



Socio-Economic Upliftment of Tribal Women through FPO in Bastar District of Chhattisgarh

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ABSTRACT

The study was carried out in Bastar district of Chhattisgarh state during 2021-22. The findings depicted that on the basis of their membership period in Bhumigadi Mahila Krushak Farmer Producer Organization (BMKFPO); the 37.28 per cent increase (Rs. 11653/-) was recorded for the member of BMKFPO since last four years whereas 36.81 per cent (Rs. 11456/-), 32.97 per cent (Rs. 10203/-) and 31.62 per cent (Rs. 9420/-) increase in income were recorded for the member of FPO since last three years, two years and one year respectively. The significance level of differences in income of respondents before and after joining the BMKFPO, Bastanar; P value were recorded as 0 ($p=0$, $p<0.05$) for income generating activities and overall annual income and 0.002 ($p=0.002$, $p<0.05$) for the non-FPO activity (wages) and found highly significant. It is inferred that the FPO module had assisted respondents in raising their income from various income generating activities and in their overall income.

INTRODUCTION

The Central and State Governments have been taking various initiatives for socio-economic upliftment of tribal population of the country. The Tribal Sub Plan Strategy (TSP Strategy) implemented since 1974-75 and these efforts have brought out some improvements for scheduled tribes in terms of various indicators relating to literacy, health, livelihood, etc. as reflected in Census 2011. However, there are still considerable gaps in the human development indices between Schedule Tribes and general population (Samir, 2015).

The government affirmed that farmer producer organizations (FPOs) are the most appropriate institutional form around which farmers can mobilize and build their capacity to collectively leverage their production and marketing (GoI, 2013).

The FPOs has helped farmers to be more aware of the benefits of collective and sustainable agriculture. The real benefits happen only when communities are empowered. In India, women have never

been part of the main stream society and they are still considered as a great liability. Gandhiji said “to construct the society and create a hunger free India, empowerment of women is vital”. In context to the women empowerment through women’s education, uplifts in their living standard, giving opportunities to fight against poverty, cuts out gender inequality, facilitates women entrepreneurs are the prerequisite for the development of the economy.

It has two implications; women’s participation remains limited to field engagement and have no control over the income of the produce and they have limited negotiating power once they take their produce to the local mandi. So, there was a felt need for the farmers to be collectivized and exposed to the market-oriented farming. The fundamental goal of FPOs is to advance empowerment and serve the common goods. FPO is to ensure better income for the producer farmers through an organization of their own (Kumari et al., 2022). The tribal women can be empowered by participating in Farmer Producer Organizations (FPOs) and improve their living situations in the rural areas with overall income security. This

initiative has been in operation from 2014 in the country and one of the FPO *Bhumigadi Mahila Krushak Farmer Producer Organizations (BMKFPO)*, Bastanar Block was registered in 2017 under the Company Act of 2013 and promoted by National Rural Livelihood Mission (NRLM) (Anonymous, 2019). There are 4,659 tribal women shareholders all together in this FPO, with 180 PGs (Producer Groups) in the cluster.

The present study majorly emphasized increase the area, production, productivity, income and adaptation behavior of the tribal women's of Bastanar divisionas well as found out the contribution of Bhumigadi Mahila Krushak Farmer Producer Organization in upliftment of socio-economic status of the tribal women entrepreneurs.

METHODOLOGY

The study was based on ex-post facto design. Out of seven blocks of district Bastar in Chhattisgarh state; the tribal dominated Bastanar block was selected purposively on the basis of presence of headquarter of Bhumigadi Mahila Krushak Farmer Producer Organization (BMKFPO), Bastanar. Top twelve villages having maximum tribal women shareholders of BMKFPO namely; Bade Kilepal Number Three; Bastanar; Bade Kaklur, Kodanar, Paralmeta, Burgum, Kapanar; Turangoor; Bodenar; Lalaguda; Tangiyahodi and Irpa were selected purposively. A list of tribal women shareholders of BMKFPO, Bastanar was obtained. Out of total 1043 shareholders, proportionately, 15 per cent tribal women shareholders were selected randomly from each selected villages. Hence, a sample size of 156 respondents was obtained for the present investigation. The independent and dependent variables having relevance to the objectives of the present study were selected and the null hypotheses were formulated accordingly to test it. The primary and secondary data were collected through personal interview method by the investigator from the locale of the study with the help of pre-tested well-structured schedule. The collected data was compiled, tabulated, analysed and interpreted by using of suitable statistical tools and techniques viz. Frequency, Percentage, Percent Change and Paired sample test-t Chandel (2004) & Supe (2007). The percentage change was calculated by using the following formula:

$$\text{Per cent change} = \frac{\text{Final value}-\text{Initial Value}}{\text{Initial Value}} \times 100$$

The paired sample t-test gives a hypothesis examination of the difference between population means for a set of random samples whose variation were often tested in a before-after situation and it was calculated by using following formula:

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n - 1}}}$$

Where, $\sum d$ = Sum of the difference in income
 n = Total number of samples

RESULTS AND DISCUSSION

The study revealed that the majority of the tribal women shareholders of BMKFPO, Bastanar (73.08%) belonged to the

middle age group (29-43 years), 26.28 per cent were possessed their education up to primary level, having small family (50%) with < 5 members, small farmers (60.90%) with 1-2 hectare land, low income group (71.15%) with annual income ranging between Rs. 35259/- to Rs.47663/-, having membership in BMKFPO since 2 years (48.72%), having maximum exposure to the mass media mobile (73.07%), active participation in specific activity nutrient management trainings (80.13%), having medium risk oriented (66.67%) and having medium credit oriented (84.62%). The similar results are also concurred with the findings of Kirar (2007) & Anonymous (2021).

Income from income generating activities of the Bhumigadi Mahila Krushak FPO

It is revealed from the data presented in Table 1 that the majority of tribal women shareholders of BMKFPO (82.05%) were associated with the FPO for minor millet production & marketing activity and earning an average income around Rs. 13135/- from this single activity of the FPO whereas 69.23, 63.46, 55.77 and 26.28 per cent tribal women shareholders of the BMKFPO were engaged with the FPO for the other income generating activities viz. turmeric production & marketing (Rs. 2262/-), amchoor processing & marketing (Rs. 2450/-), tamarind collection & marketing (Rs. 1430/-) and vegetable production & marketing (Rs. 5350/-) respectively. Further, women shareholders of BMKFPO (48.08%) were also found engaged with non-FPO activities (wages) for their income earning on an average Rs. 16834/- annually. The results implies that the tribal women shareholders of BMKFPO, Bastanar were earning overall annual income on an average Rs. 41461/- annually including the income from the income generating activities of the FPO. The results are at par with the results of Darshan et al., (2017).

Table 1. Income from income generating activities of BMKFPO, Bastanar during 2021-22

S.No.	Income generating activities of BMKFPO	Average Income (Rs.)	Percentage
1.	Minor Millet Production & Marketing	13135/-	82.05
2.	Amchoor Processing & Marketing	2450/-	63.46
3.	Tamarind Collection & Marketing	1430/-	55.77
4.	Vegetable Production & Marketing	5350/-	26.28
5.	Turmeric Production & Marketing	2262/-	69.23
6.	Non-FPO activities (Wages)	16834/-	48.08
7.	Overall Annual Income	41461/-	100.00

Increase in income through various FPO activities vis a vis membership period

It is apparent from the Table 2 that the maximum increase of 493.70 per cent average increase in income (Rs. 1881/-) of the tribal women shareholders of BMKFPO was recorded through engagement in turmeric production & marketing activity of the BMKFPO and 81.61 percent average increase in income (Rs. 1101/-) was recorded through amchoor processing & marketing activity whereas 75.67 per cent, 61.22 per cent and 55.34 per cent average increase in income of tribal women shareholders of BMKFPO were recorded through the tamarind collection &

Table 2. Increase in average income of women Shareholder of BMKFPO through various income generating activities of FPO

