

# **ANALYSIS OF TREND IN OPERATIONAL HOLDINGS**

**(Study in Tikamgarh and Jhabua Districts, Madhya Pradesh)**



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## CHAPTER-I

### INTRODUCTION

#### 1.1 Introductory

Agriculture forms the most important part of the Indian economy. It is dominated by marginal and small holdings below 2.00 hectares. Although marginal and small holdings are very large in number these occupied very small area in the total area. Population dependent on these holdings is increasing rapidly.

Data on distribution of land holdings by size groups for various agricultural censuses showed that number of marginal holdings increased from census to census. Not only number but also the percentage of number of marginal holdings increased. In the case of "small" size holdings the number increased from census to census but at a lower proportion than the marginal holdings. The percentage to total number in the case of small holdings on the other hand, decreased from census to census.

The number of semi-medium holdings increased from census to census but the proportion of number among total holdings decreased from census to census. In the case of medium and large holdings the number did not show a definite trend but the proportion of number among total number did decrease from census to census.

The area operated by marginal holdings increased from census to census so also the proportion of area in total area. The area operated by small and semi-medium holdings increased from census to census. The percentage of area in total area did not follow the trend strictly. The medium and large holding groups did not show any trend neither in area nor in proportion.

It is thus observed that number of marginal holdings and the proportion of number in total number increased from census to census. It is also noted that the area operated by marginal holdings as well as proportion of area in total area increased from census to census.

It is further noted that percentage decrease in average size of holdings was highest in marginal holdings.

It is thus clear that country is heading towards marginalisations of holdings.

Five things were clear-

1. There is a definite trend towards marginalisation
2. The number of holdings increased from census to census
3. The area operated increased only marginally
4. The average size of holdings decreased from census to census as a result of sub division of holdings.
5. The distribution of holdings by size groups is extremely skewed.

#### 1.2 Sub-division of Land Holdings

Sub division of land holdings takes place due to natural process of division among family members. Some divisions also take place as notional transfers for evading land ceiling legislation. Some land transfers take place from the rich to the poor and vice versa through land purchases. The increase in the number of operational holdings resulted in decrease in average size of holdings.

#### 1.3 Points of Concern

The ever increasing number of holdings, marginalisation of holdings and rapid decrease in the average size are the matters of concern to the planners and policy makers. They are anxious to know the reasons of these phenomena.

#### 1.4 This Study

With this background of concern of planners and policy makers the Directorate of Economics and Statistics, Ministry of Agriculture asked all the 10 Agro- Economic Research Centres to conduct the study titled "Analysis of trend in agricultural holdings" in the year 1995-96.

#### 1.5 Objectives

The specific objectives of the study are :

- i) To analyse trend in operational holdings giving emphasis on concentration of number of holdings and operational area in different sizes.
- ii) To highlight the reasons for variation in number of operational holdings
- iii) To know the extent of decrease in size of holdings and increase in number of holdings and the reasons thereof.



### 1.6 Data Base

The study is based on both secondary and primary data.

Agricultural census data formed the secondary data. It was used to narrate the distribution of land holdings in various size groups.

The data relates the agricultural census years from 1970-71 to 1990-91.

The primary data was that of the selected households. It was collected in schedules and questionnaires specially prepared for the study.

### 1.7 Sampling Design

Madhya Pradesh has 3 agro-climatic zones as delineated by the Planning Commission. These are :

- (i) Western Plateau & Hills Region (11 districts of M.P.)
- (ii) Central Plateau & Hills Region (25 districts of M.P.)
- (iii) Eastern Plateau & Hills Region ( 9 districts of M.P.)

Of the three agro-climatic zones two zones viz. i) Western Plateau & Hills Region and ii) Central Plateau & Hills Region were selected. Among the districts of these two zones Jhabua district from Western Plateau & Hills Region and Tikamgarh district from Central Plateau & Hills Region were selected. These two districts had highest concentration of the number of operational holdings.

From these districts a village each was selected at random. Thus in Jhabua district village Makankui and in Tikamgarh district village Barkhiria were selected.

From each selected village a random sample of 50 households was drawn. Thus the total sample of households was 100.

### 1.8 Reference Year/s

For collecting the secondary data from village papers the years of reference were 1983-84 to 1994-95. The data earlier to these years were not available. For collecting primary data in schedules regarding crops etc. 1994-95 was the reference year.

## CHAPTER-II

### TREND IN OPERATIONAL HOLDINGS

#### IN MADHYA PRADESH

#### AND SELECTED DISTRICTS

Agricultural Censuses were conducted in Madhya Pradesh alongwith other states of the country in the following years.

1970-71

1976-77

1980-81

1985-86

1990-91

The size groups of holdings were following :

1. Marginal - Below 1.00 hectare
2. Small - 1.01 to 2.00 hectares
3. Semi medium - 2.01 to 4.00 hectares
4. Medium - 4.01 to 10.00 hectares
5. Large - 10.01 and above

#### 2.1 Number of Holdings

The number of operational holdings increased from 52,99,400 in 1970-71 to 84,01,000 in 1990-91 or an increase of 58.53 per cent. The increase from census to census was not uniform. The percentage increase from base year 1970-71 to 1976-77 was 14.18. It was 20.97, 43.47 and 58.53 per cent respectively in the subsequent three censuses. As regards census to census increase it was observed that the percentage increase from 1970-71 to 1976-77 was 14.18. In next census the percentage decreased to 5.94. The percentage increase in 1985-86 over 1980-81 was 18.60 but decreased to 10.49 in last census (Table 2.1).

Table 2.1 Number of operational holdings in different censuses, M.P.

S. No.	Year of census	Number of operational holdings	Percentage increase with reference to base year (1970-71)	Percentage increase over preceding census
1.	1970-71	52,99,400	-	-
2.	1976-77	60,51,131	14.18	14.18
3.	1980-81	64,10,855	20.97	5.94
4.	1985-86	76,03,144	43.47	18.60
5.	1990-91	84,01,000	58.53	10.49

The reasons for increase in number of operational holdings was fragmentation of holdings due to divisions or sale and purchase of parts of holdings or acquisition of land (small holdings) given by government under various schemes. Another reason was wilful divisions of large holdings for obtaining benefits meant for small farmers.

## 2.2 Area of Operational Holdings

The area under operational holdings was 2,11,93,900 hectares in 1970-71. It increased from census to census and was 2,21,91,000 hectares in 1990-91 or an increase of 4.70 per cent. The increase from census to census was not uniform. While the percentage increase in 1976-77 was 2.35 it was 3.48, 4.54 and 4.70 in the subsequent censuses. Although the increase with reference to base year census was continuous in different censuses the percentage increase in a census year over preceding census showed a decline. Thus the percentage increase in 1976-77 over 1970-71 was 2.35. In 1980-81 the increase over 1976-77 was lower (1.11). In the subsequent census years the increase was 1.02 and 0.16 respectively (Table 2.2).

Table 2.2 Area of operational holdings in different censuses, M.P.

S. No.	Year of census	Area of operational holdings (Hectares)	Percentage increase with reference to base year (1970-71)	Percentage increase over preceding census
1.	1970-71	2,11,93,900	-	-
2.	1976-77	2,16,91,198	2.35	2.35
3.	1980-81	2,19,31,118	3.48	1.11
4.	1985-86	2,21,55,302	4.54	1.02
5.	1990-91	2,21,91,000	4.70	0.16

## 2.3 Average size of Holdings

As the percentage increase in the number of operational holdings was much higher (58.53) than the percentage increase in the area of operational holdings (4.70) the average size of holding decreased. While the average size of holding was 4.00 hectares in 1970-71 it declined continuously in every subsequent census and was 2.64 hectares in 1990-91. It was observed that the percentage

decrease from first census (1970-71) to the last census (1990-91) was 34.00. Census to census variation indicated that from 1970-71 to 1976-77 the decrease was 10.50 per cent. From 1976-77 to 1980-81 the decrease was 4.47 per cent. The decrease from 1980-81 to 1985-86 was 14.91 per cent and that from 1985-86 to 1990-91 was 9.28 per cent. Thus it was observed that while the average size of holding declined from one census to another the rate of decline from census to census varied considerably (Table 2.3).

Table 2.3 Average size of operational holdings in different censuses, M.P.

S. No.	Year of census	Average size of holding (Hectares)	Percentage decrease with reference to base year	Percentage decrease with reference to previous census
1.	1970-71	4.00	-	-
2.	1976-77	3.58	10.50	10.50
3.	1980-81	3.42	14.50	4.47
4.	1985-86	2.91	27.25	14.91
5.	1990-91	2.64	34.00	9.28

#### 2.4 Percentage of Number of Holdings in Various Size Groups

It was noted that the percentage of number of holdings in marginal and small size groups increased during the last two decades. While the percentage of marginal holdings increased from 31.76 in 1970-71 to 37.33 in 1990-91, that of small holdings increased from 16.81 in 1970-71 to 22.82 in 1990-91. In the case of semi medium holdings the percentage of number was 20.14 in 1970-71 and increased to 20.92 in 1976-77 and to 21.39 in 1980-81. In the subsequent two censuses, however, the percentage decreased to 20.95 (1985-86) and 20.69 (1990-91). The percentages of number of holdings in medium and large size groups decreased with every census. In the case of medium size group the percentage decreased from 22.02 in 1970-71 to 15.32 in 1990-91. Similarly the percentage of number of large farms decreased steadily from 9.27 in 1970-71 to 3.84 in 1990-91.

It is concluded that during the last two decades the percentage of number of marginal and small holdings increased and that of medium and large farms decreased. In the case of semi-medium

holdings the percentage of number increased upto the census 1980-81. However, the percentage decreased in the later two censuses. Clearly there is an addition to the percentage of marginal and small holdings at the cost of medium and large farms (Table 2.4).

Table 2.4 Percentage of number of holdings in different size groups, agricultural censuses, M.P.

Size of holdings	1970-71	1976-77	1980-81	1985-86	1990-91
Marginal	31.76	32.53	32.80	35.94	37.33
Small	16.81	18.10	19.13	21.21	22.82
Semi medium	20.14	20.92	21.39	20.95	20.69
Medium	22.02	20.93	19.89	16.99	15.32
Large	9.27	7.52	6.79	4.91	3.84
Total	100.00	100.00	100.00	100.00	100.00

## 2.5 Percentage of Area of Holdings in Various Size Groups

It was noted that the percentage of area of marginal and small size groups increased during the last two decades. This was in line with the proportion of number of holdings. The percentage of area under marginal size group was 3.39 in 1970-71. It increased continuously from census to census and was 6.35 per cent in 1990-91. Similarly the percentage of area of area of small size group increased from census to census. It was 6.21 in 1970-71 and was 7.42, 8.17, 10.62 and 12.54 in the subsequent censuses respectively. In the case of semi medium size group also the proportion of area increased from census to census. It was 14.56 in 1970-71 and was 16.59, 17.65, 20.08 and 21.80 in later censuses respectively. Of course, there was slight deviation from the proportions of number of holdings. As was observed earlier the proportion of number of holdings in semi medium size group increased from first census to third census. However, in the fourth and fifth censuses the proportions decreased. In the case of medium size of holdings the proportion of area was 34.68 in 1970-71. It increased to 36.13 in 1976-77. However, in the subsequent censuses the proportion decreased continuously and was 35.91, 35.60 and 35.03 respectively. Thus there was slight variation from the percentage of number of holdings. As observed earlier the percentage of number of holdings decreased

continuously from first census to last census. In the case of large size group the percentage of area in the first census (1970-71) was 41.16. It decreased continuously from census to census and was 24.28 in the last (1990-91) census. This was in line with the trend of percentages of number of holdings.

Thus while the trends of percentages of number of holdings and area of holdings were similar for marginal, small (both increasing) and large size groups (both decreasing) the trends differed slightly for the two size groups of semi-medium and medium holdings.

In the case of semi medium size group the percentages of number of holdings increased from first census (20.14) to second census (20.92) and on to third census (21.39). But it decreased to 20.95 in fourth census and further to 20.69 in fifth census. On the other hand, the percentage of area increased continuously from census to census.

In the case of medium size group the percentages of number of holdings decreased continuously from first census to the last census. However, the percentages of area increased from first census to second but it decreased continuously in the later three censuses (Table 2.5).

Table 2.5 Percentage of area of operational holdings in different size groups in M.P.

S. No.	Size of holdings (Hectares)	1970-71	1976-77	1980-81	1985-86	1990-91
1.	Marginal	3.39	3.99	4.24	5.48	6.35
2.	Small	6.21	7.42	8.17	10.62	12.54
3.	Semi medium	14.56	16.59	17.65	20.08	21.80
4.	Medium	34.68	36.13	35.91	35.60	35.03
5.	Large	41.16	35.87	34.03	28.22	24.28
Total		100.00	100.00	100.00	100.00	100.00



## 2.6 Distribution of Holdings by Size Groups

The distribution of holdings was quite skewed. In 1970-71 nearly one third (31.76 per cent) of the total number of holdings were marginal but commanded only 3.39 per cent of the area. Small size holdings occupying 16.81 per cent of the total number commanded only 6.21 per cent of the area. In the case of semi medium size group the distribution was less skewed as these holdings constituted 20.14 per cent of total number and occupied 14.56 per cent of the area. The medium and large holdings were favourably placed. While medium size holdings contributing 22.02 per cent to the total number occupied 34.68 per cent of the area, large holdings constituting only 9.27 per cent occupied as high as 41.16 per cent of the area.

The skewness existed in all the censuses with varying degrees (Table 2.6). (See Lorenz curve and bar diagrammes also).

## 2.7 Land Holdings and Castes

Another aspect on which the data throws light is the relationship between the ownership of land holdings and castes.

The data on this aspect was available from 1980-81 census onwards. In 1980-81 the average size of holding was 3.421 hectares. It was smallest among the owners of scheduled castes (2.101 hectares). The size was 3.383 hectares among scheduled tribes owners and largest (3.709 hectares) among owners belonging to 'other' castes (Table 2.7).

This fact was noted in other two censuses also. Thus in 1985-86 the average size of holding was 2.914 hectares. It was smallest (1.831 hectares) among scheduled castes owners. It was higher (2.962 hectares) among scheduled tribes owners, and largest (3.116 hectares) among 'other' castes owners. (Table 2.8).

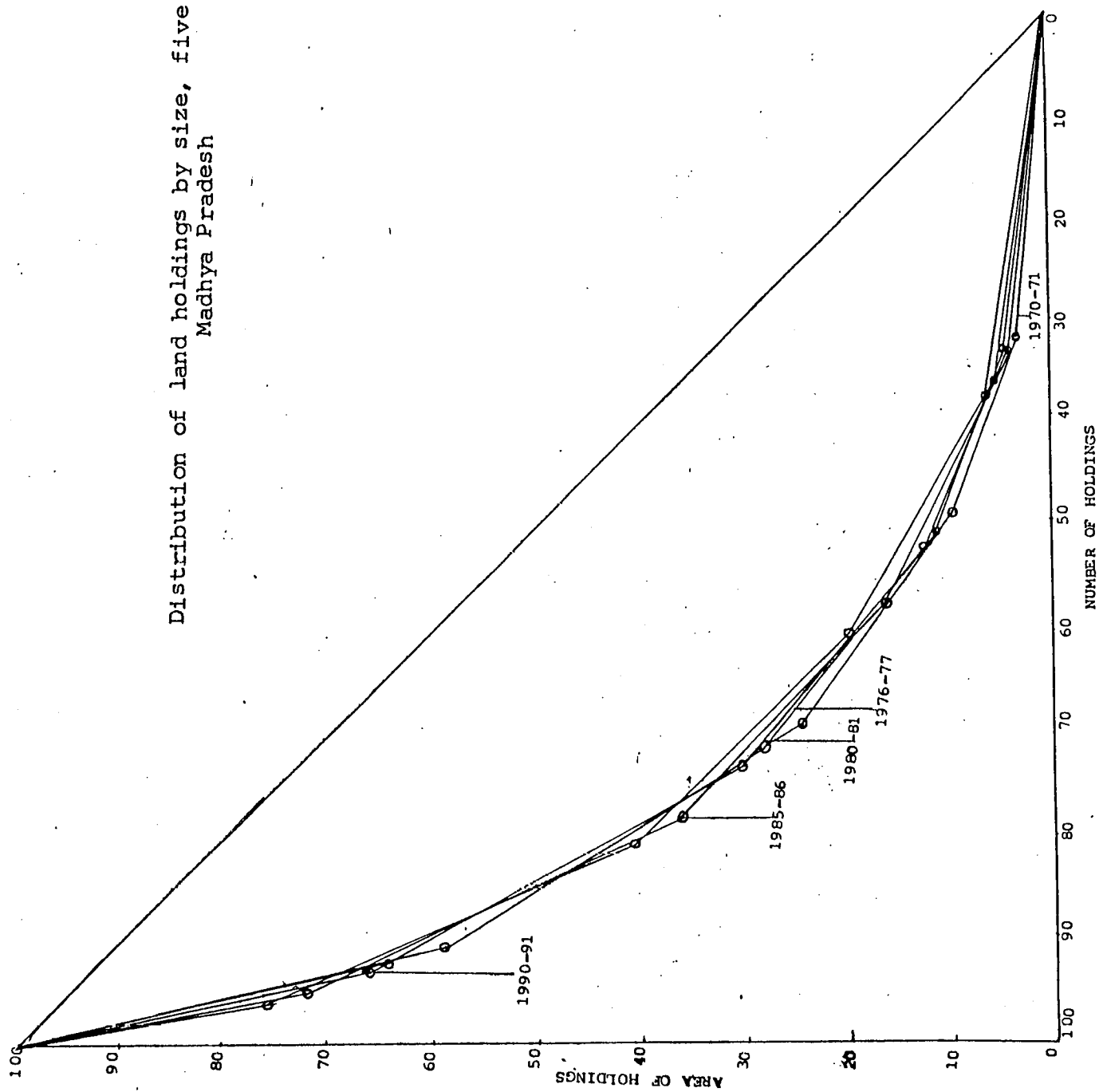
In 1990-91 census the average size of holding was 2.636 hectares. It was smallest or 1.704 hectares among scheduled castes owners, 2.681 hectares among scheduled tribes owners and 2.804 hectares among 'other' castes owners (Table 2.9).

Table 2.6 Percentages of number of holdings and area in different size groups, agricultural censuses, M. P.

