MINOR RESEARCH PROJECT REPORT

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HUMAN DEVELOPMENT AND SUBSTANTIVE EMPLOYMENT: PERCEPTION AND REALITY – A Study of Raigad District of Maharashtra

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SECTION I

INTRODUCTION

❖ Origin of the Research Problem

The present project has its genesis in this researcher's doctoral thesis (Paranjape, 2005) where the focus was on the employability of graduates. The Ph.D. dissertation was in the spatial frame of the Konkan coast (Mumbai Division) encompassing five districts, viz. Mumbai, Thane, Raigad, Ratnagiri and Sindhudurg. These districts also come under the jurisdiction of University of Mumbai. The study highlighted many disparities among variables which were used to determine developmental status of the districts in general. The situation is characterized by a depression in substantive employment in the Mumbai division during 1991-2001, when the proportion of main-workers, an indicator of substantive employment, declined in all districts except Mumbai. Further, it is coupled with most uneven educational attainment in both rural and urban areas. The average schooling is least among the SC/ST categories, particularly the females. The inequality is highest where high levels of illiteracy are coupled with low levels of attainment of secondary and tertiary education.

Raigad district was most affected in terms fall in the proportion of main workers, both in the rural areas as well as among females. The findings from the primary data on graduates too, confirmed the high incidence of unemployment, lower income levels and absence of regular employment in semi-urban and rural areas particularly in Raigad district. Region as the most significant determinant of employability was a key finding of the thesis. The study shows it is the regional unevenness, more than disparities in gender and social background that has major impact on employability.

Another significant result was linkages of substantive employment with education. Although the unemployment rates were found to be higher among those with secondary education and above, lack of substantive employment characterized by casual labour, underemployment and lower levels of MPCE (Monthly Per Capita Expenditure), was more frequent among the less educated.

Maharashtra's Human Development Report (Government of Maharashtra, 2002) has ranked Raigad district at fourth position by virtue of a high HDI (Human Development Index) in the 34 districts of the State. The paradox is that though Raigad scores very high in terms of per capita district income, has impressive literacy rate and coverage of elementary education; the dropout rate after the middle school level is as high as some of the poorest districts like the Yavatmal and Latur. **This illustrates the incongruence between the high HDI and lower levels of substantive employment.**

The present research project originates from the need to address issues arising out of the given situation and to examine some related questions posed by the economic conflict as seen at a micro level in Raigad district.

Study Area

The study has concentrated on Raigad district, geographically part of North Konkan, and located close to Mumbai metropolitan region at a distance of about 50 kms. Though Raigad has 24 percent urban population as per 2001 population census, it has consistently maintained a high rank (fourth in the State after Mumbai, Thane and Pune) in terms of per capita district income due to dominance of secondary sector. These features give it a unique position in Konkan.

Interdisciplinary Relevance

The present study is interdisciplinary in nature. Employment and HDI are intricately interrelated attributes explaining economic situation of a region. An intensive economic analysis of this nature encompasses historical context and socio-political issues along with Government policy and thus brings an interdisciplinary flavor.

❖ Review of Research and Development in the Subject

Substantive Employment and Employability: It is imperative to look at the concept of 'employability' in literature. In a detailed article Jos Sanders has traced the evolution of this concept since it first appeared at the beginning of the twentieth century (*Sanders, 2004*). The early definition of 'employability' was in terms of availability of able-bodied workers. This was the post-war period characterized by shortage of skilled workers. During the 1960s this concept signified the individual potential to become employed which, later crystallized into an individual's labour market value signaled by knowledge and occupational skills. By the 1980s the concept of employability broadened to include an individual's labour market performance in terms of wages, marketability of skills and ability to cope with rapid changes in products, processes and services. This has also been a period when, the world over, it is harder to find and then to retain a job. Presently, there are widening differences on the definition of 'employability' and its measurement.

A more context-neutral concept is that of "work potential" which signifies the physical and intellectual abilities of a person which make him/her fit for work (*Morio and Zoctizoum, 1980*). A productive work potential becomes more employable. The changing labour market modifies the 'value' of the work potential. For instance, decrease in the number of available low-skilled jobs 'devalues' the work potential of those who are less educated or untrained and makes them unemployable.

In the Indian context, the successive rounds of National Sample Survey Organisation (NSSO) from 1983 to 1999 showed structural shift in employment, indicated by steady rise in the proportion of casual labour in both rural and urban

areas, as the cost of proportionate fall of self-employment in rural areas and regular employment in urban areas, respectively (NSSO, 2001). The employability of the labour-force is affected by the changes taking place in the distribution of enterprises, by the nature of economic activities as well as by the employment size. Specifically, in case of Maharashtra, the trends of shift of employment generation towards informal sector, decline in share of organized sector and increase in underemployment were set in motion since the late 1980's. These trends strengthened at the turn of this century and have accelerated thereafter (Paranjape, 2005). This is further confirmed by the Economic Census in 2005 related to Maharashtra (Government of Maharashtra, 2006).

However, the results of the 61st round of the NSSO survey in 2004—05 (NSSO, 2006) while showing a substantial all-India rise in the proportion of workers, reveal a contrast with trends in the earlier NSSO rounds, as well as those established by the latest Economic census. There is a substantial rise in the proportion of self-employed in both, rural and urban Maharashtra with a corresponding reduction in the proportion of casual labour in rural areas and a corresponding fall in the proportion of regular employees in urban areas. Some of the recent studies by economists have expressed concern that the rise in employment indicated by the 61st NSS round is due to proliferation of low productivity, subsidiary status employment in the informal sector, much of which is in the rural areas (Bhalla, 2007). It is maintained that the quality of employment and structure of employment growth count in reducing poverty. Although the share of agriculture in state incomes has been falling, the decline in the share of employment has been slow (Dev, 2007).

The distribution of education is extremely skewed, particularly in the rural regions and especially, among the backward sections. The educational attainment is lower in rural areas, more so among females and lowest among SC/ST categories. A close correspondence is observed between levels of educational attainment, signaling stock of human capital, and some broad parameters of substantive employment viz., the usual status, nature of economic activity and levels of per capita expenditure. Further, even among graduates, the unemployment period, nature of employment, and income levels have strong association with region. The non-metro regions exhibit longer unemployment periods, greater incidence of lack of regular employment and lower income levels (Paranjape, 2005). At the same time, there is concern at the mismatch between job opportunities available in a competitive globalized environment and the employability of those with basic skills (Datta 2006).

