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Government Of Maharashtra
Tribal Development Department

An Evaluation Study Of Health & Nutritional Beliefs, Practices & Facilities Among The Tribals Of Dharni & Chikhaldara Tahsils

Tribal Research & Training Institute
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Maharashtra State

1995

PREFACE

Human beings, today are increasingly becoming victims of diseases, nutritional disorders, stress & mental illness, drug addiction, alcoholism and natural calamities such as earthquake, famine, accidents & so on, which invade them irrespective of their age, sex and socio-economic status. Health magazines, journals and books, newspapers and even electronic media are constantly highlighting these human health issues.

A developing country such as India in particular still continues to experience scientific abundance, while basic health & nutritional services remain inaccessible to the rural & tribal masses, especially those living in the inaccessible terrain.

It was not until 1993 when the hidden secrets of health & nutritional hazards of the tribals inhabiting in Dharni & Chikhaldara tahsils of Amravati district were brought to the notice of general public & health administrators by Press and media. The news papers nearly reported 700 deaths of tribal children in the above said tahsils. The causes of these deaths as reported by Press were malnutrition among tribal women & children, lack of adequate health care, nutritional transportation & development facilities.

This tragic event not only invoked inspirations among social workers, activist, politicians, health administrators but research scholars as well. Since the Tribal Research & Training Institute carries out research studies on various aspects of tribal life in Maharashtra, it was decided to take up a research study in selected villages of Dharni & Chikhaldara so as to understand the problem holistically.

This research report gives a comprehensive account of the micro-level reality of health care, health education & nutritional care rendered to the tribals of Dharni & Chikhaldara. It also brings into light the various factors which were responsible for child death tragedy in Melghat region. Besides this, an attempt has been made to provide an action plan in the form of suggestions which will help both government & non-government organizations to control health & nutritional problems of the tribals & develop culturally acceptable health care, health educational & nutritional programmes for this region.

The data collection, analysis & writing of this research report was entrusted to Dr.Robin D. Tribhuwan, an Anthropologist. Dr.Tribhuwan was assisted by Shri .Purushottam Aghashe, Ms.Aarti Kelkar, Research scholars from School of Health Sciences & Ms.Rajas Bharekar from Anthropology Department, University of Pune. Shri J. B. Avachat, Statistical Assistant contributed in designing layout and codification of Interview schedules & preparing the layout and graphical presentations in the report. Mrs. Archana Gaikwad contributed typing work of this report.

I am grateful to Shri Nandakumar, Chief Executive Officer, Dr. Ashok Laddha, District Health Officer & the Zilla Parashid staff for their co-operation in organising the field work & their valuable help in rendering official data on Dharni & Chikhaldara. I would like to thank Dr. Kamat from S.N.D.T. University, Pune for her help in analysing the anthropometric & nutritional data collected by our research team.

The findings & suggestions presented in this report will certainly be useful to health administrators, development workers, I.T.D.Ps. , voluntary agencies, research scholars & more specifically for those interested in tribal development. This data base will form a platform to develop health care, health educational, nutritional & development strategies for the tribals in Melghat and other inaccessible terrains.

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BACKGROUND OF HEALTH ISSUES IN INDIA, WITH REFERENCE TO THE TRIBALS.

1.1 INTRODUCTION -

Human Health has been defined as a complete state of physical, mental and social well being and not merely absence of disease or infirmity (WHO : 1948). Health is not merely a concern of an individual a family or a community but it is a responsibility of the nation. Further, health issues today have not only become a national concern but an international too.

"Health for All" has been a prime moto of all Governments and of course some voluntary organizations, world over. Health of the people is natural wealth of the nation. It is an inseparable element in development process of a nation in all its aspects. Hence both government and non-government organizations are involved in providing promotive, preventive & curative health care & health educational services to mankind on the face of this Planet.

1.2 HEALTH SITUATION IN INDIA -

India has no doubt made notable achievement in the medical and health field, since independence, yet there is lot to be done as far as providing health care & health educational facilities are concerned. Ramkumar (1990) reports that, the maternal mortality in India is very high. Official estimates place the mortality at 400-500 per 1,00,000 live births but figures are as high as 1,000 - 1,200 reported from certain rural areas.

Women in the sub-continent run a life time risk of 1 in 18 dying from a pregnancy related causes like anaemia, hemorrhage, taxemia, sepsis and abortions, which are major causes of maternal deaths. Research on women's nutrition shows that malnutrition is an underlying problem that seriously affects the health of adolescent girls and adult women and has its roots in early childhood. There is a high prevalence of protein-energy malnutrition, iron deficiency, anaemia and iodine deficiency disorders among Indian women (Pachuri S. 1994)

Studies show that continued heavy work during pregnancy coupled with low dietary intake adversely affects maternal nutrition and the course and outcome of pregnancy because of energy deficit due to gap between energy intake energy expenditure (Gopalan 1962). Assuming that the overall prevalence of anaemia is 60% in pregnant women, 13 million estimated of the 22 million pregnant women in India are anaemic (Ramchandran, 1992).

At present, not only are Indian women's reproductive health problems scanty, but most available data are from hospitals or clinics and so research results cannot be generalized. Population based studies should be undertaken to rectify the frequently misleading results obtained from hospital & clinic based studies (Pachuri s, 1994).

Currently, gender desegregated data are not available for health problems and so it is difficult to establish gender defferentials for health risks. There is a need to increase the demand for such information by researchers so that data on health related problems, causes of these problems on rural, tribal & slum societies be obtained.

At the same time, inter-disciplinary research, combining biomedical and social research methods should be promoted so that epidemiological information on levels, trends, and determinants of morbidity, fertility & mortality can be obtained along with information that provides a clearer understanding of the same.

At the same time, research should be undertaken to study the beliefs and practices that have become an hindrance to promotive, preventive and curative health of Indian population. Besides cultural factors an in-depth understanding of the various social, economic & political factors, which are barriers to human health.

Women's and children's groups today are the main concern as far as their health is concerned. Both these groups in India suffer from high levels of morbidity and malnutrition. A community- based epidemiological study in rural India showed that 92% of women had one or more gynaecological problems, infections constituted 50% of the disease burden, and 91% of the women suffered from iron deficiency anaemia (Bang et al, 1989)

Poor health and nutritional status of women in India is a function of a complex interplay of cultural, economic, religion and social factors. Some of the major indicators associated with health & nutritional status of women in India is as given below :

Sex Ratio : India is one of the few countries in the World where males out number females. The 1981 census counted 9235 females for every 1,000 males .....giving a "female male ratio (FMR) of 935. Sex ratio continues to be unfavourable to women. Bose A (1991) states that sex ratio has been more or less steadily deteriorated from 972 in 1901 to 929 in 1991, although there were marginal improvements in between.

Life Expectancy : Data on the expectation of life at birth for women show that life was about a year less for women (51.6 years) for the period 1976 to 1981, although life expectancy for both men and women has more than doubled from 1901-11 to 1976-81 due to fall in overall mortality levels resulting from improvement in sanitary conditions, health facilities and economic development (Chatterjee M., Reddy H.P. 1983)fact that due to endogamous biological factors, females have been found to be stronger than males. Age specific death rate presents a clearer picture to begin with, female foeticide is rampant. For example a study conducted in Bombay showed that out of 8000 amino countries cases, 7999 of the foetuses aborted were of female children (A Report of a workshop on the Girl child, NIPCCD 1992). Further though female infanticide which was common in India in the early part of this century has more or less technically disappeared, a large number of deaths occur during pre-school years due to child negligence (Chatterjee M 1983).

Maternal Mortality Rate : The maternal mortality rate (at 500 per 10,000 live births) is about 50 times higher than in developed country. The commonest cause are general malnutrition (anaemia) and poor antenatal, natal and post natal care (Chatterjee M. 1983). As a result of poor health and lack of appropriate and early accessible medical services for women bear an enormous risk every time they become pregnant. Because of the fertility of a developing country woman, her life time risk of death from pregnancy may be 400 times greater than that for a woman in North America (Wini Koff B 1988).

A recent source book by (Mehra & others 1992) mentions that about 100,000 women die in India each year from pregnancy related causes and that the number of maternal deaths in a single day in India exceeds those in all the developed countries in one month.

NUTRITIONAL STATUS : Nutritional status and food consumption data also indicate women's inferior status in India. The hall mark of poor maternal nutrition and poor antenatal care in a community is the high proportion of babies born with low birth weight (< 2.5 kg.). In India, nearly one third of the babies born are of low birth weight. Further, nearly 24 percent of adult women in the reproductive period have body weights less than 38 kg and 16 percent have height less than 145 cms and thus are in high risk category with respect to obstetric complications (Gopalan C. 1989). Data from some studies suggest that prevalence of iron deficiency anaemia, protein-energy malnutrition and iodine deficiency is higher in women than in men. Anaemia in particular , affects more than 50% women more than 80% pregnant women in India.

Dietary inadequacies are more common in women and girls as compared with man and boys (Report of National Nutritional Monitoring Bureau, 1980). A study in Uttar Pradesh by Das & others (1989), reported that a majority of rural mothers studied, exclusively breastfed their male infants for six months, fewer mothers did so for their female infants. Women and female children commonly receive what is left-over after males of the household have eaten (Khan M.E. 1986) while women get a smaller share of the family food, they may expend a greater proportion of its energy.

ABILITY : The extent to which women are able to seek healthcare perhaps depend on their economic status. Given their double burden of employment and household chores are serious, 'trade off' between these economically and socially unavoidable tasks, and time, energy and expenses seeking health care.

HEALTH CARE AVAILABILITY : The availability of services for women, their location, timings, nature & quality are all important factors and determine women's access to health care. Services are congruent with the needs of women result in effective supply. There are several health care services which really do not meet women's health needs.

Given this background on the status of women's health in India what is important is to understand through social science research is the qualitative dimensions of women's health which has been largely ignored till now. More specifically on the health status of tribal women, girls and children too.

The Times of India Newspaper, dated May 1, 1994, Bombay edition in an article by Gunvanthi Balram highlight the health problems faced by Bombay Municipal Corporation school children. It given details about a survey conducted by Dr. P.B.Shetty - Medical Officer for schools , BMC, who with her team examined

nearly 330,000 children aged between 5-12 from 1,300 schools in Bombay. It was found out that 30,755 children were suffering from serious vitamin deficiency.

The deficiencies varied in children's backgrounds : The children of fisherfolk, for instance showed a vitamin B complex deficiency, while those of Tamilians had a vitamin A deficiency. A number of Muslim children from the Central Bombay boroughs of Byculla, Tardeo and Mahalaxmi were found to be anaemic. The reasons for this are linked up with their eating habits which are no doubt culturally defined.

Since some Tamilians did not eat meat and also drained water out of cooked rice, they were defficient of Vitamin A, while the fisherfolk did not eat leafy vegetables rich in vitamin B-complex in sufficient quantities, Muslims, too tended to eat less vegetables & greens which could explain the high incidence of anaemia in their young age. According to a BMC nurse, Ms. Esther Garud who attends children in M.P.Mill compound and pitwalla chawls in Tardeo, found that the students in Urdu medium schools were generally more anaemic than those in Marathi-medium schools and that the muslims kids normally had pav-chai for breakfast while the others had pav or chapati sabji.

Yet another trend noticed by the medicos was the incidence of tuberculosis was rising while that of leprosy declining. Infact the number of leprosy cases had increased by half in the last five years i.e. from 1989-1994. About 400 new cases of leprosy are now detected annually in these schools as against 1,000 per year in mid - 1980's. But TB cases have risen from about 500 per year then, to about 800-1000 today. The above report gives glimpses of the health problems faced by children in Urban areas and more specifically among corporation schools of a well advanced city such as Bombay.

It has been established that both in India and other developing countries there is prevalence of various diseases due to inadequate water and sanitation facilities. One of the estimations for India is a loss of 75 million work days due to water borne diseases alone. The cost of this in terms of loss of production and medical treatment is estimated at approximately Rs.600 cores. Ramu Shiva (1986 : 130). Gives this magnitude of the health problem, it becomes necessary to look into the health situation of tribals in India.

1.4 GLIMPSES OF TRIBAL HEALTH CARE ISSUES :

The tribals of India live in forests, on hills, in valleys, on plains and in naturally isolated regions known as a rule by different names meaning either people of forest and hills or the original inhabitants. Vidyarthi & Rai (1976 : 25) have given some popular names by which the tribals are known: Pahari (hill dwellers), vanyajati (castes of forest),Janajati (folk people), Anusuchit Jati (scheduled tribes) and so on.

India can boast of the second largest tribal population in the world next to Africa. Studies conducted by social scientists on tribal health have shown that people everywhere including tribals have culture specific beliefs and practices regarding health and disease which are developments of indigenous culture and are not derived from the conceptual frame work of modern medicine, the term Ethnomedicine is used (Hughes Charles 1968 : 88).

Health is an aspect of culture & hence beliefs of the tribals associated with origin & cause of disease, perceptions regarding body composition & its physiology, notions of preventive, promotive & curative health, nature & role of ethnomedical practitioners, concepts of diet, mother & child health care beliefs & practices, hot & cold concepts & so on are part & parcel of their cultural whole.

Disease has been one of the fundamental problems faced by every society & every known society has developed ways & means to take care of the sick in the community. Health problems differ from one society to another. For instance, mental stress, hyper-tension, heart diseases, diabetes etc. are found among the well-to-do classes of society while diseases such as scabies, boils, eczema, malnutrition, diarrhoea, gastro enteritis etc. are found among the poorer classes.

Irrespective of the spread of health facilities & services in tribal areas since independence most tribal communities face following health problems.

1. Lack of adequate health facilities in remote tribal areas.
2. Lack of clean & safe drinking water especially in summer.
3. Lack of good nutritional supplement programmes for tribal children & women.
4. Poor personal hygeine & sanitation.
5. Lack of appropriate MCH health education programmes.

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6. Prevalence of superstitious beliefs about health & disease.
7. Prevalence of skin & digestive disorders, especially among tribal children.
8. Prevalence of nutritional disorders among women & children.
9. Alcohol addiction.

The health statistics of the Directorate of Health services, Maharashtra State shows that the health situation in tribal areas is far from promising as seen in this table.

Table 1.1

Tribal Health situation in Maharashtra

S.No.	Indicator	Goal by 2000 AD	Situation in Maharashtra.	Tribal situa-tion
1.	I.M.R.	< 60	59	110
2.	Crude Death Rate	09	7.9	13
3.	M.M.R.	< 2	1.2	-
4.	L B W babies	10%	28%	40%
5.	Family size	2.3	3.8	4/2
6.	Delivery by a trained person.	100%	86%	60%

A study by Bagade and others (1994 : 5) pointed out most common health problems as reported by four different P.H.Cs. in tribal areas of Maharashtra State.

Table 1.2

Common Health Problems Among Tribals

S.No.	Disease	Percentage of patients in P.H.Cs. Kasa (Thane)	Aliabad (Nashik)	Etapalli (Gadchiroli)	Dharni (Amravati)
1.	Diarrhoea	19	21	12	07
2.	Respiratory dis.	18	19	25	34
3.	Fever,Maleria	14	12	11	06
4.	Skin diseases	10	11	04	11
5.	Injuries	07	04	10	02
6.	Worm Infestation	06	03	-	04
7.	Eye & Dental	04	05	05	05
8.	Others	23	25	33	31

Every now and then, one hears of diseases & deaths in tribal areas due to malnutrition, communicable diseases & so on. Some episodes which made head lines in the news papers were :

BAMNI EPISODE : Deaths in some villages of Akkalkuwa & Akrani Mahal blocks of Dhule

district :

Period : Dec. 1986 - May 1987.

Villages affected - 09

Population Affected _ 3405

Total Deaths - 88

Measles with Malnutrition accounted for 49 of these deaths. 49 of these deaths -

Post-measles pneumonia - 25

Diarrhoeal Diseases - 24

46 deaths occurred among children below 5 years of age.

DHARNI EPISODE - Deaths due to malnutrition in Dharni block of Amravati district during the one and half month period from 14th July 1993 to 31st August 1993.

CAUSES OF DEATHS -

Pneumonia	105
Gastro enteritis	63
Others	02
Total - -	170

168 of these cases were below the age of 5 years and malnutrition was the common contributing factor in all these cases.

There are a few studies on tribal health by individual investigators in our country. The studies of Dr.Kate et. al of N.S.S. Tribal health camps, held at Navapur & Dhadgaon in Dhule and Pal in Dist. Jalgaon in 1983, 84 and 8u5 where 6261 tribals were studied show that 90% of people from Navapur tahsil are tribals and the common health problems seen were :

I. SYSTEMATIC DISEASES -

a) GIT - Diarrhoea, Dysentry etc : 60%
Worm infestation :70%

b) Malnutrition : 30 - 50%

c) Respiratory diseases : 10%

d) Anaemia : 50 - 80%

e) Goitre - Overall 10% in Dhadgaon it was about 60%

II. POOR SANITATION AND LACK OF SAFE DRINKING WATER LEADING TO INCREASED CASES OF DIARRHOEA & WORM INFESTATION.

III. Alcohol addicti

IV. GENETIC DISE

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* TADVI - 8.3%

* BANJARA - 5.

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e) Veneral diseases
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III. Alcohol addiction - MAUHA

IV. GENETIC DISEASES

a) sickle cell trait - 20.4%
sickle cell disease- 1.2%

* PAWRA - 17.8%

* TADVI - 8.3%

* BANJARA - 5.7%

b) G - 6 P - D deficiency - 5.7% in males.

V. IGNORANCE AND SUPERSTITIONS LEADING TO INAPPROPRIATE HEALTH SEEKING BEHAVIOUR.

In his report for 1960-61 & 197 9-81, the Commissioner for Scheduled Castes & Tribes provided the following information

about the incidence of specific diseases among tribals in the concerned States :

1. MADHYA PRADESH - Yaws, Malaria, T.B. & Leprosy.

2. MAHARASHTRA - T.B., skin ailments and those resulting from Malnutrition.

3. ORISSA - Malaria, Filariasis, Yaws and Leprosy

4. RAJASTHAN - GIT & skin diseases, T.B., veneral diseases

5. UTTAR PRADESH - Veneral diseases, Goitre & Leprosy.

6. TRIPURA, ASSAM - Yaws, T.B., Leprosy, veneral diseases & skin diseases.

Thus, the common health problems of the tribals are :

a) Malnutrition
b) Malaria
c) Diarrhoeal diseases
d) Poor MCH care
e) Veneral diseases
f) Tuberculosis, leprosy, skin ailments, & others.
g) Genetic diseases.

The present study is an attempt to unravel the traditional health care and nutritional practices of tribals of Dharni and Chikhaldara tahsils, Amravati district in the State of Maharashtra. Besides assessing the health & nutritional status of the tribals the study also aimed at understanding the efficiency of government health care nutritional and health education services in the above said tahsils to assess the causes of deaths of children reported. Given this background following aims and objectives were kept in view.

1.4 STATEMENT OF THE PROBLEM -

Much can be talked & written about the beautiful valleys, the mountains, the rivers, the forests, hills, brooks, wild life of Melghat region from the view point of poets, admirers of natural beauty and environmentalists, on one hand, while on the other hand volumes can be written based on empirical findings on the human right, health, nutritional and developmental issues of the poor tribals who have been part and parcel of this beautiful natural setting.

It was not until 1993 when the hidden secrets of tribal health and nutritional issues were highlighted in newspapers and doordarshan newsbulletin. Newspapers reported nearly 700 deaths of tribal children both in Chikhaldara and Dharni tahsils of the Melghat region. The causes of deaths as reported in newspapers were malnutrition among women and children, lack of adequate health and nutritional facilities, lack of adequate transport communicational facilities and so on.

This tragic event not only invoked inspirations among social workers, activists, politicians but also research scholars to explore the exact causes of these deaths. A lot of propaganda was also made from this issue against the government of Maharashtra. The question at Stake, was whether these events occurred only during 1993-94 or were part of the ongoing natural calamity since times immemorial. Several remedial steps were taken by government to control malnutrition and child mortality. Irrespective of these efforts the problem of child and mother malnutrition and deaths of tribal children and children's diseases such as respiratory infections, diarrhoea, hypothermia, broncho-pneumonia, premature deaths, etc. still exists. In order to expose the factors responsible for these tragic events, an evaluation study of the health and nutritional beliefs, practices and facilities among the tribals of Dharni and Chikhaldara was taken by Tribal Research and Training Institute.

1.5 AIMS & OBJECTIVES OF THE STUDY -

1. To understand the ethnomedical beliefs and practices of the Korkus of Dharni and Chikhaldara, with respect to :

a) their culturally held perceptions regarding the origin and cause of disease and illness.

b) to document the nature role of various ethnomedical specialists and the therapies administered thereof.

c) to assess their concepts regarding preventive, promotive and curative health care.

2. To study the nutritional beliefs, practices and facilities among the Korkus of the above said tahsils and more specifically to examine ;

a) their concepts of dietary intake with reference to health promotion of women and children.

b) to assess their perceptions of the impact of food on human physiology.

3. To evaluate health care, health educational and nutritional services rendered to the tribal women and children.

4. To identify the various factors responsible for malnutrition among children and women and also the death tragedy which took place both in Dharni and Chikhaldara in 1993-94.

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5. Finally, to suggest measures to improve upon health care, health educational, nutritional and developmental services in Melghat region.

1.6 JUSTIFICATION OF THE STUDY -

Studies conducted on health related beliefs and practices of various groups assume significance in view of developing, planning and implementing appropriate and culturally acceptable health care and health education programmes, for the tribal and rural masses. Anthropological studies related to health behaviour are fast gaining importance because they help the health providers to understand how social and cultural phenomena influence health behaviour of human beliefs. Health and disease though scientifically understood as biological in nature are yet related to people's belief system. Hence, health is an aspect of cultural and must be studied from a wholistic perspective.

Health care policy planners health care providers and health educators often have faced stiff resistance in trying to introduce modern medicine. To cite a few examples of tribals, the Thakurs of Karjat tahsil especially the one residing in remote areas refuse to give iron tablets to their pregnant women for it is believed that these tablets are 'hot' (quality wise) and if consumed the heat in these tablets disrupts the foetal growth and destroys it and hence leads to an abortion. (Tribhuwan Robin 1993). Among the tribals of Chandrapur it was observed from an emic perspective that these tablets if consumed activates rapid growth of the foetus, the foetus enlarges considerably thereby giving problems during delivery. To avoid these kind of deliveries women do not consume iron tablets.

Colustrom milk which is supposed to create immunity in the child as per scientific explaination, is not given to infants in many tribal cultures. It is believed that the thickness of the milk may result into child having diarrhoea or stomachache. Hence this milk is manually squeezed out on a piece of cloth, without giving it to the child. For 3-5 days the child is fed with cow milk, honey or merely water. In rural areas where exists the joint family system use of condoms is not welcomed, because they feel shy to use it and moreover it is very hard for them to dispose the used condom in such a big family set-up. One can quote a number of such illustrations and examples of stiff resistance of natives to acceptance of health care and health education programmes. Social science research on health behaviour of people certainly helps us to know and comprehend, why people behave the way they do ?

The significance of specifically carrying out this study was to unravel the social, economic, cultural and political factors which have let to the death of tribal children in Dharni and Chikhaldara tahsils due to malnutrition. It would also suggest measures as to how health care, nutritional and health education facilities and services would be strengthened in these tahsils so as to prevent death of children in near future, and upgrade the health and nutritional standards of not only children but women and men too. Besides identifying the factors of malnutrition among children and women this study intended to bring into light other health issues of the tribals of Dharni and Chikhaldara which have not been emphasized by the media.

CHAPTER TWO

RESEARCH METHODOLOGY

2.1 LOCALE OF THE STUDY -

The present research study was carried out in 8 tribal villages of Dharni and Chikhaldara tahsils of Amravati district in the State of Maharashtra. The tribal villages selected for research were as follows -

TABLE 2.1

TRIBAL VILLAGES SELECTED FOR RESEARCH

S.No.	Tahsils	villages
1.	Dharni	Utavali Dharanmuh Heerabambai Kusumkot
2.	Chikhaldara	Amzari Boratyakheda Semadoha Salona

Two tribal villages namely Heerabombai and Boratyakheda were selected from the interior and inaccessible terrain of Melghat region, while the other six were accessible by a proper road. This criteria of selecting interior and approachable villages was used to get a comparative view of health care and nutritional situation of the Korkus.

2.2 THE TARGET POPULATION -

The Korkus of Melghat region were selected as the target group for the present study since most of the child deaths which took place during 1992-93 were among the Korku tribe. Korkus of all the eight villages mentioned were studied. Besides Korkus a few Gonds (a neighbouring tribe) were also interviewed to get their perceptions about the death tragedy of tribal children which took place on account of malnutrition, acute respiratory infections, diarrhoea, hypothermia, pneumonia, etc.

