

CHAPTER 4

ECONOMIC PROBLEMS

1. INTRODUCTION:

The present chapter deals with the occupational background of the respondents, income-expenditure, savings, indebtedness, land allotted by government, cultivation practices and other activities.

2. OCCUPATIONAL BACKGROUND: India is predominantly an agricultural country where more than 70 percent of its population continues to live in rural areas and feed on agriculture. Agriculture has been the traditional occupation and the major source of livelihood. There was little scope for occupational mobility. People also did not like to change their parental occupation and take up to some other occupation.

In order to measure the extent of occupational mobility amongst the respondents over the two generations, they were asked to specify their own as well as their parental occupation. As a natural trend, the Koyana dam was constructed on the river Koyana and the people residing on the banks of river were totally displaced who were mainly engaged in agricultural activities. On this background the data regarding respondents' parental occupation are presented in the Table 4.1.

TABLE 4.1

RESPONDENTS' PARENTAL OCCUPATION

	Owner Cultivator	Bal./Agr.Lab.	Others	Total
P	204 (75.55)	64 (22.70)	2 (0.74)	270
C	267 (91.75)	19 (6.52)	5 (1.71)	291
K	54 (100.00)	---	---	54
T	525 (85.36)	83 (13.48)	7 (1.13)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

The table clearly shows that in case of the majority of the respondents their parental occupation was agriculture. This has been followed by those who were engaged in Balutedari (Jajmani System)-cum-Agricultural Labour.

Further, all those, who were engaged in agriculture, were necessarily owner-cultivators. And the parental occupation of the majority of the respondents, distributed over three zones, i.e., plain, catchment and konkan, was found to be owner-cultivation.

The other side of the same picture shows that the percentage of Balutedars-cum-agricultural labour was relatively higher in the plain area than in the catchment area.

3. OCCUPATIONAL BACKGROUND BEFORE AND AFTER REHABILITATION: As noted above the parental occupation of the respondents was mainly owner-cultivation. In table 4.2 an attempt has been

made to measure the extent of change in the traditional occupation in the present generation.

Owner-cultivators are divided into two separate categories. Owner-cultivators before rehabilitation were cultivating their own land. They did not work on other's farms as agricultural labourers. But the owner-cultivators after rehabilitation continue to till their own lands which have been either allotted to them by the Government or purchased by them from the market. Besides this, they are forced to work on others' land as agricultural labour, for they are unable to manage their livelihood only from their own landholdings. Therefore they will be referred to as owner-cultivators-cum-agricultural labourers hereafter.

TABLE 4.2

OCCUPATIONAL BACKGROUND BEFORE AND AFTER REHABILITATION

	OWNER-CULTIVATORS		BALUTEDARS +		OTHERS		TOTAL
			AGRI. LAB.				
	B	A	B	A	B	A	
P	195 (72.22)	206 (76.29)	39 (14.44)	43 (15.92)	36 (13.33)	21 (7.77)	270
C	249 (85.56)	256 (87.97)	13 (4.45)	22 (7.54)	29 (9.96)	13 (4.46)	291
K	45 (83.33)	41 (75.92)	--	--	13 (24.07)	9 (16.66)	54
T	485 (78.86)	507 (82.43)	52 (8.44)	65 (10.56)	78 (12.68)	43 (6.99)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

The table clearly shows that almost all those who were owner-cultivators before rehabilitation have become owner-cultivators-cum-agricultural labourers; while almost all those who were Balutedars-cum-agricultural labourers before, continue to be so even after rehabilitation with a little change here and there. The same trend has been reflected in the distribution of respondents in the three zones.

4. ANNUAL INCOME BEFORE AND AFTER REHABILITATION: It is very difficult to estimate the income of the people engaged in the primary sector. Moreover, when it comes to disclosing the quantity of agricultural food grains to the outsiders, farmers generally don't reveal the exact yield of foodgrains for want of some unknown fear. Not only that, one has to estimate their prices at the prevailing market rates. In the present study, we had to estimate the prices of agricultural produce at two different points in time. First at the time of displacement some 25 years back and secondly at the time of the present study, i.e., in the year 1985-86. Further, we had to take into account the price rise that has taken place during the last 25 years. The following Table 4.3 indicates the annual income of the respondents before and after rehabilitation with some 25 years gap in between.

