A STUDY OF LOW GROWTH OF THE SCHEDULE TRIBE POPULATION IN MAYURBHANJ DISTRICT DURING 1971 – 81

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MASTER OF PHILOSOPHY

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Dec. 2, 1987

CERTIFICATE

Certified that the dissertation entitled, "A Study of low growth rate of the Scheduled Tribe Population in Mayurbhanj district during 1971-1981" submitted by SHAIKH RAHMAN is in partial fulfilment of six credits for the degree of Master of Philosophy of this University. This dissertation has not been submitted for any other degree of this University or any other University and is his own work.

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

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Shaikh Rahman

[SHAIKH RAHMAN]

CHAPTER - I

INTRODUCTION

REVIEW OF LITERATURE

INTRODUCTION

In India, the analysis of population phenomena has been carried out mostly at the national, regional and urban community levels, although the decinnial census operations cover, and provide data for all parts of the country. Very few socio-demographic studies of population have been conducted in rural areas, and still fewer studies for tribal areas. The general and widely held impression that tribal areas are sparsely populated and contain only a small segment of the nation's total population, or that their demographic profiles are more or less heterogenous and static is probably one of the reasons why they have not attracted the attention of social demographics, sociologists, and anthropologists. An associated factor is the belief that a study of demographic factors cannot throw light on behavioural aspects, which seems to have rendered sociologists and anthropologists generally shy of undertaking studies of bare population phenomena. Consequently, such phenomena as culture, religion, kinship and social structure have been over-emphasised in the tribal studies of sociologists and anthropologists. The functional link between population factors, on the one hand, and socio-cultural factors on the other, has only been academically

acknowledged rather than investigated in practice. The emergence of, and variations in, specific population structures canceal and contain a host of subtearanean forces of human dynamics and decision that should properly be addressed both by demographers and social scientists.

In the post-independence era, some of the tribal areas are expe riencing critical or even calamitious population growth and change mainly owing to the in-migration of outsiders over and above their birth and death rates. The research conceptualised in this dissertation concerns the low growth rate of tribals in Mayurbhanj district. An attempt will be made to investigate out the causal forces acting on this phenomena. This may add to the existing knowledge and data available for tribals in general and particularly for the Mayurbhanj district in which tribal population is maximum in Orissa.[1]

It is surprising that the growth rate of Orissa is 19.7 percent - which is next only to Tamilnadu and Kerala in 1981 census.[2] Various explainations ahave been offered about the slow growth rate of population. These are such as - high mortality rate, the good implementation of the family planning programme, and the overall efficiency in administration etc.

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factors. The following hypot

1. The extent of underenumeration in 1981 census was of a higher order than in 1971, thereby deflating the population growth rate during 1971-1981.

2. It is likely, that the anticipated decline in mortality did not occur. In other words, mortality remained high. Theoretically, it is possible to argue that mortality might have been increased.

3. Likewise, the expectations regarding featility decline might have been more than fulfilled and there might have been a steep fall in featility.

4. There might have been considerable net out-migration from Orissa as a result of distress, growing poverty, and allied factors and also migration on account of better opportunities in other states.

In the present state of knowledge, it is very difficult to test these hypothesis. But an investigation can be made to arrive at a logical explanation for this phenomenon.

The most striking thing about family planning figures is that sterilization and family planning are almost synonymous, such is the lions' share of sterilization in the family planning programme. Mayurbhanj, the most tribal district, has the highest percentage of couples protected and the lowest growth rate of population. The implication is that mortality must have been high in this tribal district and/or there might have been considerable out migration from this district. One must look for intensive surveys on nutrition, mortality, morbidity to substantiate the high mortality thesis.

The mystery behind Mayurbhanj district's low growth rate of tribal population during 1971-81 deserves a systematic enquiry. It is the most backward tribal district of Orissa. Illitracy is wide spread. Poverty, undernutrition, hunger and famine are common features. The level of administration is far from satisfactory.[4]

To carry out this study the data will be collected at the district level. A systematic design has been constructed to make this enquiry on the basis of data from various sources and a logical analysis has been made on this phenomenon relating to tribals.

REVIEW OF LITERATURE

Fertility studies have been carried out much before independence of the country. However, not much empirical studies in this field were conducted. Some studies like the population problem of India(P.K. Watall, 1916)[5], poverty and population in India (D.C. Karve, 1936)[6], the Sociology of population (Sarkar,1936)[7], India's teeming millions (Gyan Chand, 1938)[8], were mostly based on thinking and experience.

In the post independence days the fertility studies gained momentum in terms of scientific basis. The Mysore population study (UN, 1952)[9], a survey of Fertility and Mortality in Poona District (V.M. Dandekar and K. Dandekar, 1951)[10], Differential Fertility in Central India (Driver, 1963)[11], Sociology of Fertility (Mahadevan, 1979)[12] are worth mentioning. The United Nation Study made extensive use of socio-economic characteristics for analysis. It had collected valuable data on births, deaths, children ever born and a get marriage. Detailed fertility and attitude schedule s were used to examine motivational aspect in regard to fertility and small family and use of family planning methods. The studies made by Mahadevan, Nag and Nampoodhri brought some vital socio-cultural factors to light. In their studies they used influence of caste, duration of married life, caused by widow-hood, separation, divorce, differential age at marriage, role and values of children, modernisation, family size norms, differences in vital events in rural and urban areas and family type.

Age at marriage is a vital factor affecting fertility. The studies of Agarwala (1962)[13] and Mahadevan (1972, 1979)[14] have shown that this culturally conditioned variable has great influence on fertility. People get

married after attaining physical maturity or self-reliance. But some parents like to have an additional earning member in the family before they become old and inactive, some try to avoid the risk of the child going astray, and the result is early marriage of the children.

The Mysore population study found that not economic status but prescriptions of customs have greater influence on marriage. In earlier days pre-pubertal marriages were frequent so there could be very low average age at marriage, particularly among for males (Agarwala, 1972)[15]. However, at the turn of the century this has undergone tremendous change. The UN (1961)[16] study recorded the proportion of women marriying under age 13 was only about 25 percent declining to 15 percent by 1960.

A recent study by Rao etc. (1986)[17] on Karnataka looks into some other possible determinants of age at consummation like dowry, living arrangements after marriage and role played by couples in decision making often non-payment or inability to pay the demands from bride grooms side lead to unhappy postponment or cancellation of the marriage. And "if the couple plans their marriage independent of the opinion and influence of other, this may indicate a greater recognition

of the economic considerations involved in maintaining a family, which in turn could possibly influence the timing of marriage and consummation." For urban couples availability of housing facility may delay the marriage. However, in rural areas this may not be so, as, usually, bride goes to her in - laws house.

In some cases, the marriage gets delayed where the girl is the bread earner or having a major role in this regard. For grooms the delay is generally caused by factors like searching for a girl of desired qualities, financial difficulties, completing education, etc.

"Family structure and function have strong influence on fertility behaviour. It is now believed that nuclear families form high fertility. This is because of the needful function of the children like providing economic support to the family, ensuring social security for parents in old age besides helping mothers in house hold business Cain (1977a)[18], While (1976)[19], Mamdani (1972)[20].

In this context the health situation assumes great importance. In fact mortality is a vital factor in determining fertility behaviour. Chandrasekhar writes,

"Because many babies are born, many die in infancy, and the large number of children born is apparently in response to the high number of infant deaths." Freedman (1963)[21] made a statement, after reviewing several studies, that secular decline in mortality must eventually produce a decline in fertility.....Heer (1966)[22] found infant mortality to be the strongest and more consistent predictor of fertility. 'Couples will not wish to present pregnancies until they have some assurance that the children they already have will survive.' WHO (1972)[23].

Some recent studies have too such opinion. Balakrishnan (1978)[24], Harrington (1971)[25], Prasad and Bagchi (1976)[26]. A UN (1981)[27] study says that in Columbia women experiencing child mortality are less ready to cease child bearing. They sum to replace a child (died) and have a certain number of children alive.

Sex preference and desired number of children also contribute to such high fertility rates. Khan (1972)[27] points out that "Sex preference and life span of previous child play a dominating role in increasing or reducing the birth interval. The interval between two consecutive live birth when the previous child is male and alive is greater than that when the previous child is female

and alive. Similarly interval between two births reduces if the child dies in infancy and specially if it is a male birth." Prasad and Bagchi conclude that "Married couples intending to become parents of a number of children often desire to have some of them of the prefered sex and a lso wish that each child, irrespective of sex, that they produce should survive at least their life time. But, in reality with little human control over sex determination and mortality taking a heavy toll of human lives during infancy and childhood, couples less frequently achieve what they wish and desire well within a minimum number of children. As such any nonfavourable out-come in the matter of procreation may cause frustration among affected couples and shake their willingness to limit the family size with the result that they fall in with certain behaviours generally giving rise to conditions largest favourable to high fertility in human communication".

The UN(1981)[28] study shows relationship between fertility and occupation, education urbanization and possibility by socio-economic mobility.

Working women preferless children. Women working in agricultural sector have higher fertility preferences than those who are in white-colour jobs. Similarly

for husbands, there is high fertility for those who work in primary industries, low in professional classes, white-collar workers and urban industrial workers, When parents are educated and employed the family size tends to be low because of parents' care for the children's education and future good placement. Shastry[29] points out that there are atleast four mechanisms through which the observed inverse relation-ship between female work participation and fertility could arise. Those, who work marry at a higher age than non-working group. There is high probability of remaining single in fear of loosing status and freedom. Studies in developing countries (Nye, 1961)[30], have shown that there is an inverse relationship between wife's work participation and marital harmony. Use of contraception increases due to the working status of the wife. Blake (1965)[31], Davis (1967)[32].

Caste and Religious belief too determine fertility behaviour. Mahadevan (1979)[33], UN(1961)[34], Ralte and Kanitkar (1979)[35]. Differential fertility have been proved across different cultural groups in India (Davis 1951,[36] Driver, 1963)[37]. A cross-cultural study showed that the Harijans have the highest fertility (CBR:37) as against a lowest fertility for the Gounders (24.5) and for the other numerically smaller groups together

had an intermediate level of fertility i.e. 32.7 (Mahadevan, 1979)[38]. Mahadevan feels that the muslims and Christians in India have high fertility compared to the Hindus. During 1961 to 1971 Muslims experienced an increases of 30.8 percent as against the dismal growth rate of 28.7 percent for the Hindus (Census of India 1971)[39]. Khanna while analysing the data for all India Family Planning survey - 1980 (ORG Baroda)[40], draws important conclusions in this regard. Muslims in lower income group (Rs.500) irrespective of education have higher child mortality than Hindus. But in high income groups this is reversed. . Mean number of live births for Muslims was 13.3% higher than the Hindus, Christians and Sikhs had lower than Hindus and Muslims. "There is perfect correlation between socio-economic characteristics and fertility in case of each religion. It revealed that there was constant decline in the mean number of live births with the increase in income and education level of each religious group ". Moreover, inter spouse communication is lower in Muslims than in Hindus.

Education has been considered to be of prime importance in the studies of fertility. For instance it may influence fertility directly by altering attitudes and behavioural patterns of individuals and indirectly, by

affecting such factors as age of marriage, acceptance of family planning and infant and childhood mortality (Kasarda, 1976)[41]. Mahadevan in a study of south Indian village brings out tremendous influence of education on Harijans. According to his findings a greater proportion of Harijans become literate (60%) compared to the caste Hindus (50%) and the Muslims (27%)[42]. The advancement in education and changes in occupation together have depressed their fertility very significantly. However, more than occupation, education showed a decisive anti-natalist influence for the Harijans.

In most of the traditional societies there built in preventive checks on fertility. (Das, 1983)[43]. For, the observance of long post partum taboo on sexual inter - course for the breast feeding mother results in child spacing. Srinivasan (1977)[44] argue that in Karnataka there had been a large number of traditional checks on fertility. They are prolonged abstinence by couples after child birth owing to the mother's visit to her parents' home, taboos regarding sexual intercourse on certain days of the mother for religious or for social reasons, prolonged breast feeding, prohibition of widow remarriage etc. Moreover, when a women's daughter - in - law becomes mother she develops grand - mother complex and tries to avoid pregnancy or else falls to

community criticism. Nag (1980)[45] also feels that social modernisation may create conditions which tend to increase fertility.

Acceptance of Family Planning methods puts a check on fertility. Das[46] states that the use of Family Planning methods is less than that of the higher age group. Studies of Lal and Swamy, (1978)[47] show that there is a marked shift in the pattern of fertility towards younger age groups in the states of UP and Tamil Nadu. The study of Srinivasan (1977)[48] shows that in rural plains, towns and Bangalore city there has been an increase in marital fertility rates in the age group 15-19 and 20-24. Mahadevan from his study of Ramapuram village points out that Muslim culture is a hindrance in acceptance of Family Plannings methods. As he found out, people believe that child is a God's gift and preventing god blessed - conception is a sin and can go to hell. Khanna (1983)[49] observes that Muslims remain indifferent towards acceptance of Family Planning.

Out of the brief review of litrature on fertility, it appears that the fertility level of population at any point of time is an out come of a complex set of factors biological, social, cultural, economic, demographic and

political. It is the response of the people to the total social setting and not reaction to one or the other factor. Fertility therefore could be determined by several factors like age at marriage, contraception, social taboos, cultural practices, economic status, health situation, migration nutrition and so on.

There is a dearth of studies giving emphasis to migration in fertility analysis. Migration occupies an important place in demographic analysis. Because gradual pauperisation of villages and paucity of employment opportunities there is a gold rush towards urban centres which provide short and long term employment. Even the rural youth come to the cities for education and settle down thereafter.

As far as the fertility of tribal people is concerned no systematic study has been conducted so far. It has been felt by several social scientists as well as demographers that a systematic long term investigation is highly essential to for scientific understanding of trends of fertility and associated behaviour of the different tribal population because of thin variety of life processes existing in India. Considering this the investigation has made a modest attempt in this dissertation.

C H A P T E R - II

M E T H O D O L O G Y

METHODOLOGY AND THE DESIGN OF THE STUDY

Demographic studies and research have received considerable attention in India during the last two decades. The improvements in the process of collecting data through census particularly since 1951, and through various surveys have laid foundations for long term research to consolidate the ideas in the field of sociology of population.

Most of the research studies discussed in the previous pages conducted in India have been in overall national terms and only a few regional or local studies were undertaken. Unfortunately, no demographic or social science research project has so far been undertaken in Orissa to analyse the problems connected with its population.

Moreover the absence of any research work of demographic nature pertaining to tribals has been a conspicuous void in the field of demographic researches in India. This ethnic group of population has escaped the due attention of the socialscientists' probably because of difficulties involved in collecting the empirical evidences.

From the census it is found that the tribal population growth rate of Mayurbhanj district is a dismal one. In 1971-81 while the state of Orissa as a whole records a growth rate of 19% over a decade, the tribals of Mayurbhanj district have only 9.96% growth rate. Even this figure of the district is much lower than other districts in the state having a large tribal concentration.

Hence, the objectives of this study are as follows:

(1) What is/are the reason(s) of this steep fall in growth rate among the tribals;

(2) Does the reason confirm the well established facts/census of diminshing fertility.

