

## JFM AND MIGRANT WOMEN WORKER: A COMPARATIVE STUDY OF JHABUA AND MANDLA DISTRICTS OF MADHYA PRADESH

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**Abstract:** While environmental impact assessment has focused mainly on the physical and biological properties of natural environments, social impact assessment (SIA) is concentrated on distinctively human side of human environment. This paper is split up into three parts. First part of the paper deals with the Introduction, objectives and methodology. Second part consists of profile of the study area and sample villages and analysis of the two dimensional Impact of JFM and migrant worker, on social sustainability and compares the reasons and causes of migrant women worker. For this paper Jhabua and Mandla districts from Madhya Pradesh and five villages from each tribal districts have been selected for in-depth study, based on many criteria.

**Keywords:** social sustainability, JFM, occupational structure, women empowerment, capacity building

### INTRODUCTION

While environmental impact assessment has focussed mainly on the physical and biological properties of natural environments, social impact assessment (SIA) is concentrated on distinctively human side of human environment. SIA is about “people impacts”. Its aim is to predict and evaluate those impacts before they happen. (Finsterbusch *et al.*, 1983)<sup>1</sup>. Establishing time horizons play key role in assessing social impact by identifying people’s problem and their concerns (Preister and Kent, 1981)<sup>2</sup>. The criteria for judging the consequences of carrying out (or failing to carry out) a course of action of the peoples staying the way they are or Changing. These criteria can be expected to change over time, as the emphasis on equity concerns has changed, for example (Lampman, 1974)<sup>3</sup>. Some of the studies deals with trend impact analysis for example (Hollies and McEvoy, 1973; Heller, 1971)<sup>4</sup> “cross- impact analysis strives to identify interactions among events or development by specifying how one event will influence the likelihood, timing and mode of impact on another event in different but associated field. Second- and higher order impacts come into consideration, as do the compound effects, or “synergism’s” of cumulative impacts (Danjani and Ortolano, 1979; Grigsby, 1981; Husky, 1979)<sup>5</sup>.

Bhattacharya *et al.*, (2000)<sup>6</sup> evaluated the fulfilling of societal need through participatory silviculture approach. Of late, interest in traditional knowledge is increasing rapidly all over the world, much of which owes to the community based development (Sengupta, 1995)<sup>7</sup>. Discussion was organized at Chennai Round table (2001)<sup>8</sup> about the Indigenous knowledge and traditional

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knowledge of community and how this knowledge could be disseminated in the society. Thus the local knowledge systems include practices where farmers, fishermen, pastoralists etc. do the right things for wrong reasons as well as for right reasons. There are practices where they do the wrong things which may have been right at one time but are no more so. Thus, one doesn't have to romanticize the capabilities of indigenous knowledge system. There are, however, strengths of the local knowledge system which can help extend the frontiers of natural as well as social sciences. (Pandey, 2001)<sup>9</sup> find out how indigenous knowledge is helpful in managing common wasteland in Rajasthan and suggests how the impact of developmental project on social condition could achieve sustainability. While (Bhattacharya, 2001)<sup>10</sup> assessed in Gohra Dongri, Betul District of Madhya Pradesh that the traditional values should keep alive to understand the people's knowledge related to medicinal plants and utilization of the same.

The socio-economic indicators for sustainable forest management as find out by (Ferguson et al 1999)<sup>11</sup>, highlights issues involved and possible solution for sustainability. Further he discusses the geography of socio-economic indicators how the location and distance from forest affect the socio-economic condition of the commons living in those area.

The contemporary role of social indicators as a guide to planning and public policy can be traced to the 1960s and to the OECD's Social indicator programme in 1970s and 1980s (Horn 1993).<sup>12</sup> In Australia, the Australian Bureau of Statistics has published collections of social indicators would inform, nor they could be evaluated. Social impact analysis attempts to understand likely social changes before development or other events occur (Burge and Van clay 1995)<sup>13</sup>

The large scale migration of tribal's is a chronic and persistent feature of Jhabua. The average percentage of migrants even in normal years is around 46, being as high as 60-70 from Petlawad and Jhabua blocks and lowest of 20 to 30 from Udaigarh block. (Joshi, 1997)<sup>16</sup>

In case of Ratlam district of Madhya Pradesh the drought has a tendency to affect the individual decision to migrate out. These decisions are governed by social and Institutional values. (Singh, 1993)<sup>17</sup>.

Thus, the objectives of this is as follows .

## **OBJECTIVES**

- To assess the impact of JFM and migrant women worker on social sustainability.
- To study the socio-economic status of migrant worker .
- To find out the reasons and causes of migration
- To suggest remedial measures of problem and issues and challenges ahead.

## **METHODOLOGY**

The following methodology is used in the study.

This study is based on the primary source of data collection from the two districts of Madhya Pradesh. Both the districts are tribal dominant districts with maximum tribal population.

Two districts has been selected from the state of Madhya Pradesh to get overview of the problem of tribal migrant worker. The selection of districts are based on several criteria adopted for the study such as severity index of depletion of forest, access to the area, age of VFCs and FPCs, as per the secondary data. i.e. Jhabua, Mandla.

#### **i. Primary source of data**

The primary source of data has been obtained through structured schedule. On the bases of above criteria and secondary data obtained from different sources, two districts Jhabua and Mandla were selected for in depth study. Selection criteria of five registered VFCs and FPCs is based on the following, attributes. The survey was conducted in the study area of Jhabua and Mandla district of Madhya Pradesh during 1999, 2000, and 2001 2006, 2010, 2013-14 during various projects and workshops conducted.

#### ***Meaning of VFCs and FPCs***

As per the definition of Forest department VFCs means Village forest committee, while FPC means Forest protection committee. VFC exists in the degraded forest area while FPC indicates about the good forest area, good forest area means forest density of 0.4 and above. In other words where peoples' are protecting existing forest cover.

#### ***Selection of VFCs and FPCs from Jhabua and Mandla Districts***

The following VFCs were selected from Jhabua District of Madhya Pradesh.

1. Golamba from Katthiwada range
2. Bejada from Sondawa/ Umrli Range
3. Kotnai from Thandla Range
4. Kabrisel from Katthiwada Range
5. Rakhadia from Thandla Range Range

While from Mandla District the following FPCs were selected for intensive study from Moti Nala Range.

1. Baila,
2. Lohta,
3. Panari Kheda,
4. Chima Gundi.

5. Amwar from Mawai range

Village Profile of the above villages is also prepared

**c) Sampling Frame work:**

Firstly with the help of Government records and discussion with appropriate authorities and agencies a list of these villages has been prepared which comes under JFM list. A list of 5 FPCs /VFC's were prepared from different selected forest division and ranges selected randomly for intensive study.

As the study aims at analysing both qualitative and quantitative aspects of the problem, the survey work has been divided into the following two steps.

**1. Group discussions :**

The group discussion was organised for two categories viz.

- a. Forest Officials and staff
- b. Villagers/ VFCs/FPCs members

**a. Forest Officials and staff :**

To capture perception, attitude and responses of forest officials and staff the focal group discussion technique was used. In this technique forest officials and staff were interviewed and their views were documented. The recorded responses were coded and documented accordingly. These responses were documented from 22 forest officials including staff from Jhabua district and Mandla district respectively. The discussions were carried out at three different places like, DFO Office, Range office and at the selected villages.

**b) Villagers/ VFCs/FPCs members :**

1. To capture perception, attitude and responses of VFCs/FPCs members the focal group discussion was organized by using technique was used. The perception and responses of the members were gathered by using two methods viz.

- Group discussions committee members and villagers :
- Documenting responses of 10 Households from each selected VFCs/FPCs - Total 100 households

The Group discussions method or peoples participation in meeting is as follows :

- One group discussion was organized in each selected VFCs/FPCS by following PRA Method to obtain the group perception; ( David Case, 1990; Ingles *et al.*, 1999)
- In group discussion, all villagers are invited to participate;
- This discussion is open to villagers and VFCs and FPCs members and non members too;

- The President and Secretary are the facilitator of the discussion
- Mixed views are obtained from the members by using structured schedule;
- The group discussion were organized at the common meeting places in the villages like Chaupal Place, School Place or the place suggested by the villagers.

1. Interviewed 10 households of selected VFCs/FPC members with the help of structured schedules by using random sample techniques

The information collected during the survey work has been classified into the qualitative and quantitative data. The quantitative information is transferred to the data entry sheets for computer tabulation and statistical analysis.