2.3 METHODS OF DATA COLLECTION -

Both qualitative and quantitative methods of data collection were used to collect relevant data for the present study. Besides use of traditional anthropological tools and techniques such as in-depth interviews, focused group interviews, participant observation, ethnographic method etc. anthropometric measurements of 113 children of Kusumkhot, Dharnmuha, Heerabambai, Boratyakheda, Amzari and Salona village Anganwadi from both Dharni and Chikhaldara tahsils were taken so as to assess the degree of malnutrition among the Korku children below 6 years.

The variables used for taking anthropometric measurement of children between (0 - 6) , villages (interior and road side), head circumference, arm circumference, height, weight

and chest circumference. The results were then compared with standard tables of anthropometry used to assess the degree of malnutrition.

The main tools and techniques of data collection used for the present study were as follows :

a) INTERVIEW SCHEDULES :

One of the major tools of data collection were interview schedules prepared for women within the age range of 15 - 45 years, and second was for school going children within the age range of 12 - 16 years. About 160 interview schedules for women within the range 15 - 45 years completed from all the eight villages and 50 interview schedules were filled in from three Zilla Parishad schools.

b) QUESTIONNAIRES :

Two types of questionnaires were used to collect data from Health Workers and Anganwadi Workers. Thus 23 questionnaires from Anganwadi Workers and 22 from health Workers of both Dharni and Chikhaldara were filled into assess their views about health of tribal children, women problems linked with their health services, the causes of deaths of tribal children and so on.

c) IN-DEPTH - INFORMAL INTERVIEWS -

Besides collecting data using interview schedules for women within the age range 15 - 45 years and school children of 12 - 16 age range and through questionnaires from Aganwadi and Health Workers, in-depth and informal interviews of key informants such as traditional medical practitioners, private practitioners, Primary Health Centre medical staff, elderly people etc. were taken to cross check the data collected through interview schedules and questionnaires. It was observed that free discussions with the tribals and key informants fetched frank opinions of the respondents. This certainly helped in cross-checking data collected through interview schedules and questionnaires.

d) OBSERVATION -

Most of the times researchers find out that data collected through schedules and interview guides or even questionnaire tends to be different when a researchers cross checks what he collects through interviews with participant or non-participant observation. This usually happens due to various reasons such as mood of the respondent, his willingness to furnish data, his ability to grasp and understand a question, his priorities and engagements and so on. It therefore becomes evident to cross check the data using observation technique. In this study besides collecting data using interview schedules and questionnaires the researchers used observation method to document relevant data.

e) PHOTOGRAPHS -

Photograph of malnourished children and mothers, traditional practitioners, patients, a few Health and Aganwadi Workers in action, and various other photographs linked with the research topic were taken to validate the empirical nature of the data.

f) ANTHROPOMETRIC MEASUREMENTS -

Assessment of nutritional status is conveniently done using dietary, anthropometric and clinical parameters (Nutrition News, Vol. 12, No. 3, 1991). In the present study anthropometric measurement and dietary intake were used to assess the degree of malnutrition among Korku children below the age of 6 years.

Anthropometric data of 113 tribal children were collected from villages, out of which two were from the interior and inaccessible terrain. The data collected using anthropometric parameters contributed in assessing the degree of malnutrition among Korku children.

g) USE OF DIETARY INTAKE PARAMETERS -

The overall intake of a few Korku families from all the 8 villages was calculated by documenting information on the amount of food consumed by a family. In order to assess the calorie intake of a family per day, their weekly food menu was documented by taking information on what food stuff was bought by a family every week, the members in the family, their ages and the quantity of food consumed by them daily was calculated in order to assess daily calorie intake.

Besides this recall method was also used to understand the amount of food consumed by a family per day. The energy intake of adult men, women and children of 1 - 12 ages were calculated by applying appropriate coefficient of consumption according to the type of work performed by men and women whose calorie intake classified as moderate workers. To cross check this data, Korku children were interviewed to assess their energy intake.

2.4 DATA PROCESSING AND ANALYSIS

Analysis and processing of the data was done both manually and using lotus and exel software. Relevant tables, histograms, graphs and pie diagrams were prepared with the help of computer. While processing and analysing qualitative data efforts were made to understand the problem of child death tragedy, food supply and health facilities from an holistic perspective keeping in view factors such as literacy, poverty, health care and nutritional facilities, transportation and communication facilities, beliefs and practices regarding health, disease and nutrition and the political will too. Besides this, based on the observations of actual reality in the field and available P.H.C. and I.C.D.S. records field analysis was done. Deductions drawn from analysis of field situation was used to cross check with computer analysis.

2.5 CHAPTER SCHEME -

The data of this study has been presented in seven chapters. The first chapter deals with background of human health issues, with reference to the tribals and more specifically the nutritional issues of the Korkus of Melghat. Chapter two deals with the methodology used to collect , analyse and present the data.

Before getting into actual data chapters, the third Chapter very briefly highlights the glimpses of Korku culture with reference to their sub-divisions, population in Maharashtra, geographical distribution, physical features, dress pattern, economic organization, Religion and ritual cycle, forms of marriage, family types, political organization and so on. The second part of the chapter gives a picture of the Korku beliefs and practices regarding health and disease. Chapter four highlights the review of the death tragedy of Korku children and the factors which contributed for their deaths. Chapter five deals with people's perception about the death tragedy. In this section the Korku parihar (shamans) and Gond views about this tragic event of child death is assessed. Chapter six briefly deals with the consequences of the food and grain supply system and its impact on the attitude of tribals. Finally, the seventh chapter gives a clear picture of the findings in the form of conclusions and suggestions.

CHAPTER THREE

ETHNOMEDICAL BELIEFS AND PRACTICES OF THE KORKUS

3.1 GLIMPSES OF KORKU CULTURE -

Before getting to the focal point of this study, with a view to assessing the values and attitudes of the Korkus a study of their ethnography was made. This holistic model of the study contributed in understanding health and nutritional beliefs, practices and facilities as a part of their cultural and ecological whole. The procedure followed to obtain ethnographic data was both participant and non-participant observations followed by extensive interviews. This brought to light the following salient features of Korku culture.:

a) KORKU SUB- DIVISIONS -

The Korkus are divided into three sub divisions namely Mahvasi, Ruma and Bondaya.

b) POPULATION IN MAHARASHTRA -

According to the 1981 census of India the total population of Korkus in Maharashtra State is 1,15,974 with 58,675 males and 57,229 females.

c) GEOGRAPHICAL DISTRIBUTION -

The Korkus are principally found in east Nimar and Baitul in Madhya Pradesh and in Amravati district in the State of Maharashtra. A few Korkus are also in Chandrapur, Gadchiroli, Buldhana, Akola and Yavatmal, districts as well.

d) THEIR PHYSICAL FEATURES AND DRESSING STYLES -

The Korkus are dark as well as brown skinned people with medium height, prominent cheek bones, straight hair and a well built strature. They are a hardy group of tribals who really work hard as dailywage labourers and cultivators to earn their livelihood.

Korku men wear a dhoti, a shirt or a 'bandi' and a white or red turban. A Korku never goes bare headed, especially the elderly folk. They have a long piece of cloth Turban (Pheta) tied round the head. Korku women wear saris of five or ten yards. Saris are worn with anchals drawn on the head and dropping in the Marathi style on the right shoulder. A very few Korkus wear chappals.

e) ECONOMIC ORGANIZATION -

Korkus are basically small scale agriculturists, agricultural and daily wages labourers. Gathering fruits, mushrooms, roots, corns, wild leafy vegetables and honey is part of their economic activity. They also collect fire-wood and sell it to non-tribals and government workers in tahsil places and weekly markets. Mahau flowers and char seeds are stored for use when food becomes scares. At times even banyan leaves (Ficus religious) are boiled and eaten, in times of food crisis. Fishing and hunting provide them with supplementary food as well as income. A very few Korkus are employed in government and private sectors.

f) FORMS OF MARRIAGE -

The marriage ceremony among the Korkus is more of a social affair than a religious one, the Priest (Bhumka baba) takes no part in it. Korku culture has made provisions for a number of forms of marriages and methods of acquiring a bride.

Monogamy as a rule is certainly practical but quite a number of cases of polygyny are found among the Korkus. Widow remarriages are also allowed. Widows usually marry their husband's younger brothers. These marriages take place without any ceremony. Some of the methods of acquiring a mate among the Korkus are as follows -

i) Elopement - A young boy who proposes a girl and expresses his willingness to marry her decide to elope from the village and stay in the forest for a day or two. They then come back and get married with the consent of the parents and the traditional panchayat.

ii) Marriage by service - Those boys who cannot pay bride price, go and work at the bride's father's house for a fixed period. The boy is then married to the girl. This kind of a marriage agreement is known as LAMSENA.

iii) Marriage by Bride price payment - As practised among most tribes of India the Korkus also have marriage by paying a bride price either in cash or kind to bride's father. Bride price ranges from Rs. 500 upwards depending on the economic status of the groom's family. In kind from one bag or rice or jowar upwards.

iv) Marriage by forcible entry of a woman - Yet another method of acquiring a mate is called as "***Gharghushi***" wherin a woman or girl who likes a man or boy enters his house with a pot full of water on her head. The man concerned has to accept her as his wife, irrespective of whether or not he is married. He however must pay back the bride price to her first husband and give a liquor treat to the members of traditional panchayat.

g) FAMILY TYPES -

Both nuclear and joint family types are prevalent among the Korkus with patriarchy, patrilocal residency and patriliny as a norm.

h) MAIN FEATURES OF KORKU PANCHAYAT -

Every Korku village has a panchayat or council of elders, which functions as a judiciary body. A panchayat is headed by a person popularly known as patel. His post is hereditary. Each village has a Choudhary who is a servant of the Panchayat. The judicial function of a choudhary are as follows :

i) calling the panchayat members for meeting.

ii) deciding the day and place of the meeting with the consent of village head.

iii) making arrangements for the meeting.

iv) collecting fine from criminals.

v) announcing judgements of the parties involved in disputes.

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The Korku panchayat tackles disputes such as :

i) Family disputes and fights.

ii) Breach of a taboo or failure to perform a divine duty.

iii) Disputes over divorce, marriage and bride price.

iv) disputes over property, theft, sexual misconduct etc.

The culprits are either outcasted; charged fine in cash or kind; socially humiliated or at times they are deprived of using public amenities.

I) RELIGION AND RITUAL CYCLE -

The Korkus worship their village god (Muthawa gomaj) during all social ceremonies and festivals. A community puja is held on Dasara when food, fowls and goats are offered and a common feast is held. Some of their other gods are Kuta Gomaj (the mother goddess), Akhadi gomaj (the god of crops), Kulla gomaj (the Waghdev tiger god), and the Dongar gomaj (the god of hills).

The Korkus also worship Hindu gods like the sun, moon, Hanuman and Mahadev. Milk and coconut alone are offered to Hanuman and Mahadeo. A while goat is sacrificed to the sun once a year. Mata gomaj is worshipped whenever there is an epidemic or disease. Bhum gomaj is worshipped at the time of sowing and harvesting. Akhadi gomaj and the village god (Muthma gomaj) are worshipped on all social and religious occassions. They also worship their ancestors. The main supporting wooden beam of the hut is supposed to be their dwelling place and is worshipped on all occassions.

Their priests are known as ***Bhoomkas***. They are present at all sacrificial rituals and preside over such rituals and ceremonies. There is yet another class of diviners known as "***Padyals***" or "***Parihars***", who claim to have mystic, magical and curative powers.

The Korkus have strong faith in them and consult them in the event of disease or any other calamity. The Padyals know many herbal medicines but always link the disease or calamity to the wrath of one of the other local deities and persuade their clients to perform some puja or sacrifice. Both the Bhumkas and Padyals are paid at harvest time.

Dasera, Diwali, Holi and Nagpanchami are some of the major festivals celebrated. The major festivals celebrated by the Korkus are : Pola (a festival of bullocks) which is celebrated

on Shravan Amavasya when their bullocks are washed, decorated and given rest. Six important fairs are held in Melghat in honour of Mahadev, Maghnath and Dhoraba (all Hindu gods) which are attended by a number of Korkus and other tribal groups as well.

Korkus perform a number of rituals associated with a person's life cycle, at birth, puberty, marriage, ill-health and death. These rituals have symbolic and meaningful implications. Even with regards to health, the Korkus have series of preventive, promotive, curative and even destructive rituals. It was observed that some of these superstitious beliefs and practices have become an hindrance to government health care providers.

3.2 ETHNOMEDICINE OF THE KORKUS -

Disease in some or the other form has been a fundamental problem faced by every society and every known society has developed methods of coping with disease, thereby creating a system of medicine (Caudil William 1955 : 772).

Thus, even before the advent of modern medicine , people all over had developed culture specific beliefs and practices regarding health & disease which are the products of indigenous cultural development and are not explicitly derived from the conceptual frame-work of modern medicine that the term "ethnomedicine" is applied to (Hughes 1968 : 88)

Anthropological interest in medicine stems from the fact that health and disease, though scientifically understood as biological in nature are yet related to people's belief systems. Tribals everywhere have culture specific beliefs about human body image, disease causation, pathogenic agents, intervention of supernatural agents, in human health, ethnophysiology, nature and role of medical practitioners, preventive, promotive, curative and destructive health rituals etc. This chapter focusses on very briefly the various ethnomedical beliefs and practices of the Korkus.

a) DISEASES AMONG TRIBAL WOMEN AND CHILDREN

The data collected through interviews with PHC staff, the tribal medical practitioners, Anganwadi worker, private practitioners and the school teachers revealed that following diseases are very common among tribal women and children in the Melghat region.

DISEASES AMONG CHILDREN

1. scabies
2. Boils
3. Pneumonia
4. Hypothermia
5. Septicaemia
6. Anaemia
7. Bacillary Dysentry
8. Diarrhoea
9. Gastroentritis
10. Measles

The Department of Health, Amravati took up health check-up programmes to detect most common ailments among school children in Dharni and Chikhaldara. About 8,895 children in Dharni block and
7,813 children in Chikhaldara were medically examined. The results of disease detection are given in table 3.1 and graph 3.2. This data was furnished by the District Health Officer's office.

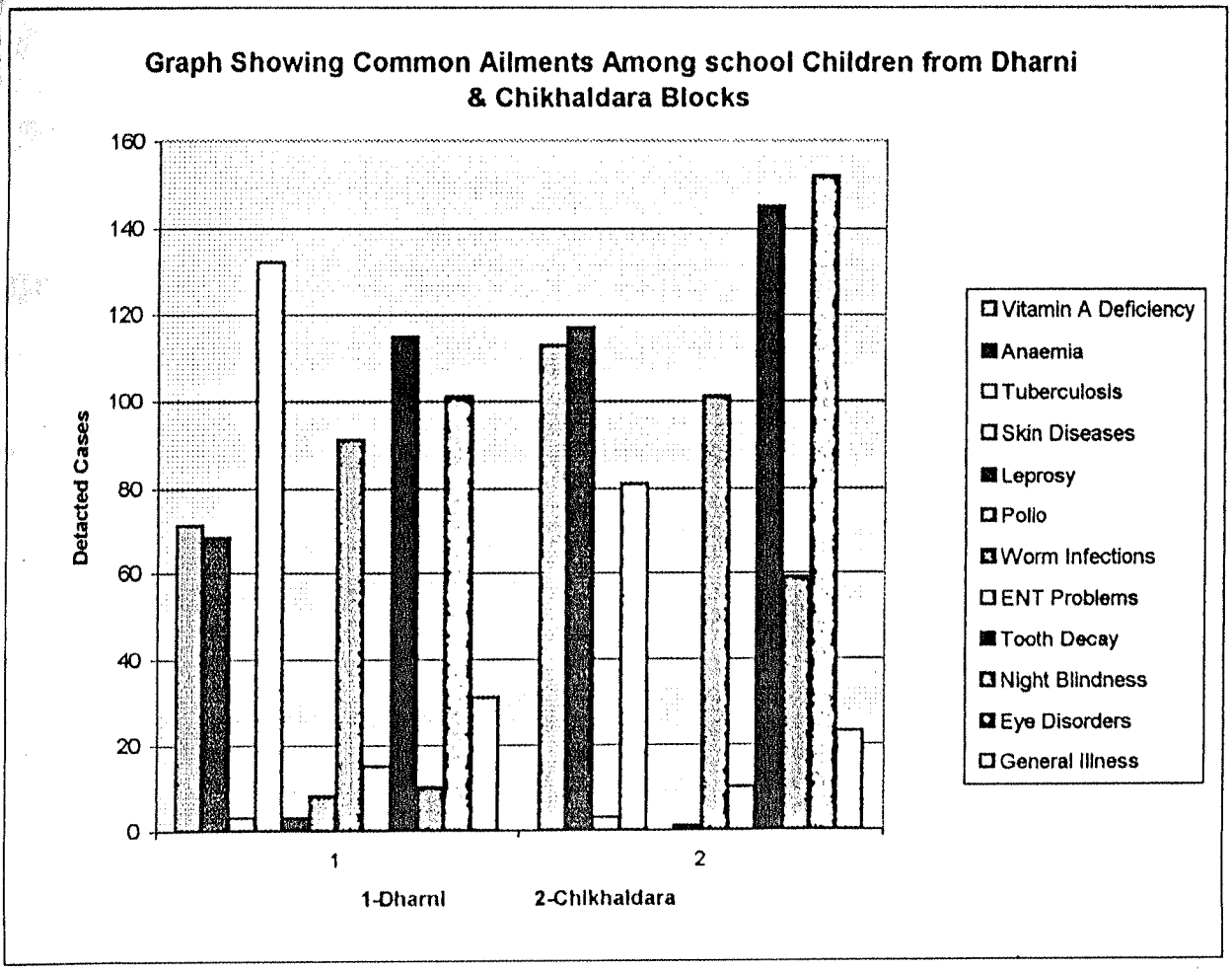
DISEASES AMONG WOMEN

1. Tuberculosis
2. Anaemia
3. Weakness
4. General debility
5. Early Aging
6. Malaria
7. Skin diseases
8. Diarrhoea
9. Dysentry
10. Malnutrition

Table No. 3.1

Common Ailments Among School Children In Dharni & Chikhaldara Blocks

Sr. No.	Disease	Detected cases in	
		Dharni	Chikhaldara
1	Vitamin A Deficiency	71	113
2	Anaemia	68	117
3	Tuberculosis	3	3
4	Skin Diseases	132	81
5	Leprosy	3	0
6	Polio	8	1
7	Worm Infections	91	101
8	ENT Problems	15	10
9	Tooth Decay	115	145
10	Night Blindness	10	59
11	Eye Disorders	101	152
12	General Illness	31	23
	Total	648	805



Source: D.H.O., Zilla Parishad Amravati

b) DISEASE CAUSATION CONCEPTS

The causes of illness/disease as revealed by ethnomedical specialists and informants in all the 8 villages may be classified into two, namely, natural and cultural. Natural causes are the environmental factors such as heat, cold, diet, wind, etc. The variable (greater or lessor) influence of such factors upset, bodily humors and equilibriums and affect human health. It was observed that ailments such as cold and cough, head-ache, migrane, asthma, cuts, wounds, sprains, bone fractures and fever may be categorised as having caused due to environmental factors.

The culturally recognized causes of illness are those events, factors or supernatural intervention responsible for causing an illness or disease. The commonly prevalent cultural causes of illness as revealed through the data are as follows :

1. Visitation and wrath of Gods and goddesses, ancestral spirits, evil spirits and cosmic forces.

2. possession by evil spirits

3. sexual intercourse with menstruating women

4. witchcraft/sorcery/evileye

5. failure to perform a religious duty or a rite

It was observed that the Korkus also attribute the origin and cause of illness to combination bith natural and supernatural pathogenic forces and agents. The table given below highlights the disease taxonomy and etiology of as perceived by the Korkus.

TABLE 3.1
Disease Taxonomy & Etiology

S.No.	Disease	Local name for disease	Cause of illness
1.	Chicken pox	Badi Mata	Visitation of goddess Mata.
2.	Boils	Badi Mata	Visitation of goddess Mata
3.	T.B.	Rokod Rog	Excess drinking of alcohol.
4.	Diarrhoea	Ulti tatti	- Drinking contaminated water - Consumption of stale & uncovered food. - Indigestion - Consumption of heavy foods
5.	Measles	Chhoti Mata	Visitation of goddess Mata
6.	Malnourish--ment	Sharir sukhana	Witchcraft, sorcery or wrath of supernatural beings
7.	Arthritis	Baygola	Entry of cold air in the joints
8.	Worms	Illi	Consumption of excess sweets
9.	Jaundice	Hardya	Blood turning yellow
10.	Cleft palate	-	Pregnant women cutting vegetables during Solar eclipes.
11.	Cough	Khoka	Exposure to cold air/water
12.	Migrane	Adatisa	Presence of spoilt blood in the forehead
13.	Scabies	Khujali	Unhygienic conditions
14.	Asthma	Damma	Weakness of lungs
15.	Pneumonia	Thandi	Exposure of body to cold air
16.	Fever Among children	Bhukhar	Evil eye
17.	Polio	-	Wrath of goddess Mata

c) NATURE AND ROLE OF ETHNOMEDICAL SPECIALISTS -

In the context of medical pluralism, a wide variety of medical specialists both tradition as well as modern co-exist and whose services the tribals avail to. However within th ethnomedical system of the Korkus different specialists are available including herbalist shamans, priests, bone setters and mid-wives. These practitioners are looked upon wit great respect and reverence by the Korkus. Every medical practitioner has a role to pla in prevention, promotion and cure of human health, their medical functions are give below -

i) PRIEST (BHOOMKA BABA)

A bhoomka is basically a religious functionary , who presides over pujas and sacrificia rituals. He derives his powers directly from supernatural sources. He interprets the caus of epidemics and even health and fertility failures. He also knows a few herbal medicina plants. Korkus have lot of faith in Bhoomka baba.

ii) SHAMAN (PADYAL OR PARIHAR)

A shaman is a man or a woman, states (Harner, M. 1973 : ix) who has direct contac with the spiritual world through a trance state and has one or more spirits at his/he command to carry out his/her biddings for good or to cure person's affected by othe spirits or simply acting on their own violations.

A Parihar is a diviner and an interpretor of supernatural phenomena. To fulfill his medical functions he diagnoses and interprets cultural causes of illness, performs healing writes, ward off evil forces and effects, offers, sacrifices to originators of illness administers herbal medicines and also ordinates new bhagats. The Korkus also have female shamans popularly known as "*Bhavanis* ".

iii) BONE SETTER (HAD GURU)

Had Gurus or bone setters provide treatment for mechanical injuries such as sprains, broken bones, swellings. Massaging and branding techniques also are part of mechanical therapies. As rightly stated by (Kurian J.C. and Tribhuwan Robin 1990 : 255) that bone setters have a sound knowledge about the positions of bones, nerves, veins and arteries in human body. Among the Korkus of Melghat who are really expert in their profession.

iv) HERBALIST (GUMANJA) -

A Gumanja or herbalist is one who may or may not use magico-religious elements in herbal therapy. He mostly cures his patients using medicinal herbs. He also advises his patients on diet to be encouraged or discourage during ill-health. Besides this, it was observed that most of these herbalists administer medicines extracted from animal sources. Among the Katkaris of Karjat this practice of using animal extracts as medicine is very common (Tribhuwan Robin and Peters Preeti 1993 : 21).

iv) MIDWIFE (SUINE) -

A traditional midwife is one who is always a female and is necessarily not a diviner. Her duties are to give advice and medical aid to expectant mothers, to assist in deliveries and to treat illness that may be fall the new mother and child. To

fulfill her duties a midwife prescribes a few herbal medicines,
knows massage techniques and recommends a proper diet for the new mother and the child.

Midwives who complicated case delivery, bathing a for 5 - 15 days. status.

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Midwives who start their career always face problems of child deaths, especially with complicated cases of deliveries. A traditional midwife gets Rs. 50/- for conducting the delivery, bathing and massaging the new mother and child and also washing their clothes for 5 - 15 days. Some people offer her a blouse or sari depending on their economic status.

All these medical specialists are looked upon with great respect by their community members for their medical skills, knowledge and of course for the services that they render. However, these medical specialists are not full-time professional practitioners but are dependent on other economic activities for livelihood, like other members of their community.

Qualifications for folk medical roles vary considerably. In some cases, formal training is required for the practitioners (Metzger and Williams 1963) in others a long apprenticeship is customary. Our data has revealed that a post of medical specialists is hereditary, as medical knowledge is restricted to a particular clan or family in a community.