(3) Whether the low growth rate was the result of voluntary action for small family norm or adopted under stress or due to conditions peculiar to themselves?

The review of literature on the different areas of study in the previous chapter have thrown some insights into the low fertility trends. These are as follows:

(1) Birth rates, death rates, infant mortality rates, maternal mortality rates, migration and general health situation in the district.

(2) Family planning achievements with reference to couple protection and also the sterilization.

(3) Age at marriage

(4) Socio-economic and cultural conditions (including level of education source of employment etc.)

(5) Impact of in-migration and out-migration on the low growth rate.

DESIGN OF THE STUDY

Considering the above areas of study it has been realized that very little knowledge is available in this problem with particular reference to the tribals. From the various literature and study reports and facts and figures have been collected to develop broad ideas regarding the demographic situation of tribals of Mayurbhanj district. The state data has been taken into consideration when the district data is not available at all. Not even a single earlier study is available on this problem of Mayurbhanj district. Because of this, as well as not able to identify a sound reason responsible for this complex phenomenon, a village was selected to carry out a short survey to get hold of a series of field level data to cross check authenticity of the data collected from different documents available at state, district and Block level offices. This village study has provided ample scope to the investigator to develop emperical evidence for this problem.

DATA COLLECTION

Data on various items have been collected for ten years period from 1971-81 for Orissa and also for

Mayurbhanj district. Data consists mainly of two types i.e, primary and secondary. Considering the difficulty in collecting primary data on the areas cited above data has been collected from various levels as well as from field situation covering a tribal village in Bijatola Block.

METHOD OF DATA COLLECTION

Various methods have been applied to collect data.

1. Census reports-Census reports are extensively used to determine the growth/fall of the population.

2. Official records have been used to collect data on various vital events reflecting the fertility, such as family planning achievements, birth rates, death rates, infant mortality rates. Some official publications were used to look into the health situation and general socio-cultural situation in the district giving emphasis for the scheduled tribes.

3. Interview- various people associated with family planning at the state, district and block or local level have been interviewed. Apart from the opinions of different state level officials, the opinions of the local Tribal Development and the Health department officers were also noted. To get in touch with local situation and events, local leaders including ward members, Sarpanch, Panchyat samiti chairman, doctors and staff of PHC and other responsible people were interviewed.

It was problematic to obtain the official records. However, after prolonged discussions with the state level officials it was made clear to them that the data would be used for research purpose only. Then it was possible to collect data at three levels; state, district, and block. The investigator himself is a resident of Mayurbhanj district. This has helped the investigator alot. Various community leaders and PHC officials were interviewed to cross check the official data. Because the investigator is associated with the tribals Since his childhood, it was not difficult to interview the tribals at their family level. A few case studies have been collected to strengthen the data collected from other sources.

DIFFICULTIES FACED BY THE INVESTIGATOR

Because this problem has created much sensation regarding diminishing population for the tribals after 1981 census the government officials are found to be very sceptical in parting with the data. After long persuasion and discussion it was possible to convince them that this data would be used basically for research purposes. But at the village level and also at various levels, the informants cooperated very much in investigating out the various dimensions of this problem.

A lot of difficulties were faced because the records available at the state, district and local level were found to be mostly incomplete or maintained very badly. The sources for collection of data on births and deaths are census enumeration, periodical surveys, analytical methods and normal registration of vital events. The census enumeration method provides data over a period of time and not at a point of time, while periodical surveys suffer from incomplete coverage. The results generalised on the basis of sample surveys for a group of population or community may not be true for every region. The position of vital statistics, which suffers from gross under registration can very well be imagined. Thus the dependable source for birth and death rates rests with analytical method, based on census and sample surveys. As regards assessment of birth and death rates on the basis of normal registration data, any precise trend can not be deduced due to variations in the extent of registration. Any conclusion drawn on the basis of registered data would be as grossly inaccurate as the under e registration is.

Moreover, it was a matter of great concern that still most of the data collected in 1981 census operation have not been analysed officially so far. The investigator recorded the required information from the district census office and analysed them and because of this it took a lot of time to arrive at this analysis.

C H A P T E R - III

M A Y U R B H A N J D I S T R I C T - A T A G L A N C E


ADMINISTRATIVE MAP
OF
ORISSA
BIHAR
WEST BENGAL
MADHYA PRADESH
ANDHRA PRADESH
BAY OF BENGAL
SUNDARGARH
SAMBALPUR
KEONJHAR
MAYURBHAN
BARIPADA
BALESHWAR
DHENKANAL
CUTTACK
BALANGIR
KALAHANDI
PHULABANI
GANJAM
PURI
KORAPUT
BOUNDARIES:
STATE
UNDEMARCATED
DISTRICT
SUBDIVISION
TAHASIL
HEADQUARTERS:
STATE/DISTRICT/SUBDIVISION/TAHASIL
82° East of Greenwich
Based upon Survey of India map with the permission of the Surveyor General of India.
The territorial waters of India extend into the Sea to a distance of twelve nautical miles measured from the appropriate base line.
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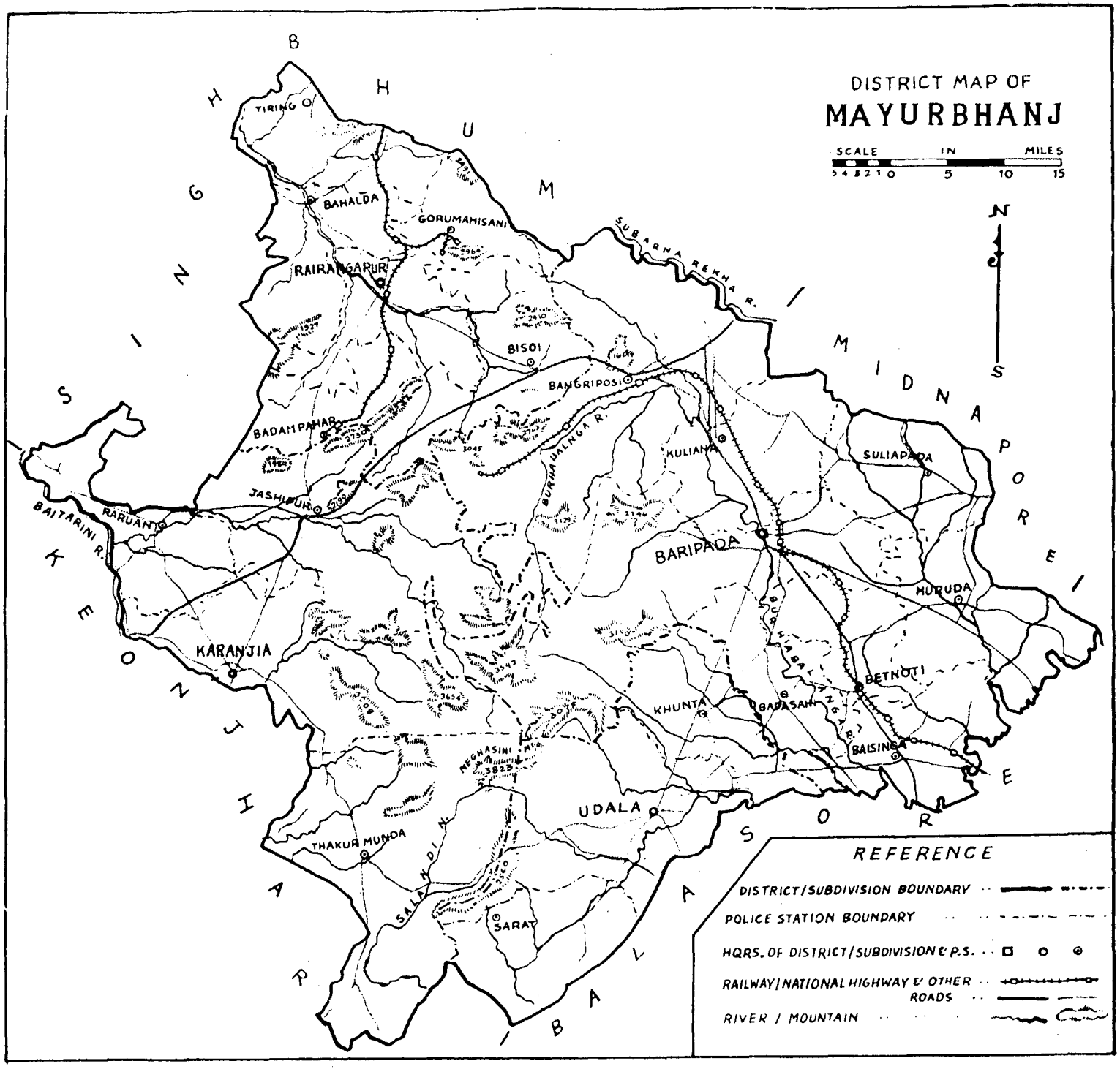
MAYURBHANJ DISTRICT

PHYSICAL FEATURES

Mayurbhanj is a land locked district situated in the Northern boundary of the state. It is one of the border districts with district headquaters at Baripada. It lies between 85°40" East and 87°11" East longitudes and 21°16" North and 22°34" North latitudes (Map-1).

The district is bounded in the North by Midnapur district of West Bengal and Singhbhum district of Bihar, in the South by Keonjhar and Balasore districts of Orissa, in the West by Singhbhum and Keonjhar and in the East by Balasone district. The total geographical area of the district is 10,418 square kilometers, of which 48 per cent of area is under forest (MAP-2).

The central part of the district is covered by a group of hills known as similipal range and the remaining portion is covered by undulating plains rising and falling in gentle slopes. The district is 559.31 meters above sea level. The Budhabalanga is the main river flowing through the district. The other rivers, namely, Baitarani, and Subannakekha touch to the boundary of the district on the Western and North-eastern side respectively.


DISTRICT MAP OF
MAYURBHANJ
SCALE IN MILES
5 4 3 2 1 0 5 10 15
N
S
BHUMIJ
SINGHBHUM
KEONJHAR
BALASORE
MIDNAPORE
TIRING
BAHALDA
GORUMAHISANI
RAIRANGPUR
SUBARNA REKHA R.
BISOI
BANGRIPOSI
BADAMPAHAR
JASHIPUR
BURHA BALANGA R.
KULIANA
SULIAPADA
BAITARINI R.
RARUAN
BARIPADA
MURUDA
KARANJIA
BETNOTI
KHUNTA
BADASAHI
BAISINGA
MEGHASINI
UDALA
THAKUR MUNDA
SALANDI
SARAT
REFERENCE
DISTRICT/SUBDIVISION BOUNDARY
POLICE STATION BOUNDARY
HQRS. OF DISTRICT/SUBDIVISION & P.S.
RAILWAY/NATIONAL HIGHWAY & OTHER ROADS
RIVER / MOUNTAIN

ADMINISTRATIVE DIVISIONS

The district is divided into four subdivisions, namely, (i) Sadar subdivision with headquarters at Baripada, (ii) Panchpir subdivision with headquarters at Karanjia, (iii) Bamangati subdivision with Rairangpur as its headquarters and (iv) Kaptipada subdivision with headquarters at Udala. Besides, there are six Thasils, Twentysix Community Development Blocks, Twentyone Police-stations, Four towns, One Muncipality, Three Notified Area Councils, 255 Gram Panchayat Samities, and 3,712 inhabited villages.

In the four subdivisions of the district, four Integrated Tribal Development Projects, namely Baripada, Kaptipada, Karanjia and Rairangpur are functioning. Besides, one District Rural Development Agency has been set up in this district since July, 1981. Through these Agencies various Rural Development Schemes are being executed to uplift the Economic condition of the rural masses. In this district, 75 scheduled Commercial banks are operating. Among these the Bank of India is the lead bank. Besides, one Central Co-operative Bank with its 10 branches scattered over the district is functioning. These financing institutions are looking into the credit needs of development programmes implemented in the various areas of this district.

DEMOGRAPHIC PROFILE

The total population of the district is 15.82 lakhs in 1981 census which is 6 per cent of the total population of Orissa (Table 1). In which consideration of the population, it occupies seventh place in the state. The majority of the population speak in Oriya language. The scheduled tribes of this district also speak in Oriya language besides their own tribal dialects.

According to 1981 census in Table 2 scheduled caste population in the district is 1.04 lakhs which is 6.58 per cent of the total population of the district. The scheduled tribe population in the district is 9.12 lakhs which is 57.67 per cent of the total population of the district. Thus the total back ward population of the district is 10.16 lakhs which is 64 per cent of the total population. Table (3) shows that the district is predominantly a rural one with 94.26 per cent of the population. The density of population of Mayurbhanj district is 151 per square kilometer as per the 1981 census report.

Table No.1 Distribution of Population by sex in different Districts according to 1981 census of Orissa.

District	Total Population			Percentage to state population
	Males	Females	Total	
Balasore	1,138,904	1,114,186	2,253,090	8.58(6)
Balangir	728,875	723,800	1,452,675	5.53(9)
Cuttack	2,340,310	2,277,438	4,617,748	17.58(1)
Dhenkanal	804,261	772,304	1,576,565	6.00(8)
Ganjam	1,305,125	1,374,574	2,652,699	10.10(3)
Kalahandi	661,212	668,568	1,329,780	5.06(11)
Keonjhar	559,459	550,287	1,109,746	4.22(12)
Koraput	1,237,412	1,229,917	2,467,329	19.39(4)
Mayurbhanj	729,315	784,672	1,576,987	6.00(7)
Phulbani	356,362	356,410	712,772	2.71(13)
Puri	1,484,799	1,426,921	2,911,720	11.08(2)
Sambalpur	1,152,735	1,121,390	2,274,125	8.66(5)
Sundergarh	691,754	645,064	1,336,818	5.09(10)
Orissa	13,253,523	13,081,531	26,272,054	100.00

Source:- 1981 Census Report, 1981

N.B:- Figure in the bracket indicates rank of the district in Population.

