



Effectiveness of poultry based Farmers' Producer Organization and its impact on livelihood enhancement of rural women

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ABSTRACT

Farmers Producer Company (FPC) has emerged as a new business model for the rural area. Like agriculture and horticulture, it is working in poultry sector too. With an intuition to find out the impact of poultry based Farmer Producer Company on upliftment of rural people, the present study was conducted by selecting Madhya Pradesh Women Poultry Producer Company Pvt. Limited (MPWPCL) founded by a team of poor rural women. An Ex–Post Facto research design was used. Difference in difference technique was utilized to estimate the actual impact of FPCs. To measure the effectiveness of MPWPCL and its impact, two indices, viz. effectiveness index and livelihood wellbeing index were prepared. Study was conducted in Orchha district of Madhya Pradesh from 37 randomly selected poultry growers' members and 15 nonmember respondents from the same locale. The MPWPCL was found highly effective with overall effectiveness score of 71.88. Joining the FPC has improved the poor rural women's human, social and political dimensions of livelihood empowerment in addition to a significant economic gain.

Key words: Agri–business, Income enhancement, Poultry, Producer Company, Women empowerment

India is the third–largest egg producer in the world after China and the USA and the fourth–largest country in chicken production in the world after China, Brazil and the USA. The domestic poultry industry in India consists mainly of broiler meat and table egg with other poultry meat constituting marginal share of overall market. Majority of the market share is captured by commercial farms.

Rural poultry production sector can ensure a stable income for rural poultry producer with commercial outlook. Even though commercialization can yield substantial gain as it will reduce the cost of production, marketing shall ensure the economies of scale for the group. As individual backyard poultry producer the farmers are facing tremendous problems of getting good quality chicks, feeds, medical supervisions, lack of capital and technical expertise and market volatility (Ramaswami *et al.* 2005, Thamizhselvi and Rao 2010).

The reason for low level of poultry production are limited finance for the procurement of basic poultry equipment and

materials hinders the small farmers to go for large scale production (Akanni 2007); low prices offered by chain stores, lack of slaughter facilities, high feed cost, high cost of veterinary drugs, high chick mortality, high utility costs, lack of services and lack of refrigerated transport (Moreki, 2011); lack of training institutions, lack of proper infrastructure, lack of skilled labour, difficulties to access the veterinary services, improper communication, lack of government support and inadequate research are the major constraints faced by the small scale poultry industry in Pakistan (Abbas and Zeeshan 2018).

In this scenario, the solution may possible through exploring innovative market led extension models in order to integrate the poultry producer with the value chain so that the net return at the farmers' end is remunerative enough to remain in poultry sector. Fragmented and dispersed small producers face numerous challenges which cannot be tackled individually. Here lies the importance of collectivization and Farmers Producer Company.

The Producer Company concept has emerged as a new generation farmer's organization in India. It was introduced in 2002 by introducing a new part IX A into the Companies Act 1956 under the chairmanship of economist, Y K Alagh (Alagh 2007, Singh 2008 and Mukherjee *et al.* 2018a). Since then Indian farmers got a new opportunity to start expedition towards livelihood sustainability (Mukherjee *et al.* 2018b). The main objectives of Producer Company are procurement

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of inputs, production, harvesting, grading, pooling, handling, storage, marketing, selling or exporting the primary produce of the company members or import of goods or services for them in addition to processing of produce of members, manufacturing, sale or supply of machinery, consumables, conducting training and awareness programme, insurance of crop and livestock and providing guidance for efficient natural resource management etc. to members (ASA 2009, Chauhan 2015). There is a rising concern that the Farmers Producer Company can act as a potential driving force for agricultural and rural development. Farmers Producer Companies are working as 'engines' of development that can uphold the pennon of development even ahead of local level, offering benefits to the rest of society (Blokland and Gouët C 2007). The present study was conducted with the objective to study the impact of such poultry producer company on upliftment of rural women.

MATERIALS AND METHODS

Study area: The study was conducted in Madhya Pradesh state of India. The state is pioneer in flourishing the Farmers Producer Companies in India. A successful company working in poultry industry was selected through purposive sampling based on five specific criteria, viz. the FPC is working for more than 5 years successfully; the FPC has a sizeable membership (more than 2000 members), FPC's turnover is more than 50 lakhs; the FPC has several reported success stories and the FPC has a unique business model. The criteria based purposive sampling was useful to select an effective and functional company working at ground level. Based on that, MP Women Poultry Producer Company Ltd. was selected for the study. The data was collected from Orchha, Madhya Pradesh.