S.No.	Various activities	Average Income before Membership	Average Income after being Member	Difference in Income	% increase in Income
1.	Minor Millet Production and Marketing	8147/-	13135/-	4988/-	61.22
2.	Amchoor Processing and Marketing	1349/-	2450/-	1101/-	81.61
3.	Tamarind Collection and Marketing	814/-	1430/-	616/-	75.67
4.	Vegetable Production and Marketing	3444/-	5350/-	1906/-	55.34
5.	Turmeric Production and Marketing	381/-	2262/-	1881/-	493.70
6.	Non-FPO Activity (wages)	16645/-	16834/-	189/-	1.14
7.	Over All Annual Income	30779/-	41461/-	10682/-	34.71

marketing (Rs. 616/-), minor millet production & marketing (Rs. 4988/-) and vegetable production & marketing (Rs. 1906/-) activities of the BMKFPO. Further, only 1.14 percent average increase in income (Rs.189/-) of tribal women shareholders of BMKFPO was recorded through non-FPO activity i.e. wages only. The results implies that the average increase in overall income (Rs. 10682/-) of tribal women shareholders of BMKFPO was 34.71 percent through put together all the income generating activities of the BMKFPO in Bastar district.

It is clear from the data presented in Table 3 that there was 37.28 per cent average increase in income of tribal women shareholders of BMKFPO, Bastanar for those respondents who became the member of BMKFPO since last four years and they were earned Rs. 11653/- more through the involvement in the income generating activities of the BMKFPO whereas 36.81 per cent average increase in income were recorded for those tribal women shareholders who became the member since last three years and earned Rs. 11465/- more. Further, 32.97 per cent (Rs. 10203/-) average increase in income was recorded for those tribal

women shareholders of BMKFPO were became the member of FPO since last two years and only 31.62 per cent (Rs. 9420/-) increase in income was recorded for those tribal women shareholders of BMKFPO who were became the member since one year. The results were found to be concurred with the findings of Arputhamani (2013); Sakthi et al., (2015) & Sofia Khan (2019). The result explained that the older tribal women shareholders of BMKFPO were more benefitted and getting much increased income in comparison with the younger one members of the BMKFPO. The results from the present investigation were found to be concurred with the findings of Pervez et al., (2018).

Impact of BMKFPO, Bastanar on income of tribal women shareholders

From the Table 4, it is depicted that the mean differences between the income from various income generating activities of BMKFPO viz. minor millet production and marketing (Pair 1), Amchoor Processing and Marketing (Pair 2), tamarind collection and marketing (Pair 3),vegetable production and marketing (Pair

Table 3. Average increase in income on the basis of their membership period

Membership Period	Frequency	Average Annual Income (Before)	Average Annual Income (After)	Difference in Income	% Change in income
Member since 1 year	26	29792/-	39212/-	9420/-	31.62
Member since 2 year	76	30942/-	41145/-	10203/-	32.97
Member since 3 year	39	31124/-	42580/-	11456/-	36.81
Member since 4 year	15	31255/-	42908/-	11653/-	37.28

Table 4. Paired sample test ‘t’

	Paired Differences				T	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper
Pair 1	4987.82	2956.422	236.703	5455.401	4520.240	21.072	155	0
Pair 2	1101.090	1095.960	87.747	1274.424	927.755	12.548	155	0
Pair 3	615.686	584.342	46.785	708.104	523.268	13.160	155	0
Pair 4	1907.050	1564.531	125.263	2154.494	1659.610	15.224	155	0
Pair 5	1881.530	401.865	32.175	1945.084	1817.970	58.478	155	0
Pair 6	189.788	738.338	59.114	306.562	73.0148	3.211	155	0.002
Pair 7	10683.000	3636.288	291.136	11258.068	10107.900	36.694	155	0

Where, Pair 1 = Before & after income from activity Minor Millet Production and Marketing,
 Pair 2 = Before & after income from activity Amchoor Processing and Marketing,
 Pair 3 = Before & after income from activity Tamarind Collection and Marketing,
 Pair 4 = Before & after income from activity Vegetable Production and Marketing,
 Pair 5 = Before & after income from activity Turmeric Production and Marketing
 Pair 6 = Before & after income from activity Non-FPO Activity (wages)
 Pair 7 = Over all annual Income

4), turmeric collection and marketing (Pair 5), non-FPO activity (wages) (Pair 6) and over all annual income (Pair 7) of the tribal women shareholders of the BMKFPO before and after joining the BMKFPO, Bastanar. The Table 4 denotes the differences in standard deviations (SD) and standard error (SE) of means for the respective pairs (Pair1 to Pair 7).