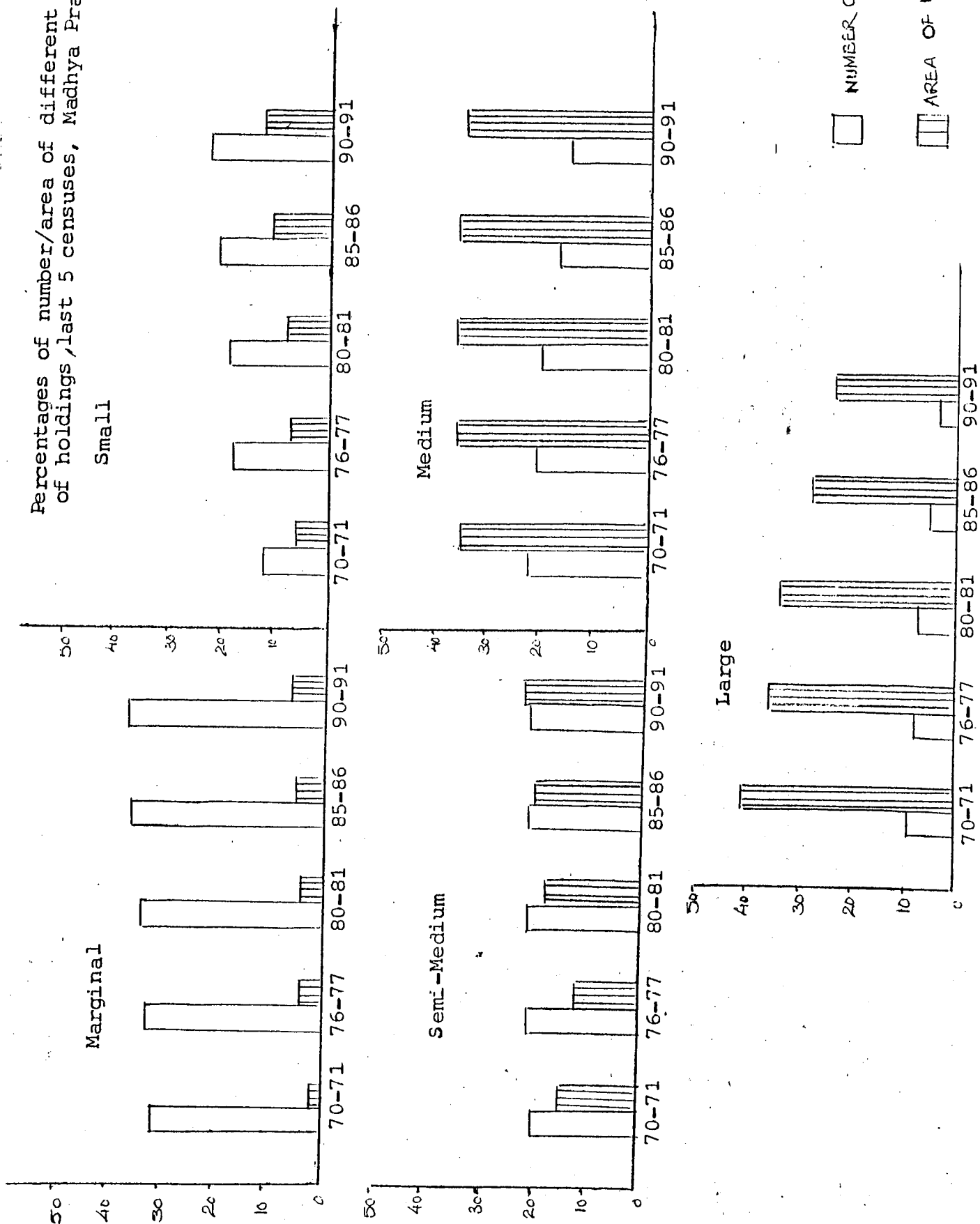
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Distribution of land holdings by size, five censuses,  
Madhya Pradesh



Percentages of number/area of different sizes of holdings, last 5 censuses, Madhya Pradesh







4

4

Table 2.9 Distribution of number and area of land holdings in different size groups by castes, Madhya Pradesh, 1990-91

Size class in Hectate	Number of Holdings			Area of Holdings			Average Size		
	S.C.	S.T.	Others	Total	S.C.	S.T. Others Total	%	S.C.	S.T. Others Total
0 - 1.00	494 (46.96)	694 (33.50)	1932 (36.82)	3120 (37.27)	221	319 862	6.4	0.447	0.460 0.446 0.449
1.01- 2.00	265 (25.19)	470 (22.68)	1175 (22.39)	1910 (22.82)	378	684 1711	12.6	1.426	1.455 1.456 1.425
2.01- 4.00	189 (17.96)	489 (23.60)	1,056 (20.13)	1,734 (20.71)	514	1,344 2,966	21.9	2.720	2.748 2.809 2.782
4.01-10.00	94 (8.94)	347 (16.75)	844 (16.09)	1,285 (15.35)	532	2,077 5,149	35.1	5.660	5.985 6.100 6.037
10.00& above	10 (0.95)	72 (3.47)	240 (4.57)	322 (3.85)	148	1,132 4,027	24.0	14.800	15.722 16.779 16.481
Total	1,052 (100.00)	2,072 (100.00)	5,247 (100.00)	8,371 (100.00)	1,793	5,556 14,715	100.00	1.704	2.681 2.804 2.636

SC = Scheduled Castes  
ST = Scheduled Tribes  
% = Percentage

It was noted that in 1980-81 largest percentage (41.95) of scheduled castes owners belonged to marginal farmers' category. Another 22.79 per cent of the scheduled castes farmers belonged to the category of small farmers. On the other hand 30.13 per cent of the scheduled tribes farmers belonged to marginal farmers' category and 31.98 per cent of 'other' castes farmers to that category. 'Other' castes farmers had lowest percentage of farmers in small farmers category.

Conversely, only 1.85 per cent of scheduled castes farmers belonged to large farmers' category. The percentage of scheduled tribes farmers belonging to this category was higher (6.26 per cent) and that of 'other' castes farmers was largest (8.02 per cent). (Table 2.7)

This phenomenon was observed in other two censuses, also.

In 1985-86, of the total scheduled castes farmers 45.50 per cent belonged marginal farmers' category. Of the scheduled tribes and 'other' castes farmers 32.64 and 35.31 per cent belonged to marginal farmers' category. Again, of the total scheduled castes farmers 24.20 per cent belonged to small farmers' category, whereas, this percentage for scheduled tribes and 'other' castes farmers was 20.85 and 20.74 respectively.

While only 1.24 per cent of the scheduled castes farmers belonged to large farmers' category the percentage of scheduled tribes and other castes farmers belonging large farmers' category was 4.66 and 5.76 respectively (Table 2.8).

In 1990-91 nearly 47 per cent (46.96) of the scheduled castes farmers belonged to the category of marginal farmers. This percentage for scheduled tribes and 'other' castes farmers was 33.50 and 36.82 respectively. In the small farmers' category 25.19 per cent of the scheduled castes farmers got represented, whereas, 22.68 and 22.39 per cent of scheduled tribes and 'other' caste farmers got clubbed in that category. Only 0.95 per cent of the scheduled castes farmers belonged to large farmers' category. In the case of scheduled tribes and other castes farmers the percentage was 3.47 and 4.57 respectively (Table 2.9).

Thus the farmers belonging scheduled tribes and other castes were better placed than scheduled castes farmers as far as distribution of land holdings by size groups was concerned. Between scheduled tribes and 'other' castes farmers, the latter category had an upper edge with regard to distribution of land holdings by size groups.

## 2.8 Trend in Selected Districts

As mentioned earlier Tikamgarh and Jhabua districts were selected for the study. Trend in operational holdings in these districts is narrated below.

### 2.8.1 Number of Holdings

In Tikamgarh district the number of holdings in 1970-71 was 107.8 thousand. The number increased to 149.0 thousand in 1990-91. It increased steadily from 1970-71 to 1985-86 but decreased slightly in the last census. The increase with reference to base year was 38.22 per cent. However, the rate of increase from one census to another declined. It declined from 15.12 per cent in 1975-76 to (-) 1.78 in 1990-91.

In Jhabua district the number of holdings in the base year (1970-71) was 64.0 thousand. It increased in subsequent censuses and was 144.4 thousand in 1990-91, an increase of 125.62 per cent, over the base year.

The rate of increase from census to census, however, decreased from 42.50 per cent in 1975-76 to 20.33 in 1990-91.

It would thus be observed that the increase in number of holdings in Jhabua district was much higher (125.62 per cent) than Tikamgarh district (38.22 per cent) (Table 2.10).

Table 2.10 Number of operational holdings in different censuses  
Tikamgarh and Jhabua districts, M.P.

Year	Tikamgarh			Jhabua		
	Number of operational holdings ('000)	Percentage increase with reference to base year (1970-71)	Percentage increase over preceding census	Number of operational holdings ('000)	Percentage increase with reference to base year (1970-71)	Percentage increase over preceding census
1970-71	107.8	-	-	64.0	-	-
1975-76	124.1	15.12	15.12	91.2	42.50	42.50
1980-81	137.8	27.83	11.03	97.7	52.65	7.12
1985-86	151.7	40.72	10.09	120.0	87.50	22.82
1990-91	149.0	38.22	1.78	144.4	125.62	20.33

### 2.8.2 Area of Operational Holdings

In Tikamgarh district area of operational holdings was 258.5 thousand hectares in 1970-71. It increased from census to census and was 281.0 thousand hectares in 1990-91. The percentage increase from base year to 1990-91 was 8.70. The rate of increase was 2.75 per cent from 1970-71 to 1975-76. It increased slightly in 1980-81 and was 3.39 per cent. Thereafter it decreased and stood at (-) 0.85 in 1990-91.

In Jhabua district the area of operational holdings was 341.6 thousand hectares in 1970-71. It increased from census to census and was 374.8 thousand hectares in 1990-91. In other words the increase in 1990-91 was 9.72 per cent as compared to base year. The rate of increase from census to census, in general, declined. (Table 2.11)

Table 2.11 Area of operational holdings in different censuses, Tikamgarh and Jhabua Districts, M.P.

Year of Census	Tikamgarh			Jhabua		
	Area of operational holdings ('000 hectares)	Percentage increase with reference to base year (1970-71)	Percentage increase over preceding census	Area of Operational holdings ('000 hectares)	Percentage increase with reference to base year (1970-71)	Percentage increase over preceding census
1970-71	258.5	-	-	341.6	-	-
1975-76	265.6	2.75	2.75	364.4	6.67	6.67
1980-81	274.6	6.23	3.39	368.6	7.90	1.15
1985-86	283.4	9.63	3.20	370.0	8.31	0.38
1990-91	281.0	8.70	0.85	374.8	9.72	1.30

### 2.8.3 Average Size of Holding

Higher percentage of increase in number of holdings than the area of holdings from census to census resulted in lowering of average size of holding from one census to another. Secondly smaller number of holdings and larger total area of operational holdings resulted in larger average size of holding in Jhabua district (5.337 hectares) than Tikamgarh district (2.397 hectares) (1971 census).

In both the districts the average size of holding decreased from census to census. In Tikamgarh district the average size was 1.886 hectares in 1990-91 and in Jhabua district, 2.596 hectares.



The decline in Tikamgarh district was 21.32 per cent and that in Jhabua district slightly more than 50 per cent (51.36 per cent).

In both the districts the rate of decline decreased from census to census. In Tikamgarh district the rate of decline decreased from 10.72 per cent to 0.96 per cent and that in Jhabua district from 25.15 to 15.80 per cent (Table 2.12).

Table 2.12 Average size of operational holding in different censuses, Tikamgarh and Jhabua districts, M.P.

Year of census	Tikamgarh			Jhabua		
	Average size of holding (Hectares)	Percentage decrease with reference to base year 1970-71	Percentage decrease with reference to previous census	Average size of holding (Hectares)	Percentage decrease with reference to base year 1970-71	Percentage decrease with reference to previous census
1970-71	2.397	-	-	5.337	-	-
1975-76	2.140	10.72	10.72	3.995	25.15	25.15
1980-81	1.992	16.90	6.92	3.772	29.32	5.58
1985-86	1.868	22.07	6.23	3.083	42.23	18.26
1990-91	1.886	21.32	0.96	2.596	51.36	15.80

#### 2.8.4 Percentage of Number of Holdings in Various Size Groups

In Tikamgarh district the percentage of number of holdings in marginal size group, in general, increased in every census. The percentage was 36.64 in 1970-71 and increased to 39.16 and 40.80 in subsequent two censuses. Thereafter, the percentage decreased to 39.70 and 38.59. In the case of small farmers' category the percentage increased from 22.82 in 1970-71 to 28.59 in 1990-91. In the case of semi medium farm size group the percentage, in general, decreased. It was 24.12 in 1970-71 and decreased steadily to 21.80 till 1985-86. It increased marginally to 22.15 per cent in 1990-91. In medium and large size groups also the percentage of number of holdings decreased from census to census till 1985-86. It marginally increased in the last census. It is thus concluded that during the last two decades the percentage of holdings, in general, in marginal

and small size groups increased and that in semi medium, medium and large size groups decreased with every census (Table 2.13).

Table 2.13 Percentage of number of holdings in different size groups, Tikamgarh district, M.P.

Category of holdings	1970-71	1976-77	1980-81	1985-86	1990-91
Marginal	36.64	39.16	40.80	39.70	38.59
Small	22.82	23.61	24.50	28.00	28.59
Semi medium	24.12	23.04	22.30	21.80	22.15
Medium	14.47	12.65	11.10	9.60	9.73
Large	1.95	1.54	1.30	0.50	0.94
Total	100.00	100.00	100.00	100.00	100.00

In Jhabua district similar trend was noticed. The percentage number of holdings in marginal size group increased from 16.09 in 1970-71 to 20.39 in 1975-76. In 1980-81 it decreased only marginally to 20.10 but again increased to 23.50 and 26.50 in last two censuses. In the case of small size group the percentage increased from 12.97 in 1970-71 to 27.70 with every census. In semi medium farms category the percentage increased from 20.47 in 1970-71 to 27.20 in 1985-86 with every census. In 1990-91, however, it decreased slightly and was 26.70. In medium and large farms categories the percentage of number of holdings showed a declining trend. (Table 2.14)

Table 2.14 Percentage of number of holdings in different size groups, Jhabua district, M.P.

Category of holdings	1970-71	1975-76	1980-81	1985-86	1990-91
Marginal	16.09	20.39	20.10	23.50	26.50
Small	12.97	17.33	19.30	23.50	27.70
Semi-medium	20.47	24.78	25.80	27.20	26.70
Medium	36.56	30.26	28.50	22.20	17.00
Large	13.91	7.24	6.30	3.60	2.10
Total	100.00	100.00	100.00	100.00	100.00

Thus in both the districts the percentage number of holdings in marginal and small farms categories increased. In both the districts the percentage in medium and large farms categories showed a declining trend.

The point of difference between the two districts was of semi medium size of farms. While in Tikamgarh district the percentage of farms in this category declined from census to census that in Jhabua district increased.

#### 2.8.5 Percentage of Area of Holdings in Various Size Groups

In Tikamgarh district the percentage of area in the marginal size group increased from 7.35 per cent in 1970-71 to 10.60 per cent in 1985-86. In the last census it decreased only marginally to be 10.43. In the case of small size group of farms the percentage of area in 1970-71 was 14.43. It increased steadily in the subsequent censuses and was 21.74 per cent in 1990-91. In semi medium size group the percentage of area increased from 29.36 in 1970-71 to 31.96 in 1990-91 with every census. With regard to medium and large farms' categories the data showed that the percentage of area holdings declined from census to census (Table 2.15).

Table 2.15 Percentage of area of operational holdings in different size groups, Tikamgarh district, M.P.

Category of holdings	1970-71	1976-77	1980-81	1985-86	1990-91
Marginal	7.35	8.36	9.30	10.60	10.43
Small	14.43	16.00	17.90	21.20	21.74
Semi medium	29.36	30.00	30.80	31.70	31.96
medium	35.82	33.82	31.40	28.90	28.47
Large	13.04	11.82	10.60	7.60	7.40
Total	100.00	100.00	100.00	100.00	100.00

Thus while marginal, small and semi medium farms categories had increased percentage of area medium and large categories had decreased share.

In Jhabua district similar situation prevailed. The percentage of area of holdings in marginal size group increased from

1.52 in 1970-71 to 5.71 in 1990-91. The percentage in small size group increased from 3.60 in 1970-71 to 15.69 in 1990-91. Similarly the percentage in semi medium size group increased from 11.30 to 29.00. Medium and large farm size groups, on the other hand showed declining trends. While the percentage in medium size group declined from 43.82 to 38.50 that in large size group declined from 39.76 to 11.10 (Table 2.16)

Table 2.16 Percentage of area of operational holdings in different size groups, Jhabua district, M.P.

Category of holdings	1970-71	1975-76	1980-81	1985-86	1990-91
Marginal	1.52	2.61	2.70	4.00	5.71
Small	3.60	6.42	7.50	11.10	15.69
Semi medium	11.30	17.95	19.50	25.10	29.00
Medium	43.82	46.95	46.60	43.40	38.50
Large	39.76	26.07	23.70	16.40	11.10
Total	100.00	100.00	100.00	100.00	100.00

In conclusion we can say that percentages of number of holdings as well as area increased in marginal and small size groups. The percentages of both number and area decreased in medium and large size groups. There is a shift from large and medium size farms to small and marginal farms.

#### 2.8.6 Distribution of Holdings by Size Groups

Distribution of holdings by size groups was quite skewed in both the districts.

In Tikamgarh district, in 1970-71 marginal farms constituted highest percentage (36.64) of number of holdings. However, the area occupied by these holdings was only 7.35 per cent. Another 22.82 per cent holdings belonging to small size group occupied far less percentage of area (14.43 per cent). Semi medium farms numbered 24.12 per cent but occupied higher percentage (29.36) of area. Medium size farms on the other hand, formed 14.47 per cent of the total number but occupied much higher percentage (35.82) of the area. Large farm size holdings were still more advantageously placed. Mere 1.95 per cent of the total number occupied 13.04 per cent of the area (Table 2.17).

Table 2.17 Percentage of number of holdings and area in different size groups, agricultural censuses, Tikamgarh district, Madhya Pradesh

[illegible]

This skewness in distribution of holdings was observed in all the Censuses with varying degree.

In Jhabua district, in 1970-71 marginal farms constituted 16.09 per cent in number but occupied an area of only 1.52 per cent. Small farms which formed 12.97 per cent had 3.60 per cent of area under these. Semi medium farms also had lesser proportion of area than number. On the other hand 36.56 per cent of medium size farms occupied 43.82 per cent of area and the largest size group had 13.91 per cent of number against 39.76 per cent of area.

The skewness existed in all the census years, Semi medium size group had, in 1990-91, larger proportion of area than the number (Table 2.18). (See Lorenz curves and bar diagrammes).

#### 2.8.7 Land Holdings and Castes

In Tikamgarh district the average size of holding in 1980-81 was 1.991 hectares. The average size among scheduled castes farmers was 1.712 hectares. It was higher (1.849 hectares) among scheduled tribes farmers and highest (2.066 hectares) among 'other' castes farmers.

Distribution of holdings by castes among size groups showed that 'other' castes farmers had highest proportion (41.54) of marginal farmers. Scheduled tribes farmers had 31.58 per cent farmers belonging to marginal farmers' category and scheduled castes farmers had 39.18 per cent farmers belonging to that category. 'Other' castes farmers had least proportion (23.28) of farmers belonging to small farmers' category. Scheduled tribes farmers had 32.43 per cent and scheduled castes farmers had 28.38 per cent farmers belonging to small farmers' category. 'Other' castes farmers had least proportion (21.52) belonging to semi medium size group. Scheduled tribes had 29.14 per cent and scheduled castes, 24.24 per cent.

On the other hand 'Other' castes farmers had largest proportions of farmers belonging to medium and large farmers' categories. Scheduled castes farmers had second largest proportions of farmers belonging to these categories. Scheduled tribes farmers had least proportions (Table 2.19).