“Before” and “after” analysis of 100 households from selected villages

Some of the methods are based on Spread effect and backwash effects of migration has also be used in the study as used by the Gunnar Myrdals book titled “*Asian Drama: An Inquiry into the Poverty of Nations*”

## ANALYSIS

Thus, it essential to assess the impact of joint forest Management and migrant worker on social condition, its sustainability and related issues in the study area .

Table 1, shows the age group of the households interviewed personally in the selected 5 VFCs/ FPCs of Jhabua and Mandla districts. The highest percent of households were interviewed in the age group of 35-40 years (42% ), followed by age group 45-50 years (20%) in Jhabua district. While the highest percent of households interviewed in Mandla come in the age group of 35-40 years (38%), and 40-45 years(20%) respectively.

**Table 1 Age group of the Households**

Age group of Respondents	Jhabua		Mandla		Total %	
	No. of respondents	%	No. of respondents	%	No. of respondents	%
30-35	3	6	5	10	8	8
35-40	21	42	19	38	40	40
40-45	09	18	11	22	20	20
45-50	10	20	6	12	16	16
50 and above	07	14	09	18	16	16
Total	50	100	50	100	100	100

Source : Survey in the selected VFCs/FPCs of the study area

The ethnic composition of the households surveyed is given in table 2 A. It is clear from the table that 96% and 100%of the respondents were interviewed from ST community in Jhabua and Mandla district respectively. The ST of Jhabua district Consists of **Bhil, Bilala and Patlia Tribes** while the ST of Mandla Consists of **Baiga and Gond Tribes**.

Table 2 A Ethnic Composition of Households

Caste of respondents	Jhabua		Mandla		Total	
	No. of respondents	%	No. of respondents	%	No. of respondents	%
SC	-		-	-		
ST	48	96	50	100	98	98
OBC	-		-	-	-	
Others	2	4	-	-	2	2
Total	50	100	50	100	100	100

Source : Survey in the study area.

Italics indicates percent

### IMPACT OF JFM ON HOUSING CONDITION AND ELECTRICITY

The changes in the housing condition of respondents of the selected VFCs/FPCs is furnished in table 2 b. The results of the analysis of 10 selected VFCs/FPCs from the study area of Jhabua and Mandla is given below.

#### BEFORE JFM :

- No *Puccka house* was found in the selected 5 VFCs/FPCs of Jhabua and Mandla district.
- 80% and 90% of *Kaccha houses* were found in Jhabua and Mandla district.
- 20% and 10% of *Semi Kaccha-Puccka houses* were found in Jhabua and Mandla district.

#### AFTER JFM :

- 8% and 6% of the *Puccka houses* has been constructed, after the JFM programme in the Jhabua and Mandla district.
- 14% and 28% of *Kaccha houses* has been converted in *Semi-Kaccha and Puccka houses*. The conversion or decrease in the number of *kaccha houses* after JFM programme, is a very good indicator to assess social impact in context of changing housing condition. After JFM programme 66% and 62% of the *kaccha houses* of the respondents are existing.
- After JFM programme, the percent of *Semi-Kaccha-Puccka* houses has increased by 6% and 22% in Jhabua and Mandla district respectively . It can be concluded from the table, that the social impact in context of changing condition of respondents houses has positive impact.

**Table 2 b Changes in the housing condition of the sample households in the study area.**

Attributes	Jhabua			Mandla			Total		
	Before JFM	After JFM	changes	Before JFM	After JFM	Changes	Before JFM	After JFM	changes
Type of houses of respondents									
i) Pucca house	-	4	+4 8	-	3	+3 8	-	7	+7 7
ii) Kaccha house	40	33	-7 14	45	31	-14 28	85	64	-21 21
iii) Semi Kaccha -Pucca	10	13	+3 6	5	16	+11 22	15	29	+14 14
Total	50	50		50	50		100	100	

Source : Survey in the study area

The changes in the status of electricity connection of respondents of the selected VFCs/FPCs is furnished in table 3. The results of the analysis of 100 respondents of selected VFCs/FPCs from the study area of Jhabua and Mandla is given below.

#### **BEFORE JFM:**

- a. 30% and 36% of households were having legal ( One bulb connection) in Jhabua and Mandla district respectively.
- b. 54% and 50% of households were having illegal connection electricity connection in Jhabua and Mandla district.
- c. 16% and 14% of household have no electric connection in Jhabua and Mandla district.

#### **AFTER JFM :**

- a. The positive changes in context of installation of legal electric connection( One bulb has registered an increase by 34% and 18% in Jhabua and Mandla district respectively. In Jhabua District +17 and +9 in Mandla district.
- b. The illegal electricity connection ( One bulb ) has decreased by 24% and 8% in Jhabua and Mandla district respectively.
- c. After JFM, 10% of households have no electric connection in Jhabua and Mandla district
- c. It can be concluded, that changes in installation of 52% of legal electric connection is good indicator of social well being of the community. While decrease in the total illegal electricity connection by 32% and negative change of 20% of households having no connection is good indicator to assess social impact of the programme.

**Table 3 Changes in the electricity connection of the sample households in the study area.**

Attributes	Jhabua			Mandla			Total		
	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes
Number of house holds having electric connection									
i) Legal connection (one Bulb)	15	32	+17	18	27	+9	33	59	+26
ii) Illegal connection	27	15	-12	25	21	-4	52	36	-16
iii) No connection	8	3	-5	7	2	-5	15	5	-10
	50	50		50	50		100	100	

Source : Survey in the study area. (Based on the information obtained from respondents **Changes in Demographic features**

Table No. 4 shows the before and after analysis of joint forest management programme in the study area on population. As per survey in the study area, the sample size of population in the two district was 699 and average size of family was recorded 7.16 in Jhabua and 6.82 after the Joint Forest Management programme. Before and after the formation VFC/FPC committee the percent changes was recorded + 6.42% in selected 5 VFCs/FPCs of Jhabua District, followed by 7.5% Changes in the selected 5 FPCs of Mandla District. While the changes in average size of family members was recorded +0.46 change in Jhabua and +0.58 in Mandla district respectively. The overall changes was recorded +7.1 and +0.49. This shows that there is a positive changes in the size of family members or increase in the population after the JFM programme. (Singh, 1992)<sup>14</sup> suggested to check the rapidly increasing population and find out the causes behind the increasing population.

The social impact of the programme could be viewed in the percent change in population, which is one of the important indicator to judge social impact.

**Table 4 Status of population of the sample households of VFCs/FPCs**

Attributes	Jhabua			Mandla			Total		
	Before JFM	After JFM	% changes	Before JFM	After JFM	% Changes	Before JFM	After JFM	% changes
Number of Households	50			50			100		
1.1 Family members	335	358	+6.42	312	341	+ 7.5%	650	699	+ 7.1
1.2 Average Size of Family	6.7	7.16	+ 0.46	6.24	6.82	+ 0.58	6.5	6.99	+0.49



Table 5, shows the age group of the family members of the respondents surveyed in the selected VFcP/FPCs. The heavy concentration was observed in the age group of **15-35 years ( 42.6%)**, followed by the age group of 5-14 years (32.3%) in Jhabua and **43.3% and 31.1% in** , Mandla district respectively.

**Table 5 Age group of the Family members of the households**

Attributes	Jhabua	Mandla	Total
Age structure of Family members	(In %)	(In %)	(In %)
Less than 5 year	13.8	12.6	13.2
5 to 14	32.3	31.1	31.8
15 to 35	42.6	43.3	42.9
36 to 50	9.5	11.5	10.5
51 to 65	1.0	0.9	0.9
65 and above	0.8	0.6	0.7

Source : Survey in the study area

*italics indicates percent*

### **IMPACT OF JFM ON CONSTRUCTION AND CREATION OF UTILITY**

Some of the indicators related to social impact assessment could be judged from the changes occurred in the construction or opening of new schools, aganwadi in the study area. Table 6 shows the number of school in study area of Jhabua and Mandla district. Government primary school in the selected VFCs/FPCs. The sustainable development of rural education in drought prone area of Ratlam district M.P. is of immense importance from the point of view of literacy level, awareness level and factors compelling the household to withdraw their children's from the school and put them on to work to pass out the drought year or more specifically the children's contribution to family income.(Singh, 1997)

#### **BEFORE JFM :**

- i. 5 and 4 primary schools are in operation in Jhabua and Mandla district.
- ii. No change occurred in the opening of new Middle school in the study area.
- iii. 4 *Aganwadi* in ( Jhabua and Mandla district ) were in operation in the study area.
- iv. One programme each related to ***Adult education and Literacy programme*** were carried out in selected VFCs/FPCs of Mandla district.