Table 2 Scheduled Caste and Scheduled Tribe population in different districts as per 1981 Census

Name of the district	SC population	%age of SC population to total population	ST population	%age of ST population to total population
1	2	3	4	5
Balasore	404,197	17,94	154,153	6.84
Balangri	228,260	17.67	280,381	19.22
Cuttack	817,873	15.64	144,708	3.13
Dhenkanal	250,554	15.83	194,060	12.26
Ganjam	401,116	15,02	253,034	9.48
Kalahandi	211,069	15.76	418,871	31,28
Keonjhar	124,379	11.16	499,567	44.82
Koraput	349,307	14.06	1,371,550	55.27
Mayurbhanj	104,057	6.58	912,320	57.67
Phulbani	133,071	18.55	279,276	38.94
Puri	377,546	12.93	100,827	3.45
Sambalpur	350,078	15.35	620,555	27.21
Sundargrah	114,036	8.52	685,765	51.26
Orissa	3,865,543	14.66	5,915,067	22.43

Source: Census Report, 1981

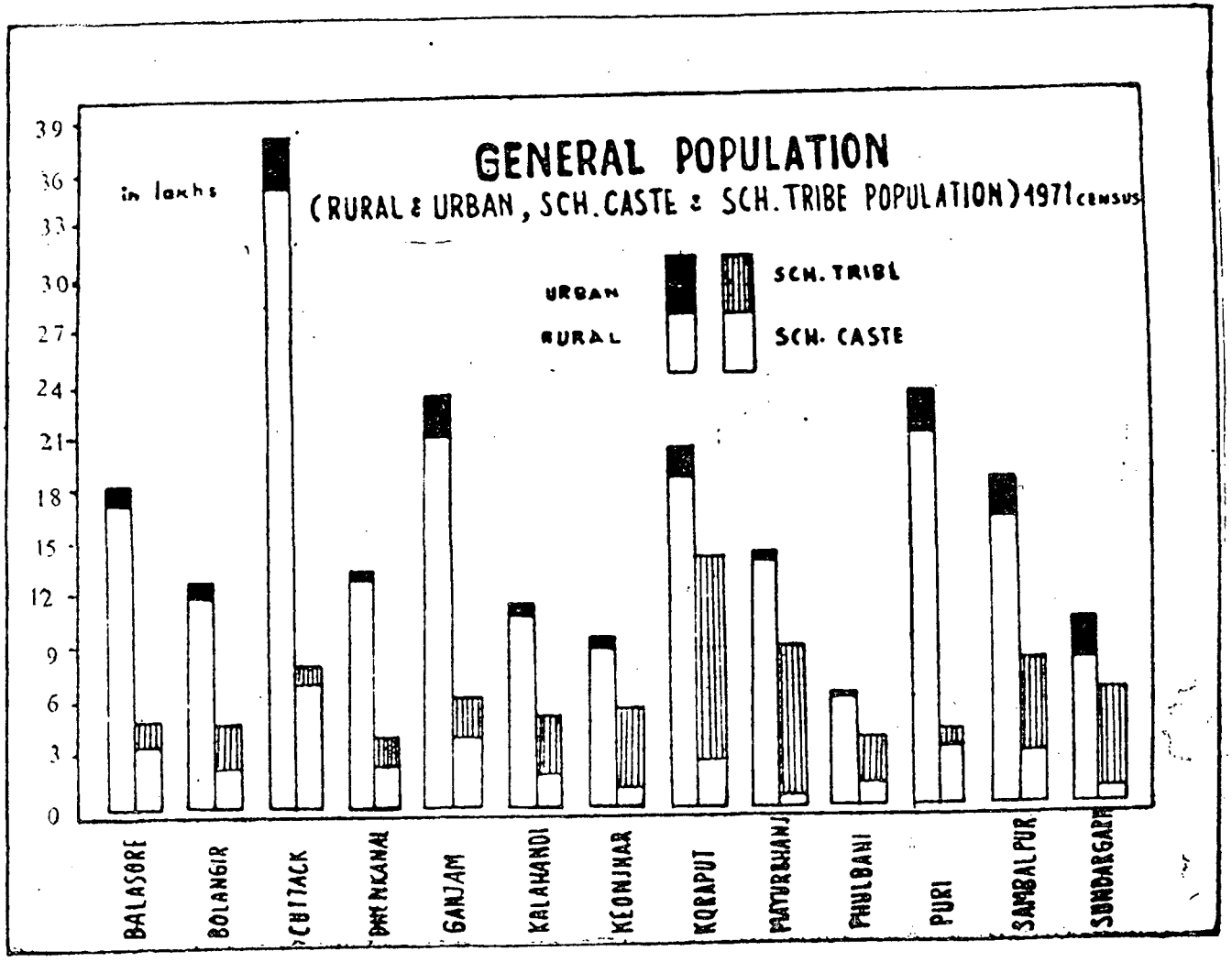

GENERAL POPULATION
(RURAL & URBAN, SCH. CASTE & SCH. TRIBE POPULATION) 1971 census
in lakhs
URBAN
RURAL
SCH. TRIBE
SCH. CASTE
39
36
33
30
27
24
21
18
15
12
9
6
3
0
BALASORE
BOLANGIR
CUTTACK
DHENKANAL
GANJAM
KALAHANDI
KEONJHAR
KORAPUT
MAYURBHANJ
PHULBANI
PURI
SAMBALPUR
SUNDARGARH

Table 3 Distribution of population by sex in different districts according to 1981 Census

District	Rural population			Percentage to total population
	Males	Females	Total	
Balasore	1,040,197	1,026,966	2,067,163	91.75
Balangir	660,008	659,679	1,319,687	90.84
Cuttack	2,074,592	2,068,060	4,142,652	89.71
Dhenkanal	734,641	718,214	1,452,855	92.15
Ganjam	1,110,611	1,162,092	2,272,703	85.68
Kalahandi	619,645	629,627	1,249,272	93.95
Keonjhar	491,897	491,604	983,501	88.62
Koraput	1,092,474	1,094,754	2,187,228	88.65
Mayurbhanj	743,378	743,095	1,486,473	94.26
Phulbani	336,547	339,109	675,656	94.79
Puri	1,247,218	1,232,285	2,479,503	85.16
Sambalpur	964,785	956,182	1,920,967	84.47
Sundargrah	466,923	461,836	928,759	69.48
Orissa	11,582,916	11,583,503	23,166,419	88.18

The district has a very low literacy rate . The general literacy rate of this district in 1971 and 1981 is 18.05 and 25.5 per cent respectively. In the field of education this district is one of the backward districts of the state. The number of females educated or literate is only 8 and 14 per cent as per 1971 and 1981 census report respectively.

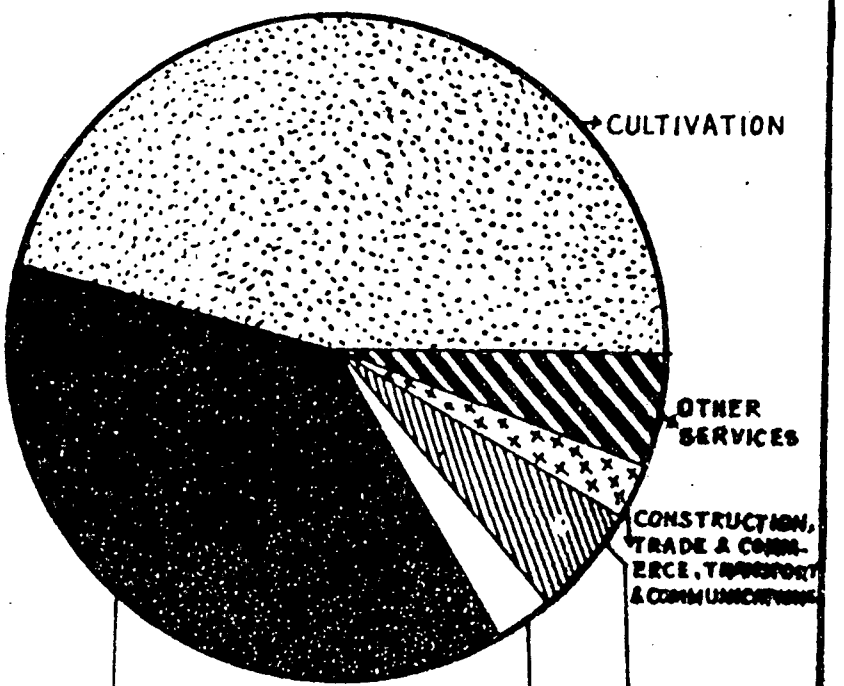
SOCIO-ECONOMIC PROFILE:-

Agriculture is the most important occupation of the people of the district. When judged both from the value of out put and from the volume of employment of the total working force of the district 80.54 per cent work in this field either as cultivators or agricultural labourers.

Table (4) shows that the total number of workers engaged in the house hold industry in the district is 5.43 per cent of the working population. This working population is engaged in the industries like basket making, rope making, weaving, black smithing, pottery making, etc. The house hold industry or the cottage industry is no longer a remunerative enterprise and so the number of persons engaged in them have gradually come down. The workers engaged in them are hereditary and indigenous and they just take to these professions when they do not find any other source of livelihood. Many also take to those industries as their parttime work.

WORKERS ACCORDING TO OCCUPATIONAL CLASSIFICATION IN MAYURBHANJ DISTRICT

1971 CENSUS



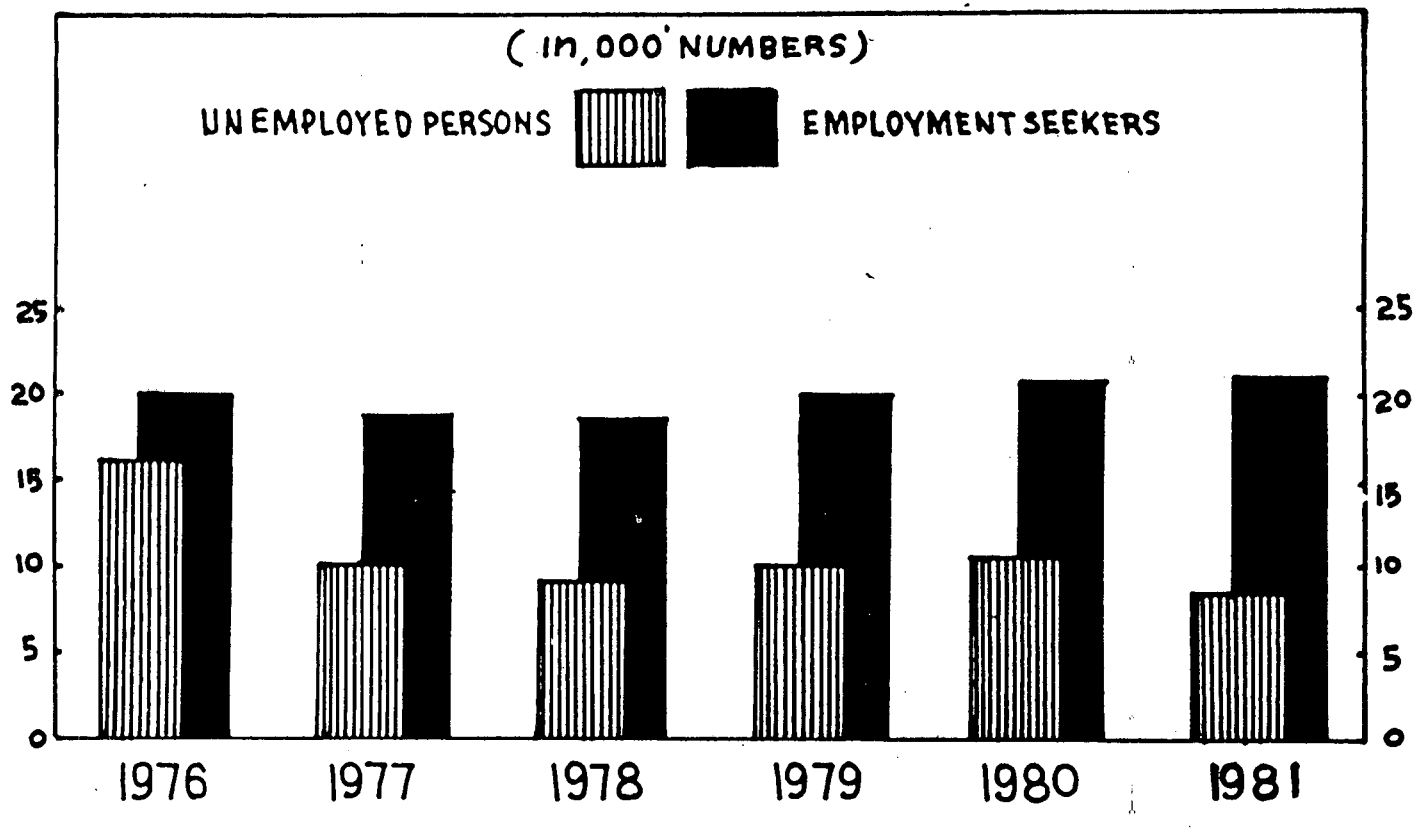
(PERCENTAGE FIGURES)

Table 4. Distribution of Main Workers by sex and category according 1971 and 1981 (Provisional) Census in Mayurbhaj district.

Sex/year	Percentage of main workers as		Workers household industry	other workers
	Cultivators	Agricultural labourers		
Persons				
1971	46.17	37.42	4.72	11.69
1981	47.14	33.40	5.43	14.03
Males				
1971	51.83	31.10	4.36	12.72
1981	53.41	25.57	4.44	16.58
Females				
1971	19.10	67.65	6.49	6.76
1981	30.14	54.65	8.10	7.11

Source:- 1981 Census Report.

NUMBER OF EMPLOYMENT SEEKERS REGISTERED IN EMPLOYMENT EXCHANGES & NUMBER OF UNEMPLOYMENT PERSONS IN THE LIVE REGISTERS OF THE EMPLOYMENT EXCHANGES OF MAYURBHANJ DISTRICT



In 1981 a new category of workers was listed that is marginal workers amounting to 146000. Thus it is clear enough that the employment opportunities are scarce. Regular employment is not available for more than four months in normal situations. And during the natural calamities like heavy rains or drought the situation becomes worst.

Agriculture is the main profession in the district. The few who hold land give employment to a large number of agricultural labourers. Nearly 40 per cent of the total area (1040000) heactares is used for agricultural purposes.

Table 5

Year	Net cropped area (in hectares)
1972-73	396000
1980-81	418000

There is no perinnial source of irrigation. So most of the cultivable lands are under single crop. Some areas remain fellow alround the year due to lack of adequate water. The most common crop is paddy and that is also not of high variety. It has low yield rates. Hence, commercialisation of crops is yet to be seen, because the total irrigated area of the district is about 29,340 hectares from all sources of irrigation.

Irrigation facilities being very meagre hardly comprise of 5 per cent. More production can be achieved only if more areas are irrigated as the cultivators mostly depend on the mercy of rains for their cultivation. The principal crops of this district are paddy, Kulthi, Black gram, Maize, Niger, Groundnut, Mustard, Koda, and Gondule. Tobacco of inferior quality is also cultivated in some areas on homestead lands by tribals for their own consumption. The low fertility of the soil has embodied the spirit of cultivation to take to improved methods of cultivation like use of high yielding variety of seeds, chemical fertilizers, pesticides, and improved impleme nts to accelerate the rate of production. The greatest bottle neck of the cultivators is the lack of adequate irrigation facilities in the district for which in most of the cultivable areas only one crop is sown. As a result their economic condition has remained the same for years together. The landless agricultural labourers migrate to the neighbouring states and also districts in large number in search of jobs to make their both ends meet.

Industrial situation of Mayurbhanj presents a dismal picture. Central Government has declared this district as industrially backward. It has no large scale industry. There are four medium scale industries producing sal

seed oil, ferroalloys and acids. There are 744 small scale industrial units of forest products or agricultural products. In the cottage industries sector, there are 10435 units relating to sabai rope, and furniture, stone curving, weaving, pottery etc. All of these units have a low investment and employment opportunities. Sabai rope and furniture industries are the most important traditional industries of the tribals. However, since the trade is controlled by the unscrupulous hands, their income turns out to be a meagre one besides the livestocks and fruit cultivation provide some subsidiary income to the people.