Nature and roles of ethnomedical specialists may however differ from one society to another. In their studies on the traditional medical practitioners of Sahyadri Kurian J.C. and Tribhuwan Robin (1990 : 251 - 264) have shown that there are seven types of medical specialists among the Thakurs. These are Bhagats, Bhagatin, Vaidus, Had vaidus, Mantriks, Suines (mid-wife), and potdharies (assistant mid-wives).

d) ETHNOMEDICAL THERAPIES -

Three types of major ethnomedical therapies have been revealed through the data collected on the ethnomedicine of the Korkus. They are as follows :

i) Magico : religious Therapy - includes those ritualistic and divine procedures performed by a shaman or any other medical practitioner or an elderly person with the help of divine power, holy objects or by chanting divine commands to wardoff or remove evil elements or objects from a patient or to ritually compromise with the originator of illness by appearing him/her and offering a sacrilice or a gift so as to restore the health of the patient.

The parihars and bhoomkas are experts in magico-religious therapies. People have faith in them and prefer to first consult them in case of ill-health, than a medical person from Primary Health Centre. The word of the parihar is a gospel truth to the Korkus. His interpretation regarding the origin and cause of any illness is respected by the Korkus. It was observed that the prevalence of magico-religious practices among the Korkus is very common.

ii) Mechanical Therapy - includes therapeutic procedures such as bone setting, massaging, branding painful parts of the body by touching them with hot iron rod, using accupressure or acupuncture techniques and so on. Mechanical therapy is provided usu ally by the Had Gurus, Gumanja or elderly people in the village.

iii) Herbal or Chemo therapy - Herbal therapy consists of administration of medicinal herbs or medicines extracted from animal and mineral sources. Gumanja (herbalists) is one of the medical specialists who cures his patients using chemo therapy. Besides this, he advises his patients on diet. Elderly men and women also have sound knowledge about herbal medicines which are administered as home remedies in case of common ailments like cough, cold, cuts, wounds, fever etc.

Among the Thakurs of Karjat, herbalists have a ritualized way of treating their patients. These are specific rituals of collecting, preparing and administration of herbal medicines (Tribhuwan Robin 1993).

MCH - BELIEFS AND PRACTICES -

Women and children are our nation's greatest asset. They constitute about 70% of the population. Their health is the basis for the better health of the family as a whole and also the nation. The good health of women and children reflects the health of the family as a whole which is reflected on the national scene and is one of the indicators of development of the nation as a whole.

It is very necessary to protect and promote the health of women and children through well planned health care programmes to fulfill the complete physical , mental and social wellbeing of the people.

In order to understand the health needs of the people it is very necessary to have a knowledge of their health problems and at the same time knowledge of their attitudes and responses towards the health facilities provided to them.

The health needs and problems of women and children have to be assessed by taking into consideration their beliefs and practices regarding health care, diet, which also have an influence on their response and choice of medical facilities provided to them.

While taking into consideration Maternal and child health it has to be understood that mothers and children have to be considered together and their interdependence with respect to matters of health must be recognized.

Health of mothers affects the health of child, thus consideration of the woman's health in various stages, the beliefs and practices associated with the matters of health care in these stages and their positive and negative influences on her health as well as that of the child is very important.

Improvement in the health of mother and children with proper family spacing and family planning is also an important issue in the Maternal and Child Health Care.

DIETARY INTAKE AND THE BELIEFS AND PRACTICES AMONG THE KORKUS -

All the Korkus eat thrice a day with the morning break-fast follow by lunch at noon and dinner at round about 8 p.m.

The women who spend a major part of their time in cooking, fetching water, collecting firewood, doing household work, childrearing and doing their bit where agricultural work is concerned are a neglected lot. This negligence also extends to the sphere of diet. The adult males and children eat first. The leftovers are consumed by the womenfolk.

DIET DURING PREGNANCY AND LACTATION -

No special foods are given during pregnancy and lactation. A pregnant woman is denied a few foods which are considered hot and is believed to harm the foetus. These are papaya, shevaga, til, masur dal, banana which lead to abortions, according to Korkus. After delivery the women are generally given Kutki and savaria pej (porridge) which are supposed to increase the breast milk production. The women usually take rest for seven to eight days after delivery after which majority of them go back to work.

DIET OF INFANTS AND CHILDREN -

The newborn is never given colostrum for the first five days as it is believed to be heavy and sticky, due to which it remains attached to the intestine. The child hence has problems of indigestion. Instead of colostrum, sugar water or Jaggery water sometimes honey is given to the child.

Colostrum is believed to produce -

1) Pain in the stomach

2) Diarrhoea

Mothers breastfeed their infants till their stomach is full. Breastfeeding is continued till the birth of the next child. Rice, Kutki or savaria pej or Kanji is given to the child when it starts sitting as reported by the women. Other solid food items like Roti, Rice, Dal, are given to the children when they start walking or when they demand food.

CARE AFTER DELIVERY -

Black tea prepared with jaggery is given to a woman who delivers so that the impure blood which is there in her body gets cleaned out. Savaria (millet) porridge is consumed for 5-15 days by a woman after she delivers. She is bathed twice a day with hot water so that the muscles and nerves of the woman get relaxed.

The woman is allowed to rest in the house for about 15 days after which she starts working again.

RITUALS AND CEREMONIES ASSOCIATED WITH THE NEWBORN AND THE MOTHER -

Rituals according to Edmund Leach (1968 : 524) should be applied to all "culturally defined sets of behaviour as such regardless of its explicit regligious, social or other contents". Every ritual or ceremony is performed to achieve something. Thus a ritual is a purposeful act performed with intentions. A few of the rituals and ceremonies associated with the mothers and children are given below.

Menstruation is considered to be a state of pollution. A menstruating woman keeps herself aloof for four to five days. She does not cook nor perform any household activities. Thus, a menstruating woman is socially dislocated from the society because it is believed that social interaction with her may bring trouble to the community. After the menstrual period i.e. on the 4th and 5th day the woman takes a bath, washes her clothes. Then she is allowed to perform her duties and interact with the society.

The delivery is performed by the traditional Dai at home itself. It appears that due to strong faith in the Dai most of the deliveries are performed at home and never in the hospital. In the interior areas the ICDS or ANM Workers are not allowed even to feel the foetus of the pregnant woman as they believe that their touch might lead to still birth or abortions. This attitude becomes a barrier in the ANC programme. Only a midwife is allowed to do this.

Tetanus toxoid injection given to pregnant women are believed to lead to abortions or death of the baby, & therefore not taken. The umbilical cord of the child is cut with a sharp instrument, usually a blade now-a days but, which is unsterilised before use. The umbilical cord is burried at the back of the house usually at the place where the mother takes a bath on the fifth day. This is done to ensure that the cord remains safe from wild

animals, birds, human being which might be used as an object or device of witchcraft and might harm the small child.

On the fifth day the Dai performs the Panchvi Puja where the child is offered to the Goddess Sati or Satvai who is believed to determine the fate of the child and her blessings are considered very necessary for the good health and welfare of the child. The child is kept in a Sugali (baskot) with coconut, rice, kumkum, turmeric, etc. used in the rituals. These are the health promotive rituals performed to maintain good health and welfare of the child.

Preventive rituals -

It is commonly believed that most of the prolonged illnesses in children are because of the effect of evil eye. To ward off this a black thread is usually tied around the neck to neutralised the effect of the evil eye.

ATTITUDES TOWARDS FAMILY PLANNING OPERATIONS -

The response to family planning is very poor. The people appear to lack the concept of having less children probably due to a large number of infant deaths, poverty and wanting to have a large number of helping hands to fulfill their economic requirements. Usually, people have four or five children after which the family planning is done. There were cases where the operation was not done even after 3 - 4 girls were born because parents want a son and vice varsa. Birth of a girl child is welcomed because of the system of Bride price which ranges from Rs. 400 - 1000 along with one or two bags of rice.

The concept of birth spacing seems to be absent among the women and the gap between two consequent children is very less. Oral contraceptives are never used by the women and there were many cases where the pills received from P.H.C. staff were thrown but or just kept without use.

Copper T is also not used by the women as they believe that-

1) it causes weakness which might affect their work performance or capacity.

2) it causes pain the back.

3) it leads to internal bleeding

4) the Copper T tears the uterus

5) it makes the woman sterile

6) it decreases breast milk of the mother

7) it creates inconvenience during sexual intercourse.

Vasectomy is rarely done by the males as it is believed to produce weakness which might affect their work performance or capacity. Absence of any other recreational facilities can be one of the other factors responsible for a large family size among the Korkus. In many of the interior areas when the people decide to go for tubectomy, Health Workers have to spend extra money for patients and relatives for their transport, lodging and eating arrangements.

In the interior areas Folic acid tablets are never taken by the pregnant women as they are believed to cause abortions, miscarriages in pregnant women. They are also believed to increase the size of the foetus causing problems for the mother during delivery. Many women have reported loss of strength or energy, increase in weakness, change in colour of stools usually production of black stools due to which folic acid tablets are not taken.

RESPONSE TO IMMUNISATION FACILITIES

Most of the children from that area have been immunised in the Anganwadi but, the mothers are not aware of the various doses given, why they are given, the timings when the doses are given. All these beliefs and lack of faith in the health providers appear to act as barrier in the response of the people to the health facilities provided.

CHAPTER FOUR

A REVIEW OF CHILD DEATH TRAGEDY IN MELGHAT REGION

The child death tragedy which took place in 1992- 93 in Melghat made head lines in most newspapers. Some papers reported deaths of the tribal children to figures over 700. Figures of deaths of children however varied from paper to paper. The present report has made an attempt to review the child death tragedy situation bare on empirical findings, official data and observations. The PHC records maintained by the ADHO at Dharni regarding the general deaths recorded between April-October 1994 from all the seven PHCs is given below :-

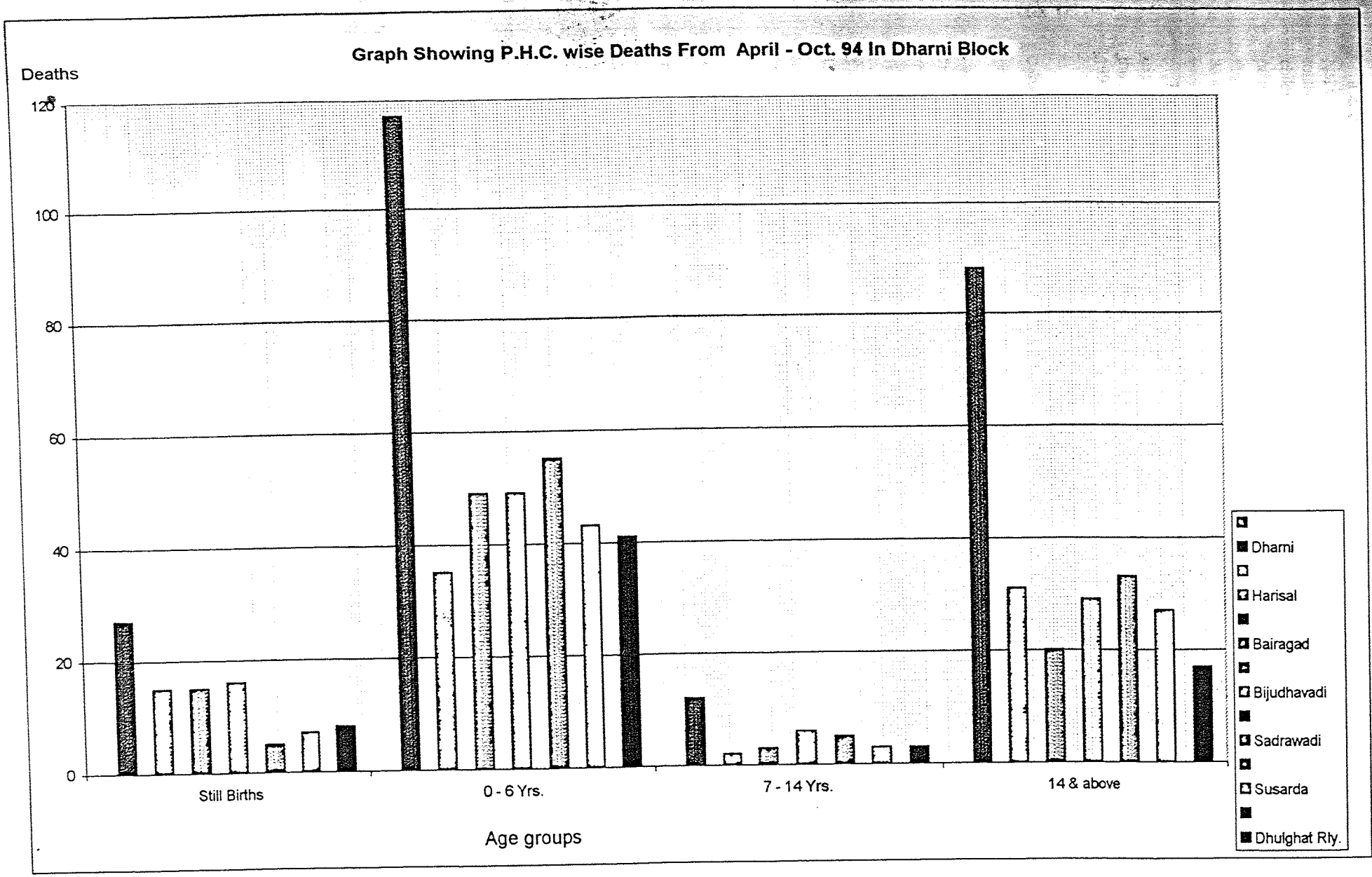
Table No. 4.1

P.H.C.wise Deaths from April-October 1994 in Dharni Block

S.No.	P.H.C.	Still births	0-06 yrs	7-14 yrs	14 & above	Total
1.	Dharni	27	117	12	88	244
2.	Harisal	15	35	2	31	83
3.	Bairagad	15	49	3	20	87
4.	Bijudhavadi	16	49	5	29	100
5.	Sadrawadi	5	55	5	33	98
6.	Susarda	7	43	3	27	80
7.	Dhulghat Rly	8	41	3	17	69
	Total	93	389	34	245	761

Source: A.D.Ho`s Office Records Available In Dharni P.H.C.

Graph 4.2



Source: A.D.H.O.`s Office Records Available At Dharni P.H.C.

It is evident from the above table 4.1 and the graph 4.2 that even the latest records of just seven months (April - October 1994) clearly shows the deaths including still births to a total of 761. The break up of which states that there were 93 still births, 389 death of 0 -6 children, 34 death of children teenagers ranging from 7 - 14 years and 245 deaths of people above 14 years. This clearly is an indication that there is still lot of scope for improving the health, nutritional, communicational, economic and developmental situation as it were in Melghat region.

The causes of child deaths as revealed by the medical staff and their records could be explained more specifically with the help of the table 4.3 and graph 4.4 which highlight the causes of deaths among children of the age group 0 - 1 for the period July - Sept., 1994 in Dharni.

Table 4.3

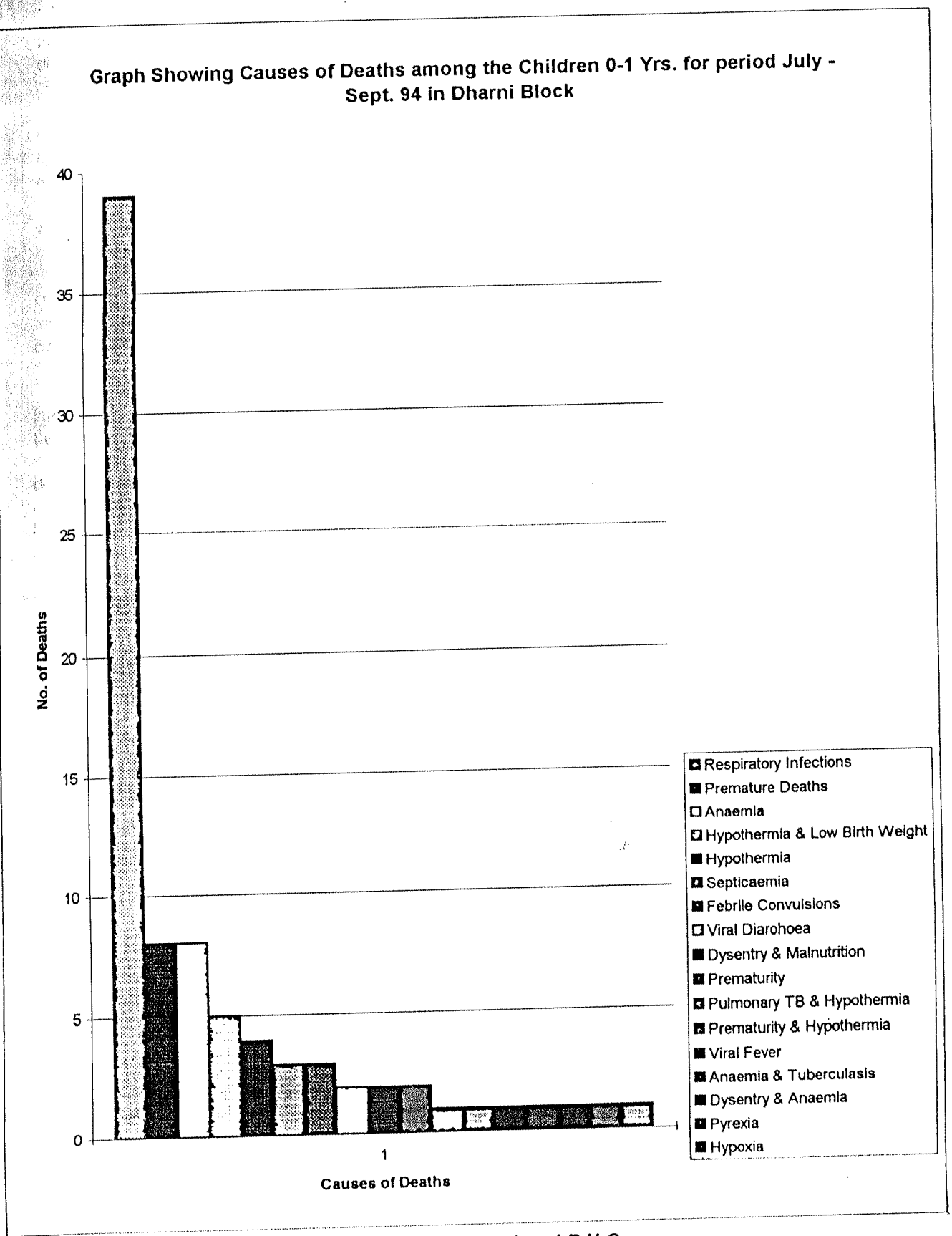
Causes of Deaths Among Children between 0 to 1 Yrs For the period July 94 - Sept. 94 in Dharni Block.

Sr.No.	Disease	No.of Deaths
1.	Respiratory Infections	39
2.	Premature Deaths	8
3.	Anaemia	8
4.	Hypothermia & Low Birth Weight	5
5.	Hypothermia	4
6.	Septicaemia	3
7.	Febrile Convulsions	3
8.	Viral Diarrhoea	2
9.	Dysentry & Malnutrition	2
10.	Prematurity	2
11.	Pulmonary TB & Hypothermia	1
12.	Prematurity & Hypothermia	1
13.	Viral Fever	1
14.	Anaemia & Tuberculosis	1
15.	Dysentry & Anaemia	1
16.	Pyrexia	1
17.	Hypoxia	1
	Total	83

Note : Respiratory infections include acute respiratory infections Pneumonia & Bronchopneumonia.

Source: A.D.Ho's Office Records Available In Dharni P.H.C.

Graph 4.4



Source: A.D.H.O's Office Record Available at Dharni P.H.C.

Premature deaths of the children as interpreted by the medical experts are linked with the health status of mothers. Malnutrition among women, tuberculosis, and even veneral diseases of the mothers can prove as predisposing factors for pre-matured deaths among children. Commenting on the majority of deaths of tribal children in Melghat region are due to acute respiratory infections, the medical personnel said that ARI (Acute Respiratory Infections) include pneumonia and bronchopneumonia. The prevalence of these disease could be due to poor sanitation, hygiene, lack of awareness regarding the nutritional care of the child, improper clothing of the child, poor nutritional status of the child, cold and damp environment in the houses. Poor ventilation, lack of sunlight etc. were probable reasons as to why ARI is prevalent among the tribal children.

Deaths of tribal children due to Hypothermia could be linked with the lack of proper care of the children by the Korkus, in adequate protection of children from sudden drop in temperature especially during rainy reason and in winter too, due to lack of proper warm clothes, blankets, bed-sheets, other cloths and over all poverty of the Korkus.

Cause of septicaemia among the tribal children in Dharni and Chikhaldara was interpreted by the medical personnel to ignorance or negligence of parents with regards to treatment of the child at right time, which ultimately leads to spreading of that infection on the body of the child. With regards to Asphyxia i.e. difficulty in breathing. This may be due to choking caused by tieing umbelical cord around the neck of the child during delivery. Above all malnutrition among both women and children is very common. This could be happening with traditional midwives (untrained) who just being their carrier newly and are not are not aware as to how to deal with complicated delivery cases. There are the few medical interpretations regarding the causes of deaths among tribal children in Melghat region.

Malnutrition among the tribal children clubbed with diseases such as pneumonia, septicaemia, diarrhoea, dysentry, worm infections, bronchopneumonia, vitamin deficiency, anaemia, skin diseases etc. have additionally contributed to the deaths of these children. This means there is an urgent need to plan and implement disease control programmes, health and nutrition education related to control the problem of child morbidity, mortality, malnutrition and health promotion.

4.1 AN EXPLORATION OF THE FACTORS RESPONSIBLE FOR CHILD DEATHS IN DHARNI AND CHIKHALDARA.

Empirical evidences based on the data collected through interviews with P.H.C. and ICDS staff, tribals school children, school teachers and other officials including official data pointed out that there were several factors which were directly or indirectly interlinked with the death tragedy. Given below is the classification of the factors responsible for child death tragedy in Dharni and Chikhaldara.

A. MEDICAL INTERPRETATIONS :

i) Malnutrition among tribal children.
ii) Age at marriage
iii) Spacing and contraception practices
iv) Sanitation and hygeinic habits
v) Korku attitude towards family planing
vi) Dietary intake

B. COMMUNICATION AND TRANSPORTATION FACILITIES.

C. POVERTY OF THE TRIBALS.

D. ILLITERACY & HEALTH IGNORANCE.

E. MARRIAGE PRACTICES

F. SUPERSTITUOUS BELIEFS & PRACTICES

G. PROBLEMS FACED BY HEALTH CARE PROVIDERS.

The above factors are discussed one by one here in this chapter based on empirical findings of this study.

A. MEDICAL INTERPRETATIONS :

An attempt has been made to project medical, cultural, social, economic and environmental interpretations of the cause of ill- health and deaths of tribal children in Melghat region. Given below are a few medical interpretations.

i). Malnutrition among tribal children -

Malnutrition refers to the physical effects on the human body of a dietary intake inadequate in quantity and/or quality (Joshi Subhangi : 5). It is a state in which a prolonged lack of one or more nutrients retards physical development or causes specific clinical disorders such as iron deficiency anaemia, goitre, etc. Malnutrition can also be defined as an impairment of health resulting from a deficiency, excess or imbalance of nutrients. It includes under- nutrition and over- nutrition, as well.

Some of the characteristics of people suffering from malnutrition are dull lifeless hair, greary pimpled facial skin, dull eyes, shimped posture, fatigue and depression are easily evident by their spiritless expression and behaviour and lack of interest in surroundings.

Persons prone to malnutrition are infants, pre-school children, adolescents, pregnant women and elderly people. Pregnant women are especially prone to malnutrition if they are adolescents and mature enough to bear children. Infants and pre-school children are dependent on their mother for nourishment and if her selection of foods for them is incorrect, they may suffer from malnutrition. The problem of malnutrition is however linked with several factors.

The sakal newspaper dated July 21st, 1994 reported that as per the observations reports of medical personnel nearly 1600 children are under nourished in Melghat region. This information was given by the Health Minister, Smt. Pushpatai Heere in Vidhan Parishad, Bombay.

The Tribal Research and Training Institute research team took anthropometric measurements of 113 tribal children within the range of 0 - 6 years. It was found out that nearly 67% of the children were found to be undernourished. This means even as of 1994 the nutritional intake of the tribal children is not upto the mark and needs to be paid urgent attention to.

ii) Age at Marriage :

Early marriage is a very common practice among most tribal communities in India. Among the Korkus the mean age at marriage of girls ranges from 12 - 16 and for boys it is 16 - 2- years. Early age at marriage leads to early pregnancies and hence such pregnant women are prone to be undernourished and anaemic. This is certainly hazardous to the health of the mother as well as the new born.

Child bearing at a very early age a number of complications for the mother such as

birth of low weight babies, anaemic babies, because the girl (mother) herself has not fully grown especially the pelvic bones. This poses problems during delivery. The nutrients which she needs for her bodily growth are inadequately supplied to the foetus this leads to anaemia and malnourishment among mothers and children. In addition poverty of the Korkus and lack of nutrition education prevents them from eating good food during pregnancy.