#### **AFTER JFM :**

- i. One school building was constructed by Forest Department in ***Rakhadia*** VFC of Jhabua district.
- ii. One *Aganwadi* in ( Jhabua and Mandla district ) has started after JFM Programme

in the study area. In Mandla District one Aganwadi was constructed by Forest Department in Baila VFC

- iii. 2 programmes related to **Adult education and Literacy programme** has started in 4 Aganwadi in ( Jhabua and Mandla district ) in the study area.

**Table 6 Number of School in the study area**

Attributes	Jhabua			Mandla			Total		
	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes
Number of schools									
i) Govt . primary school	5	6	+1	4	4	-	9	10	+10
ii) Middle school	1	1	0	1	1	-	2	2	0
iii) High school / H.S.school	-	-	-	-	-	-	-	-	-
iv) College	-	-	-	-	-	-	-	-	-
Other									
a) Anganwadi	4	5	+1	4	5	+1	8	10	+2
b)Adult education	-	2	2	1	2	+1	1	3	+2
c) Literacy Programme	-	2	2	1	2	+1	1	3	+2

Source : Survey in the study area

One school building is constructed by Forest department in Jhabua while one aganwadi in Baila FPC by Forest Department .

### IMPACT OF JFM ON LITERACY

Changes in literacy level could be judged by the number of educated people in the study area. Table 7 shows the changes in the literacy level. The changes in literacy level could be assessed before and after JFM programme in the selected VFCs/FPCs

**Table 7 Changes in Literacy Level in the Households- Family**

Attributes	Jhabua			Mandla			Total		
	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes
<b>Number of people can read and write</b>	<b>22</b>	<b>29</b>	<b>+ 7</b>	<b>24</b>	<b>35</b>	<b>+9</b>	<b>46</b>	<b>64</b>	<b>+18</b>
<b>Male</b>	<b>15</b>	<b>20</b>	<b>+5</b>	<b>16</b>	<b>22</b>	<b>+8</b>	<b>29</b>	<b>42</b>	<b>+13</b>
<b>Female</b>	<b>7</b>	<b>9</b>	<b>+2</b>	<b>8</b>	<b>13</b>	<b>+5</b>	<b>17</b>	<b>22</b>	<b>+5</b>
<b>Number of boys going to school</b>	<b>11</b>	<b>17</b>	<b>+6</b>	<b>15</b>	<b>24</b>	<b>+ 9</b>	<b>26</b>	<b>41</b>	<b>+15</b> 36.5%

<i>Number of girls going to school</i>	7	11	+4	12	19	+7	19	30	+11 36.6%
<i>Drop out rates</i>	7	3	-4	9	2	-7	16	5	-11 31.2%
<i>Total</i>	40	58		51	76		91	134	+ 43 32.0%

Source : Survey in the study area

*Italics indicates percent*

### **BEFORE JFM PROGRAMME**

- i. 15 males and 7 females could read and write in Jhabua district. While 16 males and 8 females were literate in Mandla district.
- ii. The percent of boys going to school was recorded highest in Mandla by 26.6% as compared to Jhabua District.
- iii. The percent of Girls going to school was also recorded higher in Mandla district by 41.6% as compared to Jhabua district
- iv. The drop out rate, 7 and 9 was recorded in Jhabua district Mandla respectively. The drop out rate was recorded 22.2% higher than Jhabua district in Mandla district, which also indicates that the drop out rate was higher before JFM Programme .
- v. It could be concluded that the literacy rate was recorded highest in Mandla district by 21.56% as compared to Jhabua district.

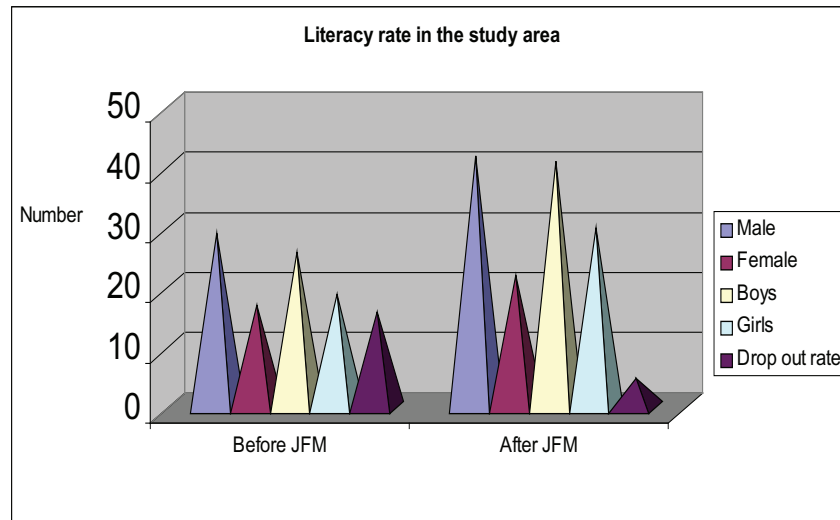
### **AFTER JFM PROGRAMME**

- i. 20 males and 9 females could read and write in Jhabua district. While 22 males and 13 females are literate in Mandla district. In both of the districts the + Changes has occurred which also indicates that the literacy rate has increased by 28.1% in both the district after JFM Programme
- ii. The percent of boys going to school has also increased by + 6 and + 9 in the study area of Jhabua and Mandla district respectively. The changes occurred + 15 in both the districts. The boys literacy rate increased by 38.5%
- iii. The percent of girls going to school has also increased by +4 and + 7 in the study area of Jhabua and Mandla district respectively. The changes occurred + 11 in both the districts. The girls literacy rate has increased by 36.6%.
- iv. It is also evident from the table that the drop rate has decreased by 31.2% in Jhabua and Mandla district. Checking drop out rate is very important for the development of human resources as social capital.

- v. It could be concluded that the literacy rate after the JFM programme has increased by 32.0%

Figure 1 shows the changes in literacy rate before and after JFM programme in the study area of Jhabua and Mandla District

Figure 1



## CHANGES IN OCCUPATIONAL STRUCTURE

Table 8 shows the changes in occupation structure of the respondents. To assess the social economic impact it is essential to understand the changes in occupational pattern of the respondents.

### BEFORE JFM PROGRAMME

- i. 15 (30%) and 14 (28%) of households were engaged in agricultural and 35 (70%) and 42 (82%), in labour occupation in Jhabua and Mandla District respectively.
- ii. 48 (96%) and 42 (84%) of households were engaged in Agriculture and Labour occupation. The occupational activities in the study area confined in other sub-occupation viz agriculture, Labour and Collection of forest products and selling of wood fuel.
- iii. In service category of occupation, 5 (10%) and 10 (20%) of households, were engaged.
- iv. 45 (90%) and 48 (96%) of households are engaged in collection of forest products in Jhabua and Mandla District respectively. While 30 (60%) and 35 (70%) are engaged in occupation like selling of wood fuel.

**AFTER JFM PROGRAMME**

- i. 18 (36%) and 18 (36%) of households are engaged in agricultural and 27 (54%) and 30(60%) in labour occupation and in Jhabua and Mandla District respectively.
- ii. 46 (96%) and 41 (82%) of households were engaged in Agriculture and Labour occupation. The occupational activities in the study area confined in other sub-occupation viz agriculture, Labour and Collection of forest products and selling of wood fuel.
- iii. In service category of occupation, 9 (18%) and 13 (26%) of households, are engaged in Jhabua and Mandla District respectively.
- iv. 47 (94%) and 45 (90%) of households are engaged in collection of forest products in Jhabua and Mandla District respectively. While 18 (36%) and 20 (40%) are engaged in occupation like selling of wood fuel.
- v. It could be concluded from the table that in study area there are changes in occupation structure of the households. The positive are recorded in agriculture 7% ; Private service 4%, Government service 3% While negative trends in occupation were found in Labour 20%; Agricultural labour 4% collection from forest 1% and selling wood fuel by 27% . This also indicates that for the assessment of social sustainability the negative changes recorded in labour and selling wood fuel occupation is very important.