Table 2.18 Percentage of number of holdings and area in different size groups, agricultural censuses, Jhabua district, Madhya Pradesh

[illegible]

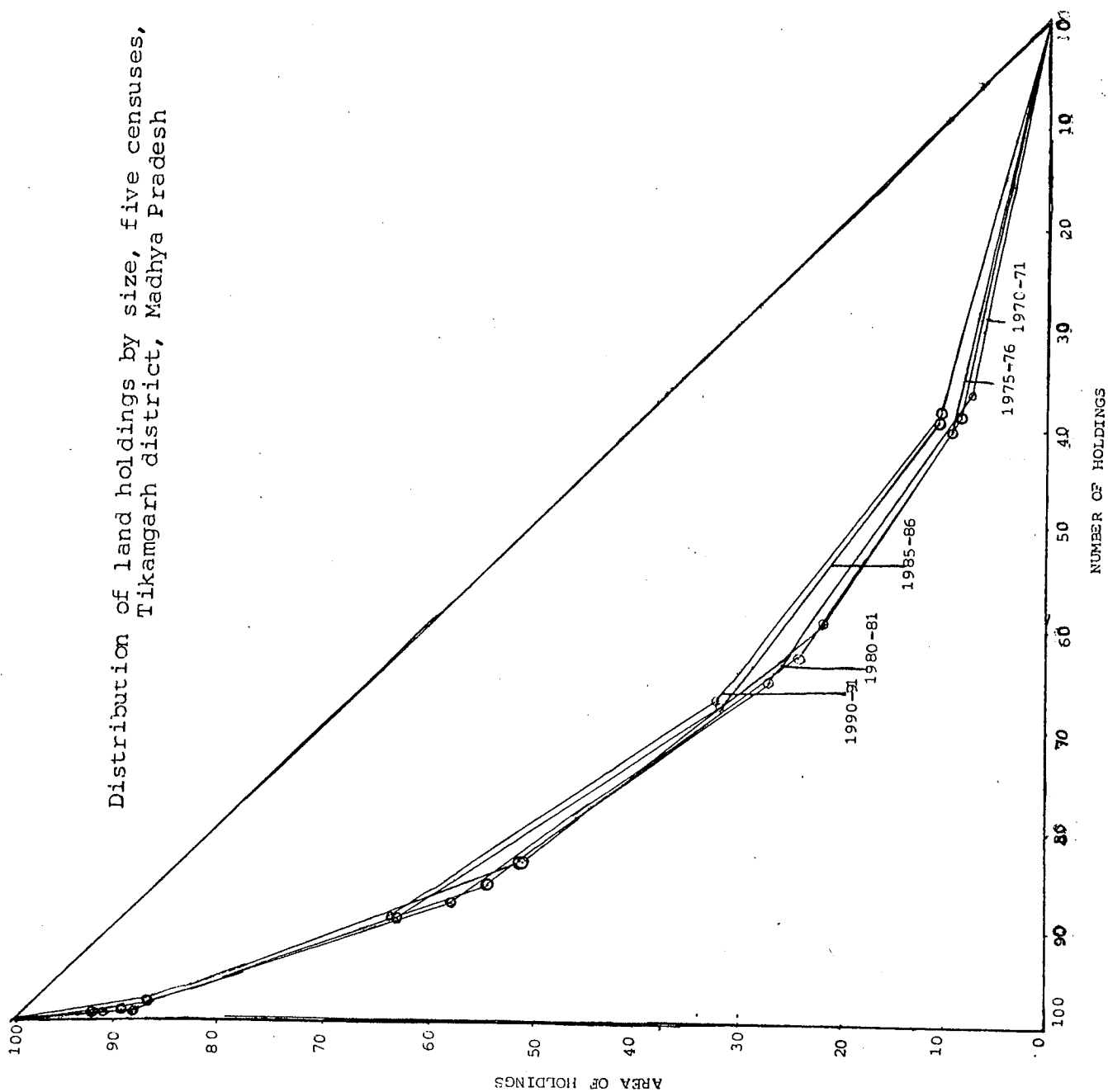
Table 2.19 Distribution of number and area of land holdings in different size groups by castes, Tikamgarh district, M.P., 1980-81

Size class in hectares	Number of Holdings				Area of Holdings				Average size				
	S.C.	S.T.	Others	Total	S.C.	S.T.	Others	Total	%	S.C.	S.T.	Others	Total
0 - 1.00	10,431 (39.18)	1,304 (31.58)	44,499 (41.54)	56,234 (40.79)	5,134	717	19,687	25,538	9.30	0.492	0.549	0.442	0.454
1.01 - 2.00	7,554 (28.38)	1,339 (32.43)	24,937 (23.28)	33,830 (24.54)	10,939	1,949	36,389	49,277	17.90	1.448	1.455	1.459	1.456
2.01 - 4.00	6,481 (24.34)	1,203 (29.14)	23,052 (21.52)	30,736 (22.29)	17,286	3,021	64,404	84,711	30.80	2.677	2.511	2.793	2.756
4.01 - 10.00	2,051 (7.70)	258 (6.24)	12,980 (12.12)	15,289 (11.09)	10,716	1,344	74,087	86,147	31.40	5.224	5.209	5.707	5.634
10.01 & above	105 (0.40)	25 (0.60)	1,647 (1.54)	1,777 (1.29)	1,526	607	26,822	28,955	10.60	14.533	24.280	16.285	16.294
Total	26,622 (100.00)	4,129 (100.00)	1,07,115 (100.00)	1,37,866 (100.00)	45,601	7,638	2,21,349	2,74,628	100.00	1.712	1.849	2.066	1.991

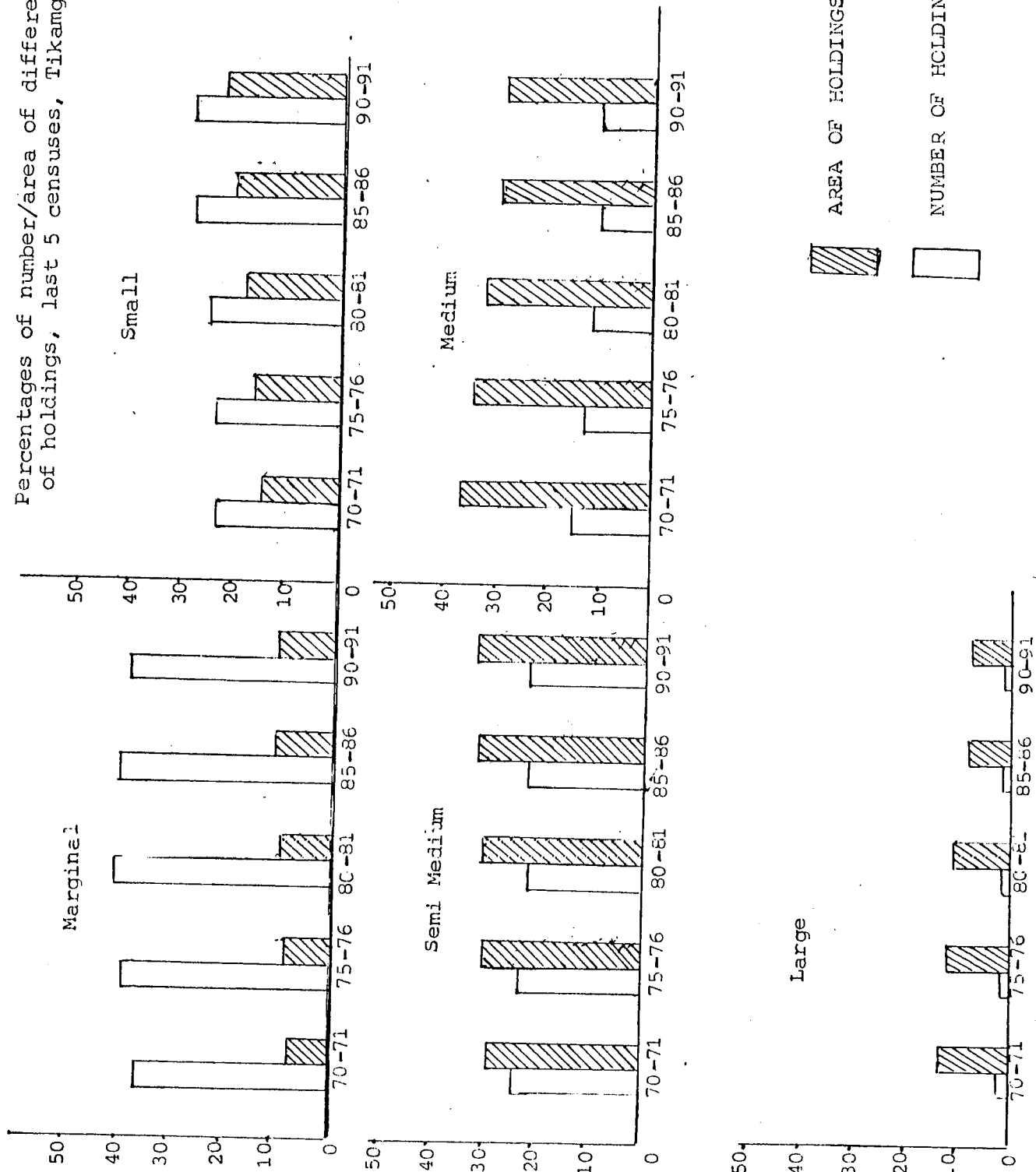
S.C. = Scheduled Castes  
S.T. = Scheduled Tribes  
% = Percentage



Distribution of land holdings by size, five censuses,  
Tikamgarh district, Madhya Pradesh



Percentages of number/area of different sizes of holdings, last 5 censuses, Tikamgarh district



In 1985-86 the average size of holding was 1.867 hectares. It was 1.577 hectares among scheduled castes farmers, 1.609 hectares among scheduled tribes farmers and 1.955 hectares among 'other' castes farmers. Thus the average size of holding was lowest among scheduled castes farmers, higher among scheduled tribes farmers and highest among 'other' castes farmers.

The proportion of number of 'other' castes farmers among marginal and small categories was least (66.51). It was higher among scheduled tribes farmers (71.34) and highest (71.69) among scheduled castes farmers.

Against this the 'other' castes farmers had highest proportion (11.93) among medium and large size categories. The proportion was lower (6.03) among scheduled castes farmers and lowest (5.33) among scheduled tribes farmers (Table 2.20).

Since Tikamgarh district had very little percentage of scheduled tribes farmers it can be said that the farmers belonging to 'other' castes category were better placed than the scheduled castes farmers.

In Jhabua district, in 1980-81, the average size of holding was 3.774 hectares. It was 2.268 hectares among scheduled castes farmers, 3.791 hectares among scheduled tribes farmers and 3.995 hectares among 'other' castes farmers. Thus the average size of holding was smallest among scheduled castes farmers, larger among scheduled tribes farmers and largest among 'other' castes farmers.

It was further noticed that the proportion of scheduled castes farmers among marginal and small size groups was higher (58.02) than scheduled tribes and other castes farmers (about 39 per cent each).

On the other hand the proportions of numbers of scheduled castes farmers among medium and large categories were much lower (20.32) than scheduled tribes and other castes farmers (about 34 per cent each) (Table 2.21).

Table 2.20 Distribution of number and area of land holdings in different size groups by castes, Tikamgarh district, M.P., 1985-86

Size Class in hectares	Number of Holdings			Area of Holdings			Average Size						
	S.C.	S.T.	Others	Total	S.C.	S.T.	Others	Total	%	S.C.	S.T.	Others	Total
0 - 1.00	11,827 (39.19)	1,919 (34.58)	46,582 (40.15)	60,328 (39.76)	6,373	1,135	22,554	30,062	10.6	0.538	0.591	0.484	0.498
1.01 - 2.00	9,808 (32.50)	2,040 (36.76)	30,584 (26.36)	42,432 (27.96)	13,621	2,791	43,673	60,085	21.2	1.388	1.368	1.427	1.416
2.01 - 4.00	6,723 (22.28)	1,295 (23.33)	25,000 (21.55)	33,018 (21.76)	17,612	3,238	69,000	89,850	31.7	2.619	2.500	2.760	2.721
4.01 - 10.00	1,767 (5.85)	284 (5.12)	12,472 (10.75)	14,523 (9.57)	9,239	1,495	71,014	81,748	28.9	5.228	5.264	5.693	5.628
10.00 & above	56 (0.18)	12 (0.21)	1,373 (1.18)	1,441 (0.95)	768	273	20,610	21,651	7.6	13.714	22.750	15.010	15.025
Total	30,181 (100.00)	5,550 (100.00)	1,16,011 (100.00)	1,51,742 (100.00)	47,613	8,932	2,26,851	2,83,396	100.0	1.577	1.609	1.955	1.967

S.C. = Scheduled Castes  
S.T. = Scheduled Tribes  
% = Percentage

Size class in hectares	Number of Holdings			Area of Holdings			Average Size						
	S.C.	S.T.	Others	Total	S.C.	S.T.	Others	Total	%	S.C.	S.T.	Others	Total
0 - 1.00	725 (36.67)	17,559 (19.73)	1,385 (20.61)	19,669 (20.14)	325	9,197	607	10,129	2.7	0.448	0.524	0.438	0.515
1.01- 2.00	422 (21.35)	17,158 (19.28)	1,246 (18.54)	18,826 (19.28)	611	25,025	1,831	27,467	7.4	1.447	1.458	1.469	1.459
2.01- 4.00	428 (21.66)	23,053 (25.92)	1,696 (25.24)	25,177 (25.77)	1,168	65,925	4,943	72,036	19.5	2.729	2.860	2.914	2.861
4.01- 10.00	374 (18.91)	25,530 (28.69)	1,931 (28.75)	27,835 (28.50)	2,013	1,58,149	11,964	1,72,126	46.6	5.382	6.194	6.195	6.183
10.01 & above	28 ( 1.41)	5,678 ( 6.38)	461 ( 6.86)	6,167 ( 6.31)	367	79,055	7,500	86,922	23.7	13.107	13.923	16.269	14.094
Total	1,977 (100.00)	88,978 (100.00)	6,719 (100.00)	97,674 (100.00)	4,484	3,37,351	26,845	3,68,680	100.0	2.268	3.791	3.995	3.774

S.C. = Scheduled Castes  
S.T. = Scheduled Tribes  
% = Percentage

Similar phenomenon was seen in 1985-86. In that year the average size of holding was 3.083 hectares. In the case of scheduled castes farmers the average size was 1.951 hectares and that in scheduled tribes farmers, 3.093 hectares. In the case of 'other' castes farmers the average size was highest (3.268 hectares).

The distribution of farmers among different size groups showed that 64.86 per cent of the scheduled castes farmers belonged to the categories of marginal and small farmers. Against this the percentage of scheduled tribes farmers belonging to those categories was 46.54 and that of 'other' castes farmers, 47.79.

In the case of medium and large size groups the representation of scheduled castes farmers was only 13.97 per cent. The representation of scheduled tribes farmers was 25.96 per cent and 'other' castes farmers, 27.59 per cent (Table 2.22).

It is thus concluded that in both the districts the average size of holding of 'other' castes farmers was larger than both scheduled castes and scheduled tribes farmers. It also revealed that larger percentages of farmers of scheduled castes and scheduled tribes belonged to marginal and small size categories than 'other' castes farmers. On the other hand, larger percentages of farmers from 'other' castes belonged to medium and large size categories than scheduled castes and scheduled tribes farmers.

For 1990-91 census data on distribution of number and area of holdings was not available by size groups.

It was noted that in Tikamgarh district the average size of holding was 1.9 hectares. It was smallest (1.6 hectares) for scheduled castes farmers. The average size of holding was largest (2.0 hectares) among 'other' castes farmers (Table 2.23).

In Jhabua district the average size of holding was 2.6 hectares. It was smallest (1.7 hectares) in scheduled castes farmers and was larger (2.6 hectares) in scheduled tribes farmers. The average size was largest (3.0 hectares) in 'other' castes farmers (Table 2.24).

Table 2.22 Distribution of number and area of land holdings in different size groups by castes, Jhabua district, M.P., 1985-86

Size Class in hectares	Number of Holdings			Area of Holdings			Total	%	Average Size		
	S.C.	S.T.	Others	S.C.	S.T.	Others			S.C.	S.T.	Others
0 - 1.00	940 (41.30)	25,246 (22.96)	1,988 (25.67)	417	13,664	870	28,174 (23.47)	4.0	0.443	0.541	0.437
1.01 - 2.00	536 (23.56)	25,946 (23.58)	1,713 (22.12)	757	38,001	2,538	28,195 (23.49)	11.1	1.412	1.464	1.481
2.01 - 4.00	482 (21.17)	30,260 (27.50)	1,907 (24.62)	1,284	86,166	5,394	32,649 (27.20)	25.1	2.664	2.847	2.828
4.01 - 10.00	292 (12.83)	24,628 (22.38)	1,757 (22.69)	1,646	1,48,044	10,761	26,677 (22.22)	43.4	5.637	6.011	6.124
10.01 & above	26 (1.14)	3,941 (3.58)	379 (4.90)	338	54,448	5,743	4,346 (3.62)	16.4	13.000	13.815	15.153
Total	2,276 (100.00)	1,10,021 (100.00)	7,744 (100.00)	4,442	3,40,323	25,306	1,20,041 (100.00)	1.7	1.951	3.093	3.268
											3.083

S.C. = Scheduled Castes  
S.T. = Scheduled Tribes  
% = Percentage

Table 2.23 Distribution of number and area of land holdings  
by castes, Tikamgarh district, Madhya Pradesh,  
1990-91

