboo is suddenly split &amp; the Bamboo dust is collected from the knot.</td>
<td>The dust is mixed with clean water. A few drop of that water is put on the ear.</td>
<td>...</td>
<td>Ditto</td>
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<td>37</td>
<td>...</td>
<td>Noongasa</td>
<td>...</td>
<td>Latex</td>
<td>...</td>
<td>Reddening of eye. The latex is obtained from the tree.</td>
<td>...</td>
<td>The Guru &amp; the Dissari treat the patient.</td>
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<td>38</td>
<td>...</td>
<td>Do.</td>
<td>...</td>
<td>Do.</td>
<td>...</td>
<td>Skin irritation. Ditto</td>
<td>...</td>
<td>Ditto</td>
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<td>39</td>
<td>(a) Mangiferina</td>
<td>(a) Amba</td>
<td>(a) Amba</td>
<td>Leaf</td>
<td>...</td>
<td>Malaria Equal quantities of mango and Eugenia Jambolana leaves are boiled and the patient is allowed to inhale the vapour along with the smoke of burning sal resin.</td>
<td>...</td>
<td>Ditto</td>
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<td></td>
<td>indica.</td>
<td></td>
<td>Jambolana.</td>
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<td></td>
<td>(b) Eugenia</td>
<td>(b) Jamu</td>
<td>(b) Jamu</td>
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<td>40</td>
<td>Vernonanthelmintica.</td>
<td>Sindhri</td>
<td>Nandabaguli.</td>
<td>Leaf</td>
<td>...</td>
<td>Toothache A few mature but The pressed mass green leaves are put at the root of the affected tooth.</td>
<td>...</td>
<td>Prescribed by all types of medicinemen.</td>
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<td>41</td>
<td>(a) Phyllanthus emblica.</td>
<td>(a) Sin-khar</td>
<td>(a) Amla</td>
<td>Bark</td>
<td>...</td>
<td>Stomachache Equal quantities of the three types of barks are powdered and boiled in water.</td>
<td>...</td>
<td>Ditto</td>
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<td>(b) Buchanania lanzan.</td>
<td>(b) Jarab</td>
<td>(b) Cherkoli</td>
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<td>(c) Holarrhena antidysenterica.</td>
<td>(c) Kringle</td>
<td>(c) Keruan</td>
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<td>Mallotus philippensis.</td>
<td>Sindur</td>
<td>Sindur</td>
<td>Leaf</td>
<td>...</td>
<td>Irregular mensuration or excessive discharge. Dough is made out of ragi powder. It is wrapped with sindur leaf and roasted to prepare cake.</td>
<td>...</td>
<td>A Dissari or a Guru attends the patient.</td>
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<td>43</td>
<td></td>
<td>Sipur</td>
<td>...</td>
<td></td>
<td>Leaf</td>
<td>Loose motion due to fear</td>
<td>The freshly plucked leaf is used as medicine.</td>
<td>The leaf is inhaled.</td>
<td>...</td>
<td>A Dissari or a Guru attends the patient.</td>
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<td>...</td>
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<td>...</td>
<td>Epilepsy</td>
<td>...</td>
<td>The little finger of the left hand is punched with a needle. The oozed blood is put on the mouth of the patient.</td>
<td>...</td>
<td>Ditto</td>
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<td>45</td>
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<td>Neelgiri</td>
<td>Neelgiri</td>
<td></td>
<td>Leaf</td>
<td>Nose bleeding</td>
<td>The leaves are grinded and its juice is extracted.</td>
<td>A little of the juice is taken orally. Raw cow-dung is inhaled.</td>
<td>...</td>
<td>Ditto</td>
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<td>46</td>
<td></td>
<td>Sirippa</td>
<td>...</td>
<td></td>
<td>Leaf</td>
<td>Chest pain</td>
<td>The leaf is burned and in hot condition put on chest.</td>
<td>It is then massaged on chest.</td>
<td>...</td>
<td>Ditto</td>
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<td>47</td>
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<td>Datura aida</td>
<td>Dhatat</td>
<td>Dhatat</td>
<td>Latex Galactagogue</td>
<td>Non-secretion of milk of a lactating mother.</td>
<td>The latex of the plant is licked by the patient.</td>
<td>...</td>
<td>Ditto</td>
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<td>48</td>
<td></td>
<td>Bureiki</td>
<td>...</td>
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<td>Leaf</td>
<td>Stung by bee or hornet</td>
<td>The freshly plucked leaves are used.</td>
<td>A few leaves are rubbed against the stung mark. Before that the sting of the bee or hornet is removed from the body of the patient.</td>
<td>...</td>
<td>All types of medicinesmen prescribe the medicine.</td>
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<td>...</td>
<td>Tongue infection (Scarring and reddening).</td>
<td>...</td>
<td>Raw goat milk is applied on the affected tongue twice a day after food.</td>
<td>Hot food is prohibited.</td>
<td>Ditto</td>
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<td>...</td>
<td>Eczema</td>
<td>The bone of dog is cleaned and burnt to obtain bone charcoal.</td>
<td>The charcoal is powdered and applied on freshly cleaned eczema.</td>
<td>...</td>
<td>Ditto</td>
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<td>51</td>
<td></td>
<td>Gunduri</td>
<td></td>
<td>Leaf</td>
<td></td>
<td>Scabies</td>
<td></td>
<td>A few leaves of Gunduri tree is grinded with turmeric.</td>
<td>The paste is applied on pre-washed affected area.</td>
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<td></td>
<td>Biloichili</td>
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<td>Fruit</td>
<td></td>
<td>Bodyache due to cold.</td>
<td></td>
<td>The fruit is grinded with mustard seed or sesamum seed.</td>
<td>Cubes of paste is taken orally (A cube at a time twice after food).</td>
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<td>53</td>
<td></td>
<td>Dana</td>
<td></td>
<td>Bark</td>
<td></td>
<td>Indigestion</td>
<td></td>
<td>The bark is made into a paste and baked in sial leaf.</td>
<td>The baked mass is rubbed on the abdomen.</td>
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CHAPTER I

INTRODUCTION

1.1. The Habitat—The Didayi, as per the legend goes, is the younger brother to the Bondo and the Gadaba and the Paroja who are none other than their brethren. They are found only in the Konda, Kombaru hill ranges of the Eastern Ghat. The Didayi country is located at the south-west corner of the Bondo Highlands. Both the areas are separated from one another by narrow strips of valley lands and hill ranges. Though the Didayi and the Bondo habitat are influenced by the similar natural environment, the climate of the former is soother than that of the latter and it is more akin to the climatic conditions of the Deccan plateau in a milder form. Being the recipient of copious precipitation ranging from 1017mm a year at one end to 2191 mm at the other; the Didayi country supports a wide variety of flora and fauna. The flora is sub-tropic and semi-evergreen to moist deciduous type. Most of these prime vegetative coverings have succumbed to the primitive agricultural practices of shifting cultivation.

1.2. The soil of the area is rocky and haematitic with little water bearing capacity at higher elevation and sticky with no sand at the valley bottoms. The laterite beds resting majestically on solid rock beds are very much visible on foot-hills and at higher gradient.

1.3. The Didayi villages are both homogeneous and heterogeneous in nature. The heterogeneity is more prominent in bigger villages like Purunaguma and Chillipadar located in planer areas. The whole of the Didayi villages come under the jurisdiction of Kudumulguma Block and Khairput Block. Both Blocks are contiguous to each other and constitute a part of Malkangiri District. The Didayi villages are located in a wider area bordering the hard-topped road leading to Balimela at one end to the Bondo Highlands at the other. The Chitrakonda reservoir also forms a portion of boundary of the Didayi country. About a dozen villages—small and almost uniethnic in character, are found inside the Balimela reservoir. These ‘cut-off’ villages have no infrastructural facilities to enhance the quality of life of the inhabitants.

1.4. The big and multiethnic villages of the Didayi country are inhabited by the plain Didayis whereas the small and almost uniethnic villages are the abode of Hill Didayis. Apart from Muduliguda, Purunaguma and Chillipadar the other important villages of the area are Oringi and Bayapada. Though both are remote and perched on hilltops, the former is bigger in size than the latter. Both the villages are almost uniethnic in character. The latter, due to its position—hilltop and at the centre of the Didayi country, was considered to be the Headquarters of the Didayi Development Agency—a semi Government body meant for the development of the Didayi Tribe. However Purunaguma is being developed by the Government for the accommodation
of the men and machinery of the Agency. It is about 3 Kms from the main trunk road.