Thus, if a mother does not get her adequate, proportionate and qualitative share of food during pregnancy it will certainly have an effect on her health as well the health of the new born.

As rightly stated in the ethnographic notes on the Scheduled Tribes of Maharashtra (census of India, Vol. X 1961 : pp 166) that the age at marriage for Korku boys is usually 15 to 20 and girls 12 to 17 years. A study of 1,095 Korku couples showed that the difference in age of husbands and their wives was between 6 to 10 years in 54% of the cases. This is an indication that the age at marriage as practised in 1961 has not gone up even 1994 as per our study. Very few educated Korkus get married late. This means educational strategies have to be designed to prevent and control early marriages among the Korkus.

III) Spacing & contraception practices -

Korkus have their own perceptions about natural spacing and contraception practices. Their ideology of spacing and use of contraceptives does not resemble with the scientific interpretation of the use of contraceptive and significance of spacing as it were. It was observed that the Korkus are not aware of the significance of the use of contraceptives. They are reluctant to use pills, nirodh and even copper T. Very few Korkus especially those who are educated or have been exposed to urbanization and modernization use these contraceptives sometimes.

Copper T programme for that matter has got very poor response both in Dharni and Chikhaldara from the Korkus because of following beliefs :-

i) Insertion of copper T leads to tearing of uterus.
ii) It hurts the penis of males during sexual intercourse.
iii) Causes pain in lower abdomen and back pain too.
iv) It gives rise to internal infection.
v) Its insertion gives rise to bleeding and white discharge.

These beliefs are a sought of socio-cultural barriers that hinder spacing and contraception programmes. Similarly in the case of oral pills Korku women said that a woman's abdomenal region tends to get fat if oral pills are consumed and therefore they are not taken. The practice of using Nirodh was also found to be absent except a very few exceptional cases. Use of Nirodh creates problems during intercourse, one does not get sexual satisfaction, it is problematic to dispose it, therefore no one makes use of Nirodh except very few educated Korkus. This scheme has faced a set back.

Due to above beliefs and attitudes of the Korkus towards contraceptive methods they do not use contraceptives. This in turn has an effect on spacing practices. It was observed among most families that the period of spacing ranges from 3 - 20 months. Very few cases were found to have kept spacing of 2 - 3 years after every child. The Korkus are pleasure loving people irrespective of their poverty. Meaning thereby they love to drink liquor (siddu) since there are no recreational facilities, mating ultimately gets priority and hence contributes to large family size. One does not even think of the significance of spacing. Secondly both men and women drink mostly in the evenings. This state of physical and mental conditions give room for mating.

There is an urgent need to devise educational strategies and programmes to create awareness among the Korkus regarding the significance of spacing and use of contraceptive devices. Voluntary organizations and even government must take up nonformal systems of education programmes for the tribals and especially the women.

iv) Sanitation and Hygiene among the Korkus -

Hygiene has been defined as the "science of health and embraces all factors which contribute to healthful living". Hygiene not only aims at preserving health but also at improving it. The purpose of hygiene is to allow man to live in healthy relationship with his environment. Air, weather, soil, waste, bodily cleanliness, and nutrition are the widely differing concerns of the Hygienists (Park : P 38 : 1986).

The term personal hygiene includes all those personal factors which influence the health and well-being of an individual. It comprises of a broad range if day to day activities such as care of the body regarding bathing and washing, care of clothing, hair, teeth, skin, nails, cultivating good habits regarding eating, diet, sleep, smoking, drinking and attitude towards life. Any disruption of these activities may impair health. This is a matter of individual responsibility (Park : P:19 ; 1986)

The concepts of sanitation and hygiene reflect the awareness of people concerning health. These concepts can be developed not through formal education, but, health education which is another aspect of education.

Awareness about the concepts of sanitation and hygiene is very much necessary among women as they are responsible for the good health of the family as a whole most important of all being the children and this awareness is reflected in the way they keep the children.

It was observed that the Korku women did not appear very clean apparently. They did not use any footwear. The women have a bath but, without using soap, stone is used to clean the body. It was found that the women did not cut their nails nor did they take proper care of their teeth and hair. The same thing was reflected among children.

The children were scantily clothed and never bathed regularly due to which many skin diseases especially scabies was very common them. Small untidy children were found roaming here and there and there were a few instances when they were picking and eating food they had dropped on the ground.

The people did not seem to have the concept of washing their hands before eating. Animals like hens had free access to the kitchen. Open air defecation was very common and use of leaves, stones, mud after defecation was very common among children. Water from brooks, rivers etc. was used for drinking purposes. Treatment of water by bleaching powder was not accepted as the change in the taste of water served as a barrier. No other modes of treatment of water like filteration, boiling were used. This probably explains the high prevalence of scabies, dairrhoea, worm infestation, dysentery, gastroenteritis among the children.

v) Korku attitude towards family planning -

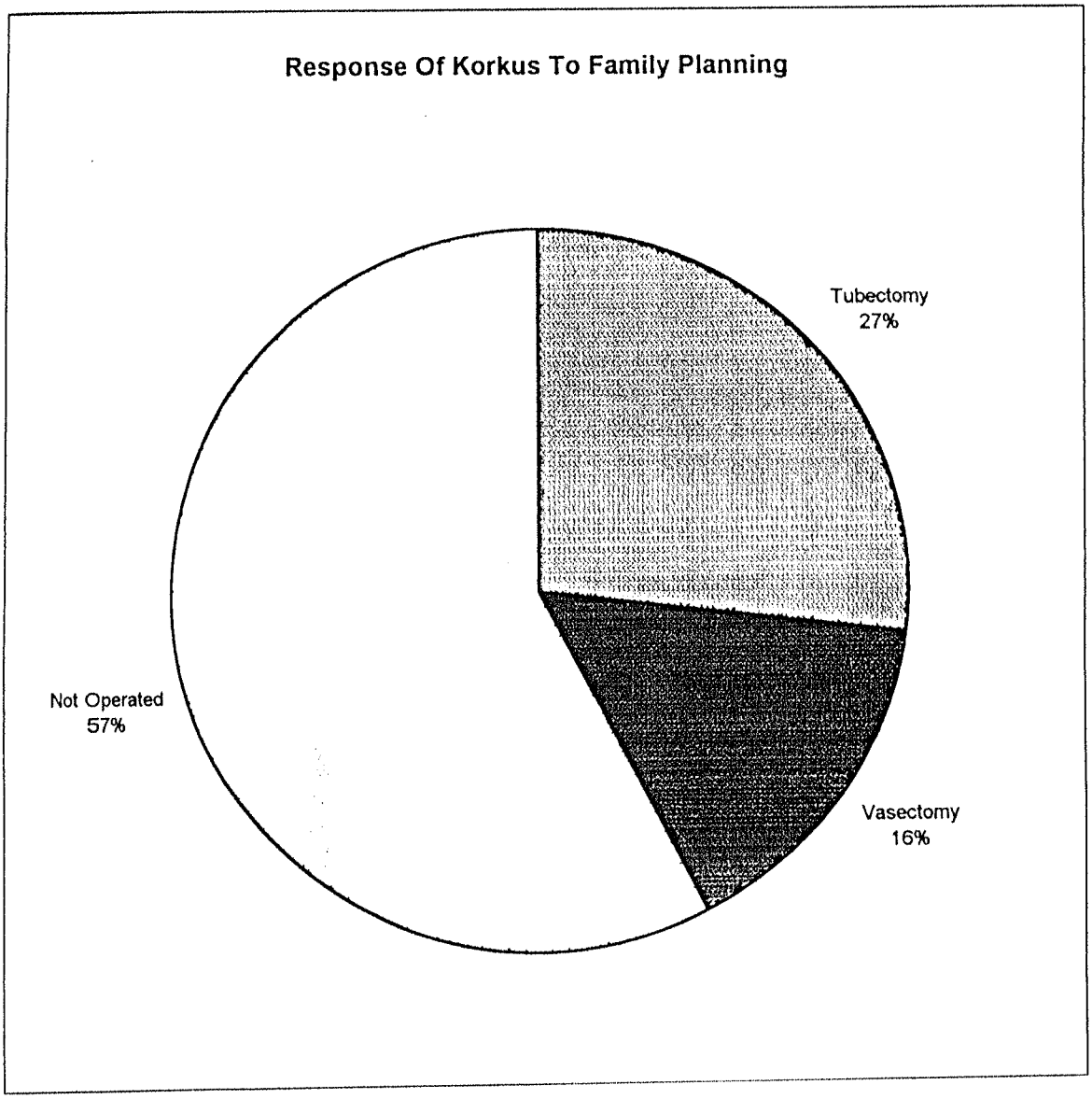
A assessment of the Korku response to family planning programmes implemented by the Primary Health Center's revealed following facts. Table 4 highlights tubectomy, vasectomy and not operated cases.

Table No. 4.5

Response of Korkus to family planning

Tubectomy	Vasectomy	Not Operated	Total
43	25	92	160

Pie Diagram 4.6



Both the table 4.5 and the pie diagram show that acceptance of family planning programme is very poor among the Korkus. Out of the 160 women interviewed it was found out that 43 of them went through tubectomy operation, 25 of the men went for vasectomy and 92 (both men and women) did not go for either of it.

Informal interviews with both Korku men & women showed that children are considered to be an economic asset . Secondly the practice of polygamy & early age at marriage gives more scope for production of more children during the reproductive life span. Thirdly knowing that child mortality & morbidity is very high the Korkus do not take risk of having one or two children, who may die due to illness , hence to substitute the lost children they produce more children.

Besides this male children take over the property (land and house) of the father, there is continuation of the clan lineage and because of male children there is security for old parents. Nearly 42.5% of the total respondents interviews had undergone tubectomy and husbands vasectomy. ***It was however observed that all these families who went for tubectomy and vasectomy operations did it only after having atleast four children. There are cases who have had 8-10 children and the gone for family planning operations. Well, this kind of an attitude does not do any justice to the small size family norm which is there before the eyes of health administrators.***

We came across a case in Salona village in Chikhaldara tahsil who has had 15 children from one wife and have not gone for family planning operation. He would shout at the health Workers who would go to canvase him for family planning operation. He would say "***Hamara bachha hai, hum unko sambhalega, tumko taklif kyo hoti hai***" In Boratyya Kheda village which falls under Semadoh Primary Health Centre we came across two families with 10 and 12 children respectively.

Yet another phenomena regarding family size as observed by us was that due to polygamy a woman tends to produce children from both her husbands. Secondly early age at marriage gives lot of scope for having more children. Thirdly, as regards to decision to go for family operation is taken by elderly members (mostly household head) of the family. Medical personnel told us that the Korkus prefer Laproscopy than tubectomy and vasectomy as one does not have to stay in the Primary Health Centre for 3 - 5 days.

Tubectomy and vasectomy is done in order to get Rs 130 and 110 respectively. Besides this a health worker spends nearly 250 - 350 rupees per case as an extra incentive to the patient so that he or she goes for family planning operation. In the bargain a health worker looses quite a lot of money to prepare these case to save his skin from getting memos from his higher authorities for not completing family planning target.

It is, therefore, very necessary to keep a check over this crucial problem of population explosion among the tribals of Melghat region. Over production of children has not only had negative impact on the child's health but even the health of the mothers as well. This has also created problems of child negligence.

vi) Nutrition Related Problems -

DIETARY HABITS OF THE KORKUS -

Food is the most basic need of human beings. People everywhere have devised different ways and means of procuring, preparing and processing food items for consumption. Dietary habits of human beings vary from one society to another and even from one class and/or caste to another. Ecosystem also plays an important role in people's dietary habits. Dependence on wild species in an ecosystem and what is available

people adapt their dietary habits accordingly. Production of quality agricultural produce depends on the available technology & society has. This section of the report precisely deals with the dietary habits of the Korkus.

i) GENERAL DIET OF THE KORKUS :

The data collected through interviews and observation revealed that the Korkus consume following diet.

CEREALS - Rice and Jowar is their staple food. However a few do consume wheat.

MILLETS - Kutki (panicum sp) a millet is also consumed by them.

VEGETABLES - It is very rare that the Korkus especially of the interior areas consume leafy vegetables. During rainy season and winter Amaranthus, Am'badi and tender leaves of gram are the only leafy vegetables consumed. Besides this they also eat wild vegetables. Brinjals, potatoes, tomatoes, cauliflower are grown by a very few Korku farmers while others get them occasionally from weekly markets.

PULSES - Toor dal, gram, french beans, chawli, udid dal, mung dal are some of the pulses consumed by the Korkus.

FRUITS - Consumption of fruits was observed to be a rare practice among the Korkus because they cannot afford to buy them and also they are available only in tahsil places which are far off from their villages. However, fruits like bananas, guavas, raw mangoes, jamoon and a few wild fruits are consumed occassionally by the Korkus.

OILS - Ground nut oil is common among villages near tahsil places and roads. While the villages in the interior areas use oil prepared from Mauha seeds. The phenomena of using ghee is beyond the imagination of the Korkus. Oil also is used sparingly except during festivals.

NON-VEG.DIET -Korkus are fond of non-vegetarian food & goes very well with liquor (siddhu). They cannot afford to buy meat from the market as it is very costly. However consumption of chicken and even meat once or twice a month is common. Dry fish is common and is consumed at least once a week. Some of them hunt wild animals such as sambar, wild buffaloes, boker etc. 3-4 times a year irrespective of the fact of forest officials.

MILK AND MILK PRODUCTS - Consumption of milk, curds and other milk product is very rare among children and adults too. Korkus who rear buffaloes sell milk and even ghee in town places to hotel owners, and to office citizens.

SOYA BEANS - Soya bean crop which is grown by the Korkus is not kept for consumption but is sold at the rate of Rs.800 to 1000 Rs. per quintal to traders. Soya bean is very rich in protein content but is occassionally consumed by Korku children by frying it on a pan. They say soya beans do not taste good, hence it is not consumed.

Consumption of dal, chicken (occasionally) with rice and jowar Bhakar is the most common food of all the Korkus. Consumption of leafy vegetables, fruits, nuts, ghee, milk products, curds etc. is very lacking in their part of their diet that is why anaemia among women and children, vitamin 'A' deficiency are very common.

Soya beans are locally cultivated [illegible] protein content are grown locally here but very few Korkus cultivate it as it is not their source of income and one bag of soyabean is sold for Rs. 800 - 950.

This peculiar behaviour of the Korkus of not utilising the resources available with them reflects their lack of awareness extreme poverty, lack of a constant source of income, which forces them to go for cash by selling whatever they have.

In a few areas the local markets are also situated at about 20 - 30 kms which makes it very difficult and unapproachable in the rainy season. Many a times, in the interior areas men usually go out in the rainy season to catch fish or hunting animals like rabbits, deer etc. An attempt was made to assess the quality and quantity of the food consumed by the people from that area by conducting a diet survey.

The amount and type of food consumed by the family was obtained by asking them the amount of food eaten per day and the information on the amount of food bought from the weekly markets was bought. Due to time constraint and practical difficulties, weighment method was not used. It was however observed that it was very difficult to obtain the exact quantity of food consumed by the people due to variation in the availability, consumption pattern, because in a few cases the people depended on whatever was available for their food due to extreme poverty and unavailability of enough money.

Also recall method was very difficult to implement among the people. It requires a long term study based on two or three different methods of dietary survey to estimate the calorie intake of the people from that area. However from the information on the amount of food bought from the weekly markets the type of food they ate everyday it was possible to assess the quality of the food consumed by the Korkus.

It was found that cereals, meat and fish are the items common among the diets of the Korkus. Meat is eaten occasionally as it is expensive but, dry fish are consumed atleast once a week. The women in the house eat the last while the tribals classify a few foods as hot and cold. Brinjals, potatoes, meat, fish, Tur, Bajra, Masur, Papaya, classified as hot while milk, bananas, curds, - cold, Rice - light foods, Bajra, Jowar,Legumes, Tur, Wheat - heavy foods.

The most important factor found in their diets is that the intakes of protective foods like leafy vegetables, milk fruits, fats and oils are very low in the Korku diet. Their diet is predominantly based on cereals and are deficient in several nutrients namely vitamin A, calcium, riboflavin, iron etc. Due to lack of green leafy vegetables, fruits, oils, milk many nutritional deficiencies are found among the women and children from that area.

A, B.H.M.S. doctor working in that area reported ***"I don't know how I am going to pull on here, I have not seen any green leafy vegetables, nor fruits here for a very long time.*** The only vegetables available here are Brinjals, Potatoes, cabbages, cauliflower. Conditions become even more worse in the rainy reason.

This is the situation as reported by the doctors so one can imagine the condition of the tribals living in the interior areas facing extreme poverty, no alternative source of income and having no other transport facility except his bullock cart or walk by foot.

General debility, weakness, early aging and anaemia are found to be very common due to poor nutrition among the tribal women.

Anaemia, vitamin A deficiency, Nightblindness, Eye disorder are very common among children. Also deficiencies related to nutrition make them more prone to infections like ENT problems, Tuberculosis, Worm Infestation, Pneumonia, Bronchopneumonia etc.

The common nutritional disorders found among school children in Dharni and Chikhaldara are (1) Vitamin A deficiency - 71 cases were detected in Dharni and 113 in Chikhaldara. (2) Anaemia 68 cases in Dharni and 117 in Chikhaldara (3) Nightblindness - 10 cases were detected in Dharni and 59 in Chikhaldara. (4) Eye disorders - 101 cases in

Dharni and 152 in Chikhaldara. Bitots spots are very commonly found among children due to vitamin deficiency, scurvy, undernourishment and stunting is also very common among the Korku children.

vii) Nutritional status of Korku children between 0-6 years

Good nutrition is the basic componant of Health. It is of prime importance in the attainment of normal growth and development & in maintenance of Health throughout life. There is a growing realisation that adequate nutrition is a necessary step in improving quality of life.

Malnutrition has been defined as a pathological state resulting from a relative or absolute deficiency or excess of one or more essential nutrients. There can be -

1) Undernutrition - Insufficient food eaten over a long period of time.

2) Overnutrition - excessive consumption of any food over an extended period of time.

3) Specific deficiency or pathological state - Resulting from relative or absolute lack of an individual nutrient.

4) Malnutrition predisposes to injection & injection to malnutrition. Lack of food is not the only cause of malnutrition but, food habits are influenced by customs, beliefs, attitudes & traditions (J.E.Park, Pg.423:1986) Food habits are the oldest and most deeply entrenched aspects of any culture.

Nutritional status of children (0 - 6) years

Various studies have identified certain high risk factors which have an influence on the child's nutritional status. They are related to medical, social, economic and educational conditions and may include -

1) Low birth weight
2) Twins or multiple births
3) Many children in the family
4) Short intervals between births
5) Poor growth in early life
6) Early stopping of breastfeeding (i.e. before 6 months)
7) Introduction of complementary foods either too early or too late.
8) Many episodes of infection
9) An illiterate mother in an area where many mothers are literate.
10)Poverty in the family due to unemployment
11)Recent migration of the mother to that area
12)Children - only one parent (1 : Pg 17)

Anthropometric measurements of 113 under six children were taken such as (weight, height, head circumference, chest circumference) and the ages were also recorded. These measurements were compared with N.C.Hs. standards.

The children were classified into different grades by using the following methods of classification.

Weight for Age

System	Reference population	Method	Classification
Gomez	Bosten	% of median	> 90% - Normal
			90-75% - Mild malnutrition
			75-61% Moderate malnutrition
			< = 60% severe malnutrition

Height for Age

WHO	Bosten	% of median	> = 90% Normal < 90% stunted

Weight for Height

Waterloo	Bosten	% of median	110 - 9-% Normal
			90-80% mild malnutrition
			80-70% moderate malnutrition
			< 70% severe malnutrition

Reference cited - From "Growth monitoring" by World Federation of Public Health Association, 1985.

The children were divided into three age groups (0 - 1) years - Infants (1 - 3) years - Toddlers & (3 - 6) years - Preschoolers and the percentage of malnutrition was calculated among the different age groups using different methods.

I) Infants (0 - 1 years)

Sample size 22

Wt. for Age	Weight for Age	Weight for Height
Normal - 9%	Normal 68%	Normal 81.8%
Ist Grade - 63.6%		Ist Grade- 13.6%
IInd Grade - 27.2%	Stunted 31.8%	IIIrd Grade 9%

II) Toddlers (1 - 3) years

Sample size 55

Wt. for Age	Weight for Age	Weight for height
Normal - 3.6%	Normal 29%	Normal 56.3%
Ist Grade - 40%	Stunted 70.9%	Ist Grade - 34.5%
IInd Grade - 43.6%		IInd Grade - 7.2%
IIIrd Grade - 12.7%		IIIrd Grade - 1.8%

1) Weight for Age - The use of weight as an indicator of growth and nutritional status is one of the best and reliable methods of assessment in cases where the exact and reliable ages of the sample are available.

Although the average weights of different groups of children vary widely, it is now agreed that this is mainly due to differences in health and nutritional status. Race and climate have relatively little effect on the weights and heights of small children. Infants of any race, anywhere in the world, born to mothers who have had no dietary restrictions or infections or complications during pregnancy ; who have been reasonably well protected from infections and given much love and stimulation, will show little if any difference in growth rates during first few years thus making it possible to use same 'reference' weights and heights in every country. - (2) (2 ; Pg. 9) Weight for Age is an indicator of Acute malnutrition -

In the case of the above sample, the exact ages of children were available and the weights were recorded using a balance. It can be seen from the table that the number of normal children decreases from 9% to 3.6% as the age group changes from 0 - 1 years to 1 - 3 years. In the age group 3 - 6 years all the children are malnourished. Thus, it is clearly seen that malnutrition increases as we proceed from 0 - 1 years to 3 - 6 years. Even when we break up the age group of 0 - 1 years into 0 - 6 months and 6 - 12 months with the increase in age the malnutrition percentage increases from 71% to 100%.

The probable reasons for initial malnutrition (0 - 6 months) can be due to poor nutritional status of mothers, low birth weight of the infants. The percentage of malnutrition increases in the age group (6 - 12 months) because the child gets detached

from the breast feeding and is subjected to faulty weaning practices. Also, poor sanitation and unhygiene of children was observed among children resulting in infections among children making them malnourished. The percentage of malnourished children increases with increase in age as the child becomes more and more independent, roams about and eats on its own coupled with poor sanitation and hygienic practices and unclean surroundings. Ignorance and illiteracy of mothers and neglect of these children by mothers due to the birth of another child worsens the condition of the children. A child may have low weight for age because he is thin (wasted) or he is stunted or is combination of both.

2) Weight for Height -Weight for Height can be used as an indicator of stunting in the children. This has been used as an indicator to assess the nutritional status of children in cases where the exact age of the sample under study is not known. But, if this indicator is used independent of age then it may prove misleading in cases of small statured community.

Thus a child may have normal weight for a particular height but, may have less weight for that particular age then the child may be classified as normal according to the weight for height indicator as the weight and height balance each other. Thus in this sample it can be seen that the percentage of normal children is more for all age groups using weight for height as an indicator than the percentage of children found normal using weight for age as an indicator for the same age groups.

But, in the same table showing weight for height as an indicator the percentage of normal children decrease with increase in age. It has to be kept in mind that a child who is stunted may have normal weight for a child of that height. Such children may be quite healthy although short. Hence, it is important to distinguish between thin and stunted children. Thin children who have 'acute' or recent malnutrition are at risk of becoming seriously ill and hence need special care. The best way to identify thin children is to measure their weights and heights where weights compared to those of a child of similar height.

3) Height for age - The height of a child expressed as a percentage of the reference height for his age indicates whether or not a child is stunted. Stunting results from malnutrition extended over a long period. However, it is impossible to tell from his height whether or nor he is still malnourished. He may now be growing well but, has not caught up with his reference height.

Stunting appears to be more for children in the age group (1 - 3) years. The main causes for malnutrition among tribal children appear to be poor nutritional status of mothers thus giving birth to low weight babies initially. Faulty weaning practices along with poor sanitation and hygiene further worsens the conditions of the children giving rise to infections. Lack of awareness and illiteracy of women, multiple births in the family coupled with all the above given factors are the high risk factors related to malnutrition in Dharni & Chikhaldara.

Due to time constraints, it was possible to take the Anthropometric measurements of only 113 children. Due to small sample size the data on children of (0-6) months and 6-12) months was pooled together.

This data but, definitely reveals the trends observed in the nutritional status of the children. An indepth study of the nutritional status of children by taking a large sample size will be of great value in understanding the problems associated with malnutrition in this area.