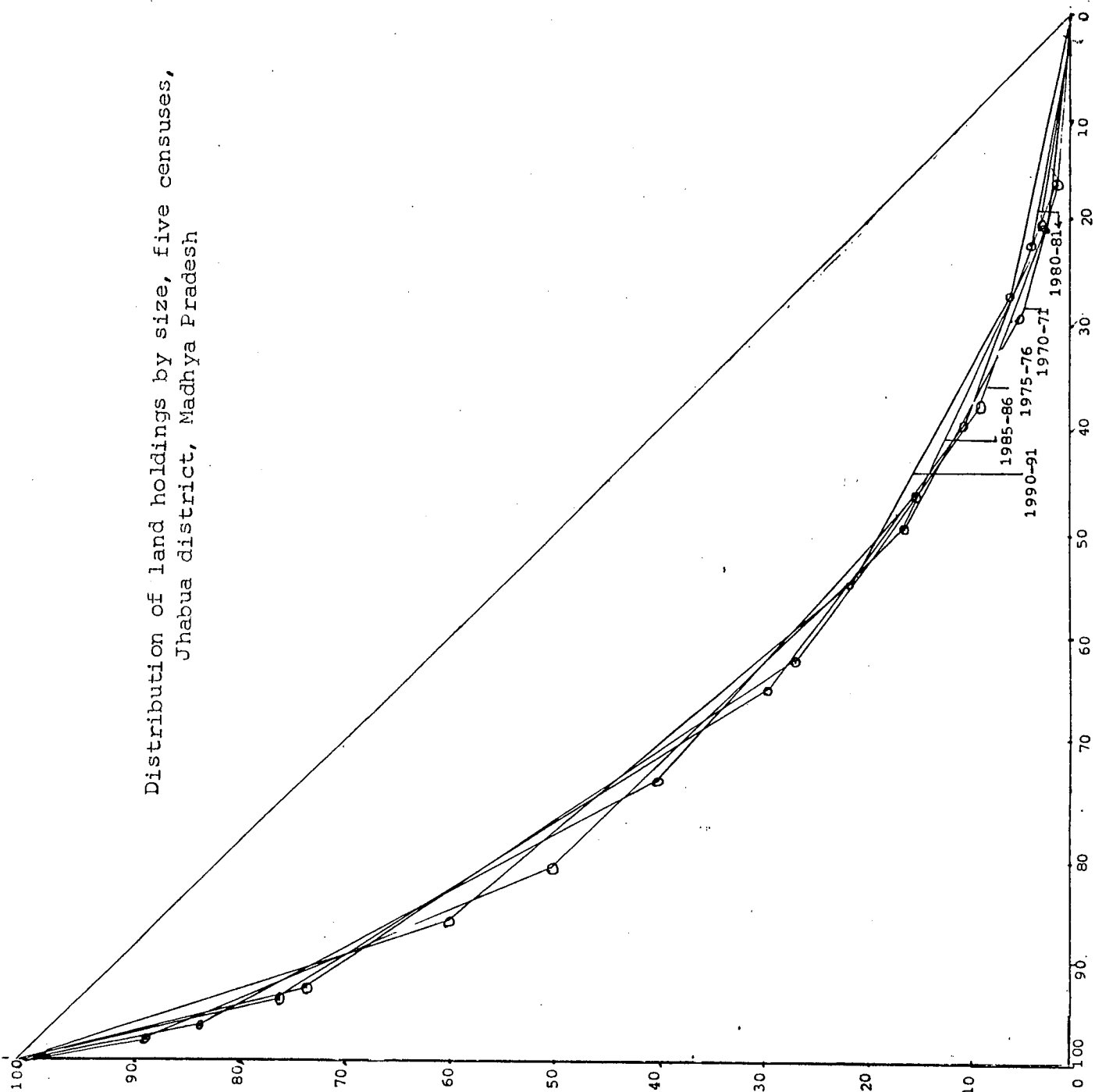
(Area - Hectares)			
Castes group	Number of holdings	Area of holdings	Average size of holdings
Scheduled Castes	29,668	48,030	1.6
Scheduled Tribes	5,127	8,666	1.7
Other Castes	1,14,246	2,24,346	2.0
Total	1,49,041	2,81,042	1.9

Table 2.24 Distribution of number and area of land holdings  
by castes, Jhabua district, Madhya Pradesh,  
1990-91

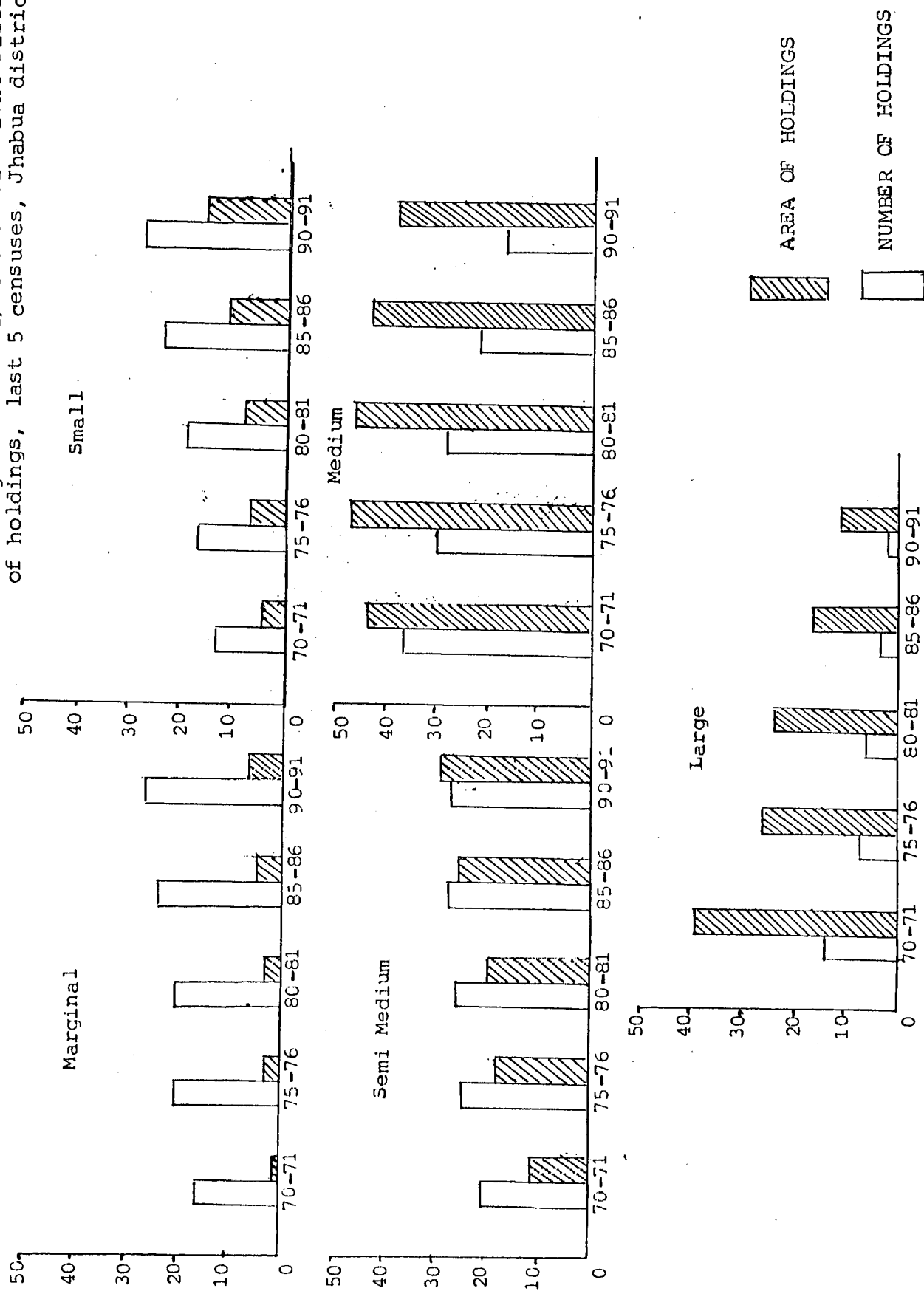
(Area- Hectares)			
Caste group	Number of holdings	Area of holdings	Average size of holding
Scheduled Castes	2,589	4,330	1.7
Scheduled Tribes	1,33,489	3,45,815	2.6
Other Castes	8,323	24,722	3.0
Total	1,44,401	3,74,867	2.6



Distribution of land holdings by size, five censuses,  
Jhabua district, Madhya Pradesh



Percentages of number/area of different sizes of holdings, last 5 censuses, Jhabua district



## 2.9 Additional Information in Agricultural Census 1990-91

We have discussed the details of total number of holdings and area occupied. Distribution of holdings and area by size groups was narrated. The other dimension described was number of holdings and area by size groups and by castes. This information was collected for all the villages of the state. However, information on ownership, land use, irrigated area, source wise irrigated holdings and area, irrigated area under different crops was collected in 1990-91 in 20 per cent of the selected villages. These were further estimated for tehsil, district and state.

The description on these items for the state as a whole follows.

### 2.9.1 State Level Information

#### 2.9.1.1 Single, Joint and Institutional Holdings

Of the total holdings of 84.01 lakhs, 74.23 lakhs or 88.3 per cent were single holdings. Another 9.73 lakhs or 11.6 per cent were joint holdings and the remaining 0.1 per cent were institutional holdings. The proportions of area occupied by the three categories, were about equal to the proportions of number. Thus 84.7 per cent area was under single holdings, 14.9 per cent under joint holdings and 0.4 per cent under institutional holdings (Table 2.25).

Table 2.25 Single, joint and institutional holdings, M.P. 1990-91

S. No.	Type of holdings	Number (lakhs)	Percentage	Area (Lakh hectares)	Percentage
1.	Single	74.23	88.3	187.32	84.7
2.	Joint	9.73	11.6	32.97	14.9
3.	Institutional	0.05	0.1	0.82	0.4
Total		84.01	100.0	221.11	100.0

It was observed that of the 74.23 lakh single holdings, 37.9 per cent belonged to marginal size group, 23.3 per cent to small size group and 20.6 per cent to semi medium size group. Thus single holdings were concentrated in smaller size groups.

Of the 9.73 lakh joint holdings one third belonged to marginal size group, 19.3 per cent to small size group, 21.3 per cent to semi medium size group and 19.4 per cent to medium size group. Thus joint holdings were about equally distributed in all the size groups (Table 2.26)

Table 2.26 Distribution of single and joint holdings in different size groups, M.P. 1990-91.

Size group	Single Holdings		Joint Holdings	
	Number (lakhs)	Percentage	Number (lakhs)	Percentage
Marginal	28.10	37.9	3.24	33.3
Small	17.28	23.3	1.88	19.3
Semi medium	15.31	20.6	2.07	21.3
Medium	10.98	14.8	1.89	19.4
Large	2.56	3.4	0.65	6.7
Total	74.23	100.0	9.73	100.0

The distribution of area under single holdings in different size groups showed that 6.7 per cent of the area was under marginal size group. The percentage of area increased in subsequent size groups and was 35.2 in the medium size group. In the large size group, however, the percentage decreased to 22.0. Similar trend was noted in the case of distribution of area under joint holdings. The percentage of area increased from 4.4 in the marginal size group to 35.4 in the medium size group with the increase in size. In the large size group the percentage declined slightly to 34.1 (Table 2.27).

Table 2.27 Distribution of area under single and joint holdings in different size groups, M.P., 1990-91

S. No.	Size group	Single holdings		Joint holdings	
		Area (lakh hectares)	Percentage	Area (lakh hectares)	Percentage
1.	Marginal	12.64	6.7	1.44	4.4
2.	Small	25.08	13.4	2.74	8.3
3.	Semi medium	42.48	22.7	5.88	17.8
4.	Medium	66.00	35.2	11.66	35.4
5.	Large	41.12	22.0	11.25	34.1
	Total	187.32	100.0	32.97	100.0

Since the institutional holdings were only 0.05 lakhs the distribution of number and area under these in different size groups has been given in absolute figures. It was noted that institutional holdings were dominant in two size groups. In marginal size group these formed 28.0 per cent of the total number and in large size group 26.9 per cent. The percentage of area occupied was only 0.9 in marginal size group and 88.1 in large size group (Table 2.28).

Table 2.28 Distribution of number and area under institutional holdings in different size groups, M.P. 1990-91

S. No.	Size group	Institutional Holdings			
		Number of holdings	Percentage	Area (Hectares)	Percentage
1.	Marginal	1,546	28.0	704	0.9
2.	Small	774	14.0	1,090	1.3
3.	Semi medium	798	14.5	2,224	2.3
4.	Medium	915	16.6	5,774	7.0
5.	Large	1,480	26.9	72,851	88.1
Total		5,513	100.0	82,643	100.0

The data also gives distribution of single, joint and institutional holdings by castes. It was seen that 89 per cent of the holdings of scheduled castes farmers were single and occupied 85.6 per cent area. Another 11.0 per cent holdings were joint and occupied 13.9 per cent area. The institutional holdings of scheduled castes were negligible. In the case of holdings of the scheduled tribes 91.5 per cent of the total number were single holdings. These occupied 85.1 per cent of the area. Further, 8.5 per cent of the holdings were joint and occupied 14.7 per cent of the area. Institutional holdings were negligible. Thus in scheduled castes and scheduled tribes farmers single holdings formed about 90 per of the total number and about 85 per cent of the total area (Table 2.29).

Table 2.29 Distribution of number and area of holdings of scheduled castes and scheduled tribes by type of operation i.e. single, joint and institutional, M.P. 1990-91

S. No.	Holdings	Scheduled castes				Scheduled tribes			
		No. of holdings (in lakhs)	Percentage	Area (lakh hect.)	Percentage	No. of holdings (in lakhs)	Percentage	Area (lakh hect.)	Percentage
1.	Single	9.40	89.0	15.38	85.6	19.00	91.5	47.35	85.1
2.	Joint	1.16	11.0	2.49	13.9	1.77	8.5	8.20	14.7
3.	Institutional	Neg.	-	0.09	0.5	Neg.	-	0.09	0.2
Total		10.56	100.0	17.96	100.0	20.77	100.0	55.64	100.0

#### 2.9.1.2 Ownership of Holdings

The holdings could be owned and operated in 4 different ways-

1. Entirely owned and operated,
2. Entirely taken on lease,
3. Entirely operated in other ways,
4. Partly owned/partly leased in/partly operated in other ways

It was found that as high as 92.4 per cent of the total holdings were entirely owned and operated by self. Such holdings occupied 90.6 per cent of the area. Holdings partly owned/partly leased in and partly operated in other ways were 4.61 per cent of the total number and occupied 8.4 per cent of the area (Table 2.30).

Table 2.30 Distribution of number and area of holdings by type of ownership and operation, M.P. 1990-91

S. No.	Type of ownership and operation	Number of Holdings (lakhs)	Percentage	Area of holdings (lakh hectares)	Percentage
1.	Entirely owned and operated	77.66	92.4	200.29	90.6
2.	Entirely taken on lease	0.14	0.2	0.42	0.2
3.	Entirely operated in other ways	1.60	1.9	1.86	0.8
4.	Partly owned/partly leased in/partly operated in other ways	4.61	5.5	18.54	8.4
Total		84.01	100.0	221.11	100.0

### 2.9.1.3 Conditions of Lease

The land was leased in on 5 different conditions. There was difference between the categories of leasing and conditions of leasing. In both the categories of leasing "other conditions" were most important. In the case of partly owned and partly leased in land "other conditions" were applicable on 46 per cent of the area. In the case of entirely leased in area "other conditions" were applicable on 70.8 per cent of the area. In the category partly owned and partly leased in, "fixed amount" was charged on 23.4 per cent of the area and 22.9 per cent of the area was leased in on the condition of the part of the production. These conditions were important in the case of area entirely taken on lease. The area covered under these two conditions was 15.0 and 10.4 per cent respectively (Table 2.31).

Table 2.31 Conditions of leasing in of land, different types of leasing, M.P., 1990-91

S. No.	Condition of leasing in	Partly owned and partly leased in (Hectares)	Percentage	Entirely leased in (Hectares)	Percentage
1.	Fixed amount	11,265	23.4	6,270	15.0
2.	Fixed production	1,894	3.9	890	2.1
3.	Share of production	11,042	22.9	4,337	10.4
4.	Mortgage	1,811	3.8	697	1.7
5.	Other conditions	22,189	46.0	29,540	70.8
Total		48,201	100.0	41,734	100.0

### 2.9.1.4 Irrigation

Of the 84.01 lakh holdings 51.78 lakh or 61.6 per cent were totally unirrigated. Partly irrigated and partly unirrigated holdings were 23.77<sup>lakh</sup> or 28.3 per cent. The area occupied by totally unirrigated holdings was 46.1 per cent and that by partly irrigated and partly unirrigated holdings, 36.8 per cent (Table 2.32).

Table 2.32 Number and area of holdings according to irrigation status, M.P., 1990-91

S. No.	Particulars	Number of holdings (lakhs)	Percentage	Area of holdings (lakh hectares)	Percentage
1.	Entirely irrigated	7.45	8.9	10.31	4.7
2.	Entirely unirrigated	51.78	61.6	102.05	46.1
3.	Partly irrigated/Unirrigated	23.77	28.3	81.36	36.8
4.	Others	1.01	1.2	27.39	12.4
Total		84.01	100.0	221.11	100.0

## 2.9.2 Selected Districts Level Information

### 2.9.2.1 Single, Joint and Institutional Holdings

In Tikamgarh district single and joint holdings shared about equal percentage of 50.04 and 49.92 in number. The area covered by these was in about equal proportions of 47.07 and 52.40 (Table 2.33).

Table 2.33 Single, joint and institutional holdings, Tikamgarh district, M.P., 1990-91

S.No.	Type of Holdings	Number	Percentage	Area (Hectares)	Percentage
1.	Single	74,572	50.04	1,32,281	47.07
2.	Joint	74,405	49.92	1,47,260	52.40
3.	Institutional	64	0.04	1,501	0.53
Total		1,49,041	100.00	2,81,042	100.00

In Jhabua district, on the other hand, nearly all the holdings (99.70 per cent) were single covering nearly entire (99.09 per cent) area. The institutional holdings in both the districts were negligible (Table 2.34).



Table 2.34 Single, joint and institutional holdings,  
Jhabua district, M.P., 1990-91

S.No.	Type of holdings	Number	Percentage	Area (Hectares)	Percentage
1.	Single	1,43,963	99.70	3,71,441	99.09
2.	Joint	402	0.28	3,011	0.80
3.	Institutional	36	0.02	415	0.11
Total		1,44,401	100.00	3,74,867	100.00

2.9.2.2 Ownership of Holdings

In Tikamgarh district 93.79 per cent of the holdings were entirely owned and operated by self. These occupied nearly equal percentage of land (94.76). Partly owned/partly leased in holdings formed 3.26 per cent of the total number and 3.75 per cent of the total area (Table 2.35).

Table 2.35 Distribution of number and area of holdings by type of  
ownership and operation, Tikamgarh district, M.P. 1990-91

S.No.	Type of Ownership and operation	Number of holdings	Percentage	Area (Hectares)	Perce- tage
1.	Entirely owned and operated	1,39,793	93.79	2,66,304	94.76
2.	Entirely taken on lease	23	0.02	67	0.02
3.	Entirely operated in other ways	4,362	2.93	4,135	1.47
4.	Partly owned/ partly leased in/ partly operated in other ways	4,863	3.26	10,536	3.75
Total		1,49,041	100.00	2,81,042	100.00

In Jhabua district entirely owned and operated holdings were 77.18 per cent and occupied 77.09 per cent of the area. Unlike Tikamgarh district partly owned/partly leased in holdings formed considerable percentage (16.30) of holdings and constituted 20.75 per cent of the area (Table 2.36).

Table 2.36 Distribution of number and area of holdings by type of ownership and operation, Jhabua district, M.P. 1990-91

S. No.	Type of ownership and operation	Number of holdings	Percentage	Area (Hectares)	Percentage
1.	Entirely owned and operated	1,11,438	77.18	2,88,983	77.09
2.	Entirely taken on lease	363	0.25	444	0.12
3.	Entirely operated in other ways	9,060	6.27	7,632	2.04
4.	Partly owned/ partly leased in/ partly operated in other ways	23,540	16.30	77,808	20.75
Total		1,44,401	100.00	3,74,867	100.00

2.9.2.3 Conditions of lease

In Tikamgarh district while 90 per cent of the partly owned and partly leased in holdings were under "other conditions" of leasing wholly leased in holdings had share of production as the only condition of leasing (Table 2.37).

Table 2.37 Conditions of leasing in of land, different types of leasing, Tikamgarh district, M.P., 1990-91

S. No.	Condition of leasing	Partly owned and partly leased in (Hectares)	Percentage	Entirely leased in (Hectares)	Percentage
1.	Fixed amount	-	-	-	-
2.	Fixed production	-	-	-	-
3.	Share of production	1	10.00	67	100.00
4.	Mortgage	-	-	-	-
5.	Other conditions	9	90.00	-	-
Total		10	100.00	67	100.00

In Jhabua district about 60 per cent (59.76) of the partly owned and partly leased in area was under "other conditions" of leasing. The percentage of area under mortgage was 24.34. In the case of entirely leased in holdings the "other conditions" governed 57.88 per cent area and "Share of production", 30.41 per cent (Table 2.38).