Research design: In the present study, an ex-post facto research design was used. Before and after design was used to estimate the changes occurred due to joining Farmers Producer Company (FPC) along with two groups with and without design, where a group of member farmers of FPC were interviewed and similar group of non member farmers were also interviewed with the same interview schedule to delineate the effectiveness. Finally, the difference in difference technique was used to calculate the actual impact of FPCs.

Sample and survey instrument: For the study, a semi-structured interview schedule was prepared. The interview schedule consisted of eighteen different socio-personal and socio-economic variables of respondents and an index to measure the effectiveness of MP Women Poultry Producer Company Ltd (MPWPCL). The effectiveness index includes seven components namely functioning efficiency, increase in income, increase in farmers share in consumers rupee, inclusiveness, sustainability of Farmers Producer Company, farmers satisfaction and (7) Empowerment.

The index, prepared based on the above mentioned parameters was calculated by the following equation:

$$\frac{FE \times W1 + I \times W2 + FSC \times W3 + Inc \times W4 + S \times W5 + FS \times W6 + E \times W7}{W1 + W2 + W3 + W4 + W5 + W6 + W7}$$

where FE, functioning effectiveness; I, increase in income; FSC, increase in farmers share in consumers' rupee; Inc, inclusiveness; S, sustainability of farmers producer company; FS, farmers satisfaction and E, empowerment.

Wi are respective weight calculated based on Analytical Hierarchy Process (AHP) of experts rating to the seven components based on Saaty (2008) and Mukherjee *et al.* (2018c).

The concept 'effectiveness' conceptually has been defined as the accomplishment of objective set forth by the FPCs. Operationally, perceived effectiveness of FPCs performance in this study was referred as degree of successful accomplishment of the objectives of FPCs perceived by the members.

After consultation with the experts and reviewing a vast volume of literature a rating scale was prepared for constructing the effectiveness index comprising the seven components.

The effectiveness index was prepared following standard procedure. Twenty experts working in the top management for promoting farmers organizations, FPC were consulted and review of related studies were considered for constructing the index. The effectiveness index comprised of the seven components described below.

Functional effectiveness: A functional effectiveness index with 1 to 5 point scale was developed to evaluate the functioning of FPCs. Ten most relevant dimensions were studied in this index measuring the functional effectiveness. Summation of the scores of 10 functioning variables used in the study yielded functioning score of a single respondent. The scores of members of a particular group were added together to get the functioning score of that FPCs. The index was calculated by dividing the actual score by the maximum possible score of functioning. A similar method was followed by Abadi (2010).

Increase in income: Measurement of increase in income was calculated by outreaching the earlier income per year (i.e. before the intervention of the FPC) and the present income per year of the agricultural produce (i.e. after the intervention of the FPC).

Increase in farmers share in consumer rupee: The farmers share in consumers rupee was calculated by outreaching the earlier farmers share (i.e. before the intervention of the FPC) and the present farmers share of the agricultural produce (i.e. after the intervention of the FPC).

Inclusiveness: The component inclusiveness was added as dimension in effectiveness to study how inclusive the companies were in including the backward class and poorest of the poor and representing other categories. The inclusiveness was studied by an index developed for the study including the category of farmers, caste, gender and financial class.

Sustainability of the company: Sustainability of company is very much important. If a source of income is not sustained it cannot provide livelihood security. The sustainability of FPC was measured by schedule developed for the purpose. This includes the growth trends of fixed and capital assets of company and most importantly the human resources were considered.

Farmers satisfaction: The farmers satisfaction of the FPC services based on the selected dimensions was measured by an index developed for that purpose following the procedure given by Edwards (1957). This index consisted of 15 statements with 1 to 5 point of scale to which the respondents were asked to give their responses. The responses were averaged to get respondents satisfaction.

Empowerment: Empowerment of farmers due to joining of FPC was measured by an index developed for the purpose following the procedure given by Edward (1957). This index consisted of 14 statements covering all aspects of empowerment with 1 to 5 point of scale on which the respondents were asked to give their responses.

The response of all seven components in this effectiveness index were normalized by z transformation and then averaged. Similar methods were also followed by Abadi (2010), Mukherjee *et al.* (2011) and Nikam, (2013).