1.2. Demography and Economic Profile—The Didayi is a numerically small tribe. The 1981 Census enumerated the total Didayi population at 1,977. As per 1971 Census the Didayi population was 2,164. The decadal population growth shows a decreasing rate. It is estimated at rate of 8.64 per cent. The tribe had registered a decadal growth rate of 9.4 per cent during the period, 1961—1971.

1.2.2. Literacy has made a little inroad into the Didayi country. The level of literacy was 2.72 per cent in 1961. It increased to 0.78 per cent in 1971 and further increased to 3.2 per cent in 1981. Increase in percentage of literacy despite the decrease in population during the decade 1971—81 indicates the acceptance of Government sponsored literacy programmes by the Didayi tribe.

1.2.3. Like the next door Bondo tribe the Didayi is divided into two sections namely, the Hill or Upper Didayi and the Plain or Lower Didayi. The former is dependent on shifting cultivation. Quite a variety of agricultural produces ranging from minor millets and leguminous crops to oil-seeds and vegetables are grown on hill slopes under slash and burn cultivation. The Lower Didayi raises paddy, millets, oil-seeds and grams. Apart from the above, the Didayi through the horticultural activities, raises a few varieties of fruits and vegetables. The villages of Chillipadar and Bayapada are famous for pumpkin and banana respectively.

1.2.4. Didayis, with the help of their dwarf-wheeled bullockcarts, bring their surplus agricultural and horticultural produce to the weekly market located at Kudumulguma. They always supplement their family income with sale-proceeds of the minor forest produce collected by them. The tribe living near the reservoir and in 'cut-off' villages supplement its diet and income by fishing activities. Apart from the above the Didayi is very good at basketry. This economic activity has found a niche in its economy.

1.2.5. The tribe in general, does not have any income from the service sector. Of the late a few Plain Didayis have adopted wage earning as the main source of living. The professionalism has not entered into health care sector. However, a few Didayis—elderly males in particular, receive gifts in kind for their services under this sector. Income derived in kind from this sector is quite insignificant compared to the total income of these so-called medicinemen. Healers of diseases, as they are called, command respect from their own community and the general public alike.
CHAPTER II
Socio-cultural Outline

The Tribe:—The Didayi is a small primitive hill tribe of Orissa, almost unknown to the world outside. They inhabit a small hill tract of dense forested picturesque wild country hidden inside the most remote and inaccessible 4,000 high plateau of mighty Konda Kombaru Ranges of Eastern Ghats stretching along the Eastern Border of Malkangiri district. This Geographical formation also constitutes a part of the common boundary line between Orissa and Andhra-Pradesh. Living far away from the mainstream of civilisation, this homogenous little community is almost isolated and hence devoid of ethnographic attention. Dr. Verrier Elwin describes them as a "Wild Tribe" in his two monumental works—Tribal Myths of Orissa' and 'The Bondo Highlanders'. Haimendorf has placed them in the stratum of primitive semi-nomadic shifting cultivators. The natives call themselves 'Gntre'—the people. The present name 'Didayi' meaning 'the wild people' has been bestowed upon them by their neighbours—the non-tribal communities.

2.2. Legendary Origin:—The universe, ab initio was filled with infinite water. Once a gourd containing two little children—a boy and a girl, fell from heaven and started floating on the surface of water. The terrified children inside the gourd cried helplessly. Their cry echoed at Mahapur's ears. He sent a crow to find out the source of cry. After an adventurous soul searching the crow discovered the source and reported Mahapur who came down to the aid of the destitute children. Wishing to settle them happily, he tore off a handful of stars from the sky and planted as the mother earth. Then he created trees, flowers, mountains, animals, birds, rivers, springs, lakes and ponds out of his hair, blood, teeth, eyebrows, sweat, coughs, spittings and urine respectively. After creating the world he directed the boy and the girl to travel in opposite directions. They obeyed him. After a long separation, they met again below a Kendu tree. By that time they had attained their blooming youth. Irresistible carnal desire made them to fall in passionate love. The children born out of their union scattered all-over the earth. The scattered groups were known as Bondo, Gadaba, Parija, Didayi etc. Didayis consider Bondos as their elder brother.

2.3. Physignometry:—Didayis are a well-built, medium statured, brown complexioned, squarish faced and flat nosed people possessing coarse and wavy hair, scanty bodily hairs, depressed nasal bridge and concave nasal profile. Narrow eyes sometimes exhibit traces of Mongolian (epicanthic) eye-fold and cheek prominence. Didayi men and women being endowed with clean-cut bodily features radiate grace and charm in their own characteristic style.

2.4. Cultural Profile:—The Didayi dialect which comes closer to that of the Gadaba, Bondo, Saora and Juang belongs to the non-Kherwari branch of the Munda-Kol group under
Austro-Asiatic branch of the Austro-Asiatic family. Hence, linguistically the tribe stands at the most ancient stratum of Austro-Asiatic group of tribes in this country.

2.4.2. The timid Didayi living in the immediate neighbourhood of the populous paraja, Gadaba, Kondh and the aggressive Bondo highlanders maintain peaceful and cordial social ties with all of them. Because of close interaction and cultural resemblances many similarities are marked among these tribal communities. Dr. Elwin and Thurston consider Didayi as a part of Paraja tribe with whom they are intimately related by their mythical origin. Sometimes boys and girls of both the tribe intermarry also. In the Koraput District Gazetteer Mr. R. C. S. Bells has stated that the Didayi is more similar to the Gadaba than the Bondo. According to Furor Heimondorf, the Didayi and the 'Reddis of Bison Hills' are of a related stock and are remnant of an ancient Asiatic culture despite their present diversities. However, Didayis have zealously preserved their genuine ethnic identity and have treated their tribal neighbours as their brethren by virtue of their 'Creation myth'.

2.5. The Settlement and House Pattern:—Didayi settlements are characterised by isolated homesteads scattered at random at the hilltops, hill bottoms and valleys having a natural water source like a perennial stream nearby. The area around the house is enclosed within bamboo wattle fencing. This implies an individualistic housing pattern. 'Gulisung' the communal place for conducting the dances, ceremonies, village meetings is located at a central place. Didayi houses are rectangular shaped having mud walls and grass (Piri) thatched roof. The spacious verandah in front is a unique feature. It serves many purposes like husking grains, sleeping and entertaining guests. The main house is single roomed. The interior is functionally divided into three parts—kitchen, store and living. The remarkable feature of the house is the attic made of bamboo that is approached by a bamboo ladder. It serves as a general store room for storing grains and foodstuffs in large baskets. The pig-sty and cattle-shed are separately built within the campus. Each house has its own kitchen garden where pumpkin, banana, gourd, maize, chilli, tobacco are grown. The house and its surroundings are generally kept neat and clean. The houses of the villages located in the plains are larger in number than those located in hill settlements. For example the village named Oringi located in the plains comprises of more than 100 Didayi households.

2.6. The Livelihood—The Didayi earns their livelihood from agriculture, hunting and food gathering. The hill Didayi pursues shifting cultivation to grow crops such as maize, millet, kandul, niger, ragi, blackgram, bean, brinjal, tomato, chillies, etc. The plain Didayis have adopted plough cultivation. They grow paddy, ragi, maize, blackgram etc. Hunting and food gathering in the forest are done in all seasons except in the busy rainy season. A variety of fruits, roots, leaves and tubers are collected for consumption. The surplus is sold in weekly markets. Collection of 'Mahul' flower during
summer season provides them a gainful economic pursuit. Didayi men take advantage of leisure especially during festive occasions like famous 'Chait Parab' to hunt in groups. The weapons of hunting are bow and arrow, knife and axe. At present different Forest Acts and deforestation and restrictions on hunting have put a check on their age-old hunting activities.

2.6.2. Didayis rear animals like cattle, pig, poultry birds and dogs. Plains Didayis use cattle for ploughing. They do not use cow's milk but take eggs. The pigs and fowls are sacrificed in rituals and the meat is consumed. The animals are also killed to entertain family guests with non-vegetarian food items.

2.6.3. The bamboo available from the forest is used for construction of house, wattle fencing and basketry. They prepare bamboo household effects like basket, mat, winnowing pan etc. both for household use and for sale.

2.6.4. Rice, ragi and millet constitute staple diet of the Didayi. It is supplemented by vegetables, dry fish, meat, egg and a variety of seasonal fruits, roots, leaves and tubers either grown or collected from jungle. Few simple items from rice and ragi and their gruels are prepared and eaten daily. Tamarind, chili, salt and turmeric are used for making vegetarian and non-vegetarian dishes. Most of pig, fowl or the hunted animals are roasted and taken during festive occasions. The Didayi eat thrice daily—morning, noon and evening. They are addicted to Mohua arrack and Salap juice. A kind of rice-beer called 'landha' is also prepared and consumed by them.