Human Capital versus Human Development – Two Parallel paradigms: The Human Capital theory, pioneered by several economists since the sixties (*Schultz, 1962*) regards expenses in education, training, medical care etc. as investments in human capital. At the same time important work was done on economic returns to various occupations and educated classes (*Becker, 1975*) to explain differences in earnings. It is in this context that, rate of return and discounted lifetime earnings as two approaches of cost-benefit analysis have attracted maximum attention.

During 1960 to 1980, the world's total enrolments doubled and two-thirds of the world share was in developing countries (*Coombs, 1984*). The expanded educational system created new opportunities for upward mobility. But following the economic slowdown, early 1970s also saw growing disparities in educational attainments, increasing poverty and growing unemployment, particularly among graduates, in the developing world. Investments in human capital began to be questioned in the face of underutilized human capital. The expenditures on education as percentage of GNP, which had earlier risen, declined after 1975. The articulation of need for reduced government interventions (*Youngman*, *2000*) came to dominate the aid policies of the World Bank and the International Monetary Fund (IMF).

A parallel paradigm of human development evolved, manifested in UNDP's use of a composite Human Development Index (HDI) from 1990, for ranking countries and the human capability approach popularised by Amartya Sen (*Mehrotra, 2005*). The focus is sought to be turned mainly on expansion of human capabilities and social opportunities rather than on GDP centered economic growth. The protagonists of human development / capabilities approach caution against the use of cost-benefit analysis to investments in education and health, which are intrinsically valuable for the externalities they generate. They emphasize on policy steps leading to greater social opportunities for the underprivileged instead of curtailment of budgetary allocations to the social sector. However, in India this approach too, supported the perception that there is an over emphasis on higher education. The demand is to reallocate the resources from the higher to the primary education.

The formula of the HDI adopted by UNESCO is a weighted average of indices of attainment of education, health and income. Unlike the universal HDI, the state governments in India have adopted a modified version. Attainment in education is a composite index of literacy and mean years of schooling in elementary education. Of the 34 districts in Maharashtra, Mumbai district has the highest HDI (*Government of Maharashtra, 2002*) owing to highest per capita district income and higher attainments in education and low infant mortality rate.

The World Declaration for higher education (UNESCO, 1998) expresses concern at the widening gaps between the developed and developing countries with regard to access to higher learning. Carrying this argument further is the "Human rights" approach to education (Tomasevski, 2003). Concern is expressed at the exclusive global focus on basic education; especially when available evidence indicates that the key to reducing poverty lies in the expansion secondary education and that higher education is the necessary foundation for individuals to "build up their human capital."

Several studies have been conducted in the Indian context on the uneven human capital formation in the country and relationship between education and unemployment as well as between education and poverty. (Tilak, 1987). It has been shown that the problem of educational development is linked to problem of social stratification, employment, health and family welfare (Aggarwal and Murlidhar, 1986)

on the one hand, and public policy on the other. There is emphasis on public policy to cater for a more egalitarian distribution of education (Prabhu and Kamdar, 2001). Expenditures on education are found to be a key determinant in the uniform distribution of education (Tilak, 1999).

The overall literature survey carried out by the researcher shows a gap in the micro level studies in regional development. This project was undertaken as a step towards filling this gap.

❖ Significance of the Study

This micro level study has helped our understanding about the economic processes, in a situation where the parameters of development in a region register a negative growth even though the district incomes are relatively high.

Secondly, the region under study, where the paradox, viz. incongruence between HDI and substantive employment exists, is very close to a large metropolitan area – Mumbai. Hence, the contrasting situation within a distance of 50 kms, is significant and should be taken as an input for regional planning.

Finally, if such micro-level studies are conducted in select sample areas, some generalisations may evolve giving common patterns. This may then help the Government to take policy decisions.

❖ OBJECTIVES

1. To examine patterns and trends of economic activities of households (HHs) in Raigad along with patterns of educational attainment.
2. To examine changes in occupational structures and their association with the post 1990 Government policy.
3. Selecting a small administrative subdivision of Raigad district, create a micro level database on employment and educational status of the resident population.
4. Based on the detailed results of the Survey, an in depth analysis be carried out to examine the relationship between the two variables viz., HDI and substantive employment in Raigad district.

❖ Research Questions

Based on the above objectives, the project has focused on the following Research question with special reference to an administrative subdivision in Raigad district:

In an ideal situation, higher economic growth would lead to higher levels of employment and subsequently result in higher level of human development. Hence it is expected that a high HDI would be positively associated with parameters of substantive employment. In a hierarchical development canvas, does an ideal situation exist or does an inter- or intra-regional paradoxical situation emerge?

Secondly, what are the socio-economic conditions under which such contrasting situation develops, especially in the periphery of a Metro region?

❖ RESEARCH METHODOLOGY

Survey Design and Sampling Frame

Raigad district has four administrative divisions: Alibag, Panvel, Mangaon and Mahad. The sample survey of households was restricted to the Alibag subdivision which consists of three talukas: Alibag, Murud, and Pen. A stratified two-stage sample design was adopted wherein:

(a) The first stage units (FSUs) included the village panchayats in rural areas and towns

(b) The second stage units (SSUs) included households from the villages in the Panchayats and from the towns.

The Sampling Frame consisted of 153 FSUs, i.e., the three towns and 150 village panchayats. The total number of SSUs was 104,745 as per 2001 Census. A stratified random sample of 7 Panchayats (Pen – 2, Murud – 2 and Alibag – 3) was drawn by proportional allocation method. Further, a stratified random sample of 361 households which is about 0.35 percent of the HH population was selected from the villages under the panchayats and the three towns.

Data Collection

(a) Most of the relevant secondary data was resourced from the publications of the NSSO, Census tables, District Collector's Office, Taluka offices and the Directorate of Economic s and Statistics, Government of Maharashtra.

(b) The primary data was collected by administering a structured Questionnaire, which was pre-tested in a pilot study, to the SSUs (households) in the sample.

Data Analysis

The data generated from the questionnaires was statistically analysed using techniques of Categorical data analysis. The entire data analysis was carried out with SPSS package.