TABLE 4.3

ANNUAL INCOME BEFORE AND AFTER REHABILITATION

Annual Income		Rs.1001 to Rs.5000/-		Rs.5001 + above		Total
Upto Rs.1000/-						
B	A	B	A	B	A	
P 55	-	179	165	36	105	270
(20.37)		(56.29)	(61.11)	(13.33)	(38.87)	
C 108	-	146	197	37	94	291
(37.11)		(50.17)	(67.69)	(12.71)	(32.29)	
K 20	-	34	15	-	39	54
(37.03)		(62.95)	(27.77)		(72.21)	
T 183	-	359	377	73	238	615
(29.75)		(58.37)	(61.30)	(11.86)	(38.68)	

P = Plain, C = Catchment, K = Konkan, T = Total.

The table indicates that the majority of the respondents had the annual income of Rs.1001 to Rs.5000/- before as well as after rehabilitation. The annual income of the respondents appears to have increased during the period before and after rehabilitation. The simple reason for this trend is the fact that the prices of agricultural products started steadily increasing after independence. The gap of ^{about} 25 years, i.e., from 62-63 to 85-86 in price rise is responsible for the rise in annual income of the respondents. Therefore we find that there were nearly 30 percent of the respondents in the income-group of below Rs.1000/- before rehabilitation; whereas there was nobody in this category after rehabilitation. On the same lines there were only 12 percent who had the annual income of Rs.5001/- and above before rehabilitation; whereas there were 39 percent of the respondents in this category after rehabilitation.

In short, two out of every three respondent-families were found to be below the poverty line. Their income level didn't improve. It continued to be where it was during all these years.

5. ANNUAL EXPENDITURE BEFORE AND AFTER REHABILITATION: After having seen the annual income of the respondent-families, it will be worthwhile to take a look at the annual expenditure of the respondent-families.

TABLE 4.4

ANNUAL EXPENDITURE BEFORE AND AFTER REHABILITATION

	Annual Exp. upto Rs.1000/-		Rs.1001/- to Rs.5000/-		Rs.5001/- +		Total
	B	A	B	A	B	A	
P	227 (84.16)	-	43 (15.92)	165 (61.10)	-	105 (38.88)	270
C	221 (75.94)	-	70 (24.04)	265 (91.05)	-	26 (9.92)	291
K	48 (88.88)	-	6 (11.10)	43 (79.62)	-	11 (20.36)	54
T	496 (80.64)	-	119 (19.34)	473 (76.90)	-	142 (23.08)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

The table shows that the annual expenditure of the respondent-families has steadily increased after rehabilitation. The general trend shows that majority of the respondent-families had their annual expenditure below Rs.1000/- before rehabilitation and there was nobody who had

annual expenditure of Rs.5001 + above. This shows that the smaller amounts were spent by the respondents. But on the other hand after rehabilitation a majority of the respondent-families had annual expenditure from Rs.1001 to Rs.5000/- and there was nobody in the category of upto Rs.1000/-. Thus the amount of expenditure has steadily increased after rehabilitation. The analysis in terms of zones also shows the similar trend.

6. FAMILY SAVINGS BEFORE AND AFTER REHABILITATION: The information about annual family savings of the respondents is presented in the following table. The only income source for the families was agricultural products, but these were consumed in house itself and they were unable to sale out these products. On this background the question asked was whether the respondents were able to save any amount. The details in this regard are presented in Table 4.5.

TABLE 4.5

FAMILY SAVINGS BEFORE AND AFTER REHABILITATION

	Upto Rs.1000/-		Rs.1001 + above		No Savings		Total
	B	A	B	A	B	A	
P	9 (3.33)	29 (10.74)	61 (22.59)	17 (6.29)	200 (74.07)	224 (82.96)	270
C	26 (8.92)	38 (13.05)	47 (16.14)	19 (6.52)	218 (74.91)	234 (80.41)	291
K	1 (1.85)	1 (1.85)	11 (19.36)	5 (9.25)	42 (77.77)	48 (88.88)	54
T	36 (5.85)	68 (11.05)	119 (19.34)	41 (6.65)	460 (74.79)	506 (82.27)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

The table shows that majority of the respondent-families did not have any savings before as well as after rehabilitation. This observation is also true for all the zones.