B) COMMUNICATION AND TRANSPORTATION FACILITIES -

One of the important criteria of judging the development of a village, town or a tahsil for that matter is the prevalence or availability of communication, transportation facilities in a given geographical area. Greater the speed of development, greater the frequency of communication and transportation services and facilities. Dharni and Chikhaldara are basically tribal tahsils, situated in mountainous and thick forest terrain. Secondly, there is no industrial development in this area hence less transportation and communicational facilities. Chikhaldara being hill station is the only attraction to tourists in summer season mostly. The settlement patterns of tribal villages are such that many of them are in interior and remote places which do not have proper approach roads neither higher frequency of S.T. bus services and even private vehicles.

Lack of transportation and communication facilities have certainly been one of the most important cause for child death tragedy. Since there is no proper communication system and transportation facility it is very difficult for the tribals to reach R.H.'s, P.H.C.'s and sub-centres. During rainy season it is impossible for the tribals to take their children for treatment as there is no means of transportation.

Heerabambai is a village, 50 kms away from Dharni and is situated in remote area. If a tribal has to take a patient to the nearest P.H.C. which is 13 kms away from Heerabambai during rainy season he has to cross a river nearly five times with the patient to reach the Primary Health Centre. Very often serious cases are referred to Rural Hospital at Dharni which becomes a complex problem for the patient's family to transport him there.

It is very hard to reach some of the interior villages given the transportation and communication situation both in Chikhaldara and Dharni. To make this point very clear three cases studies of Semadoha, P.H.C., Boratyakheda and Heerabambai villages are presented here with.

CASE STUDY 1
SEMADOH PRIMARY HEALTH CENTRE

Semadoha village is situated right in the heart of Melghat, within the vicinity of the Tiger Project in thick forests along the main road which takes buses to Dharni and Paratwada (see Map 4) Semadoha P.H.C. covers nearly 18 villages which are distributed within a geographical distance range of 0 - 59 kms. Given below is a table which throws light on the villages, their distance from P.H.C. and the distance the health staff have to cover by walking to the concerned village from the bus stop.

TABLE 4.7

PRIMARY HEALTH CENTRE : SEMADOHA

S.No.	Village	Distance from PHC	Distance to be covered by walk	Remarks
1.	Semadoha	0 kms		-
2.	Makhala	-	12 kms	12 kms walk from Semadoha.
3.	Bhavai	9 kms	2 kms	12 kms walk
4.	Kohakas	15 kms	2 kms	2 kms walk
5.	Pili	7 kms	1 km	one has to cross a river.
6.	Chikhali	25 kms	3 kms	3 kms walk
7.	Kesharpur	27 kms	5 kms	5 kms walk
8.	Bhiroa	7 kms		
9.	Keli	33 kms	11 kms	11 kms walk
10.	Tarubandha	37 kms	12 kms	12 kms walk
11.	Patkahu	27 kms	5 kms	5 kms walk
12.	Raksha	29 kms	7 kms	7 kms walk
13.	Kund	49 kms	24 kms	24 kms walk
14.	Koha	54 kms	29 kms	29 kms walk & cross a river.
15.	Belkund	59 kms	34 kms	34 kms walk
16.	Raipur	16 kms	0 kms	-
17.	Boratyakheda	23 kms	7 kms	7 kms walk from Raipur.
18.	Retlyakheda	40 kms	14 kms	14 kms walk & five times river & brookes to be crossed.

Note : Villages which cannot be reached during rainy season.

(1) Retyakheda (2) Boratyakheda (3) Pili
(4) Kund

Source: Official Records Furnished By Medical Officer Semadoh P.H.C.

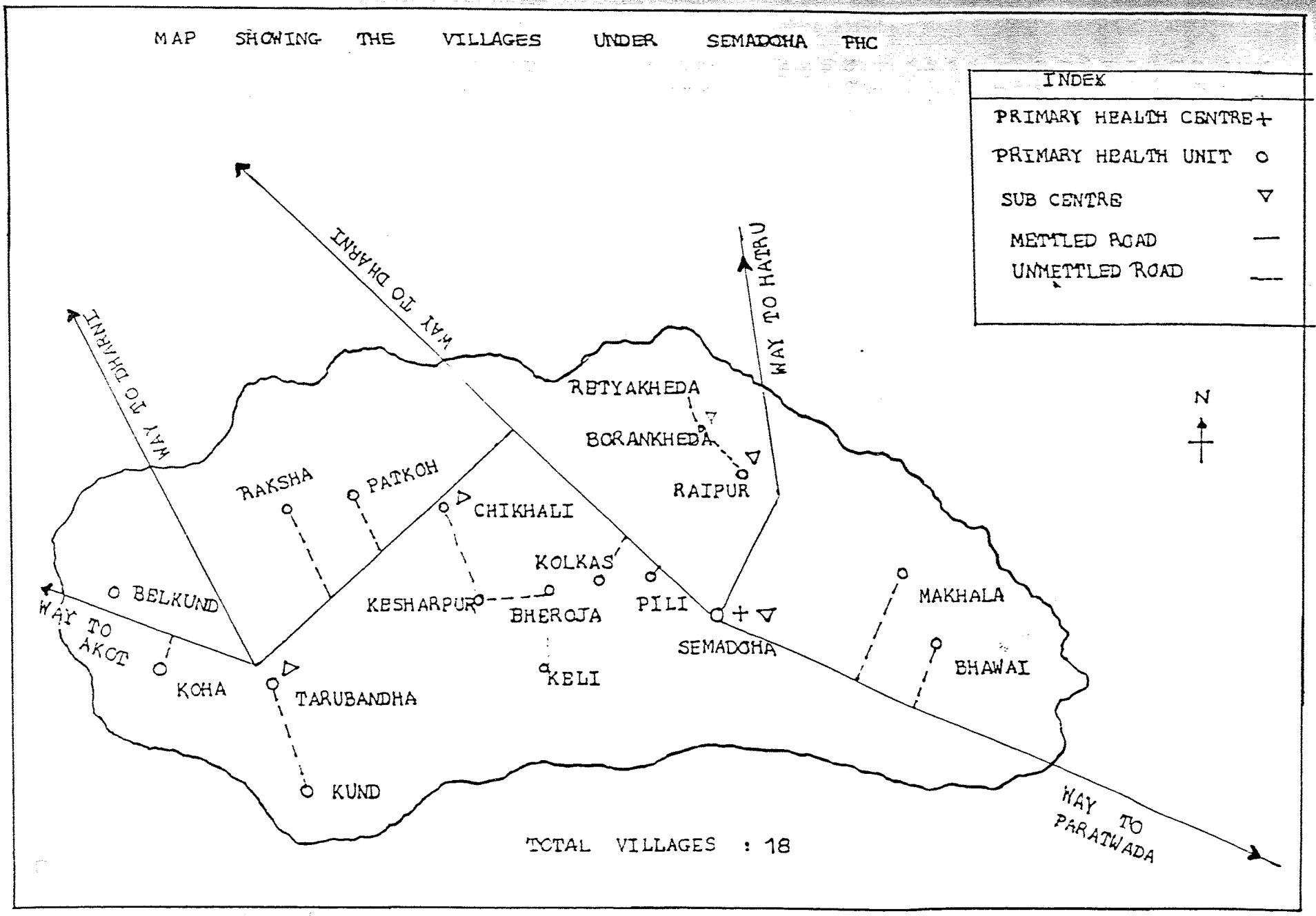

MAP SHOWING THE VILLAGES UNDER SEMADOHA PHC
INDEX
PRIMARY HEALTH CENTRE +
PRIMARY HEALTH UNIT o
SUB CENTRE ▽
METTLED ROAD —
UNMETTLED ROAD ---
N
WAY TO DHARNI
WAY TO DHARNI
WAY TO HATRU
RETYAKHEDA
BORANKHEDA
RAIPUR
RAKSHA
PATKOH
CHIKHALI
KOLKAS
PILI
MAKHALA
BELKUND
KESHARPUR
BHEROJA
SEMADOHA
BHAWAI
WAY TO AKOT
KOHA
TARUBANDHA
KELI
KUND
WAY TO PARATWADA
TOTAL VILLAGES : 18

Table 4 clearly shows the distance the P.H.C. medical staff have to cover to reach the villages with medical supplies and other aids with vehicle and by walk. Table 4 shows that some villages such as Kund, Koha, Belkund, Retya Kheda and Keli one has to walk from 11 - 34 kms. (see table for details) which is certainly a difficult task for the health staff. At times they have to cross rivers to get to the villages. In rainy season situation becomes worse. Secondly every P.H.C. has only one jeep which is out of order most of the times in a year. Thirdly, the budget provided for diesel and maintenance of the jeep is not sufficient. Fourthly it was observed that P.H.C. jeeps are utilized more for transportation of family planning cases than health educational tours and visits. Thus, it would be nice if adequate amount of budget is sanctioned for fuel and maintenance of P.H.C. jeeps. It would be advisable to supply two or three jeeps per P.H.C. in remote areas in order to reach the tribals more frequently.

Health Workers, especially A.N.M.'s and female Health assistants expressed that it is very difficult for them to walk long distances with vaccine kits, alone. Even otherwise also walking alone in thick forests is not good for a woman they said. There is fear of both wild animals and mischievous men. Most A.N.M's. prefer to go with their husbands to remote villages as a safeguard measure for self security. This is however impossible always.

It was also observed that the health Workers and even other medical staff do not like to be in interior areas such as tribal villages of Dharni and Chikhaldara. They are forcefully posted there and hence this act of forcible posting has an impact on their services. They have to live a disturbed type of a family life with husband working in one place and the women (A.N.Ms.) in another place, while children are either with one of them or with relatives.

CASE STUDY NO. 2

BORATYA KHEDA VILLAGE

Boratya kheda is a small village situated towards the north of Semadoha, about 23 kms in distance. (see Map 4). To reach this village one has to take a Bus going to Haturu, get down at Raipur which 16 kms away from Semadoha and then walk 7 kms through the woods. Bus to Raipur goes only once a day and comes back only the next day. It is no doubt a difficult village to reach. This case study highlights the developmental and health facilities that are available in Boratyakheda.

1) Population of the village - As per 1991 census the total population of Boratya kheda is 472 with 468 tribals which amounts to 99% of tribal population in the village.

2) Health facilities - Semadoha P.H.C. is 23 kms away from Boratyakheda. Boratyakheda itself is a sub-centre. At Raipur there is a primary health unit. If one has to buy medicines from drug stores he has to go to Paratwada, 74 kms away Chikhaldara 73 kms, Dharni 74 kms and Semadoha 24 kms away from Boratyakheda. If help has to be sought from private medical practitioners tribals have to go to Paratwada and Dharni which are again approximately 74 kms away from Boratya kheda.

There is an ANM and an Anganwadi worker in Boratyakheda. They have to get health care and nutritional supplies from Semadoha and Chikhaldara respectively. With regards to drinking water facility there is a well and a hand pump in the village. Well water is not used for drinking. Weekly market is situated in a place called Harisal which is 18 - 20 kms away from Boratyakheda, provided short cut road is used. Weekly market serves as a place for getting vegetables and ration. Some of the tribals also go to Semadoha to fetch vegetables. There is a ration shop in the village where wheat, rice, sugar is available occassionally.

X'ray and surgery facilities etc. are available at Dharni which is 74 kms away from Boratyakheda. X'ray machine in Dharni also does not give quality results. Secondly most of the times cases which require advance technological medical diagnosis are referred to Amravati which is beyond the imagination of the tribals hence they prefer to go back to their villages and face the consequences than going to Amravati. Lack of adequate transportation services and communication system has certainly been responsible for giving rise to health hazards in Melghat region.

3) Educational facilities - About 7 kms away from Boratyakheda in a place called Raipur there is an Ashram School. There is no high school in Boratyakheda. Children have to walk 7 kms to Raipur where they can get education upto VIIth standard. Schools above VIIth standard are at Semadoha which is 23 kms away from Boratyakheda. It was observed that not a single student from Boratyakheda goes as a day scholar to Raipur and Semadoha to attend school. However, a few children are there in Raipur Ashram school.

There is a primary school in Boratyakheda, the enrollment of student in this school is as given below :

TABLE SHOWING ENROLLMENT STATUS IN BORTYAKHEDA PRIMARY SCHOOL-

S.No.	Class	Males	Females	Total
1.	Standard I	08	08	16
2.	Standard II	06	08	14
3.	Standard III	13	12	25
4.	Standard IV	09	01	10
Total		36	29	65

There are only two teachers who handle all four classes and all the subjects. To check on the school attendance the teachers were asked to give us figures regarding attendance of tribal children as on 7th December, 1994. They furnished us the following information -

TABLE 4.8

TABLE SHOWING ATTENDANCE OF PRIMARY SCHOOL CHILDREN AS ON 7.12.94

S.No.	Class	Male attendance	Female attendance	Total
1.	Standard I	03	07	10
2.	Standard II	04	06	10
3.	Standard III	05	09	14
4.	Standard IV	08	00	08

Both the teachers received training under the Anandday Shikshan scheme but have not started implementing, what has been learnt in the training especially to attract Korku children to school. Well that is the situation of educational facilities in Boratyakheda village.

4) Transportation facilities : There is no direct Bus to Boratyakheda one has to get down at Raipur and then walk 7 kms to reach the village. Except for P.H.C. and I.C.D.S. Jeeps and very rarely private vehicles go to Boratyakheda as the road is very bad. In rainy season it is impossible even for jeeps to reach Boratyakheda.

5) Telephone, Telegraph and post office services : Telephone, telegraph services are available only at Dharni and Paratwada i.e. 74 kms away. There is a post box at Raipur seven kms from Boratyakheda.

6) Electricity : There is no electricity in Boratyakheda. Hence the question of floor mill, electric hand pumps, street lights, etc. does not arise at all. The tribals of this village have grinding stones which serves as their floor mill.

7) Diet of the tribals of Boratyakheda : Their staple diet is Jowar, Rice, Bajra and wheat. Toor dal, grams, Masoor dal, gadmal are main pulses consumed by them. Green vegetables such as gram leaves, Ambadi leaves, Amarathus leaves are the only green vegetables seasonally consumed. They also collect corms, mushrooms and few wild fruits for consumption. Chatni (chilly paste) serves as side dish in absence of vegetables and non-vegetarian food. Chilly is quite frequently consumed. Over and above the dietary intake of villagers of Boratyakheda is very poor. They occassionally fish and hunt.

8) Ways of Earning : Both men and women work as cultivators, agriculture labourers, forest daily wage labourers, and labourers of Public Works Department. These employment schemes are temporary and seasonal. On our way back to Semadoha we met some forest labourers cooking their meal. They were making rotis (bread of Jowar) to eat it with chatni. Sitting around borne fire awaiting for their meal to get ready. We inquired whether or not they had enough clothings to cover themselves and the answer was. This borne fire is only our clothing, bed sheet and blanket. These tribals were from far off villages, who would camp in the forest at night and work in the morning. After the work of two-three weeks was over they would return to their villages.

9) Gram sevak : The Gram Sevak or Village Level Worker was a resident of Raipur 7 kms away from Boratyakheda.

10) Visits of Development Workers : It was observed that the health Workers, PHC staff, gram sevak etc. would occassionally visit Boratyakheda. The register of Anganwadi worker and interviews with local people of Boratyakheda revealed this information. Their irregular visits could be because of lack of transportation facilities, personal and official problems faced by the health staff. Lack of incentives to them could also be yet another reason.

CASE STUDY NO. 3

HEERABAMABI VILLAGE

Herabambai is a small village located towards the west of Dharni. It consists of 154 houses inhabited by the Korkus, Rathiyas and Lohars. Its total population as per 1991 census is 803 with 772 tribals which amounts to 96% to the total population. This was one of the villages in which maximum number of child deaths were reported. It is a very difficult village to reach one has to cross rivers and small brookes quite a several times before reaching the village. During rainy season it gets cut off from the main stream of population living in towns and tahsils.

i) HEALTH FACILITIES : Nearest Primary Health Centre is Susarda which is 12 kms away from Heerabambai. The Rural Hospital which is in Dharni THAT is 50 kms away. If one has to buy medicines he or she has to go to Dharni Drug store which is again 50 kms. away.

There is an AMO. ANM, MPHW, CHV and an Anganwadi Worker at Heerabambai. The Assistant Medical Officer has been posted after the problem of child death was highlighted in newspapers. As far as drinking water facilities are concerned there are 5 hand pumps in the village, out of which one is out of order. 3 were installed in October, 1994. There is one well with walls whose water is not used for drinking purposes.

It was however observed that the tribals of Heerabambai do not drink water in which bleaching powder is put. They say it smells and does not taste good. Some people prefer to drink river water because of this reason. It is therefore necessary that people of Heerabambai be educated on the significance of safe and clean water used for drinking and cooking food.

Besides the P.H.C. medical facilities there are two traditional midwives (suines) trained and untrained. There is one Bhoomkababa (priest) namely Shikari Zharekar and 4 Parihars (Shamans) who take care of magico religious therapies of patients who consult them. People in Heerabambai have faith in these traditional medical practitioners and consult them more often than the paramedical staff. With regards to private medical practitioners one has to walk down or go in a bullock-card for nearly 12 kms to Susarda village.

ii) EDUCATIONAL FACILITIES - There is a Zilla Parishad primary school from I - IV standards. It is managed by two teachers only. Recently the Ananddai Shikshan scheme has been introduced in this village to attract children to education in an informal way. This scheme however needs to be evaluated from the view point of its impact on the tribal children and their parents and their participation in this scheme. It is however, very difficult for two teachers to manage the educational affairs of I - IV class, maining school records, correcting papers, conducting examinations, maintaining the school's cleanliness, etc. and at the same time devote themselves for Ananddai Shikshan programme. It is suggested that more school teachers be recruited to shoulder the responsibilities of formal and non-formal educational schemes. If one has to take admission in high school he or she has to walk 12 kms to Susarda everyday. There is an Ashram school also in Susarda. There is a high school at Ranegaon also which is 6 kms away from Heerabambai. The M.P.H.W. told us that 4 boys attend this high school. College of course is at Dharni which is 50 kms away from Heerabambai.

iii) TRANSPORTATION FACILITIES - State Transport buses were started in Heerabambai since October 1993. Earlier there were no buses going to Heerabambai it was only when the problem of child death was highlighted in the news paper the buses were started. With regards to frequency of bus service it was noted that only once a day there is a bus to Heerabambai which comes in the evening at 7 p.m. halts at night and leaves in the morning. The approach road to Heerabambai was in bad shape earlier. It has been recently repaired, but still it is not up to the mark. Other the S.T. bus service there is no other private transportation facility to go to Heerabambai.

iv) NUTRITIONAL FACILITIES - Children within the age range of 0 - 6 are taken care by the Anganwadi. The total enrolment is [illegible] with 53 children of the ages 0 - 1, 74 of the ages 1 - 3, 50 of 3 - 5 and [illegible] of ages 5 - 6. The Anganwadi children are given 88 gms Khichadi [illegible] Therapeutic food for malnourished children. These [illegible] since [illegible]. It was noticed that the food stuff received from Anganwadi [illegible] by their brothers and sisters who do not attend Anganwadi. As per the [illegible] Anganwadi worker out of 204 children 6 of

them fell under the III degree malnutrition category while 1 under IVth grade. During rainy season nutritional supplements are stocked in advance as these roads get cut off. There is one ration shop in Heerabambai.

v) **CHILD DEATHS IN HEERABAMBAI** -As per the records of the Anganwadi worker 14 child deaths took place in July and August 1993, of 10 Korku children, 3 Rathi children, and a Lohar child. During the period April 1993 to March 1994 18 deaths of children within the range 0 - 5 took place. From April 1994 to November 1994, 8 deaths were recorded. Well, this is an indication of the health care and nutritional supplement situation which the tribal children have been deprived of from their families because of illiteracy, poverty, stricken background, ignorance and superstitious beliefs and practices. It also throws light on the efforts which needs to be put in by health care providers and nutrition supplement agencies of the government of Maharashtra in villages like Heerabambai.

vi) **PREGNANT WOMEN** - November - December 1994, A.N.C. records of the Anganwadi worker showed that there were 15 pregnant women in the village. Knowing that their children die of natural calamity they tend to go for more children and do not take risk of having only one or two children. The Health worker reports that this year he was able to prepare only 3 - 4 cases for family planning operation. This is an indication of the negative response, not only to family planning programme, but also to contraceptives such as Copper T, Nirodh, oral pills. The 3 - 4 cases agreed for family planning operation after having more than 4-5 children. Secondly, there is no recreational facilities for men and women and this gives more scope for procreation which is one of the recreation for the tribals. Especially because they set drunk every day and therefore high pregnancy rate.

vii) **PROBLEMS DURING RAINY SEASON** - Interviews with both paramedical staff and the residents of Heerabambai revealed following facts about the situation of Heerabambai during rainy season -

a) Heerabambai gets cut off from the main road as water over flows over roads and small bridges.

b) people cannot go to Susarda P.H.C. nor Dharni Rural Hospital

c) Drinking water gets polluted

d) serious cases of illness cannot be taken to P.H.Cs. and R.H.

e) Health and I.C.D.S. staff are unable to visit the village during this season.

f) Medical supplies and nutritional supplements have to be stocked in advance for 3 - 4 months. In case supplies are not available this leads to health hazards in Heerabambai.

g) Bus transportation service also stops during rainy season.

viii) **Communication Facilities** - There are no telephone facilities in Heerabambai nearest place for these facilities in Dharni which is 50 kms away. Post office is at Susarda which is 12 kms away from Heerabambai. Telegraphic services are at Dharni. Over and above situation of communication facilities in Heerabambai and allied villages is very poor and needs to be given serious thought to.

ix) ECONOMIC ORGANIZATION - The inhabitants of Heerabambai are small scale cultivators, daily wage and agricultural labourers, forest workers, milk and fire wood sellers, food gatherers and hunters. Poverty is the characteristic feature of their economic organization. This in turn affects their nutritional intake, health care,

educational and other expenditure patterns. There are no industries or cottage industries which can give them employment.

C) POVERTY OF THE KORKUS - One of the major factors which has been responsible for the child health tragedy is the utter poverty of the tribals of Melghat region. They earn their livelihood by working as agricultural, forest, P.W.D. daily wage labourers. These jobs are seasonal. Some of them are small scale cultivators. Except for Soya beans which is a cash crop and which is sold for 800 - 900 per quintal, rice, Jowar and corn is utilized for consumption.

When there is money there is room for drinking liquor and eating non-vegetarian food. There is also room for paying bride price and getting another wife and buying silver ornaments for women. In times of crisis ornaments are either sold or mortgaged for a low price.

Borrowing money on interest is yet another common practice among the Korkus. Money is borrowed from Sahukars on 50% interest basis per annum. Money is borrowed on occassions of marriage, death rituals, festivals etc. If Rs. 1,000 are borrowed the tribal has to pay Rs. 1,500 at the end of the year.

In case he is not able to pay the amount the money lender takes away his land for a year or two produces crops earns the money and gives back the land. During such time the borrower suffers like anything. At times 10 acres of land is given for two years on rental basis to money lenders for only Rs. 600/- which means the real owner (tribal) get only Rs. 25/- per month for 10 acres of land from the money lender. This is certainly a height of exploitation. Even then the tribals go for it.

The scheme of nutrition supplement implemented by the Anganwadi i.e. distribution of Khichadi has been a boon to the tribals. In case a child is absent on a particular day parents fight with the Anganwadi Worker to get raw rice. Secondly, Government had distributed 1 bag of rice, 25 kg of gram and 25 kg of toor dal to families in which child death took place. Now, this did create an impression that whosoever looses his child or has a malnourished (sukha) child gets the above quantity of grains.

Both health Workers and I.C.D.S. Anganwadi Workers reported that the Korkus deliberately neglected the health of their children and bring them to IIIrd and IVth grade so as to get the benefit of the grains. This really shows that food grains were more important to them than the health of their children. Poverty is the force that drives them to behave this way.

Benefits given to the tribals through D.R.D.A. and Nucleus budget are not utilized properly. Buffaloes, goats, tinsheets etc are sold. What is necessary, is to offer them daily wage labour opportunities throughout the year. Small scale industries, cottage industries and companies should be established so that tribals get some work in order to earn money.

D) ILLITERACY & HEALTH IGNORANCE - Someone has rightly pointed out that "higher the educational status greater the health consciousness". Education no doubt plays an important role in moulding health and nutritional habits and consciousness of a person. It may not be true with every individual but by and large educated people are found to be health conscious. Women as mothers, wives and sisters have been directly or indirectly responsible for the health of a family. Their educational status certainly is directly linked with their responsibility of health care providers at family level. Therefore social activists always say *"Educate a woman educate a nation"*.