**Table 3.2.8 Changes in Occupational Structure of the Respondents**

Sl. No.	Attributes	Jhabua			Mandla			Total		
		Before JFM	After JFM	Changes	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes
1.	Agriculture	15	18	+3	14	18	+4	29	36	+7 7
2.	Labourer	35	27	-8	42	30	-12	77	57	-20 20
3.	Agricultural Labourer	48	46	-2	45	41	-4	93	87	-4 4
4.	Service									
	Private service	3	5	+2	5	7	+2	8	12	+4 4
	Government service	2	4	+2	5	6	+1	7	10	+3 3
5.	Collection from forest	45	47	+2	48	45	-3	93	92	-1 1
6.	Selling wood fuel	30	18	-12	35	20	-15	65	38	-27 27

Source : Survey in the study area

*Italics indicates percent*

Figure 2 shows the changes in occupational structure before and after JFM Programme in the study area .

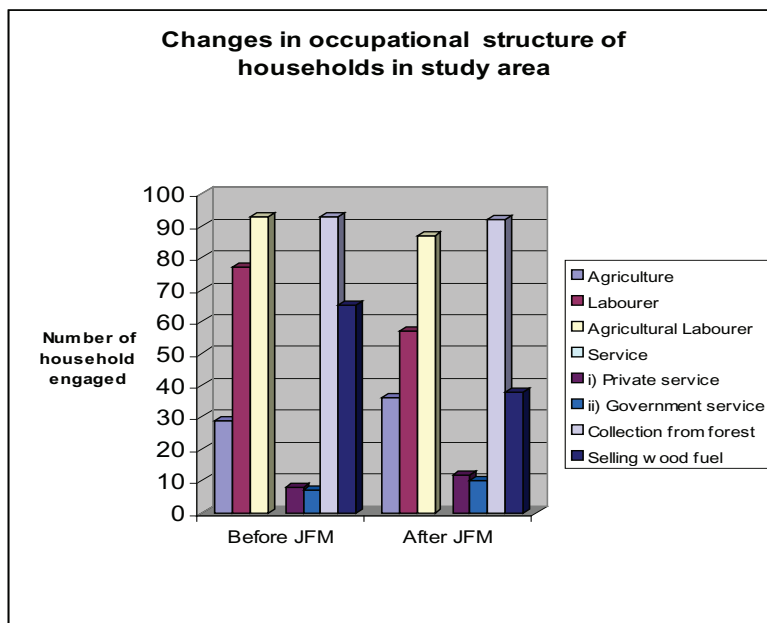


Figure 3.2.2

**THESE ABOVE FACTORS ARE HAVING A DIRECT IMPACT ON THE MIGRATION TREND OF THE TRIBAL WORKERS**

### Part –II

#### Impact of JFM on Migration Trend

Table 9, reveals the changes in the migration trends before and after JFM programme

Table 9 Migrating population in three seasons

Attributes	Jhabua			Mandla			Total		
	Before	After	Changes	Before	After	Changes	Before	After	Changes
Number of peoples Migrating out from households family in three seasons									
i) Winter season	25	19	-6 24%	27	22	-5 18.5%	52	41	- 11 21.1%
ii) Summer season	38	27	-11 28.9%	41	25	-16 39.0%	79	52	- 27 34.1%
iii) Rainy season	12	7	-5 41.6%	14	8	-6 42.8%	26	15	- 14 53.8%

Total	75	53	-22 29.3%	82	55	-27 32.9%	157	108	-49 31.2%
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Source : Survey in the study area

*Italics indicates percent*

#### **BEFORE JFM:**

- i. 25 and 27 people's were migrating in winter season.
- ii. 38 and 41 people's were migrating in summer season.
- iii. 12 and 14 people's were migrating in rainy season.
- iv. 75 and 82 were migrating in all three seasons.
- v. 22.3% and 26.3% of total sample population was migrating out of district in search of work from selected VFCs and FPCs from Jhabua and Mandla district respectively..

#### **AFTER JFM:**

- i. 19 and 22 people's were migrating in winter season.
- ii. 27 and 25 people's were migrating in summer season.
- iii. 7 and 8 people's were migrating in rainy season.
- iv. 53 and 55 people's were migrating in all three seasons.
- v. 14.8% and 16.3% of total sample population was migrating out of district in search of work from selected VFCs and FPCs from Jhabua and Mandla district respectively.
- vi. From both the districts 38 % and 35% women migration has taken place, along with the male workers consisting of 62% and 65% respectively from Jhabua and Mandla districts.
- vii. It could be concluded from the table that there has been a negative trend in number of peoples migrating out side of district to find out work.
- viii. The migration of the worker has seen from Jhabua to ( Indore, Bhopal , Godhra , Ahemedabad ,Surat, Vadodra, Ratlam etc. ) where as in Mandla ( Mandla, Jabalpur, Bilaspur, etc)
- ix. The social impact of JFM programme could be assessed as decline in migration trends by 31.2% in the study area. There has been significant decline in the labour mobility . Thus the success of JFM programme lies in the fact that how successfully the migration trends could be reduced. But owing to other factors related to employment, low agricultural productivity, livestock productivity , low income low level of capital formation and increase in consumption level , the migration trend has again been increased up to 36% in the study area.

Figure 2 shows the migration trends of the people before and after JFM programme

in the Study area.

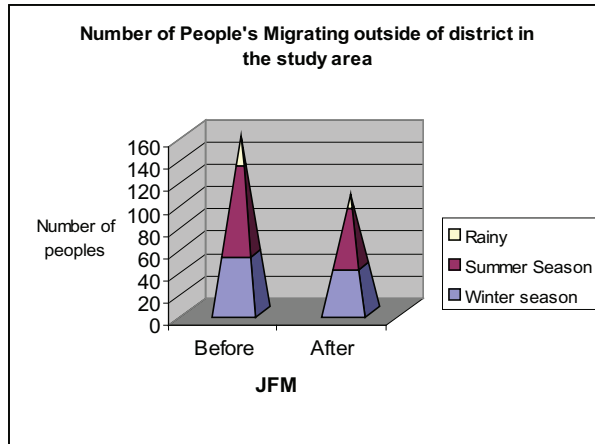
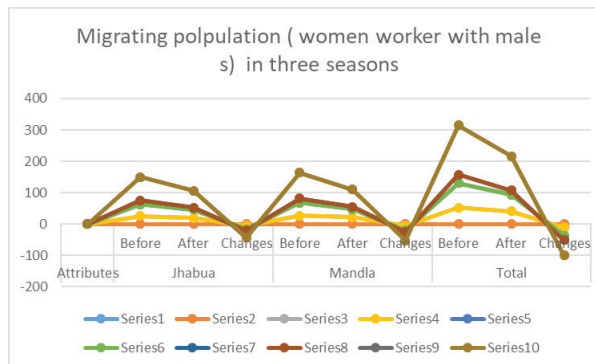


Figure 2

Figure 3, shows the migrating population trend ( women worker with males ) in the study area.

Figure 3.



**IMPACT OF INCOME EARNED DURING MIGRATION PERIOD ON ASSETS ACCUMULATION**

Table 10, shows the changes in assets accumulation in the study area of Jhabua and Mandla District. The results are given in table. The increased changes were recorded in Livestock population; Trees; Gold and Silver; watches, cycle, radio, Television, and stereo deck ( local made). after JFM.

It could be concluded from the above table that assets have been accumulated by the households with well 5%, cows 10.5%, dogs 28.7%, Poultry 28.3%, Pigs 33.3%, Silver 15.5%, gold 39.1%, cycle 28.7%, Trees 27.5%, Watches 36.9%, sewing machine 28.1%,



Radio 37.0%, televisions 35%, Stereo deck ( Local made) 33.3%, and drums/band by 28.5%. This accumulation also indicates the social well- being in the study area. The most important fact which could be mentioned here is the increase in number of dogs tamed by the households from security point of view. As the barking of dogs in the late night alerts the owners to be careful from the uncertainties.