SECTION II

SOCIO-ECONOMIC BACKGROUND AND HUMAN DEVELOPMENT

Maharashtra is widely acclaimed as the most progressive state with the *Net Per Capita State Domestic Product (PCNSDP)* at current prices estimated at Rs. 95,339 (provisional estimate) in 2011–12, as against Rs. 83,395 during the previous year and four-fold increase since 2001. The State maintained fourth rank after Goa, Delhi and Haryana (*Government of Maharashtra, 2013*). At the same time there is an unevenness in this growth as can be seen from wide variations in the per capita incomes of the districts reflected by the Net Per Capita District Domestic Products (PCNDDP) and regional averages of PCNDDPs. The lowest is Rs. 46,156 in Nandurbar which is less than one third of the highest Rs.1,51,608 in Mumbai. Among the regions, the lowest at Rs.57,280 in Amravati division is less than half of the highest average Rs.1,38,606 in Konkan division (Mumbai, Thane, Raigad, Ratnagiri, and Sindhudurg). There are intra-regional disparities too. Within Konkan, the per capita income of Ratnagiri is Rs. 77,521 , almost half of Mumbai.

On the education front, the movements led by thinkers and social reformers like Mahatma Jyotiba Phule, Shahu Maharaj, Gopal Ganesh Agarkar, Maharishi Karve in the 19th century and Babasaheb Ambedkar in the 20th century influenced the post-independence status of education as well as its spread in Maharashtra especially among Girls in general and children from lower castes in particular. As per 2011 Census, Maharashtra stands sixth with literacy rate at 82.9 percent. But this is a slip from its fourth rank in 2001. There are enormous intra-state disparities, gender and rural and urban and social group differentials, which reflect adversely on many developmental achievements. Paranjape (2007) concludes that the distribution of education is extremely skewed, particularly in the rural regions and specially, among the socially backward sections.

The present chapter attempts to examine some of the parameters of economic growth and development of education with special focus on human development indicators in the Konkan region of Maharashtra; also known as Mumbai division concentrating on Raigad district.

Work Participation Rates

Work Participation Rate (WPR) is defined as percentage of workers in the total population. The WPR for Maharashtra was 43.5% as per the 2001 census and has remained almost unchanged as 44% in 2011. The striking regional variations evident in the WPRs given in Table 1. They are further characterised by sharp gender disparities. The key characteristics of these figures are:

a) The overall urban WPRs are uniformly lower than those in the rural areas because of very low WPR among urban females.

b) The gap between urban and rural WPRs declined sharply during 2001-11, with the exception of Ratnagiri where both rural and urban WPRs have declined by 1.3 percent.

c) In Thane and Raigad, the gap has shrunk due to 2 to 4 percent rise in urban ratios and almost a similar decline in rural ratios.

d) At the same time, the rural-urban gap in Sindhudurg has reduced due to marginal rise in urban WPR and a steep fall of 7.6 percent in rural WPR.

e) Female WPRs have risen by 4 to 6 percent in urban areas (except Ratnagiri and Sindhudurg).

f) In a striking contrast, the rural WPRs for females have suffered a fall ranging from 5 percent (Ratnagiri) to 15 percent (Sindhudurg)

g) While the rural WPRs remained stagnant during 1991-2001, they have shown a marked decline during 2001-2011. The above observations highlight that this has mainly been due to worsening of female WPRs during last decade.

TABLE 1 - WORK PARTICIPATION RATES

(In Percent)

District	Region	2011			2001			1991
		Male	Female	All	Male	Female	All	All
Mumbai		59.0	18.4	40.3	57.5	14	38.0	35
Thane	R	56.1	35.4	46	57.2	43.9	50.8	50
	U	57.7	17.5	39	55.6	11.2	35.5	34
Raigad	R	56.2	29.5	42.9	52.5	37.6	45.0	46
	U	55.8	16.2	36.9	53.6	12.1	34.1	33
Ratnagiri	R	54.0	39.9	46.5	51.1	44.9	47.8	47
	U	50.9	14.5	32.6	52.3	14.3	33.9	30
Sindhudurg	R	55.2	28.6	41.6	54.9	44	49.2	49
	U	54.3	16.8	35.7	53.7	16.4	35.3	32

Source: (i) Census tables, 2001; 2011 (ii) Socio- economic review of districts, 2000-2001, Government of Maharashtra

Distribution of Main-Workers

As per Census definition, a main-worker is one who has work for at least 183 days in a year and a marginal worker is one who works for less than 183 days a year. Ratios of main-workers and marginal workers together constitute the WPR. Thus ratio of main-workers can be considered as an indicator of substantial employment. It is important to look in Table 2, at the distribution of main-workers, separately by region and gender, as well as at the changes that may have taken place between two censuses. It is revealed that:

i) Ratios of main-workers in urban areas have risen except in Ratnagiri where there is a one percent decline. In contrast, during 1991-2001, ratios in urban areas had remained stagnant *(Paranjape, 2006*).

ii) While the ratio of main-workers in rural areas has risen by nearly 3 percent in the State as a whole, the Konkan division is a picture of contrasts. The ratios in the rural areas, had suffered a severe decline of up to 10 % during 1991-2001. However, during 2001-11, there is a marginal recovery of substantive employment in Ratnagiri and Raigad, but Thane and Sindhudurg have faced further decline.

iii) WPRs and Proportion of main-workers when examined together in Tables 1 and 2 reveal that the proportion of marginal workers in the rural areas ranges from 10 percent to 15 percent.

iv) Most disturbing fact is the persistent marginalization of female workers in all districts revealed by the worsening of their ratios of main-workers

TABLE 2 - Proportions of Main Workers - By Gender and Region (2001 - 11)

(In Percent)

	Year	Mumbai	Thane	Raigad	R'giri	S'durg	Maha-rashtra
Males	2011	56.4	52.2	47.7	45.2	39.5	51.5
	2001	54.8	51.7	43.4	42.6	38.6	48.6
	1991	54.3	41.3	49.1	44.3	47.8	51.2
Females	2011	16.4	16.8	16.8	24.7	14.3	25.4
	2001	12.5	15.0	19.2	26.5	23.6	24.1
	1991	10.5	32.9	29.4	31.2	29.8	26.5
Rural	2011	-	34.8	32.4	35.3	26.2	43.1
	2001	-	38.5	31.8	34.5	31.1	40.8
	1991	-	43.9	41.6	38.1	39.0	
Urban	2011	38	35.8	32.9	29.5	29.9	34
	2001	35.9	33.4	30.4	30.6	28.3	31.5
	1991	34.6	33.8	30.3	29.0	28.6	

Source: (i) Census tables, 2001; 2011 (ii) Results calculated by the Author from Census tables.