The district is rich in mineral deposits. Iron-ore, Vandiferous and fitaniferous magnetite, chinaclay, galena (lead ore) kyanite, quartzite constitute the principal mineral resources of the district. Iron-ore deposits of Gorumahisani, Badampahar and Sulaipat, which have been exploited for a period of about half a century by Tata Iron and Steel Company, Jamesedpur (TISCO) deserve special mention. The TISCO have since stopped raising of iron-ores and the local people (basically majority tribals) engaged in those mines have been thrown out of employment. The people engaged in business and trade

of those mineral areas also suffered due to reduction of active customers of the mines. The rechest deposits of Chinaclay are located around Karanjia and Jashipur in Panchpir subdivision and the exporting of semi-processed chinaclay to ceramic industries outside the state is gradually making head way.

Medical and public health have rendered useful ser-- vices to the people of the district. The number of hospitals, dispensaries, Primary Health centres and health units have almost remained the same but gradually they are being strengthened from time to time with better management. (Table 6)

One Primary Health Centre (PHC) in each Block with one or two qualified doctor is functioning. Subcentres according to necessity, to cater to the need of the people have been opened in many Blocks together with considerable number of Maternity Centres. To curve the population growth and for small family norm a considerable number of Family Welfare Centres have been opened, because of which, in this district highest number of sterilization could be made possible. The details of infrastructural facilities of medical and health services of this district have been given in following table.

Table 6 - Medical & Public Health Facilities in Mayurbhanj District (till 1980)

		Urban	Rural
1. No. of Hospitals: Total		6	10
Government	Health Deptt.	4	10
	Home Deptt.	2	Nil
	Private -	Nil	Nil
	Local bodies	Nil	Nil
2. No. of Dispensaries: Total		Nil	9
Government Health Deptt.		Nil	8
Voluntary Organisation		Nil	1
Local bodies		Nil	Nil
3. No. of Primary Health Centres: Total		-	26
4. No. of Subcentres	Total	-	136
5. No. of Maternity Aid Centres	Total	-	3
6. No. of Specialized Institutions	TB	NIL	Nil
	Leprosy	Nil	Nil
	Malaria	Nil	Nil
7. No. of Beds available in the district (as on 31.12.1980)	Total	385	248
Government	Health Dept.	369	68
	Home Deptt.	16	Nil
Primary Health Centre		-	156
Upgraded PHC		-	24

Source: C.D.M.O. - Mayurbhanj, Baripada.

Table 7 Number of Allopathic Hospital Dispensaries and Doctors in the district of Mayurbhanj

Period	Hospitals	Dispensaries	Primary health Centres	Medical Aid. Centres	Total Medical Institutions	Total No.of Doctors
1	2	3	4	5	6	7
1977	15	10	26	3	54	...
1978	16	9	26	...	51	...
1979	14	8	26	3	51	...
1980	14	8	26	3	51	...
1981	14	8	26	3	51	175

Source: C.D.M.O., Baripada

Table 8 Number of Hemoeopathic, Dispensaries, Doctors and Patients treated in the district of Mayurbhanj

Period	No. of Hospitals and Dispensaries	No. of Doctors	No. of beds available	No. of patients (indoor and outdoor) treated
1	2	3	4	5
1977	10	10	...	90,594
1978	11	11	...	1,02,419
1979	14	14	...	1,56,017
1980	17	16	...	2,03,818
1981	17	16	...	N.A.

Source: Director, Indian Medicines and Homoeopathy, Orissa Bhubaneswar.

Table 9 Number of Ayurvedic Dispensaries,Kaviraj and Patients treated in the District of Mayurbhanj

Period	No. of Hospital and Dispensaries	No. of Kaviraj	No. of beds available	No. of patients (indoor and outdoor) treated
1	2	3	4	5
1977	12	12	...	78,601
1978	13	13	...	82,606
1979	13	13	...	87,413
1980	17	17	...	1,52,920
1981	17	17	...	N.A.

Source: Director, Indian Medicines and Homoeopathy, Orissa, Bhubaneswar.

Scheduled Tribes and the Quality of the Life Style

The demographic aspects of any country or community cannot be studied in isolation of social variables which affect the day to day life of the constituents of the country or the community. Unlike the general society the tribal community has always been subject to various infiltrations - social, economic and political. In the context of the changes that have been taking place in tribal community knowledge about the socio-economic behaviour of its various constituents become imperative before drawing inferences about changes in demographic variables.

Scheduled Tribe Population

Orissa is one of the most fascinating ethnographic states in India. It has been the epitome of as many as 62 different tribal communities numbering 59.15 lakhs population which forms 22.43 per cent of the state's population of 263.70 lakhs as per 1981 census. Next to Madhya Pradesh the state comprises the tribal states population in the country. But barring the tribal states of North-eastern hill areas it ranks first in terms of percentage of tribal population among

le -16 Distribution of Scheduled Tribe population according to 1971 and 1981 Census in different Districts of Orissa.

e of the tricts	1971 Census		1981 Census	
	Total ST population	%age of ST population to the total population of the district	Total ST population	%age ST population to the total population of the district.
1	2	3	2	3
ssa	5,071,937	25.2	5,915,067	22.43
asore	1,029,192	7.1	154,153	6.84
angir	2,49,131	19.7	280,381	19.22
tack	1,10,746	2.9	144,708	3.13
nkanal	1,66,998	12.9	194,060	12.26
jam	2,28,945	10.0	253,034	9.48
ahandi	3,40,541	29.3	418,871	31.28
njhar	4,48,675	47.0	499,567	44.82
aput	11,51,231	56.0	1,372,550	55.27
urbhanj	8,39,835	58.6	912,320	57.67
lbani	2,50,605	40.3	279,276	38.94
i	86,591	3.7	100,827	3.45
balpur	5,19,046	28.1	620,555	27.21
dargarh	5,50,401	53.4	685,765	51.26

the other states of the country. As compared with the growth rate in the total tribal population of India which is 25.49 per cent in the decinial period 1971-81 the corresponding figure in the case of tribal population of Orissa is 22.4 per cent during the same period (Table 2 and 9).

Distribution

Broadly, there are four distinct geographical zones in which the tribes of Orrisa have been distributed in uneven proportions.

1. The Northern Plateau (25.5 per cent of total Tribal population of the state)

It includes Sundergarh, Mayurbhanj and Keonjhar districts and Bamra and Kuchinda of Sambalpur district and the interior plains of the Balasore district and Pallahara region of Dheurganal district. In this zone there are as many as 58 tribal groups numbering about 2 million people.

2. The Central Table land:

This zone covers the whole of the Brahmani, and the Mahanadi river basins. There are only two major

tribes, the Gond and the Saora numbering each more than one lakh.

3. The Eastern Ghat Region

The peninsular plateaus are bordered on the east by the Eastern ghats, a tactonic range out by many rivers into discontinuous blocks of mountains. Broadly it is divided into five sections, such as: i) Northern Section; ii) Central Section; iii) Rayagada Section; iv) South-eastern Section; v) South-western Section. The major tribal groups are khond, Bhattoda, Sobar, Panoja, etc.

4. The Coastal Region

Along the eastern sea-board tract lies a plain, made up partly of deltas formed by the numerous streams which flow from the inland hills and mountains into the Bay of Bengal. There are 51 tribal communities numbering 2,75,689 living in this region. The most numerous tribe among them are the Saora, Sabar, Santal, Khond, Bhumija, Kolha, and the Munda. The tribes in coastal belt are in close contact with their Hindu neighbours and in various stages of accutturation and assimilation.

Among the most numerous tribes, the Khond forms the largest and found in Koraput, and Phulbani. The next are Gond and Santal. Gond is found in Sambalpur and Kalahandi and Santal is found mostly in Mayurbhanj. In Ganjam next highest numbering tribe is Saora. Sundergarh, Koraput and Mayurbhanj are the three districts which occupy the most important positions in the tribal atlas of Orissa.

As per the 1971 census, 11.30 per cent of the total tribal population of India is literate. In terms of literacy among the male and female population separately it is 17.63 per cent in the case of the former and 4.85 per cent in the case of the latter. As against this national picture, 9.5 per cent of the total tribal population of Orissa is literate. The literacy among the tribal male and tribal female population separately is 16.4 per cent and 2.6 per cent respectively; The percentage of tribal literates as a whole and in Orissa and of tribal male and female literates considered separately is below the national average.

Mayurbhanj district has the highest percentage of the scheduled tribe to the total population in comparison to the othr district of Orissa. (Table 10)

In 1981 census all the districts except Sambalpur have recorded a declining growth rate of scheduled tribe population compared to 1971 census. Mayurbhanj has recorded the lowest growth rate i.e. 9.96 per cent only. In 1981 census all the Tehsils of Mayurbhanj districe have recorded the scheduled tribe population in a lower rate than the state average i.e. 19.72 per cent. (Table 11)

Table 11 Tehsils wise scheduled tribe population of Mayurbhanj District according to 1981 census

Name of Tehsil	Total population	Growth rate
Baripada	2,51,410	13.28
Rainangpur	2,26,307	6.13
Karanjia	1,74,769	4.06
Udala	1,57,529	10.12
Betnoti	1,02,305	9.22

Source : Census of India Report, 1981

The tribes of Orissa are at various stages of socio-economic development. At one extreme are the groups which lead relativily a secluded and archaic mode of life while at the other extreme are groups which are indistinguishable from the general agricultural communities. The former group comprises earlier stages of economic evaluation such as hunters, food gathers and shifting cultivators. The latter group comprises backward communities which are economically worse off compared to the general population. Agricultural economy may be taken as the water-shed for distinguishing the communities belonging to the former group from the communities belonging to the latter group. Hunting and food gathering as food seeking activities constitute pre-agricultural economy. Similarly, shifting cultivation has been a way of life for the tribal people and it cannot be done away with overnight, however, hamful ,disadvantageous and unproductive it might be. Instead of thinking in teams of banning the practice it would of great profit to the tribals by bringing about reform in productive organization through scientific shifting cultivation.

The land in the tribal areas is in short supply. On calculation, it was found that there is land ranging from 0.26 to 1.85 hectares per family in the present situation. The tribals have been deprived of all the best land in the

plains by the process of mounting land alienation. One of the conditions which favours land alienation is the lack of land survey and settlement in the tribal areas. The tribals do not have patta rights for the lands they cultivate and land tenure is not under Ryotwari system Most of the lands in the tribal areas are in the terms of land lords or the eastwhile muthadars and in connaivance with them the nontribal plainsmen find it easy to take away the lands from the possession of the tribal tenants. In addition to the lacunae in the law relating to land circumstances have always favoured the cunning non-tribals to circumvent the protective legislation and dispossess the tribals from their lands.

The living style of the tribals in Mayurbhanj is significantly underdeveloped and full of mysery. They live mostly in hay or khapar thatched houses, the walls are built of mud and bamboo. Among the poorers, walls are made of split bamboo and reads plastered with earth. A single room is used both as a living room and kitchen. In some cases live stocks are also housed alongwith human beings. These houses lack ventilation, windows, and opening for smoke clearance are hardly seen.

Tribal economy is beyond description. Both male and female go for hunting, fishing, gathering edible

roots and other products from the forests. Selling of fire woods and wood for house construction is a general feature. Many people are employed as agricultural labourers. Those few who own some agricultural land they work in other's fields to earn some more. Both women and children accompany the male members of the family in construction works, collecting forest products and also in contract works.

Most of the tribals in this districts lack the necessary agricultural input such as plough and bullocks, seeds and fertilizers, etc., to carry on cultivation in the plains. Without the necesaary capital and other infrastructure which are associated with sound agriculture it is not possible for them to undertake cultivation in the plains.

For the tribals money is not as great a factor for the satisfaction of their immediate needs. Even though the produce from shifting cultivation or settled agricultural land is not sufficient to fulfil the minimum food requirements, the tribes do not find any other alternative on which they could embark to improve this deplorable economic condition.

Most of the tribal people are indebted to the non tribal traders, merchants, and money lenders. The important reasons for this indebtedness are:

a) Unproductive agriculture (b)expansive festivals and rituals (c) Lack of proper marketing facilities for the forest products which they collect and (d) Addiction to liquor.

Being exceedingly trustworthy, the tribal people believe it as their sacred obligation to pay back their debts whatever might be the burden. But their creditors never wish repayment in cast but aim at the produce raised by the bribals in settlement of the debts. The rates of interest also is never stipulated in teams of money. For each rupee advanceed, a specific quantity of produce in the form of paddy, cereal, pulse, tamarind is asked towards the interest for the fixed time.

The tribal communities differ very much from one another in racial traits, language, social organization, cultural pattern etc. In Mayurbhanj, Santal tribe is the advanced community than the rest of the other tribal communities. The tribal organization, among the different

scheduled tribes in Mayurbhanj is at present in state of fast transition because of in migration of non tribals to this district. Only those tribals who are forced with the circumstances of isolation by living in hills and forests and those who are completely wedded to the customs and beliefs have been able to retain the shape and strength of their organization, while Santals who are exposed to contacts with nontribal Hindus and have an access to educational institutions have changed considerably. Almost everywhere the political authority of the traditional council and leadership has been covered by outside influences and only religious and social functions remained in their hands. Inspite of indifferent attitude to elective principle their abiding nature and loyalty to elders help in decision making.

In the context of changed circumstances and the transition that is taking place in tribal life, the traditional tribal leadership appears to be diffusing, yet it maintains a good hold in shaping the social structure. The powers and popularity enjoyed by the tribal leaders are not uniform among all tribes and they are not equally popular. The powers of the leaders vary from tribe to tribe and is mostly governed by

the forces of acculturation and the changes that have taken place during the socio-economic development of different tribes.

Another reason for slow pace of development has been the poverty. Economic development is the really sine-quo-non for all social and political movements. Thus economic improvement should precede any seheme of reform education or political representation. However, for the betterment of tribes of Mayurbhanj district scheme of economic and educational development should go hand-in-hand because the execution of these schemes is dependent on each other. The tribals do not send their children to schools because the latter help in their economic activities.

The influence of Christian Mission on tribes has always been a subject of suspicion and doubt but its impact on education, economic advancement, improvement in health and sanitation, adoption of modern methods of sanitation by the tribal christians has been significant and kept them away from the exploitation by money lenders, traders, and other unscrupulous neighbours and officials.

The impact of industrialization in tribal areas has helped in improving their economic conditions on the hand but had for reaching social implications on the other. The story of the tribal dominated village Luhasila presents a vivid picture

A Tribal Village - LUHASILA

The investigator has carried out an extensive study for two months by staying in a village known as Lushsila, which is tribal dominated. Luhasila is an average village of Bijatola Tribal Development Block. It is 15 kilometers away from Block headquarters.

There are 625 households of different tribal as well as non tribal communities. Out of 625 households, 305 Santals, 104 Hoes, 35 Mundas, 31 Bathudies and 150 household comprising non-tribal Hindu communities of different castes, and scheduled castes, such as Baniya, Teli Brahmin, Dhobi and Ghasies. As per the village panchayat record the total population of this village is 3,750, out of which 2,480 is the scheduled tribe population.

This village is a typical village in Rairangpur Tehsil but has been influenced greatly by the iron-ore mines of Gorumahisani and Suleipat at a distance of 15 kilometers and by a chiraclay and a oil seed industry within a distance of 25 kilometers at Rairangpur. Besides these, from this village a large population migrate off and on to Jamsedpur in search of job in the Tata Iron and Steel Company as well as in the industrial township of Jamsedpur; which is at a distance of 65 kilometers.