Table 2.38 Conditions of leasing in land, different types of leasing, Jhabua district, M.P., 1990-91

S. No.	Conditions of leasing	Partly owned and partly leased in (Hectares)	Percentage	Entirely leased in (Hectares)	Percentage
1.	Fixed amount	73	5.35	19	4.28
2.	Fixed production	4	0.29	-	-
3.	Share of production	140	10.26	135	30.41
4.	Mortgage	332	24.34	33	7.43
5.	Other conditions	815	59.76	257	57.88
Total		1,364	100.00	444	100.00

#### 2.9.2.4 Irrigation

In Tikamgarh district 52.71 per cent of the holdings were partly irrigated and partly unirrigated. These covered 32.61 per cent of the area. Another 31.01 per cent of the holdings were entirely unirrigated occupying 14.53 per cent of the area (Table 2.39).

Table 2.39 Number and area of holdings according to irrigation status, Tikamgarh district, M.P., 1990-91.

S. No.	Particulars	Number of holdings	Percentage	Area (Hectares)	Percentage
1.	Entirely irrigated	23,412	15.71	30,561	10.87
2.	Entirely un-irrigated holdings	46,215	31.01	40,839	14.53
3.	Partly irrigated un-irrigated	78,561	52.71	91,646	32.61
4.	Others	853	0.57	1,17,996	41.99
Total		1,49,041	100.00	2,81,042	100.00

As seen earlier Jhabua district was devoid of irrigation facilities. Three fourths (74.85 per cent) of holdings were entirely unirrigated. These occupied 90.51 per cent of the area. Partly irrigated and partly unirrigated holdings were 24.01 per cent and occupied 8.96 per cent of area (Table 2.40).

Table 2.40 Number and area of holdings according to irrigation status, Jhabua district, M.P. 1990-91

S. No.	Particulars	Number of holdings	Percentage	Area (Hectares)	Percentage
1.	Entirely irrigated	1,644	1.14	1,999	0.53
2.	Entirely un-irrigated holdings	1,08,089	74.85	3,39,295	90.51
3.	Partly irrigated/ Un-irrigated	34,668	24.01	33,573	8.96
4.	Others	-	-	-	-
Total		1,44,401	100.00	3,74,867	100.00

#### 2.9.2.5 Single and joint Holdings by castes

In Tikamgarh district scheduled castes farmers had 56.60 per cent single holdings. Scheduled tribes farmers had larger percentage (68.66 per cent) of single holdings. Conversely scheduled castes farmers had larger percentage (43.40) of joint holdings than scheduled tribes farmers (31.32 per cent) (Table 2.41).

Table 2.41 Distribution of number and area of holdings of scheduled castes and scheduled tribes by operational holdings i.e. single, joint and institutional holdings, Tikamgarh district, M.P. 1990-91

S. No.	Operational holding	Scheduled Castes				Scheduled Tribes			
		Number	%	Area	%	Number	%	Area	%
1.	Single	16,791	56.60	24,679	51.38	3,520	68.66	5,146	59.38
2.	Joint	12,876	43.40	23,347	48.61	1,606	31.32	3,410	39.35
3.	Institutional	1	-	4	0.01	1	0.02	110	1.27
Total		29,668	100.00	48,030	100.00	5,127	100.00	8,666	100.00

In Jhabua district nearly all the holdings of both scheduled castes and scheduled tribes farmers were single holdings. The percentage of these holdings was 99.15 and 99.63 respectively (Table 2.42).

Table 2.42 Distribution of number and area of holdings of scheduled castes and scheduled tribes by operational holdings i.e. single, joint and institutional holdings, Jhabua district, M.P., 1990-91

S. No.	Operational holdings	Scheduled castes				Scheduled tribes			
		Number	%	Area	%	Number	%	Area	%
1.	Single	2,567	99.15	4,280	98.85	13,291	99.63	3,43,815	99.42
2.	Joint	22	0.85	50	1.15	489	0.37	2000	0.58
3.	Institutional	-	-	-	-	1	-	2	-
Total		2,589	100.00	4,330	100.00	13,348	100.00	3,45,815	100.00

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## CHAPTER-III

### SELECTED DISTRICTS AND VILLAGES

The study was conducted in two districts of Tikamgarh and Jhabua. While village Barkhiria was selected in Tikamgarh district village Makankui was selected in Jhabua district.

A brief description of selected districts and villages will be useful in understanding the socio- economic conditions of the selected regions.

The description of Tikamgarh district and village Barkhiria follows.

#### 3.1 Tikamgarh District

##### 3.1.1 Location

Tikamgarh district of Sagar revenue division is situated in the northern part of the state commonly known as Bundelkhand. It is irregular in shape with pointed projections in the north and south. It lies between  $24^{\circ}26'$  and  $25^{\circ}40'$  north latitudes and  $78^{\circ}26'$  and  $79^{\circ}26'$  east longitudes.

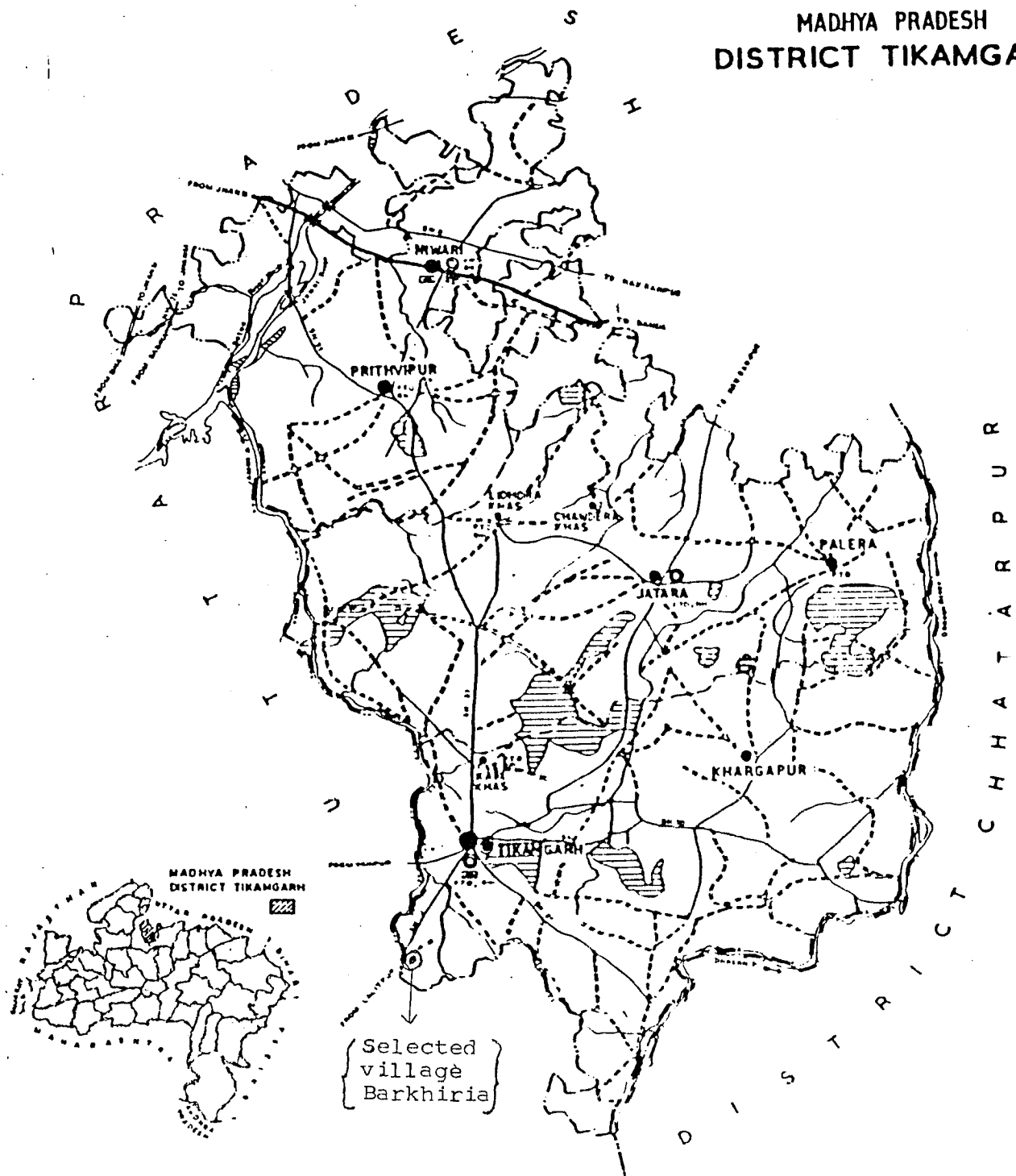
It is bounded on the east by Chhatarpur district. The southern edge of the district touches Sagar district. The district is bounded in the west by Lalitpur district (U.P.). In the north the district is bounded by Jhansi district (U.P.) and in the north east by Hamirpur district (U.P.). The western boundary of the district is carved out by river Jamni and eastern boundary, by river Dhasan.

The geographical area of the district is 504 thousand hectares and is inhabited by 9,40,829 persons.

##### 3.1.2 Topography

A series of parallel ridges averaging about 451.6 metres above mean sea level transverse the district but there are no hills of any importance. The land for the most part is rocky and the soil is of low fertility. The area is low lying and consists of gneissic formation. Between ridges and gneiss, however, lie patches of fertile

# MADHYA PRADESH DISTRICT TIKAMGARH



black soil. There are many lakes in the district and some of them are very old ones. The district, in general, is an even plain with gentle slope towards north.

### 3.1.3 The Rivers

The rivers flow to the north and join the Yamuna in Uttar Pradesh. The Betwa is the main river of the district and is joined by the Dhasan. Its other tributaries are the Jamni, the Bargi and the Barwa.

### 3.1.4 Climate

The climate is of extreme type. May and June are hot months. The rainy months are July, August and September. The average rainfall of the district is 1,001.1 m.m. December and January are the coldest months.

### 3.1.5 Communications

The district is very deficient in means of communications. The district headquarters is not connected by railway. The only railheads in the district are Niwari, Orchha and Teharka on Jhansi-Manikpur section of the Central Railway. Tikamgarh is connected by an all weather road with Lalitpur (U.P.) in the south west, Mauranipur (U.P.) in the north, Jhansi (U.P.) via Dighoda, Prithvipur and Niwari in the north west and Jatara- Mauranipur in the north-east.

The district has five tehsils of Tikamgarh, Baldeogarh, Jatara, Prithvipur and Niwari.

### 3.1.6 Population

Total population of the district stood at 9,40,829 as per 1991 census. The district is rural in character as 83.10 per cent population is termed rural. It is, however, noted that the proportion of rural population is on the decline. It has declined from 95.09 per cent in 1971 to 87.87 per cent in 1981 and further to 83.10 per cent in 1991 (Table 3.1).



Table 3.1 Rural and urban population, 1951 to 1991, Tikamgarh district, Madhya Pradesh

Year	Total population	Rural	Percentage to total	Urban	Percentage to total
1951	3,06,165	2,92,736	95.61	13,429	4.39
1961	4,55,662	4,35,193	95.51	20,469	4.49
1971	5,68,885	5,40,980	95.09	27,905	4.91
1981	7,36,981	6,47,571	87.87	89,401	12.13
1991	9,40,829	7,81,650	83.10	1,58,959	16.90

Female population per thousand males is 871.

The literacy percentage was 27.60. Among the rural population it was 24.22 against 44.20 among urban population. The literacy percentage among women was far lower (15.72) than males (37.95). It was all the more lower (12.10 per cent) in rural areas than urban areas (33.35 per cent) (Table 3.2).

Table 3.2 Percentage of literate population in 1991, Tikamgarh district, Madhya Pradesh

Particulars	Male	Female	Total
Rural	34.75	12.10	24.22
Urban	53.83	33.35	44.20
Total	37.95	15.72	27.60

The rural character of the district is also proved by the type of workers. It was noted that of the total workers 73.47 per cent were cultivators and 11.68 per cent were agricultural labourers. Thus 85.15 per cent of the total workers were engaged in agricultural occupations (Table 3.3).

Table 3.3 Classification of main workers, Tikamgarh district, M.P.

Particulars	Number	Percentage to total workers
Cultivators	2,42,568	73.47
Agricultural labourers	38,556	11.68
Live stock activities	3,741	1.13
Other workers	45,285	13.72
Total	3,30,150	100.00

The district has a comparatively higher proportion of scheduled castes population (22.75 per cent) and a lower proportion of scheduled tribes population (4.13 per cent) than the state as a whole (Table 3.4).

Table 3.4 Caste composition of population, Tikamgarh district, M.P., 1991

Particulars	Number	Percentage to total
Scheduled castes	2,14,064	22.75
Scheduled tribes	38,850	4.13
Others	6,87,915	73.12
Total	9,40,829	100.00

### 3.1.7 Agriculture

Nearly half (50.81 per cent) of the total area was net sown area. Land not available for cultivation was 16.89 per cent and area under forest, 13.19 per cent. (Table 3.5).

Table 3.5 Land utilisation, Tikamgarh district, M.P.

Particulars	Area ('000 ha)	Percentage to total geographical area
Forest	66.5	13.19
Land not available for cultivation	85.1	16.89
Other uncultivated land excluding fallow land	48.7	9.66
Culturable waste land	20.9	4.15
Fallow land	26.7	5.30
Net area sown	256.1	50.81
Total geographical area	504.0	100.00

Wheat was the single important crop of the district occupying about a third of the area. Gram was another important crop occupying 6.60 per cent. Soybean, a comparatively new crop occupied 11.87 per cent. Fodder crops occupied 8.80 per cent of the cropped area (Table 3.6).

Table 3.6 Cropping pattern, Tikamgarh district, M.P.

Crop	Area (Thousand hectares)	Percentage
Paddy	23.44	6.32
Jowar	19.99	5.40
Wheat	115.29	31.14
Other cereals	19.72	5.33
Total cereals	178.44	48.19
Gram	24.45	6.60
Other pulses	44.98	12.15
Total pulses	69.43	18.75
Total Food grains	247.87	66.94
Other food crops	7.41	2.00
Total food crops	255.28	68.94
Sesamum	18.91	5.11
Soybean	43.95	11.87
Other Oilseeds	19.35	5.22
Total Oilseeds	82.21	22.20
Total Fibres	0.19	0.05
Fodder crops	32.60	8.80
Total non food crops	115.00	31.06
Gross area sown	370.28	100.00

The percentage of irrigated area to cropped area was 46.53.

Of the crops grown wheat was irrigated to the extent of 97.06 per cent and barley, 94.95 per cent. Mustard was irrigated to the extent of 89.58 per cent and gram, 60.29 per cent. Sugarcane was entirely irrigated (Table 3.7).

Out of the total irrigated area of 1,72,286 thousand hectares nearly 80 per cent (78.36 per cent) was irrigated by wells. Another 11.00 per cent area was irrigated by canals (Table 3.8).

Table 3.7 Irrigated crops, Tikamgarh district, M.P.

Crop	Area irrigated ('000 ha)	Percentage to total	Gross cropped area	Percentage of irrigated area to gross cropped area
Wheat	111.90	64.95	115.29	97.06
Barley	5.26	3.05	5.54	94.95
Other cereals	0.11	0.06	-	-
Total cereals	117.27	68.07	178.44	65.72
Gram	14.74	8.56	24.45	60.29
Other Pulses	5.09	2.95	-	-
Total Pulses	19.83	11.51	69.43	28.56
Total Foodgrains	137.10	79.58	247.87	55.31
Sugarcane	0.66	0.38	0.66	100.00
Spices	1.66	0.95	1.75	94.86
Total fruits & vegetables	4.76	2.78	5.00	95.20
Total food crop	144.18	83.69	255.28	56.48
Groundnut	4.58	2.66	9.21	49.73
Soybean	16.06	9.32	18.91	84.93
Mustard	6.36	3.69	7.10	89.58
Other Oilseeds	0.28	0.16	-	-
Total Oilseeds	27.28	15.83	82.21	33.00
Berseem	0.82	0.48	32.60	2.52
Total non food crops	28.10	16.31	115.00	24.43
Total Irrigated area	172.28	100.00	370.28	46.53

Table 3.8 Sources of irrigation, Tikamgarh district, M.P.

Source	Area hectares	Percentage to total
Canals	18,960	11.00
Wells	1,35,008	78.36
Tubewells	319	0.19
Tanks	9,421	5.47
Others	8,578	4.98
Total	1,72,286	100.00

### 3.1.8 Size of Holdings

There were 1,51,742 holdings in the district occupying 2,83,396 hectares. The average size of holding was 1.87 hectares. A large majority (67.7 per cent) of holdings was of small size (upto 2.0 hectares). However, these accounted for 31.8 per cent of the area. On the other hand medium and large size holdings were only 10.5 per cent of the total number but these occupied 36.5 per cent of the total area. Thus the distribution of holdings by size was very unequal (Table 3.9).

Table 3.9 Number and Area of holdings, Tikamgarh district, M.P.

Size group	Number of holdings	Percentage to total	(Area- Hectares)	
			Area of holdings	Percentage to total area
Marginal (0.00 to 1.00)	60,328	39.7	30,062	10.6
Small (1.01 to 2.00)	42,432	28.0	60,085	21.2
Semi-medium (2.01 to 4.00)	33,018	21.8	89,850	31.7
Medium (4.01 to 10.00)	14,523	9.6	81,748	28.9
Large (Above 10.00 ha.)	1,441	0.9	21,651	7.6
Total	1,51,742	100.0	2,83,396	100.0

### 3.2 Village Barkhiria

In consultation with revenue officials village Barkhiria of tehsil Tikamgarh was selected for the study. It is located in south west of Tikamgarh town at a distance of 14 km. from Tikamgarh on Tikamgarh-Lalitpur road. It is the last village of the district bordering Uttar Pradesh. It is one of the villages of Samarra Revenue Inspector's Circle. It has a primary school and the village is under the jurisdiction of Kumarau Khiria Panchayat.

The total population of the village was 470 consisting of 180 scheduled castes, 186 backward castes and 104 other castes categories.

The total geographical area of the village was 220.188 hectares. Of this, agricultural land was 213.519 hectares and non agricultural

land was 6.669 hectares. Agricultural land of 213.519 hectares included 208.421 hectares of net sown area and 5.098 hectares of fallow land. Non agricultural land of 6.669 hectares included 1.515 hectares under residences, 0.251 hectares of government fallow, 2.438 hectares under water resources and 2.465 hectares under roads and other buildings (Table 3.10).

Table 3.10 Land utilisation, village Barkhiria, Tikamgarh district, M.P.

Particulars	Area (Hectares)	Percentage
Net sown area	208.421	-
Fallow land	5.098	-
Total agricultural land	213.519	96.97
Residential	1.515	22.72
Govt. fallow	0.251	3.76
Water sources	2.438	36.56
Buildings, roads, etc.	2.465	36.96
Total Non-agricultural land	6.669	3.03
Total Geographical Area	220.188	100.00

Of the net sown area of 208.421 hectares irrigated area was 207.166 hectares or 99.40 per cent. Thus nearly entire net sown area was irrigated.