Focused group discussions (FGDs) and series of key informant interviews were carried out to identify the aspects of effectiveness. Additionally, previous effectiveness studies were also reviewed to prepare the survey instrument. The survey instrument was sent to experts for their comments and possible modification and improvement were done based on their recommendations. For easy to understand by the farmers the instrument was translated in Hindi (common language) and a pilot test of 20 farmers was done to further clarify the questions.

Livelihood wellbeing index: In case of livelihood wellbeing measurement, a livelihood wellbeing index was constructed comprising six different dimensions, viz. natural capital, physical capital, economic capital, human capital, social and political capital. The increase in each equally weighted capital dimensions were indicated through index score 0–6. The before and after research design was implemented here to see the changes over time. The company was established in 2007 so the respondents were asked to indicate their status before 2007 and at present. The difference in difference was calculated to estimate the actual impact.

The data were collected from 37 randomly selected members of the company and 15 nonmember respondents were also selected randomly from the same locale. In-depth interviews were conducted with key informants to ensure the triangulation of data. Proper care was taken to make the respondents comfortable and unbiased recording of the data was ensured.

Statistical analysis: Comparison of socio-economic characteristics of Poultry growers of and non growers in the study area were done through nonparametric tests, viz. (Mann-Whitney U, Wilcoxon W and Z). For the statistical

analysis, the data were analyzed using Ms Excel and SPSS 20 software.

RESULTS AND DISCUSSION

Poultry Producer Organization: The organization, Madhya Pradesh Women Poultry Producers Company Pvt. Ltd. (MPWPCL) is India's first market led company which integrates all women poultry producers drawn from rural ST and SC families living below poverty line. The producer company was established in 2007 under 'Companies Act, 1956', and has 10 producer cooperatives operating under it. Each cooperative holds a stake in the producer company. The company is providing needed and sustainable economic interventions in the rural areas particularly to the poor tribal women. The NGO, PRADAN (Professional Assistance for Development Action) has promoted the company. The cooperative membership is spread over Hoshangabad, Betul, Sidhi, Dindori, Chhatarpur, Tikamgarh, Sagar, Vidisha, Singrauli and Shadol districts of Madhya Pradesh.

The company started the first building blocks in 1990s when a revolutionary step was taken by PRADAN for helping Gond Tribal Women in Kesla Block for their sustainable livelihood security. Poultry intervention was carried out as it was one of the fastest growing sectors. After experiment with different poultry like *Desi* birds to Cockerails, Kuroilers to broiler, rearing backyard broiler was found to be most successful.

The Poultry Producer Company is working on institute ownership model. Mainly two tier system is visible here. The tier-I is at the village level where many small producers (of capacity of 400–800 chicks) aggregate to achieve economies of scale of a commercial farm. The tier-II is at the federation level where ten individual cooperatives aggregate to form MPWPCL which then has the bargaining power comparable to any other private player.

The Poultry Producer Company is working with nearby about 10,000 members. All are poor women having very meagre resources with them. Each of them rears a flock size of 400–800 birds, managing to earn adequate amount to take care of a few critical expenses of home for which they would have to obtain loan pushing the family into debt trap. The women may be from rural background, but have sufficient professionalism with them after rigorous training imparted to them. The professionals strive to attain the balance between the competitive market and the community welfare.

The Poultry Producer Company has its own market brand. The products are mainly broiler meat and eggs. It has a retail brand *Sukhtava Chicken* initially started in Bhopal and now running in about 12 cities of MP. These retail shops are unique and consist of all the modern tools and techniques for selling and processing chicken and maintaining the hygienic conditions. It is complete package of value for money for those who prefer to buy hygienic and processed chicken.

The turnover of the Farmers Producer Company was ₹ 290 crores and profits near about ₹ 60–70 crores. The

FPC started in 2007 when the turnover was only ₹ 15 lakh, which has now grown 1933 times to ₹ 290 crores and grown at 231.82% CAGR. It is a kind of unprecedented growth rate. The reason behind that is strong marketing and poor women's commitment. The unique 4 Ps': Products, Price, Promotion and Place model. The membership has grown from initially 60 to 10,000 in 2017. The membership has grown at 176.55% CAGR during last 10 years. The company is targeting to reach 20,000 in next five years indicating it is a fast growing company by both in terms of turnover and membership.