There is a Gram Panchayat, a middle school, a branch post office, and a weekly market with six permanent shops. This village was selected by the investigator purposively to study the issues relating to low growth rate of tribal population.

The tribals of this village are mostly landless agricultural labourers. Only 75 house holds of tribals are having one to seven acres of land which are mostly nonirrigated unfertile lands. The rest tribal families are landless. They depend 3 to 4 months in a year on daily wage working as landless agricultural labourers in other land owner families with a meagre wage. During rest of the year they used to go in search of jobs to

iron-ore mines at Gorumahisani or Suleipat as temporary migrate labourer here they were getting contract jobs. Now this opportunity has been closed down because of closer of these two mines. Only alternatives open before these poor tribals are china clay oil seed industry and TISCO . The China clay and oil seed industry do not provide much jobs to these tribals because of their small production limit. TISCO is the now main attraction for tribals of this village to get jobs to overcome their misery in the lean period.

These poor tribals they migrate temporarily to these industrial areas and stay in jhugies and undergo a lot of miseries and exploitation. It was reported that many tribal girls were employed at these industrial areas where they came into close contact with men outside their tribe. As many as 50 unmarried girls of this village are staying with non tribals and some even had children. Complaints began pouring in from tribal leaders that the girls had been seduced by non-tribals. They were often engaged as domestic servants after which they developed 'closer' relations with their employers. Lured by the trappings of modern civilization, these tribal girls, it was reported, were

led to abadon their homes and "to live in sin". These had disastrous consequences on tribal life in this village One decidedly unwelcome result was that tribal boys of marriageable age could find no brides and were forced to live as celibrates.

Tribals of this village are in process of transition through various development programmes which have bearing on this socio-economic life. The size of family and growth of population are dependent variables on such factors. The existing poor level of education, very poor medical and health facilities, their traditional trades and occupation and low participation in modern trades are some of the basic reasons which lead towards higher fertility and also high mortality rates. Thus tribal population poses a problem of stagnation or low growth. In such situation with the incentive programme to increase the acceptance of Family Planning programme substantial decline in fertility has been achieved and resulted in low growth rate among the tribals without accelerating the process of accumulation through improved educational, medical and health facilities, better occupation and income opportunities through introduction of new trades and techniques and better family welfare services. In the next chapter the factors affecting growth rate have been examined.

C H A P T E R - IV

F A C T O R S A F F E C T I N G G R O W T H R A T E

TRENDS OF TRIBAL POPULATION

India has second largest tribal population in the world, next only to Africa. According to 1971 census there are 37.97 million tribals in the country which represent 6.94 per cent of it total population. Orissa has also the distinction of having second largest population in the tribal map of the country.

Unlike the general population in the country as well as in the state for which complete data are available since the turns of the current century, data for the tribal population on uniform pattern, care not available. This is a major factor which inhibits vivid presentation of trends in tribal population growth. In spite of enumeration of tribal population data on uniform pattern are not available because of varying definitions and coverages given from census to census.

The analysis of Table 12 shows that from 1901 to 1971 the population of scheduled tribe in Orissa has increased from 42.22 lakhs to 50.71 lakhs and from 1971 to 1981 to 59.15 lakhs. The tables 12 to 23 have provided a detailed trend of growth of population of scheduled tribes in Mayurbhanj district.

GROWTH OF POPULATION IN THE STATE OF ORISSA SINCE 1941

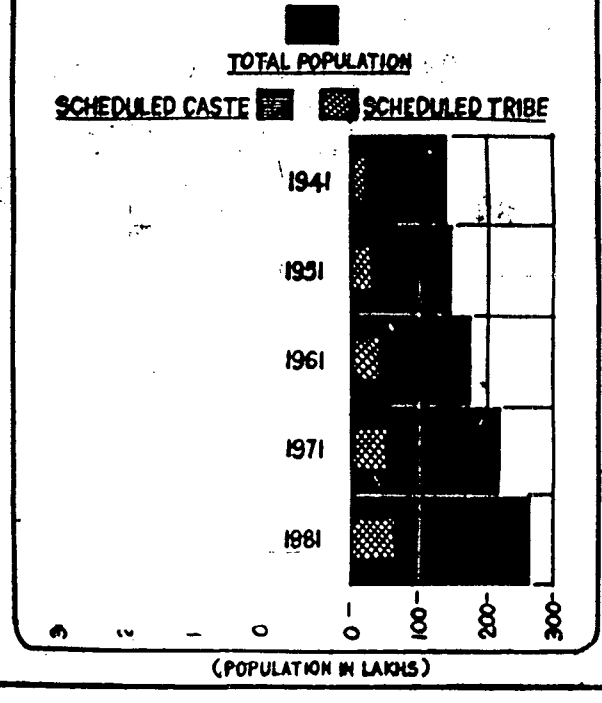


Table 12 Scheduled Tribe Population of Orissa from 1961 to 1981.

Year	Total population	Percentage to total population
1961	42,23,757	24.07
1971	50,71,937	25.20
1981*	59,15,067 ((appx)	22.43

Source: 1981 Census Report.

Table 13 Scheduled Tribe population according to 1971 Census in different Blocks of Mayurbhanj District

Name of thessub-division Blocks	Total population	ST Population	% of ST population to total
Baripada subdivision	5,90,737	3,13,686	53.10
Kuliana Block	54,162	35,303	65.18
Suliapada Block	55,997	21,066	37.62
Rasagovindapur Block	49,227	26,415	53.66
Moruda Block	61,179	26,641	43.55
Baripada Block	39,022	27,281	69.91
Samakhunta Block	45,001	29,942	66.54
Badasahi Block	90,005	43,882	48.76
Betnoti Block	76,371	30,655	40.14
Saraskana Block	59,328	33,041	55.69
Bamanghati subdivision	3,19,947	2,11,536	66.12
Rairangapur Block	41,151	22,546	54.79
Bijatala Block	41,608	31,083	74.70
Bisoi Block	48,238	33,906	70.29
Jamada\Block	40,399	30,093	74.49
Bahalda Block	56,833	31,746	55.86
Bangriposi Block	60,445	39,460	65.28
Tiring Block	31,062	22,928	73.81
Kusumi Block	60,656	39,234	64.68
Panchpir subdivision	2,64,738	1,67,944	63.44
Karanjia Block	68,587	41,883	61.07
Thakurmunda Block	50,578	37,565	74.27
Joshipur Block	62,650	42,092	67.19
Sukruli Block	38,221	23,809	62.29

Name of the sub-division Blocks	Total population	ST population	% of ST population to total
Raruan Block	44,702	22,595	50.55
Kaptipada subdivision	2,18,827	1,43,046	65.37
Udala Block	49,905	34,994	70.12
Kaptipada Block	72,658	43,889	60.40
Khunta-I Block	49,428	39,039	78.98
Khunta-II Block	46,836	25,124	53,64

Source : Census of India, 1971

The population of Mayurbhanj District has increased steadily over the years. However, in 1971-81 the increase percentage is far below that of 1961-71 which is 10.36 per cent.

The ST population of MBJ in 1971 8,39,835 and in 1981 it was 9,12,320. The growth rate has fallen down sharply from 44% in 1951-61 to 15% in 1961-71 and only 9.6% in 1971-81.

The Tehsil wise figures of ST population in 1971 and 1981 are of special interest. The ST population has grown much in urban areas in this decade. For instance in Baripada tensil alone the dacadel rise in rural population is only 10% per cent (approx), where as the urban population has gone significantly, at a rate of 310% It is quite surprising to note, similarly the rural population in Karanjia in 1971 was nil, but in 1981 it was 4,718.

The reasons for this surdain and drastic raise could not be explined in terms of growth of towns in tribal areas. But, one thing could be possible and seems the most probable, that, there is a good rush of tribal towards urban centres. This is because of cutting down of forest

Table 14 Population of Mayurbhanj since 1951 to 1981

Year	Population	Percentage variation
1951	10,28,825	+4.5
1961	12,04,043	+17.0
1971	14,34,200	+19.12
1981	15,81,873	+10.30

Source : Census of India, 1981

Table 15 Decadal variation, sex ratio and urban ratio in population since 1901 to 1981 in the district of Mayurbhanj

Year	Population All Persons		
	Rural	Urban	Total
1	2	3	4
1901	604,770	5,613	610,383
1911	723,250	5,968	729,218
1921	748,125	6,189	754,214
1931	883,410	6,193	889,603
1941	976,460	8,281	984,741
1951	1,019,548	9,277	1,028,825
1961	1,175,623	28,420	1,204,043
1971	1,394,249	39,951	1,434,200
1981	1,491,335	90,538	1,581,873

Table 16 The Scheduled Tribe Population Figures of Mayurbhanj since 1951 to 1981

Year	Total	Rural	Urban	Male	Female	Decadal variation in %
1951	5,04,678	-	-	2,52,362	2,52,317	-
1961	7,29,764	7,27,072	2,690	3,61,924	3,67,840	44
1971	8,39,835	8,36,212	3,623	4,19,118	4,20,717	15
1981	9,12,320	8,95,462	16,858	4,53,897	4,58,423	9.6

Source : Census of India 1981.

Table 17 Area, population and scheduled tribe composition of Integrated Tribal Development Areas of Mayurbhanj District,

I.D.D.A	No. of Blocks	Area in Sq.Kms	Total Population	Total ST population with % to total pa-pulation	Major and primitive tribes
Baripada	10	4119.8	6,19,462	3,13,686 (53.6)	Santal
Rairangpur	7	1908.2	3,31,173	2,11,536 (66.0)	Santal, Ho
Karanjia	5	3077.2	2,64,738	1,67,955 (63.4)	Santal, Ho Bathudi
Kaptipada	4	1239.4	2,18,827	1,43,046 (65.3)	Santal, Munda

Source: District Colletorate, Mayurbhanj.

Table 18 Tehsil wise scheduled Tribe Population of Mayurbhanj according to 1971 Census and 1981 Census.

Name of the Tehsil	Total		G.R.	Rural		G.R.	Urban		G.R.
	1971	1981		1971	1981		1971	1981	
Baripada	2,21,941	2,51,410	13.28	2,20,021	2,43,499	10.67	1,920	7,911	12.03
Rairangapur	2,13,239	2,26,307	6.13	2,11,536	2,23,915	5.85	1,703	2,392	40.46
Karanjia	1,67,944	1,74,769	4.06	1,67,944	1,70,051	1.25	Nil	4,718	-
Udala	1,43,046	1,57,529	10.12	1,43,046	1,55,692	8.84	Nil	1,837	-
Betnoti	93,665	1,02,305	9.22	93,665	1,02,305	9.22	Nil	Nil	-

Source: Census of India, 1981.

Table:19 Distribution of Population of Mayurbhanj District by Age Group in 1971 Census

Age group	Male	Female	Total
All ages	7,21,914	7,12,286	14,34,200
0-14	3,17,779	3,10,901	6,28,680
15-19	60,550	57,559	1,18,109
20-24	49,501	55,252	1,04,753
25-29	54,141	56,525	1,10,666
30-39	98,484	93,295	1,91,779
40-49	69,350	59,034	1,28,384
50-59	41,320	40,378	81,698
60 and above	30,726	30,256	69,982
Age not stated	63	86	149

Source: Census of India, 1971.

Table:20 Distribution of Population of Mayurbhanj District by Age Group in Rural and Urban Areas in 1971 Census

	Rural		Urban	
Age Group	Male	Female	Male	Female
All ages	7,00,198	6,94,051	21,716	18,235
0-14	3,09,449	3,02,791	8,330	8,110
15-29	57,962	55,742	2,588	1,817
20-24	47,429	53,660	2,072	1,592
25-29	52,429	55,107	1,712	1,418
30-39	95,566	90,980	2,918	2,315
40-49	67,313	57,699	2,037	1,335
50-59	40,178	39,547	1,142	831
60 & above	29,813	38,444	913	812
Age not stated	59	81	4	5

Source: Census of India, 1971.

Table:2| Projected Population of Mayurbhanj District by Sex and Age for the year 1971

(Figures in thousands)

Age-group	Total	Male	Female
0-4	2,211	1,098	1,113
5-9	1,828	908	920
10-14	1,700	844	856
15-19	1,488	735	753
20-24	1,277	640	637
25-29	1,074	546	528
30-34	922	471	451
35-39	844	430	414
40-44	774	395	379
45-49	656	336	320
50-54	538	274	264
55-59	437	221	216
60-64	337	168	169
65-69	235	114	121
70 and above	243	105	138
Total	14,564	7,288	7,279

Source: Bureau of Statistics and Economics, Orissa.

Table:22 Projected Population of Mayurbhanj District by Sex and Age for the year 1976

(Figures in thousands)

Age-group	Total	Male	Female
0-4	2,502	1,243	1,259
5-9	2,073	1,029	1,044
10-14	1,794	891	903
15-19	1,666	826	840
20-24	1,444	712	732
25-29	1,230	615	615
30-34	1,032	524	508
35-39	884	450	434
40-44	804	407	397
45-49	730	369	361
50-54	607	308	299
55-59	485	243	242
60-64	379	187	192
65-69	274	133	141
70 above	286	128	158
Total	16,190	8,065	8,125

Source: Bureau of Statistics and Economics, Orissa.

Table:23 Projected Population of Mayurbhanj District by Sex and Age for the year 1981

(Figures in thousands)

Age group	Total	Male	Female
0-4	2,776	1,379	1,397
5-9	2,366	1,174	1,192
10-14	2,038	1,012	1,026
15-19	1,762	875	887
20-24	1,622	804	810
25-29	1,399	689	710
30-34	1,191	595	596
35-39	996	505	491
40-44	849	431	418
45-49	764	385	379
50-54	684	343	341
55-59	555	278	277
60-64	428	211	217
65-69	315	152	163
70 and above	344	157	187
Total	18,089	8,990	9,099

Source: Bureau of Statistics and Economics, Orissa.

and gradual occupation of cultivable lands by unscrupulour non-tribal people. Taking advantage of hopeless condition of the poor tribals, the non-tribals capture lands which the tribal people use commonly as grazing grounds and for some other purposes. Cutting down of of forest render them out of reach from the forest products. Much of their daily requirements like leaves, fruits, tubers, roots, firewood, etc, could not be available according to their needs. Besides this, the hunters and food gatherers could not get their basic needs fullfilled.

The blocks having large concentration of Scheduled Tribe population are Khunta-I (78.98 per cent) Bijatala (74.70 %) Manda (74.49 per cent), Thakurmunda (74.27 per cent), Tiring (73.81 per cent), Bisoi (70.29 per cent) and Udala (70.12 per cent). The blocks having low concentration of scheduled tribe population are Sukapada (37.62 per cent), Betnoti (40.14 per cent) and Morada (43.55 per cent).

BIRTH RATE

The birth rates of Orissa (table-24) continue to be very high. It was 38.00 in 1970, 32.88 in 1978 and 32.65 in 1981. All over the decade rural birth rates were higher than the urban birthrates.