Distribution of District Incomes

Since our study concentrates on Raigad, while analysing the trends in substantive employment it is essential to examine the changes in sectoral distribution of main-workers as well as relative shares of sectors to district income in Raigad. As per 2001 Census, Raigad had 24% urban population which has increased to 37% as per Census 2011. Thus Raigad district is still a predominantly rural region. Table 3 reveals that the Primary sector in district income has declined to 7.1 percent in 2010-11. This includes the share on which cultivators and agricultural labourers depend for their livelihoods. It is seen from Table 4 that in 2010-

11, those dependent on agriculture formed one- third of the main-workers. It has to be noted that the proportion of main-workers dependent on Primary sector also includes those engaged in fishing and mining and which are classified among others. Thus the proportion of main-workers dependent on Primary sector is much more than one-third and this creates an imbalance in distribution of district incomes. In case of the State as a whole, more than half the population depends on Primary sector whose income share is 12 percent *(Sen et al, 2010)*

TABLE 3 – Sectoral Shares of District Incomes (Raigad)

				Percent of PCNDDP
SECTOR	2004-05	2006-07	2008-09	2010-11
Primary	9.2	9.4	8.5	**7.1** (12.0)
Secondary	42.0	43.7	44.0	**43.4** (26.4)
Tertiary	48.8	46.9	47.5	**49.5** (61.6)
Per Capita **NDDP** (Rs)	42,900	57,700	72,000	96,500
State Avg **PCNDDP** (Rs)	36,100	49,900	62,200	87,700
Total **NDDP** (Rs)	9,92,542	13,67,221	17,47,827	23,96,116
District proportion of NSDP	2.7	2.6	2.6	2.4

Source: (i) Socio-Economic Review of Raigad (2012), (ii) Census Tables (2011) (iii) Economic Survey of Maharashtra (2013). NSDP – Net State Domestic Product. Figures in parenthesis are for the State

TABLE 4 - Proportions of Main Workers - By Sector

Raigad

Category	**Percentage of Main Workers**	
	2001	**2011**
Cultivators	29.1	19.3
Agricultural Labourers	11.4	13.5
Household Industry	2.3	2.8
Others	57.2	64.4

Source: Same as Table 3

Table 3 further shows that share of Raigad in the State income has declined from 2.7 percent to 2.4 percent. While in 2001, Raigad ranked 2 in terms of NDDP, it has slipped to rank 4 in 2011(*Government of Maharashtra, 2013*). Another striking feature is that in terms of economic growth, Raigad has emerged as the most sluggish district (*Government of Maharashtra, 2014*), during 1999-2000 to 2008-09. During this period, Raigad's rate of growth of Net district incomes (NDDP) at 1.6 percent was the lowest in the State, even

when lowest quartile of districts was 5.5 percent growth rate. In fact other districts had growth rates of above 6.2 percent. It has been established in various studies *(Sen et al, 2010)* that the pattern of growth as seen in Maharashtra in general and Raigad in particular leads to persistence of poverty and has an adverse impact on human development.

Human Development

The per capita income of a region is one of the parameters of Human Development Index (HDI). The other two parameters are attainments in education and health. From Table 5, it is evident, with the exception of Sindhudurg, that high literacy rates and higher NER do not necessarily lead to higher average years of schooling in Elementary education (classes I to VII) and/ or do not necessarily lead to lower drop-out rates at subsequent levels of education. In fact the staggering drop-out rate of 26.9 percent in Raigad at Primary level is the highest in the State (*Sen et al, 2010*). This despite the fact that, Raigad has high literacy rate and impressive average schooling. Since 1999, Raigad has slipped below Yavatmal and Latur in terms of dropout rate (*Government of Maharashtra, 2002*).

Table 5 - Educational Development in Konkan

District	2011 Literacy Rates	2001 Literacy Rates	1999–2000 Mean Years (Std. 1 - 7)	2006–07$ Primary NER[1]	2006–07$ Primary Cohort Drop-out	2006–07$ Upper Primary NER	2006–07$ Upper Primary Cohort Drop-out
Mumbai	90.3	87.1	5.85	86.3	4.6	95.5	15.7
Thane	86.2	81.0	5.46	99.8	9.3	98.3	16.2
Raigad	83.9	77.3	5.31	99.8	26.9	99.9	2.9
Ratnagiri	82.4	75.3	4.92	92.9	0.1	90.6	10.4
Sindhudurg	86.5	80.5	6.36	99.7	5.7	99.0	8.8
Maharashtra	82.9	**77.3**	4.97*	98.0	9.7	97.5	10.1

Source: Human Development Reports Maharashtra 2002; 2012 *- In 2011, this figure is 5.12 years
$- Sen et al (2010).

The HDIs in 2012 are calculated as per revised methodology of UNDP (*Government of Maharashtra, 2014*). Now educational attainment is taken as a composite index of literacy and Gross Enrolment ratio (GER) in Primary and Secondary. In 2001, the HDI for the state was 0.667 and highest was 0.756 for Mumbai. Raigad ranked 4 among the 34 districts. There has been an overall improvement in the HDI during 2001-2011. At the same time the HDI rank of Raigad has slipped to 6 falling below Kolhapur and Nagpur. The Human Development report shows that the ranks of education and health indices for Raigad below 10.

[1] NER (Net enrolment ratio) is defined as number of persons of specified age group attending corresponding level of classes to the estimated population in that age group.

Table 6 – Human Development Indices and Ranks of Select Districts

Sr. No.	Districts above State level	HDI		HDI RANK		PCDDP RANK	
		2001	2011	2001	2011	2001	2011
1	Mumbai	0.756	0.841	1	1	1	1
2	Pune	0.722	0.814	2	2	3	3
3	Thane	0.721	0.800	3	3	4	2
4	Raigad	0.717	0.759	4	6	2	4
5	Nagpur	0.691	0.786	5	4	5	5
6	Kolhapur	0.678	0.770	6	5	6	7
7	Sangli	0.670	0.742	7	9	8	9
8	Sindhudurg	0.667	0.753	8	7	9	10
	STATE	0.667	0.752				

This section has highlighted the disparities at the inter-district and inter-region levels. However, the official surveys do not capture the **intra-district** and **intra-region** unevenness. We have sought to address this issue through our micro level study. The observations from the survey of households (HHs) in Alibag division of Raigad district form the content of our next section.