2.7. Dress and Ornament:— There is nothing special about the dress and ornaments of the Didayi. In the past the women were wearing 'Kisalu' a self-made short, unstitched clothing made of bark fibres like the hand woven 'ringa' worn by the Bondo women. It was being worn around the waist to cover the lower part of the body while the upper part remained uncovered. But now, the coloured cotton sarees and blouses available in weekly hats have replaced the traditional Kisalu. Didayi women are fond of wearing ornaments made of silver, aluminium, gold, brass and beads. Wearing of nose-rings are compulsory for married women. A Didayi man usually puts on a small loin cloth. Now-a-days the males have started wearing dhotis, shirts, banians etc. Keeping up a well-built as well as neat and clean body is a remarkable feature of their personal hygiene.

2.8. Social Organisation:— The structural organisation of Didayi society is characterised by clan groupings and totemism. The whole society is divided into two exogamous segments composed of totemic groups or clans. There are 5 exogamous totemic groups or clans, called 'Gta' or 'Bonso' namely Nkhoo, Mala, Gibe, Musli and Goi. Each 'Bonso' has its own legend to link their relationship with the totemic ancestors. The Didayi rarely worship their totemic animals but avoid to kill or injure them. The clan or 'bonso' comprises several lineage groups. Consanguinal kins of patrilineally related families in a village form one lineage (brea).

2.8.2. Didayi family, the smallest basic social unit, is nuclear and patriarchal in
nature. It consists of a man, his wife and unmarried children. Sometimes divorced or unmarried brothers and sisters, dependant old parents are included in the family. However, married sons leave their family of orientation to start their own family of procreation within a close-knit group to struggle against the physical environment and earn the livelihood. Women exercise a dominant influence over household affairs by virtue of their significant contribution for the very survival of the family. Children are born and brought up in a very congenial atmosphere. They grow up while helping their parents in all subsistence activities. Succession and inheritance of property is strictly patrilineal.

2.8.3. The institution of marriage is the most cherished and most significant social event in Didayi life. Adult marriage and monogamy is the common practice followed. It is done more by mutual choice and love between the boy and girl than by parental interference. Didayi boys and girls enjoy total freedom in selecting their mates and so, most of the marriages are love marriages. The marriage season is between February and June. Like other tribal societies, the bride-price is paid by the boy's family to the girl's family. The bride comes to the groom's house for the marriage ceremony which is celebrated pompously with dancing, drinking and feasting.

2.8.4. Widow marriage, levirate and sororate are permitted in Didayi society. Divorce, separation and remarriage of either of the spouses are also permitted to end unhappy marital life. Only the husband has the right to divorce his wife. On the other hand, the wife can desert him or elope with her lover forcing her husband to divorce her.

2.8.5. The Didayi perform elaborate death rites. They cremate the deadbody. In case of abnormal deaths caused by pregnancy, child birth, disease, accident and attack of wild animals, the dead bodies are buried immediately. The whole village observes mourning on the day of death. On that day any kind of subsistence activity is totally banned. The purificatory 'Dasa' rites are observed on the 10th day. On that day the villagers and the kith and kin are entertained in a grand feast.

2.9. Political Organisation: Didayis are custom-bound and peace-loving people. They believe in peaceful coexistence and maintain well defined cordial ties with their neighbours including the aggressive Bondo. Social control and conformity are effectively ensured in their social life. Their autonomous political system of the past has declined in these days. Village is the only socio-political unit that has survived the test of time. The Didayi village is autonomous, independent and self-sufficient having full access to its assets and resources including exclusive ownership rights to the land and forest. It is a co-operative and corporate body functioning through its own agencies and arrangements.

2.9.2. A Didayi village is managed by a traditional village panchyat called 'Lepar'. The village headman 'Naik', his assistant 'Challan' and the village priest 'Palasi' provide leadership to the panchyat composed of
household heads. It sits in various occasions to settle disputes, fix up dates for communal rituals and to deal with other routine and emergency issues. The Naik presides over the meetings.

2.9.3. The office of Naik is hereditary in practice. His functions are important because he is responsible for maintaining peace and goodwill in the village, executing the decisions of the Panchayat and especially, communicating the grievances of his villagers to the Government officers. He acts as the leader and spokesman for his village. Nowadays with imposition of Panchayat Raj, the Sarpanch and Ward Members are assuming greater importance in the village affairs.

2.10. Initiatives for Socio-Economic Development—Time is changing fast. The Didayi cannot remain away from it. The process of modernisation and social change is more rapid in case of plains Didayi and less so for their hills living brethren who are still primitive and backward. Their low level of literacy, technology and physical inaccessibility have kept them barely at subsistence level. Hence, they have been declared as the primitive tribe by Government of India. A Micro-Project named the 'Didayi Development Agency' has started functioning at Kudumulguma since September, 1986.

2.10.2. The agency is implementing development schemes for the benefit of Didayis. Importance is being given to improve their earnings by modernising and promoting their traditional land-based subsistence economy and also by upgrading their traditional skills. For promotion of agriculture, cultivation of high yielding variety of crops such as paddy, ragi, maize, groundnut, soyabean, wheat, mustard, turmeric etc. have been introduced. Use of chemical fertilisers to boost agricultural production is slowly gaining acceptance. Utilizing the land for a second crop during winter where irrigation facilities available is being demonstrated to them. The response of the Didyai to the development programmes is quite encouraging.
CHAPTER III
Disease, Ailment and Deficiency

The Maladies pertaining to the Human Body:—The World Health Organisation has endorsed health as one of the fundamental human rights and defines it is not only as mere absence of disease or infirmity but also a state of complete physical, mental and social well-being of not only an individual human being but also of the human society as a whole. A person cannot always inherit it but definitely acquire it through culture-material or otherwise. Health, thus has no biological but cultural inheritance. The absence of a perfect harmony between the internal environment of man and his external environment consisting of physical, chemical and biological surroundings cause a disease to occur. Disease has been defined as a state which limits life in its power, duration and enjoyment (Deodhar-1967:2). Ill health and disease may have the same physical but different literal meanings.

3.1.2. The Didayi considers ill health as a short-term phenomenon and as a body condition that requires rest and food supplements greater than the usual intake and disease as a short or long-term phenomenon which either impairs a part of the human body or the whole body to perform its usual chores and requires the administration of medicines and fortification of mind or soul with verbal or symbolic communication with the unseen forces—the spirits, Gods and Goddesses etc. The demarcation line between the ill health and disease being very thin and fragile, the Didayi sums up both as the state of body that causes the non-performance of manual work. Didayi considers ailment as a physical condition that requires rest for recoupment and deficiency as the abuse of the surrounding by the patient. The tribe does not consider deficiency as a form of disease but the curse of the abused ones. A section of Didayi mostly living in remote or cut off areas link deficiency to non-availability of sufficient food to fill the belly. Its counterpart the so called exposed Didayis reason out deficiency as absence of certain types of food in dietary chain. However, both the sections do not know the role of vitamins and minerals in occurrence of ill health/diseases.

3.1.3. Didayis depend on nature and their manmade surroundings usually consisting of easily degradable as well as recyclable objects-big or small. As a result the Didayi settlements are free from the menace of accumulation of wastes. It is one of the reasons for the non-occurrence of intestinal, respiratory as well as haematic disease in an epidemic form. However, absence of personal hygiene and too much attachment with the domesticated animals and the diseased ones causes the localization of certain diseases/ailments in an endemic form. These are the reasons which separate upper Didayis from the Didayis living in the plains. The latter give more importance to the personal hygiene.
3.1.4. The Didayi believes that the human body consists of two objects. The visible object has the upper cover that protects the body from heat, cold, attack of insects etc. and the body inside the upper cover consists of bones, flesh, blood and other delicate things. The inner body is usually fall prey to the unseen and malevolent objects. The tribe do not endorse fully the Santal view of the causes of diseases. The Santal believes the diseases are caused by the 'Tijio' which may be large or microscopic (Basu-1994: P-317). The Didayi is yet to reason out the existence of microscopic living beings that cause diseases. The lice, magot devouring the dead muscle tissues of a septic wound or the worm coming out of the rectum channel along with the stool are the repercussion of the evil deeds of the patient. Unlike the Bondo, the Didayi at least believe that the diseases are also occurring due to the evil deeds done earlier by the sufferers. Whatever be the causes of the disease, the Didayi agrees that it is an anathema to human activity and physical as well as material development.