Of the total irrigated area 81.25 per cent was under the command of canals. Another 16.16 per cent was irrigated by rivers and the remaining 2.59 per cent by wells (Table 3.11).

Table 3.11 Irrigation by sources, village Barkhiria, Tikamgarh district, M.P.

Source	Area (Hectares)	Percentage
Wells	5.362	2.59
Rivers	33.488	16.16
Canals	168.316	81.25
Total	207.166	100.00

### 3.3 Jhabua district

#### 3.3.1 Location

The district lies in the extreme western part of the state between 22°0' & 23°3' north latitudes and 73°0' & 75°0' east longitudes and touches borders of Gujarat, Maharashtra and Rajasthan states. The district is bounded by Banswara district of Rajasthan in the north west, Panchmahal and Baroda districts of Gujarat in the west, Dhulia district of Maharashtra and Khargone district of M.P. in south, Dhar district in the east and Ratlam district in the north east.

It forms part of Indore division. It is divided into five tehsils namely Thandla, Petlawad, Jhabua, Jobat and Alirajpur.

#### 3.3.2 Topography

The Vindyan range running in Gujarat crosses the district extending from Jobat. The terrain is generally hilly and the soil is generally light and hence not well suited for cultivation.

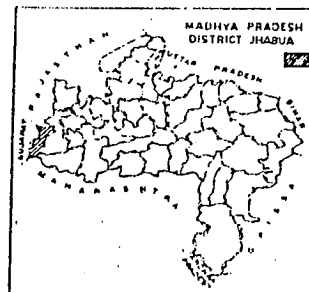
#### 3.3.3 The Rivers

The two main rivers are the Mahi and the Anas. The Mahi which enters the district from Dhar in the east and forms the boundary with Ratlam flows north west. The Anas river rises near Jobat and flows through Thandla and Jhabua tehsils and turns away into Gujarat. The waters of river Narmada only touch the southern fringe of the district. The main tributories of Narmada are Hathini and Dahi and those of Mahi are Pampavati and Larki.

#### 3.3.4. Climate

The climate though generally moderate is subject to greater extremes than the more open land of Malwa. It is, however, more pleasant in southern part of the district where the forest is somewhat dense and mean elevation is over 365 metres. The district falls into two climatic regions.

1. The comparatively hot regions of northern portions of the district viz. Jhabua, Thandla and Petlawad tehsils
2. The fairly cooler regions of south comprising Alirajpur and Jobat tahsils.





### 3.3.5 Communications

Part of the Western railway-Ahmedabad to New Delhi- passes through the district and 6 railway stations of the district are on this line. Besides the railway link, State Highways Nos.18, 22 and 26 pass through the district horizontally. In addition numerous village roads serve as communication links.

### 3.3.6 Population

The total population of the district according to 1991 census was 11,30,405. Of the total population 85.67 per cent belonged to scheduled tribes, 3.06 per cent to scheduled castes and the remaining 11.27 per cent to other castes (Table 3.12).

Table 3.12 Caste composition of population, Jhabua district, M.P.1991

S.No.	Item	No.	Percentage
1.	Schedule castes	34,641	3.06
2.	Schedule tribes	9,68,372	85.67
3.	Others	1,27,392	11.27
	Total	11,30,405	100.00

The district was rural in character as 91.32 per cent of the population resided in villages. The ratio of females per 1,000 males was 977. The literacy percentage of the district was 14.54, much lower than the state average. Among rural population it was lower (10.42) than the urban population (57.82). The literacy percentage among females was much lower (8.79 per cent) than males (20.15 per cent). Again, the literacy percentage among rural females was far lower (5.17) than the urban females (48.17). Among males also the literacy percentage was far lower (15.58 per cent) for rural males than urban males (66.69 per cent) Table 3.13).

Table 3.13 Rural and urban population, sex ratio and literacy in Jhabua district, M.P., 1991

S. No.	Item	Males		Females		Total	
		No.	Percentage	No.	Percentage	No.	Percentage
1.	Rural	5,20,671	-	5,11,654	-	10,32,325	91.32
2.	Urban	51,093	-	46,987	-	98,080	8.68
3.	Total population	5,71,764	-	5,58,641	-	11,30,405	100.00
		Females per thousand males = 977					
4.	Rural	81,139	15.58	26,477	5.17	1,07,616	10.42
5.	Urban	34,073	66.69	22,632	48.17	56,705	57.82
6.	Total literate	1,15,212	20.15	49,109	8.79	1,64,321	14.54

The rural character of the district can also be noted from the occupational distribution. As high as 84.11 per cent of the total workers were cultivators. Another 5.90 per cent workers were agricultural labourers and a small percentage of (0.40) workers were engaged in occupations like livestock, forestry etc. Other workers formed 9.59 per cent.

Thus cultivators, agricultural labourers and those engaged in occupations like livestock, forestry etc. together constituted 90.41 per cent (Table 3.14).

Table 3.14 Occupational distribution of workers, Jhabua district, 1991

S.No.	Item	No.	Percentage
1.	Cultivators	3,73,650	84.11
2.	Agricultural labours	26,227	5.90
3.	Livestock, Forestry etc. and allied activities	1,772	0.40
4.	Other workers	42,614	9.59
5.	Total main workers	4,44,263	100.00
	Marginal workers	1,66,555	-
	Non workers	5,19,587	-
	Total Population	11,30,405	-

### 3.3.7 Agriculture

A little over 50 per cent (53.44 per cent) of the geographical area was net area sown. Forests occupied lower proportion of area (18.93 per cent) than the state average. Among other classes of land "land not available for cultivation" constituted 16.89 per cent and "other uncultivated land excluding fallow land", 6.02 per cent (Table 3.15).

Table 3.15 Land utilisation, Jhabua district, M.P.

S.No.	Particulars	Area (Thousand hect.)	Percentage to total area
1.	Forest	127.9	18.93
2.	Land not available for cultivation	114.1	16.89
3.	Other uncultivated land excluding fallow land	40.7	6.02
4.	Culturable waste land	21.6	3.20
5.	Fallow land	10.3	1.52
6.	Net area sown	361.1	53.44
	Total geographical area	675.7	100.00

Maize was the single important crop occupying 21.16 per cent of the cropped area. Gram was another important crop and occupied 13.92 per cent of the cropped area. Wheat occupied 8.02 per cent. Paddy (5.86 per cent), jowar (4.95 per cent), soybean (4.38 per cent), groundnut (3.84 per cent), and cotton (3.15 per cent) were comparatively less important crops.

Of the crops grown wheat was irrigated to the extent of 94.01 per cent. Gram was irrigated to the extent of 25.76 per cent and sugarcane 100.00 per cent. Soybean was irrigated to the extent of 4.19 per cent, whereas, cotton was irrigated to the extent of 22.03 per cent (Table 3.16).

Table 3.16 Area under crops and irrigated cropped area, Jhabua district, M.P.

Crop	Area ( '000 hect.)	Percen- tage	Irrigated area ( '000 hect.)	Percen- tage	Percentage of irriga- ted area to cropped area
Paddy	28.09	5.86	0.03	0.05	0.11
Jowar	23.71	4.95	0.03	0.05	0.13
Bajra	14.98	3.12	-	-	-
Maize	101.43	21.16	4.44	6.90	4.38
Wheat	38.46	8.02	36.16	56.19	94.01
Other cereals	13.16	2.75	-	-	-
Total cereals	219.83	45.86	41.02	63.75	29.00
Gram	66.72	13.92	17.19	26.71	25.76
Other Pulses	115.32	24.05	0.17	0.26	0.15
Total Pulses	182.04	37.97	17.36	26.98	9.54
Sugarcane	0.04	-	0.04	0.06	100.00
Total Spices	1.18	0.25	0.47	0.73	39.83
Total fruits & vegetables	1.00	0.21	0.60	10.93	60.00
Total food crops	404.09	84.29	58.38	90.73	14.53
Groundnut	18.42	3.84	0.06	0.09	0.33
Soybean	21.01	4.38	0.88	1.37	4.19
Other oilseeds	5.24	1.10	0.57	0.89	75.00
Total oilseeds	44.67	9.32	1.51	2.35	3.38
Cotton	15.08	3.15	3.23	5.02	22.03
Fodder crops	15.55	3.24	0.12	0.19	0.77
Total Nonfood crops	75.30	15.71	4.86	7.55	6.54
Gross cropped area	479.39	100.00	64.35	100.00	13.42

Among the sources of irrigation "other sources" which meant stop dams, pumps fitted on rivers, nalahs, etc. accounted for 40.78 per cent of the irrigated area. Wells accounted for 31.11 per cent, canals, 20.14 per cent and tanks, 7.34 per cent (Table 3.17).

Table 3.17 Sources of irrigation, Jhabua district, M.P.

S.No.	Sources	Area (Hectares)	Percentage
1.	Canals	12,963	20.14
2.	Tanks	4,723	7.34
3.	Tubewells	406	0.63
4.	Wells	20,017	31.11
5.	Other sources	26,240	40.78
Total		64,349	100.00

### 3.3.8 Size of Holdings

About half (46.96 per cent) of the holdings were of very small size (below 2.0 hectares). However these commanded only 15.19 per cent of the area. Semi medium size holdings (between 2.0 to 4.0 hectares) were 27.20 per cent of the total number and occupied about equal percentage (25.09 per cent) of the area. Medium size holdings (4.0 to 10.0 hectares) constituted 22.22 per cent of the total number but occupied 43.36 per cent of the area. Large size holdings were 3.62 per cent of the total number and occupied 16.36 per cent area.

Two things emerged : Firstly, small size holdings predominated. Secondly the distribution was uneven. While small size holdings were in large percentage these occupied small area. On the other hand large holdings although in small percentage occupied very large percentage of area (Table 3.18).

Table 3.18 Number and area of operational holdings, Jhabua district, M.P.

S. No.	Size group (Hectare)	Number of holdings	Percentage	Area of holdings	Percentage
1.	Marginal (0 to 1.00)	28,174	23.47	14,951	4.04
2.	Small (1.01 to 2.00)	28,195	23.49	41,296	11.15
3.	Semi medium (2.01 to 4.00)	32,649	27.20	92,844	25.09
4.	Medium (4.01 to 10.00)	26,677	22.22	1,60,451	43.36
5.	Large (10.01 and above)	4,346	3.62	60,529	16.36
Total		1,20,041	100.00	3,70,071	100.00

3.4 Village Makankui

Village Makankui is located on Jhabua- Para road at a distance of 7 km. from Jhabua. It is in Jhabua Development Block of Jhabua tehsil. The total area of the village was 206.25 hectares. Of this 115.56 hectares were under agricultural holdings and 90.69 hectares under non agricultural uses. The non agricultural area included residential land (0.45 per cent), that can be brought under cultivation after some development (5.02 per cent), pasture 10.38 per cent, forest 60.17 per cent, river and nalahs 13.15 per cent, uncultivable land 7.40 per cent, and roads etc. (3.43 per cent) (Table 3.19).

Table 3.19 Land utilisation, village Makankui, Jhabua district, M.P.

Particulars	Area	Percentage
Residential	0.41	0.45
Cultivable waste land	4.55	5.02
Pastures	9.41	10.38
Forest	54.57	60.17
River and Nallahs	11.93	13.15
Unculturable land	6.71	7.40
Roads and lanes	3.11	3.43
Total	90.69	100.00
Revenue land	115.56	56.03
Non-revenue land	90.69	43.97
Total	206.25	100.00

Having undulating land and with very little irrigation, kharif crops dominated (69.88 per cent). Among kharif crops maize was most important (39.49 per cent). Paddy (9.74 per cent), groundnut (8.24 per cent) and urd (4.51 per cent) were other kharif crops. Among rabi crops only gram (26.38 per cent) was important (Table 3.20).

The total number of holdings in the village was 57 and the area occupied by these was 115.56 hectares giving an average size of 2.03 hectares per holding. Holdings below 1 hectare were 36.84 per cent of the total number. Holdings between 1 to 2.00 hectares were 26.32 per cent. Thus about two thirds of the holdings (63.16 per cent) were below 2.00 hectares (Table 3.21).

Table 3.20 Crops grown in village Makankui, Jhabua district, Madhya Pradesh

Crop	Area	Percentage
Paddy	15.12	9.74
Jowar	0.33	0.21
Maize	61.33	39.49
Minor millets	0.81	0.52
Urd	7.01	4.51
Tur	0.32	0.21
Kulthi	3.62	2.33
Groundnut	12.80	8.24
Soybean	0.10	0.06
Cotton	3.64	2.34
Chillies	0.28	0.18
Grasses	3.16	2.03
Total Kharif Crops	108.52	69.88
Wheat	2.99	1.93
Rabi maize	2.42	1.56
Gram	40.97	26.38
Castor	0.40	0.25
Total rabi crops	46.78	30.12
Gross cropped area	155.30	100.00

Table 3.21 Distribution of holdings according to size, village Makankui, district Jhabua, M.P.

Size group (Hectares)	Number		Area	
	Number	Percentage	Area	Percentage
Below 1.00	21	36.84	14.68	12.70
1.01 to 2.00	15	26.32	22.56	19.52
2.01 to 4.00	11	19.30	32.31	27.96
4.01 to 10.00	10	17.54	46.01	39.82
Total	57	100.00	115.56	100.00

## CHAPTER-IV

### TREND IN SELECTED VILLAGES AND FARMS

In each of the selected two districts a village each was selected in consultation with the state govt. officials. Fifty farmers each were selected from the selected two villages. Thus the total sample of farmers was 100. (50 in each of the selected 2 villages of two districts).

This chapter describes the trend in selected villages and on selected farms.

#### 4.1 Trend in Selected Villages

Data on number of khatas and area were obtained from B1 forms of village records. 'B1' gives serial number of khata, names of farmers who have joint or single ownership on the khata, code number of fragment, area of each fragment and revenue of the fragment.

When a fragment is sold or ownership changes name of the purchaser/new owner appears in the B1 of the subsequent year.

The increase in the number of owners was due to -

1. Addition of names of children after they attained adulthood on the application by the owner.
2. Addition of names to avoid ceiling laws and to avail benefits of small farmers.
3. Addition of names of children (sons and daughters) of the deceased person.
4. Addition of name of widow on the death of a person.
5. Purchase of full or part of khata by purchasers.

On the basis of entries in B1 the nature of change viz. inheritance, division and sale was noted.

##### 4.1.1 Village Barkhiria, Tikamgarh district

In this village the number of owners in khatas was 288 in 1983-84. The number increased from year to year and stood at 476 in 1994-95, an increase by 65.28 per cent.

The number of fragments in 1983-84 was 423. The number increased to 468 by 1994-95. It is clear that the increase in number of fragments was proportionately lower than increase in number of owners. The area

of holdings did not change during the reference period. It remained at 209.439 hectares. With the area remaining the same and the number of owners shooting up from 288 to 476 the average size per owner decreased from 0.727 hectare in 1983-84 to 0.440 hectare in 1994-95, a decline of 39.48 per cent.

The number of fragments increased by 10.64 per cent. The area per fragment decreased by 9.70 per cent (Table 4.1).

Table 4.1 Number of owners, fragments, area and area per owner and per fragment, village Barkhiria, Tikamgarh district, M.P.

Year	Number of Owners	Number of fragments	Total area (hectares)	Area per Owner	Area per fragment
1983-84	288	423	209.439	0.727	0.495
1984-85	288	424	209.439	0.727	0.494
1985-86	293	424	209.439	0.715	0.494
1986-87	304	426	209.439	0.689	0.492
1987-88	304	426	209.439	0.689	0.492
1988-89	310	426	209.439	0.676	0.492
1989-90	310	426	209.439	0.676	0.492
1990-91	311	426	209.439	0.673	0.492
1991-92	312	426	209.439	0.671	0.492
1992-93	362	440	209.439	0.578	0.476
1993-94	412	454	209.439	0.508	0.461
1994-95	476	468	209.439	0.440	0.447

In 1994-95 there were 109 khatas. The total area of these khatas was 209.439 hectares. Thus the average size of khata was 1.921 hectares. Nearly half (47.71 per cent) of the khatas were below 1 hectare each. Another 21.10 per cent of the khatas had a size between 1.01 to 2.00 hectares each. Khatas with area between 2.01 to 4.00 hectares and 4.01 to 10.00 hectares were 14.68 per cent and 13.76 per cent respectively. Only 3 khatas were of 10.01 hectares and above.

The distribution was quite skewed as 47.71 per cent of marginal holdings below 1.00 hectare occupied only 9.41 per cent of the area. Another 21.10 per cent of the small farmers occupied proportionately lower percentage (16.35 per cent) of area. On the other hand 13.76 per cent of the medium size holdings commanded 39.16 per cent of area and merely 2.75 per cent large holdings occupied as high as 16.92 per cent of the area (Table 4.2).



Table 4.2 Number of khatas and area of khatas, village Barkhiria, Tikamgarh district, M.P.

Size groups (Hectares)	Number of khatas	Percentage	Area (Hect.)	Percentage	Average size
1.00	52	47.71	19.711	9.41	0.379
1.01 - 2.00	23	21.10	34.235	16.35	1.488
2.01 - 4.00	16	14.68	38.039	18.16	2.377
4.01 - 10.00	15	13.76	82.017	39.16	5.468
10.01 - & above	3	2.75	35.437	16.92	11.812
Total	109	100.00	209.439	100.00	1.921

During the 12 year period from 1983-84 to 1994-95 there was an increase of 188 owners. It was observed that the number increased suddenly during the latter 3 years of 1992-93, 1993-94, and 1994-95. Among the reasons of increase the most important was "death of owner and division among successors" and accounted for 79.79 per cent increase. Partition (among brothers) and separation of sons from father was another important reason and caused 15.43 per cent increase in owners. Only 9 cases (4.78 per cent) were of sale (Table 4.3).

Table 4.3 Number of owners and reasons of increase in number from 1983-84 to 1994-95, village Barkhiria, Tikamgarh district, M.P.

Year	No. of owners	Increase in number of owner	Increase due to		
			Death of owner and division among successors	Partition/ Separation	Sale
1983-84	288	-	-	-	-
1984-85	288	-	-	-	-
1985-86	293	5	5	-	-
1986-87	304	11	10	1	-
1987-88	304	-	-	-	-
1988-89	310	6	6	-	-
1989-90	310	-	-	-	-
1990-91	311	1	1	-	-
1991-92	312	1	1	-	-
1992-93	362	50	40	8	2
1993-94	412	50	39	7	4
1994-95	476	64	48	13	3
		188 (100.00)	150 (79.79)	29 (15.43)	9 (4.78)

#### 4.1.2 Village Makankui Jhabua District

In village Makankui the number of owners was 124 in 1980-81. It increased from year to year and was 193 in 1994-95, an increase of 55.65 per cent.

The number of fragments increased from 149 in 1980-81 to 201 in 1994-95 or an increase of 34.90 per cent. The village area remained same (115.560 hectares) during the entire period. Therefore, the area per owner and area per fragment decreased from year to year. The area per owner was 0.932 hectare in 1980-81. It decreased from year to year and was 0.599 hectare in 1994-95, 35.73 per cent decrease. Likewise the area per fragment decreased from 0.775 hectare to 0.575 hectare, a decline by 25.81 per cent (Table 4.4).