SECTION III

HIGHLIGHTS OF MICRO-LEVEL STUDY

Socio-Economic Profile of the Sample Units (Households)

All data analysis is carried out using SPSS program. Since all the variables in the data are categorical, with some measured at the most at ordinal level, the most appropriate techniques would be Chi-square based measure of association Cramer's V for nominal variables and PRE (proportion of reduction in error) measure Gamma(G) for ordinal variables. Both these coefficients give a measure of the association, besides G also gives the direction of the association. All measures are tested at 1% level of significance (i.e. 99% confidence). The relevant cross tables are given in the Annexure tables A1 to A.17. We give here the highlights of the preliminary analysis of households (HHs):

1) 10.2% of HHs. belong to the SC/ST category, 73.1% are OBC, 8% are DT/NT and 8.6% are "others".

2) (**a**) The main source of income of 31.3% of the HHS is drawn from Primary Sector (Farming, Fishing, and Forestry), 7.2% from Secondary Sector (Industry and Household Industry which includes Artisans) and 52.4% from Tertiary. There were 9% of HHS which reported multiple main sources of income; such as farming/fishing and Service/Trade/Industry, etc. **Thus, 40.3% HHs depend on the Primary-Sector.**

(**b**) Source of Income has a low but highly significant association with Talukas. Predominance of Tertiary Sector is seen in Pen taluka.

(**c**) A more disaggregate distribution of HHs by main source of income reveals that in Primary Sector 16% are in farming, and 15% in fishing. Further, in Secondary Sector, 2.5% are in Industry and 4.7% in Household Industry (mainly artisans). HHs in Tertiary Sector were split into Trade/Business – 16.6%, Service – 28.7% and Casual Labour – 6.6%.

3) (a) 56% HHs do not possess land. However, possession of land is independent of Talukas. Among those who possess land, 10% own more than 5 acres and 75% own less than 2 acres – a highly skewed distribution.

(b) Land-holding size has low but highly significant association with Taluka.
Pen had 18% HHs with land holding above 5 acres.

4) (**a**) Period of Primary Sector activity has a highly significant and very high association (Phi = 0.896) with source of income of HHs. 65.6% of HHs depending on Primary Sector have activity for at least 6 months. 45.5% of

HHs with another source of income in addition to fishing/farming have activity for at least 6 months. Together, these HHs form 61% of HHs in the sample engaged in farming / fishing.

(**b**) Months of activity in Primary Sector is 4-5 months for 15.8% of HHs, 6-8 months for 23.5% HHs and above 8 months for only 2.2% HHs. (**c**) There is a moderate and highly significant association of months of activity with Taluka. Almost 38% of HHs in Alibag carry out farming / fishing for 6-8 months as compared to 11-12% in Pen and Murud talukas.

5) A change in the pattern of Primary Sector activity is experienced in last two decades by 17% HHs (this is 42% of those engaged in Primary sector). 10.3% now use modern technology and 2 % have added another activity like plantations. In the case of 2% HHs, the activity has become unviable due to increased production costs with modern technology. For another 2.5% HHs, their land has become unproductive due to flooding of their fields by salty tidal water.

6) 11% of HHs are affected by SEZ/CRZ mostly (20%) in Alibag taluka. Most are affected due to loss of occupation (dispossession of land) and others have experienced reduced wage work / agricultural production for locals. Almost 90% of these HHs have received compensation in cash. Less than 01% have improved their living standards.

The data on households (HHs) has also yielded information on the socio-economic variables of **INDIVIDUALS** aged 6 years and above in each of the sample HHs. Following are the observations made from their preliminary analysis:

1) The total number of members of the 361 HHs was 1471, of which 55.5% were males and 44.5 were females.

2) 19% of the persons were of age 15 years or below. 78% were in the age group 15-60, and 3% were above 60 years.

3) Overall 44% individuals were economically active, of which the economically active males formed 61%.

4) It is observed that occupation has a moderate but highly significant association with gender. While most males were active in the Tertiary Sector, females were almost uniformly divided between Primary and Tertiary sectors.

5) The earnings distribution of individuals is highly skewed, with 30% reporting earnings less than ` 10,000/- per month.

6) (**a**) Among the economically active individuals, 54% were self-employed, 27% salaried employees, 18% were on daily wages/contract and the rest were unpaid helpers in respective family enterprises.

(**b**) A moderately high association which is highly significant, is observed between occupation and wage-type. 79% of those in the Primary Sector were self-employed and 19% worked on daily wages. At the same time, in the Tertiary sector, 34% were self-employed and 47% salaried employees.

7) (**a**) 25.4% persons were either illiterate or had not completed elementary education (below Std.7); 11.4% had completed Elementary education; 21.6% were attending educational institutions; 30% had completed their SSC/HSC/Diploma afterschool; and 11.4% were graduates or above.

(b) Income distribution has a significantly high association (Gamma = 0.585) with education. While, two-thirds of persons below graduation were earning below ` 10,000/- per month, two-thirds of graduates were earning above ` 10,000/- per month and more than 50% of those below elementary education were earning below ` 5,000/- per month.

8) Only 12.6% of the persons have changed their occupation in the last two decades for which some of the reasons are:

i) Shifted to plantation due to decline in income from cultivation.
ii) Sold land and shifted to Tertiary sector.
iii) Shifted to a more profitable occupation.

Broad Findings from Secondary Data

a) The gap between the rural and urban WPRs has reduced during 2001-2011 period due to decline in rural WPRs, which had remained stagnant during 1991-2001.
b) After stagnation during 1991-2001, the ratios of the main workers have further declined in Thane and Sindhudurg while recovering marginally in Raigad and Ratnagiri.
c) There has been a worsening of WPR as well as of substantive employment in case of rural females.
d) More than a third of the main workers in Raigad depend on Primary sector which generates only 7.1% of the Net District Domestic Product (NDDP).
e) The growth rate of per capita income of Raigad has been the lowest in the State during 1999-2009 and there has been a decline in its share in the state domestic product during 2004-2011.

f) There has been a simultaneous decline in the educational attainment in Raigad and consequently in its Human Development Index (HDI).
g) The HDI rank of Raigad district has declined **from 4 to 6** during the period 2001-2011.