3.1.5. A Didayi usually suffers form seasonal diseases due to change in external surroundings. Common cold, cough, fever, headache as well as diarrhoea are considered to be seasonal diseases. Quite a lot of Didayi people suffer from corn, roughness of skin, ringworm, crack on heel or lips, boils and septic wounds. They consider these ailments are the companion of their daily work and never consider them neither as diseases nor ailments. In the changed circumstances, now-a-days the elite Didayi attends to these ailments.

3.1.6. Deficiency of vitamins, minerals and moisture among the Didayi is very much visible in remote areas. Population belonging to younger age-group (1 to 10 years) and older age-groups (above 60 years of age) suffer from such deficiencies. The pregnant ladies also suffer from vitamin and mineral deficiencies. They think that such deficiencies are momentary and go away as the children advance in their age. However the whole of Didayis agree that intake of sufficient food removes all sorts of deficiencies.
CHAPTER IV
MEDICINEMEN

The Encyclopaedia of Social Sciences defines Medicine as a Social Institution. If that be so then the medicineman is the prime office-bearer of that institution. In a primitive society, the medicine is not considered as something derived from the biotic or abiotic object that is administered into the body system in smaller quantities but also as a series of actions/processes that is chiefly followed by the medicinemen to muster the will power of the patient to take the medicine and obtain positive results. A medicineman, therefore, is none other than kingpin of the institution.

4.1.2. A medicineman, in a Didayi Society, enjoys prestige and dignity. He is considered as a man of clarity, knowledge, patience, initiative, dedication and drive. A Didayi, however modernised may be, considers a medicineman above an average person in their society and behaves appropriately in the presence of a medicineman.

4·2. Different schools of thought--A Didayi medicineman is also seen as a widely travelled man with larger contact with the members of other ethnic groups. The traditional medicineman practising healing activities among the Didayi may be clubbed into two groups, namely--(a) the dormant group and (b) the active group. The members of the former are shy, do not exhibit their expertise unless asked for and have command over very little variety of the medicinal plants. They are feared more by the members of the community because they are considered to be in possession of 'Black Medicines'. The latter have free access to all sorts of people living nearby. They are also found to be literate and have knowledge about a number of medicinal plants. This section of medicinemen also have healing practices which almost coincide with the local Vaidyas and Quacks. Many medicinemen belonging to this section also confess that they have acquired the expertise from an Oriya speaking non-tribal emigrant who constructed a temple in the Didayi belt and tried to bring some social reforms among the Didayi Tribe. From among the two groups of medicinemen the former is dependent more on 'voice and action medicine' and the latter more on 'material medicine'.

4·2·2. The medicinemen belonging to either groups bear no separate name as to their identification. The village headman, the Naik, the village priest Palasi or the village messenger the Chalan, generally act as medicinemen. These posts normally are hereditary in male line (Choudhury:1990:98). Thus the knowledge of medicemanship is verbally transmitted from one generation to another. Contact with other people has widened their knowledge and incorporated more medicinal plants and medical practices into their materia medica.

4·2·3. Existence of malevolent spirits, evil eyes as well as the ire of the angry Gods and Goddesses, according to the Didayi medicineman, cause the diseases. Usually the Palasi handles cases supposed to be
caused by the above agents. The Chalan is more at hand
with material medicine. The Naik, due to his social posi-
tion, usually is consulted by the family members of the
patient for the treatment. In such cases Naik himself handles
the patient or advise the patient or his family members
to go to the Palasi or other healing practitioner.

4.3. Gender Specification--
The Didayi medicinemen are
usually males. In the plains,
the Didayi address their traditio-
nal healer, as GURU. However,
no GURUMAI—a female
medicine practitioner is found
in the Didayi belt. In remote
villages some old Didayi women
occasionally take resort to
'touch therapy' to cure head-
ache, backache, muscle cram-
pin in joints. Oil or plant
extracts (juice of leaves, barks, roots, etc.) are usually
utilised. The Didayi women
also give certain roots or
herbs to pregnant women for
smooth and easy delivery of
child.

4.4. Good and Bad Medicinemen--
The Didayi often distin-
guishes between the good and bad
medicine. The Didayi usually
considers a medicineman as an
excellent person, free from
greed and partiality. The
concept of existence of bad
medicineman has crept into
their mind of late, when the
uniethnic villages were turned
multiethnic ones and when the
craze for acquiring material
wealth overrode their simple
lifestyle. They still consider
that the bad medicinemen are
smaller in number and induct a
disease into the body of a
victim by means of black magic
combined with administration of
very little quantity of 'charmed
objects' into the body system
covertly.

4.5. Social Status— The Didayi
places a medicineman at a high
level in their society. They
are consulted for any maladies.
The medicineman also maintains
his lifestyle tuning to the
respect shown by others. Gene-
really he is affluent, well-
formed and quick at
reasoning out the causes of
diseases.

4.5.2. A Didayi medicineman not
only caters to the need of an
individual patient but also
handles the epidemics—particu-
larly small-pox and cholera and tries to douse the epidemic
with spiritual medicines at
the village level. At times he
also attends to the congrega-
tion of village medicinemen at
a convenient place to
eradicate maladies in the
belt. This very act also causes
the Palasi to emerge as a
spokesman of the health condi-
tion of the village at the
inter-village level.

4.5.3. It is very hard to
identify a Didayi medicineman
from among the common man as
he hardly bears any physical
identity, like keeping long
lock of unkempt hair, putting
on vermilion or sandalwood
paste marks on the forehead
etc. Unlike the GURUs of the
Bondo highlanders the Didayi
medicinemen have clean habits
and practices.

4.6. The Curing Practices--
The curing practices of the
Didayi medicinemen are of two
types. The traditional medi-
cinemen go for spiritual
medicines namely dancing and
gyrating before the patient
while uttering hymns addressed
to malevolent deities. By
doing so they try to build
willpower and, infuse the same into minds of the patients. This psychotherapy at times yields amazing results.

4.6.2. In case of seasonal diseases, the medicinemen either the psychopaths or the material medicine specialists, attribute the diseases to the unseen forces but give medicines derived from herbs, plants, abiotic foreign objects and parts and parcels of animal species. In case of accidents they prepare medicines and give the same to the patient for application but claim to, ward-off the evil eye which might fall on the open wound covertly at home.

4.6.3. In case of diseases, whose causes cannot be traced out, the medicineman creates a belief that some foreign body—a charmed object, might be embedded in the body and is growing in size resulting in pain. For this also they give medicine and administer the same following certain rituals. It is observed that in most of the cases the patients do not recover and find their way to the nearby Health Centres.
Mani, Mantra and Aushadha; according to Brhat Samhita are the three instruments used by the ancient Indians to treat the patients. The Indian system of medicine got a major break by the recommendations of Sushruta for Astropochara-Surgery. All these four agents have their roles on the body system which go abnormal seasonally or perennially. Except the surgery all other instruments of treatment have been adopted by the Didayi medicinemen. The medicineman in fact is the driving force behind the medicine—the social institution.

5.1.2. The indigenous medicines used by the tribal groups are almost identical, both in the preparation and administration. Some variations are, however, noticed from one biotic zone to other. The ethnic groups living in areas with no seculent undergrowth depend heavily on 'hard trees' for medicine. The leaf, seed, bark, root and fruit pulp is used as medicine. In semi-arid zones the indigenous medicines are prepared out of animals—their bone, skin, blood, flesh, teeth, nail and even milk. In sub-tropic deciduous forest areas the tribes find a lot of plant species ranging from 'hard trees', creepers, highly sensitive succulent undergrowth to parasites and fungus. The Didayi land lies in sub-tropic deciduous forest areas. As a result a variety of plants have been identified by the indigenous medicinemen as having medicinal qualities. It is strange to find that very little kinds of botanical species have been incorporated into the pharmacology of the Didayi medicineman.

5.1.3. The Didayi school of medicine consists of the use of Mantra and Aushadha. Of late, a few medicinemen have started to advice the patients to wear fetish-amulets and talisman containing ash, root and dust fortified with mantra, around fore arm or neck. The male patients near urban centres are found in possession of such objects. A Didayi considers this as a preventive measure against any malady. Though the patient as well as the medicineman do not agree with, it is evident that two types of treatments are adopted to cure a patient. From among the two psychosomatic treatment is given to the patients where causes of diseases cannot be attributed to any visible agencies. They apply 'Mantra' to treat such patients. When a Didayi medicineman decides that a patient is suffering from the action of visible agents, he goes for somatic treatment—application of medicines either externally or internally or both.

