(1126)

A STUDY OF QUALITY OF LIFE AND HEALTH PROBLEMS IN THREE DROUGHT AFFECTED VILLAGES IN PALAMAU DISTRICT

Dissertation submitted to Jawaharlal Nehru University
in partial fulfilment of the requirements
for the Award of the Degree of the
MASTER OF PHILOSOPHY

MANOJ KUMAR

CENTRE OF SOCIAL MEDICINE & COMMUNITY HEALTH
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067
INDIA

1994

जवाहरलाल नेहरु विश्वविद्यालय
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI - 110067
CENTRE OF SOCIAL MEDICINE & COMMUNITY HEALTH
SCHOOL OF SOCIAL SCIENCES

CERTIFICATE

It is certified that this dissertation entitled "A STUDY OF QUALITY OF LIFE AND HEALTH PROBLEMS IN THREE DROUGHT AFFECTED VILLAGES IN PALAMAU DISTRICT", submitted by Mr. Manoj Kumar in partial fulfilment of the requirements for the award of the degree of Master of Philosophy of this University, has not been previously submitted for any degree of this or any other University. This is his own work.

We recommend that this dissertation may be placed before the examiners for evaluation.

DR S.K. SAHU
(SUPERVISOR)

18/7/94
DR. IMRANA QADEER
(CHAIRPERSON)

GRAM : JAYENU TEL. : 667676, 667557 TELEX : 031-73167 JNU IN

Dedicated

to

my

beloved mother

ACKNOWLEDGEMENTS

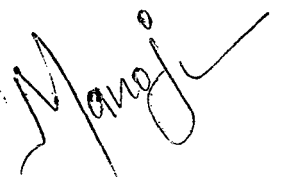
I wish to express my deep gratitude to my supervisor Dr. S.K. Sahu, Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi, whose constant guidance adorned with long well experiences whichled me to have appropriate approach of studying social problems and timely interventions at various stages along with fruitful discussions which enabled me to get the crux of this study and to accomplish it in final shape.

I am thankful to Deputy Commissioner of Palamau District and District Planning Officer for their sincere advices.

I am very much obliged to B.D.O., Circle Officer (C.O.), Sri Sarwan Kumar, Sri Surendra Kumar, Barda Babu, Sri Bansidhar Mishra, Dr. A.C.P. Sinha and other official of Chainpur Block for their sympathetical and systematical support during my study.

For providing regular moral support and cooperation, I am eager to say thanks to all staff of my Centre.

Lastly, I am grateful to Shashi and other friends who helped me a lot and obliged to all people of study villages without their whole hearted cooperation, this study would not have accomplished.



MANOJ KUMAR

CONTENTS

List of Tables & Graphs

CHAPTER III - PART A

List of Maps

ABBREVIATIONS

ANM	-	Auxilary Nurse & Midwife
B.D.O.	-	Block Development Officer
C.O.	-	Circle Officer (Anchal Officer)
F.C.I.	-	Food Corporation of India
I.R.D.P.	-	Integrated Rural Development Programme
J.R.Y.	-	Jowar Rozgar Yojna
MADA	-	Modified Area Development Approach
M.I.	-	Minor Irrigation
NWSP	-	National Water Shed Programme
N.G.O.	-	Non-Government Organisation
OPD	-	Outdoor Patient
PHC	-	Primary Health Centre
SC	-	Scheduled Caste
SFC	-	State Food Corporation
ST	-	Scheduled Tribe
S.D.O.	-	Sub-Divisional Officer
V.L.W.	-	Village Level Worker

GLOSSARY

Anchal	-	Circle Office
Ahar	-	is water reservoir
Annakal	-	drought due to shortage of food
Bechiragigaon	-	Barren or Fellow
Chuan	-	a pit hole, made of kachcha material in dried up river bed, for string cattle drinking water
Dhan	-	Rice, Paddy
Dikku	-	a word designed to call outsider in tribal community
Dukan	-	Shop
Fardiyadari	-	a petty commercial trading practice
Gram Sevak	-	Official at panchayat
Haat	-	weekly market
Hunriya	-	rice beer
Jalakal	-	drought due to shortage of water
Jinaura	-	millet
Kanda	-	Root's fruit
Kirana dukan	-	General store
Karmchari	-	a field officer of circle office
Mucca	-	Maize
Mota Anaj	-	coarse grains
Mukhiya		head of the panchayat
Naiya	-	another terms for Ojha
Ojha	-	traditioonal healer (male)
Ojhain	-	traditional healer (female)
Pagdandise	-	narrow path
Partune-dukan	-	General store
Sarpanch	-	head of the panchayat
Thana	-	Police station
Tola	-	A cluster of 4 or 5 households
Totmas & Totkas	-	a cultural and religious practice to get curved of illness
Trinakal	-	drought due to shortage of fodder
trough	-	Hauda, concrete construction

CHAPTER 1

INTRODUCTION & REVIEW OF THE LITERATURE

INTRODUCTION & REVIEW OF THE LITERATURE

Drought concerns with a particular state of an area when rainfall deficiency has reached to such an extent that the moisture available in the soil may not be found sufficient for the normal growth of plants and trees. It is a comparative terms and has a definite relation with deficiency of rainfall. The excess rainfall may also create drought conditions sometimes but not always when incessant heavy rainfall of small duration is not followed by adequate rainfall required at appropriate hour for standing crops. The excess rainfall in the form of floods and deficit rainfall in the form of drought are not favourable to human kind since their evil effects cause huge damages to life and property. The flood causes heavy damages to life and property within moments but the drought conditions can be fought and minimised to a great extent by adequate relief operations in a planned and systematic manner.

Drought ranks as one of the foremost among the earth's natural hazards representing the adverse effects due to shortage of water mainly from rainfall. They are a threat to food production. Even today, they are an outstanding instance of human limitations in the face of the broadscale formidable forces of nature. History reveals that all over

the world famines have almost always been a consequences mainly of droughts.

Before the industrial and commercial revolutions, famines were regarded as natural calamity from which no part of the world was completely immune, but there was no direct relationship between the economic conditions of the people and their vulnerability to famine. Some of the disastrous famines known in the world history occurred in ancient India, China, Egypt, Greece and Italy at a time when they were the most advanced countries in the world.[1]

The recent widespread interest in drought and famines arose out of the so-called "*SAHELIAN DISASTER*" which caused a continuous period of severe droughts in the `Sahel zone' of North Africa, for six years until 1975, with disastrous situation in 1972. About one lakh people died in the `Ethiopian famine' of 1972-74. In India too, 1972 was a bad year with acute water shortage in the States of Maharashtra, Karnataka, Rajasthan and Bihar.[2]

Under the changed conditions of this day, drought has ceased to be thought of as a natural disaster only, rather it has become now mainly a social problem of poverty and

death. The famous Bengal famine of 1943 is an example of man-made shortage of foodgrains and was the direct result of failure of all means of civil communications during the Second World War, accentuated further by artificial scarcities created by anti-social elements. The Bengal famine owes its disaster in the colonial policy. The policy of British Imperialism to divide and rule, negligence, and making money tendencies which had accelerated the ruinness in this famine of Bengal. The Sudan Famine of 1988, was also largely the result of the five year civil war. Due to increasing impact of man's activities on the eco-system, the droughts are aggravating in their intensity and ferocity. In year 1987, food producing countries in Asia were hard hit by a disastrous drought as reported by the United Nations Economic and Social Commission for Asian & Pacific (ESDAC). The drought of 1987 affected at least 300 million people in India with economic losses estimated at more than 2.5 million dollars and over 260 of the 407 districts of the country were affected badly that drought surpassed all records of the last 100 years. Millions of peasants left their homes on uncertain journey. Some had already migrated to lands they had never known, some were in the process of leaving the land they had cultivated for generations. While

other had decided to stick it out and wait for the worst. The ultimately battled the drought in their own ways.[3]

ACCOUNTS OF DROUGHT OVER INDIA

The following accounts from different sources give details associated with the year of large-scale drought over India. The river discharged data for 1901-60 are available only for two peninsular rivers, viz., Godavari and Krishna (UNESCO, 1891).[4] The area covered by the basins of these rivers is equivalent to 60% of the peninsular India and 20% of the whole of India. Since, the river discharge data pertain only to small portion of India, they are not fully representative of abnormalities of weather over the country. However, this record has been used as a rough indication of weather abnormalities over peninsular India.

(1) **The drought of 1891** - The monsoon of 1891 was late and was deficient over many parts of India but more seriously deficient in northeast India, comprising Assam, Bengal, Bihar and Orissa (Meteorological Department, 1891). Rain-fall deficiency led to large failure of crops. Scarcity and famines were experienced in different parts of the country. A drought of great severity affected Bengal, Bihar, Orissa, Rajasthan, Madhya Maharashtra, Andhra Pradesh, Tamil Nadu,

and Karnataka (Indian Famine Commission Report, Government of India, 1898).[5]

(2) **The drought of 1896** - The rainfall of the monsoon period in 1896 was considerably below normal over the whole of northern and central India (Meteorological Department, 1896). According to Indian Famine Commission Report, Government of India, 1898) the deficiency in monsoon rainfall led to partial failure of the crops over an unusually large area. The loss of crops was estimated to be one-third of the normal yearly production.[6]

(3) **The drought of 1899** - The monsoon of 1899 started on time but by the end of June showed signs of failure in several parts of India. The monsoon rainfall of this year failed almost over the entire country. The Meteorological Department declared the drought to be unique. The year was described at the time as the driest on record (IMD, 1899). The autumn harvest was a failure and few spring crops were sown. The famine was more widespread and severe than any the country had ever experienced. It was not merely a food famine but also one of fodder and water. Cattle died by the millions, and the Government helped farmers by very large appropriations of funds (IFCR, Government of India, 1901).[7]

(4) The drought of 1905 - The monsoon rainfall of 1905 was inadequate over a large part of the country, the deficiency in rainfall being great in West Uttar Pradesh, Haryana, Punjab, Himachal Pradesh, Rajasthan, Maharashtra and interior Karnataka (IMD, 1905). The river discharges over the Godavari and Krishna basins were 40% below average (UNESCO, 1971). The crops failed in the autumn of this year. However, there was scarcity and suffering over Maharashtra and certain other states (Bhatia, 1967).[8]

(5) The drought of 1911 - The monsoon of 1911 was characterized by its extreme weakness and unsteadiness from about the middle of June to middle of August. It was almost a complete failure in Rajasthan, Gujarat, Saurashtra and Kutch. During the second half of August, the monsoon, which at one time threatened to prove as serious as in 1877, revived with the result that the drought mitigated considerably (IMD, 1911). The river discharges of the Godavari and Krishna basins were 90% below average (UNESCO, 1971). The famine, however, was severe only in Maharashtra (Srivastava, 1968).[9]

(6) The drought of 1915 - The most marked features of the monsoon of 1915 were its late arrival, its weakness and

unsteadiness in July and August, and its failure to penetrate into northwest India before the middle of September. The deficiency in monsoon rainfall was most pronounced in northwest India which barely received half of its normal supply (IMD, 1915). The river discharges of Godavari and Krishna basins were 50% below average (UNESCO, 1971). The deficiency in monsoon rainfall led to famine, especially of fodder, over Bihar, Punjab, Rajasthan, Gujarat, Saurashtra and Kutch (Srivastava, 1968).[10]

(7) **The drought of 1918** - The monsoon of 1918 was exceptionally feeble and rainfall was seriously deficient over the whole of the country with the exception of northeast India (IMD, 1918). The river discharges of the Godavari and Krishna basins were 60% below average (UNESCO, 1971). The crops consequently failed. The drought in year 1918 was more widespread and severe than the country had experienced in last two centuries. The seriousness of the drought conditions over India is indicated in the comments from the Progress Report in Agriculture for 1918-1919 (Government of India, 1920) and the weekly Kesari from Pune, 1 October 1918. Reports clearly indicate that there was an almost unprecedented drought which resulted in the famine of both food and fodder over practically the whole of the country.[11]

(8) **The drought of 1920** - After making a good start the monsoon in the end proved disappointing. The deficiency in monsoon rainfall was considerable over Punjab, Jammu and Kashmir, West Rajasthan and Andhra Pradesh (IMD, 1920). The river discharges of the Godavari and Krishna basins were 70% and 25% below average, respectively (UNESCO, 1971). The comparative failure of the rains in September not only seriously affected the standing monsoon season crops but was responsible for a large decrease in area in the succeeding winter (Government of India, 1922).[12]

(9) **The drought of 1941** - Monsoon rains were 25-40% below normal over large parts of Uttar Pradesh, Haryana, Madhya Pradesh, Maharashtra and Telangana (IMD, 1941). The river discharges of the Godavari and Krishna basins were 60 and 30% below average, respectively (UNESCO, 1971).[13]

(10) **The drought of 1951** - The chief features of monsoon of 1951 were - weak monsoon conditions, in general, throughout the period, with continued drought conditions over Rajasthan, Gujarat, and Saurashtra and Kutch from about the middle of August onward, resulting in famine conditions there (IMD, 1952). The river discharges of the Godavari and

Krishna basins were 25% below average (UNESCO, 1971).[14]

(11) The drought of 1965 - The monsoon of 1965 was deficient over the whole of the country, being appreciably so in northwest India, central parts of the country and part of eastern India (IMD, 1966). During 1965-66 India witnessed one of the severest droughts in recent history, the worst affected areas being Bihar and east Uttar Pradesh, where special measures were taken to provide relief to the drought-stricken people. To meet the heavy shortfall in foodgrains production in the country, the Government intensified internal procurement and arranged for massive imports (Research and Reference Division, 1967).[15]

(12) The drought of 1966 - The monsoon rainfall was characteristic of drought condition over most of the northern parts of the country. This happened for the second year in succession, the worst affected areas being Bihar and east Uttar Pradesh (IMD, 1967). The food situation in the country continued to be extremely difficult due to widespread drought and the consequent failure of crops for the second year in succession (Research and Reference Division, 1968).[16]

(13) The drought of 1972 - The delayed onset of monsoon of

1972 and a prolonged break in July led to drought conditions over the country, particularly in many parts of north India and north peninsular (IMD, 1973). The food situation in the country was rather difficult in 1972 because of extensive damage to monsoon season crops resulting from erratic and scanty rainfall and drought conditions in several parts of the country. Scarcity conditions were experienced in varying degrees in a number of states, the worst affected areas being Maharashtra, Gujarat, Rajasthan and Andhra Pradesh. Toward the end of 1972, arrangements were made to import two metric tons of foodgrains to replenish the buffer stocks and to ensure uninterrupted flow of supplies through public distribution (Research and Reference Division, 1974).[17]

(14) <u>The drought of 1974</u> - The monsoon of 1974 proved erratic. Rains were 20-30% below normal over large parts of Gujarat, Rajasthan, Orissa, West Bengal, Bihar, Haryana, and Punjab. Consequently, a shortage of 7 million metric tons in the monsoon season crop of food grains was feared. The possibility of importing large quantities of grains was also restricted owing to the high world prices. In the climate of scarcity, many growers held on to their stocks and there was also a considerable amount of clandestine trading. In

Orissa and West Bengal low stocks of grains and lack of purchasing power led to famine conditions in rural areas. The Government adopted a series of measures to curb money supply, curtail expenditure and raise more revenue.[18]

ACCOUNTS OF FLOODS OVER INDIA

The word floods used here pertains to excessive rainfall over large parts of the country.

The following information from different sources gives detail of flood occurrence over India.

(1) **The flood 1892** - The monsoon rainfall of 1892 was normal or in excess over the whole of India. It was in large excess in Haryana, Punjab, Jammu and Kashmir, Rajasthan, Gujarat, Andhra Pradesh, Tamil Nadu and Karnataka. IMD (1962) has described 1892 as flood year in which floods or excessive rainfall occurred over large parts of the country.[19]

(2) **The flood of 1893** - The monsoon rainall of 1893 was excessive over all of northern and central India, with the greatest excess being in Bihar, Haryana, Punjab, Jammu and Kashmir, Rajasthan and Gujarat. Monsoon rains was more abundant and frequent than usual (IMD, 1893).[20]

(3) **The flood of 1894** - The monsoon rainfall of 1894 was normal or in excess over the whole of India. It was in considerable to large excess in Punjab, Himachal Pradesh, Jammu and Kashmir, Rajasthan, Gujarat, Saurashtra and Kutch (IMD, 1894).[21]

(4) **The flood of 1916** - The monsoon rains were exceptionally heavy in this year which is one of the wettest on record, a greater excess than this having occurred only twice before in 1878 and 1893 (IMD, 1916). The river discharges of the Godavari and Krishna basins were 15 and 30% above average, respectively (UNESCO, 1971).[22]

(5) **The flood of 1917** - The monsoon of this year was phenomenally vigorous, the total rainfall during the monsoon period being by far the highest on record (IMD, 1917). IMD (1962b) described this year as one of the big flood years over a large part of the country. The river discharges of the Godavari and Krishna basins were 40 and 10% above average respectively (UNESCO, 1971).[23]

(6) **The flood of 1933** - The monsoon of 1933 provided abundant and well-distributed rainfall over a large part of the country. The total rainfall during the monsoon was in large

excess in Punjab, Rajasthan, Gujarat and Saurashtra and Kutch. The river discharges of Godavari and Krishna basins were 35% above average (UNESCO, 1971). Excessive rains and flood damaged crops (IMD, 1933; Government of India, 1936).[24]

(7) **The flood of 1936** - The monsoon of 1936 had no pronounced breaks. The rainfall of the period June-September was unevenly distributed, with several spells of heavy rain in Gangetic Plain, giving rise to serious floods, and scanty rains in the Gujarat and Maharashtra (IMD, 1936). The river discharges of the Godavari and Krishna basins were 25% above average and 20% below average, respectively (UNESCO, 1971).[25]

(8) **The flood of 1938** - The monsoon of 1938 was marked by spells of heavy rains which resulted in floods in Brahmaputra valley in July and in Uttar Pradesh in August. According to press reports, large areas were submerged and breaches in railway lines caused serious dislocation of traffic in parts of Assam and Bengal (IMD, 1938). The river discharges of the Godavari and Krishna basins were 25% above average and normal, respectively (UNESCO, 1971).[26]

(9) The flood of 1942 - During the monsoon of 1942 there was abundant and well-distributed rainfall in the country, and it was in great excess in West Uttar Pradesh, Jammu and Kashmir, east Rajasthan, west Madhya Pradesh and Gujarat (IMD, 1942). The river discharges of the Godavari and Krishna basins were 30% above average and near-normal, respectively (UNESCO, 1971).[27]

(10) The flood of 1956 - The monsoon of this year over a major part of the country extended for a period of five months, from mid-May to mid-October, instead of the usual four months, June-September. Also, the activity of the monsoon was being reinforced by successive depressions both in Bay of Bengal and the Arabian Sea areas, resulting in the total season's rainfall being generally above normal, many areas getting an abundance of it. The excessive rainfall gives rise to the severe flood in the parts of Assam, West Bengal, Bihar, Uttar Pradesh and Punjab and minor flood in several parts (IMD, 1957). The river discharges of the Godavari and Krishna were 30% and 60% respectively (UNESCO, 1971).[28]

(11) The flood of 1959 - The monsoon of 1959 will be particularly remembered for the devastating floods it caused in

Assam in June, Jammu and Kashmir, Saurashtra and Kutch in July and unprecedented floods in Gujarat and coastal Andhra Pradesh in September (IMD, 1960; Research and Reference Division, 1961). The river discharges of the Godavari and Krishna basins were 125 and 55% above average, respectively (UNESCO, 1971).[29]

(12) The flood of 1961 - Many states experienced heavy flood during the monsoon of 1961. A special feature of this year's floods was that states like Kerala, Tamil Nadu, Karnataka, Madhya Pradesh and Rajasthan which are normally not subject to appreciable floods, experienced heavy floods as a result of heavy and concentrated rainfall. Many rivers recorded the highest ever levels this year (Research and Reference Division, 1962). The suffering and losses of life and property due to floods caused by the bursting of protective dams designed to control floods or regulate other projects were so alarmingly high that the economics of flood control measures had to be reviewed by agencies like Central and State Flood Control Boards, the Central Water and Power Commission, Ministry of Irrigation and Power, etc. (IMD, 1962a).[30]

(13) The flood of 1975 - During the vigorous monsoon of

1975, West Bengal, Bihar, Orissa, Uttar Pradesh, Kerala and some other states experienced the fury of floods with heavy damage to life, property and standing crops (Research and References Division, 1976).[31]

DROUGHT FROM THE THINKERS' POINT OF VIEW

India, which is predominantly an agricultural country, depends mainly on the monsoon rains for its agriculture. A major proportion of the cultivated areas still depends on the rainfall as the only source of water for raising crops, though much headway has been made to extend the areas under irrigation. The rains from the southwest monsoon contribute the major portion of the total precipitation during the year over practically the whole of the country. The distribution of this monsoonal rainfall is non-uniform not only in terms of space but in time. The so-called `onset' and `withdrawal' dates of the south-west monsoon are mere a text book norms that comes true only rarely. Quite often the onset is delayed and the withdrawal is advanced, while occasionally the onset is earlier or the withdrawal is later. But in case, the season is very irregular with long spells of scanty rain or dryness, it is the variations of rainfall which are quite often unpredictable and which are at the

root of many a drought.[32]

The important natural causes of Indian famines are large-scale droughts and floods. Although, the onset, persistence and termination of a drought are usually gradual process, its total impact may be far more disastrous than that of flood. Droughts in successive years or prolonging continuously for more than one or two years have a devastating effect on food production and the country's economy. Various attempts have been made to define and classify droughts. There is no universally acceptable definition of drought, although the world is associated with prolonged and abnormal rainfall deficiency.[33]

Definition of droughts are almost as numerous as there are publications on the subject. "Lack of sufficient water to met the normal water requirement of the locality is a common and a fairly satisfying definition."[34]

Early thinkers considered drought as prolonged periods of consecutive days without rainfall. The British Rainfall Organisation (Air Ministry Meteorological Office, 1936) - defined an `Absolute Drought' as a period of at least 15 consecutive days, none of which is credited with a rainfall of 2.5 mm or more.[35] An extensive survey of the definition

of drought has been made by Hounam, C.E. - Rainfall is the most important single factor influencing the incidence of drought and practically all definitions use this variable either single or in combination with other meteorological elements.[36]

Other attempts to define drought restricted rainfall to a definite percentage of the monthly or annual normal value.

Ramdas, L.A. defined a drought or flood with reference to the variation of southwest monsoon rainfall only. According to Ramdas, drought occurs when the actual southwest monsoon rainfall is less than the normal by twice the mean deviation or more, and floods occurs, when the actual southeast monsoon rainfall exceeds the normal by twice the mean deviation or more.[37]

In India, Meteorological Department, an annual rainfall of 75% of normal or less is taken as drought, and 50% or less as severe drought. Both these definitions suffer from the disadvantage that the drought severity is not comparable in space because no account is taken of spatial differences in the variability of rainfall. **Bates, C.G.** has also defined drought in terms of percentage of the monthly or

annual normal value of rainfall. He states that drought occurs when the annual precipitation is 75 per cent of the normal value or when the monthly precipitation is 60 per cent of the normal.[38]

Ramdas, L.A. and Malik, A.K. defined a week of drought as a week with the actual rainfall equal to 50 per cent of the normal rainfall or less and a spell of drought extending over four or more consecutive weeks will bring serious repercussions on agriculture.[39] Since, the rainfall plays a prominent part in the occurrence of drought and any picture showing the special distribution and the frequencies of occurrence of deficiencies of rainfall, will be of some use in finding out areas liable to drought.

According to **Sir Gilber Walker**, drought has been categorized in terms of its percentage of rainfall falling. He has called the years of `Large', `serious', and `disastrous' deficiency as those varying between 30 to 45 per cent, between 45 to 60 and over 60 per cent of the mean rainfall respectively.[40] **Tannehill, I.R.** descries drought and floods as the two faces of the same coin - "the spell of weather".[41]

The above definitions fail to take into account the

soil moisture and so are untenable any rational definition of drought, which cannot dissociate itself from the social moisture content and its variations for a drought begins not when rainfall ceases but rather only when the plants roots can no longer obtain moisture from the soil.

As drought has been defined by Thornthwaite, C.W. and Mathur, J.R., as a meteorological situations in which the amount of water required for maximum evapotranspiration exceeds the amount available from the rainfall and soil.[42]

> Since drought begins as a result of a sequence of weather events culminating in the production of acute water shortage, drought there is comparatively short transient periods of inadequate or total absence of rainfall or available water for the normal biological activity (Subrahmanyam, V.P.).[43]

Subrahmanyam thus pointed out that drought is a state of inadequate or total absence of rainfall, or if it is available than only to meet some basic biological activities. It is comparatively short transient periods of insufficient supply of rainfall water.

The recent thinking about drought is that it has a

regular life cycle with an origin, intensification, expansion and decay. And the duration of a drought spell is an important a feature as is intensity. Since, both of them together, and not either of them individually, determine the impact of water shortage or economic level of a situation. The new techniques of study in drought climatology have been thus applied by the employing the concepts and criteria of water balance charts both in normal year as well as in the year of extreme climatic shifts and the years of drought may be identified and their intensities too assessed.

The modern thinkers take the drought now as the social problem of poverty, decay, dearth and death rather a natural hazards. Now, by concluding all above definitions of drought, a synthesis can be put in this manner that drought is not only a natural hazard or being created by natural agencies all the time, rather it is artificial creation of man. It is man made problem along with natural forces. Most of the time, beside all these meteorological through artificial agencies, generating social problem largely, or made situation deliberately like a drought. Its example may owe its existence in a British period. How they had revealed the artificial situation though speaking up poverty, inade-

quate supply of water, lack of sanitation etc., maximum land revenue, maximum rate of land tax eventually led the farmers in a situation like drought. So, to my point of view it is a social problem besides the natural lackness, which need an integrated approach to sort out.

KINDS OF DROUGHT

Subrahmanyam classified drought into three classes:[44]

(1) **Permanent drought:** that is characteristics of arid climates without artificial irrigation.

(2) **Seasonal drought:** It is found in climate that have well recognised rainy and dry seasons.

(3) **Cartangent drought:** which is caused due to the rainfall being irregular and variable and may occur in any season, almost anywhere, but it is typical and more common of the sub-humid climates - such condition of drought creation also has been supported by Thornthwaite.

Most parts of India which have a typical monsoonal design suffer from the seasonal drought whose incidence duration as well as termination are usually known, and fairly established by observation and experience, agricul-

ture in these zones is successfully practised by adjusting the dates of showing/planting to suit the characteristics of the rainy season and also by choosing the crop varieties of appropriate seasonally and duration.

Drought is a permanent feature of arid climate while in semi-arid and sub-humid locations, drought is a seasonal characteristic alternating with periods of adequate moisture. The humid climate has a prevailing surplus condition but drought occurs intermittently when precipitation is inadequate in time or amount to sustain immediate needs when the monsoon fails. Under strictly rainfed condition, a great damage to agricultural crops is thus caused by a prolonged spell of drought.

In India, the drought in the beginning of the wet (monsoon) season can cause the Kharif operation to be delayed; if prolonged, it may depress the crops increase to a great extent. During the rainy season, if the drought prolongs, the growth of the crop is stopped and even the standing crop gets scorched off due to acute shortage of water. The spell of drought during the post wet season may ablazed out a ripe kharif crop and further create adverse conditions for the next rabi culture and may reduce the rabi

increase too. All these adverse effects of droughts are based upon the time of their occurrence. Hence, the drought is further classified in time from by Subrahmanya, and also asserted by Malik, A.K. based upon their time of occurrence.[45] These are:

(1) Pre-Monsoon drought - the early season

(2) Monsoon drought - the mid-season

(3) Post-Monsoon drought - the late season.