Table 24 Birth Rates of Orissa since 1970 to 1984

Year	Birth Rate		
	Rural	Urban	Combined
1970	39.00	34.13	38.00
1971	34.66	33.09	34.56
1972	35.12	31.19	34.86
1973	35.05	32.53	34.88
1974	33.77	30.62	33.56
1975	33.75	30.68	33.54
1976	33.35	28.97	34.92
1977	30.44	26.33	30.16
1978	33.19	28.71	32.88
1979	32.5	30.60	32.40
1980	31.9	29.00	31.60
1981	32.96	28.67	32.65
1982	34.76	30.30	34.42
1983	34.40	27.46	33.76
1984	32.81	29.83	32.55

Source: Sample Registration Scheme, 1985

Table 25 Number of births registered in the district of Mayurbhanj since 1967 to 1980

Year	Total	Rural	Urban
1967	224	N.A.	224
1968	287	N.A.	287
1969	434	N.A.	434
1970	4,589	3,927	662
1971	15,562	14,492	1,070
1972	16,524	15,340	1,184
1973	13,396	12,131	1,265
1974	16,645	15,538	1,107
1975	17,756	16,646	1,110
1976	19,965	18,645	1,320
1977	17,391	15,745	1,646
1978	18,084	16,178	1,906
1979	20,225	18,125	2,100
1980	19,948	17,686	2,262

Source : C.D.M.O. Mayurbhanj, Baripada.

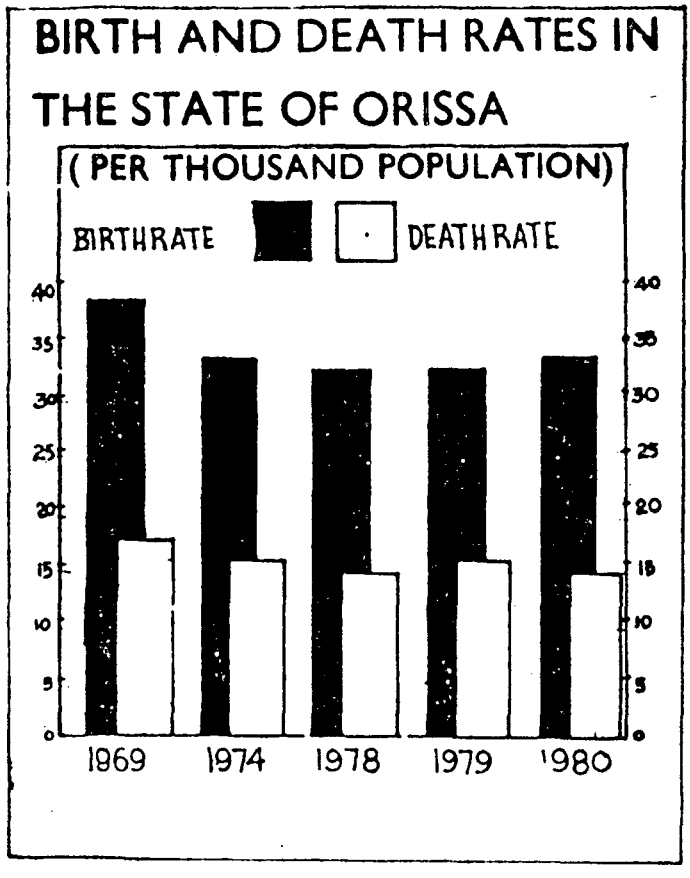
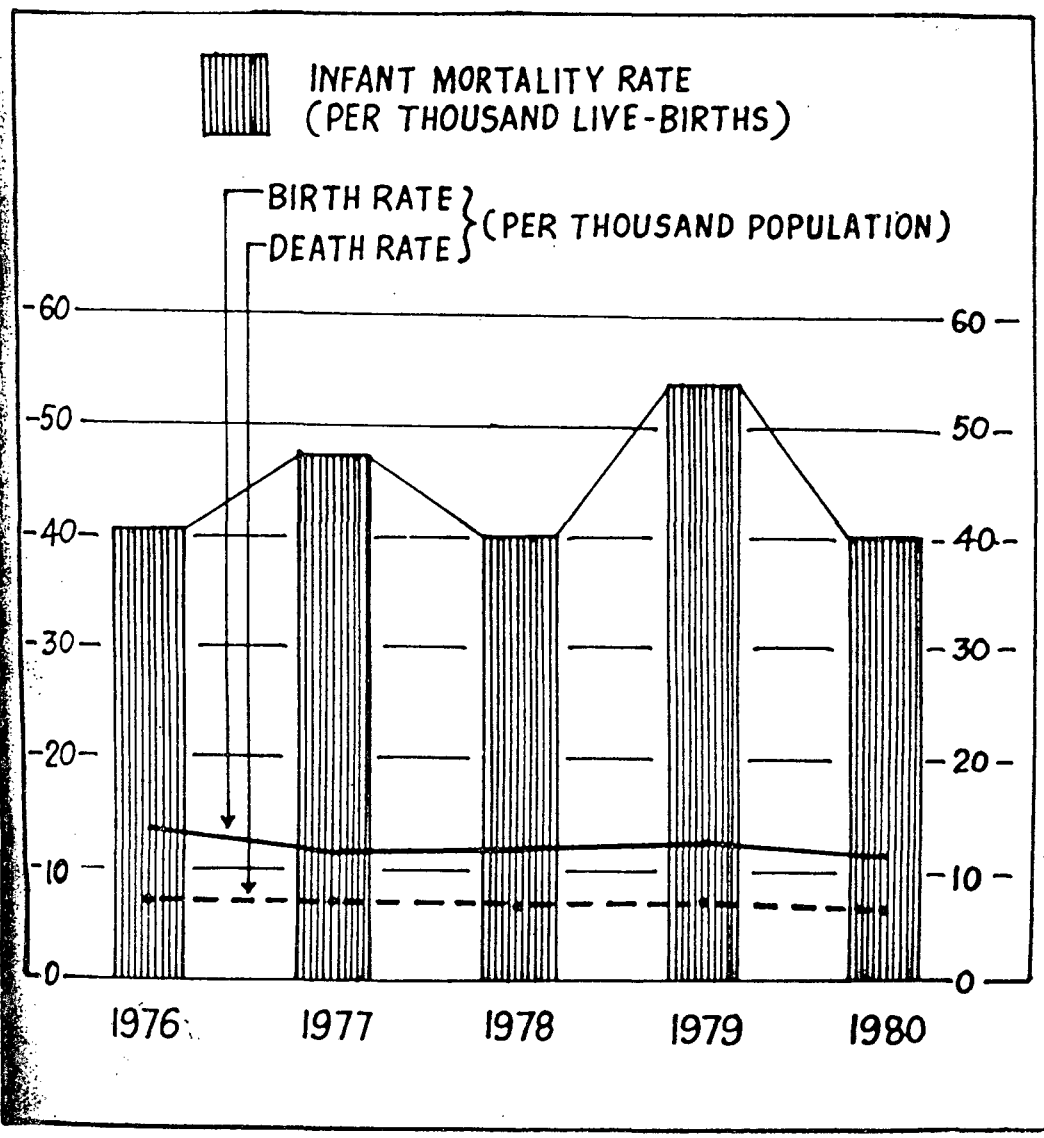

BIRTH AND DEATH RATES IN THE STATE OF ORISSA
(PER THOUSAND POPULATION)
BIRTHRATE
DEATHRATE
40
35
30
25
20
15
10
5
0
1969
1974
1978
1979
1980

Table 26 Death Rate of Orissa since 1970 to 1984

Year	Death Rate		
	Rural	Urban	Combined
1970	16.83	11.30	16.48
1971	15.97	10.00	15.60
1972	20.78	12.30	20.23
1973	18.88	10.80	18.35
1974	16.63	10.00	16.19
1975	18.28	12.74	17.90
1976	16.83	11.30	16.48
1977	17.38	9.66	16.85
1978	14.59	9.83	14.26
1979	15.40	10.10	15.00
1980	14.90	7.80	14.30
1981	13.49	7.87	13.08
1982	13.75	7.98	13.24
1983	12.88	8.96	12.52
1984	14.47	10.14	14.09

Source: Directorate of Health Services, Orissa, Bhubaneswar

BIRTHRATE, DEATH RATE & INFANT MORTALITY RATE IN MAYURBHANJ DISTRICT



The birth rates of Mayurbhanj district (table-25) are quite low. It was 13.26 in 1976, 11.78 in 1978, and 12.11 in 1980. The figures are much below the states level figures. The special reason for this contrast could be the fact that the district figures are calculacted from registered cases of birth only. However, from the figures in table No. it is desired that the birth rates are found to be steady in all through these years. It has not gone down which could have explained much of the question of low growth rate of Mayurbhanj.

DEATH RATE

The mortality situation in the state or in the district has not registered only significant change over the years. The death rates of Orissa (table 26 and 27) were 16.48 in 1970, 17.90 in 1975 and 15.0 in 1979 and the rural areas continue to register more deaths than the urban areas. Similar is the case of Infant Mortality Rates (IMR) of Orissa.(Table 29). They are significantly high 132.38 in 1970, 149.23 in 1975, 132.82 in 1980. The rural areas continue to experience the majority of the toll.

The corresponding figures of Mayurbhanj are very low. One reason could be that these figures are calculated only

Table 27 Number deaths registered in the district of Mayurbhanj since 1967 to 1980

Year	Total	Rural	Urban	Male	Female	Number of males died to every 1,000 females died
1967	106	N.A.	106	69	37	1,860
1968	194	N.A.	194	145	49	2,950
1969	283	N.A.	283	220	63	3,490
1970	2,193	2,012	181	1,179	1,014	1,160
1971	8,598	8,406	192	4,648	3,950	1,150
1972	15,175	14,351	224	8,236	6,939	1,190
1973	13,777	13,272	505	7,402	6,375	1,160
1974	10,550	9,967	583	5,668	4,882	1,161
1975	12,816	12,339	477	6,944	5,872	1,182
1976	11,569	10,983	586	6,270	5,299	1,183
1977	11,376	10,533	843	6,045	5,331	1,134
1978	10,542	9,666	876	5,719	4,823	1,186
1979	11,711	10,610	1,101	6,267	5,444	1,151
1980	11,152	10,072	1,080	6,179	4,923	1,255

Source : Director of Health, Orrissa, Bhubaneswar.

Table:28 Occurance of Deaths due to various diseases in Mayurbhanj District since 1970-1980

Year	Cholera	Small pox	Fever	Dysentry and diarrhoea	Respiratory diseases	Wounds and Accidents	Other cases	Total Deaths
1970	Nil	Nil	1,613	97	51	35	397	2,193
1971	Nil	Nil	6,736	316	103	189	1,254	8,598
1972	Nil	Nil	11,955	860	111	261	1,949	16,114
1973	1	10	11,359	537	165	179	1,556	13,806
1974	Nil	51	8,506	244	25	124	1,600	10,550
1975	Nil	2	11,113	228	34	160	1,279	12,816
1976	3	Nil	9,532	196	150	182	1,506	11,569
1977	Nil	Nil	9,123	213	321	241	1,478	11,376
1978	Nil	Nil	8,316	167	45	174	1,840	10,542
1979	Nil	Nil	8,695	371	369	251	2,025	11,711
1980	Nil	Nil	8,385	275	141	232	2,119	11,152

Source: Directorate of Health Services, Orissa.

from registered cases of deaths. If we take the death rates (20.92 in 1965, 16.61 in 1970, 6.77 in 1980) and IMR (43 in 1971, 47 in 1975 and 40 in 1980) to be true, it will not support the low growth rate in any way, keeping in mind the more or less constant birth rates. Since the figures for Maternal mortality rates are not available, we may have to contend with Birth Rate, Death Rate and Infant Mortality Rate.

The reasons for comparatively higher infant mortality are poor economic conditions, discriminating care to female children, lower number of institutional deliveries, high incidence of improvident maternities etc. It is almost a truism that poor class wives have more children than wives in higher income groups. Mothers with large number of children can provide only rationed care.

The economic condition of tribal people is poor, the method of treatment of diseases is primitive and dogmatic, level of literacy is very poor, larger number of children are considered to be an asset for they become additional hands for earning, and above all modern medical facilities are very scarce. The infant mortality in such situation is bound to be very high. Even on the basis of registered data high rate of infant mortality

Table 29 Infant Mortality Rates of Orissa since 1970 to 1984

Year	Infant Mortality Rate		
	Rural	Urban	Combined
1970	134.29	100.40	132.38
1971	130.68	83.32	127.83
1972	137.11	78.79	133.72
1973	151.50	81.29	147.23
1974	155.28	74.86	150.33
1975	152.54	98.35	149.23
1976	128.95	79.77	126.20
1977	171.23	94.44	166.63
1978	140.10	81.04	136.54
1979	152,94	84.76	148.49
1980	136.86	72.99	132.82
1981	117.96	70.47	114.92
1982	137.82	75.12	132.84
1983	135.84	99.47	133.11
1984	136.85	83.62	132.56

Source: Sample Registration Scheme, 1985

Table 30 Number of Infant deaths in Mayurbhani since 1965 to 1980

Year	Total	Rural	Urban	Deaths/1,000 Population
1965	76	N.A.	76	335
1966	1	---	1	4
1967	4	---	4	18
1968	1	---	1	3
1869	3	---	3	7
1970	191	184	7	14
1971	687	672	15	43
1972	877	842	35	61
1973	644	610	34	45
1974	684	614	70	41
1975	834	823	11	47
1976	816	77	739	41
1977	812	670	142	47
1978	692	568	124	39
1979	1,079	899	180	54
1980	795	633	162	40

Source: C.D.M.O Mayurbhanj, Baripada.

in tribal areas may be taken for granted. The rural urban break up of infant mortality rates given in Table No. 29 exhibit a marked a variation in infant mortality rates between rural and urban areas. Since the abode of tribals in mainly rural the rates recorded for rural areas are quite applicable to them.

AGE AT MARRIAGE AND FERTILITY

The duration of marriage is dependent on age at marriage. However, distinction lies between age at commencement of sexual intercourse. The age at marriage in India, mostly due to child marriages, has been very low. According to 1961 census, the mean age at marriage for females in India was 15.83.

The average age at marriage could also explain much about birth rates. It is because of human reproduction in India starts after marriage (baring a few cases) and early marriage gives a longer span of time for reproduction.

Table - 31 show that the average age at marriage of Mayurbhanj is not high enough reproduction period, among couples. In 1961 and 1971 the figures were 22.1

Table 31 Average age at Marriage of Orissa in its different districts

District	1961 Male	1961 Female	1971 Male	1971 Female
Sambalpur	21.0	16.3	21.8	17.5
Sundergrah	22.0	18.0	22.7	18.3
Keonjhar	22.5	17.7	23.0	18.4
Mayurbhanj	22.1	16.5	23.3	18.0
Balasore	22.4	15.4	22.7	16.4
Cuttack	23.5	16.7	23.7	17.4
Dhenkanal	21.7	16.3	20.8	17.4
Baudh Khondamal	21.7	17.2	22.8	17.6
Bolangir	20.3	16.2	21.4	17.3
Kalahandi	20.2	16.1	22.0	17.3
Koraput	22.1	17.1	22.0	17.3
Ganjam	20.1	15.3	22.7	17.0
Puri	22.0	17.0	23.6	17.2
Orissa	21.7	16.5	22.6	17.2

Source: Directorate of Health Services, Orissa, Bhubaneshwar.

years for male and 16.5 years for females and 23.3 years for males and 18.0 for females in 1971. There is no much difference in these two figures. Moreover, these figures are more or less equal to the figures of other districts and the state. Hence, it can not satisfy explaining the growth rate as low as 10.30% where the state has a growth.