5.1.4. As a Didayi has a very little knowledge regarding the existence of different kinds of diseases, he adopts very little types of treatments. This is also one of the reasons of such a little number of treatments for the diseases. By trial and error method the tribe has prepared a pharmacopoeia based on locally available materials and latter fortifying and enlarging it with induction of thoughts and materials acquired from outside. It is also noticed that
the diseases of civilised man (Frazer 1957: P-62) are absent in Didayi country.

5.1.5. The Didayi indigenous medicine is simple, less expensive, less dietetic, more curative but slow in action and is confined only to heal a patient from his maladies. As a result, preventive and after-care somatic medicines are not found in their system. The Palasi, in general, boasts of prescribing preventive and after-care medicines which are psychic in nature.

5.1.6. The 'Osha' is the common word for medicine used by the enlightened traditional medicineman in the Didayi country. To its contrary is 'Risha' which they believe restricts the normal activity of a man and ultimately leading him to death. Bisha, they consider is the inherent part of the black magic. 'Osha' has a short life span and should be administered immediately after preparation. Compound medicines, they believe, has the larger 'potency' period and can be stored for more than two applications. The medium of trapping the medicine derived from a plant is water. Of late, imitating the local vaidyas, they have used honey, oil and milk butter (ghee).

5.2. Preparation of medicine--Most of the Didayi medicines are applied externally. Even for the acute stomachache plant extracts are massaged externally. The medicineman has a ready stock of dried herbs (leaves, barks, roots, seeds etc.). After diagnosis, which in most cases are superficial, he gives a portion of the dried herbs and asks to make it a paste in water. He then applies it on the affected part of the body. This overt action of medicineman turns to some sort of covert activity when he goes for raw medicine. He himself collects the medicinal plants, prepares the medicine and gives to the patient. Some of the plants are well known to the Didayi people for their medicinal qualities. In this case the efficacy of the medicine depends on the right quantity of medicinal ingredients in a right manner. It is the medicineman, who due to experience, excels others in this front.

5.3. Most of the medicines are prepared 'in situ' with simple apparatus available locally. The apparatus used are the knife of various sizes, grinding stone, rudimentary mortar and pastle, a few metal containers etc.

5.3.1. The Administration of the Medicine--The prepared medicines are applied once or twice in case of wounds and fractures. The oilbased medicines are repeatedly applied till the patient feels ease to bear the effect of disease. The method of massage of the medicineman implies that he has a good knowledge about the structure of the muscles, position of the nerve centres and orientation of the cramps.

5.3.2. Apart from these epidermal applications, a Didayi medicineman applies his medicines internally into the body system through oral doses or inhalation of smoke. The respiratory disorders are done with the inhalation of the smoke emitted from the incineration of the medicinal plants or resins of 'hard trees' (sal). The 'Oral Medicines' are always taken fresh for seasonal diseases. However, in
chronic cases non-aqua medicinal doses are prescribed.

5.3.3. Like the Bondo, the Didayi also use certain medicines—the different portions of the medicinal plants as such, based on touch therapy. These medicines are adored rather than absorbed.

5.3.4. Some of the Didayi medicines, its preparation and administration are appended in Annexure-I.
CHAPTER VI
Prescriptions and Prohibitions

There are prescriptions and prohibitions as well in the context of the Didayi Medicines. The prescriptions of a Didayi medicineman consists of antidotes—both material and spiritual, that prevents diseases. This primitive society still believes that the causes of the diseases are (a) the projection of morbid objects or substances, (b) abstraction of something from the body and (c) the action of sorcerer on some part of the body or some objects once connected with the body of a person (Paul, 1925:18).

612. A Didayi prescription is superior to that of the Bondo because it not only deals with medicines but also with other supportive measures, like maintenance of body hygiene and alteration in usual dietetic habits. There exists little transparency and openness in their therapy which need further scientific testing. Being docile in nature and not as rigid or individualistic as the neighbouring Bondo people, the Didayi medicineman and its methods of use are akin more or less to the Ayurvedic system of handling the ailments. Their prescriptions are institutionalised by higher does of influence from the Kaviraj's—mostly the Non-tribal settlers.

613. The prescription makes it mandatory for the patient to visit the medicineman or vice-versa. This establishes a better patient medicineman relationship and gives scope to the latter to alter his medicine during the course of treatment. The gradual disappearance of medicinal plants from the natural vegetative coverage of the area has ushered in the process of localisation of medical knowledge with a few persons. These persons are prescribing 'prepared medicine' rather than the raw and 'green medicine'. These prepared medicines are the secrets of the medicineman. The intake of medicines are more systematised and more repetitive in case of the Didayi school of medicine.

614. The food and other restrictions laid down by the Didayi medicinemen are not always supplemented by the social sanctions. As a result, the taboos/prohibitions related to the medicine are very few in number. The methods of administration of medicine are either external—through massage, annointation and simply intimate contact with the body or internal intake through inhalation or oral administration. The psychological impact of the medicine is established by chanting of incantations (Mantras) addressed to both tribal as well as the Hindu Gods and Goddesses like Lord Jagannath, Shiva, Lakshmi, Parvati etc. As a Didayi medicineman is more knowledgeable than his Bondo counterpart regarding the effect of food on the digestive and the general body systems of the patient, his prescriptions also recommend consumption of certain food items and prohibition of some others. Generally fibrous and hot foods are not given to the patients suffering from stomach pain. Similarly Sago-palm juice, stale rice-water and fruits, like banana, custard apple are not given to
patients suffering from fever, cold etc. It is strange to note that stale meat, dry-fish and the likes are not restricted to the patients suffering from intestinal disorders and the old people with poor digestive power. In case of diseases, like jaundice, small-pox, cholera and ailment in respiratory track as well as pain in joints the prescriptions given are of supernatural type. The so-called 'faith healing' consisting of consumption of raw medicines usually prepared from different parts of a plant-either singly or in combination, anointment of oil followed by chanting of sacred words addressed to the Gods, Goddesses or the spirits. It also advocates, for offerings to benevolent or malevolent forces. A Didayi patient is never prescribed with preventive as well as 'after care' medicines.

62.2. The prescriptions and taboos are strictly followed by the medicineman and his patients. If the medicine fails to yield proper results, the medicineman refers the case to his 'guru' and if the guru fails the patient is brought to the nearby modern health-care centre for treatment. It is seen that affluent Didayi persons and those living near multi-ethnic villages are drifting away from these prescriptions and taboos. They are depending more on different 'ready to use medical formulations available in the market. This section of Didayis also confess that medicines administered in the body through the hypodermic needle less are more effective in yielding quick results. At times, they argue with the medical officers or paramedical workers to have expensive intramuscular or intravenous shots rather than swallowing equally effective oral doses. It is also observed that the so-called elite Didayis are prepared to cough off a bigger amount of...
cash after costly and bigger oral pills and capsules rather than equally effective inexpensive smaller pills. This shows that their belief system is interwoven with the idea that bigger and expensive oral medicines are more powerful. Homoeopathic as well as Ayurvedic medicines are not in vogue in Didayi belt yet. Their indigenous medicine may play a second fiddle to the modern allopathic medicines, but the homoeopathic or the Ayurvedic medicines are yet to play a secondary role next to the tribal indigenous medicine.
CHAPTER VII

An Overview: Persistence and Change

The world-view of a tribe towards every thing around them—material or non-material gets widened with the in/out-migration of both the population and information. The flexibility observed is due to the intensity of the movement and the media through which it moves. Acceptability or otherwise of the change by the people is another important factor to arrive at any inference regarding end results. The Didayi attitude towards the disease, treatment and the medicineman is changing at a lower pace despite traditional as well as institutional resistance.

7.1.2. Like the neighbouring Bondo people, the Didayi falls into three groups in terms of offering resistance or accepting the changes in healing practices. The elder ones with strong belief in traditional medicines and the medicinemen do not prefer to show their ailing body to an outsider as they feel that it affects their way of living and belief system. As the aged ones consider themselves as the liability to their offsprings, they do not prefer to go for expensive treatments. This section of the Didayi population considers the diseases as the for runners to their old age and opt for persistence of the traditional medicines. They also consider themselves as the children of nature and do not want to go against it. The people in extreme end to this section consists of those who are exposed to the process of acculturation. This group depends more on borrowed thoughts and life styles and is in favour of adopting a changed medical system. They find it easy to get the medical facilities in exchange of hard cash obtainable from sale of Surplus Agricultural Produce (SAP) and Minor Forest Produce (MFP) as well as from accepting wage-earning pursuits on either daily or monthly basis. Sandwiched between the two is that section of the Didayi population who have likings for traditional medicines and medical practices at the initial stage, but change over to modern medical system at the last lap. This section usually consists of those belonging to working age-group and those who eke out bread from service sectors. Suspicion has crept into their minds regarding the efficacy of the traditional herbal medicines and the illiterate medicineman. Covertly this section advocates for change in curing practices but overtly plays a supportive role for continuation of the age-old practices at least at the initial stage of the disease. The tradition-bound Didayis follow customs to which every member is expected to conform (Basu-1994:317). They also believe that 'the fate of the individual and community depends on their relationship with unseen forces which intervene in human affairs' (Ebid-317). They still believe in the natural theory of disease.