Comparison of Poultry growers and non-growers:

Table 1 indicates the difference in social characteristics found in poultry growers and members of the FPCs and non member poultry growers. A total of eighteen characteristics were studied. The average age of poultry growers was 44.86 years which was found significantly higher than non growers (34.87). Similar result was found in case of farming experience. It indicates that age is not a limiting factor in joining Farmers Producer Company. In case of income, the Poultry producers were earning eighteen thousand rupees more than the non growers in a year which was found statistically highly significant at 1% level of significance. The average numbers of poultry birds reared by a grower were near 800 in a year and through that enterprise an additional 15–18 thousand rupees were earned by them. It was found that in case of social participation, extension agency contact, urban contact, training experience, members of other group, progressiveness and attitude towards FPC the two groups differed significantly. The reason may be as joining FPC enhances the social participation through regular meeting, workshops and training cum exposure visits which were lacking for those

who have not joined yet. Naturally, the training and interaction with the technical officers, veterinary doctors and other service providers enhanced their extension agency contact, urban contact and progressiveness. The attitude is the first factor to decide about joining or not joining in any organization. The attitude towards Farmers Producer Company was found highly positive in case of members and moderate in case of the non members.

Effectiveness of the Poultry Producer Organization: The effectiveness of Farmers Producer Companies was calculated by an index (FPC effectiveness index) developed for the study. The index consisted of seven components namely functioning efficiency, increase in income, increase in farmers share in costumer rupee, inclusiveness, sustainability of Farmers Producer Company, farmers satisfaction and empowerment.

The weights for each component were assigned using Analytical Hierarchy Process (AHP) depicted in Table 2. The table indicates, as per the expert's judgment, highest weight was given to empowerment (eigen value=0.26) followed by sustainability of the company (eigen value=0.20), members farmers satisfaction of the FPC they belong (eigenvalue=0.17). Increase in income and share in consumers rupee was weighted next with eigenvalue 0.14 and 0.11 respectively. The consistency ratio of the AHP was 0.147 and consistency index 0.0991. The CI should be less than 0.1 which satisfies the result. The consistency index score indicated the consistency in judges' ratings.

The functional effectiveness is one of the most important parameters of company's effectiveness. In this study the functional effectiveness was measured through a sub-index consisting of the following ten components such as members interaction, cooperation among members, interpersonal

Table 1. Comparison of socio-economic characteristics of Poultry growers and non growers in the study area

Characteristic	Poultry growers (n=37)			Non growers (n=15)			Mann-Whitney U	Wilcoxon W	Z	P-value (2-tailed)
	Mean	Std. Error of Mean	Std. Deviation	Mean	Std. Error of Mean	Std. Deviation				
Age	44.86	1.38	8.4	34.87	2.14	8.27	91.5	211.5	-3.8	.000**
Education	3.16	0.16	0.99	3.00	0.26	1	253.5	373.5	-0.6	.580
Gender (male=1, female=2)	2.00	0	0	2.00	0	0	277.5	397.5	0.0	1.000
Family size	6.32	0.21	1.25	7.00	0.44	1.69	194.5	897.5	-1.7	.086
Farm size (ha)	0.02	0.06	0.04	0.02	0.01	0.04	262.5	382.5	-0.4	.689
Farming experience	29.86	1.38	8.4	19.87	2.14	8.27	91.5	211.5	-3.8	.000**
Primary occupation	0.11	0.05	0.31	0.13	0.09	0.35	270.5	973.5	-0.3	.798
Income (in lakh ₹/year)	0.65	0.01	0.07	0.47	0.02	0.08	26	146	-5.1	.000**
Distance from agril. market	14.05	0.19	1.13	14.2	0.26	1.01	260.5	963.5	-0.4	.717
Poultry birds possessed	724.32	26.11	158.82	0.00	0	0	0	120	-6.3	.000**
Social participation	0.95	0.04	0.23	0.13	0.09	0.35	52	172	-5.8	.000**
Extension agency contact	0.84	0.06	0.37	0.13	0.09	0.35	82	202	-4.7	.000**
Urban contact	0.84	0.06	0.37	0.27	0.12	0.46	119	239	-3.9	.000**
Training experience	2.54	0.08	0.51	0.40	0.13	0.51	0	120	-5.9	.000**
Members of other group	0.92	0.05	0.28	0.07	0.07	0.26	41	161	-5.9	.000**
Progressiveness	4.60	0.02	0.1	2.77	0.05	0.19	0	120	-5.8	.000**
Attitude towards FPC	4.44	0.03	0.18	2.79	0.05	0.2	0	120	-5.6	.000**
Mass media utilization	0.55	0.02	0.15	0.56	0.03	0.1	263	966	-0.313	.755