BIRTH CONTROL PROGRAMME

The family welfare programme aims at providing services for maternal and child health, treatment for sterility, marriage counselling and guidance and for contraception which includes sterilisation oprations, intra-uterine device insertions and supply of conventional contraceptives.

Table 32, 33, 34, 35 and 39 show the acceptance of family planning by the tribals in Mayurbhanj district in a high rate, because the monetary and other incentives played a greater role in this which was evident from the village study. Besides this the tribals also practise indegenous methods for the birth control.

RURAL-URBAN DIFFERENTIALS IN FERTILITY

Fertility denotes the actual power of bearing children by a woman while fecundity stands for the

Table 32 Total Achievements in Family Planning of Orissa 1970-71 to 1985-86

Year	Seterilization	I.U.D
1970-71	97,267	58,675
1971-72	86,714	52,615
1972-73	91,879	40,964
1973-74	55,252	28,341
1974-75	68,971	20,176
1975-76	1,25,040	23,976
1976-77	3,22,984	19,066
1977-78	81,928	10,385
1978-79	1,05,058	13,945
1979-80	90,676	17,450
1980-81	92,989	17,268
1981-82	1,10,130	21,089
1982-83	1,46,693	30,595
1983-84	1,78,293	43,876
1984-85	1,36,376	69,742
1985-86	1,66,481	85,702

Source: Directorate of Health Services, Orissa, Bhubaneshwar.

Table 33 Total Achievements in Family Planning of Mayurbhanj District 1970-71 to 1985-86

Year	Total Sterilisation	Total I.U.D.!
1970-71	12,510	13,034
1971-72	10,101	5,492
1972-73	10,837	3,246
1973-74	1,966	1,033
1974-75	6,334	939
1975-76	9,216	2,186
1976-77	33,843	3,192
1977-78	3,218	2,586
1978-79	7,039	2,141
1979-80	6,488	1,943
1980-81	8,004	2,264
1981-82	8,237	2,132
1982-83	11,060	2,882
1983-84	13,135	4,076
1984-85	9,842	4,668
1985-86	10,160	5,086

Source: C.D.M.O. Mayurbhanj, Baripada.

Table 34 Achievements in Family Planning of Mayurbhanj District 1970-71 to 1985-86

SCHEDULE TRIBE

Year	V	T	L	C
1970-71	4,184	16	3,672	-
1971-72	2,870	38	1,420	-
1972-73	6,224	61	1,527	-
1973-74	905	115	549	-
1974-75	708	1,610	292	-
1975-76	468	3,276	834	-
1976-77	2,561	15,104	1,063	-
1977-78	162	1,592	1,399	-60
1978-79	352	2,346	519	83
1979-80	189	1,526	265	14
1980-81	185	1,796	247	132
1981-82	251	3,668	337	575
1982-83	294	4,687	196	878
1983-84	398	4,859	61	1,416
1984-85	280	4,171	-	2,101
1985-86	121	3,902	8	1,475

Source: C.D.M.O. Mayurbhanj, Baripada.

Note : V = Vascetomy

T = Tubectomy

L = Loop

C = Cut

Table 35 Family Planning Performance in Ofissa in some tribal districts and non-tribal districts

District	Effectively protected couples(%)			Couples protected through sterilisation(%)		
	1972	1976	1980	1972	1978	1980
Mayurbhanj	33.8	31.0	38.0	25.5	28.0	35.5
Keonjhar	24.0	20.1	21.8	15.6	17.6	19.8
Koraput	21.9	23.2	31.3	19.4	21.8	29.9
Cuttack	20.4	20.7	22.9	16.5	18.2	21.8
Puri	17.1	16.0	20.4	14.0	14.0	19.1
Balasore	18.5	18.9	24.2	12.0	16.0	22.4
Orissa	14.7	18.2	24.8	13.0	16.4	23.4

Source: Directorate of Health Service, Orissa, Bhubaneshwar.

absolute power of bearing children during the entire span of reproduction. The determinants of human reproduction are numerous biological and social factors. The reproduction from fertilisation to successful termination of preganancy involves biological sequences which take place against the background of well defined institutions and customs. Sexual intercourse itself is controlled by marriage and other customs and regulations.

The duration of marriage is dependent on age at marriage. However, distinction lies between age at marriage and age at commencement of sexual intercourse. The age at marriage in India, mostly due to child marriages, has been very low. According to 1961 census, the mean age at marriage for females in India was 15.83 while it was only 18.0 in Mayurbhanj.

FERTILITY BY EDUCATION

Fertility differentials have also been found with the level of education. A high level of formal education is ordinarily associated with low fertility

Table 36 and 37 show that the literacy rate of tribal women in Mayurbhanj significantly low, as a result of which the fertility trend is quite high.

TABOOS ON SEX RELATIONSHIP

The taboos on sexual intercourse are associated with religious festivals, fast days, phases of the moon, economic and social life of the communities, beliefs and customs prevalent in the society when coitus has to be avoided. In general abstinence or taboo are insisted on under broad sets of circumstances, during post partum period, and on certain ceremonial and religious occasions. The main reasons for observance of restrainto are uncleanliness of the women, lack of desire for sexual intercourse on the part of female during this period.

ABORTIONS

Abortions have been taking place, both spontaneous and induced throughout the world. In India till recently, abortions wer performed under stringent laws. But with the adoption of Medical Termination of Pregnancy Act 1971 since April 1972 the terms have been liberalised The rate of abortion in rural areas is lower than the urban. The impact of new enactment will be perceptible after a few years when the service facilities will be extended to provide larger coverage. However, the abortions will not have much impact in tribal areas because of two main limitations viz. want of facility and propensity to abortion.

STATUS OF WOMEN

The status of women among tribals is significantly low because the tribal women in Mayurbhanj do not inherit the property in the households and they also do not take part in the decision making process in the family. The data regarding the status of women among the tribals were not available but village study gave opportunity in arriving at the above ideas.

HEALTH FACILITIES

The table 28 shows that the diseases like dysentery, avitaminosis and deficiency status, and acute infections plague the district in a big way. It is interesting to note that almost all diseases are on the rise.

The health problems in the district are acute. The table 28 make it clear enough. The people are attacked by many diseases and other health problems. Among them, dysentery avitaminosis and deficiency status, upper respiratory infection, scabies are more prevalent. Another point is that the number of people attacked over the years are more or less constant. Fever

continues to take the largest toll - 11074 in 1959, 11391 in 1963 and 11113 in 1975. Dysentry and Respiratory diseases come next.

MIGRATION

Migration as such does not play very significant role in shaping the total size of tribal population . However, its influence has not been insignificant in creating regional and district-wise disparities. It has been found out that from Lohasila village nearly 3,00 families from various tribal group have migrated to Jamsedpur since 1970 to 1980 in search of various job at the different industrial units.

UNDERENUMERATION

According to district census officials it was found out that there were possibility of underenumeration among the tribals of Mayurbhanj district because of their wide dispersion of population in inaccessible areas particularly in the hill belt of the district. The state officials also confirmed this and stated further that the enumeration among the tribes is very difficult because they migrate very frequently from one place to other in search of their livelyhood.

As regards the position among the tribals the trends prevailing in the rural areas of the state are applicable to them in toto. Both birth and death rates are higher in tribal areas. The low level of literacy, built in faith in traditions and customs, poor urbanisation and the poor economic conditions of the tribal tend to keep the level of fertility on higher side. But the the higher age at marriage, taboos on sex relations on certain occasions, better position of women in the society, prevalence of polygynous families and acceptance of methods of contraception are some of the factors which contribute towards lower fertility among the tribals, yet the level of fertility continues to be on higher side.

C H A P T E R - V

L O W - G R O W T H R A T E - A N A N A L Y S I S

LOW GROWTH RATE- AN ANALYSIS

The various aspects of demographic changes have been engaging the special attention of demographers, social scientists and Research scholars. The government of India got interested in these after 1951 when the census commissioner forcasted rapid population growth. There has since been considerable development in the field of demographic research and studies during the past two decades.

The provisional population totals of the 1981 census of India evoked shock and surprise among population experts, planners policy makers and social scientists. The statusquo in the population growth rate (24.8 per cent during both decades, 1961-71 and 1971-81), in spite of a decade of intensive Fmaily Planning Work was certainly unexpected. In fact, careful analysis of the data shows an acceleration in the growth rate of the data shows an acceleration in the growth rate of population during 1971-81.

At the state level, there were several surprises. One of the surprises was caused by the growth rate of Orissa which was only 19.7 per cent next only to

TABLE 36 LITERACY RATES IN ORISSA, 1981 (PER CENT)

District	*Males*	*Females*	*Persons*
A. *Tribal districts*			
Mayurbhanj	37.0	13.8	25.5
Koraput	23.2	8.4	15.8
Sundergarh	47.3	24.2	36.2
Keonjhar	42.6	16.9	29.9
Baudh Khondmals	42.0	11.3	26.6
Kalahandi	31.2	7.7	19.4
Sambalpur	48.0	19.7	34.0
B. *Non-tribal districts*			
Bolangir	39.9	11.5	25.8
Dhenkanal	51.4	21.4	36.7
Ganjam	45.2	16.9	30.8
Balasore	55.1	28.3	41.8
Puri	59.5	31.4	45.7
Cuttack	58.0	32.3	45.3
ORISSA	46.9	21.1	34.1

Source: Census Paper No. 1 of 1931, Series 16: *Orissa*

Tamilnadu and Kerala. Various explainations have been offered about the slow growth rate of population in Tamilnadu such as the comparatively high mortality rate, the good implementation of the family planning programme, the overall efficiency in administration Kerala has long been recognised, in national and international circles, as a model of declining birth rate brought about by solid progress in the field of health and education the crucial variables which affect the age at marriage, fertility behaviour, and mortality pattern. Further, the sizable migration from Kerala to the Gulf countries, especially after 1973, must have had its impact on the growth rate.

Orissa has the high concentration of tribals in the country. According to 1971 census, 50,71,937 scheduled tribes resides in Orissa, which constitute 23.13 per cent of tribal population in India and 25.20 per cent of the total population of the state, There are four major tribes in the districtof Mayurbhanj viz. Santal, HO, Bathudi, and Munda. The scheduled tribe population in Mayurbhanj in 1971 and 1981 census in 8,39,835 and 9,12,320 respectively and this has recorded a very significant low growth rate of 9.6 per cent only.

Because of the varing definitions adopted at different censuses for the scheduled tribes, data on tribal population on uniform, basis are not available. In the absence of proper data trend in the growth of tribal population prior to 1951, cannot be established. However, an analysis of the population data for the decade 1951-61 and 1961-71 shows that the growth rate of tribal population in this district has shown deceleration during 1961-71 as compared to the decade 1951-61. from 44 per cent to 14 per cent, an still further in 1971-81 to 9.6 per cent.

This decline in the growth rate among the tribal population is contrary to the trend available for the entire population in India as well as Orissa. In the absence of comparable figures for the extent of underenumeration revealed in the Post Enumeration Check (PEC) of 1981 census, it is not possible to say for certain if the underenumeration ration was higher in 1981 compared to 1971. But in view of the vastly increased difficulties of census-taking in 1981, it is possible that the extent of underenumeration was higher in 1981. We find that it is only marginally higher and is unlikely to have made a significant impact on the growth rate.

HIGH MORTALITY

The SRS data released by the Registrar General suffer from a number of limitations and tend to be underestimates. The official reports on SRS caution again the use of yearly data and recommend three year moving average. The Orissa figures are given in Table 26.

The SRS data do not show a marked fall in mortality. The deaths registered in Mayurbhanj district since 1967 to 1980 showing less in Table 27, because of under registration of all deaths in the district.

It may be noted that in Table 38 the 1978 figures are from a special survey of Infant and Child mortality conducted by the Registrar General. The figures may not be strictly comparable but there is no evidence to suggest that there has been a fall in infant mortality in Orissa during 1970-84 in Table 29. The SRS data are not uniformly good for the whole decade and one can not lake a definite position by the figures. We are, however, more interested in the trend and not in the magnitude as such for Mayurbhanj district in Table 30. There is no evidence of a decline in the rural infant mortality rate.

Table showing CBR, CDR, Net migration Rate, Percentage of Female Literacy and Percentage of Urban Population

Table 37

	CBR		CDR		Net Migration rate		% Increase in female literacy between 1971-81	% Urban Population in 1981
	1961-71	1971-81	1961-71	1971-81	1961-71	1971-81		
ORISSA	42.61	34.99	20.92	17.37	1.31	0.53	51.65	11.82
Kalahandi	47.80	29.64	24.75	14.36	-8.73	-1.86	65.94	6.05
Koraput	42.72	27.11	18.15	12.93	14.02	48.6	70.51	11.35
Sambalpur	43.25	35.67	22.67	16.24	-0.26	1.71	46.79	15.53
Bolangir	45.96	32.05	23.01	13.98	-6.06	-4.03	54.43	9.15
Boudh-Khondmals	46.21	28.87	21.83	16.59	-5.26	14.9	68.06	5.21
Ganjam	45.55	31.82	20.61	16.14	-1.31	-1.04	45.18	14.32
Sundargarh	37.83	39.87	17.73	15.50	11.03	1.97	54.77	30.52
Dhenkanal	37.49	37.78	24.07	19.46	9.76	1.63	62.54	7.85
Puri	42.80	39.72	23.18	18.05	3.34	0.39	52.78	14.84
Keonjhar	41.27	28.81	19.10	16.63	3.26	2.90	71.56	11.38
Cuttack	40.67	39.31	19.69	20.43	1.65	0.06	41.23	10.29
Mayurbhanj	45.65	25.84	20.72	16.70	-7.27	0.40	72.75	5.74
Balasore	39.46	44.19	18.53	22.59	5.08	-0.61	45.08	8.25

The most striking thing about family planning figures is that sterilisation and family planning are almost synonymous, such is the lion's share of sterilisation in the family planning programme. Mayurbhanj, the most tribal district, has the highest percentage of couples protected (of course, through sterilisation) and the lowest growth rate of population. Curiously enough, family planning performance in the most urban district of Sundergarh is far from impressive. Unfortunately, we do not have districtwise data on net migration to isolate the effect of migration. Table 37 The figures show that even when family planning performance is not so good, the growth rate is very low, as in Koraput, Keonjhar, Baudh-Khondmals and Kalahandi. The implication is that mortality must have been high in these tribal districts and/or there might have been considerable out-migration from these districts One must look for intensive surveys on nutrition, morbidity and mortality to substantiate the high mortality thesis. One must also study the nature of migration in detail to determine the quantum of migration. There is evidence to indicate that much of this migration is distress migration. The distress is at both ends-in the rural areas from where the migrants originate and in the places (rural or urban) where they get work.