Significant Findings from Primary Data

h) 40 percent of households (HHs) depend on Primary sector for their livelihoods. The occupational distribution shows significant taluka level variations
i) Majority of HHs do not possess land and 75% of those who possess land, own less than two acres. Distribution of land by size of landholdings also shows significant taluka level variations
j) For majority of HHs in Primary sector, the farming/fishing activity is carried on for at least six months. In this case also we observe significant taluka level unevenness
k) About 17% of HHs in Primary sector have experienced an adverse change in the pattern of their activity; which is either in the form of non-viability of farming/fishing due to higher production costs or their land has become unproductive due to flooding by salty tidal waters.
l) The work participation rate of individuals is 44% and is significantly lower for females. Majority of the economically active are self-employed
m) The earnings distribution is highly skewed and significantly associated with education. While two-thirds of graduates were earning above ` 10,000/- per month, majority of those below elementary education were earning below ` 5,000/- per month.

CONCLUSION:

1. We have created a micro level database on employment and educational status of the resident population in Alibag division of Raigad.
2. We have examined patterns and trends of economic activities of households (HHs) and individuals in Raigad, income distributions and changes in occupational structures along with patterns of educational attainment.
3. The general picture that emerges is that of stagnation of economic development and households eking out livelihood from occupations that are gradually becoming non-productive.
4. Above findings confirm that besides inter-district variations there is significant intra-district unevenness which adversely affects substantive employment and consequently various indicators of human development.

5. There is a need for in-depth study at taluka and village levels in order to help formulate appropriate policy decisions to rectify the dichotomy between apparent and actual achievements.

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ANNEXURE TABLES

CROSSTABS

TABLE A1 TAL * Caste Crosstab

			Caste					
			1	2	3	4	5	Total
TAL	Alibag	Count	0	14	120	13	20	167
		% within TAL	.0%	8.4%	71.9%	7.8%	12.0%	100.0%
	Pen	Count	16	1	102	4	10	133
		% within TAL	12.0%	.8%	76.7%	3.0%	7.5%	100.0%
	Murud	Count	0	3	42	12	1	58
		% within TAL	.0%	5.2%	72.4%	20.7%	1.7%	100.0%
Total		Count	16	18	264	29	31	358
		% within TAL	4.5%	5.0%	73.7%	8.1%	8.7%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.399	.000
	Cramer's V	.282	.000
N of Valid Cases		358	

TABLE A2 TAL * Source2 Crosstab

			Source2				
			Primary	Secondary	Tertiary	Multiple	Total
TAL	Alibag	Count	66	9	81	12	168
		% within TAL	39.3%	5.4%	48.2%	7.1%	100.0%
	Pen	Count	26	13	85	11	135
		% within TAL	19.3%	9.6%	63.0%	8.1%	100.0%
	Murud	Count	21	4	23	10	58
		% within TAL	36.2%	6.9%	39.7%	17.2%	100.0%
Total		Count	113	26	189	33	361
		% within TAL	31.3%	7.2%	52.4%	9.1%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.249	.001
	Cramer's V	.176	.001
N of Valid Cases		361	

TABLE A3 TAL * Land Crosstab

			Land		
			0	1	Total
TAL	Alibag	Count	95	73	168
		% within TAL	56.5%	43.5%	100.0%
	Pen	Count	77	58	135
		% within TAL	57.0%	43.0%	100.0%
	Murud	Count	29	29	58
		% within TAL	50.0%	50.0%	100.0%
Total		Count	201	160	361
		% within TAL	55.7%	44.3%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.050	.634
	Cramer's V	.050	.634
N of Valid Cases		361	

TABLE A4 TAL * Acre-grp Crosstab

			Acre-grp					
			Nil	Below 1	1 - 2	2 - 5	>= 5	Total
TAL	Alibag	Count	100	10	10	33	15	168
		% within TAL	59.5%	6.0%	6.0%	19.6%	8.9%	100.0%
	Pen	Count	80	3	8	20	24	135
		% within TAL	59.3%	2.2%	5.9%	14.8%	17.8%	100.0%
	Murud	Count	29	3	9	16	1	58
		% within TAL	50.0%	5.2%	15.5%	27.6%	1.7%	100.0%
Total		Count	209	16	27	69	40	361
		% within TAL	57.9%	4.4%	7.5%	19.1%	11.1%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.255	.003
	Cramer's V	.180	.003
N of Valid Cases		361	

TABLE A5 **TAL * Month-grp Crosstab**

			Monthgrp				
			0	4 - 5	6 - 8	9 -12	Total
TAL	Alibag	Count	94	7	63	4	168
		% within TAL	56.0%	4.2%	37.5%	2.4%	100.0%
	Pen	Count	88	28	15	4	135
		% within TAL	65.2%	20.7%	11.1%	3.0%	100.0%
	Murud	Count	29	22	7	0	58
		% within TAL	50.0%	37.9%	12.1%	.0%	100.0%
Total		Count	211	57	85	8	361
		% within TAL	58.4%	15.8%	23.5%	2.2%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.421	.000
	Cramer's V	.298	.000
N of Valid Cases		361	

TABLE A6 **TAL * Chg Crosstab**

			Chg			
			0	1	9	Total
TAL	Alibag	Count	42	31	95	168
		% within TAL	25.0%	18.5%	56.5%	100.0%
	Pen	Count	32	23	80	135
		% within TAL	23.7%	17.0%	59.3%	100.0%
	Murud	Count	22	7	29	58
		% within TAL	37.9%	12.1%	50.0%	100.0%
Total		Count	96	61	204	361
		% within TAL	26.6%	16.9%	56.5%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.118	.283
	Cramer's V	.084	.283
N of Valid Cases		361	

TABLE A7 **TAL * How Crosstab**

			How					
			1	2	3	4	9	Total
TAL	Alibag	Count	24	0	5	2	137	168
		% within TAL	14.3%	.0%	3.0%	1.2%	81.5%	100.0%
	Pen	Count	12	2	1	7	112	134
		% within TAL	9.0%	1.5%	.7%	5.2%	83.6%	100.0%
	Murud	Count	1	6	0	0	51	58
		% within TAL	1.7%	10.3%	.0%	.0%	87.9%	100.0%
Total		Count	37	8	6	9	300	360
		% within TAL	10.3%	2.2%	1.7%	2.5%	83.3%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.327	.000
	Cramer's V	.231	.000
N of Valid Cases		360	