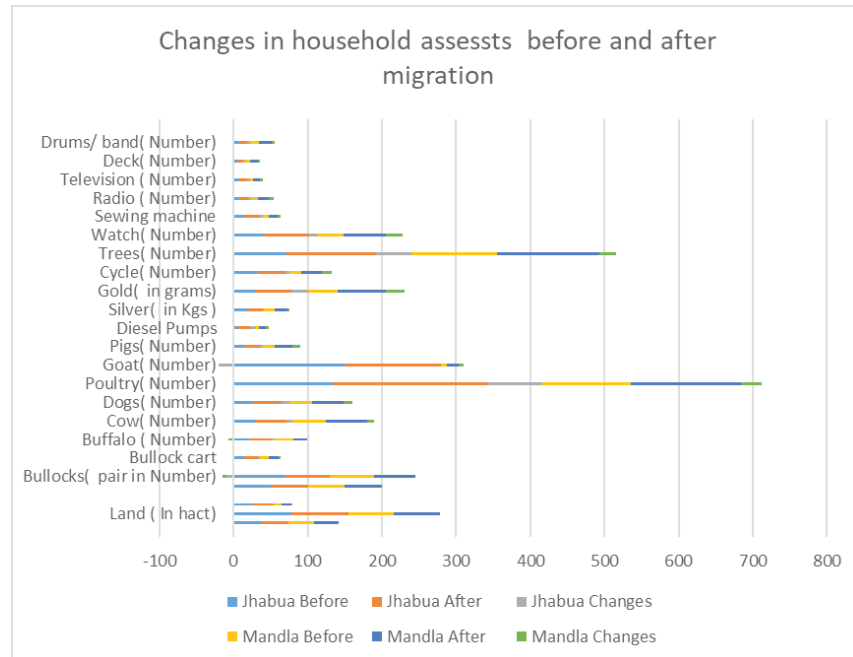
*Table 10 Changes in Assets of the Respondents after migration*

Attributes	Jhabua			Mandla			Total		
	Before	After	Changes	Before	After	Changes	Before	After	Changes
Number of households having land	37	37	-	34	34	-	71	71	-
Land ( In hact)	<i>77.7</i>	<i>77.7</i>	-	<i>61.2</i>	<i>61.2</i>	-	-	-	-
Well ( Number)	27	27	-	11	13	+2	38	40	<i>+2</i> <i>5</i>
House( Number)	50	50	-	50	50	-	50	50	-
Bullocks( pair in Number)	70	60	-10	60	55	-5	130	115	<i>-15</i> <i>11.5</i>
Bullock cart	15	18	+3	11	14	+3	26	32	<i>+6</i> <i>18.7</i>
Buffalo ( Number)	23	28	+5	25	18	-7	48	46	<i>-2</i> <i>4.1</i>
Cow( Number)	31	40	+9	45	55	+10	76	85	<i>+9</i> <i>10.5</i>
Dogs( Number)	27	38	+11	30	42	+12	57	80	<i>+23</i> <i>28.7</i>
Poultry( Number)	135	208	+73	120	148	+28	255	356	<i>+101</i> <i>28.3</i>
Goat( Number)	150	130	-20	8	15	+7	158	145	<i>-13</i> <i>8.2</i>
Pigs( Number)	15	20	+5	15	25	+10	30	45	<i>+15</i> <i>33.3</i>
Diesel Pumps	7	15	+8	4	9	+5	11	24	<i>+13</i> <i>54.1</i>
Silver( in Kgs )	18.5	20.8	+2.3	13.6	17.2	+3.6	32.1	38.0	<i>+5.9</i> <i>15.5</i>
Gold( in grams)	30	50	+20	40	65	+25	70	115	<i>+45</i> <i>39.1</i>
Cycle( Number)	32	38	+6	15	28	+13	47	66	<i>+19</i> <i>28.7</i>
Trees( Number)	72	120	+48	115	138	+23	187	258	<i>+71</i> <i>27.5</i>
Watch( Number)	40	62	+12	35	57	+22	75	119	<i>+44</i> <i>36.9</i>
Sewing machine (Number)	15	20	+5	8	12	+4	23	32	<i>+9</i> <i>28.1</i>
Radio ( Number)	8	12	+4	9	15	+6	17	27	<i>+10</i> <i>37.0</i>
Television ( Number)	8	11	+3	5	9	+4	13	20	<i>+7</i> <i>35.0</i>
Deck( Number)	5	8	+3	7	10	+3	12	18	<i>+6</i> <i>33.3</i>
Drums/ band( Number)	8	11	+3	12	17	+5	20	28	<i>+8</i> <i>28.5</i>

Source : Survey in the study area

*Italics indicates percent*

The following figure 4 shows the changes in household assets after migration



### IMPACT OF MIGRATION ON CLOTHING CONDITION AND WASHING OF CLOTHES

Table 11 shows the changes occurred in the clothing condition and washing of cloths among the households after migration with an additional income to family

#### BEFORE MIGRATION :

- i. 45 (90%) and 50(100%) of the households were using old cloths by repairing themselves, while 47(94%) and 38(76%) were purchasing cloths on the eve of important festivals in Jhabua and Mandla district respectively.
- ii. 28 (56%) and 40( 80%) of the households were purchasing new cloths at the time of marriage.
- iii. 44 (88%) and 45 (90%) of the households were washing cloths with soil known as *Rehu/ Jigna Plant* once in a week or once in Fifteen days without using soaps and detergent cakes. While 17(34%) and 15(30%) of the households were washing cloths with soaps cakes and detergents when gets dirty.
- iv. 38(76%) and 35(75%) of the households were in view that neat and clean cloths have a impact in deciding marriage of boys and girls in Jhabua and Mandla district respectively.

**AFTER MIGRATION :**

- i. The repairing of old cloths has decreased, now 25 (50%) and 38 (76%) of the households are repairing the old cloths and using them
- ii. The purchasing new cloths on the eve of important festivals has decreased by 17 (34%) and 14 (28%) in Jhabua and Mandla district respectively.
- iii. The purchasing new cloths at the time of marriage has also decreased by 3 (6%) and 11 (22%) .
- iv. Now 18 (36%) and 15 (30%) of the households are washing cloths with soil known as *Rehu/ Jigna Plant* once in a week or once in Fifteen days without using soaps and detergent cakes. While the consumption of soaps cakes and detergents has increased among households 41 (82%) and 48 (96%) in study area when cloths gets dirty.
- v. Now 48 (96%) and 44 (88%) of the households has changes in thinking that the neat and clean cloths have a impact in deciding marriage of boys and girls in Jhabua and Mandla district respectively.
- vi. It could be concluded that repairing of the old cloths among the households has decreased by 32%, Purchasing New cloths on the eve of important festival by 9%, While the purchasing of new cloths at any time due to increase in income has increased by 65%. There has been a considerable declined in the means of using soil *Rehu/ Jigna Plant or without using soaps and detergents* washing cloths by 56% . The consumption of soap cakes and detergents in the study area has increased significantly by 57% in context of washing of cloths when get dirty. It also worth mentioning here, about the changing views of the households regarding the impact of neat and clean cloths which boys girls wears during Periodic market. Therefore, the changes in the clothing condition and washing of cloths of the respondents indicates about the social impact of migration

**Table 11 Changes in Clothing condition and washing of cloths of the respondents**

Attributes (Number of households)	Jhabua			Mandla			Total		
	Before JFM	After JFM	Changes	Before JFM	After JFM	Changes	Before JFM	After JFM	% Changes
Repairing old cloths	45	25	-20	50	38	-12	95	63	-32 32
Purchasing new cloths on festivals	47	30	-17	38	24	-14	85	54	-31 31
Purchasing new cloths at the time of marriage	28	25	-3	40	32	-11	68	57	-9 9

Now Purchasing cloths at any time due to increase in income	15	46	+31	12	47	+38	27	92	65 65
Washing cloths with soil type known as Rehu/ Jigna plant/ once in week/ fifteen days. Without using detergents/ soaps cakes	44	18	-26	45	15	-35	89	33	-56 56
Washing cloths with soaps and detergents/ soap cakes when gets dirty	17	41	+24	15	48	+33	32	89	+57 57
Neat cloths have a impact in periodic market in deciding marriage of boys and girls	38	48	+10	35	44	+9	73	92	+19 19

Source : Survey in the study area

*Italics indicates percent*

### IMPACT OF JFM ON WOMEN EMPOWERMENT, GENDER DIMENSIONS AND CAPACITY BUILDING

Table 12, shows the status of formation of Self Help Group ( SHGS) in the study area.. After JFM, 32 SHGs and 15 SHGS has been formed in Jhabua and Mandla district respectively. There are 480 members and 225 females members in SHGs of Jhabua and Mandla district. The registration fee is Rs 30 per member for month in SHGs is same in the study area. The women empowerment and gender participation has taken up a new dimension because of the formation of SHGs.