TABLE 38 INFANT MORTALITY, INDIA, (1970-78)

	Rural	*Urban*	*Total*
1970	136	90	129
1971	138	82	129
1972	150	85	139
1973	143	89	134
1974	136	74	126
1975	151	84	140
1976	139	80	129
1977	142	67	129
1978	136	70	125

Source: Registrar General, *Survey on Infant and Child Mortality, 1979: A Preliminary Report*, 1980, p.33.

Our inference from the data we have presented is that the picture on the mortality front is depressing and this must be true both in the tribal and non-tribal districts but the impact of family planning, rather of sterilisation, must have been more in the tribal districts. One can legitimately ask: Has the lure of incentives in cash or kind attracted the tribals must have been high in these tribal districts more than the non-tribals? Have the officials taken advantage of the helplessness of the tribals? Are there any other factors responsible for this "enlightened reproductive behaviour" of the tribals? A look at Table 7 giving the literacy levels in 1981 do not speak well of the state of affairs in Orissa as a whole and the tribal districts in particular, in spite of the increase in literacy levels during 1971-81.

Except in the urban district of Sundergarh, in Table 36 the female literacy rate is shockingly low in all the tribal districts (though there may be individual tribes with comparatively high literacy rates). It is also low in the non-tribal districts of Bolangir and Ganjam.

A rise in the average age at marriage does influence fertility. In Table 31, we give the estimates of average

age at marriage worked out by R.P. Goyal [51], on the basis of 1961 and 1971 Census data. There is no evidence of any significant change in the average age at marriage of men and women in the different districts of Orissa. It is well known that the age at marriage is generally higher among the tribal population compared to the non-tribal.

MIGRATION

As already noted, in the absence of data on district level migration, we cannot comment on the impact of migration on the growth rate. In the 1971 Census, on the basis of the question on last residence, it was found that the in-migrants in Orissa numbered 5,76,940 while the out-migrants numbered 4,84,102.[44]

FALL-IN FECUNDITY?

Some observers of tribal development believe that many tribes are not able to cope with the new pattern of life inherent in modern industrialisation. The cutting down of forests and the distortions in the ecological balance brought about by deforestation, commercial agriculture and industrialisation are factors which are believed to have led to fall in fecundity (the power to reproduce)

TABLE 39 PERFORMANCE OF FAMILY PLANNING AND STERILISATION IN DIFFERENT DISTRICTS OF ORISSA

	Per cent of tribal population, 1971	*Per cent of urban population 1971*	*Per cent increase in population 1971-81*	*Per cent of couples protected 1980*	*Per cent of couples protected by sterilisation 1980*
	(1)	(2)	(3)	(4)	(5)
A. *Districts with high proportion of tribal population*					
1. Mayurbhanj	58.6	2.8	10.0	38.0	35.5
2. Koraput	56.3	8.2	20.8	31.3	29.7
3. Sundergarh	53.4	23.3	29.7	25.3	24.2
4. Keonjhar	47.0	7.1	16.1	21.8	19.8
5. Baudh Khondmals	40.3	3.2	14.7	21.6	19.7
6. Kalahandi	29.3	4.9	14.3	32.1	31.1
7. Sambalpur	28.1	12.0	23.3	24.6	23.4
B. *Districts with low proportion of tribal population*					
8. Bolangir	19.7	6.9	15.0	22.3	21.3
9. Dhenkanal	12.9	4.0	21.8	22.8	21.4
10. Ganjam	10.0	11.3	15.7	23.2	21.7
11. Balasore	7.1	5.5	23.1	24.2	22.4
12. Puri	3.7	9.8	24.4	20.4	19.1
13. Cuttack	2.9	8.0	20.6	22.9	21.8

Source: Cols. (1) & (2). *Census of India, 1971*, Series 16 Part I-A, p. 130 and p. 62; Col. (3). *Census of India, 1981*, Series, 16, Paper No. 1 of 1981, Cols. (4) & (5). See Appendix Table 1.

and the inevitable decline in the birth rate, without the help of family planning. Detalied anthropological investigations are necessary to test this hypothesis.

Sinha in his paper on "Growth and Distribution of Tribal Population", on the other hand, estimates that the birth rate of the tribal population for the 1961-71 decade was 47 per thousand compared to the estimated 41 per thousand for India as a whole. What is true of India as a whole may not be true of Orissa. The Registrar General's Survey of Infant and Child mortality in 1978 collected data on fertility also. The Orissa data show that the fertility level of the tribal population is lower than that of the total population of Orissa.

In Table 20 we give the comparative figures for different communities in rural areas only.

But even these figures do not prove anything convincingly. One must look into the picture, tribe by tribe, distridt by district. If one were to investigate the causes of the low growth rate (and obviously of the low birth rate and the high death rate) in Mayurbhanj district, for example, one is confronted with the fact that this district claims 79.4 per cent of the Santal population

TABLE 40 INDICATORS OF FERTILITY IN RURAL ORISSA, 1978

	GFR	*TFR*	*GRR*	*GMFR*	*TMFR*
Orissa	127	4.7	2.24	174	5.6
Sheduled Tribe	106	3.6	1.81	156	5.2
Sheduled Caste	114	3.9	1.96	152	4.9
Non-SC/ST	139	4.8	2.37	187	6 0

Source : Registrar General's *News Letter*, April 1981, p. 21.

of Orissa, 65.8 per cent of the Bhumij population, 55.3 per cent of the Bathudi population, 44.5 per cent of the Kolha population, and so on.

Changes in administrative boundaries and faulty classification also account for differential growth rates of tribes. The 1971 General Report on Orissa points out that the population of Kolha tribe in Mayurbhanj increased by 15.7 per cent during 1961-71 while in Keonjhar district the population of this tribe increased to 264.7 per cent! The report admits that this may be attributed to "erroneous classification of the tribes bearing almost similar names.

IMPACT OF UNDERNUTRITION

The low growth rate of Orissa's population may also be explained in terms of growing undernutrition and malnutrition and a high and even increasing incidence of foetal mortality through miscarriage and abortion which will not be reflected in the usual set of statistics on births and deaths. The birth rate refers to live births only. It is possible to argue that given the high infant mortality rate in rural and tribal areas, the possibility of a high foetal mortality rate cannot be ruled out. This

will result in a lowering of the birth rate without the practice of family planning.

The mystery behind Orissa's low growth rate of population during 1971-81 deserves a dispassionate study. But what is it that one should look for in Orissa? It is a state known for its economic backwardness. The tribal content of the population is high. Illiteracy is widespread. Poverty and undernutrition, hunger and famine are common phenomena. Distress migration in times of famine has persisted all through the ages. The Green Revolution has eluded Orissa and there is very little industrialisation. The level of administration is far from satisfactory.

We have no intention of denigrating Orissa. But we have failed to explain the spectacular decline in the population growth rate of Orissa, especially in the tribal districts. There is a lurking suspicion that the innocence, poverty and credulity of the tribals has been exploited by the family planning dalals (brokers) who must have excelled in the game of fulfilling 'targets'. There is no evidence to show that Orissa's success in the population control programme has been due to economic and

social development. The argument that the adoption of the small family norm is a part of development and without population control, no tribal development is possible, cannot stand scrutiny. It betrays a colossal ignorance of social reality. It cannot be argued that the tribal population is suffering mainly because of their excessive fertility. The central issue of tribal development is not family planning but the speedy end of the ruthless exploitation of the human and natural resources in the tribal areas

The factors which we have listed, namely, impact of malnutrition and undernutrition on mortality and fertility, the consequences of distress migration, and the ethical aspects of the "good" performance of family planning, should cause concern to planners and policy makers, some of whom seem to rejoice at the low growth rate of Orissa's population.

Interestingly enough, Mukerji's[53] conclusions support our analysis presented in this dissertation Mukerji observes that "It may sound harsh, but perhaps the weaker section of Oriss's population is accepting sterilisation in a big way and the reason is not development but the monetary incentive offered for accepting sterilisation."

Here again the figures are somewhat erratic but the trend towards decline in fertility can be observed both in urban and rural areas. Ideally, we require comparable data for the 1961-71 and 1971-81 decades but SRS data are not available for the earlier decade. (Table 24, 25 and 37)

In Table 39, we give data on the prevalence of family planning based on official statistics for all the districts of Orissa. The estimates of "couples effectively protected" have been made by our colleague,
In table 40 we have try to match family planning performance data with the proporation of tribal population, the proportion of urban population and the growth rate of population during 1971-81.

The picture revealed by Table 39 is very mixed. But one fact stands out: expept in Sundergarh District the growth rates are very low in all the 'tribal districts' In this connection, one mustnote that Sundergarh is the most highly urban district in Orissa- the urban proportion was 23.3 per cent in 1971 and 30.5 percent in 1981. The implied acceleration in in-migration, therefore, is an important factor influencing the growth rate of this district.

Mukerji also notes that "the declining trend in net in-migration to Orissa along with relatively low level of net migration between the districts of the state may indicate a stagnant economy".

What is of particular concern here is the rapid decline in the birth rate of predominantly tribal areas and the slow decline in the death rate. For example, in Mayurbhanj district, the birth fell from 46 per 1000 to 26 per 1000, i.e. by 20 points while the death rate declined from 21 per 1000 to 17 per 1000, i.e. by only 4 points.

In view of the controversy about the methodology, one should look at the trend rather than the figures as such. There is clear evidence that the slow growth rate of population is primarily because of the slow reduction in the death rate and a spectacular reduction in the birth rate in the tribal districts.

The contraception without development is a disaster. Prof. Mukerji has cautioned against condemning the

the Family Planning Programme in Orissa's tribal areas on the following grounds:

1. Health inputs, particularly in terms of number of health centres and sub-centres, in the tribal areas is more per 1000 persons compared to the general population.

2. The tribal population of Orissa compares favourably with the general population in terms of the proporation of children surviving the first 10, first 20, first 30 years of life.

3. The average number of children surviving per woman of completed fertility is not very low compared with the corresponding number for the general population in the more progressive areas. For example, the average number of surviving children to women of completed fertility as on 1981 are: 3.16 in Mayurbhanj, 3.36 in Phulbani, 3.55 in Kalahandi compared with 4.36 in Cuttack, 3.71 in Puri and 2.29 in Sundargarh. So if a tribal woman has 34 surviving children in 1981, the likelihood of decay is remote.

As we have already pointed out, in the absence of detailed data from the 1981 Census and in-depth anthropological studies on different tribes, one cannot arrive at any firm conslusion. In response to Prof. Mukerji's points, the analysis is as follows:

1. The number of health centres does not necessarily reflect the state of health. Mukerji himself has noted the slow decline in the death rate all over Orissa. We do not consider a decline of 3.5 points per 1000 in ten years as good progress on the health front, especially when the death rate was 20 to 25 per 1000. There is a lot of international interest in Orissa and foreign agencies have funded several programmes but their impact is too recent to be evaluated.

2. In the absence of separate Life Tables for tribes it is not possible to say anything conclusively about the proportion of survivors at different ages among tribals.

3. The fact that in Mayurbhanj district, 3.16 children survive per mother of completed fertility, compared with 4.36 in Cuttack (Mukerji's calculations) does cause concern to us.

Our central point is not about the eventual decay of certain tribes but about the exploitation of the poverty, illiteracy and credulity of the tribal population growth rate is reduced to zero, there is no guarantee that there would be development. Contraception is a means to development and not an end in itself.

In a recent paper on Orissa, Ziauddin Khairoowala[54] says that "during the last ten years, the percentage of people living below the poverty line in the state has increased to 85 from 50."

C H A P T E R - VI

S U M M A R Y

SUMMARY

In spite of a sizable population covered under the group tribes, particularly in Orissa, the problems specially pertaining to demographic aspect of this group of population has received little attention so far. The research scholars and administrator were content with socio-economic and anthropological studies. The present study is a basic departure from the tradtional studies and is mainly confined to demographic aspect of the problem.

The Orissa case is very complex. Particularly, Mayurbhanj district with high percentage of tribal population has recorded a significant lowest growth rate (9.6%) in Orissa.

The ethical question we raised is : Is increasing sterilization of tribal population development? The economic question we posed is : Has the adoption of the small family norm among the tribal population accelerate the pace of tribal development, given the illiteracy, undernutrition,, malnutrition and low income levels of the tribal population?

With the above questions an attempt has been made to carry out a study to establish the causal relationship between the low growth rate and the factors affecting the low growing rate.

Mostly the data for this analysis were pulled from various government records maintained at state headquarters, district headquaters and Block offices. Besides these the various statistical data were also analysed along with 1971 census data. Unanalysed 1981 census data of Mayurbhanj district were collected from the census office and were complied to arrive at some definate solution for this phenomenon.

But when the above data could not provide sufficient clues to this complex problems a field level study was undertaken in a village to substantiate the following analysis.

From the various data it does seem likely that an explanation for the low growth rate of population in Mayurbhanj can not be sought in terms of the impact of health and education on fertility. Nor is the age at marriage high in this district. The analysis has shown that the low growth rate of this district is attributed

primarily to the success of the family planning programme because of monetary incentive along with other incentives allowed the hungry tribal couples as well as unmarried young persons. Above all there is nothing in Mayurbhanj situation which can explain a sudden transition to a low level of birth rate in the face of a high death rate. Mayurbhanj is economically backward, with a small content of industrialization and urbanization; also there is no evidence of agricultural prosperity, the levels of health and education are shockingly low and one does not find any other spectacular development. In the absence of detailed data of the 1981 census, especially age tables, it will be hazardous to arrive to any firm conclusions about the factors behind the low growth of Mayurbhanj district. The blockwise analysis of the provisional results of 1981 census and other relevant demographic data support us to conclude that the story of family planning success is centred around the tribal population who are in majority.

The impact of out migration of tribals from this district on the low growth rate of this district is another feature of this analysis. Due to closure of the two large iron-ore mines in this district has caused

a large number of outmigration of tribals to the neighbouring states. The village data has established this very significantly.

The low growth rate could be explained also in teams of the impact of one or more of the following factors;

1. The extent of underenumeration in the 1981 Census was of a higher order than in 1971, thereby deflating the population growth rate during 1971-81.

2. The actual count revealed a lower population of Mayurbhanj in 1981 compared to the projected figure. The projections were based on the assumption regarding decline in fertility and mortality. It is likely, therefore, that the anticipated decline in mortality did not occur. In short, mortality remained high. Theoretically, it is possible to argue that mortality might have been increased.

3. Likewise, the expectations regarding fertility decline might have been more than fulfilled and there might have been a steep fall in fertility.

4. There might have been considerable net out-migration from Mayurbhanj as a result of distress, growing poverty and allied factors (the so-called push factors) and also migration on account of better opportunities in other states and abroad (the so-called pull factors).

5. Influence of biological reasons like genetical factor (out of perview of this study) could not be ruled out, because some surveys have already established the relationship between low fertility rate and genetical disorders among certain tribal communities in Mayurbhanj.

In the present state of data, wecould not arive at at a particular causal relationship between any factor

influencing the low growth rate. For this, detailed indepth study is neeessary on each tribal community to identify the real issue.

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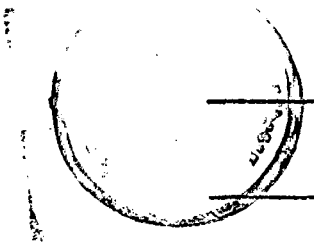

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