TABLE A8 **TAL * Proj Aff Crosstab**

			Proj Aff		
			0	1	Total
TAL	Alibag	Count	134	33	167
		% within TAL	80.2%	19.8%	100.0%
	Pen	Count	129	6	135
		% within TAL	95.6%	4.4%	100.0%
	Murud	Count	58	0	58
		% within TAL	100.0%	.0%	100.0%
Total		Count	321	39	360
		% within TAL	89.2%	10.8%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.271	.000
	Cramer's V	.271	.000
N of Valid Cases		360	

TABLE A9			Month-grp				
			0	4 - 5	6 - 8	9 -12	Total
Source2	Primary	Count	9	30	72	2	113
		% within Source2	8.0%	26.5%	63.7%	1.8%	100.0%
	Secondary	Count	24	2	0	0	26
		% within Source2	92.3%	7.7%	.0%	.0%	100.0%
	Tertiary	Count	174	11	3	1	189
		% within Source2	92.1%	5.8%	1.6%	.5%	100.0%
	Multiple	Count	4	14	10	5	33
		% within Source2	12.1%	42.4%	30.3%	15.2%	100.0%
Total		Count	211	57	85	8	361
		% within Source2	58.4%	15.8%	23.5%	2.2%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.896	.000
	Cramer's V	.518	.000
N of Valid Cases		361	

TABLE A10 Source * TAL Crosstabulation

			TAL			
			Alibag	Pen	Murud	Total
Source	0	Count	0	1	0	1
		% within TAL	.0%	.7%	.0%	.3%
	Farming	Count	25	15	19	59
		% within TAL	15.1%	11.1%	32.8%	16.4%
	Fishing	Count	39	11	2	52
		% within TAL	23.5%	8.1%	3.4%	14.5%
	Industry	Count	1	7	1	9
		% within TAL	.6%	5.2%	1.7%	2.5%
	Busi/Trade	Count	23	29	8	60
		% within TAL	13.9%	21.5%	13.8%	16.7%
	Service	Count	43	51	10	104
		% within TAL	25.9%	37.8%	17.2%	29.0%
	HH Indus	Count	8	6	3	17
		% within TAL	4.8%	4.4%	5.2%	4.7%
	Multiple	Count	12	11	10	33
		% within TAL	7.2%	8.1%	17.2%	9.2%
	Casual Lab	Count	15	4	5	24
		% within TAL	9.0%	3.0%	8.6%	6.7%
Total		Count	166	135	58	359
		% within TAL	100.0%	100.0%	100.0%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.399	.000
	Cramer's V	.282	.000
N of Valid Cases		359	

TABLE A11 Age_grp * Gen Crosstabulation

			Gen		
			1	2	Total
Age_grp	< =15	Count	167	115	282

		% within Gen	20.5%	17.6%	19.2%
	15- 40	Count	383	321	704
		% within Gen	46.9%	49.0%	47.9%
	40- 60	Count	243	201	444
		% within Gen	29.8%	30.7%	30.2%
	> 60	Count	23	18	41
		% within Gen	2.8%	2.7%	2.8%
Total		Count	816	655	1471
		% within Gen	100.0%	100.0%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.385	.000
	Cramer's V	.385	.000
N of Valid Cases		1469	

TABLE A12 : TAL * EcoActv Crosstabulation

			EcoActv		
			0	1	Total
TAL	1	Count	380	326	706
		% within TAL	53.8%	46.2%	100.0%
	2	Count	318	227	545
		% within TAL	58.3%	41.7%	100.0%
	3	Count	126	92	218
		% within TAL	57.8%	42.2%	100.0%
Total		Count	824	645	1469
		% within TAL	56.1%	43.9%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.044	.239
	Cramer's V	.044	.239
N of Valid Cases		1469	

TABLE A13 Occ_Mod * Gen crosstab

			Gen		
			1	2	Total
Occ_Mod	Primary	Count	165	62	227
		% within Gen	20.2%	9.5%	15.4%
	Secondary	Count	49	11	60
		% within Gen	6.0%	1.7%	4.1%
	Tertiary	Count	271	75	346
		% within Gen	33.2%	11.5%	23.5%
	Multiple	Count	14	0	14
		% within Gen	1.7%	.0%	1.0%
	9	Count	317	507	824
		% within Gen	38.8%	77.4%	56.0%
Total		Count	816	655	1471
		% within Gen	100.0%	100.0%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.391	.000
	Cramer's V	.391	.000
N of Valid Cases		1471	

TABLE A14 Inc * Gen Crosstab

			Gen		
			1	2	Total
Inc	<5000	Count	171	88	259
		% within Gen	21.1%	13.5%	17.7%
	5000-10000	Count	151	35	186
		% within Gen	18.7%	5.4%	12.7%
	10000-20000	Count	106	15	121
		% within Gen	13.1%	2.3%	8.3%
	20000-30000	Count	33	7	40
		% within Gen	4.1%	1.1%	2.7%

	>= 30000	Count	25	3	28
		% within Gen	3.1%	.5%	1.9%
	9	Count	323	506	829
		% within Gen	39.9%	77.4%	56.7%
Total		Count	809	654	1463
		% within Gen	100.0%	100.0%	100.0%

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.395	.000
	Cramer's V	.395	.000
N of Valid Cases		1463	

TABLE A15 **Occ_Mod * Wg-Ty Crosstabulation**

			Wg-Ty						
			1	2	3	4	5	9	Total
Occ_Mod	Primary	Count	179	3	2	43	0	0	227
			78.9%	1.3%	.9%	18.9%	.0%	.0%	100.0%
	Secondary	Count	42	8	2	6	2	0	60
			70.0%	13.3%	3.3%	10.0%	3.3%	.0%	100.0%
	Tertiary	Count	115	160	16	45	4	0	340
			33.8%	47.1%	4.7%	13.2%	1.2%	.0%	100.0%
	Multiple	Count	13	0	1	0	0	0	14
			92.9%	.0%	7.1%	.0%	.0%	.0%	100.0%
	9	Count	0	0	0	0	0	824	824
			.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Total		Count	349	171	21	94	6	824	1465
			23.8%	11.7%	1.4%	6.4%	.4%	56.2%	100.0%

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi	1.140			.000
	Cramer's V	.570			.000
Ordinal by Ordinal	Gamma	.922	.009	80.435	.000
N of Valid Cases		1465			