Note: * and ** indicates level of significance at 5% and 1% respectively.

trust, decision making, cohesiveness among members, goal achievement, leadership, manageable size, administration systems, rules regulation and procedures. As per the data (Table 3), all the components were scored more than 4.0 (4.29–4.64) which indicates that the company is functioning well inspite of such a large membership volume. The increase in income observed in MP Women Poultry Producer Company Ltd. was 48.76% indicating a good amount. Farmers share in consumer's rupee was found for MP Women Poultry producer company Ltd. (59.84%). This may be due to well established marketing channel by the company, door to door picking and delivery to retail market and marketing efficiency has culminated the change. Based on the data it is clear that MP Women Poultry Producer Company's work for livelihood development of poor women has made the company's score 0.92 in inclusiveness parameter. The parameters for sustainability were net profit, physical asset, linkages, growth, skilled human resources, successful diversified ventures etc. The company's average sustainability score was 0.87 which indicates a good sign of long term sustainability of the company.

Satisfaction of member farmers was measured through another sub-index consisting of the following parameters, viz. the quality of Inputs from MPWPCL, the quality of services, timeliness in availability of inputs, timeliness in availability of services, cost of inputs, cost of services, value addition, marketing of products, timeliness of payment made, dividend distribution, training and capacity building, concern for community, equitable growth of members, income enhancement and enhanced social status. The scores ranged from 4.19 to 4.62, which indicated the members are highly satisfied in association with MPWPCL.

Empowerment is an important parameter for effectiveness. To measure empowerment, a scale was made consisting of 14 statements. Each of the statement indicated a dimension of empowerment. The highest was found as confidence in activity (4.73) that the member was felling followed by motivated (4.59), effective planning of family expenses (4.57). The overall score for empowerment was 4.43 which indicate a high empowerment of poultry grower members after joining the organization.

Based on the calculated effectiveness, the overall effectiveness score of the company was found 71.88 out of 100 indicates highly effective based on the index parameters.

Factors responsible for income enhancement: The index shows an income enhancement of 48.76% which indicate quite a good amount. To study the factors behind the income enhancement stepwise multiple regressions was carried out. The result are shown in Table 3.

The stepwise multiple regression was conducted to study the factors responsible for income enhancement of the member farmers. The result depicted in Table 3 indicates that number of poultry birds and attitude towards FPC were found significant factors for overall enhancement of income of farmers. The number of poultry birds possession was significant at 1% level whereas attitude towards MPWPCL was found significant at 5% level. The regression model fitted well which is indicated by the R^2 value of the model (0.814). It indicates that the model was able to capture 81% variability. The F value of the model was 9.573 which is significant at 1% level of significance.

Impact of MPWPCL in terms of enhancing livelihood wellbeing: Fig. 1 indicates the changes of different dimensions of livelihood wellbeing of non poultry growers in a period of ten years before and after. The figure indicates that considerable increase in political capital, social and human capital was there over the period of last ten years. Although in natural no such changes were found whereas in physical and economic capital some changes were found. We have used the information as a baseline.

Comparative Livelihood wellbeing

Fig. 2 indicates that considerable changes in the dimensions like social, political and human capital over the last ten years after joining the farmers producer company, while the non members farmers in case of changes in natural capital. The reason is that the natural capital consisted of the asset category land. Score was given for new purchase or improvement of land. The poultry growers women in the study area are mainly landless labourers and do not possess any land. Although in physical capital and economic capital some changes have been recorded.

Fig. 3 indicated the difference in the difference of livelihood wellbeing parameters before and after of members and non-members. That indicates the actual changes in livelihood dimensions of the members only due to membership. The difference in difference research design was employed to identify the actual impact of membership in FPC by eliminating the maximum sources of errors. The

Table 2. Analytic Hierarchy Process (AHP) based weight scores for effectiveness index components

Parameter	Functional efficiency	Income	Share in consume rupee	Inclusiveness	Sustainability	Satisfaction	Empowerment	Eigen value
Functional efficiency	1.0	0.33	0.40	0.50	0.29	0.31	0.25	0.05
Increase in income	3	1.00	1.50	2.00	0.67	0.80	0.50	0.14
Share in consume rupee	2.5	0.67	1.00	1.50	0.50	0.57	0.40	0.11
Inclusiveness	2	0.50	0.67	1.00	0.40	0.44	0.33	0.08
Sustainability	3.5	1.50	2.00	2.50	1.00	1.25	0.67	0.20
Satisfaction	3.25	1.25	1.75	2.25	0.80	1.00	0.57	0.17
Empowerment	4	2.00	2.50	3.00	1.50	1.75	1.00	0.26

Note: CR=0.147; CI=0.0991.