Table 4.4 Number of owners, fragments, area and area per owner and per fragment, village Makankui, Jhabua district, M.P.

Year	Number of owners	Number of fragments	Total Area (Hect.)	Area per owner (Hect.)	Area per fragment (Hect.)
1980-81	124	149	115.560	0.932	0.775
1981-82	157	149	115.560	0.736	0.775
1982-83	157	159	115.560	0.736	0.727
1983-84	157	165	115.560	0.736	0.700
1984-85	160	178	115.560	0.722	0.649
1985-86	164	179	115.560	0.705	0.645
1986-87	164	188	115.560	0.705	0.615
1987-88	164	188	115.560	0.705	0.615
1988-89	164	188	115.560	0.705	0.615
1989-90	164	188	115.560	0.705	0.615
1990-91	166	188	115.560	0.696	0.615
1991-92	167	188	115.560	0.692	0.615
1992-93	171	189	115.560	0.676	0.611
1993-94	192	201	115.560	0.602	0.575
1994-95	193	201	115.560	0.599	0.575

The total number of khatas was 57 in 1994-95. With area of village being 115.560 hectares, the area per khata was 2.027 hectares. The distribution of number of khatas and area by size groups showed that the distribution was very uneven. It was noted that 36.84 per cent of the khatas of marginal size group commanded only 12.70 per

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cent of the area. Similarly 26.32 per cent of the number belonging to small size group commanded proportionately lower percentage (19.52) of area. In semi medium and medium size groups the proportions of number of holdings were smaller than the proportions of area of those holdings. (Table 4.5)

Table 4.5 Number of khatas and area of khatas, village Makankui, Jhabua district, M.P.

Size group (Hectares)	Number of khatas	Percen- tage	Area (Hectares)	Percen- tage	Average size
0 - 1.00	21	36.84	14.680	12.70	0.699
1.01 - 2.00	15	26.32	22.560	19.52	1.504
2.01 - 4.00	11	19.30	32.310	27.96	2.937
4.01 - 10.00	10	17.54	46.010	39.82	4.601
Total	57	100.00	115.560	100.00	2.027

As noted earlier the number of owners increased from 124 to 193 during the period 1980-81 to 1994-95. Thus the number increased by 69. While the number increased from 124 in 1980-81 to 157 in 1981-82 or an increase of 33, it increased from 171 in 1992-93 to 192 in 1993-94 or increase by 21. Apart from substantial increase in these two years the increase in other years was nominal. Of the 69 cases of increase 56 (81.16 per cent) were recorded due to death of owners and divisions among successors. Only 6 cases (8.70 per cent) of partitions were recorded. The cases of sale were 7 (10.14 per cent) (Table 4.6).

Table 4.6 Number of owners and reasons of increase in number from 1980-81 to 1994-95, village Makankui, Jhabua district, M.P.

Year	Number of owners	Increase in number of owners	Increase due to		
			Death of owner & Division among successors	Parti- tions	Sale
1980-81	124	-	-	-	-
1981-82	157	33	26	3	4
1982-83	157	-	-	-	-
1983-84	157	-	-	-	-
1984-85	160	3	3	-	-
1985-86	164	4	4	-	-
1986-87	164	-	-	-	-
1987-88	164	-	-	-	-
1988-89	164	-	-	-	-
1989-90	164	-	-	-	-
1990-91	166	2	2	-	-
1991-92	167	1	1	-	-
1992-93	171	4	4	-	-
1993-94	192	21	15	3	3
1994-95	193	1	1	-	-
		69 (100.00)	56 (81.16)	6 (8.70)	7 (10.14)

#### 4.2 Trend on Selected Farms

Fifty farmers in each of the two districts were selected. The results obtained are described in the following paragraphs. A description of the characteristics follows.

##### 4.2.1 Village Barkhiria, Tikamgarh District

Tikamgarh district did not have sizeable scheduled tribes population. Among the selected farmers there was none belonging to scheduled tribes. Of the 50 farmers 46 per cent belonged to scheduled castes and the remaining 54 per cent to 'other' castes.

The inheritance could be of two types. Firstly, son/sons claim and acquire landed property due to them during the life time of father. Such cases were 9 or 18 per cent. Second type of inheritance takes place after the death of father. These cases were very common (41 or 82 per cent).

Of the selected 50 farmers 36 per cent belonged to small size group and 42 per cent to semi-medium size group.

The owned area of selected 50 farms was 116.034 hectares. An area of 0.400 hectare was leased in to make a total operated area of 116.434 hectares. Only one farmer in the small size group leased in the area. Of the total owned area of 116.034 hectares only 4.540 hectares or 3.91 per cent was purchased land. The remaining 96.09 per cent of the area was inherited land (Table 4.7).

Table 4.7 Operated area, selected farms, village Barkhiria, Tikamgarh district, M.P.

Size group (Hectares)	No. of farmers	Owned land			Leased in land	Operated area
		Inherited	Purchased	Total		
Below - 1.00	6	3.157	-	3.157	-	3.157
1.01 - 2.00	18	23.937	0.968	24.905	0.400	25.305
2.01 - 4.00	21	52.435	3.572	56.007	-	56.007
4.01 - 10.00	4	21.729	-	21.729	-	21.729
10.01 - above	1	10.236	-	10.236	-	10.236
Total	50	111.494 (96.09)	4.540 (3.91)	116.034 (100.00)	0.400	116.434

Of the 50 selected farmers 49 had agriculture as main occupation. One farmer in the marginal size group had agriculture as subsidiary occupation and not main occupation. It was also observed that larger proportions of farmers belonging to marginal and small size groups had agricultural labour as subsidiary occupation. This is because of the fact that their holdings are not big enough to support the families.

The village Barkhiria was encircled by a canal drawn from dam constructed across river Jamni, nearby. Therefore, as high as 86.79 per cent of the operated area was irrigated. The percentage of irrigated area was highest (95.51) in the medium size group and second highest (87.94) in semi medium group. The marginal size of holdings had 85.18 per cent of the area irrigated (Table 4.8).

Table 4.8 Irrigated area, selected farms, village Barkhiria, Tikamgarh district, M.P.

Size group (Hectares)	Operated area	Irrigated area	Percentage of irrigated area to operated area
Below - 1.00	3.157	2.689	85.18
1.01 - 2.00	25.305	20.236	79.97
2.01 - 4.00	56.007	49.255	87.94
4.01 - 10.00	21.729	20.753	95.51
10.01 & above	10.236	8.115	79.28
Total	116.434	101.048	86.79

The chief source of irrigation was canal and commanded 95.48 per cent of the irrigated area. Wells contributed 3.10 per cent and nallah very negligible 1.42 per cent. It was noted that well irrigation was localised on large farms (Table 4.9).

Nearly half (48 per cent) of the selected farms were below 2.00 hectares each. However, these occupied half of the percentage of number (24.44). In the medium and large size groups 10 per cent of the total number occupied more than double of the proportion as far as area was concerned (27.45 per cent). The average size of farm was 2.329 hectares (Table 4.10).

Table 4.9 Sources of irrigation, selected farms, village Barkhiria, Tikamgarh district, M.P.

Source	Group I		Group II		Group III		Group IV		Group V		Total	
	Area	Percen- tage	Area	Percen- tage	Area	Percen- tage	Area	Percen- tage	Area	Percen- tage	Area	Percen- tage
Canal	2.689	100.00	19.654	97.12	48.405	98.27	20.111	96.91	5.622	69.28	96.481	95.48
Nallah	-	-	0.582	2.88	0.850	1.73	-	-	-	-	1.432	1.42
Well	-	-	-	-	-	-	0.642	3.09	2.493	30.72	3.135	3.10
Total	2.689	100.00	20.236	100.00	49.255	100.00	20.753	100.00	8.115	100.00	101.048	100.00

Table 4.10 Number and area of selected farms by size groups, village Barkhiria, Tikamgarh district, M.P.

Size groups (Hectares)	No. of Holdings		Operated area		Average size of holdings (Hectares)
	Number	Per- centage	Area	Per- centage	
Below - 1.00	6	12.00	3.157	2.71	0.526
1.01 - 2.00	18	36.00	25.305	21.73	1.406
2.01 - 4.00	21	42.00	56.007	48.11	2.667
4.01 - 10.00	4	8.00	21.729	18.66	5.432
10.01 & above	1	2.00	10.236	8.79	10.236
Total	50	100.00	116.434	100.00	2.329

On the selected farms wheat, soybean and gram were important crops and occupied 40.98, 26.00 and 21.60 per cent of the gross cropped area respectively. The only other important crop was pea and occupied 6.20 per cent of gross cropped area.

While larger farm groups grew larger proportions of wheat, gram and vegetables, small and medium size groups had larger proportions of area under paddy, moong, urad and mustard.

It was observed that the percentage area under wheat was generally higher on larger farms. The percentage of area under gram increased from 15.85 in the smallest size group to 24.65 in the largest group with minor variation.

The percentage of area under soybean, on the other hand, decreased with the increase in the size of holdings. It was 46.83 per cent in the smallest size group and 24.65 per cent in the largest size group (Table 4.11).

Table 4.11 Cropping pattern, selected farms, village Barkhira, Tikamgarh district, M.P.

Crop	(Area in hectares)											
	Size group											
	Below 1.00	1.01 - 2.00	2.01 - 4.00	4.01 - 10.00	10.00 & above	Total						
	area	%	Area	%	Area	%	Area	%	Area	%	Area	%
Paddy	-	-	0.940	2.51	0.071	0.11	0.404	1.74	-	-	1.415	1.01
Wheat	1.285	20.35	14.802	39.54	27.874	43.20	10.079	43.30	3.200	39.43	57.240	40.98
Barley	-	-	-	-	0.500	0.77	0.210	0.90	-	-	0.710	0.51
Total Cereals	1.285	20.35	15.742	42.05	28.445	44.08	10.693	45.94	3.200	39.43	59.365	42.50
Moong	0.100	1.58	0.111	0.30	0.101	0.16	-	-	-	-	0.312	0.22
Urd	0.100	1.58	0.654	1.75	0.331	0.51	-	-	-	-	1.085	0.78
Pea	0.468	7.41	0.505	1.35	4.492	5.96	3.200	13.75	-	-	8.665	6.20
Gram	1.000	15.85	7.387	19.73	14.960	23.18	4.822	20.72	2.000	24.65	30.169	21.60
Lentil	-	-	0.250	0.66	0.558	0.88	1.620	6.96	-	-	2.438	1.75
Total Pulses	1.668	26.42	8.907	23.79	20.452	31.69	9.642	41.43	2.000	24.65	42.669	30.55
Soybean	2.957	45.83	12.788	34.16	15.639	24.23	2.939	12.63	2.000	24.65	36.323	26.00
Mustard	0.404	6.40	-	-	-	-	-	-	-	-	0.404	0.29
Total Oilseeds	3.361	53.23	12.788	34.16	15.639	24.23	2.939	12.63	2.000	24.65	36.727	26.29
Vegetables	-	-	-	-	-	-	-	-	0.915	11.27	0.915	0.66
Gross cropped area	6.314	100.00	37.437	100.00	64.536	100.00	23.274	100.00	8.115	100.00	139.676	100.00



Productivity of most of the crops was quite low. In most cases it was lower than the district average. Only paddy had a higher productivity than the district average (Table 4.12)..

Table 4.12 Productivity of crops, selected farms, village Barkhiria, Tikamgarh district, M.P.

Crop	(Productivity in Kg./hectare)					
	Size group					All farms
	Below 1.00	1.01-2.00	2.01-4.00	4.01-10.00	10.00 & above	
	Productivity	Productivity	Productivity	Productivity	Productivity	
Paddy	-	851	2113	1733	-	1166
Wheat	1673	969	831	1012	375	892
Barley	-	-	1100	952	-	1056
Moong	400	180	198	-	-	256
Urd	500	321	363	-	-	350
Pea	1709	1287	724	1031	-	923
Gram	950	778	725	1037	600	787
Lentil	-	400	1408	1358	-	1272
Soybean	778	747	540	1259	500	688
Mustard	248	-	-	-	-	248

#### 4.2.2 Village Makankui, Jhabua district

Unlike Tikamgarh district Jhabua district was a tribal district. Among the selected farmers none belonged to either scheduled castes or 'other' castes. All were tribals.

Of the 50 farmers 44 per cent were marginal and 42 per cent were small farmers. Further, agriculture was the primary occupation of all the 50 farmers. However, the size of holdings being very small, the land being hilly and slopy and devoid of irrigation it could not support the family. Therefore, family members did agricultural and non agricultural labour as a secondary occupation. Of the 50 families 49 were engaged in agricultural and non agricultural labour and the remaining one was doing service as secondary occupation.

Family members went to far off places like Jaipur, Udaipur, Bhopal and Bhilai in search of labour.

Total operated area of the selected farms was 65.944 hectares or 1.319 hectares per farm. Of the operated area 2.000 hectares were leased in. Of the owned land only 1.200 hectares or 1.88 per cent was purchased land and the remaining 98.12 per cent was inherited land.

The leasing in of land was done by marginal, small and semi medium farmers. Similarly land was purchased by marginal and small size groups only (Table 4.13).

Table 4.13 Operated area, selected farms, village Makankui, Jhabua district, M.P.

Size group (Hectares)	No. of farms	Owned land		Total	Leased in land	Operated land
		Inherited land	Purchased land			
Below 1.00	22	13.222	0.400	13.622	0.400	14.022
1.01 - 2.00	21	28.162	0.800	28.962	1.000	29.962
2.01 - 4.00	5	11.670	-	11.670	0.600	12.270
4.01 - 10.00	2	9.690	-	9.690	-	9.690
10.01 & above	-	-	-	-	-	-
Total	50	62.744 (98.12)	1.200 (1.88)	63.944 (100.00)	2.000	65.944

Jhabua district had very small percentage of land under irrigation. On the selected farms only 1.38 per cent of the operated area was irrigated, the rest being rainfed (Table 4.14).

Table 4.14 Irrigated area, selected farms, village Makankui, Jhabua district, M.P.

Size group (Hectares)	Operated area	Irrigated area	Percentage of irrigated to operated area
Below 1.00	14.022	-	-
1.01 - 2.00	29.962	0.910	3.040
2.01 - 4.00	12.270	-	-
4.01 - 10.00	9.690	-	-
10.01 & above	-	-	-
Total	65.944	0.910	1.380

The sources of irrigation were nalah and well contributing 0.510 and 0.400 hectare respectively. Thus Jhabua farms had much lower proportion of irrigated area than Tikamgarh farms.

Forty four per cent of the selected farmers were marginal and another 42 per cent small. Ten per cent farmers belonged to semi-marginal size group and the remaining 4 per cent to medium size group. The distribution of number of farms and area occupied was unequal (Table 4.15).

Table 4.15 Number and area of selected farms by size groups, village Makankui, Jhabua district.

Size group	No. of holding		Operated area		Average size of holdings (Hectares)
	Number	Percentage	Area (Hectares)	Percentage	
Below 1.00	22	44.00	14.022	21.26	0.637
10.01 - 2.00	21	42.00	29.962	45.44	1.427
2.01 - 4.00	5	10.00	12.270	18.61	2.454
4.01 - 10.00	2	4.00	9.690	14.69	4.845
10.01 & above	-	-	-	-	-
Total	50	100.00	65.944	100.00	1.319

As land was hilly and slopy the water holding capacity was low. Therefore kharif crops dominated the cropping pattern. Other reason of low area under rabi crops was absence of irrigation facilities. Fallow-rabi was the rotation followed.

Maize was the most important crop and occupied nearly 40 (39.69) per cent of the area. Paddy occupied 23.36 per cent. Important rabi crops were gram and wheat. While gram occupied 13.64 per cent wheat occupied 11.91 per cent of the cropped area (Table 4.16).

The productivity of crops was quite low. It was lower than the district average (Table 4.17).

Table 4.16 Cropping pattern, selected farms, village Makankui, Jhabua district, M.P.

Crop	Size group									
	Below 1.00		1.01 - 2.00		2.01 - 4.00		4.01 - 10.00		All farms	
	Area	%	Area	%	Area	%	Area	%	Area	%
Paddy	5.240	27.25	7.610	19.58	2.750	17.06	4.000	41.28	19.600	23.36
Maize	7.924	41.20	15.525	39.96	5.850	36.29	4.000	41.28	33.299	39.69
Wheat	2.100	10.92	4.900	12.61	1.800	11.17	1.190	12.28	9.990	11.91
Total cereals	15.264	79.37	28.035	72.15	10.400	64.52	9.190	94.84	62.889	74.96
Moong	-	-	0.200	0.51	-	-	-	-	0.200	0.24
Urad	0.400	2.08	0.760	1.96	2.970	18.42	-	-	4.130	4.92
Arhar	0.288	1.50	0.550	1.41	-	-	-	-	0.838	1.00
Gram	2.780	14.45	6.110	15.73	2.050	12.72	0.500	5.16	11.440	13.64
Total pulses	3.468	18.03	7.620	19.61	5.020	31.14	0.500	5.16	16.608	19.80
Soybean	-	-	0.450	1.16	-	-	-	-	0.450	0.54
Groundnut	0.500	2.60	2.350	6.05	0.400	2.48	-	-	3.250	3.87
Total Oilseeds	0.500	2.60	2.800	7.21	0.400	2.48	-	-	3.700	4.41
Cotton	-	-	0.400	1.03	0.300	1.86	-	-	0.700	0.83
Gross cropped area	19.232	100.00	38.855	100.00	16.120	100.00	9.690	100.00	83.897	100.00

Table 4.17 Productivity of crops, selected farms village  
Makankui, Jhabua district, M.P.

Crop	(Kg./hectares)				
	Size groups				Total
	Below 1.00	1.01 - 2.00	2.01 - 4.00	4.01 - 10.00	
Paddy	420	720	818	900	690
Maize	653	687	547	250	602
Wheat	433	571	1416	1260	777
Moong	-	75	-	-	75
Urd	50	263	345	-	301
Arhar	590	491	-	-	525
Gram	385	483	512	1000	487
Soybean	-	60	-	-	600
Groundnut	620	430	500	-	468
Cotton	-	50	533	-	514

## CHAPTER V

### SUMMARY AND CONCLUSIONS

5.1 Distribution of land holdings by size groups for various agricultural censuses showed that number of marginal holdings increased from census to census. The percentage of number of marginal holdings also increased. It could be concluded from data on number and area occupied by holdings of different size groups that the country was heading towards marginalisation of holdings. It was noted that-

1. There is a definite trend towards marginalisation
2. The number of holdings increased from census to census
3. The area operated increased only marginally
4. The average size of holding decreased from census to census as a result of sub division of holdings.
5. The distribution of holdings by size groups is extremely skewed.

5.1.1 The specific objectives of the study are :

- i) To analyse trend in operational holdings giving emphasis on concentration of number of holdings and operational area in different sizes.
- ii) To highlight the reasons for variation in number of operational holdings
- iii) To know the extent of decrease in size of holdings and increase in number of holdings and the reasons thereof.

Secondary data related to census years from 1970-71 to 1990-91. Primary data were collected from selected households with reference year 1994-95.