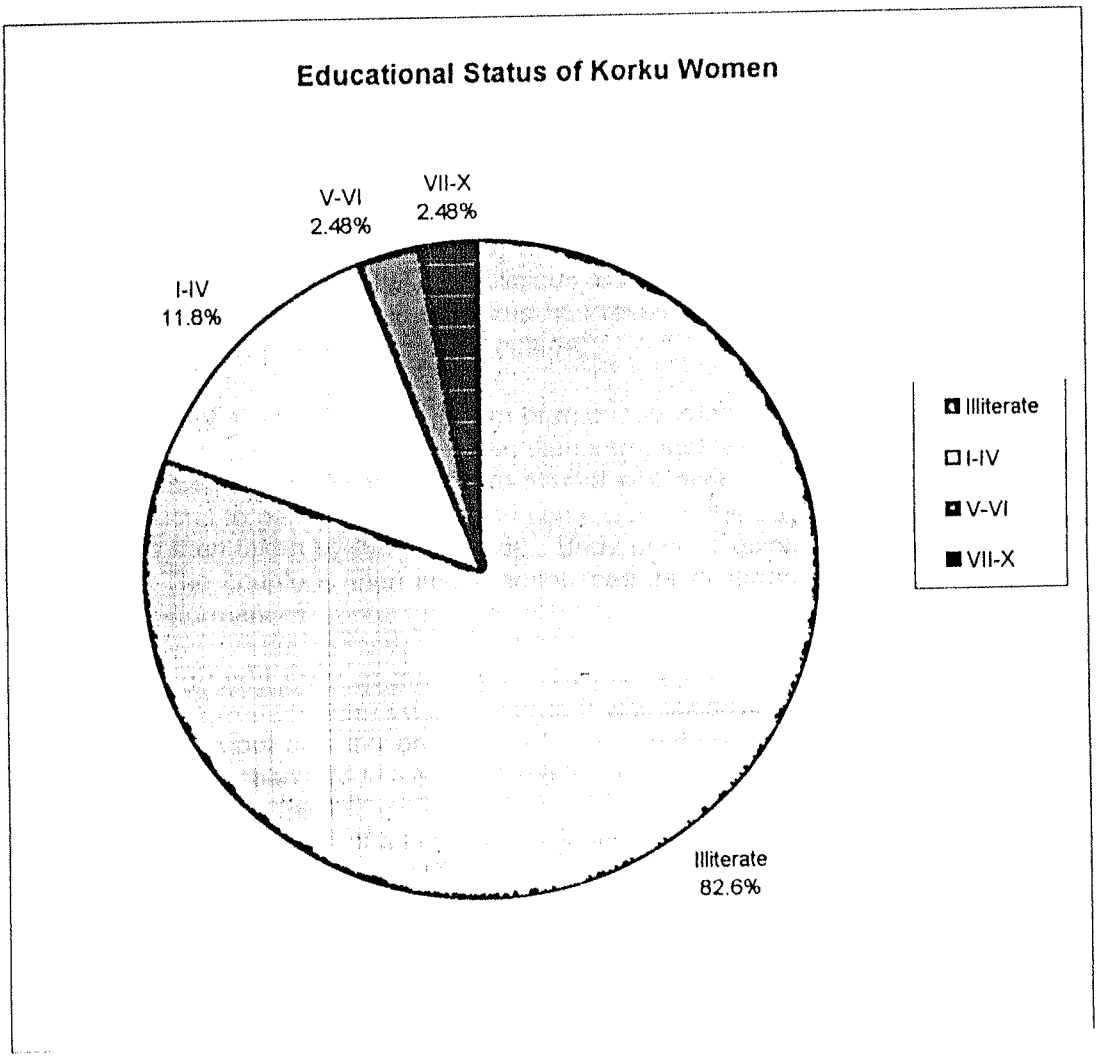
According to 1981 census of India, women made up 57% of the illiterate population and females made up 70% of the children of school age who did not participate in formal education system. Further the dropout rate for girls is over 60% at the primary level (Varma 1991 : 57) Illiteracy is particularly very high among tribal women. The table 4.9 given below depicts the educational status of 160 Korku women interviewed.

Table No. 4.9

Educational Status of Korku Women

Illiterate	I-IV	V-VI	VII-X
113	19	4	4

Pie Diagram 4.10



From the above table and pie diagram it is clearly evident that almost 82.6% of the Korku women within the age range of 15 - 45 years were illiterates, while 11.8% studied upto 4th class, 2.48% from Vth - VIIth class and 2.48% from VIIth to Xth class and very unfortunately not a single soul out of 160 women interviewed was found to have studied above Xth standard. This is an indication of the level of illiteracy among Korku women. It is very necessary that non-formal as well as formal educational strategies be planned and implemented for the Korku girls and women so as to upgrade their educational status. Non-formal educational programmes must be clubbed with earning (economic) activities so that the Korku women earn as well as learn.

If the non-formal education programme is for 8 hours 2 - 4 hours must be utilized for educating the women while rest of the time they must be made to work on daily wage basis. This daily wage would serve as an incentive for the tribal women. As far as possible the medium of instruction should be in Korku dialect. It would be better if educated and dedicated Korku women are given the responsibility to co-ordinate non-formal education classes under the supervision of supervisors. The co-ordinators and supervisors must be given honorariums to run the show. Secondly, present younger generation of girls must be paid attention so that they are educated. If this is not done illiteracy of both Korku men and women will be an hindrance to the health of themselves and their children too.

Our observations regarding the negligence of child health and nutritional care, is directly linked with educational status and economic status of the Korku families. If they are upgraded economically and educationally the problem of malnutrition, morbidity and mortality can be brought under control to some extent. Illiteracy of both men and women has become a barrier in health promotion, prevention and service programmes.

E) **FORMS OF MARRIAGE** - Marriage among Korkus as rightly stated in the ethnographic notes on scheduled tribes of Maharashtra (census of India 1961 , Vol. X, pp. 166) is more of a social affair than a religious or ritualistic one. Our data and observations on the marriage practices of the Korkus has revealed following facts about the various forms of marriages prevalent in Korku culture.

i) Marriage by elopement - This form of marriage is one in which a boy and a girl who like each other elope away from their settlement(s) and live in the jungle or on their farms for two or three days. They have pre-marital sex over there, get to know each other, make decisions to get married and then come back to the boy's house. The initiative for marriage is then taken by the boy's side. Bride price is given to the girl's father in cash and kind. The couple is then social announced as husband and wife followed by few ritualistic performances.

ii) The Gharghushi form of marriage - This form of marriage is also prevalent among the Kolams. A woman (married or unmarried) who likes a man (married mostly) walks in his house with a pot of water on her head. He is not supposed to refuse her. However price to her ex-husband and give liquor and feast to the Panchayat.

iii) Marriage by service - If a boy who does not have any cash or kind (grains) to pay as bride price he works in his would be father-in-law's house for a certain period of time and then he gets the girl. This form of marriage is known as "Lamsana".

iv) Polygyny - The practice of marrying two or more wives is very common among the Korkus. The second and third wives are however mostly married women. Each time a person marries another woman he pay bride price to her husband and pays some fees to the traditional panchayat.

v) **Marriage by trial** - is a form of marriage wherin a boy's bravery is judged before he is married to the girl. During Holi festival Korkus dance the bride who is encircled by young men has to break the chain and fetch up mate from outside the circle. This form of marriage is prevalent among the Bhils too.

vi) **Widow Re-marriage** - widow re-marriage take place without any ceremony. They are usually married to their husband's younger brothers.

vii) **Monogamy** : Marriage of one man marrying one woman is the most common form of marriage among the Korkus.

The point which needs to be understood here is that marriage practices among the Korkus are more social affair than religious which does not have any binding on the males to stick on to one woman. Korku society also gives social sanction to youngsters to choose their own partners, elope, have pre-marital sex, marry two or more women depending on one's economic status. These practices then certainly give rise to problems such as population explosion, early marriages, large family size, neglegence of child care and so on.

A number of women in our study were detected to have married twice and having children from two husbands. To add to this Korkus appear to be attatched to their women folk. A Korku never leaves his wife alone. He takes her wherever he goes, i.e. to the field, for gather minor forest produce, to the weekly bazar leaving infants & children at the mercy of nature. This form of marital behaviour is certainly an hindrance to the nutritional and health needs of little ones and children. This is one of the factors which has been responsible for the child death tragedy in Melghat region.

f) SUPERSTITIOUS BELIEFS AND PRACTICES -

Beliefs and faith in the parihars (shamans) and Bhumkas (priests) is very strong even in the 21st century and after 46 years of independent India. Korkus first prefer to consult parihars and Bhumkas in case of illness even if it has to cost the life of their children. The parihars and Bhumkas who are diviners and interpreters of supernatural phenomena take charge of rituals of diagnosis and healing too. The belief that "what comes (caused) spiritually must be healed (cured) spiritually and therefore a parihar or Bhumka is consulted." Medical personnel or Modern medicine does not fit into this frame of beliefs system. The parihars and Bhumkas ritually diagnose and interpret the cause of illness and offer solutions too.

Seriousness in sickness of children, adults and elderly folks is commonly attributed to wrath of Gods, Goddesses, ancestral spirits, evil spirits, witchcraft; sorcery; evil eye, failure to perform a divine duty or rite, possession of evil spirits; intrusion of objects in the body of the patient, visitation of Gods and Goddesses and so on. In such conditions also patients are taken to the parihars and Bhumkas because of the strong faith in them.

It is very hard to convince the present elderly generation of the ill-effects and draw backs of superstitious beliefs in parihars and Bhuma cult as it assumes meaning to them if viewed from anemic perspective. However, if right motivations incentives, educational approach, communication strategies are used the younger generation may gradually change. To summarize superstitious beliefs and practices have definitely been responsible for the death tragedy of tribal children in Melghat.

G) PROBLEMS FACED BY HEALTH CARE PROVIDERS -

Grass root workers who actually work for and with the target community are in true sense pillars of developmental work. Whatever has been planned at the centre or state level is finally bestowed on the grass root workers to be implemented and followed up. In the field of health, the health workers both ANM and MPHW are directly in touch with the people more than the Medical and Assistant Medical Officers.

While shouldering the responsibility as health Workers and Aganwadi Workers, these grass root workers face a number of personal, familial and official problems including the tribals.
Higher the degree of problems lesser the quality of health service. Meaning workload combined with problems does effect the quality of health care, nutritional and health educational services.

This section of the chapter highlights the personal, familial and official problems and problems that arise from community faced by the health and I.C.D.S. Workers. How these problems are linked with the quality of health services to be rendered to people.

Table 4.11

TABLE HIGHLITGHTING THE PROBLEMS OF MALE AND FEMALE HEALTH WORKERS -

SR. NO.	NATURE OF THE PROBLEM	A.N.M.'s	M.P.H.W.'s
1.	**Personal & familial problems.**	1. staying away from children or husband in remote villages assigned & therefore lack of male (hus--band's) security.	1. staying away from native place and away from family
		2. Walking long distances to reach village where there is no transportation services becomes tire--some and exacting. At times husband or some relative has to accompany the ANM.	2. Walking long distances to reach 3 - 7 assigned villages of work where there is no transportation service is very tiresome and exacting.
		3. Lack of proper civic amenities at the the village level.	3. Lack of proper civic amenities at the village.
		4. Negative impact on education of their children.	4. Negative impaction the education of their children.
		5. Lack of supply of good vegetables, cereals, pulses, kerosene and other household articles & facilities in the village. This gets worse in rainy season, as their villages are cut off from main roads as there are no trans--portation services.	5. Lack of supply of good vegetables, cereals, pulses, kerosene and other household articles & facilities in the village. This gets worse in rainy season, as their villages get cut off from main roads as there is transportation services.

2. Official problems.	1. Delay in forwarding TA & DA bills.	1. Delay in forwarding TA & DA bills.
	2. Tension or stress of completing targets and family targets in particular.	2. Tension or stress of completing targets and family planning targets in particular
	3. Devoting lot of time for writing & maintaining records.	3. Devoting lot of time for writing & maintain--ing records.
	4. Non-availability of PHC Jeep for transportation of tubectomy, vasectomy & laproscopy cases.	4. Non-availability of PHC Jeep for trans--portation of tub- ectomy, vasectomy & laprosecopy cases.
	5. Memos from higher authorities for not completing targets.	5. Memos from higher authorities for not completing targets.
	6. Non availability Medical supplies at times.	6. Non-availability of medical supplies at times.
3. Problems from the community	1. Negative response for TT & Copper T	1. Negative response for Nirodh scheme.
	2. Extra payment to beneficiaries of tubectomy, vasectomy and laproscopy rang--ing from 250-350 Rs. per case.	2. Extra payment to bene--ficiaries of tubectomy vasectomy or leprascopy ranging from 250 - 350 Rs. per case.
	3. Demand for blankets & food grains from tribals & quarrels over this issue.	3. Demand for blankets & food grains from tribals & quarrels over this issue.
	4. Less co-operation in ANC & immuni--zation programme.	4. Less co-operation in ANC & immunization programme.
	5. The barrier of tribal dialect.	5. The barrier of tribal dialect.
	6. The beliefs of tri- -bals in Parihar cult.	6. The beliefs of tribals in Parihar cult.

Table 4.12 Highlighting the problems of female Anganwadi Workers

Sr.No.	Nature of problems	
I)	Problems faced from the community	1. They are not easily accepted by the tribals hence becomes hard to motivate them.
		2. The tribals do not allow the Anganwadi Workers to take the weights of the children proba--bly due to the fear of evil eye.
		3. Negative response for the immunization programmes.
		4. Beneficiaries demand extra payment for undergoing tubectomy or vasectomy operations.
		5. Problems faced in distribution of Khichadi to the malnourished children who want to take it home and share it with other family members.
		6. Negative response to Family Planning and contraceptive measures.
		7. Neglect of the children due to which the children are dirty, unclean.
		8. Pregnant women do not easily opt for checking nor do they take T.T.injections.
		9. The people are not ready to take their malnourished children to the doctors for treatment.
		10. The people have to be spoonfed constantly.
		11. Their behaviour is guided by superstitious beliefs and practices.

	12. They are careless and ignore whatever they are told about sanitation and hygiene.
	13. People do not send the children for nonformal education.
	14. Barrier of the tribal dialect.
II) Personal problems	1. Have to walk almost 15 - 20 kmts everyday through the forest.
	2. Problem faced in crossing river due to the floods in the rainy season.
	3. No proper accommodation facil--ties available.
III) Official problems	1. Delay in forwarding TA/DA bills.
	2. Delay in receiving their salary

CHAPTER FIVE

PEOPLE'S PERCEPTION ABOUT THE DEATH TRAGEDY : AN EMIC VIEW

As per the interpretations of the medical personnel and dieticians the cause of deaths of children were malnutrition clubbed with diseases such as diarrhoea, pneumonia, hypothermia and other respiratory infections etc. from an etic perspective or through an outsider's eye. As per one of the aim of this study it was necessary to assess the views of the tribals about the death tragedy, hence it was necessary to get an emic (insider's) view. In order to do so the Korkus, a few Gonds and Parihars (medical practitioners) were interviewed so as to get an emic view.

5.1 PERCEPTIONS OF THE KORKUS -

When the Korkus were interviewed to know their reactions towards the death tragedy a number of responses were given by them. These could be classified as followed :

i) **Wrath of Mata Goddess -** Most Korkus explained that the death of their children was due to wrath of goddess mata whose religious and healing rites were not performed properly, people failed to please her, hence her wrath took away so many children from Melghat region. Mata usually visits a persons (patients) during illness such as chichkenpox, boils, body sores, measles etc. If a family or person fails to fulfill the demands of Mata she gets angry and causes more harm or kills the person who does not follow the norms of her visiting a person during ill-health of a person.

ii) CHILD DEATHS AS NATURAL CALAMITY - For some Korkus this death tragedy was a natural calamity. They said human body is like tree which bears fruits (children) and just as some fruits fall from the tree so also children die. They further added as far as our trees (woman) are fine, they will keep bearing fruits (children). It is but natural that a few fruits of a tree fall down and perish. To this phrase in their words it could be written this way "*Jab tak hamara ped majboot hai, hame koi gum nahi. 'Har ped ko phal aate hai kuchh acche hote hai aur kuchh kharab*". Hence for some Korkus the death tragedy was a natural event. It was among such type of respondents it was observed that their family sizes were large. This was a precautionary measure that if one or two children die others can be there and therefore one would prefer to have many children.

iii) SICKNESS AS THE CAUSE - Some Korkus expressed that their children died because of sickness such as ultitatti (diarrhoea), Thandi (pneumonia), Sharir sukhana (malnutrition), vomiting of blood etc. Lack of good food and proper medical facility was yet another reason why the Korkus thought this tragedy took place.

iv) MALNUTRITION AS THE CAUSE - Very few Korkus who were educated leaders or in service were able to tell us the exact cause of deaths of the children. They said it was due to "Kuposhan", meaning malnutrition. Scarcity of food, illiteracy, inadequate transportation and communication system, lack of proper medical and nutritional facilities were other causes of deaths as viewed by them.

5.2 PERCEPTIONS OF PARIHARS (SHAMANS)

Parihars are diviners and interpretors of supernatural phenomena. They preside over magico-ritualistic healing rituals which include diagnosis of the origin and cause of an illness, the ritualistic procedures involved therin and the thanks giving rituals and ceremonies. They are middle men between human beings and divine beings and forces. It is generally observed among most shamans that they do not believe in modern

medicine and scientific causes attributed to disease causation. Being such an important key personnel in the Korku culture it was necessary to assess their views regarding the death of tribal children

It was observed that both bhoomkas (priests) and the Parihars (shamans) attributed the cause of child deaths to supernatural interventions i.e. is the wrath of "Mata" (Goddess). The views of parihars would be clear from the following case study which is one of the few case studies of parihars interviewed.

Motilal Bapulal Bhilekar, aged 42, married male, illiterate Korku, a daily wage labourer and a parihar (shaman) by social status, a resident of Chhethur village, in Dharni tahsil, Amravati district narrated his views about the child death tragedy.

He mentioned about the several deaths that took place in Dharni and Chikhaldara of Korku children, during 1993-94. In fact in my own village Chhethur, he said 12 children died last year. On enquiring the cause of these deaths he revealed that among the Korkus it is a taboo to take injections when a person suffers from chickenpox, boils, body sores, measles etc. The causes of these diseases are attributed by the Korkus to visitation of Goddess "Mata". When "Mata" visits a person she should be pleased performing several rituals and offerings. One of the taboos of her visiting a person is that there should not be any menstruating woman in that house, people should not offer non-vegetarian food to the patient, the patient should not given injections. If by mistake this is done, "Mata" gets furious and aggravates the sickness and at times kills people it is in the light of this the death tragedy occurred.

Motilal interpreted this tragic event to wrath of goddess Mata". It so happened that a few people in Dharni gave injections during measles to their children and broke the healing ritual norm of goddess Mata. Mata was so furious with this, that she took lives of many children both in Dharni and Chikhaldara. He stated that our community members must take this as a warning and please Mata whenever she visits a person. This view was held by other shamans too. A number of Korku women who interviewed although could not tell us the exact cause of child deaths revealed that they felt very bad about their tragic event. They think of their dead children. These views were contrary to the views of these Korku men who attributed the cause of child deaths to natural calamity, stating ***"har ped ko phal aata hai kuch phal girte hai (perish) aur kuch phal achhe hote hai (good).***

5.3 PERCEPTIONS OF THE GONDS -

The Gond community is yet another tribal group dwelling in the Melghat region along with the Korkus. Since the Gonds are a neighbouring community to Korkus, their view regarding the death tragedy was assessed. The Gonds of Gond Dahana (hamlet) of Salona village were interviewed. One of the elderly woman said that the death tragedy took place due to wrath of 'Mata'.

She added that the Korkus do not know how to please 'Mata' when she visits a person's body. One has to give whatever the patient (Mata) asks for. At times there is lot of expense involved in pleasing her buying ornaments or clothes if she demands. Besides this one needs to be very careful that a menstruating woman does not stay in the house wherin Mata visits, no injection is given to the person's body who is visited by Mata, we have to wash the feet of the patient and drink that water. Some people bathe the patient and drink that water. This act is symbolic of showing reverence and humility to goddess Mata (patient whose body she visits). One has to maintain certain dietary restrictions too. All this was not done by the Korkus hence she got furious and killed a lot of Korku children. *"Matano bahut Korku bacha utha liya"*, she exclaimed !

Gonds of Salona worship a number of female goddesses including Khokali devi Ma, Ghurkadi devi Ma, Kali Ma, Dharti Ma, Dheri Ma, Pheri Ma are a band of seven female planetary spirits who move in the cosmos. They visit human beings and cause skin diseases. Pheri Ma's are worshipped for seven days. They get into a person's body and show themselves by errupting that person's skin and flesh. If they are not given proper treatment they aggravate illness and at times kill people. The cult of female goddesses is very popular among both Gonds and Korkus. The visitations of not only 'Mata' but any of these above mentioned goddesses is observed very religiously by both Korkus and Gonds. Interpretations regarding the visitation and wrath of these goddesses is however ritually done by the parihars (shamans) and Bhoomkas (priests).

To sum up the Korku views as well as the views of the Gonds it is very clear that they are not aware of the scientific causes of deaths which have been occurring since ages and not only during 1993-94. They link up this tragedies with natural calamity and/or supernatural intervention. There is an urgent need to promote health education programmes using various strategies and modes of communication culturally appropriate so as to spread the message of scientific causes of malnutrition, significance of small family norms, balanced diet, effect of alcohol on body as well as economic life, child and mother's care and so on.

It is very necessary to teach the educated Korkus both men and women how to plot nutritional gradations of children depending on their height, weight, arm circumference, head circumference, chest circumference, nutritional intake and clinical signs.

This training will help them to convey the message to the parents of malnourished children. Merely the Anganwadi Workers knowing how to plot IIIrd and IVth degree malnutritional gradation does not do any good to the tribals. The tribals must be taught these things.

CHAPTER SIX

IMPACT OF FOOD SUPPLY SCHEMES AND OTHER DEVELOPMENT FACILITIES ON THE TRIBALS.

With regards to the child death tragedy in Melghat region several corrective measures were taken up by the government. These were as follows -

i) Supply of 1 bag of Jowar, 25 kg of gram, 25 kg of toor dal etc. to families who lost their children in the death tragedy period.

ii) Supply of raw rice (for Khichadi) therapeutic food packets, protovita packets, milk powder etc for anganwadis in every village.

iii) Medical and food supplies to sub-centres and PHCs and anganwadis for rainy season.

iv) Construction of roads and small bridges in Melghat region.

v) Introduction of "Anand Dai Shikshan Scheme" to attract children to schools.

vi) Health educational strategies.

vii) Establishment new sub-centres and PHCs.

viii)Establishing an office of the Additional District Health Officer initially at Dharni and Chikhaldara, but now only in Dharni by temporarily deputation of ADHO's turn by turn every month.

ix)Assigning the Project Officer of Dharni, an I.A.S. personnel to co-ordinate health, nutritional and other developmental activities of Dharni and Chikhaldara.

x)Introduction of bus services to many remote villages.

Besides this several other schemes were also implemented so as to uplift the socio-economic life of the tribals in Melghat region. This chapter very briefly discusses the impact of above schemes on the Korku attitudes and life style as it were. As any developmental programme has both positive and negative effects on its beneficiaries.

6.1 IMPACT OF FOOD SUPPLY SCHEMES -

Data collected through informal interviews with health Workers, Aganwadi Workers, medical officers, and the Korkus revealed following facts.

i) Provision of food grain supply -Families who were supplied with 1 bag of Jowar, 25 kg of gram and 25 kg of toor dal were certainly benefited as long as they were able to feed on it. This supply was given only to families wherin child death(s) occurred due to malnutrition. That the other children should not suffer from malnutrition therefore food

grains were provided with an intention that parents will take care of the nutritional needs of other children. The positive aspect of this scheme was that the tribals did get something to feed on during that period of time. Simultaneously it did create negative effects on the attitudes of the Korku people and these are as follows :

a) Complaints & quarrels : Families who did not receive 1 bag of Jowar, 25 kg of gram and 25 kg toor dal complained and quarrelled with Aganwadi Workers. In some villages Aganwadi Workers were abused. In Heerabambai people threw stones on the house of the Aganwadi Worker at night. This was reported by the Aganwadi Worker and her husband.

b) Deliberate neglegance of child health -Knowing that government is supply food grains and pulses to families wherin deaths occurred and even malnourished children. Some Korku parents deliberately started neglecting their child's nutritional requirements, hoping that they would receive grains and pulses. This attitude was reported by both health Workers and Aganwadi Workers who are constantly interacting with the tribals. This attitude indicates that food grains and pulses were more important to the tribals than the health of their children. This also shows their level of poverty and their need to gain food grains and pulses even at the cost of their child's health.

c) Increase in the number of part takers of Food Supply Scheme- The supply of jowar, gram and toor dal was implemented with an intention that parents would use these cereals and pulses for promotion of their children health. It was however observed that even adults, teenagers and elderly folks become part takers (beneficiaries) of this supply. This is clearly an indication that the adults and teenagers are equally in need of food supply schemes. Inspite of the instructions given to parents that the food supply was meant for the children they used it for everyone in the family.