Table 3. Component mean scores and respective weights of the effectiveness index

	Effectiveness index components	Mean score	Weights
1	Functional efficiency (very low=1, very high=5) of MPWPCL		0.05
i	Members Interaction	4.29	
ii	Cooperation among members	4.30	
iii	Interpersonal trust	4.63	
iv	Decision making	4.64	
v	Cohesiveness among members	4.54	
vi	Goal achievement	4.60	
vii	Leadership	4.52	
viii	Manageable size	4.61	
ix	Administration systems	4.55	
x	Rules regulation and procedures	4.60	
	Mean functional efficiency score	4.53	
2	Increase in income (%) after joining MPWPCL	48.76	0.14
3	Share in consume rupee (%) enhanced	59.84	0.11
4	Inclusiveness (low=0, High=1) policy of MPWPCL	0.92	0.08
5	Sustainability (low=0, High=1) of the company MPWPCL	0.87	0.20
6	Satisfaction (very low=1, very High=5) of members from MPWPCL		0.17
i	The quality of Inputs that we get from MPWPCL	4.35	
ii	The quality of services	4.30	
iii	Timeliness in availability of inputs	4.43	
iv	Timeliness in availability of services	4.43	
v	Cost of inputs	4.57	
vi	Cost of services	4.41	
vii	Value addition	4.43	
viii	Marketing of products	4.62	
ix	Timeliness of payment made	4.43	
x	Dividend distribution	4.62	
xi	Training and capacity building	4.73	
xii	Concern for community	4.51	
xiii	Equitable growth of members	4.19	
xiv	Income enhancement	4.46	
xv	Enhanced Social Status	4.54	
	Mean satisfaction score	4.47	
7	Empowerment (very low=1, very High=5) after joining MPWPCL		0.26
i	Enhanced Social Status	4.43	
ii	Enhanced income	4.57	
iii	Initiated participation in village administration	4.35	
iv	Enhanced knowledge on improved technologies	4.19	
v	Getting recognition in my neighborhood/society	4.41	
vi	Started addressing social issues and problems	4.22	
vii	Enhanced leadership capacity	4.46	
viii	Motivated	4.59	
ix	Saving more money for future	4.32	
x	Effective business planning	4.54	
xi	Effective family expenses planning	4.57	
xii	Better thinking for the village development	4.16	
xiii	Increased confidence in any activity	4.73	
xiv	Effectively family security planning	4.54	
	Mean empowerment score	4.43	

figure indicates that highest changes were found in social capital followed by political, human and economic capital. In case of physical and natural capital much difference has not been found. The table indicates that joining FPCs has enhanced the members social capital as the members were more connected to social groups formed by FPCs, and other groups, there were reduction in domestic violence, social security and insurance awareness.

Good practices and lesson learned from MPWPCL: The research not only has pointed out the impact of MPWPCL but has gone down deeper to dig out the probable reasons behind the probable impacts in changing the lives of poor rural women's of Madhya Pradesh. Any organization shall become very successful through the implementations of some good practices which not only makes that organization enhance their effectiveness level but enhance the quality of

Table 4. Factors responsible for income enhancement of women Poultry producer

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.066	.266		4.013	.000
Age	.000	.001	.019	.176	.862
Education	.009	.009	.076	.949	.349
Family size	-.009	.007	-.115	-1.356	.184
Farm size	.039	.372	.014	.105	.917
Primary occupation	-.008	.047	-.024	-.173	.864
Distance from Agriculture Market	-.003	.010	-.029	-.279	.782
Poultry birds	.000	.000	.865	3.715	.001
Social participation	.042	.056	.175	.750	.458
Extension Agency Contact	-.011	.034	-.049	-.328	.745
Urban contact	.007	.026	.029	.260	.796
Previous training experience	.008	.020	.081	.404	.689
Members of other groups	.036	.040	.156	.912	.368
Progressiveness	-.027	.069	-.206	-.391	.698
Attitude	-.140	.054	-.984	-2.605	.013
Mass media utilization	-.132	.070	-.165	-1.889	.067