*Table 12 Formation of Self Help Groups*

Attributes	Jhabua			Mandla			Total		
	Before	After	Changes	Before	After	Changes	Before	After	Changes
Formation of Self help group	-	32	+32	-	15	+15	-	+47	+47
Number of female members	-	480	+480	-	225	+225	-	+705	+705
Registration of Membership Fee Per Female ( Per month in Rs)	-	30	+30	-	30	+30	-	+30	+ 30

Source : Survey in the study area

*Italics indicates percent*

The capacity building is very important factor for assessing the social sustainability in the study area. The Forest department Government of Madhya Pradesh has started training programme to build the capacity among villagers. Table 13 A shows the programme taken up Madhya Pradesh, Forest department to strengthen Joint Forest Management.

**Table 13 A Capacity Building in Madhya Pradesh**

Sl. No.	Type of capacity building	Numbers
1.	Spearhead team	56
2.	PRA Training to staff	Over 15000
3.	Awareness workshop	Over 2000
4.	Awareness Rallies	Over 1000
5.	Study Tours	Over 300
6.	Persons trained in various aspects of JFM	1,40,000 ( approx.)
7.	Training to Self Help Groups	2, 000 ( approx)

Source : Strengthening of JFM in M.P., MPFD, 2000

The details of the programme organized by Forest department, related to capacity building in the Study area is given in Table 3.2.13B. The highest number of people's have been trained by the forest department personnel's in various aspects of JFM. After training the capacity building of the members has increased. These capacity building are related to, method of collection of MFPS, harvesting of NTFPS, Fire extinguishing , Methods by which the soil erosion could be controlled etc.

**Table 13 B Capacity Building in study area of Jhabua and Mandla district**

Sl. No.	Type of capacity building	Jhabua	Mandla	Total
1.	Number of households trained in controlling the forest fire	31	32	63
2.	PRA Training to staff Including Ranger Officer. From selected range ( based on discussions)	25	15	40
3.	Awareness workshops	3	3	6
4.	Awareness Rallies	2	2	4
5.	Study Tours	15	12	27
6.	Persons trained in various aspects of JFM	52	48	100
7.	Training to Self Help Groups	15	8	23

Source : Survey in the study area

Based on the information obtained during discussion

## **IMPACT ON MEDICAL AND HEALTH RELATED FACILITY**

Table 14, reveals the changes occurred in the use of medical facilities and health of respondents. The Good health is an important indicator for the social capital formation as it increases the efficiency to do work and think better.

**BEFORE MIGRATION :**

- i. 25 (50%) and 22 (44%) of households were going for the treatment to primary health centre and 5 (10%) and 3(6%) to private doctors in Jhabua and Mandla district respectively.
- ii. 20(40%) and 25 ( 50%) of households were consulting magician or herbalist for the treatment in Jhabua and Mandla district respectively.

**AFTER MIGRATION :**

- i. 36 (72%) and 36 (72%) of households has started going for the treatment to primary health centre and 8 (16%) and 6(12%) to private doctors in Jhabua and Mandla district respectively.
- ii. There has been a considerable decline by 28 % and 34% in number of respondents consulting magician or herbalist for the treatment in Jhabua and Mandla district respectively.
- iii. It could be concluded from the table that there has been a 25% change in context of respondents consulting to the primary health services and 6% to private doctors. While 21% of respondents has been decreased in context of consulting magician/herbalist in the study area. This also indicates about the social awareness in context of medical and health facilities.

*Table 14 Changes in the use of medical facilities and health of respondents*

Attributes (Number of households)	Jhabua			Mandla			Total		
	Before	After	Changes	Before	After	Changes	Before	After	Changes
Number of Households going to primary health centre	25 50	36 72	+11 22	22 44	36 72	+14 28	47 47	72 72	+25 25
Number of households going to private doctors.	5 10	8 16	+3 6	3 6	6 12	+3 6	8 8	14 14	+6 6
Number of households consulting magician/herbalist.	20 40	6 12	-14 28	25 50	8 16	-17 34	45 45	14 14	-21 21
Total	50 100	50 100	50 100	50 100	50 100	50 100	100 100	100 100	

Source : Survey in the study area

Italics indicates percent

Table 15, shows the Changes in the use of local transportation.

**Table 15 Changes in use of local transportation**

Attributes (The values for each attribute is taken out of 50 households)	Jhabua			Mandla			Total		
	Before	After	changes	Before	After	Changes	Before	After	changes
On foot	30	5	-25	40	10	-30	70	15	-55
Cycle	32	38	+6	15	28	+13	47	66	+19
Bus	18	34	+16	10	32	+22	26	66	+40
Truck	5	12	+7	8	13	+5	13	25	+12
Tractor	29	22	-7	35	40	+5	64	62	-2
Jeep	13	17	+4	16	25	+9	29	42	+13
Bullock cart	5	2	-3	8	4	-4	13	6	-7

Source : Survey in the study area

#### **BEFORE MIGRATION :**

- i. 30 (60%) and 40(80%) of the respondents and family members were going to the market or different places on foot .
- ii. 32(64%) and 15 (30%) of the of the respondents and family members were using there cycle.
- iii. 18 (36%) and 10 (20%) of the respondents and family members were availing bus facilities.
- iv. 5 (10%) and 8(16%) of the respondents were coming by Truck.
- v. 29 (58%) and 35 (70%) of the respondents and family members were coming by tractor up to market place.
- vi. 13 ( 26%) and 16 ( 32%) of the respondents and family members were using Jeep facility.
- vii. 5(10%) and 8(16%) of the respondents and family members were using bullock cart as means of transportation.

#### **AFTER MIGRATION :**

- i. The distance travelled by the respondents and the family members on foot has decreased by 25 (50%) and 30(60%) in Jhabua and Mandla district.
- ii. The use of cycle as a means of transportation by the respondents and family members has increased to 6(12%) and 13 ( 26 %) in habua and Mandla district.
- iii. The availing of bus facilities has increased by the respondents and family members to 16 ( 32%) and 22( 44%).

- iv. The respondents and family members using truck as means of transportation has increased to 7( 14%) and 5(10%) in Jhabua and Mandla district.
- v. The use of tractor by the respondents and family members has decreased in Jhabua by 7(14%) and increased in Mandla by 5 (10%) .
- vi. The respondents and family members using Jeep facility has increased by 4( 8%) and 9( 18%) .
- vii. The use of bullock cart as means of transportation by the respondents and family members has decreased by 3( 6%) and 4 (8%) .
- viii. It could be concluded that there has been a positive trend for using means of transportation by the respondents and family members in context of Bus (40%) , followed by use of cycle ( 19%), Jeep ( 13%) and truck (12%). While the use On foot has decreased considerably by (55%), Bullock cart ( -7) and use of tractor ( 2%)

Table 18, shows the average distance travelled by the villagers to access the basic amenities in the study area. The negative trends shows that the distance travelled by the villagers has reduced while - sign shows no changes in the distance travelled by the peoples. The changes in the distance travelled by the villagers has taken place due to addition income earned during migration period and other developmental intervention.