Yet another observation made in this regard was that the Khichadi (cooked rice) distributed to Aganwadi children i.e. below six years was again distributed among other non-Aganwadi children (above 7 years) of the family. The purpose of distributing exact quantum of Khichadi (80 gms) per child and even that being shared by his/her brothers and sisters gets disturbed. The purpose of the scheme is hindered because of such a kind of attitude of parents taking Khichadi at home to be distributed to other children. Same kind of an attitude is shown in the case of therapeutic food, protovita and milk too. The Aganwadi Workers have been fed up this attitude of tribals. There are, however, very few parents who allow their children to eat Khichadi in Aganwadi itself.

d) What happens to the food supply if a child does not attend Aganwadi - Interestingly it was found that if a child is sick, or if she/he goes to another village with his/her parents or is absent for some or the other reason parents quarrel with Aganwadi Workers to get their share of Khichadi, therapeutic food, protevita or powder milk for that particular day. They see to it that they get their share. This was reported by infact all the Aganwadi Workers interviewed.

e) The attitude that it is the duty of government to supply food-
A common tendency of most beneficiaries of any development scheme who only receive something cash or kind from an agency tend to develop this attitude that it is to develop this attitude that it is their right to be served and it is their right to be served and it is the duty of a development agency to supply them goods. The food supply scheme has created such a kind of an impact on the attitudes of the Korkus that it is their right to receive benefits.

Social scientists and activists working in the field of community development do not advocate the idea of spoon feeding or one way traffic programme of supplying something in kind and cash. This kind of planning hinders the concept of community participation and self reliance in development programmes. It is therefore suggested that the tribals of

Melghat region be made aware of the concept of participation and self sufficiency in development programmes.

To summarize the effects of food supply scheme on the attitudes of the Korkus, their negative attitudes could be classified as follows -

1. Deliberate neglegence of children's nutritional intake with a hope to get food grains and pulses from govern--ment on a continuing basis.

2. Quarrels with Anganwadi Workers and Supervisors on distribution of food supply.

3. Sharing Khichadi and other food stuff with brothers and sisters of a child who attend anganwadi.

4. Use of jowar, gram and toor dal for the entire family and not for the malnourished children only.

5. The attitude that it is the duty of government to compulsarily provide nutritional supplements. That it is their right to receive these benefits.

ii) Positive aspects of the food supply schemes. As compared to earlier situation of food supplement programmes it was noted that this programme is being taken very seriously by Government irrespective of number of difficulties which it has given rise of. Earlier tribal children in the Aganwadis would get only 'sukhda' and pulses but now therapeutic food, protevita, khichadi and milk is being distributed to children below 6 years. Even child health care programmes such as immunization, school health, distribution of Iron and vitamin tablets, referring malnourish and sick children to PHC's , keeping details of child morbidity and mortality are taken seriously now by both health and ICDS departments.

It however appears on the whole that the tribals need to be educated on the significance of child health care and nutritional programmes so as to promote their participation and co-operation in these programmes. The Aganwadi Workers reported that the tribals do not allow them to take height and weight of their children. The pregnant women do not allow the Aganwadi Workers to check them. This resistance comes from the beliefs that if the height and weight of a child is taken he or she becomes weak (sukhata hai bachha). In case of checking a pregnant woman, the Korkus believe that the child is either born weak, get aborted or is born dead.

In the light of these attitude it is very necessary that non-formal education classes clubbed with some kind of an income generating activity be started for tribal women so that they earn something as well as learn about health and nutritional principles.

6.2 Impact of Transportation Facilities -

Introduction of bus facility has certainly been a boon to the tribals. Because of such a kind of facility the tribals are able to keep contact with tahsil places. Even government development agents working at grass root are able to reach their respective villages of work, by utilizing bus service and also walking to interior villages from the bus stop. The tribals are able to take their agricultural produce (in small quantities), firewood and even milk to be sold at tahsil places and bigger villages.

With regards to bus service system it is suggested that the frequency of buses should increase especially those going to interior areas so as to increase the rate of contact of

development workers with the tribals and vice versa. Thus bus facility has certainly helped the tribals.

Besides this, efforts were made to repair and construct roads and bridges. The construction and repairing of roads and bridges helped the tribals to get some cash as they worked as road construction workers. Inspite of the efforts made to construct roads and bridges there is still lot of scope for constructing roads to reach interior villages for example Bhavar in Dharni, Ketyakheda in Chikhaldara connecting tribals with urbanities for a fruitful cause through roads should certainly do good to them.

With regards to road construction programmes it is suggested that the PHC and ICDS departments be given more vehicles and funds for fuel and repairing vehicles so that they supervise and monitor the health and nutritional situation of tribal children and women more particularly. It was observed that PHC transportation facility is used more for transporting tubectomy, vasectomy and leproscopic patients than for school health check-up, health education and health awareness programmes. This trend is very common all over Maharashtra, as family planning programme is a target oriented programme.

6.3 The Anand dai Shikshan scheme -

The Anand dai Shikshan Programme was introduced by Shri Nandakumar, Chief Executive Officer, Amravati Zilla Parishad with the help of his colleagues. The main aim of this programme was to attract the tribal children to come to schools and get themselves educated informally. For this the teachers were given training on non-formal educational methods, skills of attracting children, use of various communicational strategies and so on. This programme has been implemented recently and hence there was less scope to really assess its impact. However, it was noted that this scheme has created extra burden on the unwilling teachers and it has really not caught on its speed. One can only get to see very well painted boards highlighting the name Anand Dai Shikshan Scheme. It is suggested that after a year or two an evaluation study be conducted on the impact of this programme on Korku children and their parents so as to know its success and failure.

6.4 Establishment of ADHO's temporary office at Dharni -

With the initial establishment of ADHO's temporary office both at Dharni and Chikhaldara and now only in Dharni there has been a serious check on health situation of the tribals and the health staff. Since ADHO's are deputed temporarily at Dharni every month turn by turn they are able to communicate the health situation to the Dist. Health Officer and Chief Executive Officer every month. Besides his very presence has created a sought of submission or the point of health staff to report day to day's activities and work done. He is only responsible for co-ordinating health service activities and reporting system.

6.5 Co-ordination of Activities by Project Officer -

With regards to co-ordination of health, nutritional and other developmental programmes an I.A.S. officer has been posted at Dharni to co-ordinate the above activities for both Dharni and Chikhaldara. This posting has certainly made difference in management and administrative affairs as far as planning, implementation and monitoring of health, nutritional and developmental programmes. Under the able guidance of the present Project Officer a developmental plan of action has been prepared for Dharni and Chikhaldara tribals.

Inspite of preparation of a developmental plan the Project Officer along with the department heads of ICDS, health, PWD, and others has been able to work out a number corrective measures in Dharni and Chikhaldara. The posting of an I.A.S. officer at Dharni has certainly done good to accelerate the rate of development activities.

CHAPTER SEVEN

SUMMARY AND CONCLUSION

Human beings are increasingly becoming victims of diseases, nutritional disorders, national calamities such as earthquake and famine, alcoholism and drug addiction, stress and mental illness and other health hazards, which invade them irrespective of their age and socio-economic status. Health magazines, journals and books, newspapers and even electronic media are constantly highlighting these human health issues.

A developing country such as India in particular still continues to experience scientific abundance while basic health and nutritional services remain inaccessible to the rural and tribal folks. Health and nutritional problems in tribal areas especially the remote villages as compared to the caste villages.

This research has made an attempt to unravel the various factors which are directly and indirectly linked with the child death and malnutrition child that took place in Melghat region and prevails even to this date. Based on the empirical research findings following conclusions have been drawn -

1. The problem of infant mortality and malnutrition which prevails in Melghat region is an interplay of multiple factors such as social, cultural, educational, economical, political, communicational, developmental etc. which have been responsible for child mortality, malnutrition and other health hazards in Dharni and Chikhaldara tahsils of Amravati district.

2. Extreme poverty among the Korkus, indebtedness, lack of advance agricultural and irrigational technology, lack of knowledge of marketing agricultural produce such as soya beans, wheat, cotton etc. lack of job opportunities, absence of industrial development in Melghat region, lack of mobilization of national and human resources in the Melghat region has been one of the major factors which have been responsible for the health hazards.

3. Low level of literacy among the tribals and among women in particular our findings showed almost 82.6% women interviewed were illiterate. This is indicative of the fact, lower the level of literacy lesser the health and nutritional awareness and consciousness as it were.

4. Early age at marriage among the girls (12 - 15) and boys (16 - 20) leading to early pregnancies and therefore large family size and poor nutritional status of women giving rise to still births, premature deaths, low birth weight babies, anaemic children etc.

5. Supersititious beliefs and practices of the tribals regarding health and disease. Strong faith in the parihar and Bhoomka baba cult, leading the tribals to consults traditional medical practitioners to diagnose and interpret the origin and cause of illness. Hence, as per their logic what comes spiritually must be healed or got rid of spiritually and therefore spiritual curers (shamans and priests). The Korkus prefer to consult these specialist first and then try out the doctors. These superstitious beliefs and practices regarding health and disease have certainly been one of the factors that has been responsible for health hazards among the tribals of Melghat.

6. Lack of adequate transportation and communication facilities in Melghat has been one of the major factors which has become an hindrance to provide quality health and nutritional facilities to the tribals of remote and inaccessible villages. It had also cut off the tribals from the main stream. During rainy season especially one finds it very difficult to seek medical help as it becomes very difficult to P.H.C.'s, drug stores, Rural Hospitals

and private practitioners. Absence of tele-communication facilities in most remote areas has been yet another drawback for not getting in touch with the paramedical personnel.

7. Inadequate dietary intake and lack of vitamins, minerals, fats and oils in the diet giving rise to various nutritional deficiencies like anaemia, night blindness and malnutrition among both women and children.

8. High prevalence of diseases such as viral diarrhoea, pneumonia, broncho-pneumonia, worms, gastro-enteritis, dysentry, septicaemia clubbed with malnutrition has led to infant and child mortality.

9. Poor response from tribals to health programmes such as Copper T, Nirodh, oral pills have shattered the concept of spacing. Yet another reason could be that absence of recreational facilities may have given rise to population explosion among the tribals. We detected a family with fifteen children produced from one wife in Salona village and two cases with 10 to 12 children in Boratyakheda. Minimum 4-6 children one must have is the common family norm among the Korkus. This could be due to death risk factors of the children. Children being economic assets both in terms of getting bride price and putting in household and agriculture labour for the family.

10. Negligence of health and nutritional care of infants and children is yet another factor which has been responsible for health hazards and deaths among tribal children in Dhami and Chikhaldara. Infants and even small children are left at home by both father and mother at the mercy of grown up children. Parents go out for agricultural work, daily wage labour, collection of minor forest produce together and leave infants and children at home to be taken care by the nature.

11. Late tubectomy, vasectomy and laproscopic operations have shattered the rationale of small family norms. These cases however serve to depict a glamorous target achieved by the P.H.C. What tribals need to understand is the significance of small family planning norms, contraceptive methods and its practice. It is clear indication that tribals go for family planning operations to earn Rs. 130 or 110 along with extra money (Rs.250-350) which they receive from Health Workers.

12. Lack of adequate transportation and maintenance budget for P.H.C. jeeps, and use of jeeps for transporting family planning cases more than using them for actually going to schools, villages, Ashram schools for educational and health check up and nutritional monitoring purpose.

13. Lack of medical facilities such as X'ray machines, good surgical instruments, proper cots, mattresses, beds, toilets, urinals etc. in P.H.Cs.

14. Tribal people attributing the cause of malnutrition and infant mortality to wrath of "Mata" (A planetary Goddess). Linking the health hazards and death tragedy with supernatural intervention.

15. Lack of industrial development in Melghat has deprived the development of communication and transportation facilities and also the economic development of the tribals. This has also hindered the promotion of job opportunities for the tribals. Other than forest, agricultural and P.W.D. daily wage labour there is no other source of wage earning.

16. Forceful posting and recruitment of non-tribal health and I.C.D.S. staff in these remote areas where there are no developmental facilities, no communication and transportation facilities, no recreational facilities, no proper medical and educational facilities, not much vegetables and fruits, no good residential facilities on one hand and poor response to health programmes from tribals on other hand certainly reflects on one's

interest and dedication in providing quality health and nutritional services to the tribals. Most ANM's and MPHW's leave away from their children and other family members.

17. Nutritional supplement programme has created an impact wherein tribals think that they need to served. It is their right to get nutritional supplements and share with their family members. Secondly because food grains and pulses were distributed to families who lost their children, the tendency for neglecting child's health and nutritional care was increasing in the hope of getting food grains and pulses supply from the Government.

18. The Anand dai Shikshan scheme has not shown much progress as it was recently implemented. This scheme's impact on the tribal children and their parents needs to be evaluated so as to assess its success and/or failure.

SUGGESTIONS

The problem of malnutrition among infants, children and women as well as the Melghat region and other health hazards could be checked with integrated efforts of Government, Voluntary agencies and the tribals themselves.

1) Transportation -

Efforts must be made to develop transportation system and facilities taking into account following suggestions.

a) Construction of new roads and repairing of the old ones. In fact every village needs to connected by pucca roads.

b) Construction of small and big bridges and culvert s wherever necessary.

c) Provide at least 2-3 jeeps per P.H.C. and I.C.D.S. zone to monitor health care and nutritional services and health education programmes as well.

d) Mobile clinic health care services should be promoted in Melghat region so that services can reach people of interior villages. Efforts also must be made to monitor mobile clinic services. A visit register must be maintained at every village and should be signed by the Doctor, Incharge of the Mobile Clinic, along with village Patil and two or three beneficiaries.

2. Educational programmes -

The rate of illiteracy is very high among the tribals of Melghat region and more particularly among women. Efforts must be made both by government and voluntary organization to take up following activities seriously.

i) Establishment of Adult Education centres.

ii) Non-formal Education classes for women, dropouts and farmers as well should be started.

iii)Encourage Health and Nutrition classes for women and children

iv) Promotion of health and nutrition education in schools compulsorily. Health and Nutritional educated programmes in schools must be clubbed with or centred around recreational activities so as to invoke interest among the students.

NOTE - There is a need to combine educational activities adult men and women with income generation programmes. Meaning thereby if two hours could be utilized for extracting work from the tribals for which they could be paid. In doing so they can learn as well as earn.

Some of the areas of health education for adult men and women could be as follows :

- Significance of small family norms

- Significance of spacing.

- Significance of Immunization.

- Significance of child health care.

- Significance of mother's health care.

- Adverse Impact of alcoholism on economic life and human health as well.

- Significance of health, hygiene and sanitation.

- Significance of drinking safe and clean water.

v) Regular monitoring and evaluation of Anand dai Shikshan scheme so as to take a stock of the failure and/or success of the programme.

vi) Provide some kind of an honourarium for educated tribal boys, girls, men and women to take up non-formal education classes for their community members. This will provide an opportunity of part time employment for them.

vii) Establish creshes which could be managed by voluntary agencies. This will help to control the problem of child care negligence which is there among the tribals of Melghat.

3. Communication Facilities -

There is an urgent need to promote communicational facilities in Melghat region so as to develop the communicational network of the tribals with health, nutritional and developmental sectors. In the light of this following suggestions could be useful -

a) Increase or establish the number of post offices, telegraph offices, STD phone booths, public telephone services.

b) Every gram panchayat must be provided with Televisions so as to have access to mass media programines of health, nutrition and development as well.

c) Films on health and nutrition should be compulsarily screened in the theatres before screening the movie and even at intervals, so as to spread the message of health and nutrition significance.

d) Use of folk media as a medium of communication in educating the tribals in their own dialect, should be encouraged both by government and non-government organizations.
e) Organizing film and video shows on health, nutrition and development in tribal villages.

4. Suggestions for P.H.C. and I.C.D.S. staff -

i. P.H.C. and I.C.D.S. jeeps must be used to propagate and promote health and nutrition education and health check-ups. It was observed that P.H.C. jeeps are used more to transpot family planning cases from village to P.H.C., than for educational and health check-up purpose.

ii. It would be appropriate to recruit educated tribal youths as A.N.M.'s and M.P.H.W.'s, C.H.V.'s and Anganwadi Workers especially in remote areas as it was observed that non-tribal Health Workers tend to live in tribal places or big villages and go weekends to their relatives and own homes. Secondly they are reluctant to work in remote areas.

iii) P.H.C.'s must be allocated a sum of money every month for the repairs and maintenance of vehicles and also for fuel.

iv) There should be a check on maintenance and follow-ups of immunization records.

v) Health Workers spend lot of time in maintaining records and attending meetings. They must devote time in educating the tribals.

vi) The practice of giving extra incentive (money) by Health Workers to tubectomy, and Laproscopic cases must stop as this practice has been looked upon by the tribals as a means of earnings some money by going for late tubectomy, vasectomy and Laproscopy i.e. after having 4-8 children. This practice shatters the rationale of the small family norms, and further creates a negative impact in the minds of the tribals that they must get money in order to go through family planning operation.

5. Nutrition Education & Supplement programmes -

a) It would be appropriate to train educated tribals and even high school students to plot nutritional gradations based on the anthropometric parameters and clinical signs. It is very necessary that the tribals know how to plot gradations (IIIrd and IVth) and take necessary actions, than only I.C.D.S. Workers knowing it.

b) Promote and encourage nutrition education programmes covering following areas -

- concept of Balanced diet.

- Diet during pregnancy

- Diet of infants.

- Diet of children.

- Diet during illness.

- Diet of the elderly folk.

- Nutritional disorders and associated causative factors

- Food preservation and storage education

c) Encourage both government and voluntary organizations to take nutritional service projects such as management of Mobile, ration, fruit and vegetable shops.

d) Efforts must be made to regularly monitor the growth and development of tribal children in the Anganwadis.

e) There should be a check on the distribution of food grain and nutritional supplies given to the tribals so as to see that it is used properly and not sold.

f) Nutrition Education should be made compulsory in the schools at least twice a week. The tribal students, both in Zilla Parishad and Ashram schools must be made aware of the significance of nutrition and the preventive measures to be taken thereof.

6. Development Facilities & Programmes

1) Unemployment in off seasons among the tribals is one of the major factors which has contributed to the poverty of the tribals in Melghat. It is in the light of this, following suggestions would prove to be useful.

a) Establish small scale Industries in Melghat region which will help the tribals to get employment.

b) Forest Department is certainly doing very well as far as providing daily wage labour to the tribals. This department must take up initiative to mobilize the Minor Forest Produce resources with the help of tribals so as to create more jobs for them. Small Scale Pharamaceutical firms can be established in the tribal areas with the help of pharmacoologists, bio-chemists, forest department and the tribals. In doing so the medicinal herbs will be scientifically utilized to prepare medicine which may be marketed in Metropolitan cities. These activities will contribute in providing daily wage labour to the tribals.

The Academy of Development science, for instance is a voluntary organisation which is working with traditional medical practitioners in Karjat tahsil, Raigad district in mobilizing naturally available medical resources. This organization has also get a processing unit wherein herbal medicines and medicated oils are prepared and marketed. If Academy of Development science could do it why not other agencies.

c) It is necessary to establish vocational training and guidance centres for tribal women and youth so as to widen the scope of promoting skilled workers for the proposed companies and small scale industries in Melghat region.

7. Role of Tribal Development Corporation -

The Maharashtra State Cooperative Tribal Development Corporation which has been appointed as the chief agency in the procurement of food grains and minor forest produce is no doubt rendering good services to the tribals. It is however suggested that the T.D.C. with its available infrastructure and man power must introduce two more programmes besides procurement and marketing of M.F.P. and Food grains of the tribals. These programmes are :

i) Mobile Fare Price Shops - Tribal Development Corporation must start mobile fare price shops so that food grains and other commodities could reach the interior villages Melghat region. Its time that these mobile fare price shops service be introduced at a price which could be affordable by these poor tribals.

ii) Supply Centres - Tribal Development Corporation already has its collection centres. These same centres with available man power could start food grain supply centres.

It could also be possible that Tribal Development Corporation may incure losses but if the maternal and child mortality problems in Melghat region has to be viewed from humanitarian angles, service with loss for a good cause should not take into account the felt loss. This scheme will be of immense help to landless tribals.

8. Forest Department -

As most of the Melghat area is geographically under the jurisdiction of forest department. It would be appropriate for this department to provide daily wage labour on a large scale for the tribals. Tribals could be recruited for jobs such as construction of small bridges, dams, bandharas, plantation etc. Their payment could be done in cash as well partly in kind (supply of food grains). This will certainly keep a check on the drinking habit of the tribals as well as provide them with nutritional supplements.

This approach of creating employment opportunity for the tribals of Melghat will certainly be a boon to these tribals, provided it is sincerely and honestly managed on humanitarian grounds. In fact forest department can establish small scale cottage industries which can mobilize Minor Forest Produce. This will create an opportunity for

providing employment to the tribals in their own habitat. In the light of promoting such programmes government must allot separate budget to Forest Department.

9. Role of Integrated Tribal Development Project -

The Integrated Tribal Development Project office has great responsibility in upgrading the socio-economic life of the tribals in Melghat region. Efforts must be made to mobilize the available natural and human resources in the eco-cultural system. Development programme, Planning, implementation and follow-up should however be based on a participatory approach wherein tribals are involved in the schemes.

Efforts should be made to assess the developmental needs of the tribals, their likes and dis-likes about the schemes, their knowledge about the technical "know how" of the scheme, their willingness to participate and of course their economic capability to refund the loan etc. should be taken into account, while planning and implementing the concerned schemes. One of the areas which needs more attention is promotion of irrigational and agricultural programmes.

10. Efforts should be made to provide basic amenities such as residential quarters, water facilities, toilet and bathing facilities etc. should be made available to grass root workers such Health Workers, Anganwadi Workers. gram sevaks, Health visitors, etc. In fact if all these grass root workers along with other concerned officers are given facilities so that they live in a common residential complex, campus or chawls. This will enhance the awareness among tribals that there is a common place to seek medical and development help for. If these incentives are given to workers, it will certainly reflect on the quality of services rendered by them.

11. It was also observed because grass root health and development workers get posted in remote areas such as the Melghat region, their children get deprived of educational, recreational, vocational etc. needs. Efforts must be made to provide these workers travel expenses or educational allowance so as to send their children to good day schools and or boarding schools in tahsil or district areas. This will relieve the stress which these workers have regarding the future of their children.

12. It was also found that these grass root workers have to visit villages assigned to them with respect to their jobs. Some of them have to walk for long distances. This again is a hard task on the part of female workers. As an incentive they must be provided with reasonable travel expenses. In fact Health Workers of every P.H.C. or sub-centres should be privileged to make use of jeeps for health care and health educational services.

13. Voluntary organizations should be encouraged to take up health, nutritional and developmental programmes in these areas. In doing so voluntary organizations will shoulder part of government's responsibility in handling human right issues in Melghat region. These voluntary agencies should be assisted financially so as to carry out these activities effectively.

14. Why not urge Industries to take up development projects in Melghats ?

In recent years a number of industries are getting involved in developmental activities by adopting slums, rural villages, schools etc. Why not liaison with such industries so as to take up developmental activities in remotest villages which need health, nutritional and other facilities. Efforts must be made to urge industries in Amravati and neighbouring districts to take up development activities as per the felt needs of the people. Most industrialists tend to adopt villages close to the cities. As a special case industries must adopt certain remote villages in Melghat region. This will lessen the burden of Health Department.

15. Liasoning with International & National Health Organizations :

Whenever a natural calamity such as earthquake, accident, famine etc. occurs in a given area a lot of international & national agencies rush at the site to help the victims & their relatives. For example very good development work was carried out for the inhabitants of Latur & Osmanabad which became a victim of earthquake in 1994.

Similarly, international & national health organizations should be approached to work out research & health developmental activities in Melghat region. Efforts must be made to write project proposals in order to get funds to upgrade health case, health educational, nutritional care, nutritional, educational & developmental activities in this area.

16. Role of Pharmaceutical Companies -

A number of leading Pharmaceutical industries in India are involved in cultivation of medicinal plants in rural areas. These plants or plant parts are later processed for commercialised products. Pharmaceutical industries should be contacted to take up medicinal plant cultivation in Dharni and Chikhaldara. Such a project will in turn generate employment for the tribals and also create awareness among them about the scientific utility of the medicinal plants as well.

Further more if small scale Pharmaceutical companies are established in these tahsils it would do more good for the tribals from health care and economic (employment) point of view.