The paired sample test 't' was computed by dividing the paired differences mean of various pairs by the SE of respective pairs resulted 21.072, 12.548, 13.160, 15.224, 58.478, 3.211 and 36.694 were recorded for the pair no. 1, 2, 3, 4, 5, 6 and 7 respectively. The degree of freedom (df) have been calculated as 155 (n-1) as the same tribal women shareholders of BMKFPO, Bastanar had shared their perceptions about the before and after income from various generating activities and their overall annual income. Further, the probability has been presented finally in the column titled sig. (2-tailed) value were recorded as 0 ($p=0$, $p<0.05$) for pair no. 1, 2, 3, 4, 5 and 7 whereas sig. (2-tailed) value was recorded as 0.002 ($p=0.002$, $p<0.05$) for the income of the tribal women shareholders of the BMKFPO, Bastanar through non-FPO activity (pair no. 6).

Further, it is implicated by the i.e. results presented in the Table 4 since the p value is less than 0.05 ($p=0$, $p<0.05$), the null hypothesis H_{0_1} is rejected for the pair 1 i.e. income generating activity minor millet production and marketing. Hence, it is concluded that there is significant difference between before and after joining BMKFPO among the income of tribal women shareholders through the income generating activity minor millet production and marketing. Similarly, the p value is less than 0.05 ($p=0$, $p<0.05$), the null hypothesis H_{0_2} is rejected for the pair 2 i.e. income generating activity amchoor processing and marketing. Hence, it is concluded that there is significant difference between before and after joining BMKFPO among the income of tribal women shareholders through the income generating activity amchoor processing and marketing. The p value is less than 0.05 ($p=0$, $p<0.05$), the null hypothesis H_{0_3} is rejected for the pair 3 i.e. income generating activity tamarind collection and marketing. Hence, it is concluded that there is significant difference between before and after joining BMKFPO among the income of tribal women shareholders through the income generating activity tamarind collection and marketing.

Hypothesis H_{0_4} is rejected for the pair 4 i.e. income generating activity vegetable production and marketing. Hence, it is concluded that there is significant difference between before and after joining BMKFPO among the income of tribal women shareholders through the income generating activity vegetable production and marketing. The null hypothesis H_{0_5} is rejected for the pair 5 i.e. income generating activity turmeric production and marketing. Hence, it is concluded that there is significant difference between before and after joining BMKFPO among the income of tribal women shareholders through the income generating activity turmeric production and marketing. The null hypothesis H_{0_6} is rejected for the pair 6 i.e. income generating activity non-FPO activity (wages). Hence, it is concluded that there is significant difference between before and after joining BMKFPO among the income of tribal women shareholders through the income generating activity non-FPO activity (wages). Since the p value is less than 0.05 ($p=0$,

$p<0.05$), the null hypothesis H_{0_7} is rejected for the pair 7 i.e. overall annual income. Hence, it is concluded that there is significant difference between before joining BMKFPO and after joining BMKFPO among the overall annual income of tribal women shareholders. The results are found to be concurred with the findings of Arputhamani (2013); Pervez et al., (2018); Dewangan (2018) & Sofia Khan (2019).

CONCLUSION

It is inferred that the FPO module had assisted to the tribal women shareholders of BMKFPO, Bastanar in increasing their income from 61.22 per cent to 493.70 per cent from various income generating activities of the FPO and 34.71 per cent increase in their overall income which is a major attribute of their socio-economic status in the study area. It is also depicted that the trend of increase in the income of tribal women members was associated with; length of membership i.e. low increase in income for less period membership and high change in income for long period membership. FPOs helped to the farming communities in addressing productivity issues, collective farming, getting the machinery, agricultural inputs at lowest cost, developing the ability to compete with large corporate enterprises in bargaining, access to the direct marketing of their produce and all these directly reflect significant increase in their income from the various income generating activities of the FPO.

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