7.1.3. The Didayi is yet to compromise with the theory that bacteria, microbes and finer particulates (dust, pollen grain, etc.) invite diseases. They confess that visible solid particulates (sand, clay, dung, hair, nail
(etc) if find their way into the stomach, they grow in size and hinder the usual function of the body organs. As the strong believer of blackmagic a Didayi fears to come into the contact with any magic objects. The so-called magical objects may be the poison extracted from plants, animals or minerals. The poison in small doses if administered into the body, the victim gradually fails to perform his usual work. The medicines, they think, are always curative and the drugs that constitute the medicine are none other than the boon of the appeased supernatural beings.

7.1.4. The medicineman rather than the medicine tries very much for the disappearance of the disease. A Didayi gives more emphasis on the medicineman who handles the patient. A good medicineman, he believes, has a good pair of hands that touch the medicine and make it foolproof. In the Didayi country the so-called good hands are not only associated with experience but also with tolerance, patience and personal cleanliness. The wind of change has not shifted their reliance from medicinemen to medicines at least in traditional therapy.

7.1.5. Being the lover of nature, a Didayi depends on 'green or fresh' medicines of simple composition prepared out of simple ingredients. They still go for fresh medicines rather than the stored medicines. Medicine if stored loses its potency. If the preying eyes gaze upon the medicines or the medicine are kept in cool and dark places, the efficacy diminishes. This belief do not hold good for non-traditional medicines. Almost all Didayis belonging to different schools of thoughts have great faith on 'stored' medicines of other form—the pills, the syrups and the intramuscular or intravenous shots. They think it is the last step to cure ailments. They also express eagerness to use 'green' or 'fresh' medicines as the emergency antidotes.

7.1.6. It is strange to note that the Didayi who always allow assimilating finer things of other tribes and communities into their own, has a pharmacopoeia for such a lesser kinds of diseases with the single therapy in use. The herbal therapy is based on experience and the method of administration is inhalation, massage and oral consumption followed by chanting of incantations addressed to spiritual beings.

7.2. The Change--The Didayi pharmacopoeia is slowly affected by the winds of change. At present for storage of prepared medicines oil of tree-borne seeds is being used instead of water. The methods of preparation of medicines has been altered a bit to arrest contamination by the foreign bodies. This change, it seems, is due to change in outlook towards health and hygiene and fascination for ayurvedic system of medicine both by the enlightened patients and equally enlightened medicinemen. These medicinemen are gradually preparing compound medicines from different types of dry matters derived from different kinds of medicinal plants. The methods adopted for preparation of medicines at present are grinding, whipping, filtering through coarse cloths and ageing through long storage.
7.2.2. The treatment of a patient is no more considered mere administration of medicine. A set of restrictions have been imposed by the medicinemen on the patients to observe. As a result, the enlightened traditional Didayi medicinemen advise the patients to consume certain types of food and reject certain others. The fibrous foods, animal proteins and ripen fruits are not advised for consumption. The consumption of milk, once a taboo for the Didayis, is being encouraged. The Didayi medicinemen, now-a-days, do not hesitate to advise a patient to go for alien food supplements, like sagoo, barley etc. However, a traditional Didayi medicineman has no reliance on tinned cereals and milk based foods. In the recent past, a Didayi medicineman was not serious enough to prescribe 'Aftercure' medicaments. Imitating the non-tribal herbalists (the vaidyas), the Didayi medicinemen have started advising the patients to consume certain foods, perform certain physical works, abstainment from exposure to extremity of temperatures and flow of winds.

7.2.3. The attitudes of the patients as well as their relatives towards the medicinemen and their methods of treatment have changed. The former two give more stress on 'matters'--the medicines rather than the 'words'--the hymns addressed to the benevolent/malevolent supernatural beings. A common sight observed in a Didayi belt is that the medicineman is also a referral body who when fails in his mission advises, the relatives of the patients to a medicineman of higher order. If the medicineman of the higher order fails, he instead of referring the patient to a Health Unit, advise the patient's relatives to see a shaman or a mystifier. The latter is a psychopath who takes resort to perform action to appease the spirits, Gods and Goddesses. If the attempt fails at this point, the patient or his relatives turn to modern medicine.

7.4. Some aspects in the field of the indigenous medicine have persisted and some have changed due to various factors, like modernisation, planned development intervention, etc. The Didayi population has been caught in the web of tradition and modernity and within therapeutic pluralism.

END NOTE:
The paper has been prepared by Shri A. K. Moharana, Research Officer, based on field work conducted by him among the Didayi of Malkangiri district. The Socio-Cultural outline in Chapter-II has been contributed by Shri S. C. Mohanty, Research Assistant. The study, an exploratory one, was conducted under the supervision of the Director.
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
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<tbody>
<tr>
<td>BASU, SALIL</td>
<td>1994</td>
<td>'Tribal Health in India' in Sely (ed), Tribal health in India, Nanak Publication, Delhi, P. 317.</td>
</tr>
<tr>
<td>CHAUDHURY, B.</td>
<td>1990</td>
<td>'Didayi' in Tribes of Orissa, Tribal and Harijan Research-cum-Training Institute, Bhubaneswar, P. 98.</td>
</tr>
</tbody>
</table>
## ANNEXURE I