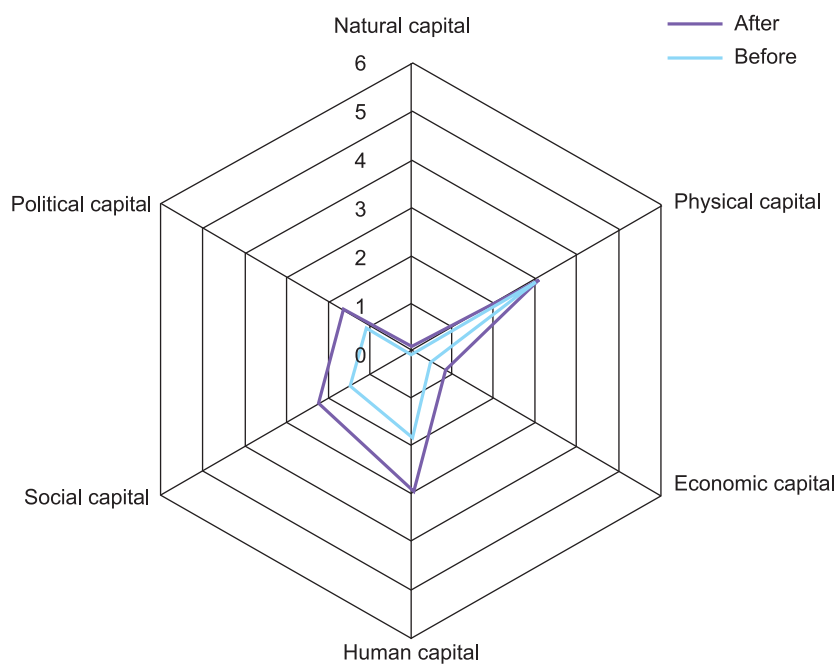


Fig. 1. Changes in different dimensions of livelihood wellbeing of non poultry growers in a period of ten years (2007–17), before and after.

performance and efficiency. In this research the observations and focused group discussions have revealed several good practices that are followed by Women Poultry Producer Company. The identified good practices were:

Door to door veterinary service

The company has appointed a veterinary expert for each cluster. Thus it has ensured timely and door to door veterinary service to the members. It is necessary in case of poultry business where sudden outbreak of disease can kill poultry birds of whole cluster. The regular inspection of birds helps to reduce the risk level.

Maintaining health and hygiene

The poultry business is sensitive towards disease and for that, health and hygiene should be maintained. In this FPC with the women were maintaining good health and hygiene were encouraged to join the venture. The reason behind that unhygienic way of handling poultry birds can not only ruin the birds but the whole village may be at risk. The company is very particular in maintaining that. To reduce contamination it even produces own feed and supplies to growers to reduce the chance of contamination. Only those women are selected who follow the recommended practices during the training programme. The

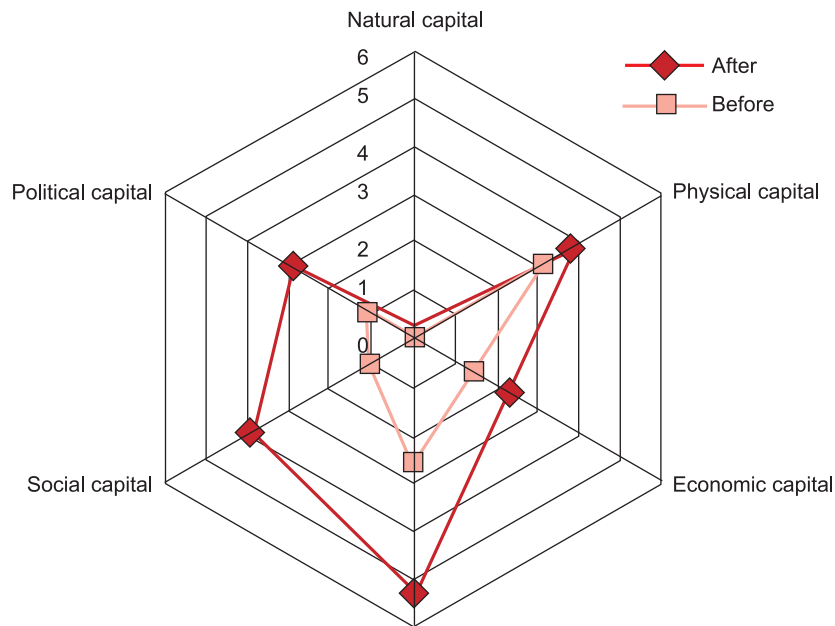


Fig. 2. Changes in different dimension of livelihood wellbeing of poultry growers MPWPCL in a period of ten years (2007–17), before and after.