In terms of their incidence and effects, droughts are:

(1) Meteorological drought

(2) Hydraulic drought

(3) Agricultural drought.

(1) Meteorological Drought:

The Meteorological Department of India defines drought as a situation occurring in any where when the annual rainfall is less than 75 per cent of the normal. Further gives the classification of it.[46]

(a) Moderate drought - occurs when rainfall deficit is between 25 to 50 per cent.

(b) Severe drought - When deficiency is above 50 per cent.

(c) Chronic drought - When the deficiency of rainfall reported more than 40 per cent of the normal.

(d) Drought area - It has been identified after repetition of rainfall occurrence only 20 per cent.

(1) Meteorological Criteria:

- Drought is the result of an imbalance between the soil moisture and evapo-transpiration needs of an area.
- The basic characteristic of drought is a steady rise in a temperature, in addition to the absence, or the severe deficiency, of rainfall over a fairly long period.
- Several factors such - precipitation, temperature, wind velocity, sunshine, soil texture, soil moisture and antecedent rainfall interact to produce the situation.
- However, the key role is played by rainfall and the crucial variable are its - distribution, its variability, and its capacity to meet evapo-transpiration needs.

(2) Hydraulic Drought:

It means going down of the water table on account of

the underground reservoirs, not getting normal replenishment through periodation-process from the surface due to paucity of rain water. This also may not create any serious problem if rains had been plentiful the previous year and there is plenty of underground water available to offset the effect of the drought year deficiency on the total supply of water. The same can be said of water-level in surface water reservoire. It is only when these two extenuating circumstances are absent that the drought takes the third form, viz. severe adverse effect on agricultural product. The drought of 1987 was of this type. The first two extenuating circumstances were absent because this year (1987) is the fourth one of drought in succession.[47]

(3) Agricultural Drought:

Absence of these factors create drought.

Ecological Balance:- the drought proof device.

(a) Land, water and forest are the important resources which satisfy the basic needs of human life.

(b) Land is finite, forest and water are renewable but all these three resources are inter-dependent.

Ecological balance:- lacking of it creates agricultural drought. The problem emerging out of them are inter-related and therefore call for inter-related solution.

3) Land, forest and water are put to a variety of uses. In view of the holistic science, infrastructure of life in the forest is the foster another of agriculture in perpetuality and a common regular of soil, water and air as well.

4) All these resources are being utilized to their maximum capacity. Often there arises a kind of crisis of these resources, say the problem of ecological imbalance.[48]

The problems so created are:

a) Shortage of food creates (starvation - ANNAKAL).

b) Shortage of water creates acute problem of drinking water or (Jalakal).

(c) Shortage of fodder creates (TRINAKAL).

Other problems are fuel and power (energy) and lastly unemployment, health and sanitation and the ultimate results are droughts and famines.

5) To mitigate or reduce the adverse effect of agricultural drought in the country, the agricultural research

oriented approach should be adopted.

6) Social, economic and political factors are responsible which impinge upon the use and misuse of these resources - both natural and artificial or man-made.

7) Some of the problems emerge due to a widening gap in the level of equi-distribution and in due time. Bengal famine is an instance of such level which witnessed a moral and social breakdown as well as administrative breakdown.

The failure of monsoon in 1986 in succession to two drought years of 1984 and 1985 have increased the intensity as well as severity of drought in Rajasthan. The Government as well as a large population has been affected by the natural calamity and have no other option than to face the same with hard work patiently till the onset of next monsoon.

A temporal and regional analysis of droughts in India has recently been conducted by Shri Rajendra Prasad of India. Meteorological Department, Poona which has been published in Vayu Mandal under vol.16 and no.3 and 4 July, December, 1986 edition. The intensity of drought condition in Rajasthan have been analysed on the basis of two categories i.e. moderate and severe drought. The percentage

deficiency of rainfall data received at Raingange station during Monsoon period is divided into three groups as mentioned below:[49]

(a) 25% or less deficiency of rainfall out of 100% - No drought.

(b) 26% to 50% deficiency of rainfall - Moderate drought.

(c) 51% or more deficiency of rainfall - severe drought.

It has also been presumed that a drought year will be that year in which 20% or more geographical area is affected by either moderate or severe or from both. The severe drought year will however be that year when total droughts including severe is observed in 20% or more area. The medium drought year will be that year when there is no severe drought but area is 20% or more. Area prone to drought conditions is that area where the cycle of drought is repeated by 20% or more area and time.[50]

Frequency of Drought in Rajasthan

It is pertinent here that this Rajasthan state has been witnessing continuous drought conditions for years together

as mentioned below:[51]

(1) Out of 18 drought years, there were seven drought years when 50% or more areas was affected by severe drought in Rajasthan.

(2) Five years continuous droughts were observed from 1965 to 1969.

(3) Four years continuous droughts were observed from 1984 to 1984 to 1986.

(4) Two years continuous droughts were observed from 1971 to 1972.

Need for the Present Study

The present study has been conceptualised on the basis of some of the hypothesis. The bases of these hypothesis has been drawn from the existing notions or the work which had been done on the Palamau district related to drought situation. So, two assumptions were taken before the starting the study.

These are:- (i) It was tribal people who had been affected severely than to non-tribal; (ii) The drought was or is not only the result of the natural calamities or forces rather it was or is man-made creation.

On the basis of above assumptions, there was a need to know the total dimension of drought and its impact on the life condition of the various sections of population in Palamau. These are tribal, non-tribal, peasant and other landless agricultural labourers. It was felt necessary to study the quantum of problems of the drought affected population to test above hypothesis. On the part of the relief operation, it was need to understand what were the various measures undertaken by the government to cater relief work to this affected population. Besides that, it was essential to know what were the consequences of drought on health condition of the people. What sorts of changes were taken place in absence of basic infrastructural facilities? Whether migration took place or not? What was the perception of affected people regarding the causes of the drought? How far monsoon was responsible or whether it was malpractices that had brought the situation like drought.

The need of the present study was thought in the wake of knowing what were the ongoing trends to face the such disastrous blow? What was impact of drought on the cultivation an overall agricultural activities. It was designed to study particularly the health-dynamics of the people of this

drought affected area. Whether any special kind of disease had been brought by the natural haphazards or the prevalent diseases were not new one rather had been intensified the severity of it? How far the people of this area coped up the problems being generated by the situation what is called "Drought"?

CHAPTER II

DESIGN OF THE STUDY AND METHODOLOGY

DESIGN OF THE STUDY AND METHODOLOGY

Objectives:

To carry out a study in the drought affected area of Palamau district following the specific objectives were identified:

(1) to study the overall life process of people in drought affected areas;

(2) to assess the quantum of the suffering in terms of starvation, various health disorders of the people in absence of basic amenities and services;

(3) to study the perceptions of the people about the drought and their basic needs; and urgent needs to adapt themselves to overcome from drought;

(4) to study the various relief work provided by both the Government and non-Government agencies, for the drought affected people.

Design of the Study:

On the basis of above specific objectives, following

design of the present study has been drawn.

Since Palamau district has been affected by the drought, the researcher contacted the district official such as District Deputy Commissioner, District Planning Officer, District Statistical Department along with Block Development Officer, Block Circle Officer, Mukhiya and Sarpanch of village panchayat and had detail discussion separately to identify a severely affected block. Out of 17 blocks of Palamau district, the Chainpur block has been selected as most severely affected block of this district.[52]

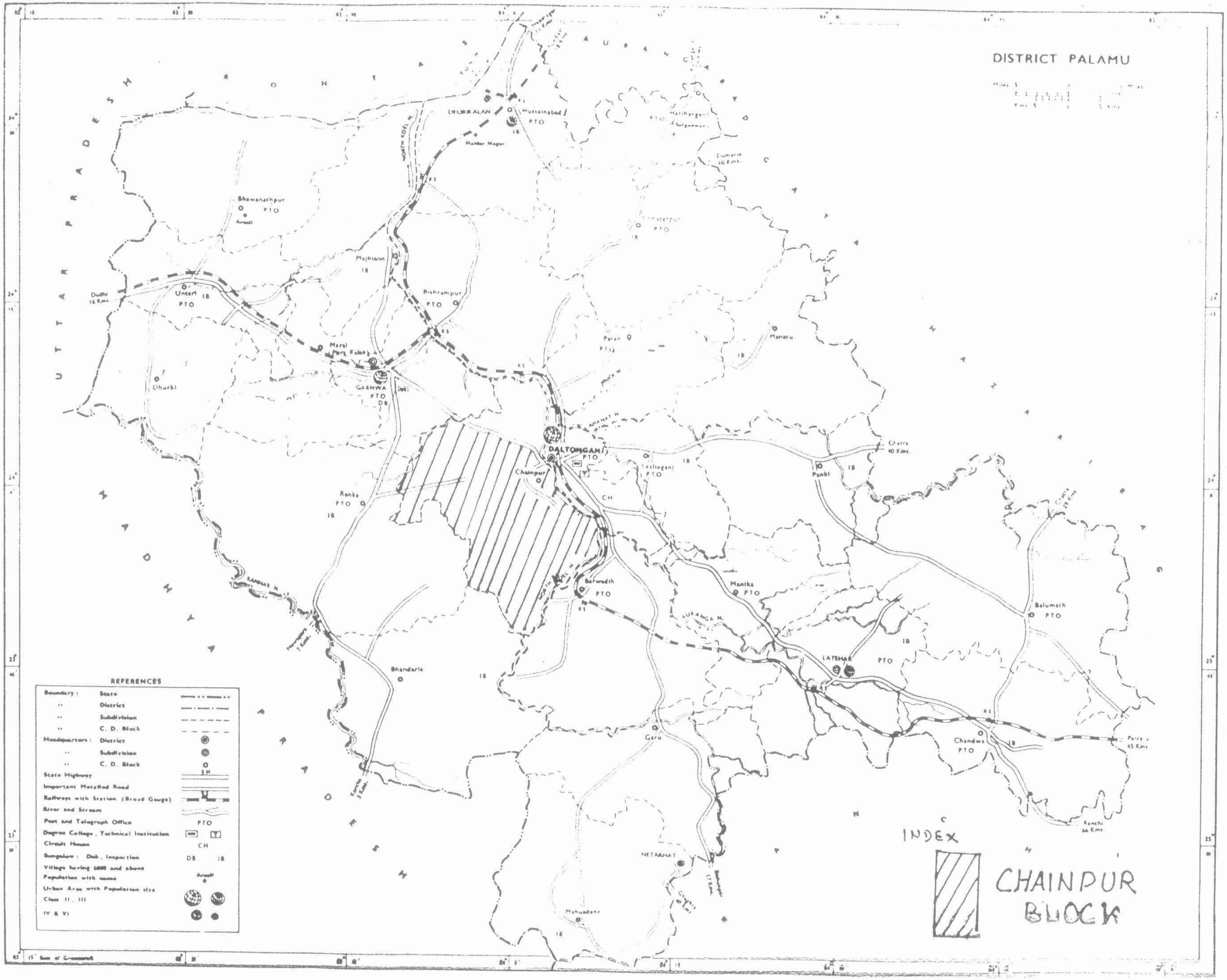
In Chainpur block itself, it was decided with the help of Block Circle Officer and Block Development Officer that the present study would be undertaken in only three villages on the criteria of predominantly Tribal and non-Tribal population. It is reported that tribal dominating villages such as - Karma and Temerai were severely affected villages by drought, on the other hand, Neura as a non-tribal village was being less affected by the drought. The researcher selected these three villages of different nature just to make a comparative study of tribal and non-tribal population.

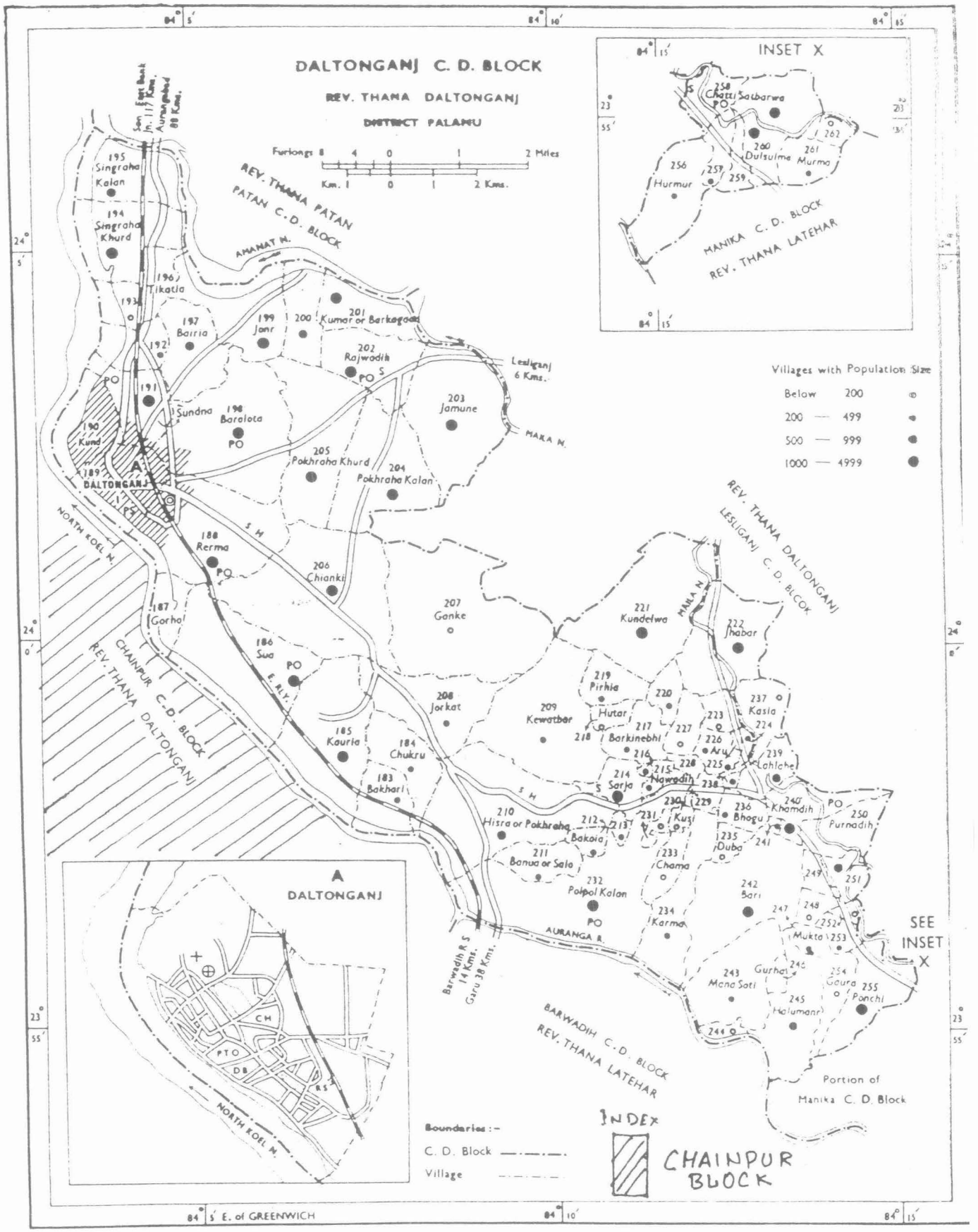
Study Area

A. Palamau District: A Socio-economic Profile

The Palamau district is not only a backward but poorest district of Bihar, where the rate of urbanisation and industrialisation is very slow. A sound proportion of tribal habitants is one of the dominating characteristics of this district. The district is situated between longitude $83^{o}20'$ to $85^{o}0'$ East and latitude $23^{o}20'$ to $24^{o}40'$ North. The geographical and political boundaries of the Palamau district - The district is bounded on the north Rohtas and Aurangabad districts, on the east by Hazaribagh district, on the south by Ranchi district and on the west by Surguja district of Madhya Pradesh and Mirzapur district of Uttar Pradesh and newly created Garhwa district, which resumed as separate district on 1st April 1991, from Palamau district. (Map-I)

The district Palamau was constituted on the 1st January 1928. Just after the movement of 1857, Palamau district had been formed into a separate administrative unit of the state of Bihar with the headquarters at `DALTONGANJ'. The Garhwa was one of the sub-division of Palamau district, but it


DISTRICT PALAMU
DALTONGANJ
Chainpur
GARHWA
LATEHAR
Hussainabad
PTO
Bhawanathpur
Untari
Dhurki
Majhiaon
Bishrampur
Meral
Ranka
Bhandaria
Leslieganj
Panki
Manatu
Patan
Barwadih
Manika
Balumath
Chandwa
Garu
NETARHAT
Mahuadanr
UTTAR PRADESH
MADHYA PRADESH
REFERENCES
Boundary : State
District
Subdivision
C. D. Block
Headquarters : District
Subdivision
C. D. Block
State Highway
Important Metalled Road
Railways with Station (Broad Gauge)
River and Stream
Post and Telegraph Office
Degree College, Technical Institution
Circuit House
Bungalow : Dak, Inspection
Village having 5000 and above Population with name
Urban Area with Population size Class II, III
IV & VI
INDEX
CHAINPUR
BLOCK


DALTONGANJ C. D. BLOCK
REV. THANA DALTONGANJ
DISTRICT PALAMU
Furlongs 8 4 0 1 2 Miles
Km. 1 0 1 2 Kms.
INSET X
Villages with Population Size
Below 200
200 — 499
500 — 999
1000 — 4999
REV. THANA PATAN
PATAN C.D. BLOCK
AMANAT N.
MAKA N.
Lesliganj 6 Kms.
REV. THANA DALTONGANJ
LESLIGANJ C.D. BLOCK
CHAINPUR C.D. BLOCK
REV. THANA DALTONGANJ
NORTH KOEL N.
E. RLY.
S H
AURANGA R.
Barwadih R S 14 Kms.
Garu 38 Kms.
BARWADIH C.D. BLOCK
REV. THANA LATEHAR
MANIKA C.D. BLOCK
REV. THANA LATEHAR
SEE INSET X
Portion of Manika C. D. Block
A
DALTONGANJ
CH
PTO
DB
RS
Boundaries :-
C. D. Block
Village
INDEX
CHAINPUR BLOCK
84° 5' E. of GREENWICH

resumed separate status of district on 1st April 1991 from this district with 8 blocks. Now only 17 blocks are in this district. Daltonganj town is the headquarter and the principal town of the district situated on the river KOEL. The town has taken its name after colonel Dalton, Commissioner of Chotanagpur in 1861. (Map 2)

The word/name Palamau defines the economy of the region, `Pa' stands for `Pahaad' or mountain, `la', is for `lac' or `Lah' and `Mau' for `mahua'. Hills and hillocks are spread uniformly over the district. The area is rich in lac production. According to the 1926 Gazetteer, Palamau ranked second among lac production districts in India. Then, about 3,135 tonnes of lac were exported annually in the form of stick lac hellac from Palamau. The figure however had come down to 365 tonnes in 1981-82.

Mahaua is a supplementary food for humans, fodder for livestock, a source of edible oil for cooking, and can also be processed to yield country liquor.

The district is having three sub-divisions, 254 panchayats which consist of 2696 villages and 282 `BECHIRAGI GAON' (Barren land) distributed into 17 blocks and 17 anchals (circle office) and also having 22 police stations.

The district has total areas of 7,87,914.44 hectares, out of which 3,35,212.25 hectares is covered under forest and hills constituting 42.5% and total cultivated area contribute 43.3% to total areas. Out of total net area sown of 1,20,448.85 hectares, the existing irrigation scheme has a designed command area of 46,572 hectares were irrigated during the year which was only 7.5% of the net sown area.

The Government of India has listed 77 districts as drought affected under "Drought Prone Area Programme". Out of 77 listed district, Palamau district has been listed from the Chotanagpur region. And, Chainpur block is being recognised as most severely affected block through DPAP report.[53]

The total population of the district is according to 1991 Census is 16.50 lacs (16,49,841), out of which males and females are 8,53,769 and 7,96,072 respectively. Total scheduled castes are 4,23,730 in which male (2,18,796) and female (2,04,934). And total scheduled tribes are 3,17,834, of which male (1,16,734) and female (1,56,100). Total literate population is of 4,17,272, therein, male (3,08,285) and female (1,08,987).[54]

Total cultivators and farmers in this district are 2,34,208, of which marginal farmers are (1,57,000) and small farmers (35,000). And total labour force of this district is 5,71,497. The population density is very low at 151/sq. km.[55]

There are three colleges in this district which come under jurisdiction of the Ranchi University, Ranchi. Total numbers of school to impart education at all three levels are 2,455, of which 1,829 are primary schools, 518 middle school and high school are 108 in district.

There are 17 Primary Health Centre along with 62 sub-centres and are district Hospital are working to cater adequate treatment to the patients. There are 126 banks, 31 veterinary hospitals. Departmental inspection bungalows are 25 and 18 forest rest houses. And 19 residential hostels for Adivasi students, situated in this district.[56]

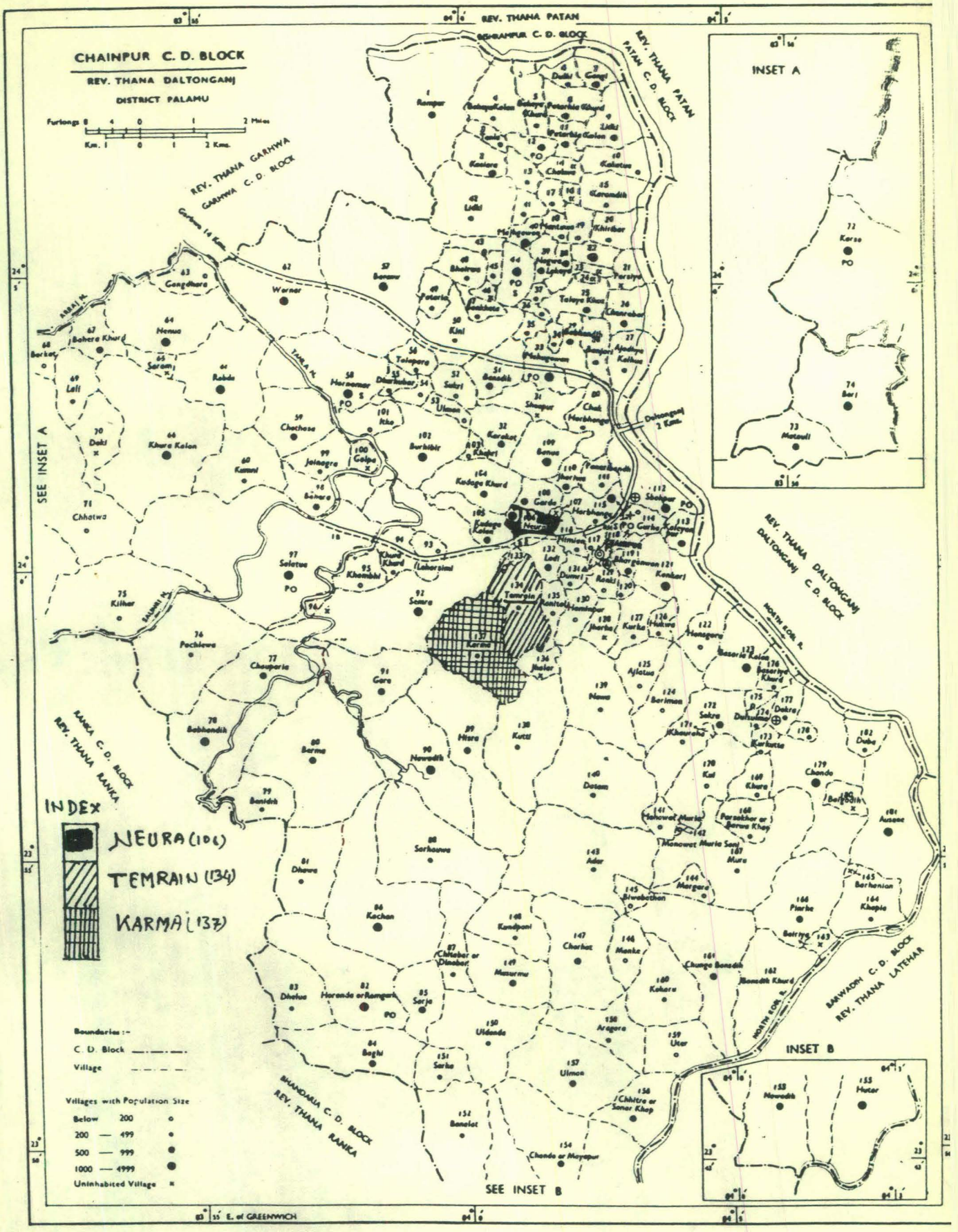
The climate of the district is hot and dry but healthy. Oppressive hot summer, high humidities and irregularities of rainfall in *Hathia Nakshatra* during monsoon season are some of the characteristics of the climate of Palamau. The average or normal rainfall of this district is 1,279.9 mm (annual).[57]

More than 70% of the total population is dependent on agriculture and forest for their livelihood. Due to undulating nature of the land and reduction in forest cover, the surface run off of water is high. Because of this not only is the amount of rainfall important but also its spread. The district is having very least industrial expansion. Only JAPLA CEMENT FACTORY at JAPLA and BIHAR CAUSTIC and CHEMICALS LTD. at REHLA are big set up. The existence and growth of small scale and village industries are negligible. Due to lack of industries, the process of urbanisation is very slow.

B. Chainpur Block:

The Chainpur block is one of the blocks of Palamau district which has been recognised as most severely affected under the blow of drought through "Drought Prone Area Programme" of central government. It comes under the jurisdiction of sub-division and headquarter "Daltonganj" of the district, linked with concrete made bridge over river Koel, situated along with river bank at the distance of 6 km. from Dantonganj. (Map 3)

The political and geographical boundaries of this block


CHAINPUR C. D. BLOCK
REV. THANA DALTONGANJ
DISTRICT PALAMU
Furlongs 8 4 0 1 2 Miles
Km. 1 0 1 2 Kms.
REV. THANA PATAN
REV. THANA PATAN C. D. BLOCK
REV. THANA GARHWA
GARHWA C. D. BLOCK
SEE INSET A
INSET A
REV. THANA DALTONGANJ C. D. BLOCK
NORTH KOEL R.
RANKA C. D. BLOCK
REV. THANA RANKA
BHANDARIA C. D. BLOCK
REV. THANA RANKA
BANWADIH C. D. BLOCK
REV. THANA LATEHAR
INSET B
SEE INSET B
INDEX
NEURA (106)
TEMRAIN (134)
KARMA (137)
Boundaries :-
C. D. Block
Village
Villages with Population Size
Below 200
200 — 499
500 — 999
1000 — 4999
Uninhabited Village
83° 35' E. of GREENWICH

are - in north, the Bishrampur anchal under Patan thana and north-eastern part belongs to Patan anchal while its eastern limit touches the boundary of Daltonganj, on its south-eastern, Barwadih anchal (Latehar thana), Bhandaria anchal is on its south and south-western limit while western part is attached with RANKA Anchal (thana Ranka) and newly created Garhwa anchal makes its north-western boundary. River Koel passes through its north-east, whole eastern part and southern limit.