### Tribal Medicine at a glance (Tribe-Didayi)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Plant</th>
<th>Dry matter</th>
<th>Properties of dry matter</th>
<th>Disease/ Ailment</th>
<th>Method of Medicine Preparation</th>
<th>Administration</th>
<th>Food &amp; other restrictions, if any</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jaibajali</td>
<td>Root</td>
<td></td>
<td>Headache</td>
<td>A two inch long root is washed and roasted in live amber.</td>
<td>The roasted root is threshed and applied on forehead preferably in the morning when the sun is well above horizon.</td>
<td>Prescribed by both traditional and secular medicineman.</td>
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<td>2</td>
<td>(a) R. Serpentina. (a) Patal garuda. (a) Root (a) Fever fuge, Alexipharmic.</td>
<td>Stomach pain.</td>
<td>Equal volumes of root of R. Serpentina &amp; fruit of Swarga garuda are ground and made into a thick paste.</td>
<td>The paste is taken orally thrice a day.</td>
<td>Ditto</td>
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<td></td>
<td>(b) Swarga garuda.</td>
<td>Fruit</td>
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<td>3</td>
<td></td>
<td></td>
<td></td>
<td>Continuous cry by baby child.</td>
<td>The drymatters are solely collected by the medicineman guided by a dream.</td>
<td>Mostly used as a surface applier.</td>
<td>Prescribed by only traditional medicineman.</td>
<td></td>
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<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>Loose motion &amp; vomiting by baby child.</td>
<td>Ditto</td>
<td>Ditto</td>
<td></td>
<td>Ditto</td>
</tr>
<tr>
<td>5</td>
<td>(a) Hydrocotyle asiatica, Khura. (a) Thallkudi. (a) Root</td>
<td>Loose motion &amp; vomiting by adults.</td>
<td>The roots of the both plants in the proportion of 2:1 is made into a thin paste. It is diluted with water.</td>
<td>Taken orally twice a day (both fresh and dry) and fibrous food is restricted.</td>
<td>Prescribed by both traditional and secular medicineman.</td>
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<tr>
<td>6</td>
<td>(a) Hydrocotyle asiatica, Linn.</td>
<td>(a) Thali kudi.</td>
<td>(a) Root</td>
<td>To ward off evil spirits from body.</td>
<td>The roots of the both plants in the proportion of 2:1 is made into a thin paste. It is diluted with water.</td>
<td>Taken orally twice a day after any light food.</td>
<td>Hot food, meat (both fresh and dry) and fibrous food is restricted.</td>
<td>Prescribed by traditional medicineman.</td>
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<tr>
<td>7</td>
<td>Phyllanthus Niruri, Linn.</td>
<td>Phyllanthus amla.</td>
<td>Phyllanthus amla.</td>
<td>Leaf</td>
<td>Blood dysentery.</td>
<td>A handful of leaves are washed and ground to a thick paste. A pinch of salt is added to it.</td>
<td>Taken once in day time. In case the aliment does not respond to the medicine, two times a day orally administered.</td>
<td>Heavy food is avoided. Advised to take complete rest.</td>
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<td>8</td>
<td>...</td>
<td>Do.</td>
<td>Do.</td>
<td>Do.</td>
<td>Stool with mucus.</td>
<td>Ditto</td>
<td>Ditto</td>
<td>Ditto</td>
</tr>
<tr>
<td>9</td>
<td>Bauhinia purpurea, Linn.</td>
<td>Barada</td>
<td>Barada</td>
<td>Leaf</td>
<td>Piles</td>
<td>A handful of the leaves is ground with one strand of charming feather of peacock &amp; a little of Goruchina to a thick paste.</td>
<td>The paste is whipped with a lobe of jaggery &amp; taken orally once. After sometime one egg of a hen is cracked &amp; placed on the anus by the Dissari. The Dissari chants Mantra &amp; evoke all the Gods and Goddesses to place boon on the patient. In old cases two to three administration is prescribed.</td>
<td>The patient is advised to avoid constipating food. The Dissari attends to the patient. When the patient gets cured, he offers fowl with upright feathers.</td>
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<tr>
<td>10</td>
<td>(a) Diplocyclos</td>
<td>(a) Dimbarimal.</td>
<td>(a) Sibalingi.</td>
<td>(a) Kusum</td>
<td>(a) Risom</td>
<td>(a) Bark</td>
<td>(a) Kusum</td>
<td>Deep wound</td>
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<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Easy delivery of child</td>
</tr>
<tr>
<td>12</td>
<td>Surti</td>
<td></td>
<td>Flower</td>
<td></td>
<td>Removal of placenta</td>
<td>The flower is fixed to the ear or worn around the neck.</td>
<td>It is some sort of close contact between the body and the flower.</td>
<td>The flower is removed from the closed contact when the placenta comes out of the body.</td>
</tr>
<tr>
<td>13</td>
<td>Custard apple.</td>
<td>Sitaphal</td>
<td>Sitaphal</td>
<td>Seed</td>
<td>Lice eradication</td>
<td>The seed is ground to a thick paste.</td>
<td>Care is taken to keep the paste away from the eye.</td>
<td>Both secular &amp; traditional medicinemen attend the patient.</td>
</tr>
<tr>
<td>14</td>
<td>Azadirachata Indica, Ad de Juss.</td>
<td>Limba</td>
<td>Neema</td>
<td>Leaf</td>
<td>Anthelmintic, anti-pruritic</td>
<td>The leaves of neem are made into a paste. It is whipped with fresh cowdung with cow urine.</td>
<td>The paste like thing is massaged on head by the leg of an assistant.</td>
<td>Both fresh or dried twigs &amp; leaves are used. Dry fish eating is avoided.</td>
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<tr>
<td>15</td>
<td>Azadirachata Indica.</td>
<td>Limba</td>
<td>Neema</td>
<td>Twigs</td>
<td>Scabies</td>
<td>The diccion is cooled and taken orally several times after food.</td>
<td>Both fresh or dried twigs &amp; leaves are used. Dry fish eating is avoided.</td>
<td>Ditto</td>
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<td>16</td>
<td>Terminallatomentosa,</td>
<td>Piasal</td>
<td>Piasal</td>
<td>Resinous fluid</td>
<td>...</td>
<td>Eye infection (redenting of eye).</td>
<td>The tree is struck with a sharp weapon to get the resinous fluid.</td>
<td>The fresh fluid is applied on the eye brow.</td>
</tr>
<tr>
<td>17</td>
<td>Ggdalu</td>
<td>...</td>
<td>Leaf</td>
<td>Epilepsy</td>
<td>...</td>
<td>A handful of the leaves are ground to a paste. It is made thick with little water.</td>
<td>The liquid is taken orally in the name of the family deity for two to three months.</td>
<td>...</td>
</tr>
<tr>
<td>18</td>
<td>Calotropis gigantea,</td>
<td>Arakha</td>
<td>Arakha</td>
<td>Latex</td>
<td>...</td>
<td>Skin infection due to contact with damp cloth sweet etc. (Machala &amp; Chamadala).</td>
<td>The latex of the freshly plucked leaves is collected.</td>
<td>The latex is applied on the affected part.</td>
</tr>
<tr>
<td>19</td>
<td>Panur</td>
<td>...</td>
<td>Swollen root</td>
<td>...</td>
<td>...</td>
<td>Water infection in between the toes of the foot.</td>
<td>The swollen root is made into a paste with little salt.</td>
<td>The affected part is cleaned &amp; wiped with a piece of cloth. The paste is then applied on it.</td>
</tr>
<tr>
<td>20</td>
<td>Aegle marmelos, Linn.</td>
<td>Bel</td>
<td>Bel</td>
<td>Root</td>
<td>Digestive Snake-bite</td>
<td>A finger long root is ground and made into a paste.</td>
<td>The paste is taken orally &amp; a little of it is applied on eye lid.</td>
<td>The patient is kept awake always.</td>
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<tr>
<td>27</td>
<td>S. Xanthocarpum.</td>
<td>Vejibaigan</td>
<td>Vejibaigan</td>
<td>Seed</td>
<td>...</td>
<td>Toothache</td>
<td>The seed is burnt inside</td>
<td>Sour/sweet food</td>
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<td></td>
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<td>a funnel and smoke is</td>
<td>is avoided.</td>
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<td></td>
<td>inhaled orally.</td>
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</tr>
<tr>
<td>28</td>
<td>Semecarpus ana</td>
<td>Valia</td>
<td>Bana Valia</td>
<td>Oil</td>
<td>...</td>
<td>Hydrosil</td>
<td>A thin string is soaked with the</td>
<td>It is tied around the</td>
</tr>
<tr>
<td></td>
<td>cardium, Linn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>oil of valia.</td>
<td>oil of valia.</td>
<td>left leg.</td>
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<td>No.</td>
<td>(1)</td>
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</tr>
<tr>
<td>21</td>
<td><em>Vitis</em></td>
<td><em>Hada</em></td>
<td><em>Hada</em></td>
<td><em>Root</em></td>
<td>...</td>
<td>Bone fracture</td>
<td>The branches of the creeper is converted into a paste.</td>
<td>The paste is applied on the wound &amp; bandaged.</td>
</tr>
<tr>
<td>22</td>
<td>...</td>
<td><em>Ghunti</em></td>
<td><em>Twig</em></td>
<td>...</td>
<td>Impotency</td>
<td>The twigs are used as tooth brush.</td>
<td>The patient advised to brush his teeth with the twigs for a long time. He is advised to make it a practice.</td>
<td>Cock, hen and sparrow are consumed by the important male.</td>
</tr>
<tr>
<td>23</td>
<td><em>Jatropha curcas</em>, <em>Dumboga</em></td>
<td><em>Baigaba</em></td>
<td><em>Tender branches</em></td>
<td>...</td>
<td>Sprain</td>
<td>The tender branches are put on live charcoal and twisted to extract the fluid.</td>
<td>The fluidoozing branches are pressed over the affected part of the body.</td>
<td>...</td>
</tr>
<tr>
<td>24</td>
<td>...</td>
<td><em>Lue</em></td>
<td>...</td>
<td>Resinous fluid</td>
<td>...</td>
<td>Constipation</td>
<td>The tree is hit with sharp weapon to get the fluid.</td>
<td>The fluid is taken orally once a day.</td>
</tr>
<tr>
<td>25</td>
<td><em>Terminalia chebula</em>, <em>Harida</em></td>
<td><em>Seed &amp; fruit</em></td>
<td>Digestive Cough</td>
<td>The dry fruit is roasted and the pulp is removed.</td>
<td>The pulp is chewed and the seed is burst open to get the tender part. It is eaten.</td>
<td>Exposure to cold and water is restricted.</td>
<td>Ditto</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td><em>Tamin- rindus indicus</em>, <em>Tentuli</em></td>
<td><em>Tentuli</em></td>
<td><em>Pulp</em></td>
<td>...</td>
<td>Consumption of poison</td>
<td>The pulp is mixed with water.</td>
<td>The water is taken orally so that the patient vomits.</td>
<td>The patient is not allowed to sleep.</td>
</tr>
</tbody>
</table>
The Book titled, "Intellectual Property Rights and the Tribals" contains 11 articles contributed by various eminent Social Scientists, Planners, Administrators and Researchers. The eminent writers, like Prof. B. K. Roy Burman, Dr. K. K. Chatterjee, Dr. B. N. Sahaya etc., have focussed the most critical and controversial topics on intellectual property rights specially among the tribals indicating an International Policy to safeguard the intellectual property rights of all societies, irrespective of their progress in the field of civilisation. The World Body United Nations have dictated a policy for protection of rights among commercial groups as well as community based groups for defining the rights of farmers, Innovators, tribal inventors specially to protect traditional knowledge as well as creating a social and legal infrastructure to patient or reward the inventing communities for the innovations through a profit sharing mechanism. This process of thought brought about several important issues regarding patenting and protecting intellectual property rights of neglected communities, farmers, tribals as well as protecting the traditional resources and knowledge base of each country. In India, inspite of several constitutional provisions for safeguarding the interest of tribal communities, their rights and interests are seriously encroached upon by the so-called civilised upper class society specially in the sphere of basic economic resources, like forest, land and water. Major industrial, irrigation and Mining Projects destroy the very back-bone of tribal habitat and their economy consequently force them to adopt an alien culture and keep them in isolation on their traditional cultural atmosphere. Their age old technology on house construction, preparation of indigenous medicine through plants and herbs, knowledge in typical terraced cultivation etc. are gradually fading away owing to massive encroachment by out sider intruders in the name of modernity and scientific advancement. It is therefore, very much needed to check the erosion of knowledge and resources by recognising and rewarding tribal contributions to bio-diversity.
The book is outcome of a Seminar-cum-National Level Workshop conducted by Jigyansu Tribal Research in collaboration with the Tribal Development Division, Ministry of Welfare, Government of India at the India International Centre, New Delhi.