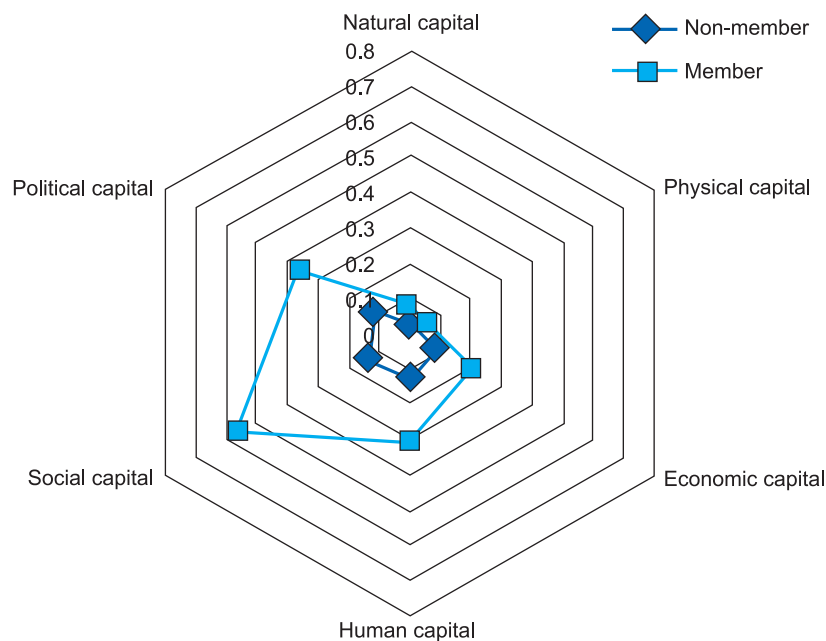


Fig. 3. Difference in changes of different dimension of livelihood wellbeing of the members of MPWPCL and non members in a period of last ten years (2007–17) before and after.

trainers observe the women very carefully during the entire training period (Table 4).

Transparency

Transparency is very much important for any kind of Organization, particularly for producer companies and co-operatives where huge amount of money are handled by few leaders. Transparency of the system helps to motivate the members through the message of honesty and faith. The MPWPCL was following a fair practice of transparency

that any member at any time can ask for the records of the company.

Maintenance of records

Maintenance of record is a sign of good administration. MPWPCL was maintaining records in a very organized manner. This practice helps in tracking MPWPCLs growth through scrutinizing and comparing the previous data with the present. It is very helpful for the Board of Director members to take good decisions based on the data.

Following the cooperative principle

The producer company was found to follow the cooperative principles. Cooperative principles are planned in true spirit which ensures the empowerment of poorest of the poor. The reason for the impact of MPWPCL was due to following the co-operative principles very seriously.

Leadership and support

Leadership plays an important role for any organization. It was seen in case of MPWPCL where the poor women developed leadership quality through hand holding and support of the NGO PRADAN. The leadership and support from NGO have created a good environment for business, enhanced the members faith in the organization and anchored them for collective struggle against poverty.

Conclusion

Madhya Pradesh Women Poultry Producers Company Pvt. Ltd. (MPWPCL) is fundamentally women governed and owned micro-enterprises which has the cooperative principle as a base and very strong market outlook. The study found that poultry based farmer producer company MPWPCL was highly effective as an organization as a whole. It was found that the FPC has a positive impact on the livelihood well-being of the rural women. The resource poor women have enhanced their social, political, economic and human capitals. It is one of the most important achievements for the poor women that after joining MPWPCL their human social and political dimensions of empowerment have grown in addition to significant economic gains. Thus it can be concluded from the research results that the poultry based farmers producer company, MPWPCL is working for the upliftment of poor rural women of Madhya Pradesh and has provided an option for livelihood enhancement to them. The MPWPCL can act as a model for sustainable development of rural livelihood. The other organizations can learn from the model they followed, the good practices they performs to enhance efficiency of organization and betterment of poor farmers of India, especially poor rural women.

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