*Table 18 Average distance travelled by the people's in the study area*

Attributes (Average Distance in Km)	Jhabua			Mandla			Total		
	Before JFM	After JFM	Changes In Km	Before JFM	After JFM	Changes In Km	Before JFM	After JFM	Changes In Km
Drinking water	1.0	0.300	-.700	1.3	.350	-0.95	2.3	.650	-1.650
Bus stand	2	1.5	-.500	3.8	3.8	-	5.8	5.3	-.500
Police station	13.8	13.8	-	12.7	12.7	-	26.5	26.5	-
Railway station	30.0	30.0	-	103	103	-	133	133	-
Polling centre	5.0	1	-4.0	4.0	1.5	-2.5	9.0	2.5	6.5
Primary health centre	8.4	8.4	-	12.7	12.7	-	21.1	21.1	-
Weekly market	7.2	7.2	-	6.8	6.8	-	14.0	14.0	-
Block	8.4	8.4	-	12.7	12.7	-	21.1	21.1	-
Veterinary Hospital	8.4	8.4	-	12.7	12.7	-	21.1	21.1	-
Agro-service centre	8.4	8.4	-	12.7	12.7	-	21.1	21.1	-
Financial Institutions/ Bank	8.4	8.4	-	12.7	12.7	-	21.1	21.1	-
Post Office	8.4	6.4	-2.0	10.3	8.9	1.4	18.7	15.3	3.4
Telecom	8.4	.700	-	12.7	.700	-12.0	21.1	1.4	19.7
Cooperative society	8.4	8.4	-	12.7	12.7	-	21.1	21.1	-
Primary School	2.5	.800	-1.7	3.5	.700	2.8	6.0	1.5	-4.5
Middle school	4.0	3.8	-.200	6.8	5.0	1.8	10.8	9.0	-1.8
H. Secondary school	8.4	8.4	-	15.0	15.0	-	23.4	23.4	-
College	45	45	-	25.0	25.0	-	70.0	70.0	-

Source : Survey in the study area



**Table 19 Major Social Issues identified during Study**

SI No.	Social Issues documented during in-depth survey work	Jhabua	Mandla	Average percent
	Awareness level has been raised but the institution building does not occur to that extent as desired due to negligence in confidence building	64%	67%	65.5%
	The role and duties of president or leader of the VFCs/ FPCs should be in tune with people's priorities.	71%	68%	69.5%
	Assets accumulation or purchase of new items by few active peoples	54%	58%	56%
4.	Unequal participation of village members in functioning of the forest committee	61%	54%	57.5%
5	Lack of confidence of some members to run the activities	74%	76%	75 %
6	Question on the equality in the sharing of the benefits	75%	78%	76.5%
7	Solution of seasonal unemployment and to check the out flow of labour mobility	70%	68%	69%
8	Question of "Who" & "How Many" will get wage work from the forest department	54%	59%	56.5%
9	Criteria of providing wage work to the villagers by Forest department.	63%	60%	61.5%
10	Collection of resources from forest like grass, NTFPs, etc	78%	80%	76.5%
11	Incorporation of traditional and indigenous knowledge of the local peoples related to medicinal plants and their own ways of prediction about the natural problem.	82%	81%	81.5%
12	Effects of social, religious and cultural activities on forestry related work.	83%	84%	83.5%
13	Social conflict between poor and better off.	51%	64%	57.5%
14	Conflict related to the distribution of the loans			
15	Damage to the crops by the increased number of wildlife, especially wild boar, blue bull and deer where the wildlife sanctuary is in proximity	40.5%	70%	55.3%
16	To some extent bureaucratic control over the protection committee	64%	68%	66%
17	Many conflicts still exist between villagers expectations and needs and state guidelines for forest management and product sharing.	82%	8%	80%
18	Formation of SHGs, initiation and implementation regarding	38%	42%	40%
19	Politics in providing aids to the poor peoples	72%	78%	75%
20	Women participation in decision- making is not reaching unto the expectation due to cultural norms & practices.	78%	80%	79%
21	Some sections are reluctant to participate in the government ownership of forest.	62%	64%	63%

Source : Survey in the study area .

*Note* The percent value is taken out of 100 for each specific social issue prevailing in Jhabua and Mandla district.

#### **RANKING OF SOCIAL ISSUES :**

*A = Very Important issue ( 75% and above)*

*B = More than medium Important ( 65% to 74%)*

*C = Medium important ( 55% to 64%)*

*D = Less important but cannot be ignored ( below 54%)*

On the basis of ranking it could be concluded that Social issues as serialized

- 5,6,10,11, 12, 16,, 17, and 19 are very Important social issues.
- 1,2,3,7,15 and 20 are more than medium important.
- 3,4,8,13 and 14 are medium important, while
- 18 social issue is less important but cannot be ignored.

## CONCLUSIONS

The increasing population is the greatest issue among all issues as it shallows the fruits of development. As per the increasing demand elasticity the increasing population has to be controlled down by following preventive measures ,family planning etc. However, in this aspects the people's awareness level has to be increased and precautionary measures should be taken on top priority , without effecting social cultural and religious values in the study area of Jhabua and Mandla district. Population of the study area has an impact on reducing per capita forest area and density is increasing in per sq km. which results in spatial problem. The increased forest productivity results in declined per capita availability of forest products.

### *Tackling down the issues related to Social Sustainability.*

On the basis of ranking as per the survey, the three category of social issues were identified during study

- a. Very important social issues
- b. More than Medium Important Issues

#### **A. VERY IMPORTANT ISSUES**

- The issues related to lack of confidence of some members to run the activities could be tackled down by increasing motivational level among the people through training awareness workshop and capacity building.
- Issue related to question of equality in the sharing of benefit could be tackled down by proving equal opportunity by VFCs/ FPCs committee members for this social accounts need to be prepared by the committee members for example How many people obtained and how many not obtained. Plan should be based for those who has not obtained any opportunity in benefit sharing.
- Regarding the collection of resources from forest could be tackled down by incorporating modification as suggested by people for strengthening Joint forest management. For this collection account need to be prepared at household level that how many family members are collecting NTFP and quantity collected during season should be maintained in the register.
- The issue related to effects of social, religious and cultural activities on Joint forest

management programme is seen in the study area of Jhabua and Mandla district of Madhya Pradesh. The reduction in number of days in specific activity indicates that JFM programme is running good. Therefore, it is suggested that for any developmental activities or plan which has to be proposed or to begin in any area the social, cultural and religious values should be given due credit and modification as suggested by the peoples be incorporated in the plan and policy.

- The issue related to bureaucratic control of the VFC/FPCs should be tackled down through People's participation; related priority and Modification as suggested by the people.
- The formation of SHGs, initiation and implementation regarding issues could be tackled down by increasing women's participation and motivational level through economic independence.
- The issues related to Women participation in decision-making are not reaching unto the expectation due to cultural norms & practices. Therefore, the social and cultural reform this regard is needed to eliminate ill set up. More over, the new dimension in field of Women's empowerment is suggested for effective women's participation in rural resource management.
- Another important issue which peoples in the study area of Jhabua and Mandla district has pointed out is Politics in providing aids to the poor peoples could be tackled down by fair and justice approach a list of those poor people's should be prepared by the VFCs/FPCs and inflows percentage be fixed for them.

## **B. MORE THAN MEDIUM IMPORTANT ISSUES**

The second category of issues hindering social sustainability need to be tackled down for present and future sustainability of Joint forest Management in the study area of Jhabua and Mandla district of Madhya Pradesh.

- The issue related to Awareness level has been raised but the institution building does not occur to that extent as desired due to negligence in confidence building could be tackled down by increasing people's participation, motivational; aspects and capacity building among the people's for this training, skills development and awareness level workshops required to be organized from the forest department, forest Institutes, NGO and Social worker in the study area.
- Solution of seasonal unemployment and to check the out flow of labour mobility issue could be tackled down through provision of creating new avenues and opportunities in developmental projects. The occupational structure should be considered for putting people in different occupation. The government schemes should be tune with the people's priority and loan disbursement should result in income generating activities. For this forest department should up with the plans

related to income generation. Or VFCs/FPCs deposit funds may be utilized for the purpose.

## **B. MEDIUM IMPORTANT ISSUES.**

- The issue related to unequal participation of VFCs/FPCs members in functioning of the forest committee could be tackled down by providing equal opportunity to all members and their aggregated views should be incorporated in the Plan.
- The Question of “*Who*” & “*How Many*” will get wage work from the forest department should be based on criteria how many have obtained work in specific scheme and those who have not obtained opportunity to work in the earlier scheme should be identified and be given an opportunity to work in the second scheme. However, the criteria should be developed by forest department with committee members and accounts should be prepared at VFCs/FPCs level.
- The issue related to non incorporation of people’s knowledge. However, Incorporation of traditional and indigenous knowledge of the local peoples related to medicinal plants and their own ways of prediction about the natural problem should be given due weight in the Planing at the forest Department level.
- The migrants themselves could tackle the issues related to migrating population out side the district down.
- The issue related to loan distribution, which later on becomes conflict could be tackled down by providing opportunity to those people’s who have not received or received less loan for the specific purpose . The disbursement of loan should be based on priority of people and how much time taken by the people to repay the loan.
- The social issue related to better off and poor in the study area is common. However, the wide gap between poor and better could be minimized up to some extent through occupational shifts in households occupation. This is a long period process and depends upon the people’s will.
- Many conflicts still exist between villagers expectations and needs and state guidelines for forest management and product sharing could be tackled down through people’s plan and modification as suggested by the people’s

## **RECOMMENDATIONS**

On the basis of issues to be tackled down the following the important recommendation of the wok related to

- It is recommended that the increase in population should be controlled ( As it affects the Per Capita , Production, consumption, saving and investment) through awareness camp, family planning , preventive checks etc.