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ANTHROPOLOGICAL ECONOMICS:

Substantivism Versus Formalism

Behura, N. K. (Dr.)

1997

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AUTHOR'S PREFACE:

These essays are an attempt to analyse economic phenomena, economic behaviour and economic relation in respect of tribal societies, which are simple, subsistence-oriented and overwhelmingly tradition bound. Tribal societies are pre-industrial and some are even pre-agricultural, relatively egalitarian, non-stratified, culturally homogeneous, structurally segmentary, kin-based and closed. Their techno-economic base is simple, and there is lack of motivation amongst them to generate capital for multiplying income; and their ideological order is dominated by animistic and fatalistic orientations. All these parameters account for a specific mode of social organization which is found amongst the tribal communities.

Tribe represents a type of society and according to some scholars it represents a 'stage' in social evolution. Every stage in social evolution is characterised by a specific mode of social organization and production. Tribal communities by and large inhabit forest and hilly tracts and depend on forest resources for a variety of purposes. Even settled agricultural tribal communities living in the vicinity of forests supplement their economy with hunting and gathering. Tribal economics are undifferentiated and mixed in nature. Hunting, gathering, pastoralism and practice of shifting cultivation, crafts and settled agriculture are the main economic pursuits of the tribal communities. The peculiar feature of tribal economy is that no tribal community fully depends on any one mode of economic pursuit. Therefore, tribal economies are said to be mixed and undifferentiated.

Tribes by and large inhabit forest and hilly tracts. Even settled agricultural tribal communities live in the vicinity of forests. Most of the tribal communities depend on forest resources in varying degrees for a variety of purposes. Thus settled agricultural tribal communities living in the proximity of forests resort to hunting and gathering as their subsidiary occupation.
Study of the economy of simple societies attracted the attention of Western anthropologists right from the beginning of the current century, and the process was accelerated from 1940s onwards. The scholars concentrated on the study of physical background, subsistence, institutional forms, economic spheres, patterns and alternatives of allocation, possibilities for growth, spheres and barriers, management and stratification, innovative activity and market orientation. While discussing the economic sphere of tribal communities they of course kept in view the anthropological concept of 'holism'. Economic subsystem of any traditional society constitutes the means by which goods are produced, exchanged, redistributed and consumed. In non-literate and non-industrial societies economic and socio-cultural factors are mutually interdependent and reinforcing. And hence study of economics in such societies can be best undertaken in the context of total culture of each society.

Study of economy of tribal societies in course of time assumed polar positions, Grass (1927) had coined the term "economic anthropology" and had conceptualised it as a synthesis of anthropological and economic studies. Firth (1965, 1967), Good fellow (1939) and Herskevits published books on 'economic anthropology' maintaining therein the position that 'anthropologists could benefit analytically by studying and applying related aspects of conventional economics to primitive and peasant economics'. These scholars have been termed as 'formalists' in Anthropology. In contradiction to this approach Polanyi (1944), Dalton (1961) and Godelier (1977) focused attention on economic problems from diachronic evolutionary perspective and paid due attention to socio-cultural factors which influence economic behaviour and relations. They are termed as 'substantivists' in Anthropology. The present volume is a modest endeavour to examine the arguments and logics of both 'formalists' and 'substantivists' and steer forward the sub-field of 'Economic Anthropology'/'Anthropological Economics' (Sahlins, 1969) to a distinct anthropological domain. In this exercise the author has extravagantly referred to the writings of Althuser (1977), Burling (1962), Cook (1973), Dalton (1967, 1969, 1971), Firth (1965, 1967), Godelier (1966, 1972, 1977), Grass (1927), Herskovits (1952), Nash (1966), Polanyi (1944, 1957) and Sahlins (1963, 1969). The author records his gratitude without reservation for these eminent scholars.

A major acknowledgement must be given to Dr. P. K. Bhowmick, Professor of Anthropology, Calcutta University, and Director of the Institute of Social Research and Applied Anthropology, Bidisa (W.B.) who time and again encouraged me to prepare this volume. The author expresses his indebtedness to Professor Bhowmick. The author sincerely thanks Shri Asis Kumar Gayen, who has undertaken the responsibility of printing this book.

The author offers special thanks to the Academic Staff, College, Ranchi, and Gujarat Vidyapeeth, Ahmedabad where most parts of these essays had been presented during 1990 and 1992 in the form of lectures. If there are short-comings the author alone is to be blamed.
We may congratulate Professor N. K. Behura for his sincere attempt at a synthetic analysis for our understanding of anthropological economics which is vital to comprehend the society as a whole. It is a sustained piece of serious and meticulous work for creating an interesting vision for its readers who cherish to acquire knowledge most lucidly and unambiguously. It is interesting to note that purely conceptual/theoretical thrust has been presented in such a manner that readers will not have any scope to find it as a brain storming exercise, but as an explicit expression of theory and facts, concerning the economic man in the societal niche, with special reference to tribesmen and their economies.

The book containing text of 121 pages includes 6 Chapters in all with introduction and conclusion. The introduction chapter while elucidating the thematic content of conventional economic theory explores two distinctive sub-fields of economic anthropology, such as materialism/substantivism and idealism/formalism. To substantiate we may quote, "Scott (1973) maintains that the proponents of substantivism emphasize the spatial, corporeal, sensuous, non-volitional, empirical and deterministic approach in their studies, whereas formalists stress the supra or non-spatial, incorporeal, supersensuous, normative or valuational and indeterministic approach in their studies. The formalists maintain that the methods of conventional economic theory is compatible with their idealistic epistemology. And the substantivists deny the applicability of economic theory to anthropological enquiry of economic phenomena. They hold that the methods of neoclassical economics are contradictory to their substantivist epistemology. For them economic phenomena can best be studied in their respective socio-cultural empirical contexts. However, both approaches must be combined in the study of economic phenomena", (Behura, 1997:17). The main tenet of the book has been maintained tenaciously to explore the economic phenomena of tribal societies vis-a-vis their exposure in the contextual frame of planned development intervention. Further, the relevance of applied anthropological economic has been critically analysed in relation to the conceptual basement, methodological perspective and the superstructural manifestation.

In Chapter-II, the economic field and the substantive process have been vividly discussed with reference to production; exchange, both economic and extra-economic; wealth and capital and classification of economic systems. The Chapter-III on New Economic Anthropology, as an alternative to functionalism and micro-sociology, critically analyses the view points intellectual luminaries in the field, such as Karl Mary, Godelier, Malinowski, Karl polanyi, George Dalton, Sahlins, Firth, Levi-Strauss and Leslie A. While to conceptualise the thrust. The Chapter-IV highlights the problems in theoretical and methodological aspects of Economic Anthropology, Pioneered by Melville J. Herskovits (1952). The Chapter-V discusses the economics pursued by tribal communities in India with special
treatment on very pertinent aspects, like ethnoeconomics, cultural ecology, ethnoecology, primitive economic systems, formalism versus, substantivism etc. The Chapter-VI is, the concluding Chapter and it is pre-eminently devoted to understand tribal economy in the context of planned development intervention during the post-independence period.

The book, although small in size, is beautiful. There is juxtaposition of theory and facts which make the matter crystal clear for comprehension and readers will certainly derive immense benefit out of it.

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