Total population of this block is 1,34,116 wherein male population shares about 69,735 and female 64,381. Total scheduled castes are 30,126, in which male (15,666) and female (14,460) and total scheduled tribes are 25,012, contributed by male (12,960) and female (12,052) (Census of 1991).[58]

The block contains 182 villages under 24 panchayats which have been further divided into 3 sectors. Each sector is having considerable number of villages based on size and strength of population. The administrative head of each panchayat is Mukhiya or Sarpanch. But all three sectors have been administrative through the help of Block Development Officer and Circle Officer. The Gram panchayat acts as

basic unit of administration under Mukhiya through B.D.O. and C.O. of the block. Besides them, other officials are such as Karmachari, gram-sevak, chowkidar and village level workers (V.L.W.). The block is also having 14 "Bechiragi-Gaon", villages which land is barren, futile, infertile or with least productive capacity.

C. The Study Villages

The study villages have been chosen on the basis of tribal and non-tribal population. The tribal villages are Karma and Temerai which are registered under the category of "severely drought affected" villages. And the non-tribal villages which has been reported comparatively less affected under drought situation is Neura.[59]

1. Tribal Villages:

KARMA: It is one of most poorest village, situated in remote part of the block at the distance of 15 km. This is predominantly a PRAHAIYA village. The domination of Prahaiya typical primitive tribe is one of the basic characteristic of this village. Out of total 64 households in this village, Prahaiyas contributed 54 families along with five MUNDAS families. The total population of this village is

only 399 with total area of 1609 dismil covers only 2 km. area. It is at distance of 21 km. from Daltonganj. It comes under the jurisdiction of SEMRA panchayat. The village is divided into many Tolas. The hilly structure of the village marked with deep forest and maximum ups and down. There hardly one could see plain or field. The undulating surface accelerates the surface run-off which lastly resulted in situation like drought. There are mostly Kachcha roads. The communication is not good enough to link with Chainpur and Daltonganj headquarter. Their remoteness led them to be in primitive phase of survival. Most of the population depends upon the forest, survives by gathering of forest's stuffs.

Prahaiyas are basically foodgatherer, woodcutter and agricultural labour. They largely depend on the food obtained from forest. Their staple diets are root of trees and herbs, kanda, potato, bajra, macca, jinoura, aar etc. Both male and female go to forest to collect food and wood. The wood cutting and selling of it to nearby town is main occupation by which they survive. Few younger prahaiyas do work like rickshaw pulling, as wage-labourer and sometimes selling of wood's bundle.

Temerai: Temerai comes in Neura panchayat. This is also a predominantly tribal village but consists scheduled castes too. It is comparatively developed in comparison to karma because it produces some of the grains. The fields are flat here which facilitated them to do agricultural activities. Total population of this village is 481, where-in 138 are SCs and 101 STs. The cultivable lands is 236.50 acres, total irrigated lands is about 60.75 acres and forest covers 661.42 crores. Total cultivators are 65 along with 70 agricultural labours. It is situated at the distance of 7 km. from Chainpur and at 12 km. from Daltonganj. Temerai village is dominating by Munda who is basically an agricultural tribe. Mundas are largely depend upon agriculture, very few survive on forest there. Converted Mundas into Christian are mostly educated while others are illiterate. Here main source of irrigation is ahar and well for drinking water.

2. Non-Tribal Village:

Neura: This is an important village of Chainpur block which has maximum share in prosperity of this block. It comes under jurisdiction of Neura panchayat. The chief feature of this village is domination of Muslim population

along with other Hindu castes. Out of total population of 2,632 more than 50% has been dominated by Muslim community. Only 212 scheduled castes share in it while STs population is negligible. The village has total area of 388.7 acres in which cultivable land is about 286 acres and total well irrigated area is 86.50 acres. This village comes in Neura panchayat which ranks top in Chainpur block in numerous contribution such as agriculture is flourishing well. The source of irrigation is mainly "Aahar" - which is linked with river Koel. The village is situated at the distance of 10 km. from Daltonganj headquarter and sub-division of the district. The total families of this village are 295 households; wherein Muslim of all classes contribute with 187 households. Their prime occupation is agriculture, on which they survive as well as some of them are engaged in secondary and tertiary level of occupation. The total strength of labour force of this village is 425. Out of which agricultural labourers who work on wage basis are 260 and the cultivators who work on their own field are 165. There is one sub-centre of Chainpur PHC situated in the mid of this village which provides health facilities not only to this village rather covers Karma and Temerai too.

(1) Socio-Economic Profile of the Study Villages[60]

(a) Tribal Village: Karma & Temerai

Both Karma and Temerai are a very typical villages, known for their measurable condition and remoteness in all fronts of survival. In fact, they are living yet in the phase of primordial mode of survival. Because, Karma is such village where Prahaiya dominated, who is basically a food gatherer, wood cutter and practicing some sort of shifting cultivation which does not provide sufficient input to survive. The village largely has been associated with the features of traditional and primordial ways of living based on forest. Both male and female go to the forest for woodcutting, than selling it in nearby town and the money what they earn from it makes them able to eat meals of two time by and large.

The undulating relief structure of the village makes them unable to do agricultural activities. There are extreme shortage of water for both drinking as well as irrigational purposes. Only few wells are there at a greater distance from their dwelling areas. The woman has to bring water for drinking purpose from the handpipe situated at the distance of $1^1/2$ km. There are less proportion of fertile

land liable to produce, that is why production of grains is almost negligible, only some of the `mota anaj' or grains such as - Bajra, Jinaura, Macca etc. have been producing at a very low ratio.

The Prahaiyas are formidable from every angles of survival. The main occupations have been categorised below in such manners:

1) Food gatherer, woodcutter from forest.
2) Woodcutting and selling as chief source of income.
3) Agriculture only in the form of shifting cultivation.
4) The young population go for the work as wage labour, rickshaw-pulling or agricultural labourers.
5) Both male and female share equally in earning of basic amenities.

The pattern of land-holding shows maximum possession of land physically but actual benefit from this is negligible. A Prahaiya holds not less than 5 or 10 acres of land in his physical possession but in absence of adequate sources of irrigation as well as monetary capacity to purchase required seeds and equipments; not stands in position to produce any things. That is why holding of land either maximum or

minimum does hardly matter for a Prahaiya. Hence, he is solely dependent on the available root-fruits, underground fruits such as Kanda, Sakarkand and trees' roots, which make staple diet of a prahaiya.

The drought situation had brought scarcity and paralyzed the whole set up not only in this village rather affected in town too. This resulted in curtailment in purchasing power of the people residing in town or nearby village areas. This had adversely damaged the selling capacity or earning ratio of woodcutters. The prahaiyas had to sell their bundle of woods in a less amount than what they were getting earlier. Eventually this lower trend of selling and earning made them totally handicapped to earn even the two square meals a day. This was most striking suffering of Prahaiyas in drought period. On the other hand, shortage of woods in forest due to failure of monsonal rainfall, made them helpless. It was another major suffering for them. Besides this, the rules and regulations of government of forest department had restricted them to enjoy their traditional jobs. In these suffering, only alternative left was to find for wage labour or pulling rickshaws in town from where they could earn to live. In town, they had been exploited largely due to their unfamiliarity with

town life and the people. They worked hard and were getting least wage for their labour. Thus, the situation of alienation created, and the sense of alienation made them mentally depressed which was caused for severe in drought situation.

Another village Temerai is also a tribal populated, but here scheduled castes are more than the tribe. Only Mundas tribe are main habitant of this village. A Munda tribe is a agricultural labour based largely on agriculture. The Mundas cultivate crops of both rabi and kharif seasons. Owing to flatness in the field, irrigational facilities and primordial equipments made them able to cultivate grains. Out of total population of 481, SCs are 138 and STs are only 101 who have been living in 75 families.

Depending mainly on agriculture the Munda tribes had suffered largely because of less agricultural production due to failure of monsoonal rain continuously. They became handicapped in manner of cultivation and lastly made them totally dependent on the activities like wage-labourers, or agricultural labour - who work on the field of others. For them too, town set-up proved more alienated. Alienation in the sense of their least earning in comparison to their selling labour force. Lastly they became as a commodity to

sell their labour only on the basis of wage. While, the existing situation of town was too bad to support them equally to their requirements. Hence, they had gone under severe blow of drought despite of getting relief facilities.

(b) Non-Tribal Village: NEURA

(1) Social structure

There are 295 families in this village. Out of total families, there 187 families which belong to Muslim community. The village is dominating numerically by Muslims population. Other than Muslims of all classes, there are few upper castes of Hindu community and rest shares by lower caste and scheduled castes. 12 families of Rajputs, 10 Brahmins, and rest are of lower castes, such Kumhar, Bhuiya, Dom, Halwai and SCs.

The Muslims of this village are very traditional in the way of their survival, largely depend on agriculture. The mode of their survival is not so much advanced but better than tribal habitant village. Education is prevalent maximum at primarily level. Higher education is certainly absent over but found many graduates over there.

The social milieu of this village is under the influence of advanced town such as Daltonganj. Chainpur which is headquarter of this block situated nearby this village which helps in shaping their standard of living. The living standard of the village is categorised according to their hierarchy of social set up.

(2) Economy of the Village:

The economy of the village is entirely based on agriculture. As it has been mentioned above, Muslims are numerically dominating over there with full majority. One of the landlord from this community had 200 acres of land known as "Sameria State". But the introduction of land reform made him mere a zamindar of 50 acres of land. The surplus lands have been distributed among agricultural labourers of this community who were working under his control. By the rule of ceiling act, a person is entitled to hold not more than 35 acres of land. The land is segmented into small pieces rather having control of any one over large part of it.

The agricultural activities are of primordial in nature. Equipments are traditional by which they produce, a very less percentage of grains. The farmer is not familiar with modern instruments. They lack in getting seeds of good

quality and fertilizers made through scientific method. The productivity of land is very low. They use maximum cowdung as chief fertilizer to raise the productivity. Irrigation facilities are not good enough. Only Ahar is main source of getting water which does not provide sufficiently. Hence, they have to depend largely upon monsoonal rainfall in Hathiha Nakshetra. If it fails, then their cultivation suffers greatly. Even, existing artificial sources of irrigation are not capable of maintaining standing crops in absence of monsoon's rain. But overall, what they cultivate, not good enough rather could survive if monsoon rainfall maintains regularity.[61]

Irony of this fact is that hardly monsoon keeps regularity rather known for its irregularities, which resulted great suffering from every angle in situation like drought.

Apart from this, other secondary occupations such as - trading agricultural produce which is popularly and locally known as "phardiyadari". By going from village to village, they purchase their agricultural products like lac, til, tendu pata, mahua, tisi etc. and then take these to town market to sell it. In return they purchased some basic

amenities for them. Besides this, opening of partune dukan or kirana dukan, pan dukan, is very well known practices which they do easily. Other activities are - petty contractorship, bidi patta, storing of mahua in season and selling it in off season, petty commercial exchange which keeps face value - giving money to farmer on interest etc. and some of the cottage industrial and crafts are famous among the lower castes of Muslim. The jullahas are engaged in darji work or tailor, kunjras are primarily attached with selling of green and dry vegetables in nearby town market. Lastly, economy is not very much at advanced phase but better in comparison to tribal villages.

During drought period, major changes they observed that were of great damaged of their cultivation, shortage of foodgrains, hike in price of basic things such as - wheat, rice, pulses, kirasan oil, mustard oil etc. The scarcity of food and drinking water along with irrigational needs, made them handicapped and rely only on the promises being made by government agencies in relief operation.

(c) Methodology:

On the basis of above mentioned research design, and

specific objectives, the researcher has selected the study population through "purposive sampling". Apart from this, other tools have been used during study are observation, informal interview and interview through schedule, focused group discussion and case studies. The qualitative data have been quantified after careful crosschecking and verifying the official records.

(i) Sample and Research tools:

It was decided to make a comparative study of suffering of various section of the people of both communities tribal and non-tribal during drought period i.e. from January 1993 to September 1993. The village Karma and Temerai have been selected as a sample of tribal community and village Neura for non-tribal community. A sample represents similarities at greater extent to whole. So, it was taken purposely to know about the varying degrees of suffering, exploitation and misery of both communities.

Interview was basic research tool which had been used by researcher in this study through applying both formal and informal ways of interviewing the villagers with the help of prepared schedule. The preparation of interviews schedule was based first on observation being made by researcher in

initial phase than making a content analysis of literature or information obtained from secondary sources - such as B.D.O. and C.O. office at Block level and from District Planning office. Based on the analysis of contents coming out by different sources, interview's schedule was prepared. Besides that focus group interview was conducted by researcher for cross verification of secondary informations. In this, particular category was selected to discuss and interviewed in group.

(ii) Process of Data Collection:

After deciding the study area, researcher went through the related literatures of books, files and registers, census report, available at block's B.D.O. and C.O. office and reports of statistical department of block, to collect all the background information needed to initiate the present study. At the beginning of field work, the Block Development Officer, Circle Officer, Mukhiya and Sarpanch of the concern panchayat, statistical department, health centre, and other block's field officials were communicated regarding the purpose of the study. The research was assured all help by the concerned agencies.

At the village level, the help of elected Mukhiya and other members of Panchayat, local leaders and social workers were also sought for the smooth conduct of the study. On the first day, one field worker was deputed by block office to help the researcher in getting familiarity with the villagers and to see the normal ways of their living. This was starting point to meet the people. After that day, researcher made random visit continuously for a month to make an empirical study by observing the activities going on day to day life process of the villagers.

Gradually, informal discussions took place naturally wherever the researcher met the villagers. All the villagers of Karma village had been categorised after conducting informal discussion with them on the basis of their occupation to get cross understanding. In first category those who come are food gatherers. Sri Gain Prahaiya of 60 is a food gatherer who survives largely on the stuff collected from the forest. His staple diet is Kanda, boiled potato, sakarkand and different kind of tree's root. Sri Rakhu Prahaiya of 65 and Smt. Shkhiya Prahaiya of 55 were chosen from the category of woodcutter and sellers. Their prime occupation is to cutting woods from nearby forest and selling them in Town market. Their staple diets are mota anaj,

mucca, jinaura, kanda, roots and some times rice of lower quality.

Naresh Prahaiya, a young man of 35 had been taken from the category of cultivator, whose prime work is to cultivate some of the mota anaj, mucca, and crops which do not need much water and fertile soil to grow. Sri Mohan Prahaiya of 45 was also doing the same and Smt. Muslimi Devi, an old lady of 70, is getting old age pension from the government.

In village of Temerai, following persons have been interviewed. These are - Sri Bandhana Munda of 70, a cultivator; Duchra Munda of 35, a wage-earner; Phuleshwar Munda of 45, an agriculture labourer and two educated persons - Jetha Hemrom of 30, who is educated upto class seven, other person was Ajay Gudiya of 25, who is still studying in graduation.

The social and economic status of these persons were not sound. Though each cultivator or person is having much more land, but the acquisition of land was not the beneficial concept for them rather it was just assumed property.

The mode of cultivation was not of modern or scientific rather it was merely rudimentary or traditional practices.

That is why the agricultural products were less.

In village Neura, following persons had been interviewed. They are: Ali Ahmad Ansari of 60, a cultivator; Akhatar Hussain of 45, a wage earner; Saukat Ansari of 45, a vegetable seller; and Mansoor Ali of 30, a shopkeeper or petty worker. All these persons are not having much more land but were getting agricultural products as much as the means of cultivation were available at their work. It could be said that the agricultural activity was not as bad as it was in tribal communities.

(iii) Limitations of the Study:

The difficulties which had been faced by the researcher during the present study's period, could be explained under the realm of following facts.

Since, the present study has been conducted in tribal and non-tribal communities. The major difficulties were in tribal community than in non-tribal. It was problem of establishing rapport with the tribal people. It was very hard to get familiarity with them. Since, there is a sense of insecurity, danger of loosing something which restricts them to get smooth interaction with outsiders. They called

`DIKKU' to outsider. It is a term that imply meaning of `alarming danger'. Both male and female keep attention seriously whenever any one comes to their Tolas or village. Sometime they are shy but maximum avoid to talk with unknown person. Researcher got help of some of the local leader, so called social worker of that village for this purpose. Through his help and gradually visit to that village made researcher known and had communicated the purposes of the study. But it took a long period of a month completely.

Other problem was understanding of their local dialects. With the help of some of the literates and karmchari, interview was conducted informally. Here the problem was of manipulation of the meaning by the middle man. Such as karmchari who is a Block staff working at that village might have done some manipulation when the respondents were putting claims over his and other official's act of exploitation. Being familiar of their dialects, researcher was following his suggestions and passing answers.

The researcher made a constant effort right from Delhi to Palamau district to get access to secondary data on drought in Bihar in general and particularly in Palamau district; published articles and written documents are very

less and they were not supported with empirical data. To get access to the secondary data was a severe limitation to design the present study. After constant interaction and special effort, the researcher could manage to get a little information about the drought affected block of the Palamau district and thus the present study was designed.

After constant effort and probing in through the social worker, the researcher could be able to talk to the various informants of the tribal population without any of their hesitation and suspicion. It was made very clear to the study population that, this study is meant for understanding their day to day life and their health problems because of the drought condition. It was also categorically mentioned to the informants that the researcher is not a government employee but a research scholar of the Jawaharlal Nehru University, New Delhi.

The social scientists have made a little effort to study the consequences of the drought on the life pattern of the various population - tribal and non-tribal. The present study was designed to explore the various dimensions of the suffering of the affected people of Palamau district. The empirical data would be generated from this micro study in

relation to health problems and practices along with the quality of the life of the people in three villages which would establish a good range of data to plan out a major study in future.

The mismanagement of written documents at a district level and block level both created situation of helplessness. If, ever had been done any study or survey or any kind of official investigation, the reports and the findings of that particular study was not kept in an arranged way. At district level, this mismanagement was acute as it is reported from district planning office. Data or information could be found only of recent studies that are also not in a position to provide information systematically. There was lack of any arrangement, whether it was library or whatever to keep files and reports for a long period of time.

Lastly it was problem of getting appointment with higher officials at district level and to make contact with the staff at block level. What may be causes behind this, it was simply observed that absence of punctuality or may be their heavy pressure of work load had led them to be in this condition. Anyway, it was essential for the present study to get contact with them to discuss and seeking their help-

ing hands. It was managed somehow to make study according to objectives.

(iv) Relevance of the Study:

The present study is an explorative study to understand the dynamics of the suffering of the people in drought effected areas. This study can help researcher to understand systematically that how much government and non-government agencies who were working over these areas and at what degree relief works being provided by them have taken care of drought affected people, and the removal of their formidable conditions. It is equally important to know about the actual causing factors whether it is only natural disastrous or have become a established practice to include Palamau district in `DPAP'. So, a constant flow of government fund has to come for the relief work, thereupon, how the self interests seeking persons have been playing their contribution in both government and NGOs agencies.

(v) Period of the Present Study

The central Government of India had declared the Palamau district under drought from January 1993 to September 1993. The announcement was made on the basis of intensity

of dryness due to failure of monsoon in three consecutive years in `Hathiya-Nakshatra', and on the report being sent by District Statistical Department after making a field-survey and studying the ratio of annual rainfall in comparison to normal or average rainfall. Though government had started relief work since November 1992, but it was reported from January 1993 in Chainpur Block till to the end of September 1993.

All together, four months had been taken to conduct the present study. Out of which, one month of starting phase was spent on regular visit to study village areas. Then, the quantification of data from both quantitative and qualitative aspects socio-economic study took one and half month more to finish the collection of these datas. And lastly, one and half month has been taken under the process of writing.

Relief Work

Since one of the objectives of this study was to study relief work undertaken by government non-government agencies. A detail information were collected to collect further empirical data from the beneficiaries and non-

beneficiaries affected by the drought. So it is necessary to provide a detail information regarding the relief work.[62]

The various relief measures had been introduced under the `Relief Operation' which was started at the district level since November 1992 and had extended upto the end of October 1993. But it was only a period of nine month at block level. In Chainpur block, it has been reported by B.D.O. and C.O. that relief operation was launched since January 1993 and continued upto the month of September 1993.[63]

Under `Relief Operation' both protective and preventive methods had been used to cope up the situation through various tools. The **protective method** implies meaning of immediate removal or solution of burning crisis. It keeps aim to protect the people from the death being caused by hunger, or death by starvation. It is made to check the situation which originate from the situation like famine. So its prime moto is to protect from **incidence of death.**

The protective method is used only for a short period of time. It is short term policy. While the **preventive method** is a long term policy which demands the prevention of natural calamities gradually. In this,

the effort is made to root out the basic causing factors of any natural disastrous through applying scientific approach of prevention.

The administration or execution of various schemes being launched by the government relief work was running under the supervision of Deputy Commissioner of Palamau district and District Planning Officer at district level through making different channels of controlling and investigation process. At the block level, it was B.D.O. and C.O. authorised to supervise and Mukhiya and Sarpanch at panchayat level were doing the same. Each and every official was accountable to his or her immediate senior officer in regard to allocation, expenditure, recording of that expenditures, of given financial fund. The panchayat has to submit monthly report to B.D.O. and C.O. at block, than they have to put detail accounts of fund and reports of expenditure to Deputy Commissioner who is lastly accountable to central government.

In the short term protective relief policy in the following schemes had been introduced. Their detail explanation has been provided in the next chapter. These schemes were:[64]

1) Red Card.

2) Green Card.

3) Reserve Quota.

4) Drinking Water.

5) Sasti Roti.

6) Animal drinking water.

7) Animal free fodder.

8) Medical facilities.

9) Employment Generation.

While in **Preventive Methods**, following schemes were:

1) Afforestation of barren land.

2) Plantation of trees in nearby town areas.

3) Storing of rainfall water through reservoir and/or scheme of "*Cheekdom*".

4) Irrigational facilities under scheme of "*Jaldhara*".

5) Reducing the surface run-off of rainfall by plantation of grasses and bushes.

CHAPTER III

DATA PRESENTATION
Part A - Socio-Economic
Profile of the
Study Villages
Part B - Relief Operation

SOCIO-ECONOMIC PROFILE

PART-A

(1) Palamau District:

Land Utilization: The district covers total geographical area of 7,87,914.44 hectares, which has been distributed among forest, fallow land, net sown area, and others with 42.5%, 28.0%, 15.3% and 14.2% respectively. The detail of it can be studied from the table given below. Table 1.1 shows the land-utilization.

Table 1.1: Pattern of Land Utilization

S.N.	Land Use	Area (in hect.)	% of total area
1.	Forest	335211.32	42.5
2.	Fallow Land	220411.81	28.0
3.	Net Sown Area	120448.85	15.3
4.	Others	111842.46	14.2

Source: District Statistical Office, Daltonganj, Palamau.

Total Geographical Area of the district: 7,87,914.44 hectares.

Cropping Pattern: Seventy per cent of the population depends on agriculture. There is a need to know about the pattern of area under different crops. That will educate

the understanding of productivity of particular crop and its frequency.

Table 1.2: Area under Different Crops (in hect.)

Year	Rice	Maize	Pulses (K)	Oil Seed (R)	Wheat	Pulses (R)
1990-91	70,242	15,520	11,659	4,064	9,631	16,579
1991-92	21.257	6,948	4,925	1,936	6,099	3,071
1992-93	4,766	4,332	4,478	137	693	397
Avg.	32,088	8,933	7,021	2,045	5,474	6,672

Source: District Statistical Office, Daltonganj, Palamau.

The above mentioned table 1.2 shows the coverage of area by particular crop in past three years. In above mentioned crops which are most popular in this district, rice stood on the first place which covered on the average 32,088 hectares of land in three successive years of 1990-91-92-93, second place occupied by maize with average 8,933, kharif's pulses on third step with 7,021, rabi pulses on fourth with 6,672 and wheat and oil seed of rabi season cover 5,474 and 2,045 on the average of total areas respectively. By this description, it can be said that rice was one of the most important crop of this district. Not only it was main crop rather it is staple diet of the people in this district, that is why the cropping of rice was done on such a large portion of the land.

Table 1.3: Area Under Different Crop (in hect.)

S.No.	Crop	Area covered	% of Net Sown Area
1.	Rice	37,179	30.8
2.	Maize	17,993	14.9
3.	Oil Seeds	8,795	7.3
4.	Pulse	30,542	25.3

Source: District Statistical Office, Palamau.

By the figure of this table, rice again shows domination with 30.8% of total net sown area, which covered 37,179 hectares of land. The net sown area is that where actual growth of crops takes place. It has been fed with well irrigation. Next to rice, pulse of both seasons (Rabi and Kharif) acquired 30,542 hectares of land with the 25.3% of total net sown area stood on second place.

From the study of both tables (1.2 and 1.3), it can be said that since rice is staple food in the diet of the people of this district that is why the area under the cultivation of rice was more than any other crops.

The absence of wheat from above mentioned table shows that the cultivation of wheat was negligible during past three years; while pulses were another important crops during these period.

During drought period, failure of monsoon and shortage of irrigtional water from other means had damaged rice greatly. Since the cultivation of `Dhan' or rise is prime agricultural activity that is why it got ruined extremely by the drought. This can be studied from Table 1.4 which is mentioned below.

Table 1.4: Agriculture Operation & Damage
During Drought Period

S.N.	Name of Crop	Target	Achieve-ment	Damaged Area	% Coverage	% Damaged
1.	Rice	63,000	37,179	29,589	59%	80%
2.	Maize	19,300	17,993	10,195	93.2%	57%
3.	Oilseeds	10,920	8,795	5,599	80.5%	63%
4.	Pulse	46,700	30,542	17,295	65.4%	57%

Source: District Statistical Office, Daltonganj, Palamau.

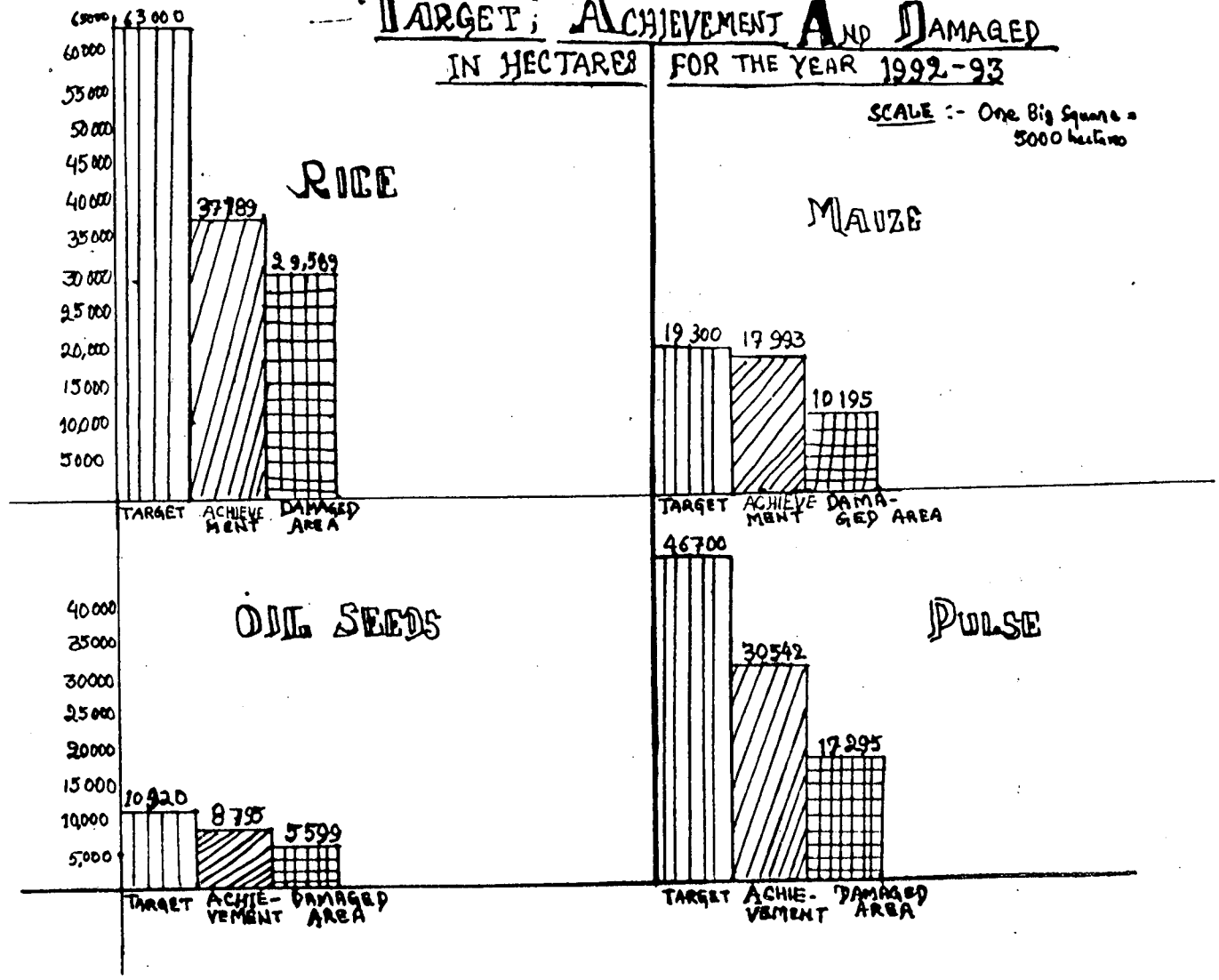
The above table and graph show, the cultivation of rice was targeted on about 63,000 metric tons which covered 59% of total area. But achievement showed the figure of only 37,179 mt. While the damage of standing crops of rice on 29,589 hectares which covered ruinness of 80% total covered area under the cultivation. The second damaged crop was oilseeds with 63% and on third place it was both maize and pulses with 57% and 57% respectively.