In the remaining categories, the proportion of families in the low category of savings upto Rs.1000/- has increased and it is true for all the zones also. In the higher category of savings of Rs.1001/- + above, the proportion of families has decreased and this is true for all the zones. Thus some of these families may not be able meet both the ends for want of sufficient savings at their disposal.

7. LOANS BEFORE AND AFTER REHABILITATION: As noted earlier, the majority of the respondent-families have shown no savings which makes them take loans for maintaining their livelihood. The following table shows the position regarding indebtedness amongst the respondent-families.

TABLE 4.6

LOAN BEFORE AND AFTER REHABILITATION.

	Upto Rs.1000/-		Rs.1001 + above		No Loan		Total
	B	A	B	A	B	A	
P	5	59	1	53	264	158	270
	(1.85)	(21.85)	(0.37)	(16.91)	(97.77)	(58.51)	
C	3	75	2	44	286	172	291
	(1.03)	(25.77)	(0.68)	(15.10)	(98.28)	(59.10)	
K	-	21	-	17	54	16	54
		(38.88)		(31.47)	(100.00)	(29.62)	
T	8	155	3	114	604	346	615
	(1.29)	(25.20)	(0.48)	(18.55)	(98.21)	(56.26)	

P = Plain, C = Catchment, K = Konkan, T = Total.

The table shows that there were only few 11 (1.77) respondent-families who were indebted before rehabilitation, but its proportion has steadily increased after rehabilitation 269 (43.75). This trend is observed for all the zones also.

The table thus indicates that most of the people were able to maintain their livelihood without any loans before rehabilitation because they were able to produce the required foodgrains on the bank of the river, but after rehabilitation this scene has completely changed and as the respondent-families are not getting sufficient yield from the allotted lands (forest area). They have to take loans from money-lenders, friends, relatives, Banks etc. making them ultimately indebted. Thus the trend of indebtedness has been on the increase after rehabilitation which is the sole product of displacement.

8. LAND-HOLDINGS BEFORE REHABILITATION: The respondents were asked about the land holdings possessed by them before rehabilitation. The responses are divided in terms of area and quality of land holdings. This is done in terms of acre, Jirait and Bagait land holdings as it has been the general practice in rural areas. As far as the quality of land holdings is concerned, jirait is the non-irrigated, rain-fed land; whereas Bagait is the irrigated land. As some of the respondents had both jirait and bagait land, a separate category was provided for this purpose. The data on land holdings possessed by the respondents before rehabilitation have been presented in Table 4.7.

TABLE 4.7

LAND POSSESSED BY RESPONDENTS BEFORE REHABILITATION

	No Land Holdings	J Upto 4	JB upto 4	Bag upto 4	J 5 + above.	JB 5 + above.	Bag 5 + above.	Total
P	27 (10.00)	50 (18.51)	6 (2.22)	-	92 (34.76)	95 (35.13)	-	270
C	42 (14.43)	37 (12.71)	9 (3.09)	19 (6.52)	92 (31.61)	78 (26.80)	14 (4.80)	291
K	6 (11.11)	5 (9.25)	1 (1.85)	1 (1.85)	24 (44.44)	16 (29.62)	1 (1.85)	54
T	75 (12.19)	92 (14.95)	16 (2.60)	20 (3.25)	208 (33.81)	189 (30.72)	15 (2.43)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

J = Jirait, JB = Jirait + Bagait, B = Bagait.

The table indicates that 12 percent of the respondents were landless before rehabilitation. For those who were possessing land holdings, the proportion of the respondents with 5 and more acres of Jirait land and 5 and more acres of Jirait + Bagait land was higher than any other categories, which shows that the majority of the respondents 397 (64.53) had 5 + more acres of land before rehabilitation. This has been followed by those who had jirait land upto 4 acres. There were only few respondents in other categories. Thus it can be safely concluded that the respondent-families with insignificant exceptions did possess some agricultural land no matter whether Jirait or Bagait even before rehabilitation.

9. LAND ALLOTTED BY THE GOVERNMENT: The Government of Maharashtra allotted land to the displaced families depending on the land submerged. The following table gives the details in this connection.