- The important reasons and causes of migrant workers are, increasing population , marginal size of land holding, low agricultural productivity, low income, housing condition, occupational structure, low livestock productivity, illegal electricity connection, low level of capital formation, absence of micro finance and micro-credit at low rate of interest.
- It is recommended that Social auditing of the activities under taken in the villages should be made after every two years to monitor changes in progress. For this a rigorous frame work should be developed and tested at the village level.
- Concurrent evaluation should be taken up by the Government/ Forest Institute's to evaluate success or failure of different government programmes .
- The model areas of JFM programme should be replicated in other VFCs/FPCs in different forest division, and States.
- Creating Public Utility/ infrastructure, Employment.; Formation of more SHGs
- Checking seasonal migration in the study area , creation of employment opportunity, Infrastructural- Health facilities, transportation, settlement issues, drinking water, safety and security of migrant women worker
- The modification as suggested by the peoples' should be incorporated in the working plan to strengthen joint forest management programme .
- The peoples perception and responses related to future sustainability of joint forest management programme should be included as peoples' voice. Economic Sustainability

### *References*

- Finsterbusch, Liewellyn, and C.P.Wolf eds ( 1983) : **Social Impact Assessment Methods**, Sage Publication, Beverly Hills / London/ New Delhi.
- Priester, K and J.Kent (1981) : “ **The issue- centered approach to social impacts: from assessment to management**”. Social Impact Assessment 71/72 ( November- December).
- Lampman, R.J. (1974) : “ **What does it do for the poor? – A new test for national policy**.” Public Interest. 34 (Winter) : 66-82.
- Hollies, J. and J. Mc. Evoy III (1973) : “ **Demographic effects of water development**.” Impact of Water Resources Development 1 ( July): 24-40.
- Heller, A. [ed.] (1971): The California Tomorrow Plan. Los Altos, CA : William Kaufmann.
- Danjani, S. and L.Ortolano [eds.] (1979): **Methods of forecasting the Reciprocals Impacts of Infrastructure Development and Land use**. Report IPM –11 Stanford, C.A: Department of Engineering, Stanford University.
- Grigsby, J.E. III (1981): “ **Cumulative impact assessment : a case study of the aggregate effects of diversified federal projects on Santa Barbara Country, california**.” Presented at the 76<sup>th</sup> Annual Meeting of the American Sociological Association, Toronto, August 24.

- Husky, L. (1979) : Analysis of Cumulative Impacts, Western Gulf of Alaska Impact Analysis. Anchorage : Institute of Social and Economic research, University of Alaska.
- Bhattacharya, P. Bharti Joshi and Hemant Oza (2000) : **Fulfilling Societal Needs through Participatory Silviculture – An Evaluation , Paper Presented in XXI IUFRO World Congress during August 7-12 2002 at Kuala Lumpur, Malaysia.**
- Sengupta Nirmal ( 1995) : **Salvaging Traditional Knowledge**, *Economic & Political Weekly*, 30 (9), December 16,1995.
- Chennai Round Table on Indigenous knowledge ( Traditional Knowledge) :** (2001) Organized at Madras Institute of Development Studies in Collaboration with national Bio-diversity Strategy and Action Plan ( NBSAP)
- Pandey, Amitab (2001) : “ **Using Indigenous Knowledge for Management of Common ( Wasteland) in Rajasthan Village**” paper presented in the International Conference on Indigenous Indic Traditions in Forestry : Lessons for Contemporary Sustainable Forest Management Feb 8-10 , 2001 at IIFM, Bhopal
- Bhattacharya P. (2001) : “**Keeping the Tradition Alive : Promotion of Indigenous Knowledge System -A case study from Ghora Dongri betul**” ” paper presented in the International Conference on Indigenous Indic Traditions in Forestry : Lessons for Contemporary Sustainable Forest Management Feb 8-10 , 2001 at IIFM, Bhopal
- I.S.Ferguson, J.B.Dargavel, K.Conley, W.Proctor, P.Kanpwski and U.N.Batti (1999): **Socio-Economic Indicators for Sustainable Forest Management; Issues and Possible Solutions**; Proceedings of the National technical workshop ( Under Bhopal India Process of SFM) (1999): **Evolving Criteria and Indicators for Sustainable Forest Management** (21-23 Jan 1999) page 20-38; Organised by Indian Institute of Forest Management Bhopal.
- Horn ,R.V. (1993) **Statistical indicators for the economic and social Science**, Cambridge University Press ,Cambridge
- Burge ,R.J. and Vanclay , F. (1995): **Social impact assessment** . In Vanclay, F. and Bronstein, D.A. (eds) Environmental and Social impact assessment. Wiley, Chichester.
- Singh, S.P ( 1992): “Why we are not able to check the rapidly increasing population ? A search of some authentic cases : A case study of Etawah district, U.P.” Proceedings of **25th Silver Jubilee International Regional Science Conference**, Indian Institute of Technology, Kharagpur, 17-19 December, 1992. page 3.17
- Singh, S.P ( 1997) : **Sustainable development for rural education in drought prone area : A Case study**” *Proceeding of 29<sup>th</sup> Annual International Regional Science Conference Jan 31-2 Feb, 1997, pp 110-111, on Regional Sustainable Development and new Economic policy.* Organized by Delhi School of Economics Delhi University Delhi.
- Joshi, Y.G. ( 1997) : **Tribal Migration** Rawat Publication, Jaipur
- Singh, S.P. (1993) : “**How individual decisions are affected by social and institutional values in drought affected areas ? A case study of Sailana Block of Ratlam district**” in **International Symposium on Modelling and Simulation, Organized by Dr. Tony Jackman, at National University of Australia , 22 Dec to 26 Dec 1993. Vide acceptance letter of Dr. A.J. Jackman, President, MSSA, National University of Australia**
- Joshi Y.G. ( 1995) : Changed context of Infrastructure, Sustainability and Development in the Scare-resource Tribal Ecosystem, in Tiwari, S.K. (ed) “ *Tribal Situation in Central India*” M.P. Publication

- Pvt. Ltd., New Delhi.
- Strengthening of JFM in Madhya Pradesh**, June 2000, Principal Chief Conservator of Forest. M.P. Forest Department, Government of M.P.
- Harrison, R.P., (1992) : Forests, *The Shadow of Civilisation*, The University of Chicago Press, Chicago and London.
- Seeland, klaus and Franz Schmithusen [Eds] (2000): **Man in the Forest**, Man Forest series 1. D.K.Printworld (P) Ltd, New Delhi.
- Seeland, K. [ed.] (1997) : *Nature is Culture. Indigenous knowledge and socio-cultural aspects of Trees and Forests in Non- European Cultures*, Intermediate Technology Publication, London, P. 152.
- Schmithusen Franz ( 2000): The Socio-Cultural and Political Context of Sustainable Forestry Practices, in** Seeland, klaus and Franz Schmithusen [ed] (2000): **Man in the Forest**, Man Forest series 1. D.K.Printworld (P) Ltd, New Delhi.
- Firey,W., (1960) : Man mind and land. A theory of resource use, free Press of Glencoe, Illinois.**
- Schefold, R., (1990) : Natur und Kultur im Weltbild indonesischer Stammesgesellschaften. In: Boehm, W.; Lindauer, M., (Hrsg.), 1990: Woher, Wozu, Wohin ? Fregen nach dem menschlichen Leben, S. 285-308, Klett, Stuttgart.**
- Singh, S.P., (1994) : “Will the drought be occurring this year ? A search of some traditional and cultural indicators : A case of Etawah** Proceedings of **26th Annual Regional Science Conference**, Organized by Prof. Nagalingachar at K.E.L.S.’s College of Engg. and Tech., Balgaum 29 and 30 April, 1994
- Burch , W.R., De Luca, D.R., (1984): *Measuring the Social Impact of natural Resource Policies*, Albuquerque.
- Poffenberger, M., McGean, B. [eds] (1996) : *Village Voices, Forest Choices- Joint Forest Management in India*, Oxford University Press, Delhi/Bombay/Calcutta/Madras, P. 356.