17. Role of Voluntary Organizations.

Voluntary Organizations have certainly rendered qualitative services to the down trodden, the poor and the needy in this country. In Amravati and neighbouring districts there will be number of Voluntary Organizations who would be interested in working in Melghat region if given adequate funds by the State Government. Such organizations should be encouraged and financially aided to taken up programmes in the field of education, mother and child health care, vocational training and guidance, nutrition supplement programmes, health education and so on.

18. Role of Zilla Parishad -

The Zilla Parishad Amravati is no doubt doing good work in the rural and tribal areas of Melghat region. Efforts must be made to create job opportunities and strengthen income generation programmes for the tribals. Besides this health and nutritional programmes should be upgraded in the remotest areas.

19. Role of State Health Sector (Civil Surgeon) -

The Civil Surgeon of the district who looks after Rural Hospitals and the urban health care sectors should be entrusted part of the geographical sector to render health care services to the tribals. The services of the State Health Sector (Civil Surgeon's office) will certainly be a supporting aid to the D.H.O. and his staff. This kind of a measure should be taken as a special case for areas such as Dharni and Chikhaldara. It is also suggested that the Rural Health Hospitals must have enough staff, medicine stock and medical equipments so as to strengthen health care activities.

20. Finally, the Melghat human right issue has to be viewed and seriously given attention to from humanitarian angle rather than service oriented angle. The lives of these tribals should be valued and protected if we really have respect for the phrase. "Health For All by the year 2000 A.D."

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An Evaluation Of The Health & Nutritional Beliefs , Practices Facilities Among The Tribals Of Dharni & Chikhaldara Tahsils.

SCHEDULE NO. 1

Interview Schedule for tribal women (Age Group 15 to 45 Yrs)

I. IDENTIFICATION.

District :_____ Tahsil :_____

Village :_____ Hamlet :_____

II. PERSONAL INFORMATION

2.1 Name :_____

2.2 Tribe :_____ 2.3 Age :_____ Years

2.4 Education : ☐

(Use Following Codes)

1 Can not read or write
2 Can read only
3 Up to IV std.
4 Up to VII std.
5 Up to X std.
6 Up to XII std.
7 Up to graduate
8 Up to post graduate

2.5 Marriatal Status

1	2	3	4	5	6
Married	Unmarried	Widow	Divorce	Deserted	Separated

2.6 Her age at the time of marriage :_____ Years

2.6 Her husband's age at the time of marriage :_____ Years

2.7 No. of family members

S.No	Name	Relation With Ego	Sex 1-M 0-F	Age Yrs	Education Use Code	Marriatal Status Use Code	Occupation	Income Rs.
	Self	Self	F					

2.8 Socio-Ecconomic Status of the family

a> Main Occupation :_____

b> Subsidary Occupation :_____

c> No. of members earning in the family :_____

2.9 Crop Production during the last 3 Years

Sr. No.	Crop	Quantity (in Kg.)					
		1991-92			1992-93		
		Total	consumed	Sold	Total	consumed	Sold
1	Rice						
2	Jawar						
3	Nachani						
4	Worrie						
5	Soyabean						
6	Toor						
7	Udid						

2.10 Live Stock owned by the family.

Sr. No.	Animal Type	No. of animal	
		Indegeneous	Imported
1	Cows		
2	Bulls		
3	He Buff		
4	She Buff		
5	Sheep		
6	Goats		
7	Hens		
8	Pigs		

2.11 Annual Income received from livestock:_____

2.12 Annual family income from

Sr. No.	Source of Income	Annual Income
1	Land	
2	Daily wage labour	
3	Small Scale Industry	
4	Service	
5		

2.13 Land holdings (in Acres)

Sr.	Description	Irrigated	Non irrig.	Total
1	Total			
2	Cultivated			
3	Not Cultivated			

2.14 Availability of water source for cultivation :

Sr. No.	Source of water	1-Yes 0-No
1	Well with Motor	
2	Well without Motor	
3	Tubewell with Motor	
4	Tubewell without Motor	
5	River	
6	Stream	
7	Lift Irrigation	
8	Rain	
9	Other	

2.15 Do you go for fishing ? (1-Yes 0-No):_____

If Yes,

In which season :_____

How many times within month :_____

2.16 Do you go for hunting ? (1-Yes 0-No):_____

If Yes,

In which season :_____

How many times within month :_____

2.17 Do you go for gathering minor forest produce ?
(1-Yes 0-No):_____

If Yes, Pl. give following details

Sr. No.	Type	Who Collects	Season	Monthly Frequency	Qty Per Season	Income of Sold good
1	Fruits					
2	Corms					
3	Roots					
4	Flower					
5	Seeds					
6	Others					

2.18 Type of Houses

Sr. No.	Description	1-Yes 0-No
1	Thatched Roof, Stick Wall	
2	House with tiles & Brick Wall	
3	Thatched Roof & with Brick wall	
4	House with Tiles & Stick Wall	
5	Other Type	

III. Family Planning History

3.3 Contraciptive Methods Used

Sr. No.	Description	1-Yes 0-No
0	Not using any method	
1	Pills	
2	Copper T	
3	Condom	
4	Tubectomy	
5	Vasectomy	

3.4 Are there any traditional contraceptive methods ? (1-Yes 0-No) :_____

If yes,
specify _____
_____
_____

3.5 If not using any contraceptive methods state reason.

_____
_____
_____

3.6 Death of Children in the family for last 3 years of age group 0 to 5 Yrs.

S.No	Name	Sex 1-M 0-F	Age Yrs	Cause of death

IV CARE DURING PREGNANCY

4.1 If there is any pregnant woman in the family fill the following information

S.No	Name	Did she receive following				
		Health Check Up 1-Yes 0-NO	Iorn Tablets 1-Yes 0-No	Folic Acid 1-Yes 0-NO	Tetanus Toxoid 1-Yes 0-No	Nutrition Health Edn 1-Yes 0-No

4.2 Which special diet is given to pregnant women ?

4.3 Which foods are avoided during the period of pregancy & why ?

Sr. No.	Food Item	Reason for avoidence

4.4 Which diet is recommended after delivery & why ?

Sr. No.	Food Item	Reason for recommendetion

4.5 Food recommended to purify the blood.

Sr. No.	Food Item

4.6 Food consumed to increase the quantity of blood.

Sr. No.	Food Item

4.7 Which food is consumed by new mothers to increase the quantity of breast milk ?

Sr. No.	Food Item

V DELIVERY CONCEPT & CHILD CARE

5.1 Which instrument is used to cut the umbelical chord ?

_____

5.2 Is it sterilized before used ? (1-Yes 0-No) :_____

5.3 Which special care is taken of child immediately after birth ?

_____

_____

5.4 Does the mother feed the child colostum milk ? (1-Yes 0-No):_____

If not state reason:_____

_____

_____

5.5 Does the mother give water to infant ? (1-Yes 0-No) :_____

If not for how many days :_____

5.6 Which diet is encourged for new born ? & why ?

Sr. No.	Food Item	Reason for recommendetion

5.7 Which diet is avoided for new born ? & why ?

Sr. No.	Food Item	Reason for avoidence

5.8 Whether breast feeding to a child starts immidetiately after the birth ? (1-Yes 0-No): _____

If not state reason:_____

5.9 Who conducts the delivery of a woman ? :_____

5.10 What does the dai receive in return for the service she renders ?

5.11 What is done with the umbelical chord ? Explain in detail :

5.12 What are the various ritual & ceremonies associated with birth of a girl/ boy child? Explain their meaning from an emic view.

_____

_____

5.13 How long does the new mother rests before she starts her daily routine ?: No. of days

5.14 What medication does a midwife provides for the new mother during Pre-natal & post-natal period ?

Pre-natal period

Sr. No.	Food Item

Post-natal period

Sr. No.	Food Item

5.15 For how many months/years is the child breasted feeded ?_____

5.16 At which age weaning foods are given to a child? :_____ Years

5.17 Which weaning foods are given to a child ?

Sr. No.	Food Item

5.18 Which food items according to you are nutritious for growth of a children?

1. _____

2. _____

5.19 Which foods are given to a child during illness ? Why ?

Sr.	Sickness	Food item Consumed	Reason
1	Diarrhoea		
2	Jaundice		
3	Scabies		
4	Boils		
5	Cough & Cold		
6	Stomach Ache		
7	Fever		
8	Chicken Pox		
9	Pneumonia		
10	Dysentry		

5.20 Which foods are avoided during illness ? Why ?

Sr.	Sickness	Food item Consumed	Reason
1	Diarrhoea		
2	Jaundice		
3	Scabies		
4	Boils		
5	Cough & Cold		
6	Stomach Ache		
7	Fever		
8	Chicken Pox		
9	Pneumonia		
10	Dysentry		

5.21 What do you feed the child when he/she gets diarrhoea?

Sr. No.	Description	1-Yes 2-Not 0-Not appllicable
1	Breast Milk	
2	Home available fluid	
3	Solid foods	
4	Sugar salt solution	
5	Oral Rehydration Solution	

5.22 In case of illness where did you take your children for treatment?

Sr. No.	Description	1-Yes 0-No
1	Traditional Healer	
2	Health worker	
3	Asst. Medical Officer (Sub-Centre)	
4	Medical Officer (P.H.C.)	
5	Rural hospital	
6	Private Clinic	
7	Domestic Treatment	
8	Others	

5.23 Immunization status of children below one year

S.No	Child's Name	Received following					
		Sex 1-M 2-f	Age in Months	B.C.G. 1-Yes 0-No	D.P.T. 1-Dose 2-Doses 3-Doses 8-No Dose	Polio 1-Dose 2-Doses 3-Doses 8-No Dose	Measles 1-Yes 0-No

VI FOOD HABITS

6.1 Who eats first in the family ?

1	2	3	4
Men	Women	Children	Old Folks

6.2 What did you have yesterday for ?

Sr. No.	Food Item	Quantity of food item consumed		
		Breakfast	Lunch	Dinner
1	Rice			
2	Bhakar			
3	Chapati			
4	Dal			
5	Vegetable			
6	Eggs			
7	Meat			
8	Fish			
9	Milk			
10	Curd			
11	Bread (Pav)			
12	Khari			
13	Toast			
14	Tea			
15	Sweets			
16	Fruits			
17	Others			

6.3 Which food grains/items you get from ration shop & weekly market
Use following codes.

1. Ration shop 2. Weekly Bazar 3. Both Weekly Bazar & Ration Shop

S.No	Food Item	Code
1	Rice	
2	Wheat	
3	Jawar	
4	Soyabean	
5	Nachani	
6	Warrie	
7	Tuber	
8	Pulses	
9	Leafy Vegetable	
10	Fruits	
11	Nuts	
12	Sugar	
13	Meat	
14	Eggs	
15	Curd	
16	Milk	
17	Other	

6.4 How often do you consume following food ? (Make tick mark if Yes)

CEREALS

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Rice								
2	Wheat								
3	Jawar								
4	Soyabean								
5	Nachani								
6	Warrie								
7	Corn								
8	Bajari								
9	Other								

PULSES

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Mung dal								
2	Toor dal								
3	Gram								
4	Val								
5	Reas								
6	Chavali								
7	Udid dal								
8	Bajari								
9									
10									

6.6 MILK PRODUCT

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Milk								
2	Curd								
3									

6.7 VEGETABLES

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Palak								
2	Kobi								
3	Shepu								
4	Methi								
5	Cauliflower								
6	Ambadi								
7	Cucumber								
8	Tomatoes								
9	Kanda Pat								
10	Lettuce								
11	Raddish								
12	Beans								

6.8 FRUITS

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Banana								
2	Papaya								
3	Guava								
4	Orange								
5	Mangoes								
6	Grapes								
7	Apples								
8	Aylas								
9	Karvandas								
10	Phanus								
11	Jambus								
12	Jackfruit								

6.9 NUTS

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Peanuts								
2	Coconuts								
3	Cashawnuts								
4									

6.10 NON-VEGETERIAN FOODS

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Meat								
2	Chicken								
3	Beaf								
4	Pork								
5	Fish								
6	Eggs								
7	Dry Fish								
8	Sukat								

VII DIET DURING ILLNESS

7.1 Which diet is encouraged & discouraged during following illness.

Sr.	Sickness	Diet Discouraged	Diet Encouraged
1	Diarrhoea		
2	Jaundice		
3	Scabies		
4	Boils		
5	Cough & Cold		
6	Stomach Ache		
7	Fever		
8	Chicken Pox		
9	Pneumonia		
10	Dysentry		

7.2 Disease Causational Concepts

a) DIGESTIVE DISORDERS

Sr.	Sickness	Cause of Disease	Therapy
1	Diarrhoea		
2	Jaundice		
3	Dysentry		
4	Cholera		
5	Gastro-entritis		
6	Stomach Ache		
7	Worm Infections		
8	Abdomenal Pain		
9			

b) SKIN DISORDERS

Sr.	Sickness	Cause of Disease	Therapy
1	Scabies		
2	Boils		
3	Measles		
4	Chicken Pox		

c) COMMON AILMENTS

Sr.	Sickness	Cause of Disease	Therapy
1	Fever		
2	Cold		
3	Migrane		
4	Malaria		
5	Wounds		
6	Arthritis		
7	Goitre		
9	Conjuctivitis		
10	Epilepsy		

d) RESPIRATORY DISORDERS

Sr.	Sickness	Food item Consumed	Reason
1	Pneumonia		
2	Cough		
3	Asthma		
4			

VIII PROFILE OF HEALTH FACILITIES

8.1 How far are the following health facilities from your village?

S.No	Facility	Distance in K.M.	Visits Per Month
1	Traditional Dai		
2	Village Health Guide		
3	A.N.M./Nurse		
4	Health Visitor		
5	Medical Officer		
6	Private Doctor		
7	Traditional Healer		
8	Sub Centre		
9	P.H.C.		
10	Private Clinic		
11	Drug Store		
12	Rural Hospital		
13	Others		

8.2 In case of Epidemic in the village who reports it to the Govt. ?

S.No	Description	1-Yes 0-No
1	Sarpanch	
2	Police Patil	
3	Gram Sevak	
4	A.N.M.	
5	M.P.H.W.	
6	V.H.G.	
7	Teacher	
8	Police	
9	Medical Officer	
10	Private Doctor	
11	Others	

9. What is the role of Gram Sevak during a health crisis such as epidemic, lack of clean drinking water, floods etc.?

_____
_____
_____
_____

_____

Date of interview: _____ Place of interview: _____

Signature of Investigator: _____

Name of Investigator: _____

Designation: _____

Tribal Research & Training Institute, Maharashtra State,

An Evaluation Of The Health & Nutritional Beliefs, Practices & Facilities Among The Tribals Of Dharni & Chikhaldara Tahsils.

SCHEDULE NO. 2

(Schedule for tribal children between 12 to 16 Years)

I. IDENTIFICATION.

District :_____ Tahsil :_____

Village :_____ Hamlet :_____

Name of the school :_____

Name of student :_____

Sex (1-Male 2-Female) :_____ Age :_____Years

Std in which studying :_____ Tribe :_____

II. DIETARY PATTERN.

2.1 Food Consumed before going to school & during the recess in the school

Sr. No.	Food Item	Quantity of food Consumed	
		Before going to school	During the recess
1	Rice		
2	Bhakar		
3	Chapati		
4	Dal		
5	Vegetable		
6	Eggs		
7	Meat		
8	Fish		
9	Milk		
10	Curd		
11	Bread (Pav)		
12	Khari		
13	Toast		
14	Tea		
15	Sweets		
16	Fruits		
17	Others		

2.1 What did you have yesterday for ?

Sr. No.	Food Item	Quantity of food item consumed		
		Breakfast	Lunch	Dinner
1	Rice			
2	Bhakar			
3	Chapati			
4	Dal			
5	Vegetable			
6	Eggs			
7	Meat			
8	Fish			
9	Milk			
10	Curd			
11	Bread (Pav)			
12	Khari			
13	Toast			
14	Tea			
15	Sweets			
16	Fruits			
17	Others			

2.2 What happens when a person eats uncovered /stale food ?

Uncovered Food

Sr. No.	Description	1-Yes 0-No
1	Diarrhoea	
2	Vomits	
3	Stomach ache	
4	Fever	
5	Head ache	
6	Dysentry	
7	Others	

Stale Food

Sr. No.	Description	1-Yes 0-No
1	Diarrhoea	
2	Vomits	
3	Stomach ache	
4	Fever	
5	Head ache	
6	Dysentry	
7	Others	

2.3 Do you eat uncovered food ?
(1-Yes 0-No) :_____

2.5 Do you eat stale food ?
(1-Yes 0-No) :_____

2.6 which food do your parents give when you fall sick ?

Sr.	Sickness	Food item Consumed	Quantity

Following sickness codes are to be used:

1. Diarrhoea
2. Jaundice
3. Dysentry
4. Cholera
5. Gastro-entritis
6. Stomach Ache
7. Worm Infections
8. Abdomenal Pain
9. Scabies
10. Boils
11. Measles
12. Chicken Pox
13. Fever
14. Cold
15. Migrane
16. Malaria
17. Wounds
18. Arthritis
19. Goitre
20. Conjuctivitis
21. Epilepsy
22. Pneumonia
23. Cough
24. Asthma

III. HEALTH FCILITIES

3.1 Did you fall ill during the last six month ? (1-Yes 0-No):_____

If Yes,

Suffered from which health Problem? (Use Sickness Code)

1._____

2._____

3._____

4._____

3.2 In case of illness where did your parents take you for treatment?

Sr. No.	Description	1-Yes 0-No
1	Traditional Healer	
2	Health worker	
3	Asst. Medical Officer (Sub-Centre)	
4	Medical Officer (P.H.C.)	
5	Rural hospital	
6	Private Clinic	
7	Domestic Treatment	

IV. FOOD, HABITS

4.1 Who eats first in the family ?

1	2	3	4
Men	Women	Children	Old Folks

4.2 Who goes to buy ration & vegetable for the family ?

Sr. No.	Relative	1-Yes 0-No
1	Father	
2	Mother	
3	Uncle	
4	Brother	
5	Sister	
6	Grand Father	
7	Grand Mother	
8	Self	
9	Neighbour	

4.3 From where do they buy ration & vegetable ?

Sr. No.	Description	1-Yes 0-No
1	From village	
2	From weekly Market	
3	From Tahsil Place	
4	From District Place	
5		
6		

4.4 Which food items according to you are nutritious for growth of a children?

1. _____

2. _____

3. _____

4. _____

4.5 How often do you consume following food ? (Make tick mark if Yes)

S.No	Food Item		Daily	4/week	3/week	2/week	1/week	Occa.	Never
1	Rice								
2	Wheat								
3	Jawar								
4	Soyabean								
5	Nachani								
6	Barrie								
7	Tuber								
8	Pulses								
9	Leafy Vegetable								
10	Fruits								
11	Nuts								
12	Fish								
13	Meat								
14	Eggs								
15	Curd								
16	Milk								
17	Other								

4.6 How many glasses of water do you drink in a day ? _____

V. PERSONAL HYGEENE

5.1 How often you take bath ?

1	2	3	4	5	6	7
Daily	6/week	5/week	4/week	3/week	2/week	1/week

5.2 How often you cut nails ?

1	2	3	4
1 week	2 month	3 month	as per convenience

5.3 Do you wash your hands before you eat [illegible] ?

5.4 How many times do you brush/clean your teeth?

1	2	3	4
1/day	2/day	Alternate day	Does not brush

5.5 What do you use to clean your teeth ?

S.No	Description	1-Yes 0-No
1	Neem Stick	
2	Babul Stick	
3	Ash	
4	Mishri	
5	Tooth Powder	
6	Tooth Paste	
7	Others	

VI. HEALTH EDUCATION

6.1 Does your teacher talk to you about the importance of diet ? (1-Yes 0-No) :_____

If Yes,

What does he/she talk about ?

_____

_____

_____

6.2 Does your teacher talk about the harmful effects of eating stale or uncovered food ? (1-Yes 0-No) :_____

6.3 Does your teacher checks you for your cleanliness, cut their nails etc ? (1-Yes 0-No) :_____

If yes how often ?

1	2	3	4	5	6	7
1/week	2/week	3/week	1/month	2/month	3/month	as per convenience

6.4 Has any one from P.H.C. come to talk to children in the school about health , sanitation & hygiene? (1-Yes 0-No) :_____

If Yes,

What was he talked about ?

_____

_____

_____

6.5 Does any one from P.H.C. come for health check up in your school ?

1	2	3	4	5	6	7	8	0
1/month	2/month	3/month	4/month	4/Year	3/Year	2/Year	1/Year	Not visited

---

Date of interview:_____

Signature of Investigator:_____

Name of Investigator:_____

Designation:_____

Tribal Research & Training Institute, Maharashtra State,

An Evaluation Of The Health & Nutritional Beliefs , Practices & Facilities Among The Tribals Of Dharni & Chikhaldara Tahsils.

SCHEDULE NO. 3

Schedule for Health Worker

I. IDENTIFICATION. -

District :_____ Tahsil :_____

Village :_____ Hamlet :_____

Name of Respondent:_____

Sex (1-Male 2-Female) :_____ Age :_____Years

Designation :_____ Education :_____

No. of Years of service as Health Worker :_____

Marital Status

1	2	3	4	5	6
Married	Unmarried	Widow	Divorce	Deserted	Separated

No. Of Children : Male:_____ Female:_____

II. Workload

2.1 As health worker what are your job assignments?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

6. ----------

7. ----------

8. ----------

2.2 Target & Achievement for year 1992-93 & 1993-94

Sr. No.	National Program	1992-93		1993-94	
		Target	Achievement	Target	Achievement
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
15					

2.3 Geographical Area Covered for Health Service:

Sr. No.	Village Name	Total Population	Distance From House	Means Of Transport	No.Of visit Per Month
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

2.4 Which diseases do you come across in women? Why?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

6. ----------

7. ----------

8. ----------

III. HEALTH EDUCATION

3.1 Do you conduct health education programmes for women and children ?

If yes,
What kind of ?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

6. ----------

7. ----------

8. ----------

3.2 What is response of the tribal women & children ?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

3.3 Which personal problems do you come across while handling your responsibilities as health worker?

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------

3.4 What difficulties do you face while convincing the tribals to accept the health care programme?

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------

3.5 What personal problems do you come across while handling your responsibilities as a health worker ?

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------

3.5 Which programmes have failed among the tribals of your target population ?
(Please Explain in details)

3.6 Which programmes have succeeded among the tribals of your target population ?
(Please Explain in details)

2.12 How many children died in last year? : [ ]

2.13 What are the causes of these deaths ?

2.14 What remedial measures have been taken by ICDS to promote the health of tribal children ?

Date of interview:_____

Signature of Investigator:_____

Name of Investigator:_____

Designation:_____

Tribal Research & Training Institute, Maharashtra State,

An Evaluation Of The Health & Nutritional Beliefs , Practices & Facilities Among The Tribals Of Dharni & Chikhaldara Tahsils.

SCHEDULE NO. 4

Schedule for Anganwadi Workers

I. IDENTIFICATION.

District :_____ Tahsil :_____

Village :_____ Hamlet :_____

Name of Respondent:_____

Sex (1-Male 2-Female) :_____ Age :_____Years

Designation :_____ Education :_____

No. of Years of service as Health Worker :_____

Marital Status

1	2	3	4	5	6
Married	Unmarried	Widow	Divorce	Deserted	Separated

No. Of Children : Male:_____ Female:_____

II. Workload

2.1 As Anganwadi worker what are your job assignments?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

6. ----------

7. ----------

8. ----------

2.2 Target & Achievement for year 1992-93 & 1993-94

Sr. No.	Description	1992-93		1993-94	
		Target	Achievement	Target	Achievement
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
15					

2.4 Which diseases do you come across among women? Why?

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------
6. ----------
7. ----------
8. ----------

2.5 Which diseases do you come across among the children? Why?

1. ----------
2. ----------
3. ----------
4. ----------
5. ----------
6. ----------
7. ----------

2.6 How many children do you take care of ? _____

2.7 What nutritional supplements are provided to these children ?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

2.8 Nutritional status of children:

Sr. No.		No. Of Children	Reason
1	Healthy		
2	II nd Degree		
3	III rd Degree		
4	IV th Degree		

2.9 What personal problems do you come across while handling your responsibilities as an Anganwadi Worker?

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

2.10 Which ICDS programmes have failed among the tribals of your target population ? (Please Explain in details)

2.11 Which ICDS programmes have succeeded among the tribals of your target population ? (Please Explain in details)

Table No. 1.21

Seasonwise migration of families

Sr. No.	Season	Migration Period					
		Upto 2 months		Upto 3 months		Upto 4 months	
		Hhs.	Persons	Hhs	Persons	Hhs	Persons
1.	Rainy	486	971	56	129	51	129
2.	Winter	2515	5174	1983	4842	1067	2521
3.	Summer	2368	4372	2197	5164	2115	5444

Total no. of Households migrating = 7442 (50%)

Source : B.M.S. Series No. 3. Table No. 20.