TABLE 4.8
LAND ALLOTTED BY THE GOVERNMENT

	No Land	Upto 1 acre.	2 to 4 acres.	5 + above acres.	Joint village holdings.	Total
P	80 (29.62)	63 (23.33)	92 (34.07)	22 (8.14)	13 (4.81)	270
C	99 (34.02)	87 (29.89)	60 (2.61)	30 (10.30)	15 (5.15)	291
K	20 (37.03)	7 (12.96)	18 (33.33)	9 (16.66)	-	54
T	199 (32.35)	157 (25.52)	170 (27.64)	61 (9.90)	28 (4.54)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

The table indicates that 32 percent of the respondents did not receive any land from the government, so these were the families left to themselves with no source of livelihood from agricultural land. They have been trying to contact Government officials during all these years in their individual capacities. However they have met with failure. These people are now organizing and trying to pressurize the Government. But we don't know whether they will succeed in their endeavour. In the remaining, majority of the respondents were allotted land upto 4 acres. In this

category also, there were 26 percent who were allotted the land of 1 acre only. There were also few respondents who were allotted 5 and more acres of land. Some of these respondents were in the category of Joint village holdings as they did not actually own land but were allowed to cultivate a piece of joint village holdings.

The details regarding irrigated land in Patan and Jaoli Talukas are presented in Table 4.9.

TABLE 4.9

LAND USE IN PATAN AND JAOLI TALUKAS

Taluka	Total area (in hectares).	Percentage of Cultivable area to total area.	Percentage of irrigated area to total cultivable area.
PATAN	138,555.00	70.19	3.49
JAOLI	78,806.00	59.70	4.30

Source: Census of India, District Census Handbook, Satara, 1981, P.24.

The table clearly shows that the percentage of irrigated land to the total cultivable land in Patan and Jaoli Talukas of Satara District where resettlement has taken place on a very large scale is extremely small.

Karve and Nimbakar have noted that " In the joint village holding, the land was either bought by the village as a whole or given by the government to the village as a whole. The land was cultivated co-operatively by the entire village

and the produce divided on a per capita basis. However the villagers had no intention of carrying on this system. It was merely a temporary measure adopted until such time as land could be individually allotted and the papers made out in the names of individuals." ¹ Our data indicate that this practice is still continued, though on smaller extent.

About the land distribution amongst the displaced families, it is observed that there is no uniformity as regards land reallocation. In some rehabilitated villages people received as much as 16 acres of land as in the case of Kandati Valley villages of Javali Taluka, whereas in some other villages it is only the clear title-holders who received land upto 4 acres in Koyana and Solasi Valley villages of Javali and Patan Talukas. The sub-title holders were left to themselves and the percentage of sub-title holders is predominantly larger than the title-holders. In the peasant communities in India, it has been a customary practice to keep all the landholdings in the name of the senior most male member in the joint family who is legally recognized as the title-holder. All his younger brothers and cousins go unrecognized till untill legal separation takes place. As a result of this cultural practice, the problem of sub-title holders has assumed gigantic importance and has created insoluble problem and even the State Government has not so far been able to come out with a just solution to the problem of sub-title holding.

The land allotted by the Government was jirait land, to be precise, it was mainly forest land. As noted by Karve and Nimbakar, " the officials stated that finding blocks of cultivable land was impossible, since the villagers wanted to move enblock. The only large acreage at the government's disposal were under revenue waste land or forest. A lot of the dam affected people were given land under forest. In their survey it was found that majority of the families were given land under forest (324/602)."

The present study also indicates the same trend as most of the respondents particularly in the catchment area have been allotted forest land for cultivation.

10. NEW LAND BOUGHT: Apart from the land allotted by the government, the respondents also bought some land in their places. The following table gives the picture on this aspect.

TABLE 4.10

LAND BOUGHT

	No. Land	J upto 4	JB upto 4	B upto 4	J 5 +	Total
P	147 (54.44)	105 (38.88)	10 (3.70)	3 (1.11)	5 (1.85)	270
C	199 (68.38)	56 (19.24)	5 (1.71)	7 (2.40)	24 (8.23)	291
K	28 (51.85)	23 (42.59)	-	1 (1.85)	2 (3.70)	54
T	374 (60.81)	184 (29.91)	15 (2.43)	11 (1.78)	31 (5.03)	615

P = Plain, C = Catchment, K = Konkan, T = Total.