TABLE A16 Occ_Mod * Pre-Occ Crosstabulation

			Pre-Occ					
			Primary	Secondary	Tertiary	Multiple	9	Total
Occ_Mod	Primary	Count	48	0	3	2	174	227
		% within Occ_Mod	21.1%	.0%	1.3%	.9%	76.7%	100.0%
	Secondary	Count	1	8	5	0	46	60
		% within Occ_Mod	1.7%	13.3%	8.3%	.0%	76.7%	100.0%
	Tertiary	Count	14	1	53	0	278	346
		% within Occ_Mod	4.0%	.3%	15.3%	.0%	80.3%	100.0%
	Multiple	Count	4	0	0	2	8	14
		% within Occ_Mod	28.6%	.0%	.0%	14.3%	57.1%	100.0%
	9	Count	29	1	15	0	779	824
		% within Occ_Mod	3.5%	.1%	1.8%	.0%	94.5%	100.0%
Total		Count	96	10	76	4	1285	1471
		% within Occ_Mod	6.5%	.7%	5.2%	.3%	87.4%	100.0%

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi	.562			.000
	Cramer's V	.281			.000
Ordinal by Ordinal	Gamma	.497	.043	8.339	.000
N of Valid Cases		1471			

TABLE A17 Edn * Income Crosstabulation

			Inc					
			<5000	5000-10000	10000-20000	20000-30000	>= 30000	Total
Edn	0	Count	39	15	3	0	0	57

CODE LIST

NR - 8 NA – 9

Part A – Preliminary

Col			Member Code	
1 – 4	Family Code	(001 – 315),	(0011 -315x)	
5	Taluka	Alibag – 1, Pen – 2, Murud – 3		
6	Panchayat	Alibag – 1,2 ; Pen – 3,4 ; Murud – 8, 9; Alibag city – 6; Pen city – 7; Murud city- 5		
7	Residence	House – 1 ; Flat – 2 ; Chawl – 3 ; hut - 4		
8	Religion	Hindu – 1 ; Muslim – 2 ; others – 3		
9	Caste	SC – 1 ; ST – 2 ; OBC – 3 ; DT/NT – 4; Open – 5		
10	Income Source	Pension/Interest – 0; Farming – 1 ; Fishing – 2 ; Industry – 3 ; Business / Trade – 4 ; Service – 5 ; HH Industry – 6 ; Multiple -7; Casual labour - 8		
11	Land owned	Yes – 1 ; No – 0; Owned & now sold – 2		
12	Area (acres)	0 if no land		
13	In case of (10)	How many months activity? : (Months)		
14	Any change in pattern (10)	Yes – 1; No – 0; NA – 9		
15	If Yes	How? Use of modern tech – 1; Addl. activity -2; Unproductive due to increased prodn cost/ mod tech – 3; Unproductive due to flooding – 4; NA – 9		
16	No. of Family Members	< 6 years : number		
17	No. of Family Members	6 – 15 yrs : number		
18	No. of Family Members	16 – 60 : number		
19	No. of Family Members	≥ 60 yrs : number		

Family Expenses (Last one year)

20	On Health	< 5000 – 1 ; 5000 – 10000 – 2 ; 10000 – 20000 – 3 ; 20000 – 50000 – 4 ; 50000 – 1 lakh – 5; ≥ 1 lakh - 6
21	On Education	< 1500 - 0 ; 1500 – 5000 -1 ; 5000 – 10000 – 2 ; 10000 – 20000 – 3 ; 20000 – 50000 – 4 ; 50000 – 1 lakh – 5; ≥ 1 lakh - 6
22	Any other	Do
23	Project Affected	Yes – 1 ; No – 0
24	What Project	SEZ – 1 ; Infrastructure – 2 ; CRZ etc – NA – 9

25	Effect	Lost occupation – 1; Reduced wage work- 2; Reduced Agr. Prodn- 3; Improved living std-4; Flooding/neglect of farms-5; Negative impact on traditional profns (ZP schools, services) - 6
26	Any Compensation	Yes – 1 ; No – 0
27	Compensation type	Cash – 1 ; Alternate Source – 2
28	Utilization	Spent on HH-1, Invested -2, Land for farming-3, Set up Business-4
29	Any Loan	Yes – 1 ; No – 0
30	Purpose of Loan	Health / Education – 1 ; Personal – 2 ; Farming/ Fishing – 3 ; Industry / Business – 4 ; Daily needs – 5, Multiple - 6
31	Loan Agency	Bank – 1 ; Co-op. Scheme – 2 ; Pvt – 3; NA – 9
32	Loan Repaid	Yes – 1 ; No – 0; NA – 9
33	Beneficiary of Loan waiver Scheme	Yes – 1 ; No – 0; NA - 9
34	If yes, which scheme	Govt. – 1; other – 2; NA – 9

Education and Economic Activities

6 – 15 Years

35	Gender	M – 1 ; F – 2
36	Age	years
37	Educnl Status	Below 7^{th} - 0 ; Studying – 1 ; Completed Elementary – 2; Completed SSC – 3;
38	Eco. Activities	Yes – 1 No – 0; NA – 9

15 – 60 Years

35	Gender	M – 1 ; F – 2
36	Age	years
37	Educnl Status	Below 7^{th} - 0 ; Studying – 1 ; Elementary – 2; SSC – 3; HSC / Dipl. – 4 Gradn & above - 5
38	Eco. Activity	Yes – 1 ; No – 0
39	Wage Type	Self Emp.- 1; Reg. Sal – 2 ; Contract – 3 ; Daily Wages – 4; Helper in family Business – 5; Interest / Pension – 0
40	Nature of Work	Farming – 1 ; Fishing – 2 ; Industry – 3 ; Business / Trade – 4 ; Service – 5 ; HH Industry – 6 ; Multiple – 7; Casual labour – 8; Interest – 0
41	Monthly Income	< Rs. 5000 – 1 ; 5000 – 10000 – 2 ; 10000 – 20000 – 3 ; 20000 – 30000 -4 ; 30000 – 50000 – 5; ≥ 50000 – 6

> 40 Years

42	Work in 1990s	Farming – 1 ; Fishing – 2 ; Industry – 3 ; Business / Trade – 4 ; Service – 5 ; HH Industry – 6 ; Multiple – 7; Casual labour – 8; Interest – 0
43	Wage Type	Self Emp.- 1; Reg. Sal – 2 ; Contract – 3 ; Daily Wages – 4; Helper in family Business – 5; Interest / Pension – 0
44	Change - Year	Year; NA- 9
45	Change – Reas.	Decline in Cultivation – 1; Present Occup more profitable – 2; Closure of Industry – 3; Unproductive land – 4, Addl. Activity – 5, Other- 6 .