Pertaining to the question that why rice is such crop

T-NO – 1.5

TARGET; ACHIEVEMENT AND DAMAGED IN HECTARES FOR THE YEAR 1992-93

SCALE :- One Big Square = 5000 hectares



Source:- District Statistical Office, Daltonganj, Palamau.

which suffered more during drought. Because it is one of the crop which demands maximum rainfall, accumulation of water into field during generation and through whole gestation period. The degree of damage vary with the reducing amount of rainfall or water from other sources. That is why Maize and pulses were less suffered than rice, they need less water at their gestation period in comparison to rice. Pulses demand water only at the time of growth in much quanity than afterward survive itself.

The cultivation of rice has been affected badly in Chainpur Block. Each block of district has reported loss of rice crop in three successive years, followed by failure of rainfall. Among them, Chainpur block stands on the top.

CLIMATE

The district is characterised with hot and dry climate with three seasons of winter, summer and rainy. The basic features of the district's climate are oppressive hot summer, high humidity and irregularities of monsoonal rainfall particularly in "Hathia Nakshatra". Rain comes through south-west monsoon, which plays major role in the agricultural activities.

Role of Monsoon

The south west monsoon begins at mid of month June and continued till the end of October in normal case. But it does hardly maintain regularity in occurrence that ultimately get suffered the cultivation and eventually creates situation like drought in absence of other means of irrigation.

The agricultural activities of this district mainly dependent on monsoon because there is neligible irrigational network available in this district. There is no big canal system except "BATANE" which covers a few panchayats of Hariharganj and Chhaterpur Blocks.

The rainfall of the year 1992 has been the lowest in the last 20 years. The trends that has been calculated statistically also shows a decline over the years. The quantum of rain during the *Hathia Nakshatra* period in 1990 was 90.1 mm., in 1991 11.6 mm. and in 1992 down to 9.1 mm. with 96.6, 86.3 and 51.2% of the normal respectively. Such figure can be studied in table 1.6. Thus, not only was the total rainfall poor but the spread was also adverse. Due to inadequate and irregular rainfall this year, all crops have

been badly affected.

Table 1.6: RAINFALL: Normal Rainfall-1279.9m.m

Year	Annual Rainfall	Actual Rainfall During "Hathia"	% of the Normal
1990	1237.2 m.m.	90.1 m.m.	96.6
1991	1104.2 m.m.	11.6 m.m.	86.3
1992	654.7 m.m.	9.1 m.m.	51.2

Source: District Statistical Office, Daltonganj, Palamau.

The ground of disastrous drought of 1993 had been prepared by the complete failure of monsoonal rain of the year 1992, which almost perturbed the whole set up of this district. Since, agricultural produces make backbone of the district upon which whole economy rests, the failure of rice and dhan crop led the people to be in grim situation and indirectly made dependent on the government's rescue operation. Though the district is vulnerable to the natural calamities always as it has been recognised by the "Drought Prone Area Programme" scheme of the central government, but during the failure of monsoon in three consecutive years, it was only 1992 which witnessed maximum degree of shortage of water from all sources i.e. natural and artificial for both irrigation and drinking purposes. The impact of this was not only glaring in the village areas rather towns too had

been thrown into the same situation.

Above table indicates that it was 1992 which had accelerated the degree of dryness in absence of both monsoonal rain and other artificial sources of irrigation. The year 1992 was reported with least amount of rain through monsoon by the contribution of only 9.1 mm. in "*Hathia-Nakshatra*" period which is a ideal time to growth of plant and sustain in gestation phase. The annual rainfall of the 1992 was only 654.7 mm. that is 51.2% of the normal. It was the year of big hit created by monsoon and acute problem of the water.

Table 1.7
The Monthwise Normal & Actual Rainfall of 1992

Month	Normal Rainfall (in m.m.)	Actual R.F. (in m.m.)	% of Normal R.F.
June,92	160.9	41.2	25.6
July,92	347.2	222.9	64.1
August,92	370.2	287.8	77.7
September,92	210.1	62.0	29.5
October,92	63.3	14.5	22.9

Source: District Statistical Office, Daltonganj, Palamau.

The table shows a comparative understanding of the normal and actual rainfall monthwise in the period of "Hathia". The normal rainfall of the district is 1279.9 mm.

annually. From the above table, it can be observed that the month of june, July, August, September and October reflect a trend of decline from the normal or average rainfall with 25.6, 64.1, 77.7, 29.5 and 22.9% of it respectively. In which the month of June, September and October had contributed with least amount of actual rainfall. The normal or average rainfall of any place has been estimated on the basis of annual rainfall of past fifty years.

In all these months, the rainfall in the month of June keeps a logical meaning and it is importtant because it is high time for seedling and sowing the dhan crop and to provide ground for the survival in the gestation period. It particularly demands accumulattion of water into the field with much quantity which fulfills the above condition of generation of a rice plant. And, the performance of June was poorest which made the farmers unable to cultivate rice, which is most important crop. While the condition of rainfall was left a little in better status in the month of July and August, but the unequal distribution or spread of rainfall in space, created the situation like drought which did not allow farmers to cultivate rice. Eventually, it resulted in the failure of the cultivation and destruction of standing crops. The poor sources of irrigation could not

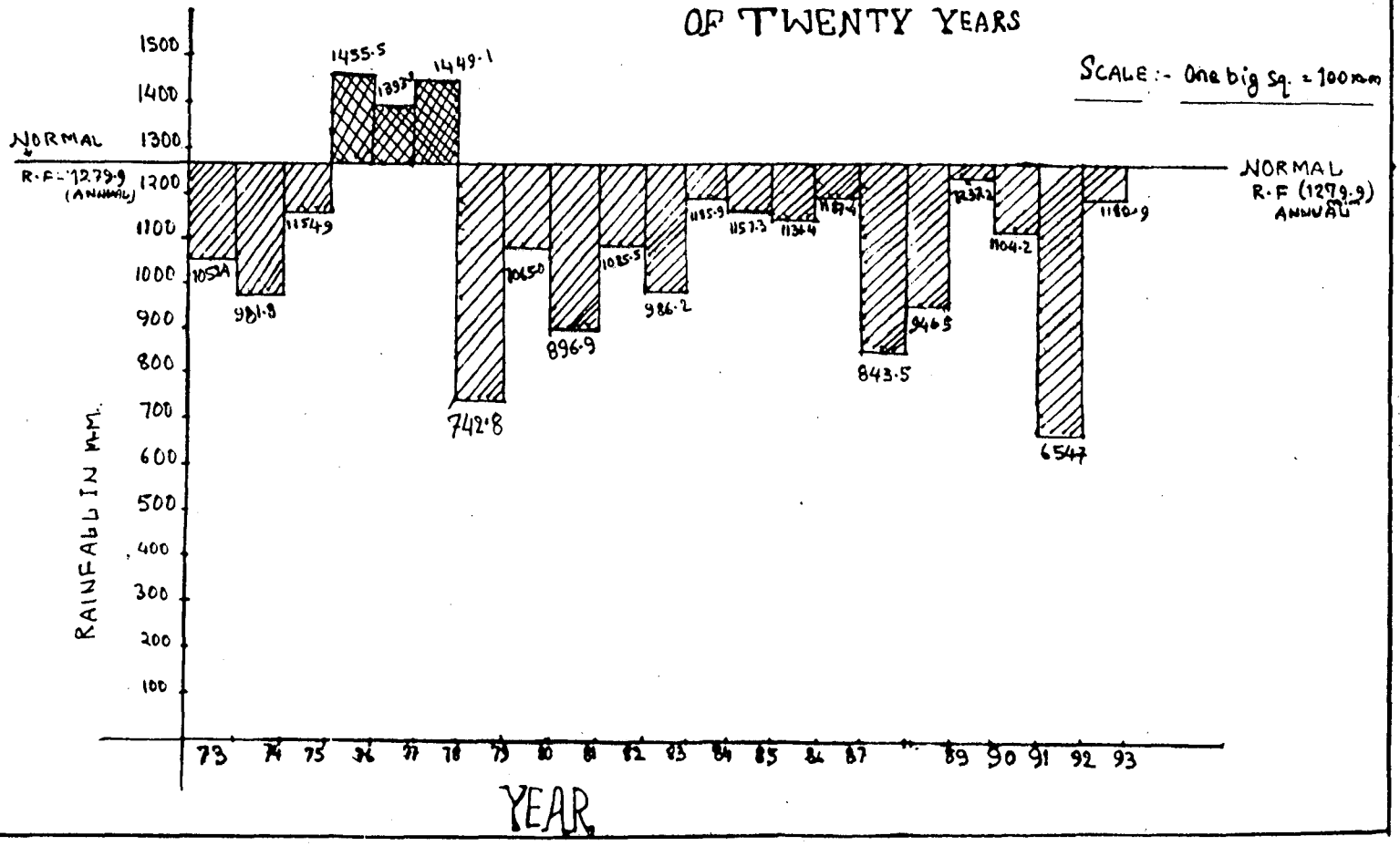
maintain even the standing crops of rice which wiped out the least possibilities of grains cultivation. It is due to the failure of rice cultivation, the degree of severity of drought had gone up in all front of survival with colapse of economy.

Among the basic criteria for the declaration of the situation like "drought", rainfall is one of the most important scale to judge the intensity of drought. With the help of Table 1.8 (on P.N-76) it can be studied the records of rainfall in the district of past twenty years. On the basis of annual rainfall of these past twenty years, the drought had been declared by the central government. The announcement was guided by the analysis being done according to the meteorological norms by the statistics department of the district.

The graph in Table 1.9 suggests the frequencies of increase and decrease from "Normal Rainfall" in past twenty years. By which only in the years of 1977, 1978 and 1979, it was above slightly from normal (1279.9 mm) with 1455.5, 1393.9 and 1449.1 mm respectively.

T-NO – 1.9

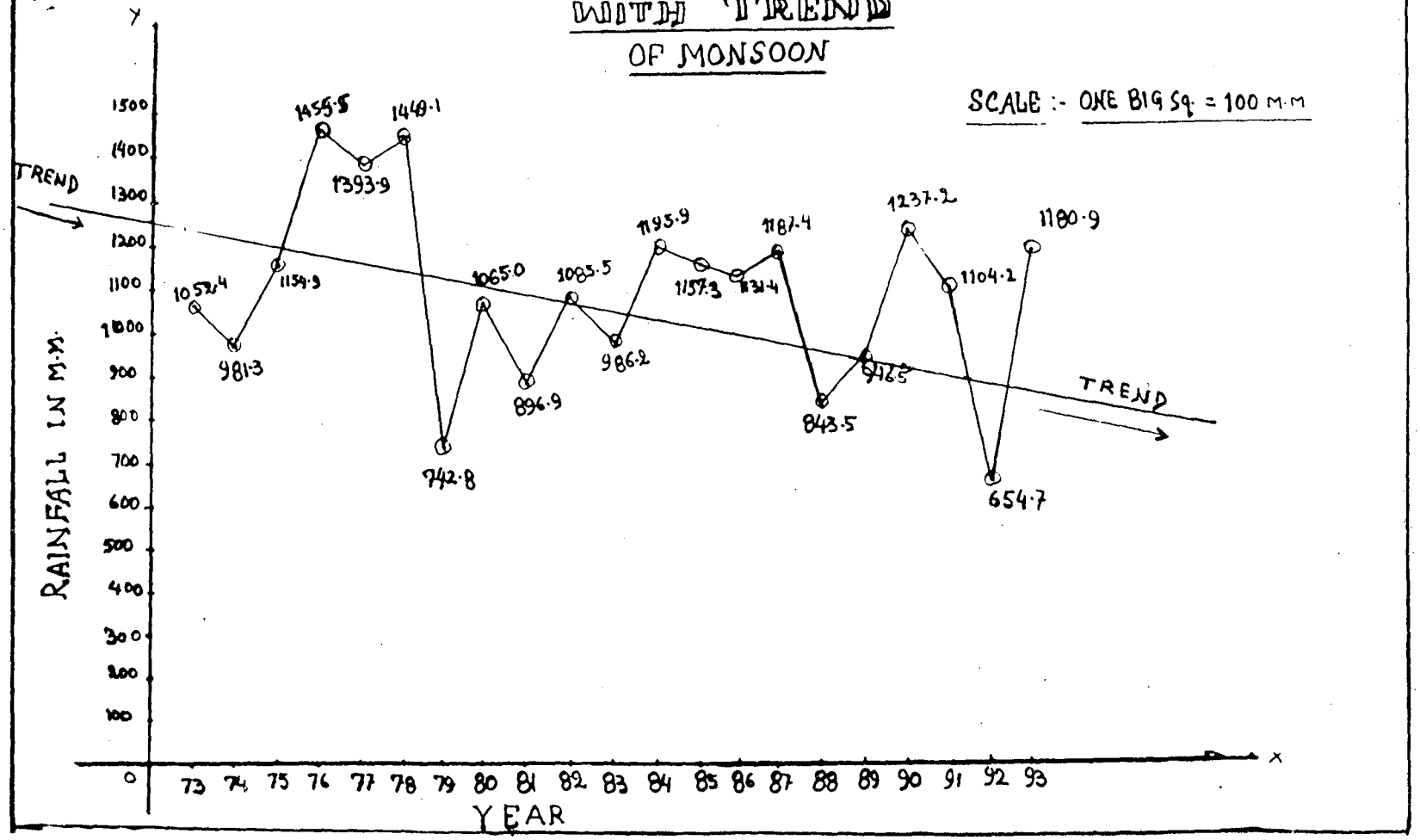
ACTUAL RAINFALL SHOWING INCREASE AND DECREASE FROM NORMAL RAINFALL OF TWENTY YEARS



Source :– District Statistical Office, Dalrongaj, Palamau.

T-No - 1.10

ACTUAL RAINFALL OF TWENTY YEARS WITH TREND OF MONSOON



Source :- District Statistical Office, Dalltonganj, Palamau.

Table 1.8: Monthly Rainfall of Palamau District, from 1973 to 1983

Sl. No.	Month	Year										Normal Rainfall
		1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
1.	January	13.2	0.0	15.2	0.0	15.4	14.9	19.6	3.4	48.6	15.9	25.2
2.	February	20.7	0.6	8.5	14.9	4.7	74.6	38.4	10.8	9.5	28.3	28.7
3.	March	8.7	0.9	26.1	0.0	2.0	22.9	3.2	21.9	18.5	57.0	18.2
4.	April	0.9	0.0	6.2	21.6	35.1	13.5	3.6	14.1	7.9	23.3	9.7
5.	May	4.8	20.5	3.4	13.8	60.4	11.0	0.0	4.8	15.8	72.3	18.0
6.	June	125.1	47.0	91.5	101.2	147.1	219.3	97.5	201.4	50.5	75.3	158.5
7.	July	179.5	447.6	549.0	326.1	561.9	208.7	281.3	331.4	365.7	129.2	347.2
8.	August	285.4	268.6	230.8	241.9	224.9	374.2	162.2	252.2	200.3	12.2	370.2
9.	September	302.4	110.0	142.8	733.3	270.6	413.6	98.1	179.4	174.9	153.7	223.0
10.	October	131.3	81.9	81.4	2.3	28.8	81.9	15.7	41.7	0.1	103.9	63.3
11.	November	0.2	4.3	0.0	0.0	30.5	0.0	21.1	0.0	0.0	11.1	12.2
12.	December	0.2	0.4	0.0	0.4	12.5	1.5	1.9	3.9	4.1	3.3	5.7
	Total	1052.4	981.8	1154,8	1455.5	1393.9	1449.1	742.6	1065.0	896.9	1085.5	1279.9

Source:- District Statistical Office, Daltonganj, Palamau.

Sl. No.	Month	Year										Normal Rainfall
		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1.	January	4.9	40.1	21.0	1.3	3.3	1.1	1.3	0.0	8.5	0.0	0.0	25.2
2.	February	15.3	51.3	1.0	49.1	13.9	15.4	0.0	38.6	7.7	0.0	0.09	28.7
3.	March	4.0	0.0	0.1	0.5	12.8	36.7	4.1	11.8	12.4	0.4	5.5	18.2
4.	April	49.1	2.6	6.1	5.4	7.2	8.8	0.0	2.3	0.4	3.9	1.1	9.7
5.	May	60.6	5.5	5.6	33.5	23.8	8.2	26.6	54.8	12.1	24.8	21.3	18.0
6.	June	86.7	272.1	57.8	202.3	21.4	220.4	167.2	235.0	159.3	44.8	195.5	158.5
7.	July	279.1	323.9	398.8	348.9	291.5	207.4	293.1	482.4	274.9	209.8	202.4	347.2
8.	August	143,3	339.6	377.3	213.5	313.2	169.0	218.9	180.5	396.0	287.8	227.2	370.2
9.	September	220.4	125.2	149.6	133.1	444.4	169.5	183.1	178.2	210.1	68.3	367.3	223.0
10.	October	114.4	35.6	142.0	71.0	24.6	6.7	17.1	51.9	11.1	14.9	32.2	63.3
11.	November	0.2	0.0	0.0	14.5	25.3	0.0	11.3	0.4	0.2	0.2	127.5	12.2
12.	December	8.4	0.0	0.0	58.3	6.0	2.3	23.8	1.3	11.5	0.0	0.0	5.7
	Total	986.2	1195.9	1157.3	1131.4	1187.4	843.5	946.5	1237.2	1104.2	654.7	1180.9	1279.9

And the rest seventeen years indicate their status below the normal.

Through the observation of Table 1.10 which indicates the trend of monsoon rainfall, and the understanding can be developed that how monsoon has greater impact upon the cultivation of crops with its irregularities. The frequency line has gone up from normal only in few years, and touches the lowest point of graph in the year of 1992 with 654.7 mm annual rainfall. The trend clearly shows a steady decline of the amount of rainfall. Thus, it can be perceived that drought like situation is a perpetual feature of this district and has become a part of day-to-day life. The lowest annual rainfall was in the year 1974, 1979, 1981, 1983, 1988 and extremely down in 1992 with 981.8, 742.6, 895.9, 986.2, 843.5 and 654.7 respectively.

Table 1.11: Occurrence of Drought in Palamau District

Year	Annual rainfall (mm)	Nature of Drought
1974	981.8	Moderate
1979	742.6	Severe
1981	895.9	Moderate
1983	986.2	Moderate
1988	843.5	Moderate
1992	654.7	Severe

Source: District Statistical Office, Daltanganj, Palamau.

The declaration and categorisation of drought in these years have been largely based on the report of Mateorological and Statistical department of the Palamau district. Among them, as mentioned above, 1992 has been categorised as most severe in the sense of destruction of the cultivation rather of man kinds. It is said that the annual rainfall of 1992, i.e. 654.7 mm is to some extent not bad so much, but the unequal distribution of it in both time and space has created the situation of severe drought. The failure of cultivation is enough more to the ruiness of human beings rather dying in it.

(2) The Chainpur Block

The block is situated at the distance of 6 km from Daltonganj, headquarter of the district, in Chainpur village. The Chainpur village is headquarter of the block and makes the heart in all respects of activities. The block is having 182 villages divided in 24 panchayats and each panchayat is headed either by a either Mukhiya or Sarpanth.

The socio-economy status of block is low which marks with its low profile of living, based largely on agriculture, traditional mode of equipments are basic features of

cultivation, communication is not advanced, occupation largely guided with their social position in the hierarchy of the castes, the standard of living occupies its status in the essence of caste profile. The institution of caste plays greater role in determining various kinds of activities.

Table 1.12
Caste-wise distribution of population of Chainpur Block

S.N.	Caste	% of total population
1.	Brahmin	10
2.	Bania	30
3.	Rajput	9
4.	Kayshat	5
5.	Halwai	12
6.	Nai	2
7.	Darji	3
8.	Julaha	8
9.	Upper Muslims Castes	5
10.	Schedule Castes	5
11.	Scheduled Tribe	8
12.	Others	3

Source: Circle Office, Chainpur Block, Palamau.

The society of this block is similar to the mainstream culture, where the patriarchal form of family, monogamous marriage, caste, cultural configuration of various communities, patrilineal law of inheritance, kinship tie is based on consanguinal or on blood relation are some of the basic characteristics of it.

Father occupies central place in the family while mother is subject of greater respect. Generally, joint family exists with all traditional values and norms. The caste plays decisive role in perpetuating the established traditional customs, values and norms. And violence of it still is subject of punishment. The pattern of interrelationship and interaction is being guided largely by the institution of caste.

The above statistics show the distribution of population on the basis of caste. By that, the Bania castes share a greater role in the society with 30% of total population, play like a dominating castes but in actual practice, they did not dominate over other because they are basically a trading caste and class which throws maximum attention towards the trading of goods as per their capability. The *Faridiyadari* is a famous commercial practice which is prevalent among them. More than 50% of Banias are engaged in Fardiyadari. It is a kind of trading at small scale which implies meaning of bringing the goods from remote villages and to sell into town market with a considerable profit. Mahua, telhan, katha, tendu patta, lac, mota anaj, and some consumer items which are main subjects to be traded

or exchange with face value of money or selling in the practice of Fardiyadari. It is clear that major portion of economy has been guided by these classes of Bania. On the second place, it is Halwai who contribues next major contribution and then Brahmin and other upper castes and SCs with few Muslims. With the help of above table, the percentage of each caste can be studied.

(3) The Study of Villages

The classification of villages has been based on the criteria of tribal and non-tribal population as it has been mentioned earlier. Karma and Temerai are chosen as a sample of tribal population while Neura represents non-tribal communities.

For conducting the present study, following parameters have been taken into consideration to make a comparative understanding of both communities, which will help to achieve the specific objectives of this study.

(a) Household:

The Chainpur block is having total households of 23,124 which consists total families of 21,234. Out of which, the

village Karma shares 64 households with total 71 families. While Temerai contributes with 67 total households which absorb 75 families. And Neura is having 295 household with 337 families.

Table 1.13
House-hold Pattern of tribal villages

S.No.	Caste	Karma	Temerai
1.	Prahaiya	57	11
2.	Munda	3	35
3.	Manjhi	4	12
4.	Christian	Nil	8
5.	Bhuiya	Nil	9
6.	Yadav	Nil	2
	Total	64	67

Source: Circle Office, Chainpur Block, Palamau.

The table 1.13 indicates castewise distribution of hosehold in tribal villages. The Prahaiya in Karma with 57 households and Munda with 35 in Temerai make main contribution in their respective villages. Other than Prahaiya, only Munda tribe and Manjhi live with 3 and 4 households respectively. In Temerai it is Manjhi who comes next to Munda in numerical strength. The contribution of rest castes can be studied from above table.

It describes the distribution of total households based

on different living castes among non-tribal population (Neura).

Table 1.14: Pattern of House-Hold in Neura
Total House-holds - 295

S.No.	Caste	No. of House-hold
1.	Muslims	187
2.	Brahmins	10
3.	Rajputs	12
4.	Halwai	20
5.	Schedule Castes	45
6.	Schedule Tribes	Nil
7.	Backward Castes	21

Source: Circle Office, Chainpur Block, Palamau.

Numerically, the Neura is basically a Muslim dominating village. This community occupies 187 households of total, next to them scheduled castes come with 45 households. Here tribal population is negligible. But the Muslims community is not economically sound because most of them belong to lower caste and class, i.e. Jullaha and Darji etc.

(b) Land:

It is main asset of villagers upon which economy rests. The value of land is greater than any other things for them. Out of total land of Chainpur block, i.e., 160,197.51 acres only 67,446.20 acres of land is cultivable and major chunk

of it is covered by forest, i.e., 66,685.25 acres. The major portion is useless, lying fallow depopulated, with least productive capacity that is called barren land or bechiraji land which contributes 26,066.06 acres of land. The table which is mentioning below can make it clear systematically.

Table 1.15: Distribution of land at Block level

S.No.		Land in Acres
1.	Total Land	160197.51
2.	Cultivable Land	67446.20
3.	Forest Land	66685.25
4.	Barren Or Bechiragi Land	26066.06

Source: Circle Office, Chainpur Block, Palamau.

While the pattern of land distribution in the study villages can be studied through the help of Table 1.15. By that Karma, Temerai and Neura are having cultivable land with 415.75, 236.50 and 286.00 acres respectively. Out of it a very less portion of cultivable land has been provided with irrigational facilities. Only Karma (42.60), Temerai (60.75) and Neura (86.50) have been irrigated. Though, the cultivable land is much to total than to barren land but actual outputs of the cultivation is less overall. And it is due to lack of infrastructural facilities of cultivation.

Table 1.16
Pattern of Land distribution to the Study Villages

S.No.	Pattern of Land Coverage	Kasma	Temerai	Neura
1.	Total Land	1609.10 acres	1048.63 acres	388.17 acres
2.	Total Forest Land	1120.42 acres	661.42 acres	Nil
3.	Total Cultivable Land	415.75	236.50	286.00 acres
4.	Total Irrigated Land	42.60	60.75	86.50
5.	Total Barren Or Bachiragi Land	33.33	89.96	15.67

Source: Circle Office, Chainpur Block, Palamau District.

According to the ceiling act of government, a man cannot keep more than 35 acres of land in his possession legally. The act has set up a pattern of land holding and categorised the farmers as per their physical possession legally.

Table 1.17: Scale of Land - Holding

S.No.	Category	Land-holding (Non-Irrigating) (in acres)
1.	Maximum Capacity	35 acres of land
2.	Marginal Farmer	0-2.5
3.	Small Farmer	2.5-5
4.	Medium Farmer	5-20
5.	Rich or Big Farmer	More than 20 upto 35

Source: Circle Office, Chainpur Block, Palamau.