The table shows that majority of the respondents have not purchased any new land after rehabilitation, which shows the weak financial position on the part of the respondents. Nearly 30 percent of the respondents who were in the top category, were able to purchase only jirait land upto 4 acres and there were only a few respondents who had purchased more Bagait land.

However the general trend shows that the respondents were not in a position to buy additional land apart from whatever was allotted to them by the government.

11. USE OF MODERN PRACTICES IN AGRICULTURE: As noted earlier, agriculture has been the main source of livelihood and a majority of the respondents have been practising Kumri cultivation. When the question was asked whether the respondents were using improved variety of seeds, chemical fertilizers, pesticides and modern techniques in agricultural production, all the respondents reported negatively.

Now the question arises whether this situation has changed after rehabilitation and the details in this regard have been presented in Table 4.11.

TABLE 4.11
USE OF MODERN PRACTICES IN AGRICULTURE

Zones	Yes	No	Total
Plain	166 (61.48)	104 (38.51)	270
Catchment	199 (68.38)	92 (31.61)	291
Konkan	46 (85.17)	8 (14.81)	54
Total	411 (66.82)	204 (33.17)	615

The table clearly indicates that a majority of the respondents were using modern practices in the field of agriculture and this is true for all the three zones. The Konkan zone is showing a positive trend in the use of such practices and it is due to their exposure and proximity to the urban centres like Thane and Bombay.

12. KUMARI CULTIVATION: As noted by Karve and Nimbakar, the landholding was of three types - flat rice land, slopping Nachani land and a third category called Kumari which was so poor in quality that it could be cultivated only once in every five or six or ten years. Most of the people used to describe the practice of Kumari cultivation, the details of which have been presented in the following table.

TABLE 4.12.

PRACTICE OF KUMARI CULTIVATION

Zone/Reply	Yes	No	Total
Plain	198 (73.33)	72 (26.66)	270
Catchment	209 (71.82)	82 (28.17)	291
Konkan	50 (92.59)	4 (7.40)	54
Total	457 (74.30)	158 (25.69)	615

The table indicates that a majority of the respondents were practising Kumari cultivation and it is true for all the zones.

The main crops cultivated with the help of this system were Nachani and Vari. Thus the practice of Kumari cultivation which is entirely different from other parts of the state is being followed by the respondents and they consider that this is the only way through which they are able to get some crop yield.

As far as the land which has been allotted to the displaced families in the catchment area is concerned, it lies on the hillslopes and hence it is totally useless for permanent cultivation. Therefore what these farmers do is, they resort to shifting cultivation, in the given plot of land, the trees are cut off, these are set on fire and then the plot is prepared for cultivation. Under these circumstances, the land on the slopes is brought under cultivation only once in six or seven years, which means

that these villagers find it very difficult to meet their annual demand of food grains. Whatever they produce, is sufficient only for a period of 3 to 4 months and for the rest of the period they are forced to migrate to other places in search of livelihood.

The Satara District Gazetteer also notes that, " in the Mahableshwar village nothing could grow but hill grains and rice and even they failed if planted before the first violence of the monsoon was over. In the hills most of the land was cropped for 2-3 years and left fallow for 3-6 years.

The harm that shifting cultivation can cause has now been well established. Nowhere else has this been more severe than in Himalayan region. " The large scale deforestation that it involves has given a further fillip to the soil erosion that has become endemic, which in turn has contributed, not only to higher levels of siltation of rivers but also led to the increased incidence of floods, causing massive death and destruction in their wake. In the circumstances, it is a pity that the model, evolved by the Indian Council of Agricultural Research, so that the jhumias (Shifting cultivators) take a better land use pattern, has not been promoted more assiduously. Under it a hillside is divided into three parts, the top one is strictly left untouched so that trees can provide the necessary cover, the second one is turned over to forage and horticultural plantations and the lowest one is used for agriculture. Indeed, this is a system that disturbs the the jhumias system the least and has had good results wherever

it has been applied in the north eastern states. Considering the enormous resources lost thanks to the ecological damage that shifting cultivation is encouraging, it may be a good idea for the government to allocate more funds to put an end to it." 3