5.1.2 Of the three agro-climatic zones in the state of Madhya Pradesh two viz. i) Western plateau and Hills Region and ii) Central plateau and Hills Region were selected for the study. From among the districts of these two zones one each was selected. Jhabua district from Western Plateau and Hills Region was selected and Tikamgarh district from Central Plateau and Hills region was selected. These two districts had highest concentration of the number of operational holdings. From each of the two districts a village each was selected. From Jhabua district village Makankui was selected and from Tikamgarh district village Barkhiria was selected. From each selected village a random sample of 50 farmers was drawn.



5.2.1 The number of operational holdings increased from 1970-71 to 1990-91 by 58.53 per cent. The increase from one census to another was not uniform.

5.2.2 The area under operational holdings increased from 1970-71 to 1990-91 by 4.70 per cent. The increase from one census to another was not uniform.

5.2.3 The average size of holding decreased from census to census. It was 4.00 hectares in 1970-71 and decreased continuously to be 2.64 hectares in 1990-91. The rate of decline from census to census varied considerably.

5.2.4 During the last two decades the percentage of number of marginal and small holdings increased and that of medium and large holdings decreased. In the case of semi medium holdings the percentage of number increased upto the census 1980-81. However, the percentage decreased in the later two censuses. Clearly there is an addition to the percentage of marginal and small holdings at the cost of medium and large farms.

5.2.5 The trends of percentage of number of holdings and area of holdings were similar for marginal, small (both increasing) and large size group (both decreasing) the trends differed slightly for the two size groups of semi medium and medium holdings.

5.2.6 The distribution of holding by size groups was quite skewed. In 1970-71 nearly one third of the total number of holdings were marginal but commanded only 3.39 per cent of the area. Small size holding occupying 16.81 per cent of the total number commanded only 6.21 per cent of the area. In the case of semi medium size group the distribution was less skewed as these holdings constituted 20.14 per cent of total number and occupied 14.56 per cent of the area. The medium and large holdings were favourably placed. While medium size holdings contributing 22.02 per cent to the total number occupied 34.68 per cent of the area, large holdings constituting only 9.27 per cent occupied as high as 41.16 per cent of the area. The skewness existed in all the censuses with varying degrees.

5.2.7 In 1980-81 the average size of holding was 3.421 hectares. It was smallest among the owners of scheduled castes (2.101 hectares). The size was 3.383 hectares among scheduled tribes owners and largest (3.709 hectares) among owners belonging to 'other' castes. This fact

was noted in subsequent two censuses also. It was observed that in 1980-81 largest percentage (41.95) of scheduled castes owners belonged to marginal farmers category. Another 22.79 per cent of the scheduled castes farmers belonged to the category of small farmers. On the other hand 30.13 per cent of the scheduled tribes farmers belonged to marginal farmers' category and 31.98 per cent of 'other' castes farmers to that category. 'Other' castes farmers had lowest percentage of farmers in small farmers category. Conversely, only 1.85 per cent of scheduled castes farmers belonged to large farmers' category. The percentage of scheduled tribes farmers belonging to this category was higher (6.26 per cent) and that of 'other' castes farmers was largest (8.02 per cent). This phenomenon was observed in other two censuses, also. Thus the farmers belonging to scheduled tribes and other castes were better placed than scheduled castes farmers as far as distribution of land holdings by size groups was concerned.

5.2.8 In Tikamgarh district the number of holdings increased steadily from 1970-71 to 1985-86 but decreased slightly in the last census. The increase with reference to base year was 38.22 per cent. However, the rate of increase from one census to another declined. In Jhabua district the number of holdings increased from census to census. The increase was 125.62 per cent over the base year. The rate of increase however, decreased. The increase in number of holdings in Jhabua district was much higher (125.62 per cent) than Tikamgarh district (38.22 per cent).

5.2.9 In Tikamgarh district the area of operational holdings increased. The percentage increase from base year to 1990-91 was 8.70. In Jhabua district the increase in area in 1990-91 was 9.72 per cent as compared to base year.

5.2.10 The average size of holding in Tikamgarh district was 2.397 hectares and in Jhabua district, 5.337 hectares. In both the districts the average size of holding decreased from census to census. The decline in Tikamgarh district was 21.32 per cent and that in Jhabua district, 51.36 per cent. In both the districts the rate of decline decreased from census to census.

5.2.11 In Tikamgarh district during the last two decades the percentage of holdings in general, in marginal and small size groups increased and that in semi medium, medium and large size groups decreased with every census. In Jhabua district similar trend was noticed.



5.2.12 In Tikamgarh district while marginal, small and semi medium farms had increased percentage of area medium and large farms had decreased share. In Jhabua district similar situation prevailed. It can be said that the percentage of number of holdings as well as area increased in marginal and small size groups. The percentage of both number and area decreased in medium and large size groups. There was a shift from large and medium size farms to small and marginal farms.

5.2.13 Distribution of holdings by size groups was quite skewed in both the districts. The skewness in distribution of holdings was observed in all the censuses with varying degree.

5.2.14 In Tikamgarh district the average size of holding in 1990-91 was 1.991 hectares. The average size among scheduled castes farmers was 1.712 hectares. It was higher (1.849 hectares) among scheduled tribes farmers and highest (2.066 hectares) among 'other' castes farmers. Since Tikamgarh district had very little percentage of scheduled tribes farmers it can be said that the farmers belonging to 'other' castes category were better placed than scheduled castes farmers.

In Jhabua district, in 1980-81, the average size of holding was 3.774 hectares. It was 2.268 hectares among scheduled castes farmers, 3.791 hectares among scheduled tribes farmers and 3.995 hectares among 'other' castes farmers. Thus the average size of holding was smallest among scheduled castes farmers, larger among scheduled tribes farmers and largest among 'other' castes farmers. It was further noticed that the proportion of scheduled castes farmers among marginal and small size groups was higher than scheduled tribes and 'other' castes farmers. On the other hand the proportions of numbers of scheduled castes farmers among medium and large categories were much lower than scheduled tribes and other castes farmers. Similar phenomenon was noticed in 1985-86. It is concluded that in both the districts, the average size of holding of 'other' castes farmers was larger than both scheduled castes and scheduled tribes farmers.

For 1990-91 census data on distribution of number and area of holdings was not available by size groups. It was noted that in Tikamgarh district the average size of holding was 1.9 hectares. It

was smallest (1.6 hectares) for scheduled castes farmers. The average size of holding was largest (2.0 hectares) among 'other' castes farmers. In Jhabua district the average size of holding was 2.6 hectares. It was smallest (1.7 hectares) in scheduled castes farmers and was larger (2.6 hectares) in scheduled tribes farmers. The average size was largest (3.0 hectares) in 'other' castes farmers.

5.2.15 State Level Information Collected in 1990-91 Census

Of the total holdings of 84.01 lakhs 88.3 per cent were single holdings. Another 11.6 per cent were joint holdings and 0.1 per cent were institutional holdings. The proportions of area occupied by the three categories were about equal to the proportions of number. The single holdings were concentrated in smaller size groups. In scheduled castes and scheduled tribes farmers single holdings formed about 90 per cent of the total number and about 85 per cent of the total area.

5.2.16 As high as 92.4 per cent of the total holdings were entirely owned and operated by self. Such holdings occupied 90.8 per cent of the area. Holdings partly owned/partly leased in and partly operated in other ways were 4.61 per cent of the total number and occupied 8.4 per cent of the area.

5.2.17 The land was leased in on 5 different conditions. In both the categories of leasing (partly owned and partly leased in and entirely leased in) "other conditions" were most important. In the case of partly owned and partly leased in land "other conditions" were applicable on 46 per cent of the area. In the case of entirely leased in area "other conditions" were applicable on 70.8 per cent of the area. Other conditions of leasing were fixed amount and share of production.

5.2.18 Of the total holdings 61.6 per cent were totally unirrigated. Partly irrigated and partly unirrigated holdings were 28.3 per cent.

5.2.19 In Tikamgarh district single and joint holdings shared about equal percentage of 50.04 and 49.92 in number. The area occupied by these was in about equal proportions of 47.07 and 52.40. In Jhabua district, on the other hand, nearly all the holdings (99.70 per cent) were single occupying 99.09 per cent area. The institutional holdings were negligible in both the districts.

5.2.20 In Tikamgarh district 93.79 per cent of the holdings were entirely owned and operated by self. These occupied about equal (94.76) percentage of land. Partly owned/partly leased in holdings formed 3.26 per cent of the total number and 3.75 per cent of the total area. In Jhabua district entirely owned and operated holdings were 77.18 per cent and occupied 77.09 per cent of the area. Unlike Tikamgarh district partly owned/partly leased in holdings formed considerable percentage (16.30) of holdings and constituted 20.75 per cent of the area.

5.2.21 In Tikamgarh district while 90 per cent of the partly owned and partly leased in holdings were under "other conditions" of leasing wholly leased in holdings had "share of production" as the only condition of leasing. In Jhabua district 59.76 per cent of the partly owned and partly leased in area was under "other conditions" of leasing. The percentage of area under mortgage was 24.34. In the case of entirely leased in holdings "other conditions" governed 57.88 per cent area and "share of production" 30.41 per cent.

5.2.22 In Tikamgarh district 52.71 per cent of the holdings were partly irrigated and partly unirrigated. These occupied 32.61 per cent of the area. Another 31.01 per cent of the holdings were entirely unirrigated occupying 14.53 per cent of the area. In Jhabua district three fourths (74.85 per cent) of the holdings were entirely unirrigated. These occupied 90.51 per cent of the area. Partly irrigated and partly unirrigated holdings were 24.01 per cent and occupied 8.96 per cent of the area.

5.2.23 In Tikamgarh district scheduled castes farmers had 56.60 per cent single holdings. Scheduled tribes farmers had larger percentage (68.66 per cent) of single holdings. Conversely scheduled castes farmers had larger percentage (43.40) of joint holdings than scheduled tribes farmers (31.32 per cent). In Jhabua district nearly all the holdings of both scheduled castes and scheduled tribes farmers were single holdings.

5.3.1 Tikamgarh district of Sagar revenue division is situated in the northern part of the state known as Bundelkhand. The geographical area of the district is 504 thousand hectares and is inhabited by 9,40,829 people. The land for the most part is rocky and soil is of low fertility. The district, in general, is an even plain with gentle

slope towards north. The Betwa and the Dhasan are the main rivers. The average rainfall of the district is 1001 mm. The district is very deficient in means of communications. It has five tehsils of Tikamgarh, Baldeogarh, Jatara, Prithvipur and Niwari. The district is rural in character as 83.10 per cent of the population is termed as rural. Female population per thousand males is 871. The literacy percentage was 27.60. The literacy percentage was lower for rural population and for women. Of the total workers 85.15 per cent were engaged in agricultural occupations. The district has a comparatively higher proportion of scheduled castes population and a lower proportion of scheduled tribes population than the state as a whole. Nearly half (50.81 per cent) of the total area was net sown area. Wheat was the single important crop of the district occupying about a third of the cropped area. Gram was another important crop occupying 6.60 per cent. Soybean occupied 11.87 per cent and fodder crops occupied 8.80 per cent. Wheat was irrigated to the extent of 97.06 per cent and barley, 94.95 per cent. Mustard was irrigated to the extent of 89.58 per cent and gram, 60.29 per cent. Of the total irrigated area 80 per cent was commanded by wells and 11.00 per cent by canals. The average size of holding was 1.87 hectares. A large majority of 67.7 per cent holdings was of small size (upto 2.0 hectares). The distribution of holdings by size groups was quite unequal.

5.3.2 Village Barkhiria is located in south west of Tikamgarh town at a distance of 14 km. from Tikamgarh on Tikamgarh- Lalitpur road. The total population was 470 consisting of 180 scheduled castes, 186 backward castes and 104 other castes categories. The total geographical area was 220.188 hectares. Irrigated area was 99.40 per cent of the net area sown. Of the total irrigated area 81.25 per cent was under the command of canals and 16.16 per cent under the command of river.

5.3.3 Jhabua district lies in the extreme western part of the state. It is divided into 5 tehsils namely Thandla, Petlawad, Jhabua, Jobat and Alirajpur. The terrain is generally hilly and soil is generally light, not well suited for cultivation. The main rivers are Mahi and Anas. The climate is subject to greater extremes than the climate of Malwa. The total population of the district is 11,30,405. Of the total population 85.67 per cent belonged to scheduled tribes, 3.06 per cent to scheduled castes and the remaining

11.27 per cent to other castes. The district was rural as 91.32 per cent of the population resided in villages. The ratio of females per 1000 males was 977. The literacy percentage was only 14.54. It was lower among rural population and lower among female population. Cultivators, agricultural labourers and those engaged in occupations like livestock, forestry etc. together constituted 90.41 per cent of the workers. Of the geographical area 53.44 per cent was net sown area. Forest occupied 18.93 per cent area and land not available for cultivation, 16.89 per cent.

Maize was the single important crop occupying 21.16 per cent of the cropped area. Gram occupied 13.92 per cent and wheat, 8.02 per cent. Wheat was irrigated to the extent of 94.01 per cent and gram, 25.76 per cent.

About half (46.96 per cent) of the holdings were of very small size (below 2.00 hectares). Semi medium size holdings (2.00 to 4.00 hectares) were 27.20 per cent.

5.3.4 Village Makankui is located on Jhabua Para road at a distance of 7 km. from Jhabua. Geographical area of the village is 206.25 hectares. Due to undulating land with very little irrigation kharif crops dominated. Maize was most important occupying 39.49 per cent. Paddy, groundnut and urd were other kharif crops. Among rabi crops only gram (26.38 per cent) was important. The average size of holding was 2.03 hectares. About two thirds of the holdings (63.16 per cent) were below 2.00 hectares.

5.4.1 In village Barkhiria of Tikamgarh district the number of owners in khatas was 288 in 1983-84. The number increased from year to year and stood at 476 in 1994-95, or an increase by 65.28 per cent. The number of fragments in 1983-84 was 423. The number increased to 468 by 1994-95. The area of holdings did not change during the reference period. It remained 209.439 hectares. The average size per owner decreased from 0.727 hectare in 1983-84 to 0.440 hectare in 1994-95, a decline of 39.48 per cent. The average size per khata in 1994-95 was 1.921 hectares. During the period from 1983-84 to 1994-95 there was an increase of 188 owners. Among the reasons of increase the most important was "death of owner and division among successors" and accounted for 79.79 per cent increase.

Partition (among brothers) and separation of sons from father was another important reason and caused 15.43 per cent increase in owners. Only 9 cases (4.78 per cent) were of sale.

5.4.2 In village Makankui the number of owners was 124 in 1980-81. It increased to 193 in 1994-95 or an increase of 55.65 per cent. The number of fragments increased from 149 in 1980-81 to 201 in 1994-95 or an increase of 34.90 per cent. The village area remained at 115.560 hectares during the period. Therefore the area per owner decreased from 0.932 hectare in 1980-81 to 0.599 hectare in 1994-95, or 35.73 per cent decrease. The area per fragment decreased from 0.775 hectare to 0.575 hectare, a decline by 25.81 per cent. The area per khata was 2.027 hectare. The number of owners increased from 124 to 193 during the period 1980-81 to 1994-95. Of the 69 cases of increase 56 (81.16 per cent) were recorded due to death of owners and divisions among successors. Only 6 cases (8.70 per cent) of partitions were recorded. The cases of sale were 7 (10.14 per cent).

5.4.3 Of the total land owned by selected farmers of Tikamgarh district 96.09 per cent was inherited land and only 3.91 per cent was purchased land. The average size of holding was 2.329 hectares.

5.4.4 In village Makankui all the farmers were tribals. The average size of holding was 1.319 hectares. Of the owned land only 1.88 per cent was purchased land and the remaining 98.12 per cent was inherited land.

5.4.5 The productivity of crops was low on selected farms of both the districts.

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Appendix Table A 2.1

Number and area of operational holdings in different size groups in Madhya Pradesh, census 1970-71

Size of holdings (Hectares)	Number of holding		Area of holding		Average size per holding
	Number	Percentage to total	Area	Percentage to total	
Marginal	16,83,300	31.76	7,17,700	3.39	0.43
Small	8,90,600	16.81	13,17,000	6.21	1.48
Semi Medium	10,67,100	20.14	30,85,900	14.56	2.89
Medium	11,66,900	22.02	73,50,900	34.68	6.30
Large	4,91,500	9.27	87,22,400	41.16	17.75
Total	52,99,400	100.00	2,11,93,900	100.00	4.00

Appendix Table A 2.2

Number and area of operational holdings in different size groups in Madhya Pradesh, census 1976-77

Size of holdings (Hectares)	Number of holding		Area of holding		Average size per holding
	Number	Percentage to total	Area	Percentage to total	
Marginal	19,68,122	32.53	8,64,837	3.99	0.44
Small	10,95,250	18.10	16,10,223	7.42	1.47
Semi Medium	12,65,748	20.92	35,99,603	16.59	2.84
Medium	12,66,733	20.93	78,35,244	36.13	6.19
Large	4,55,278	7.52	77,81,291	35.87	17.09
Total	60,51,131	100.00	2,16,91,198	100.00	3.58

Appendix Table 2.3

Number and area of operational holdings in different size groups in Madhya Pradesh, census 1980-81

Size of holding (Hectares)	Number of holding		Area of holding		Average size per holding
	Number	Percentage to total	Area	Percentage to total	
Marginal	21,02,491	32.80	9,30,197	4.24	0.44
Small	12,26,388	19.13	17,91,582	8.17	1.46
Semi Medium	13,71,519	21.39	38,71,481	17.65	2.82
Medium	12,75,427	19.89	78,75,869	35.91	6.18
Large	4,35,030	6.79	74,61,989	34.03	17.15
Total	64,10,855	100.00	2,19,31,118	100.00	3.42

Appendix Table A 2.4

Number and area of operational holdings in different size groups in Madhya Pradesh, census 1985-86

Size of holding (Hectares)	Number of holding		Area of holding		Average size per holding
	Number	Percentage to total	Area	Percentage to total	
Marginal	27,32,924	35.94	12,14,197	5.48	0.44
Small	16,12,622	21.21	23,52,791	10.62	2.20
Semi Medium	15,92,537	20.95	44,49,702	20.08	2.79
Medium	12,91,817	16.99	78,85,488	35.60	6.10
Large	3,73,244	4.91	62,53,124	28.22	16.75
Total	76,03,144	100.00	2,21,55,302	100.00	2.91

Appendix Table A 2.5

Number and area of operational holdings in different size groups in Madhya Pradesh, census 1990-91

Size of holding (Hectares)	Number of holding		Area of holding		Average size per holding
	Number	Percentage to total	Area	Percentage to total	
Marginal	31,36,000	37.33	14,09,000	6.35	0.45
Small	19,17,000	22.82	27,83,000	12.54	1.45
Semi Medium	17,38,000	20.69	48,38,000	21.80	2.78
Medium	12,87,000	15.32	77,72,000	35.03	6.04
Large	3,23,000	3.84	53,89,000	24.28	16.68
Total	84,01,000	100.00	2,21,91,000	100.00	2.64

Note : Marginal - Below 1.00 hectare  
 Small - 1.01 to 2.00 hectares  
 Semi Medium - 2.01 to 4.00 hectares  
 Medium - 4.01 to 10.00 hectares  
 Large - 10.01 & above