By the above table a rich farmer is one who is having maximum extent of holding, i.e., acres of land while Margin-

al, Small, Medium and Rich or Big farmers have been categorised with the limits of 0-2.5 acres, 2.5 to 5 acres, 5 to upto 20 and more than 20 upto 35 acres of land, respectively.

In the study villages, karma is numerically dominated by the Prahaiyas, so maximum holding of land is with them. The Prahaiyas who are more than 50% of the total population of Karma village, hold maximum land in their legal possession but the dynamics of reality show a different picture in regard to their status of living.

Table 1.18
House-hold wise pattern of Land-holding in Karma village
Total Household - 64

S.N.	Category	Scale	House-hold Prahaiya	House-hold Others	% of total population
1.	Marginal Farmer	0-2.5 acres	2	7	11
2.	Small Farmer	2.5-5 acres	9	-	14
3.	Medium Farmer	5-20 acres	16	-	25
4.	Rich Farmer	More than 20 acres	30	-	50
	Total		57	7	

Source: Circle Office, Chainpur Block, Palamau.

Table 1.18 shows that the Prahiayas who occupy 30 households of the total in Karma village have been categorised as rich farmers. A Prahaiya holds certainly maximum of land holding but in practice they do not have equal return. Land does not keep value in cultivation rather forest is beneficial for them. Because their prime occupation is not to cultivate rather cutting woods from forest and selling it into nearby market. There are very few prahaiyas who hold less amount of land and categorised as marginal farmer. Rest categorisation can be studied from above table.

Table 1.19
House-hold wise Pattern of land-holding in Temerai village
Total house-hold 67.

S.N.	Category	Scale	SC	ST	Backward Castes
1.	Marginal farmer	0-2.5 acres	3	5	1
2.	Small farmer	2.5-5 acres	6	3	1
3.	Medium farmer	5-20 acres	8	9	2
4.	Rich farmer	More than 20 acres	14	10	5
	Total		31	27	9

Source: Circle Office, Chainpur Block, Palamau.

The above table tells us about the pattern of holding of land in Temerai village based on households. Here, in Temerai, land is distributed among all categories of the farmers, in which Scheduled Castes enjoy the status of rich farmers with 10 househoolds. Next to it, Mundas who are basically a cultivators. Rest Mundas are as marginal, small and big farmers with 5, 3 and 9 households respectively, Nine households of backward class are also in possession of land. So ou of total 67 households, scheduled castes and scheduled tribes share 31 and 27 respectively.

The Neura village is divided into two communities, i.e. Muslim and HIndu with share of 187 and 108 households respectively. The main feature of land holding here is the domination of marginal farmers. Out of 187 households of Muslims, the marginal farmers dominate with 97 households, while it is 35 in Hindu's community. Other important point in this that less domination of rich farmers while it is proportionate in middle order, i.e. small and big one.

Table 1.20: Household wise pattern of Land holding in Neura Village

Sl. No.	Category	Scale	Muslim Community	Hindu Community
1.	Marginal farmer	0-2.5 acres	97	35
2.	Small farmer	2.5-5 acres	58	27
3.	Medium farmer	5-20 acres	19	31
4.	Rich farmer	More than 20 acres	13	15
	Total		187	108

Source: Circle Office, Chainpur Block, Palamau District.

The above mentioned table explains that in the Neura village, the marginal farmers are dominating with 132 households to the total. These marginal farmers though do not have much land in their possession but make major chunk of the population in this village who get affected severely under drought.

Both above mentioned parameters, i.e. household and land or land holding capacity provide a logical ground of understanding that reveal the *status, standard of living, pattern of economy*, and overall the *ways of survival*. Karma and Temerai which are remote villages of tribal population

which show a very low socio-economic profile and backwardness in all fronts.

(c) Labour force:

At block level, the total labour force is about 37,996, wherein the cultivators and agricultural labourers are with 20,130 and 17,796 respectively.

Table 1.21: Total Labour force at Block level

Sl. No.	Classfication of Labour force	Total No. Labour force
1.	Total Labour force	37,996
2.	Total Cultivators (own land)	21,130
3.	Total Agricultural Labourers	17,796
	a) Wage earner - 9,516	
	b) Cultivator+Wage earner - 8,280	

Source: Circle Office, Chainpur Block, Palamau District.

The table shows the dominance of cultivators who have been cultivating on their own land while agricultural labourers are those who either go for wage earning or do both. The statistics of wage-earner and cultivators are 9,516 and 8,280 respectively who make total agricultural labour force.

In the study villages, the agricultural labourers are found in two forms, i.e., wage earners and cultivators and

wage-earners. In the agricultural labourers, the number of cultivators is less and these cultivators because of their backwardness could not cultivate properly, which was also due to the absence of infrastructural facilities.

(d) Occupation:

It is a very dynamic scale of measuring the status of a person by which living standard of his or her gets reflected. Not only it is important in terms of social position rather in economy set up too.

The Chainpur block is famous for the commercial activities of Baniyas in this district who play some time major role in controlling market prices and providing basic facilities to the local people.

The Baniyas of this block who are in major proportion, practice largely the commercial activities locally named "Fardiyadari". Besides that cultivation is their main occupation along with wage earning in off season.

Table 1.22: Distribution of Household according to pattern of Occupation in Study Villages

Sl. No.	Nature of Occupation	Karma	Temerai	Neura
1.	Both food gather and wood cutter and seller	15	2	3
2.	Only food gatherer	10	5	-
3.	Wage earner and wood cutter and seller	35	15	17
4.	Cultivator and Agricultural labourer and wage earner	4	37	147
5.	Cultivator and Fardiyadari	-	4	87
6.	Only Fereliyadari (petty trading)	-	-	35
7.	Others (petty jobs)	-	4	16
	Total	64	67	295

Source: Circle Office, Chainpur Block, Palamau District.

The above table shows the pattern of occupation in the study, vilages based on household. By the above figures, it is wage earner and wood cutter and sellers with 35 households dominate as main occupation in village Karma, next to it, both food gatherer and woodcutter and seller make second important activities of them. In Temerai, main occupation is cultivation along with agricultural labourer and wage earner. It is both cultivators and agricultural activities which make main occupation of the Neura village, next to it, it is Fardiyadari which acquires the second important place of occupation in Neura. The details of

these categorisation can be studied from above table.

(e) Housing Pattern:

It is another important parameter to scale the standard of living and to know about overall standard of living. A house is a status symbol for some people while it is taken only as a shelter for others. It gives internal structure of the family. The pattern of housing shows the varying degree of richness and poorness. The housing pattern is shaped by all integrated and interrelated cultural aspects of a person. The dwelling place does provide not only shelter to a person rather maintains secrecy of the family and shaped the pschological attitudes.

The Chainpur block is not an advanced block. It is amalgamation of both misery and joys. The pattern of housing here does not give a very distinctive characters rather symbolises the Indian villages with their traditional ways of dwelling habits and places.

Above table 1.23 indicates the nature of the house and pattern of housing. In the block, Kachcha, Pacca and Puchcha are 27, 38 and 35% of the total population respectively. Here, first type is of Kachcha which is generally made with

Table 1.23: Pattern of Housing in Chainpur Block

Sl. No.	Type of House	% of Total Population
1.	Kachcha	27
2.	Pacca	38
3.	Puchcha (mixed with both)	35

Source: Block Development Office, Chainpur Block, Palamau District.

the help of existing resources such as soil, bamboos, woods and Bhakhara Chana. Under this type, Khappara which is baked tile of soil largely used on making roof of the houses with the help of bamboos. The walls are generally white-washed either with cow-dung or lime or chuna. This type of house is peculiar feature of Indian villages. The villages of the block are also having similar style of construction. Another is that of Pacca, which is constructed with the help of concrete, cement, baked bricks, iron rods and other building materials. While pachcha is yet another marked feature of Indian villages, whose peculiarity comes from the mixture of composition of both kachcha and pacca. It is at the same time represents the features of both.

Table 1.24: Pattern of Housing based on Houehold in the Study Villages

Sl. No.	Type of Housing	Karma	Temerai	Neura
1.	Kachcha	52	47	42
2.	Pacca	nil	3	113
3.	Pachcha (mixed of both)	12	17	140

Source: C.B.D. Office, Chainpur Block, Palamau District.

After studying above mentioned table, it is said that in the study villages, kachcha type of houses which have been used by 52, 47 and 42 households of Karma, Temerai and Neura respectively, while it is most prevalent in Karma and Temerai. Neura is marked with maximum households with 113 and 140 of pacca and pachcha types of houses respectively. Paccha construction is nil in Karma while Temerai witnessed 3 households to be in this category. The cost of construction of Kachcha is least while it is comparatively higher in pachcha and go up relatively in pacca construction of a house. House symbolises the socio-economic status of a person and total ways of living.

(f) Sanitations:

It keeps prime importance from the point of health. The study of this parameter indicates the level of awareness

which reflects through the pattern of sanitation to be used by villages. In Chainpur block, it has been observed by the researcher at a lowest level of performance. The overall picture of this block shows that the people still do practice traditional mode of it. The meaning of it for the villagers is only to secretion of urine and filthy substance of the body, but do not know the adverse effect of it on the health.

Table 1.25: Mode of Sanitation at Block level

Sl. No.	Mode	% of Total Population
1.	Service Latrine	30
2.	Ceptic Latrine	17
3.	Sandas Latrine	27
4.	Field Latrine	26

Source:C.B.D. Office, Chainpur Block, Palamau District.

The above table shows that it is service laterine which has been used by 30% of the total population, while ceptic, sandas and field absorb 17.27 and 26.8% of total population. So, after studying the above table, it can be said that 83% of the total population of this block has been using traditional pattern of sanitary devices, i.e. services, snadas and field. Such large percentage of the people is vulnerable to be caught by different diseases always while

on the other hand it creates situation of unhygienic which put adverse effect upon rest of the people. If, maintenance of service and sandas laterines is going as per requirements and being cleaned properly the chances of victimisation by different diseases would be reduced. But it has been observed empirically by the researcher in the villages area that hardly any one keeps maintenance and the avoidance of it gradually pushing them into clutches of dangerous diseases. They rarely bother about it and do not try to get awareness in this regard.

Table 1.26: Household wise Pattern of Sanitation in the Study Villages

Sl. No.	Mode	Karma	Temerai	Neura
1.	Service Latrine	17	37	167
2.	Septic Latrine	nil	5	69
3.	Sandas Latrine	11	15	44
4.	Field Latrine	36	20	15

Source: C.B.D. Office, Chainpur Block, Palamau.

The above table reveals the facts that to what extent the people living in remote areas are aware about the proper use of any sanitary method. Here again, the dominance of traditional ways could be observed. By this table the people of Karma use maximum field for this purpose while in

Temerai it is. service laterine which is used largely and Neura is remarkably using maximum ceptic latrine along with service latrine. So, thus the importance of sanitation is still left away from the appropriate understanding of villagers, and there is a need to educate them at a greater extent, and the teaching regarding the role of sanitation in health dynamics which get affectted with varying degree of improper uses of sanitary measures is essential in order to get a good health.

Road:

The communication between the study villages and Chainpur which is headquarter of the block is very poor. Only they are lined with a narrow path, i.e. PAGDANDISE. The pagdandises are kachcha which got purturbed in rainy seasons Hardly any road of study villages is pacca, but in block, there are two pucca or concrete roads which linked the block to the Dalliganj subdivision and other parts of the district. On the other hand, the pagdandises are characterised by the uneven relief structure. Undualling nature of relief, does not provide space of having plain surface of the pagdandise that appeared very tough to cross in some circumstances.

(h) **Postal** - For the postal facilities, the study villages are dependent on the Chainpur. It is almost negligible. Though post-delivering staff have been appointed but seemed more or less inactive. While, block is having post office, but it is not the case with each village of it.

(i) **Water Supply** - For the irrigation purpose, the whole block depends on the natural rainfall, i.e. monsoonal rainfall. And, for the drinking use, well is most important device to get water. Ahar serves as the chief means of irrigation among all sources.

The water of Ahar is used largely for the irrigation purposes. In some parts of the block, it is used for both irrigation as well as drinking purposes. On the third place, it is handpipe which has been used mainly for the drinking purpose.

But the irregularities of monsoon rain, the water table of this block has gone down, that is why drilling for a handpipe has become costly affair.

(j) **Market** The Chainpur village which is headquarter of the block, serves as main market for all its neighbour villages.

Though the weekly "hart" is held in different places but most important place of buying and selling is Chainpur market. Besides that few shops of partune or general stores were found in the study villages. But these shops do not fulfill whole demands of the people.

(k) **Electricity** The facility of electtricity is limited to the non-tribal villages, i.e., Chainpur and Neura, but it is absent in the tribal villages. Few houses of Temerai have been electrified which are in the periphery of Neura village but rests are secluded from it.

(l) **The Village Panchayat** The panchayat is an administrative unit of the block which consists of a considerable number of villages in it. The head of village panchayat is Mukhiya or Sarpanch who acts in capacity of the executive head of it and look after the whole affairs at village level. He is an elected official of panchayat for the terms of few years. The Mukhiya helps the Block development officer in order to get implement the various developmmental schemes of the government.

The Chainpur block is having 182 villages which have been divided into 24 panchayats. These panchayats are controlled through 3 sectors. The executive head of each

sector is BDO or CO of the block office. The Karmchari and village level worker (C.L.W.) are field staff of block office who help both Mukhiya and Circle officer and B.D.O. in order to get information or implementing the schemes at villages. So, they are grassroot workers.

(m) School The level of education overall is low in this block. There is a high school at Chainpur village while primary schools are found at different places in this block. Even the Temerai is also having a primary or basic school where children from neighbour village come to get education. But the pattern of teaching is traditional.

(n) Health & Health Services It is most important parameter to scale the overall mode of living or survival. Health is a macro concept which demands integrated approach to study socio-economic profile of a person. The concept of `Health' implies meaning, i.e., a state of `WELL BEING' the well being is based on wholestic theory and incorporates sound-ness from all angle, i.e., social, political and economy. So far health services are concerned, it is most important factors to provide a state of `well being'. Here health does not apply only the meaning of biological disorder and suf-fering rather envelops whole activities of human affairs.

Table 1.27: The Structure of Health Institutions at District level

Sl. No.	Health Services	No. of Centres
1.	Referral Hospital	1
2.	Primary Health Centre (PHC)	14
3.	Add. Primary Health Centre	27
4.	Health Sub-Centre	318
5.	Sadar Hospital	1
6.	Sub-Divisional Hospital	1
7.	Maternity Child Welfare Centre	2

Source: District Planning Office, Daltonganj, Palamau.

The above table reflects the structure of health institution available at district level. There are one referal hospital, PHC (14), additional PHC (27), health sub-centres (318), Sadar hospital (1), sub-divisional hospital (1) and maternity child welfare centre (2).

On the part of physical possession of Chainpur PHC, it was found by the researcher that building of it was small, which could not even accommodate the six iron beds, there was four wheeler which was running out of order, there was very few modern equipments and the medicine being distributed through OPD was limited.

Table 1.28: Structure of Health Personnel of PHC, Chainpur

Sl. No.	Health Personnels		Nos.
1.	Primary Health Centre (PHC) at Chainpur		1
2.	Sub-Centres		16
3.	Doctors		4
4.	Para Medical Staff		38
	a) Sanitation Inspector	- 1	
	b) Extension Inspector	- 1	
	c) Surveillance Inspector	- 2	
	d) Lady Health Visitor	- 2	
	e) Auxilary Nurses and Midwives	- 13	
	f) Trained Dai	- 2	
	g) Health Workers	- 15	
5.	Officials (Clerks and Compounders)		2
	Total		61

Source: PHC, Chainpur Block, Palamau.

This table explains the health personnels available at block level. There is a PHC situated at Chainpur village. There are 16 sub-centres working under PHC of Chainpur, and total numbers of doctors are 4 along with 38 paramedical staff. The Chainpur PHC is main centre which guides the all 16 sub-centres working at different villages. The PHC receives a sum of Rs.6000 for the medcine of OPD of it, and Rs.2000 for the medicine of sub-centre each annually. there are 13 ANMs who are working along with field staff.

Mode of Treatment in Tribal villages

There are two popular approaches of curing the diseases among the tribal communities:

(1) First Approach: The Traditional Healers

In this approach, villagers do prefer to go to any tradittional healers. The situation of this approach begins like this - as they notice attack of any disease, they rush immediately to either Ojha, magician or female ojha locally called as "Ojhain". On their request, ojha begins his treatment through sacrifycing a chicken or hen, pours some local made alcohol called Hanriya a rice bear on chicken and than moves around patients with chanting some of his mantras loudly with different gastures and posture of his face and other action. And than after few minutes announced the result. He declares not only the posibilities of coming out from danger rather naming the causing factors to such serious attack.

If he fails to do what a customer was expecting, than patient has been taken to the local deities, there they worship deities with existing forms and follow the established 'totmas' and 'totkas' which are supposed to be pre-

scribed by that deity. This approach is used in any, kind of disease whether serious or minor one. And the last choice is there for PHC and allopathic but before this they go for private practioners. So, this was the story of their getting treatment and setting priorities categorically.

(ii) Second Approach: The tribal villagers do prefer to go to PHC, private practioner of allopathic and homeopathic only in case of:

(1) when patient has been referred by traditional healers on ojha showing his inability to bring back normal sttate of patient,

(2) when they failed to get positive result of the treatment of totmas and totkas prescribed by local deities.

(3) in case of total rejection from all sources of indigenouos methods, than they make an attempt to get treatment of allopathic medicine from nearby sub-centre PHC or any private practioners.

Table 1.29: Mode of Treatment in the Study Villages Responses based on Household

Sl. No.	Name of the Village	Total Household	PHC	Traditional Healers	Private Practitioner
1.	Karma	64	4	49	11
2.	Temerai	67	7	44	16
3.	Neura	295	81	58	156

The above table explains the priorities being set up by the villagers based on the house hold. By that the first priority has been given to traditional healers with 49 and 44 in karma and Temerai while in Neura private practioners stand on first choice with 156 house holds. In both Karma & Temerai the choices for PHC are least while it is high relatively in case of private practioners. In Neura, the preference of PHC come on second priority while traditional healers stand on third priority.

Here now, question arises that why it is on third priority in case of PHC in these villages? And why do they prefer traditional healers with setting on first priority? The answers of the above questions can be inferred from the table 1.30, which explains the causes of setting their priorities.

Table 1.30: Reasons of Avoidance of PHC Responses based on Household

Sl. No.	Reasons	Karma	Temerai	Neura
1.	Due to inappropriate mode of treatment	7	14	90
2.	Lack of adequate Medical facilities	13	16	105
3.	Ignorance of Knowledge	24	19	45
4.	Due to Communication	20	18	55

The above table provides the reasons for avoiding the PHC. It became clear after interviewing many people from Karma, Temerai and Neura villages that it was due to inappropriate mode of treatment, due to lakc of communication, ignorance of the people, and chiefly because due to lack of adequate medical facilities. They though of the PHC inappropriate because of their cultural differences. It was also due to the fault in policy making process, disparities between doctors and patients, lack of understanding between the doctors and patients, and mainly due to the failure of doctors in finding out the local factors behind occurrence of many diseases.

Another important point for their avoidance of PHC was lack of medical facilities. Hardly any sub-centres of PHC Chainpur is having proper building, medicines and medical staffs. Mismanagement and irresponsibilities of medical staffs and officials can also be said to a large extant responsible for their avoidance of the people of PHC.

Ignorance of the people, lack of awareness among them could also be taken for their avoidance of PHC. Most of the people were illiterate which prevented them to avail the facilities whatevr it was available at the PHC and its sub-

centres.

Finally, lack of means of communication was responsible for less interaction between medical staffs and villagers. Since, tribals lived in the remote areas, at a considerable distance from the block, that is why least accessibility come across in their way to get proper medical treatment. These remote areas, where these helpless people lived are connected with PHC or its sub-centres only by kachcha pag-dandis.

These pagdandis are useable in normal days but in rainy, the condition became worsed and to cross the field was only option to reach the PHC.

Now the question arises why do they prefer first the treatment through the traditional healers.

Table 1.31: Reasons of Preference for Traditional Healers: Responses based on Household

Sl. No.	Reasons	Karma	Temerai	Neura
1.	Immediate Cure	18	13	25
2.	Ease access	14	15	88
3.	Least Experience	15	18	102
4.	Sense of Security	9	10	18
5.	Lack of Awareness	8	11	62

This table provides various reasons for their reference given to traditional healers. The researcher found that these people prefer to visit 'Ojha' because they got immediate relief from traditional healers as the people thought of it. Many reasons were also responsible for visiting the 'Ojha' such as easy accessibility, familiarity, easy appointment and twenty four hours availability of the 'Ojha'. While PHC restricts accessibility in many ways such as time factors, presence of doctors, irregularity in distribution of medicine etc.

Economy factor also seemed very crucial to the researcher particularly in the case of Neura for their preference to traditional healers while it was mainly psychological problem in case of tribal habitants of Karma and Temerai. While considering the economic factor it seemed to the researcher that it was not possible for the inhabitants of the Neura village to purchae the which was not available at PHC and the prices were very high. They were unable to purchase these medicine from the market because the economic condition was very bad, they were not even able to manage the meals for two times.

It was noticed by the researcher that sense of security also prevented them to go for PHC. Sense of alienation, unfamiliarity out-siders feelings and the inferiority complex also forbade them to go to PHC. Avoidance, irresponsibility, ignoring tendencies, escaping attitudes, money-making attitudes, and commercialization to the medical profession were another factors which rather forced them to go to traditional healers.

Finally, lack of awareness among the people also pushed them to clutches of the ojha and undue death.

For example, while `interviewing the doctor of PHC', the fact was revealed by him that the people here are so strong at their will or guided largely by their mental bend. The attitudes of villagers are subject of their superstitious and religious dogmas which could be seen as heredity. Once, doctor was visited Karma, there one person was so serious that his death was near to him. He tried maximum in pursuing to get applied an injection to the patient to come out of danger, but the dying person and his family members were not ready at all to get applied injection. After a rigorous effort the doctors and his staffs somehow could have managed to take him out of danger by using his allo-

pathic treament.

On the other hand, researcher observed himself that their mental attitudes are carved out by superstitious beliefs. While interviewing a person in Karma village, reseracher saw four persons were carrying out a young along with a chicken and hunriya, when he asked the person he came to know that they were taking the young off to the Ojha who lived nearby tola. Then he himself went there and observed the going on psychological and magical treatment of Ojha. The condition of young was deteriorating gradually. He made an attempt to send them to subcentre at Neura but could not got success. Lastly, they went to PHC when Ojha refused and recommended them to go under the allopathic treatment.

It was found there after making close observation that only those who are aware about PHC in both tribal and non-tribal communities do prefer to go to PHC. It was studied that the maximum aware people are living in non-tribal community than to tribal community. Their level of awareness is subject of different factors which incorporate the multi-colour aspects of their life. The variation in their mode of treatment largely are the products of their cultural as well as economic factors which used to shape the mental

attitudes to villagers.

Disease Profile: The nature of the disease and its frequencies are output of geographical climate, socio-economic and political factors and existing health-services. Even the causing factors do very from group to group within a society because disparities between castes and classes.

Table 1.32: Disease Profile of the Study Villages

Sl. No.	Disease	Karma	Temerai	Neura
1.	Fever	79	102	1432
2.	Malaria (fever)	160	148	703
3.	Cold and Cough	16	35	43
4.	Warm Infection	15	25	53
5.	Skin Diseases	22	27	57
6.	Diarrhoea	17	26	40
7.	Anemia	90	118	304
	Total Population	399	481	2632

Source: PHC, Chainpur Block, Palamau.

The above table shows the profile of the diseases which have been observed by the researcher in the study villages, which the researcher had collected from the PHC of Chainpur. By the figure, it was apperent to the researcher that it was malaria (fever) which was prevelant largely in tribal villages while it was simple fever which predominated the non-tribal population of the Neura village. Interviewing a

staff of malaria department, it was revealed that frequencis chart of the malaria fever was prepared on the basis of the registration of the patient's names who visited the PHC of Chainpur. According to this staff, malaria was an acquate problem for the people of these areas. Out of 182 villages of this block 175 have been registered as severely affected by the malaria. Next to Malaria, it is aneamia which was most prevalent disease. This disease was particular to females as numbers of males suffering from this disease was negligible. Aneamia was caused by the absence of iron content in the diet of tribal females. This deficiency of iron also created the problem to the tribal females while giving birth to a child the absence of proper maternity facilities, the number of deaths during delievery were very high. Rest of the diseases such as cold and cough, waron-infection, skin-diseases and the diarrhoea which were noticed but less in frequency and seasonal in nature.

Health Problems: Though the malaria is prevalent disease in this block as has been revealed by the table which was mentioned earlier. Besides that health problem is an acquete because, poverty is most dominating factor here which gives birth of malnutrition and alcoholism. The use

of alcohol further added the health problems more. The tribal villagers use to take forest roots in their diet which also caused many serious diseases.

Due to poverty, many of the poisionness roots and fruits of the forest became diet of tribal people which unconsciously harm their health. It was observed by the researcher that the health status of the villagers was down to normal or lowest. It seemed, as if, they eat just to get linked bone with the flash of body. The ill-health do not help them to meet appropriate mannual power to earn minimum. Even the cultivators are not well enough in doing mannual activities. Overall the health of the people in study villages was low.

To know the impact of droght and health-problems, researcher interviewed many villagers. After interviewing all these persons in Karma and Temerai it can be said that the answers were similar. All had reacted in same fashion on the subject of suffering due to situation like drought. Answering on the same line they said, the major blow what they got, only in reduction of their income from selling wood's burdle to nearby town as it was replied by and old man while Naresh & Mohan prahaiya replied that failure of

monsoon made us totally unable, helpless and handicapped in pursuits of getting minimum necessities of day to day survival. In this situation they had lost their capacity of selling woods, cultivating even mota anaj and in return purchasing basic amenities from towns' market. They had become subject of exploitation in all front of activities.

On the question of getting health-services, they replied, we are vulnerable to so many diseases here. Since water accumulates around their Tolas, or houses made of Kachcha material, due to lack of proper drains to carry out filthy water and stuff, this situation prevailed not only in rainy season rather it is seen in normal days also. The most prevelant disease which had been reported is malaria. The accumulation of filthy water and dense shrubs and bushes around their huts paved the way of generation of mosquitos. The mosquitos were plenty. This was observed by the researcher during visit to Karma.

On the question of mode of treatment they replied that first and foremost we like to go to a traditional healers. It may be Ojha and Naiya or Magician. The very common fever cases do prolonged in danger situation due to their mode of treatment. Because, a Ojha does nothing to cure fever

rather acts in a psychic gestures by pronouncing some of the mantras, pouring alcohal on chickens body and than makes sacrifice by this only he assures their sence of immediate removing danger.

While asking why do you prefer ojha instead of going PHC nearby or sub-centre at Neura? They replied by complaining the mode of behaviour or treatment prevailing among the staff of sub-centre or PHC. Since, Ojha is available all the time in their tolas at the cast of minimum effort and money, their faith in super natural agencies, assurance of removing immediately the danger of death by ojha, keep them away to rationalize the acts offered by the ojha and its consequences. Researcher met some of the youths who were intended to go after logical reasoning and showed their avoidance of ojha, but the ratio of such avoidance was very low. There was a group discussion held in Karma village envolving only focus group members (who suffered more). This discussion provided the indepth understanding and cross-varification.