The Konkan Krishi Vibhag has made it clear that, " the practice of "rab" causes more harm than good. This practice is more prevalent in the Konkan region for the crops like paddy, nachani and vari. The farmers here collect dung cakes, dry leaves and branches of trees and a thick layer of all these is prepared on the ground which is then set on fire. The practice has been in vogue for quite sometime amongst the peasants. They think that it burns out weeding and a layer of manure is created. However actually this practice is causing more harm than benefits, because for this process the organic material is burnt on a larger scale and this is harmful to national wealth. Instead of this practice, the experts from the Konkan Krishi Vibhag have suggested that, only the left over stumps of earlier crop may be burnt." 4

13. CATTLE KEEPING BEFORE AND AFTER REHABILITATION: As noted by Karve and Nimbakar, the displaced people suffer one more hardship on account of their displacement. Before displacement, living in densely forest area of high rainfall and plenty of grazing land, they could keep cattle at no cost. On this background it is necessary to analyse whether the cattle-keeping has been declined after rehabilitation. The details in this connection are presented in Table 4.13.

TABLE 4.13

CATTLE KEEPING BEFORE AND AFTER REHABILITATION

Zones/ Cattle Keeping	Yes		No		Total
	B	A	B	A	
Plain	256 (94.81)	209 (77.40)	14 (5.18)	61 (22.59)	270
Catchment	275 (94.50)	251 (86.25)	16 (5.49)	40 (13.74)	291
Konkan	54 (100.00)	51 (94.44)	-	3 (5.55)	54
Total	585 (95.12)	511 (83.08)	30 (4.87)	104 (16.91)	615

As noted by Karve and Nimbakar, 543 out of 602 respondents kept cattle. Out of these only 112 said that they grazed cattle on their own land or in the grazing land available to the village. The rest of them used the government forest as grazing land.

On this background, the picture from the present study also shows that the majority of the respondents were keeping cattle before as well as after rehabilitation and this is true for all the zones. Another thing that comes out of the table is that, the proportion of respondents who were keeping cattle has come down after rehabilitation. This may perhaps be due to the shortage of grazing land.

14. SALE OF MILK/MILK PRODUCTS: As noted earlier, majority of the respondents were keeping cattle before as well as after rehabilitation. Now it will be appropriate to see whether these people were using the milk only for household purpose or it was used for selling purpose also. The details in this regard by excluding those who were not keeping cattle are presented in Table 4.14.

TABLE 4.14

SALE OF MILK/MILK PRODUCTS BEFORE AND AFTER REHABILITATION

Zones/ Response.	Yes		No		Total	
	B	A	B	A	B	A
Plain	26	34	230	175	256	209
Catchment	57	55	218	196	275	251
Konkan	2	6	52	45	54	51
Total	85	95	500	420	585	511

The table clearly indicates that majority of the respondents were using milk and milk products for household purpose before and after rehabilitation and it is true for all the zones. In general it can be said that dairying is not performed as a subsidiary occupation in the rehabilitated families.

The proportion of those who sell milk is low. This proportion has decreased in catchment area, whereas it has increased in plains and konkan areas.

As noted by Karve and Nimbakar, "those who moved out of the valley have no grazing land and have to buy fodder if they want to keep cattle. A majority of them do not keep cattle, or keep only one or two. Out of those who have remained in the valley, the people of upper valley, especially those who live on Mahableshwar side of the valley, benefit by road from Mahableshwar to Tapola where trucks ply."5

The scene in recent days also continues to remain the same as milk and milk products are sold to Mahableshwar and onward directions.

The developments have also taken place in the catchment area near Koyananagar and the organizations such as Shramajivi Janata Sahayak Mandal, also collects the milk on co-operative basis.

The milk supply from the catchment area is done to the Koyana Milk Producers Co-operative Society. The President of this Society Mr. Bhausahab Jadhav has made it clear that, "from the Koyana Catchment the launch carries one thousand litre milk to Koyananagar from 40 settlements. The milk is then transported to the plant near Karad. The people in the catchment area have been encouraged for dairy activity under the Government's 20 point programme." 6

R E F E R E N C E S

1. Karve Irawati and Nimbkar Jai. : "A Survey of the People Displaced Through The Koyana Dam," Deccan College Post-graduate and Research Institute, Poona, 1969 P.21-22.
2. Ibid : P. 18
3. News-Item : Daily The Times of India, Bombay, 15th January 1985.
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5. Karve Irawati and Nimbkar Jai : Op. Cit. P. 21.
6. News-Item : Daily Sakal, Kolhapur, 28th January, 1985.