In village of Temerai, following persons have been interviewed. Sri Bandhana Mundo of 70, a cultivator, Dhuchra Munda of 35, a wage-earner, phuleshwar Munda of 45, an

agricultural labour and two educated persons, Jetha hemrom of 30, who is educated upto class seven, other person was Ajay Gudia of 25, who is still studying in graduation. All these persons having different answers. Bandhana complained against the damage of standing crops due to shortage of irrigational facilities, wage-earner Dhuchra Munda explained the story of exploitation through self-interest seeking persons in town area, Phuleshwar Munda showed his suffering of not getting jobs and had shifted to ricksha pulling in town. While both Ajay Gudia and Jetha Hemram raised against the existing system of block level activities - which do not let them to upgrade their standard of living, highlighted the lack of school and absence of it noot letting them to be award about the ways of removing their formidable conditions.

In Neura village, many persons have been interviewed informally through schedule, among them one local social worker explained in detail about the mis-management of government fund being allotted for local development by the official of block and other offices. While a person having 10 acres of land replied the damage caused by drought. He said, the failure of monsoon had made them unable to maintain some of the standing crops and to do further cultiva-

tion. Shortage of water appeared upon them as acute problem which caused not only shortage of grains but had accelerated prevelance of many diseases.

PART - B

RELIEF OPERATION

At district level, the relief operation was started since November 1992, but at block level it was January 1993, when rescue activities were started. It was done due to intensity fo drought which had been reported at different interval.

Table 2.1: Administrative Units of Relief Operation at District Level

S.N.	Units	Nos.
1.	Controlling Room at District Level	1
2.	Controlling Room at Sub-Divisional level	3
3.	Total Sectors	51
4.	Total Zonal Centres	10
5.	Total Sub-Zonal Centres	8
6.	Total regional Investigators & Surveyors	120

Source: District Planning Office, Daltonganj, Palamau.

(A) Administrative Units

According to above table at district level, the Deputy

Commissioner of Palamau had been working in capacity of Chief Controller of the operation. Many administrative units were assigned different responsibilities at different levels. Such hierarchial channals were - one controlling room was established at district level under the supervision of the Deputy Commissioner of Palamau, while there were three another controlling rooms at three sub-division, each one was functioning under the S.D.O. of that very sub-division. All together there were 51 sectors for the scruitinising the going on relief activities guided by 10 zonal centres and 8 sub-zonal centres. Total investigators and surveyors were 120 who were assigned to submit monthly reports of the operation.

Each channal was accountable just to immediate upper one regarding fund allotment and its expenditural accounts and in maintaining registers.

Relief operation was launched at a massive scale, which envolved almost all government employees of the district. Total expenditure was met from the both central govt. or from district fund, and non-government organisations. It is clearly said in the light of the findings that, the Deputy Commissioner had worked without much understanding situation

epidemic or famine. It was reported that due to hunger, there was not any names being registered against column of death in spite of press publication on several occasions.

The table 1.4 and table 1.5 explain the extent of damage of various crops during drought period or before it. The shortage of grains was foremost acute problem along with water for drinking purpose. Through the graph mentioned in table 1.5, it is clear that rice was most damaged crops, since it is used to cultivate maximum portion of net sown area because it is stapple diet of the people of the district. Maximum suffering in absence of water caused to the majority of study population.

Table 2.2: Position of Availability of Food-grains at district level

1.	Panchayat Level	830.3	M.T.
2.	Block Level	536	M.T.
3.	No. of SFCs outlet (State Food Corporation)	17	M.T.
4.	FCI (Food Corporation of India)	1950	M.T.

Source: District Planning Office, Daltonganj, Palamau.

So, before the government, it was first task to get managed the supply of grains from the central government. The table 2.2 mentioned above, position of availability of food grains at Panchayat level was of 830. 3 M.T. While it

was 536 M.T. of grains available at block level. The Food Corporation of India (FCI) had provided the facility of 1950 M.T. of grains for such rescue operation. And it was distributed through out let of SFC (State Food Coporation) which were 17 in numbers.

Table 2.3: Position of supply of Food-grains at district level through Public Distribution system

Month	Allotment (in M.T.)		Distribution (in M.T.)	
	Rice	Wheat	Rice	Wheat
Oct.'92	1805	2355	1805	2355
Nov.'92	1805	2355	1805	2355
Dec.'92	1805	2355	1805	2355
Jan.'93	2585	2805	2585	2805
Feb.'93	2085	2805	2085	2805
March'93	2035	5275	2035	5275

Source: District Planning Office, Daltonganj, Palamau.

On the other hand, grains made available through public distribution system, with the help of many ward's shops. By this, the ration card holders at district level got benefit in such crisis. The above table describes the monthly accounts of both allotment and distribution of wheat and rice through ward-venders. The statistics available in the table are of only those months which were reported in dangers. It started since Oct. 1992 and extent up to March 93.

The distribution of wheat and rice had gone through whole period of drought at district level of through PDS, as it is being mentioned in table no.4.4 below.

Table 2.4
Distribution of grains during drought period through Public Distribution System (PDS) at district level

1.	Total no. of shops	1317
2.	Total distributed quantity of wheat (Nov.'92 to Oct.'93)	4,59,800 quintal
4.	Total distributed Rice (Nov.'92 to Oct.'93)	3,01,900 quintal

Source: District Planning Office, Daltonganj, Palamau.

The above table puts account of distribution during the period of November 1992 to October 1993, of wheat and rice. By that figure, total nos. of shops working under PDS were 1317 and total quantity of distributed of wheat and rice were 4,59,800 and 3,01,000 quintals respectively.

(B) Various Schemes under Operation:

To conduct the relief or rescue activities as per its objectives, the government had adopted two methods. These are:

(1) Protective Method.

(2) Preventive Method.

(1) PROTECTIVE METHOD:

The meaning of this method is to provide relief or welfare activities to overcome immediate crisis or threat fo dange being caused by drought. For that purpose, it was persued to launch some of such schemes which are temporary in nature but keep importance to bring out from the clutches of death. At any cost, government made his stand to protect life of the people from the suffering arises in shortage of food, water and employment. So, it was method of providing safety and security from all fronts of suffering. Under this protective method of government following schemes had been launched to cater the required services.

(a) RED CARD

Concept: It was one of the device to combat the suffering of basic needs. It is a certificate covered with red paper. It provides legal possession to a person which makes him able to get the facilities of this scheme. It was meant not for all rather restricted to certain pockets of population who have been residing below the poverty line and having inability to earn money from any source.

Target Groups: Following criteria were taken into account

for the inclusion or selection of any persons in it.

- The population who are residing below the below line.
- Those who are old, helpless, widow and landless.
- The person who is not able to earn money due to disorder in body or is physically - handicapped.
- The person who is not sound by his mental states or is insanse.
- An old person who is not getting old-age pension, is liable to be selected.
- The widow, who is totally helpless in getting money from any sources or in absence if any male member in her family.

So, the person needed to be selected in target, must seek to fulfill any of the criteria mentioned above. The selection of the target group was subject of a detail investigation being conducted by the Mukhiya and Sarpanch of concerned village.

There are two ways of conducting the process of selection of any person in it.

First - It was decided that only 2% of total population of block will be taken into consideration for such selection

who are below the poverty line.

Secondly - The final say in selection precedure was lying in the hands of Mukhiya and Sarpanch of the concerned Panchayat. Mukhiya makes selection of any person based on the report given by Karamchari of the concerned village, who is supposed to know each and every aspects of that villages. And he identifies a person whether he or she should get selected or not. But finally, it is Mukhiya who makes any one to be in list of red-card holder.

Provision under Red Card:

- A person is liable to get 3.50 kilograms of wheat along with cash dole of Rs. 1 in a weak.
- The block authority will appoint a person to distribute wheat and cash dole.
- There shall be a fixed day in a weak for the distribution of wheat and cash dole.
- B.D.O and C.O. at block level will be accountable for maintaining all expenditure in written order to district authority who will be finally accountable to the central government.
- And lastly, a card holder will be given a certificate covered with red paper.

Table 2.5: RED CARD

Period- At district - Nov.'92 to Oct.'93
At block - Jan.'93 to Sept.'93
Source- 100% sponcered by the govt.

S.No.	Particulars	At District	At Block
1.	Total no. of Red Card Holders	41,700	3,340
2.	Received Cash Dole	66,84,090	1,20,240
3.	Distributed Cash Dole @Rs.1 holder	61,17,375	1,20,240
4.	Total received wheat	47,284 (quintals)	3,100 quintals)
5.	Total quantity of wheat distributed	45,829 (quintals)	3,100 (quintals)
6.	Balance of wheat	1,455 (quintals)	Nil
7.	Target Group	Helpless, widow, landless, physically handicapped, insane old persons without old age pension, and all those who are living below poverty line.	

Source: District Planning Office & Statistical Dept. of Chainpur Block, Daltonganj, Palamau.

The statistics presented by the above table at both district and block explained that total no. of card holders were 41,700 at district and 3,340 at block. Total received amounts were Rs.66,84,090 & Rs.1,20,240; expenditure Rs.61,17,375 and Rs.1,20,240 at district and block level respectively.

(b) GREEN CARD:

It was another device, almost similar to red card, which too provides legal standing of any person who is fulfilling the basic criteria to be included in selection group. It was same in manner of proovision, distribution, selection criteria to that of red card but only differences lying in its authorisation.

It was not merely a scheme launched by the government rather it had been funded mostly by the private institution. Basically, it was creation of the Deputy Commissioner of Palamu, who had gathered financial aids from different private sources as charity for the relief work. So, this was basic difference between the nature of funding, while red card who was fully sponcered by the central government but for it other private institutions had donated too.

It just reduced the pressure load from the red card scheme. When number of needy persons crossed the prescribed limit of 2% of total population, or, any one who left unhappy with red card, than had been included in the Green card scheme. It was created to assist the red card scheme in a manner to provide maximum relief to the sufferers.

Table 2.6: Green Card

Source: Funded by different Institutions along with government.

Period: At district- Nov.'92 to Oct.'93
At block - Jan.'93 to Sep.'93

	At district	At block
1. Total no. of Green Card holders	10,575	960
2. Distributed grains on Green Card	3,162 (quintals)	403.20 (quintals) + 88 bags of flour + 77 bags of rice
3. At Block level: (a) C.C.L. - 403.20 quintal of grains (b) C.M. Quata- 88 bags of flour 77 bags of rice		

Source: District Planning Office, Daltonganj, Palamau.

The total Green card holder were 10,575 and 960 at district and block respectively. It was 3,162 quintals of grains were distributed at district level. At block level, total grains of 403.20 quintals were distributed among Green card holders which had been supplied by the C.C.L. While 88 bags of flour and 77 bags of rice had reached at block from C.M. quota.

(c) Reserve Quata

The provision was made to keep resume quata in each

panchayat. It was managed only for sake of protecting any threat of death due to hunger. The amount of 5 quintals was kept under the supervision of Mukhiya of that panchayat. It was called as special provision or security providing resume. Any body was liable to get benefit of this quato, but he/she must not be listed in red and green card holder-ship. It was conceptualized in the light of prime moto of the relief operation to protect life and death must not be caused by hunger.

(d) Drinking Water:

Next to food, water is essential for the survival of human beings. The impact of drought was sharp on the existing sources of drinking water. The shortage of water had inflicted a threat of danger or ruinness on the life process of the people.

Table 2.7: Drinking Water source at district level

S.N.	Source	Existing	Additional need available during drought	Under Execution
1.	Well	21054	3852	902
2.	Tube-well	11889	1116	912
3.	Pipe Water supply	21	Nil	Nil
4.	Tankers	12	Nil	Nil
5.	Rigs	24	20	22

Source: District Planning Office, Daltonganj, Palamau.

At district level, the existing numbers of wells were 21054 as table is showing while it were 3852, mode available purposely during drought period, and 902 wells were running under construction. By the statistics of above table, it could be said that well was main source of drinking water. The existing Tube wells were 11886 but 1116 additional tube-wells were added during drought period to reduce the pressure from well and to provide clean portable water.

Table 2.8: Main source of Drinking water at district level

S.N.	Source	Nos.
1.	Total no. of sources (Tube well + well)	32943
2.	Total no. of Tube-wells	11889
3.	No. of Tube-well under operation	9213
4.	% of Tube Wells under operation	77.5%
5.	Population load/Tube wells	177 persons
6.	Total no. of wells	21054
7.	No. of W under operation	16131
8.	% of W under operation	77.6%
9.	Population load/well	100 persons

Source: District Planning Office, Daltonganj, Palamau.

The well was main source of drinking water but tube well was seen mostly in use among the town dwellers. Though the help of table 2.8, it was said that one tube well covers

the presure of 177 persons. While a well provided drinking water for 101 persons. Out of total tube wells (11889), 9213 were running under operation while 16131 wells out of order of total numbers of 21054. The percentage of tube wells and well were 77.5 and 76.6% respectively.

The progress during drought period for the drinking water was made through the help of various scheme and department. It was JALDHARA scheme which provided additional numbers of well that come around 3,663 and 2,076 were under execution, this can be studied from the Table 2.9, mentioned below. Next to it, it was PHED department which completed 1,224 schemes to provide drinking water and 2,638 schemes

Table 2.9: Progress during drought period in irrigational facilities at district level

Item	Fund received (in lacs)	Expen-diture (in lacs)	Target	Schemes completed	Scheme unded execu-tion	Bal-ance in lacs
P.H.E.D.	544.39	322.45	3862	1224	2638	222.00
M.I. (Wells)	287.11	128.69	1742	456	1286	158.42
Jal Dhara (wells)	307.56	394.89	1183	3663	2076	87.33
Relief	31.00	10.00	-	-		21.00

Source: District Planning Office, Daltonganj, Palamau.

were under execution. And lastly, minor irrigation had constructed 456 wells and 1,286 were under preparation to provide drinking water. In this purpose, relief operation had received 31 lacs of rupees but only 10 lacs was used in the pursuit of providing drinking water.

So far the pattern of water utilization is concerned at block level, it was different than to district milieu. At block level, it was Ahar, which has been largely used for irrigation purposes by 80% of total population while well contributed maximum for the purpose of drinking water which covered 65% of the total population.

Table 2.10: Pattern of Water Utilization at Block level

Sl. No.	Source	Nature	Purpose		% of Total Population	
			Minimum	Maximum	Minimum	Maximum
1.	Ahar	Seasonal	Drinking	Irrigation	20	80
2.	Well	Perennial	Irrigation	Drinking	35	65
3.	Handpipe	Perennial	Irrigation	Drinking	7	93
4.	Rehat	Both Seasonal & Perennial	Drinking	Irrigation	15	85

Source: C.B.D. Office, Chainpur Block, Palamau.

The above table described Ahar and Rehat for the purpose of irrigation at block level which covered the 80 and

85% of total population respectively. For the purpose of drinking water, well and hardpipe were main sources which had been used by 65 and 93% of total population. Here well was used for both purpose largely while ahar and rehat were used less for the purpose of drinking water. Ahar was seasonal at its nature which generally dried up in absence of rain but well being a perennial source of water does provide facilities for all purpose always. Rehat was both seasonal and perennial in nature, when it was used with well of having maximum deep, it reflects as perennial source of water otherwise got dried out in summer season.

(e) Sasti Roti Yojna: Under this Yojna, the provision was made to supply prepared food at a minimum price to needy person. It was decided to sell 400 grams of roti (bread) in weight with prepared subji (vegetable) only at price of Rs.1.20. It was most attractive and popular scheme which had provided immediate removal of hunger at cost of minimum price. 400 grams roti with subji only Rs.1.20 is more than sufficient to remove hunger of a person. This yojna had acquired tremendous performance during entire relief operation. 68 quintals of wheat was made available at subsidized rate of Rs.2.05 paise per kilogram to concerned dealers. By

this, dealer was benefited with Re.1/- per kilogram of wheat.

Table 2.11: SASTI ROTI YOJNA

Sl. No.		At District	At Block
1.	Number of shops opened	50	3
2.	No. of Beneficiaries per day	3,005 persons	180 persons
3.	Donated fund from other source	Rs.1,44,158.50	-

Source: District Planning Office, Daltonganj, Palamau.

The table mentioned above stated that 50 shops were operated under the **Sasri Roti Yojna** at district level which get benefited 3,005 persons per day with lucrative facilities. While at block level it was only 3 shops running for this purpose which were providing benefits to 180 persons per day. At district level, some of the private agencies or institutions were donated sum of around Rs.1,44,158.5.

By the table 2.12, it is said that 1,198 shops were opened under the head of "FAIR PRICE SHOPS". It means, the rate of commodity will be according to the rate being fixed by the government. Other than fair price shops, 13 mbile shops of same nature were running at different remote areas where scarcity of food were intense and accessibilities were

minimum.

Table 2.12: Availability of Fair Price Shops at District Level

1.	No. of Fair Price Shops	1198
2.	No. of Mobile Shops	13

Source: Planning Office, Daltonganj, Palamau.

(f) Animal Drinking Water:

In rescue operation, next to human beings, animal or particularly cattle was main subject to be considered. Since, agriculture based society demands the welfare of both man as well as cattle, because cattle makes them able to cultivate crops in absence of other scientific approach of ploughing the field. That is why different provisions were running side by side. In which, construction of "*CHUAN*" on the dried-up river beds was main activity to provide drinking water for cattle - at block level, while it were water holes and troughs (Hauda) popular at district level.

Table 2.13: Drinking Water for Cattle - at district level

1.	Fund Available	Rs.20 lacs
2.	Type of Schemes:	
	a) Water holes & tanks (in dried up river beds)	820
	b) Water Troughs (Hauda) (Concrete construction)	1270

Source: District Planning Office, Daltonganj, Palamau.

At district level total available fund for cattle drinking water was about Rs.20 lacs, as it is mentioned in above table. In which 820 schemes of water holes and tanks were completed, which construction took place in dried up river beds. In another effort, 1,270 schemes were made available. It was scheme of the concrete construction of water troughs or Hauda which facilitated the cattle population at district overall.

While at block, the drinking water for cattle was made available by the construction of CHUAN with the help of local existing resources. According to table 2.14, as mentioned below, the total allotment of fund received at block was around Rs.97,600 and the record shows the expenditure of the same amount. And this expenditure met to construct finally 80 Chuans at different locations into dried up bed of river Koel and other nearby pounds. The cost of the construction of one Chuan was estimated around Rs.1,200, and the distribution of it was largely subject of verification and identification which was done with the help of Karmchari and Mukhiya of concerned village. The number of families being benefited with such scheme were reported about 80, but the actual numbers of cattle being survived

upon this were not available at block office.

So, by then scheme government had tried to protect life of cattle along with people to restore the normal set-up in pursuit of continuing agricultural activities.

Table 2.14: Drinking Water for Cattle - at Block level

Sl. No.	Particulars	Amount (Rs.)
1.	Total received allotment	97,600
2.	Total expenditure on the construction of `CHUAN'	97,600
3.	The cost of one `CHUAN'	1,220
4.	Total no. of CHUAN constructed	80
5.	Beneficiaries	About 960 families

Source: Circle Office, Chainpur Block, Palamau.

(g) Free Fodder for Cattle:

According to table 2.15, which is mentioned below, the total cattle population at district were reported of 10,77,264 and to feed them, the normal requirement of fodder was estimated around 14400 M.Tons. The fund on this account was Rs.17 lacks available at district which had been distributed in its 17 blocks in proportion to their cattle population. At different places, 162 fodders shops were opened to provide fodder at subsidised rate. And the total

sale of 33.33 metric tons of fodder had been accomplished at the subsidised rate of Rs.30 per quintal. On the other hand, the prices at market in generation were Rs.125 & Rs.80 for wheat straw and rice straw respectively.

Table 2.15: Fodder for Cattle at District Level

1.	Cattle Population	10,77,264
2.	Normal requirement of fodder	144,00 M.T.
3.	Fund Available	Rs.17 lacs
4.	Number of fodder shops	162
5.	Market Price of	
	(a) Wheat Straw	Rs.125/Qtl
	(b) Rice Straw	Rs.80/Qtl
6.	Fodder Subsidy	Sale of 33.33 M.T. fodder at Rs.30/- per quintal

Source: District Planning Office, Daltonganj, Palamau.

While at block, the total number of cattles were recorded around 30556 can be seen in table 2.16, by that donated amount at district was about Rs.8,06,360; in which 7 lacks was received for the cattle fodder. At block, it was Rs.73,800 as total received amount. And total expenditure was reported around Rs.4,79,164.00 at district and it was Rs.73,800 at block. In block, 6454 persons were listed for the distribution of fodder, in which 6177 persons got bene-

fited. Besides that the government had distributed 1500 quintal of hay or dried grass among its all districts in proportionate to estimated requirements.

Table 2.16: Free Fodder for Cattle
Period Jan. 1993 to Sept. 1993

Sl. No.		At District	At Block
1.	Total no. of cattle	10,77,264	30,556
2.	Donated amount for fodder	Rs.8,06,360	-
3.	Amount Received	Rs.7,00,000	Rs.70,800
4.	Expenditure on free fodder	Rs.4,79,164	Rs.73,800
5.	Targetted Beneficiaries	-	6,454 Persons
6.	Actual no. of Beneficiaries	-	6,177 Persons
7.	Government distributed Hay or dired grass	1,500 qtl	-
8.	Not distributed Hay or grass	8,500 qtl	-

Source: District Planning Office, Daltonganj, Palamau.

(h) Medical Facilities:

A special measure was taken in the wake of providing good medical facilities for that special camps were arranged. The total staff of a camp were estimated on the basis of the degree of suffering. Where the degree of suffering was reported high, there camps were held many of the times. The interval between two camps was not more than 7 or 8 days. A camp unit consists of one doctor, 2 ANM,

Compounder, malaria inspectors, and other filed staff. Since most of the cases were reported of malaria (fever) and the cases of diarrohea and anaemia. But most prevalent diseases was of malaria and anaemia.

The expenditure of additional field visits and of medicine was met from district fund. Despite of the arrangement of additional camp visit to most remote parts of this block, a special attention was taken to make live all running sub-centres of Chainpur PHC.

Here in this section, findings can not be mentioned in quantity manner. It is because, there was not a single case registered any where to be suffered due to hunder, which was special aim of this temporary arrangement i.e relief operation. While the suffering which was happening in normal days, were found in same fashion. So, it was to some extent most positive sign of the success of this relief operation that had not provided any room to death due to hunger.

Researcher had collected a chart of disease frequencies during drought period, from OPD of Chainpur PHC, the headquarter of the block. By that chart, only maximum number of fever cases were registered along with other minor diseases. The nature of registered cases of fever was of malaria. And

malaria fever was reported one of the most stricking events in this period, but not any serious casuality was reported against it. The chart mentioned below provides monthly frequencies of diseases of total registered cased in OPD.

Table 2.17: Frequency of Diseases

Sl. No.	Name of the Diseases	Month (1993)								
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1.	Malaria fever	41	51	85	65	65	87	117	87	64
2.	Anaemia	17	23	19	21	32	43	57	42	36
3.	Cold & Cough	32	27	29	36	21	45	65	49	39
4.	Filaria	7	9	5	10	6	11	8	9	7
5.	Bodyache	9	12	6	17	12	27	23	34	21
6.	Asthma	6	8	4	8	12	11	15	9	13
7.	Dycentry or loose-motion	16	14	21	36	44	49	37	29	18
8.	VRTG (viral fever)	31	49	41	27	44	33	58	101	51
9.	Tonsillitis	6	15	24	8	13	15	38	23	17
10.	Worm	4	2	7	7	16	25	21	15	10

Source: PHC, Chainpur Block, Palamau.

According to table 2.17, malaria fever was stricking disease during drought. Period, apart from this it were viral fever, cases of dycentry or loose-motion, cold & cough, tonsilithes, asthma, warm etc. It was month of June, July and August. Which were reported with maximum cases of these diseases.

To extract out the nature of malaria cases, whether it was positive or negative, field visits were conducted at

short interval in reported areas. It was malaria inspector who had assigned to collect slaides of fever cases to make out the nature or identify malaria.

Table 2.18: Pattern of Distribution of Medicine

Age	Contents of one dose	
	Cloroquin tablet	Paracetamol tablet
About 14 years	4	2
8 - 14 "	3	1
5 - 8 "	2	1
1 - 4 "	1	1/2
0 - 1 year	1/2	$1\frac{1}{4}$

Source: PHC, Chainpur Block, Palamau.

The abvoe mentioned tabel shows the contents of one dose according to age. One dose consists of clorigune + paracetamole tablets. It was the method being applied by the malaria inspector at the time when taking slide of a fever case to check whether the nature of fever is of malaria or other.

(i) Employment Generation:

It was overall, keynote of the relief operation and the crux of entire activities related to rescue more. According to table 2.19, total 7748 mandays were created through different schemes and departments which altogether had been

estimated expenditure around the amount of Rs.3222.

It was Jawahar Rojgar Yojna which stood on first place in the way to generate 54.75 lacs mandays through its different schemes. Other than J.R.Y., it was forest department which had provided space for 9 lacs mandays, while Drought Prone Area Proogramme had given opportunities of 5.17 lacs mandays. The minor irrigation supported only with 2.77 lacs mandays, while others agencies reported for the generatioon of 5.45 lacs of mandays.

So, besides protecting the life from death, government had tried to accelerate their capacity of earning by providing opportunities of atleast at the time of crisis, the people had been supported by the government not only in from of providing grains, sasti-roti and sabji rather employment too, which had cultivated the scene of security and optimism toward life prospects. It was JRY, which had created maximum man days which come around 54.75 lacs during this period. Next to it, forest department had provided the space for man days with 9 lacs and other lsuch as D.P.A.P., M.I., and irrigation department had generated man days 5.17, 2.17 and 0.34 lacs respectively.

Table 2.19: Employment Generation

Sl. No.	Scheme/Department	Expenditure (in lacs)	Man days (in lacs)
1.	J.R.Y.	2,190	54.75
2.	D.P.A.P.	233	5.17
3.	M.I. (D.R.D.A.)	125	2.77
4.	Irrigation	203	0.34
5.	Forest	189	9.00
6.	Others	282	5.45
	Total	3,222	77.48

Source: District Planning Office, Daltonganj, Palamau.

Along with all these protective measures, government had given special attention on the regularity in maintaining the distribution of old age pension. Though it was not a scheme of relief operation rather exists in normal days too, but it got a new impetes during this period of crisis.

Table 2.20: Old Age Pension

1.	Total No. of Pensioners	33,381
2.	Distributed Amount	Rs.3,54,59,000
3.	Per Month Expenditure	Rs. 33,33,100

Source: District Planning Office, Daltonganj, Palamau.

By the above table total numbers of old age pensioners are 33,381. The distributed amount was estimated Rs.3,54,59,000.00 in this period. And it was Rs.33,33,100.00 per month expenditure to meet the require-

ments of 33,381 pensioners.

Table 2.21: Schemes Executed by J.R.Y. at District Level
Total Fund Available - Rs.2419.10 lacs

Sl. No.	Type of Scheme	Expenditure (in lacs)	No. of Schemes completed	No. of Schemes under execution
1.	Indira Awas	127.77	767	1,843
2.	Jaldhara	394.89	3,663	2,403
3.	20%	225.82	41	182
4.	Panchayat	1,583.71	2,004	5,616
	Total	2,329.10	6,475	110,044

Source: District Planning Office, Daltonganj, Palamau.

The above table shows the various schemes which had been launched and promoted by J.R.Y. at district level. Total fund under this head was available around Rs.2419.10 lacs, in which Indira Awas Scheme completed 767 awases and 1843 were running under construction which altogether met the expenditure of Rs.127.77 lacs. Next Jaldhara was completed 3663 schemes and 2403 were under construction which met expenditure of 394.89 lacs. Rest can be studied from table 2.21. Thus, total schemes which were completed finally figured around 6475 & 10044 schemes under process which met expenditure of Rs.2329.19 lacs.

Other than above provisions, J.R.Y. got managed the distribution of grains for conducting relief operation smoothly, where total allotment of food grains were of 13630 metric tonnes, and the same amounts were distributed among the people of target groups.

Table 2.22: Grains distribution through J.R.Y.

1.	Allotment of Foodgrain	13,630 M.T.
2.	Distribution of Foodgrain	13,630 M.T.

Source: District Planning Office, Daltonganj, Palamau.

Various Development Programmes at Block

Table 2.23: Various Development Programme at Block Level

Sl. No.	Schemes	Achievement
1.	I.R.D.P.	- 5.83 families benefited
2.	J.R.Y.	- 700 schemes, launched - 678,166 Man days during drought @ Rs.24/individual - Fertiliser worth of Rs.47 lacs distributed
3.	Indira Awas (for ST only)	- 211 I.As. have been completed during drought
4.	MADA	- Employment for 45 ST families
5.	National Water Shed Programme	- Rs.5,000 as subsidy for employment benefited 130 families out of targetted 150 families

Source: C.B.D, Office, Chainpur Block., Daltonganj, Palamau.

Following programmes were running in general development process at block which are:-

(1) I.R.D.P. - It is primarily concerned with allivation of poverty and bringing up the families, who are residing below the poverty line. Under this, 583 families had been picked-up from the poverty line, through various small scale schemes to just create social assests and job opportunity.

(2) J.R.Y.- It had been completed 700 schemes at block level, which includes distribution of fertilizers worth of Rs.47 lacs and 7,39,166 mandays generation during drought period in Chainpur block.

(3) INDIRA AWAS- In this, the provision was to provide awas made of Kachcha raw materials only to Scheduled Tribes. It was restricted only to STs. And this scheme had accomplished the construction and distribution of 211 awases to STs during drought period in this block. With this provision, it had created some of the job opportunities too at block.

(4) Modified Area Development Approach (MADA)

In this scheme, individual benefit has been taken as prime moto. This approach has been conceptualized only for

the primitive tribes who and living in remote areas. MADA had provided the employment opportunities to 45 families of tribal population during drought period at block.

(5) NWSP- The National Water Shed Programme was started since Jan'93 and has been fully sponcered by the central government. It keeps the provision of constructing Ahar, Cheekdam, Tanks, loose bolder cheekdam, bunding, field leveling etc. It had been benefited 130 families out of targeted 150 families though job opportunities.

Role of NGO's and other Institutions in Relief Operation

The role of non-government organisations and other institutions related with social services was admirable. The government efforts met a new impects with the help of NGO's and Social services group in order to cater the proper management of rescue operation.

During drought period, the camps of these institutions were running actively at different places which had been reported as most severely affected under drought. Apart from government, these NGO's and other institutions distributed free food grains and fodder for cattle. The distribution was accomplished with the help of local leaders and

government officials and other agencies.

The involvement of Birla and other like industrialists paved the way to meet smooth functioning of relief operation. The contribution of many youths and their organisation was also important in mobilizing the resources to cater infrastructural facilities to the sufferers. It was a joint effort of various organisations and other welfare institution along with government under the supervision of district commissioner of Palamau to accomplish relief operation as per its target, which resulted positively because there was not a single case of death registered or reported due to hunger.

The following NGO's and Social Services groups and institution which were contributed largely in relief operation first time in history of Palamau district.

Relief Work of Non-Government Organisation or Self-Service Institutions or by Government Agencies

Name of the Institutions

(1) C.C.L. (Central Coal-Field Ltd.), Ranchi;
- donated Rs.15 lacs to relief funds of Deputy Commissioner and porch water tankers.

(2) Catholic Charity -

distributed free food among 100 persons.

benefited 100 persons by Green Card facilities.

(3) Bihar Relief Committee -

opened 15 shopes of Sasti Roti.

Opened 16 new hand-pipes.

opened 15 mixed Centre (General Store).

(4) Bokaro Steel Plant -

donated Rs. 2 lacs to relief fund of Deputy Commissioner.

(5) Tata Relief Committee -

34 new hand-pipes.

(6) Birla Seva Samity -

distributed prepared food (Khichari) per day among 5000 persons.

(7) Bapu Rahat Mandal, Asha Ram:-

mixed stores opened at Daltonganj and Satbarwa.

benefited 20,000 persons.

free distribution of medicine among 2430 patients.

distributed milk powder freely among 300 children.

(8) Anand Marg Universal Relief Committee:

free food house.

construction of Chaun (a type of Petty well)
Sasti Roli.

(9) Rotary Club, Daltongaj:
free distribution of food at Garu block.

(10) Nehru Yuwa Kendra, Saran, Chappara -
Distributed in Chainpur block-

69 bags of rice.

58 bags of wheat.

2 bags of Macca.

(11) Primary Teachers Sangh, Aurangabad:
free distribution of rice among Students at Chattarpur block.

(12) Chief Minister, Secretariate, Patna, Bihar:
total 120 bora distributed in-

(1) Chainpur-two truck anta/chawal.

(2) Lesliganj- one truck anta/chawal distributed among helpless persons.

(13) Yuva Sakti, Ambala, Haryana:
245 bora wheat.

(14) Yuva Sakti, Kotampura, Punjab:
83 bora wheat.

Source: District Planning Office, Daltonganj, Palamau.

Note-

Death by Hunger:- There is no death reported due to hunger, while 49 cases had been registered to investigation.

or after investigation of reported 49 cases, yet, there is no death due to hunger.

People's Perception

The perception of people regarding the relief operation was found different. Since, perception of any person is outcome of his cultural, social and economic set-up, that's why it varies greatly person to person, group to group. Even, within a family perception of its members may be different.

Here in the study villages researcher observed large variation in the manner of thinking about the performance of relief work. The tribal population of Karma and Temerai gave a distinct views on it. Since, they are basically food-gatherer and wood-cutter & sellers were not much fruitful. While interviewing some of the villagers, the researcher got different rsponses. Some perceived the relief work as just like other activities under going at the block level. One prahaiya told that he got wheat through red-card but that was not sufficient to maintain his family. Other respondent narrated the stories of their plight which was result of mal-practices which had been done by the blocks officials or particularly the karamchari and V.L.W. (village level work-

er).

The perception of villagers was largely shaped by their poverty. Being backward and poorest. They hardly bothered to know about the sources by which they were getting the things during drought period. At that time, whosoever was distributing food grains to them, was concerned to know.

Researcher met some of the prahaiyas and mundas who were even not known about the relief work. Though they were receiving the wheat under red-card but were unknown about the special arrangement which was temporarily made i.e. relief camps. For them getting the things was prime matter to know rather going under complexity of knowing its sources. They were greatly concerned to get things instead of making inquiry about its means or channal through which they were getting. It was some sort of avoiding tendencies which were out come of their poverty and overall lacking in awareness and education. Such avoidance paved the ways for malpractices which were taken place in distribution system.

In Neura, where the non-tribal population reside. The perception of people certainly was distinct in comprision to tribal population. Here, the villagers were known about the

activities which were going under the process of relief operation. They took benefit of such special arrangement largely during crisis. The overall perception of the villagers regarding he relief camps was satisfactory. it was combined with both positive and negative responces. Some of the villagers respondent that it proved boon for them while other at the same time replied that though it was good but we could not have cherised or enjoyed maximum. They said, the wheat under red card, fodder for cattle and chaun for drinking of cattle were very useful measures which brought them out of danger. Though agriculture was ruined but under relief, they got fertilizer and seed of good quality through different sources as it was replied by the villagers which was used for only consumption and fertilizers were sold out to rich landlords.

Researcher found that the perception of villagers was though different. In the case of tribal communities the perception of relief was very worse.

(I) Preventive Method:

The Government has been applying another method i.e. preventive approach or method under this approach, it has been aimed to check and eradicate the factors which bring

natural calamities in. It aimed not to provide any open space to those forces who have been acting dominantly in bringing the natural calamities in. The geographical setting, relief structure, forest reserves, and overall atmosphere of any placed are responsible for natural happenings and let the chance to the natural forces to show their ugly faces.

For this purpose, the government has made this as long term policy following objectives have been made in this:-

(1) to check deforestation and promote afforestation.
(2) plantation of trees on barren land.
(3) storing and recycling the water of rainfall.
(4) to provide irrigational facilities for ever.
(5) and overall infrastructural development.

For this, certain schemes and programmes had been introduced too, at block. It was national water shed programme, started since January 1993. Wherein, the provisions had been made to construct checkdam, Tanks, Ahar, Loose-Boldder Checkdam, Bunding, field levelling etc.

Though this was started late but surely would go according to objectives as it has been started. If the gov-

ernment would have achieved finally the above mentioned. Objectives, then the possibilities of natural hazard would certainly reduce to minimum.

CHAPTER IV

AN ANALYSIS

AN ANALYSIS

The concept of drought has been defined in different ways by different thinkers and different governmental and non governmental agencies. In general, it is said that the shortage of rainfall for considerable period of time is called drought. So, here rainfall is basic unit on which the condition of drought or the concept of drought has been defined. It is the outcome of natural disaster.

The perception of people about the drought largely differs from place to place and even person to person. Researcher had interviewed many of the persons in different categories to know how they perceive the phenomenon of drought. After interviewing the person, the common understanding came out that the drought is not only the creation of natural forces rather it owes its lives with other socio-economic political forces also. Meaning thereby, that drought has not been always brought in due to imbalance in the nature or disorder in ecosystem rather it is man-made. It is the man who prepared the ground to create the situation like drought. Drought symbolises the

crisis of water; shortage of foodgrains and other suffering. So, situation of drought has been created deliberately by the manipulation of existing natural environmental as well as socio-economic resources in different ways.

Whenever the rainfall has been reported below the normal; the prices of things in market automatically go up. The shortage of rainfall definitely impart great impact on cultivation in absence of other artificial means of irrigation. The industrialists and petty commercial traders do play greater role in raising the prices of things by stopping the supply of required basic things such as grains, wheat, rice, pulses, etc. In the absence of these things in the market, naturally the demand will be high, thus prices of basic commodities increased unevenly. The hike in prices reduced the capacity of purchasing these primary commodities in order to meet day to day requirements.

On the other hand, the unequal distribution of resources is also responsible to make the ground of drought. The disparity between castes and classes - the hierarchical order of castes based on varna model where the upper castes hold the maximum share in existing resources. It is gener-

ally seen that very few holds maximum portion of lands while major chunk of the population deprived from the holding of considerable proportion of land and other existing resources. Such uneven distribution of the resources do accelerate the degree of suffering even in the normal days and become more serious on the event of mild drought.

Thus, it can be said that the malpractices; mobilization of the existing resources in the interest of certain pocket of the population; stopping the supply of basic commodities in failure of monsoon by the traders; and overall cstes and classes disparities do prepare the grounds on which the situation of drought has been severe. So, one could say that drought is not always the result of natural imbalances rather manipulation of man in order to get maximum benefit of individual interests is largely responsible to create unfavourable situation on the event of drought for the underprivileged and deprived section of the area.

The drought of 1993 in Palamau district was also of this kind. Though the monsoonal rainfall in 1992 was lowest in past twenty years (Table 1.6) the degree of severity of drought had been accelerated through the intervention of

man's interests. In failure of cultivation, the traders or big industrialists got opportunity to manipulate the situation in their favour to take advantage and to make the profit in adverse condition of survival of human being.

IMPACT OF THE DROUGHT AND THE RELIEF OPERATIONS:

People's Perception

Though the Chainpur block was reported as most severely affected block of the Palamau district from drought. But in reality, the overall impact was not severe. The initial phase of drought was marked with great severity but in later phase, the degree of severity was less rather should call it moderate. What-so-ever the suffering took place that was because of first phase because of non availability of government relief. But with the little trickle down effectof corrupted-relief operation at a later stage reduced the severity to a moderate suffering but quantum of suffering remained very high. Palamau district was recognised and listed in the `Drought Prone Area Programme' of the central government in 1993 at a very late stage. This district contains the all those factors which are essential to cause drought. But whenever the rainfall was noticed by its

irregularity in time and space; having rainfall even a little bit below the normal or even normal but irregular in time and space; people automatically presumed that drought has come. Without official declaration about the drought, the concept of drought has become a state of mind for day to day activities and accordingly the essential commodities became scarce and prices goes up in the market. This is people's perception about the drought. The acute problem of rainfall directly get affected the cultivation and entire agricultural activities. The destruction of standing crops act as yardstick to judge the intensity of drought or arrival of drought by the villagers.

Such mental make-up of the people paved the ways to those who are big traders and industrialists. They use to stop the supply of basic commodities into market to raise the demand that naturally the prices get increased of primary things. In absence of these commodities and hike in price; people forced to assume that drought has come. While in actual practices, such situation met deliberately to make money more and more by the upper vested interested people.

So, the drought has become part of day to day life

where people has taken it as usual activities; without giving special attention they maintained normal state of life. But this is the case of town dwellers where they have to face only hike in prices but having means to purchase more or less.

But the direct impact of drought in real sense could be seen only on down-trodden people; who are surviving on the daily wage-earning and having either less portion of unfertile land or without land, working on the other field. For these people, drought meant "suffering, problems" that made them totally handicapped in all front of activities. But it was not the case with middle and higher classes people. Those who are living in town on nearby sub-urban areas, were less affected rather led their life with a little ups and downs.

In Chainpur block, the tribal areas were most affected. Karma is such village where hundred per cent impact of drought was reported. In Karma, the Prahaiyas got severely affected because the forest was also ruined due to shortage of rainfall, that reduced their capacity of purchasing the basic commodities. Since, they are wood-cutter and seller,

use to sell the bundle of woods brought from forest to nearby town market. The hike in prices, reduced the capacity of purchasing of town dwellers. So whenever the Prahaiya go to market to sell wood's bundle, either they could not sell it or somehow could get managed to sell the woods, than got the prices of wood's-bundle less than the earlier. While hike in prices should also provide them financial support but being poor and backward they have been cheated by the town dwellers very easily. Ultimately they got the less income than the normal requirements which directly led them into grave situation for not meeting the basic needs for their daily life.

In Temerai, the Mundas got severely affected in cultivation of rice crops which make the backbone of their economy. The complete destruction of standing crops created miseries and sufferings in this village. This had caused them to undergo virtual starvation where food was not available even for the two times in a day. For entire villagers drinking water was another great problem. Some of the villagers who lived in remote areas used to take water of drain or nala to drink in absence of proper arrangement of

water.

The Neura which is a non-tribal village, the impact of drought was not reported as severe rather it was moderate in comparison to Karma and Temerai tribal villages. The standing crops or the entire agricultural activities of the marginal farmers, who are most backward in comparison to rest of the population, got ever blow of drought. They were survived as relief operation of the black had started. So, one could say that it was lowest strata, backward poor and down-trodden; wage-earners, the women, children and old and infirm who were main section of the population, being mostly affected severely. They were main section of the population of this block who faced most of the deaths and severe sufferings. The migration also took place but it was largely in the initial phase when the relief operation had not started but in later phase, it was less or negligible. The people mostly young had migrated to neighbouring districts and states such as Rohtas, M.P., U.P., Punjab, and wherever they found possibilities of getting jobs opportunities. But the reports of block office do not provide any data of migrants, or their rate of migration.

The Causes of ill-health

In course of the present study, the researcher found that the health of villagers was not sound. None of them seemed to be called healthy person. Both males and females were found weak in their health. Even, some of them was not able to continue the agricultural activities due to ill health.

The concept of ill-health was a subject of the logical understanding which seemed to be chronic in nature. Rather one could say that it was a regular feature persisting always side by side in their day to day activities of the deprived and under privileged masses. The further deterioration in their health was due to the problems being created by drought. The causing factors of ill-health owe its birth in their geographical, economic and socio-cultural and political aspects.

Economic Factors

The Karma and Temerai villages are situated on the plateau which is off shoot of the south Chottanagpur plateau. The uneven structure of the plateau is not suitable

for the cultivation of rice and other grains. The soil is infertile which produces less than the adjoining area.

Though Neura is not situated on such structure that is why land is fertile, produces a little more than the neighbours. Here, land is suitable to do cultivation of rice, wheat, pulses and other but other basic prerequisites of cultivation are available at a minimum or of primordial in nature. Thus, the actual and final production do met required demands of the population of Neura. The less productivity of the land is another major cause of poverty.

In the Chainpur Block the absence of other means of infrastructure do not provide a sound production of crops. Thus productivity could not met the demands to sustain the population of this block. In this block means of agriculture are traditional such as - still wood plough, cow dung, seed of lower quality and most important factor which prevent the farmers to get proper cultivation is lack of irrigational facilities. The only source is monsoonal rainfall. Because, the artificial means of water reservoirs are less developed. The most important source is Ahar to irrigate the field but does not provide water for all. Only the adjoining

areas of river Koel and Ahar which comes out from it, get irrigated, rest of the cultivable land has to take water either from well or other sources. Though Rehat is another popular means of getting water but the water level of well generally goes down in summer.

The water through rehat is drawn from the well with the help of domestic cattle. Since, the construction of Ahar is not concrete, because of this most of the water get destroyed by the erosion process. On the other hand, the local conflicts between different castes do not provide space for the equal distribution of water. Because, many of the small drains get divided the water of main channel of Ahar by the dominating castes or group of the people. The communal forces also reacted on the same line in pursuit of getting water. So it has became a source of perpetual conflict between farmers.

The financial support is not available at easy access to the farmers. The lack of financial loan or proper add reduced the purchasing capacity of the farmers. In want of money, the farmers could not get seed of good quality, fertilizers, and tractors for improved agriculture. The

irregularity of monsoon in both time and space is one of the vital cause of the poor cultivation.

The failure of proper cultivation of the food grains paves the way to poverty which is one of the important cause of economic backwardness and ill-health. It is due to poverty; farmers are not in a position to get the adequate pre-requisite of the cultivation. Majority of the population are landless labourers and a small percentage of population has economic holdings in the study villages.

Socio-Cultural and Political aspects:

The institution of caste is the key unit in regulating the social, cultural and political activities. The numerical strength of any particular caste and maximum holding of land determines a dominating caste which holds the final say in distribution of existing resources. The caste and class disparity and uneven distribution of resources generate the richness on one hand while on the other hand determines the extent of poverty and exploitation for the lowest of low.

Malnutrition:

Malnutrition is a direct product of poverty, economic

backwardness, caste-class conflict and gap and overall unequal division and share in existing natural as well as artificial resources. The malnutrition is largely responsible for the ill-health of a person. In absence of nutritious components of food in diet, reduced the level of efficiency and make a man weak. It is due to malnutrition, the resistance power or immune system of body get affected and do not work properly and make an individual prone to get attacked by any diseases - minor or major.

In the study villages, Karma and Temerai provides data of severe malnutrition among the majority. Karma particularly projects the impact of malnutrition on health. The prohaiyas are largely based on the forest stuffs for their daily meals. They used to take all what they could gather from the forest. On the other hand, the rice, wheat and pulses are not available in their diet rather mota anaj such as jinaura, Sewai, Kodo, Kand and various kinds of roots make their regular diet. On the event of severe drought these forest products became scarce and caused starvation and malnutrition among them.

In Temerai, the rice and wheat of lowest quality make,

share the diet of a person but even mota anaj was not available sufficiently for the daily consumption of the villagers.

Poverty has played a greater role to increase the impact of malnutrition. Both the villagers of Karma and Temerai are so poor that they hardly get meals of two times.

In comparison to tribal villages, Neura is less affected by malnutrition but one could not say absence of it. It is there but in less degree. But among the poorest strata of this village the malnutrition was severe.

In Chainpur block, the evidence of malnutrition has been found mostly in lower strata of caste hierarchy. The wage-earners and landless-labourers are direct victims of it. But in tribal population it is seen at a higher degree than in non-tribal population.

Alcoholism:

Daily consumption of Alcohol is one of the device to get rid of the tension due to poverty and exploitation. It is a habit of taking alcohol of bad or good quality daily.

This habit has been observed mostly among the people of lower castes and tribals. The daily users of alcohol formed a habit and has led to alcoholism. The tribal people consume rice bear i.e. 'hunriya' daily or on religious occasions.

The labour class people are regular users of alcohol. Alcohol acts like a safety-valve for them, which omits and suppressed the internal tension of a worker. A labourer or any worker takes alcohol at evening to forget their suffering or plight to earn their bread.

Some time it is seen that the lower caste and tribals people take alcohol as a substitute of food. It is used as a device to replace the hunger by intoxicating the impulses which made them able to forget about the hunger or suffering for a while.

Mode of treatment:

As it has been mentioned earlier that the tribal population do prefer first and foremost to go to a traditional healers who may be ojha or "ojhain". Their faith in supernatural power, supported by their religious dogmas, prevent them to make a rational or logical thing and preferring to

go for allopathic treatment.

Since, ojha in fact does not cure their diseases rather create a psychique confusion of getting immediate cure. In this mode of treatment, if the patient is suffering from minor disease could get survive but in case of major one or serious condition, they go to either private practitioner who is simply a compounder or to PHC to get allopathic treatment. But by that time, the condition of patient deteriorated and more often causes death.

Lack of proper sanitation is another factor for ill-health. Lack of proper infrastructure about the sanitary measures, cleanness, awareness about filthy things creat condition for them to get viral infection or various infectious diseases.

Malaria is very frequent among the villagers. The frequent prevalent of malaria (fever) caused ill-health among most of the villagers in there villages. Other than malaria; viral or common fever is seen frequent in their daily life while diarrhea is seasonal feature which generally brought by the malnutrition and lack of water to drink.

The over all the health status of women is low; it is in absence of nutritious components of diet, they could even survive at the time of delivery. That is why the growth of children is very poor because of the acute problem of malnutrition and poverty. Being weak in physical, an old tribal man or women has been treated as an extra burden upon the family. They are neglected because of lackof poor socio-economic infrastructure affected by the drought.

The responses of health institutions or PHC and its doctors are not favourable to ill-health because of non-availability of medicine and other logistics. They replied that the peoples of the three study villages are responsible for their ill-health because of lack of knowledge to have good food sanitation and not availing the health services in time for their disease and sufferings. Further, the health personnels emphasizes that bad cultural practices (consumption of alcohol) may be stopped to keep them healthy. Lastly according to them malaria is first or foremost factor of ill-health which is very frequent and widely prevalent. Why malaria is so active over there? Because

- lack of proper drainage system;

- accumulation of water around their huts;
- undulating relief of Karma and Temerai;
- to keep cattle inside the house;
- malnutrition and poverty;
- inadequate treatment of PHC;
- lack of efficient medical process of identifying the malaria;
- lack of spraying process of insecticides;
- distribution of medicine just based on assumption; avoiding proper blood-test;
- economy factors;
- poor financial status;
- productivity is low; infertile land.

About the quality of services available from PHC the doctors and other personnels could not provide any information rather they blamed the people for their illness and sufferings.

Relief Operation

The relief operation which was started since January 1993 at Chainpur block and continued upto September. Under this operation various schemes were designed to cater help

to the sufferer in order to revive normal state of activities.

The red card was one of the schemes. The provisions under this was to provide three and half kilogram wheat and cash dole of Rs.1 to each card holder. Though, the policy of red-card was not bad but its process of implementation was not designed properly. The distribution of wheat was subject of intervention of block officials and field staffs. The needy persons were not benefited maximum rather it get benefited to the concerned people who were involved in distribution of wheat and cash dole.

Researcher met several of the people in the study villages who revealed the fact that the distribution of wheat never took place properly. On the fix day of the distribution of wheat and cash dole; either wheat was given half of the prescribed quota or some time it was not distributed. Generally, the thumb impression of the villagers were taken on the behalf of receiving wheat and cash dole. It was reported that many of the time, the villagers had been manipulated by the concerned officials and local leaders in order to maintain record having the thumbs impression

on the assurance of providing later on, but in actual situation was such that they never came again to provide the essential commodities for which thumb impression was taken. This could happen because the majority were illiterate and the local leaders with the help of government official maintain their usual vested interest at the cost of miseries and death because of non availability of essential commodities.

The corruption was mounted in both distribution and selection procedure. Instead of distributing the wheat among the card-holders, the wheat was sold in the market which in return made happy and fulfill the vested interests of the concern people and officials. This corruption was not prevailing only at grass-root level's staff rather started from top bureaucrats.

The multi-bureaucratic channels and their process of implementation are one of the most important reasons which pave the way to exploitation and corruption. The hierarchical order of bureaucrats and officials take their certain amount of percentage as share in each developmental schemes. The actual amount which has been announced by the government

never reached to the targeted people, rather reduced by the commission as the share in money. So it is not only grass-roots workers or officials rather whole bureaucratic and its multi-channel and hierarchical order are responsible in the curtailment of the given financial support. The actual beneficiaries never get the amounts and things or benefits of any schemes which have been designed for them by the central or state government.

In case of red-card, it was concern thinking of the villagers as researcher felt during interview that only those who could have got success in getting the access and ready to pay the condition of karamchari or the concerned persons in order to get red-card benefit; were selected in the list of red-card holders.

Only those who could have manipulated the situation in his or her favour was listed for the distribution of red-card. In the selection procedure, the karamchari and Mukhiya were most important officials who were authorised to list any name in the red-card holding only after conducting the verification.

The karamchari who is supposed to know each and every activities going in villages was authorised to identify the person to be selected. In that process, his biasness and personal interests were great hardle for the poorest, and illiterate to get selected in the target group. Only those who was ready to pay the condition of concerned person was given such facilities. Though the Mukhiya was having final say, who was helped by the karamchari. So here, the interests of both were playing in mobilising the resources in other way. After such a process of bias, a amount less than the actual amount, was designed to pay.

In case of free fodder for cattle, a lots of corruption or mal-practices took place during the relief period. As it was reported by the villagers, the fodder which was made available at subsidised rate for the cattle of severely affected places; never had been received by any of them in full amount which was sanctioned to them from block office. During relief period, the fodder was selling by the local traders at a higher prices. Rice straw was around Rs.125 or Rs.180 per ton in general market; while government had provided fodder at a minimum price i.e. Rs.30 per ton. So this scheme was having open space to cash the vested inter-

ests of the people who were concerned to the distribution of fodder.

In tribal villages it was reported that they never received the fodder for cattle but their names were registered against the column of receiving thing.

In non-tribal villages, it was reported that they had been benefited by the free-fodder schemes of relief operation but never received at a regular internal or in full amount. Rather they were claiming against the bribe which was paid to get fodder at subsidised rate or free-fodder.

On the other hand, the quality of fodder was of lowest degree. The dried-up grass and hay were drawn from the old stock which was some time disliked by the cattle to eat.

Another scheme was made for drinking water specially for cattle. Here in this, provision was made to construct a CHUAN. The cost of a chuan was around Rs.1220. The selection process was also the same as it was in red-card, Green-card, free-fodder. Again, Mukhiya and karamchari were having final say in selection of any person to get a provision of chuan.

The villagers were responding negatively while researcher met them. The grievances were related in order to get payment for a chuan. Generally, it was paid less than the amount i.e. Rs.1220. Inless amount the construction work never accomplished finally. If the construction was done, than the quality of materials which were used from local existing resources were not appropriate. And the pressure on a chuan was so great that it became a subject of conflict among the villagers.

On the other hand, it was reported that names of the villagers were illegally registered and their thumbs impression were recorded on the paper by which the sanction of a chuan was granted. The villager or any person were compelled to put thumbs impression due to false assurance of sanction. It is also because of deprivation or sense of insecurity that made them helpless and restrict to think rationally or it has so happened that the amount which had been sanctioned against his or her name was reduced by the commission of concerned person but chances to get any of the amount that is why they put their thumb impression without bothering about their actual benefits.

The lack of awareness among tribal people was one of most important factors which has facilitate the corruption. Being illiterate or backward, the level of awareness naturally found least which resulted negatively. In the process of corruption or any malpractice which was or had been taken place during the distribution process related to any of the schemes in relief operation, the people were also equally responsible along with government officials and local leaders or any vested interests.

In case of the distribution of the "Indira Awas", the malpractices took at a greater extent. In this scheme, one scheduled tribe was supposed to get around Rs. 1450 to construct a 'awas' made of kachacha materials. The payment was not done directly to a targeted person or who had been selected to get a grant for 'awas'. Rather, payment was subject of legal verification and was given in different phases after the report of engineers who made visit to the construction spot. So, here again the money is travelling through many of the hand to reach actual beneficiaries. The final construction was liable to get positive sanction by the engineers in order to get final payment of granted

amount for an Indira Awas.

This scheme was meant specially for tribal people who are mostly illiterate and backward in all sense. A tribal people has to pay from block officials to the field staff for the sake of getting the facilities of Indira Awas. So, here, one could say that, in reduced amount, the quality of construction never done appropriately, this led to break down of this houses soon after its completion.

But the most important problems which the tribals faced to get sanction for the Indira Awas was of corruption and malpractice. Due to their ignorance of knowledge, the non tribal local leaders could fulfill their vested interest and profit on the face of suffering and needs of poor tribals.

Since, the local leaders are supposed to know the legal complexity of the block office that is why the tribals get manipulated easily. The helpless people use to think that something is better than nothing. So, without going through close scrutiny of any process, act on other's advice to get benefit of the schemes. Their dependency is another vital factor which supported generally the process of bribing the

concerned persons in wake of getting financial or any other benefits.

Thus, the interference of political leaders and caste leader made the process more complex. They made simple effort or act more problematic. And get convinced the simple and poor population of both communities i.e. tribal and non-tribal.

The on going corruption is further added to the complex procedure of paper works in office. Illiterate get affected badly due to lack of proper knowledge about the procedures going through different channels of bureaucracy.

Accessibility is another factor which made them rely entirely upon the local or caste groups leader. Since, poor and backward persons are directly linked with the community's leader who may be the leader of his or her own caste but generally it is seen that whosoever is having a little bit education became the leader of his caste or tolas or village. That person is thought of having knowledge, capacity or skill to understand the legal official work running through various complex paper works. That person may belong to any of the communities or castes. Most of the time, it

is found that non-tribal people became the leader but it is not necessary. In these days, the Jharkhand Movement has been reviving rapidly that is why the tribal leaders have been seen working very actively.

So, the local leader acts like a link between the poor masses of the population and bureaucratic officials. They do not have linked directly with higher authority, thus, the perception regarding higher officers of these people could be seen in different ways, that is full of threat of unfamiliarity and to maintained a distance always. Even the field visit of any officer, they could not put any complaint against any other officials.

Thus, the socio-economic disparities; cultural differences; feeling of inferiority and superiority; the sense of alienation; the lackof awareness and education the understanding of local leaders; and lastly the sense of insecurity, suppression and depression made the poor villagers away from th logical thinking and created the sense of dependency. Hence, they became greatly the subject of exploitation in all front of activities in order to survive. Traditionally, it was presumed that non-tribal population has been

exploiting the tribal population. But right now this is not the case. Now, corruption and exploitation are not only restricted to non-tribal educated or wealthy person rather tribal or backward class. People are showing their numerical strength and acting like a "dominant Caste" thus indirectly continuing the process of suppression, depression and exploitation which has been guided by their personal vested interest. So mobilization of the resources done according to their interests.

Though the official reports available at district and block do not support the facts regarding migration of people and death due to hunger. It has been categorically mentioned in their reports that not a single death took place due to hunger during drought period. But the works being done by other NGOs and media agencies revealed the facts of actual happenings.

From their point of views, the plight of the helpless villagers of Palamau district is indeed pathetic. With rains hide seek and crops having failed for the fourth successive year, there is virtually not even a single grain of rice or wheat in any of the houses. All the 17 blocks failing under

this district had been badly hit by the drought, the worst among them being Chainpur, Lesligung, Balumath, Manika, Chandwa, and Dhangaon. The villagers pointed out that the drought of 1992-93 was worse than famine of 1967 when there had been at least some yield of Rabi and Maize.

The government's record regarding death due to hunger has been refuted by the report of an article published in the Times of India; written by Sonali Das; who revealed the fact that at least two deaths from most of the blocks, apart from the death in Sutbarwa block where people are dying like flies - due to hunger or in absence of food.

So far migration is concerned, it took place over there largely in initial phase that was the period before starting he relief operation actively. The people had left their native dwelling in search of jobs for Rohtas, U.P., Punjab, M.P. Kanpur, and wherever they found opportunities.

The villages were reflecting a deserted look since most of the young people had left for neighbouring states in search of employment, leaving the women, the children and the old one behind. The old and infants were lying on the

charpoys with scorching hunger in their stomach; waited for death to take over.

The impact of drought was observed largely on old, infirm, women and children; because they were not standing out side in search of jobs rather relied under compulsion on the roots or fruits available at nearby forest. The possibilities of getting a little sum through employment in such a situation seemed to be least; that is why the occurrence of death due to hunger may be presumed or happening of death. Seems quit natural. But this has not been acknowledged by the government and its records. The policy behind it may be to maintain status quo.

The multi-channels administration go under a complex process for any work. The state is dependent on the centre to get order regarding the commencement of any work. The paper works go through rules and regulations. the complacency of the administration is maddening. At a time when people were dying in hundreds due to hunger and malnutrition, it was still working out proposals and schemes.

That is why, the relief works had started with a delay of four or five months from actual plight of suffering. It

was November 1992 when relief operation took place at district actively; while at Chainpur block, it was started from January 1993 which continued upto September 1993. This was in fact later phase of suffering. They provided the food under 'rahat yozna' only after happenings of heavy casualty like deaths. That is why their reports do not support the fact of occurrence of any deaths due to hunger. On the other hand researcher found some of the negative impact of relief operation. The relief activities which were a temporary arrangement to meet support to overcome the problems which were caused by the shortage of food grains and water.

The impact of relief work on the people was a subject of close observation to study. The researcher found that the impact was positive over all. The people were reviving their normal state of life. The great achievement of relief camps was that not a single case of death due to hunger reported from any of the villages in Chainpur block as it has been mentioned in governments reports. Though many of the cases were registered wherein, some death took place during that period but that was not due to hunger rather being caused by other diseases or accident. This fact was ascertained by

the PHC's doctor and the villagers while interviewing them.

But for the people of this block, the term "relief" stands for income; enjoyment; money making opportunity and overall it was taken for granted. As villagers presumed that wherever the situation like drought would come; they would get sufficient support from the government. Such hypothesis made them to rely on the facilities being provided by the relief operation. Thus, such presumption get developed the sense of dependency which reduced their efficiency. Under such circumstances, they depend solely on the government; avoiding their own efforts to revive normal activities. They used to think that there is no need to make any extra effort in absence of infrastructural facilities. Because they would get sufficient amount of wheat under Red and Green card schemes. Even, they did not go in search of job or try to earn money from the on going various development programmes at block level.

They did not participate even the special schemes were running by the J.R.Y., Jaldhara and others; as it was revealed during the interview of the B.D.O. and circle officer of the block. The lack of participation was directly the

result of their sense of dependency. They made only minimum efforts to get the foods to survive. The repercussion of their avoidance resulted in slow growth of developmental programmes and on the hand increased the rate of their suffering.

Another negative impact of relief operation was that of increasing rate of corruption and mal-practices. The money making tendencies and vested interests of some of the people; mobilised the situation and resources in their favour. The result of this was, insufficient supply of food-grains available at a higher prices and the actual benefits of the relief operation did not reach to the targeted groups of the people. The needy persons were deprived from the benefits which were designed by the government for them. The non-targeted people got maximum benefits of all schemes while listed people were left in mouth of danger.

Though the records of documents at block office were maintained by which the benefits were provided to all focus group or needy persons but in practical life, the picture was different. Those who were not enjoyed the benefits of the schemes were listed. The certain people got maximum

benefit on the behalf of them and the names of needy person were not registered. So, this was the story of their plight.

Lastly, one could say that whatsoever the schemes were taken under relief operation, their policies were not bad rather the process of implementation of these schemes were not suitable in atmosphere of corruption and malpractices. The conceptualization of the problems of villagers was also not suitable because the policy makers in fact do not know the actual reality or the socio cultural and political set of the villages to which they are supposed to assess the problems.

CHAPTER V

SUMMARY AND CONCLUSION

SUMMARY & CONCLUSION

Drought ranks one of the foremost among the earth's natural disaster representing the adverse effects due to shortage of water, mainly from rainfall. Rainfall is most important device to conceptualise the concept of drought. While socio-economic aspects are indirect causing factor of drought.

The main objectives of the present study are: (a) to study the overall life process of people in drought affected areas; (b) to assess the quantum of the suffering and the health problems of the people in absence of basic amenities; (c) to study the perception of the people about the drought and urgent needs to adapt themselves to overcome the drought; (d) to study the various relief work, provided by both the Government and non-Government agencies, for the drought affected people.

To achieve above mentioned objectives, the following design of the present study has been drawn:

- Out of 17 blocks of Palamau district, the Chainpur block has been identified as most severely drought affected block; based on the data available at district and block and discussion with concerned authority and officials.
- In Chainpur block, three villages have been selected for the present study on the criteria of tribal and non-tribal population.
- The village Karma and Temerai have been taken as a sample of tribal community while Neura, represents the non-tribal community.
- To make a comprehensive study of tribal community, Karma which is a typical village of Prahaiya predominance while Temerai is marked with Munda's majority, both have been taken as a sample.

On the part of methodology interview based on prepared schedule has been selected as basic research tool. Observation and case study were another research tools which made researcher able too accomplish the data collection according to the objectives of the present study. Interview was conducted on both formal as well as informal levels. The schedule was prepared on the basis of secondary information

obtained from block and panchayats. The tribal villages Karma and Temerai had been categorised on the basis of their occupation and land holding. Besides that an informal discussion was conducted among the people of the focus groups. The same process of data collection have been adopted in Neura too.

On the formal level, researcher held many discussions with district and block officials. The findings of secondary sources and discussion were cross-examined through informal ways of interview in the field. And lastly data were quantified and analysed systematically to get the findings of the present study.

Followings are the main findings of the present study:

(1) Drought is not always caused by imbalances in nature but its degree of impact is determined by the vested interest of man.

(2) The impact of drought was severe in initial phase while it was found moderate in later phase.

(3) The quality of life of the people in the study villages was affected severely.

(4) Health and its associated problems are outcome of poverty, malnutrition, socio-economic and cultural aspects; which were observed at a low status and this was further got severely affected because of lack of basic amenities and health services.

(5) The relief work carried out by Government and NGO agencies were found to be very inadequate and because of local corruption and vested interests a little relief which was available could not reach to the target households who were badly affected in the study villages.

(6) The government office at local and higher level were not having clear understanding about the situation caused due to drought in the study population. Though drought is a natural calamity but in the event of this, a proper planning and policies at local and higher level for the relief and other developmental measures could have better the life process of the people who suffered most. Because of the local socio-economic imbalances and political manipulation and dominant caste politics usually its impact on the poorest section accentuates further.

The drought has become a regular feature of the Palamau district because of

a. deforestation;
b. irregularities of monsoon;
c. the breakdown in hydrological cycle;
d. lack of maintenance of traditional Ahar and water reservoire, meant for the agriculture;
e. to meet the crisis of drought the present relief and minor developmental works are not the permanent solution to prevent drought.

The people in the study villages have realised over the years that unless a permanent scheme to preserve for irrigation and other needs is launched; drought cannot be prevented in the Palamau district.

REFERENCES

1. Bhalme, H.N. and Moole, D.A. (1980), Large Scale Droughts/Fllods and Monsoon Circulation - Indian Institute of Tropical Meteorology, Pune.

2. Ibid.
3. Ibid.
4. Ibid.
5. Ibid.

6. Government of India (1898), Indian Famine Report, Delhi.

7. Government of India (1901), Indian Famine Commission Report, Delhi.

8. Bhatiya, B.M. (1967), Famine in India, Asia Publishing House, Calcutta, p.172.

9. Srivastava, H.S. (1968): The History of Indian Famines, Sri Ram Mehta & Co., 417, pp.194, 316-319.

10. Ibid.

11. Government of India (1920), Progress Report in Agriculture for 1918-1919.

12. Bhalme, H.N., et. al. (1980), op. cit.

13. Ibid.
14. Ibid.
15. Ibid.
16. Ibid.
17. Ibid.
18. Ibid.
19. Ibid.
20. Ibid.
21. Ibid.
22. Ibid.
23. Ibid.

24. Government of India (1936), A Report on Flood, Indian Meteorological Department.

25. Ibid.
26. Ibid.

27. Govt. of India, Indian Meteorological Department (1942).

28. Govt. of India, Indian Meteorological Department (1957).

29. A Report on Flood, op. cit.

30. A Report on Flood (1962), op. cit.

31. Bhalme, H.N. et. al. (1980), op. cit.

32. Katiyar, V.S. (1993), Human Dimensions and Drought Management in India.

33. Ibid.
34. Ibid.
35. Ibid.
36. Ibid.

37. Ibid., quoted from Ramdas, L.A. and Malik, A.K. (1948), "Agriculture Situation in India", IJMG (New Delhi), Sept., pp.1-5.

38. Ibid., quoted from Bates, C.G. (1935), Possibility of Shelter Belt Planning In Great Plains Region (Washington).

39. Ibid., quoted from Ramdas, L.A.(1950): Rainfal and Agriculture, Use of routine reports for Crop out looks, IJMG (New Delhi), pp.1, 262-274.

40. Ibid., quoted from Sir Gilbert Walker (1914), G.T.IMD, Memoirs, 21, Pt.5, Poona.

41. Ibid., quoted from Tannehill, I.R. (1947), Drought its Causes and Effects (Princeton, New Jersey: Princeton University Press).

42. Ibid., quoted from Thornthwaite, C.W. and Mathur, J.R. (1955), "The Water Balance", pub. in Climatological Dexel Institute, Elmer (N.J.), Vol.8, No.1.

43. Ibid., quoted from Subrahmanyam, V.P. (1963), "Incidence and Spread of Continental Drought", Report No.2, WMO/IHD, Series, Geneva.

44. Ibid., quoted from Subrahmanyam, V.P. (1963), "Incidence and Spread of Continental Drought", Report No.2, WMO/IHD, Series, Geneva.

45. Ibid.

46. Government of India (1972), Report on the Irrigation, Vol.1.

47. Ibid.
48. Ibid.

49. Govt. of Rajasthan (1987), Droought - A Reality in Rajasthan (A Report from the Office of the Deputy Director, Irrigation Department, Rajasthan, (Hydrology), Jaipur.

50. Ibid.
51. Ibid.

52. Govt. of Bihar (1993), District Statistics Office, Daltonganj, Palamau.

53. District Planning Office (1993), A Report on DPAP, Daltonganj, Palamau.

54. Govt. of India (1991), Census of India.

55. Ibid.

56. Govt. of Bihar (1993), op. cit.

57. Ibid.

58. Govt. of India (1991), Census of India, District Census of Palamau.

59. Statistical Department of Chainpur Block, 1993, Statistical Profile of Chainpur Block.

60. C.D. Block Office, Chainpur, 1993, Socio-Economic Profile of the Block.

61. Circle Office, Chainpur, A Report on Irrigation & Economic Profile of the Block.

62. District Planning Office (1993), op. cit.

63. District Statistical Office (1993), op. cit.

64. C.D. Block Office, Chainpur (1993), A Report on Drought Relief Work in Chainpur Block.

- Metrological Department, 1891: Annual Summary, India Weather Review, pp.474-475.

_____, 1893: Annual Summary, India, Wea.Rev., 530.
_____, 1894: Annual Summary, India, Wea.Rev.,649.
_____, 1896: Annual Summary, India Wea. Rev.,728-729.
_____, 1899: Annual Summary, India Wea. Rev.,784-794.
_____, 1905: Annual Summary, India Wea. Rev., 407.
_____, 1911: Annual Summary, India Wea. Rev., 190.
_____, 1915: Annual Summary, India Wea. Rev., 159.
_____, 1916: Annual Summary, India Wea. Rev., 161.
_____, 1917: Annual Summary, India Wea. Rev., 132-158.
_____, 1918: Annual Summary, India Wea. Rev.,144.
_____, 1920: Annual Summary, India Wea. Rev.,25-99.
_____, 1933: Annual Summary, India Wea. Rev., A2-A3.
_____, 1936: Annual Summary, India Wea. Rev., A2-A3.
_____, 1938: Annual Summary, India Wea. Rev., A1.
_____, 1941: Annual Summary, India Wea. Rev., A1.
_____, 1942: Annual Summary, India Wea. Rev., A1-A2.

UNESCO, 1971: Discharge of Selected Rivers of the World, vol.2, pp.97-100.

India Meteorological Department, 1952: Monsoon Season 1951, Indian J. Meteor Geophys., 3, 41-43.

_____, 1957: Monsoon Season of 1956, IJMG, 8, 101-107.

_____, 1960: Monsoon Season of 1959, IJMG, vol.11, 79-84.

_____, 1962a: Rainfall and floods during monsoon of 1961, IJMG, 13, 147-156.

_____, 1962b: Wheather and Indian Farmer, Government of India, pp.9-10.

_____, 1964: Atlas of Storms and Depressions of the Bay of Bengal and Arabian Sea, 1877-1960.

_____, 1966: Rainfall and Floods during South-West Monsoon of 1965, IJMG, 17, 332-337.

_____, 1967: Rainfall and Floods during South-West Monsoon period, IJMG, 18, 345-350.

_____, 1973: Disastrous Weather events of 1972, IJMG, 24, 184-185.

Government of India, 1898: Indian Famine Commission Report, pp.5-42, 356.

_____, 1901: Indian Famine Commission Report, pp.205-207.

_____, 1920: Progress of Agriculture in India, 1918-1919, pp.8-11.

_____, 1922: Review of Agricultural Operations in India, 1920-1921, p.1.

_____, 1936: Agriculture and Animal Husbandry in India, Part 1 - Crop Production, p.1.

BIBLIOGRAPHY

Bagchi, S. Kattakali, (1991): Drought Prone India : Problems and Perspectives, Vol.2, Agricole Publishing Academy, New Delhi.

Bates, C.G. (1935): Possibility of Shelter Belt Planning in Great Plains Region, Washington.

Banerji, D. (1978): Health as a Layer for other Development, Development Dialogue, vol.1, pp.19-20.

_____, (1979): Place of the Indigenous and the Western System of Medicine in the Health Services of India, International Journal Of Health Service, vol.9, no.3, pp.511-519.

_____, (1982): Poverty, Class and Health Culture in India, vol.1, New Delhi, Prachi Prakashan.

_____, (1985): Health and Family Planning Service in India : An Epidemiological, Socio-Cultural and Political Analysis and a Perspective, Lok Paksh, New Delhi.

_____, (1990): A Socio-Cultural, Political and Administrative Analysis of Health - Policies and Programmes in the Eighties: A Critical Appraisal, Lok Paksh, New Delhi.

Beteille, A. (1971): Caste, Class and Power: Changing Pattern of Stratification in Tanjore Village, Barkely, University of California Press.

Bhatt, S.D. & Pande, R.K. (1991): Ecology of the Mountain Waters, Ashish Publishing House, New Delhi.

Cohen Allen, (1974): Tradition, Change and Conflict in Indian Family Business, Hague: Mouton.

Dahrendorf, Ralph (1959): Caste and Class Conflict in An Industrial Society, London: Routledge and Kegan Paul.

Davis Kingsley, (1958): Population of India and Pakistan, New York: Free Press.

Desai, I.P. (1964): Some Aspects of Family in Mahuva: A Sociological Study of Jointness in a Small Town, Bombay: Asia Publishing House.

Dreze, J. (1990): "Poverty in India and the IRDP Dulusion", Economic and Political Weekly, vol.25 (39), September 29.

Dube, S.C., (1963-67): India's Changing Villages: Human Factors in Community Development, Bombay, Allied.

_____, (1990): Tradition and Development, New Delhi: Vikas Publishing House Pvt. Ltd.

_____, (1992): Understanding Change: Anthropological and Sociological Perspectives, Vikas Publishing House Pvt. Ltd., New Delhi.

Durkheim, Emile [1851-54], 1933: The Division of Labour in Society, Translated by George Simpson, New York: The MacMillan Company.

Education of Health: A Mannual on Health Education in Primary Health Care, World Health Organisation, Geneva, 1988.

Fedoseyev, P & Timofeyev, T. (1981): Social Problems of Man's Environment: Where We live and Work (ed.), Progress Publishers, Moscow.

Foster, George M. (1973): Traditional Societies and Technological Change, New York: Harper and Row.

Ghosh, A. (1988): "Decentralization Planning: West Bengal Experiences", Economic and Political Weekly, Vol.23(3), pp.655-663.

Gluckman, Max. (1965): Politics, Law and Ritual in Tribal Society, Oxford: Blackwell.

Goode, W.J., (1963): World Revolution and Family Patterns, New York: Free Press.

Gore, M.S. (1968): Urbanization and Family Change, Bombay: Popular Prakashan.

Government of India, (1946): Health Survey and Development Committee (Bhore Committee): Report, Manager of Publications.

_____, (1962): Health Survey and Planning Committee (Mudaliar Committee), Report, New Delhi, Ministry of Health.

_____, (1972): Report of the Irrigation Commission, Vol.1.

_____, (1975): Health Services and Medical Education: A Programme for Immediate Action, New Delhi, Ministry of Health.

_____, (1977): Draft National Health Policy, New Delhi, Ministry of Health and Family Welfare.

_____, (1981): Working Group on Health for all by 2000 A.D.: Report, New Delhi, Ministry of Health and Family Welfare.

_____, (1982): Statement on National Health Policy, New Delhi, Ministry of Health and Family Welfare.

Gumaste, V. (1986): "Anti-Poverty Programmes", Economic and Political Weekly, January 18.

Gupta, N.U. & Gurjar, R.K. (1993): Integrated Water use Management, Rawat Publications, Jaipur and New Delhi.

Hassan, K.A. (1964): Cultural Frontiers of Health in Village India, Manaktalas, Bombay.

Hussain, Majid, (1994): Ecology and Environment (ed.), Anmol Publications Pvt. Ltd., New Delhi.

ICSSR & ICMR, (1980): Health for All: An Alternative Strategy : Report of a Study Group Set up Jointly by ICSSR and ICMR, New Delhi.

Joshi, P.C. (1979): "Perspective on Poverty and Social Change: The Emergence of Poor as a Class", Economic and Political Weekly, vol.14(7-8).

Katiyar, V.S. (1993): Human Dimensions and Drought Management in India, Pointer Publisher.

Kriksson, E., Gustaffsson, Y. & Nilson, K. (1968): Ground Water Problems (ed.), Pergamon Press.

Linton, Rulph, (1955): The Tree of Culture, New York: Alfred A. Knoff.

Malinowski, Bronislaw, (1944): A Scientific Theory of Culture and other Essays, Chapel Hill: University of North Carolina Press.

Marriot, McKim. (1965): Western Medicine in Village Northern India, pp.239-68 in Paul, 3.D. (ed. Health Culture and Community), New York: Russel Sage Foundation.

Mohtadi, M.F. (1976): Man And His Environment, Vol.2 (ed.), Pergamon Press, Oxford.

N.C. Thanh & Asilt K. Biswas, (1990): Environmentally-Sound Water Management, (ed.), Oxford University Press, Bombay, Calcutta, Madras.

Qadeer, I. (1977): "Reshaping Health Services: A Note or Draft Plan on Rural Health Services", Economic and Political Weekly, Vol.XIII, No.23.

_____, (1978): "India's Feeding Programmes and their Relevance", Social Science and Medicine, Vol.12, pp.23-27.

_____, (1985): "Health Services System in India : An Expression of Socio-Economic Inequalities", Social Action, Vol.35, July-Sept.

Radcliff-Brown, A.R. (1952): Structure and Function in Primitive Society, London: Cohen and West.

Ramalingaswamy, Prabha (1990): "Social Sciences in the Health field in India", Indian Journal of Social Sciences, Vol.III, No.1.

Ramdas, L.A. & Malik, A.K., "Agriculture Situation in India",IJMG, Sept, 1948, pp.1-5, New Delhi.

Rao, V.M. (1987): "Changing Village Structure: Important of Rural Development Programmes", Economic and Political Weekly, Vol.22(13), pp.A2-A5.

Sahu, S.K. (1980): Health Culture of Oraon at Rourkela and Its Hinterland: A Ph.D. Thesis, CSMCH, JNU, New Delhi.

Shiva, Vandana, (1991): Ecology and the Politics of Survival - Conflicts over Natural Resources in India, United Nations, University Press.

Shukla, S.K. & Srivastava, P.R., (1992): Ecology and the Environment, Commonwealth Publishers, New Delhi (India).

Singh, K. (1986): Rural Development (Principles, Policies and Mangement), Sage Publications, New Delhi.

Sir Gilber Walker, (1914): G.T. IMD, Memoirs, 21, pt.5, Poona.

Sodhi, J.S. (1983): "Integrated Rural Development Programme and Its Strength", Yojana, Vol.27(18), p.16.

Sorokin, Pitrion (1937-40)- 1957: Social and Cultural Dynamics, One Vol. (ed.), New York: American Book; and Boston: Paster Sargent.

Spencer, H. (1897): The Principles of Sociology, London: Williams and Norgate.

Subrahmanyam, V.P. (1967): "Incidence and Spread of Continental Drought", Report, No.2, WMO/IHD, Series, Geneva.

Swarup, R., Mishra, S.N. & Jauhari,V.P. (1992): Environmental Water Pollution and its Control (ed.), Mittal Publications, New Delhi.

Tannehill, I.R. (1947): Drought its Causes and Effects, Princeton University Press, Princeton (New Jersey).

The British Rainfall Organisation (Air Ministry, Meteorological Office, 1936).

Thornthwaite, C.W. and Mathur, J.R. (1955): "The Water Balance", Pub. in Climatological Dexel Institute, Technical Lab. of Clim. Centerton, Elmer (New Jersey), Vol.8, No.1.

Toennies (Tonnies), F. (1887), 1957: Community and Society, East Lansing, Michigan: The Michigan State University Press.

Weber, Max.(1904-5), 1935: The Protestant Ethic and the Spirit of Capitalism, translated by Talcott Parsons, London: George Allan & Unwin.

Westergaard, K. (1986): People's Participation, Local Government and Rural Development: The Case of West Bengal, (Copenhegin: Centre for Development Research).

Wissler, Clark, (1923): Man and Culture, New York: Thos.Y. Crowell Company.

World Health Organisation, (1978): Primary Health Care: Report of the International Conference on Primary Health Care, Alma-Ata.

Yogendra Singh, (1993): Social Change in India: Crisis and Resilience, Har Anand Publications, New Delhi.

Zurbrigg, S. (1984): Ruku's Story: Structure of Ill-Health and Source of Change, New Delhi, Voluntary Health Association of India.