ROLE OF WOMEN IN THE FINANCIAL MANAGEMENT OF POULTRY

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In augmenting the productivity and quality of poultry management, the participation of farmwives can go a long way. India now ranks sixth in animal production and eighteenth in broiler production in the world (Prabaharan, 1999). The poultry production is widely managed at the domestic level, and the crux of the problem is the inadequate participation of women. Amudha and Veerabhadraiah (2000) recorded that the main problem of rural women in poultry rearing is lack of knowledge about improved practices and disease control measures. In making a compatible coupling between pattern of work load distribution and management of poultry, it is essential to know about the factors, operative in a farming system complex and characterising the nature of management in poultry affairs, handling of financial matters by the women. Hence, the study was designed to elucidate the role of women in financial affairs in poultry management as a consequent variable to a set of socio-economic and psychological variables. The specaific objectives are :

I. To assess the nature and characteristics of relationship and interdependencies, linear and functional, between the causal variables and the consequent variable;
II. To assess the direct and indirect pathway of the linear relationships in characterizing the web of interactions between the causal variables and the consequent variable;
III. To develop and delineate a strategic intervention towards framing a sustainable approach in financial management of different enterprises.

METHODOLOGY

The present study was carried out in four purposively selected blocks (Panskura-I, Panskura-II, Tamluk-I and Tamluk-II) of subdivision (Tamluk) of a district (Medinipur-East) of West Bengal. Department of Agriculture has divided Medinipur into two district viz. Medinipur (East) and Medinipur (west) but these two districts are administratively regarded one district, i.e., Medinipur. There are 551 villages and 50 gram panchayants in the above four blocks. Out of 551 villages, 56 villages from 18 gram panchayats were detected and selected which consists of sample women who fulfill the criteria for selecting respondents like (i) Respondents are married (husband alive), (ii) Respondents have atleast five years xperience in practising the four enterprises viz. agriculture, animal rearing, poultry rearing and fish farming. Young unmarried girls and widows normally belongs to a separate strata of our rural system. Those who engaged in farm enterprises for a continuous periods of five years had considerable consistency in their performance. Ninety seven sample women who fulfill the above two criteria were detected from the above mentioned location for collecting data for the present investigation. The following variables were selected to study on their nature of interdependency. The causal variables viz. age (X_1), education (X_2), family education (X_3), caste (X_4), family type (X_5), family size (X_6), investible surplus (X_7), information use index (X_8), level of aspiration (X_9), management orientation in agriculture (X_{10}), management orientation in animal rearing (X_{11}), management orientation in poultry rearing (X_{12}), management orientation in fish farming (X_{13}), level of decisiveness in agriculture enterprise (X_{14}), level of decisiveness in animal rearing enterprise (X_{15}), level

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of decisiveness in poultry rearing enterprise (X_{16}), level of decisiveness in fish farming enterprise (X_{17}), decisiveness in financial affairs in agriculture (X_{18}), decisiveness in financial affairs in animal rearing (X_{19}), decisiveness in financial affairs in poultry rearing (X_{20}) and decisiveness in financial affairs in fish farming (X_{21}). For the measurement of education, family type and family size, the scale of Pareek and Trivedi (1964) was used of and for the variables like family education, caste, and level of aspiration, the scales used were Ray (!967), Haque (1981) and Sagar (1964) respectively. The scale developed by Samanta (1977) was used to measure management orientation in agriculture, animal rearing, poultry rearing and fish farming. For the measurement of investible surplus, information use pattern, level of decisiveness in agriculture, animal rearing, poultry rearing and fish farming and decisiveness of financial affair of four enterprises, schedules were structured and used after pretesting.

The data were collected by personal interview technique with the help of structured interview schedule during the year 1999-2000. The data were analysed by using statistical methods such as coefficient of correlation, regression, multiple regression, stepdown regression and path analsis.

RESULTS AND DISCUSSION

Table 1 presents coefficient of correlation between management of financial affairs in poultry rearing enterprise and twenty one independent variables. The table depicts that the variables viz. education (X_2), information use index (X_8), management orientation in agriculture (X_{10}), management orientation in animal rearing (X_{11}), management orientation

Table 1: Coefficient of correlation between the dependent variable management of financial affairs in poultry rearing enterprise and rest twenty one independent variables.

S.No.	Variables		'r'
1.	[X_1]	Age	-0.0845
2.	[X_2]	Education	-0.3162**
3.	[X_3]	Family education	-0.0108
4.	[X_4]	Caste	-0.1261
5.	[X_5]	Family type	0.0439
6.	[X_6]	Family size	0.1296
7.	[X_7]	Investible surplus	-0.1461
8.	[X_8]	Information use index	0.2581*
9.	[X_9]	Level of aspiration	-0.0618
10.	[X_{10}]	Management orientation (agriculture)	0.3557**
11.	[X_{11}]	Management orientation (animal rearing)	0.3332**
12.	[X_{12}]	Management orientation (poultry rearing)	0.2702**
13.	[X_{13}]	Management orientation (fish farming)	0.1965
14.	[X_{14}]	Level of decisiveness in enterprise (agriculture)	-0.1490
15.	[X_{15}]	Level of decisiveness in enterprise (animal rearing)	-0.3379**
16.	[X_{16}]	Level of decisiveness in enterprise (poultry rearing)	-0.2996**
17.	[X_{17}]	Level of decisiveness in enterprise (fish farming)	-0.0544
18.	[X_{18}]	Decisiveness in financial affairs (agriculture)	-0.1265
19.	[X_{19}]	Decisiveness in financial affairs (animal rearing)	-0.2735**
20.	[X_{20}]	Decisiveness in financial affairs (fish farming)	-0.0518
21.	[X_{21}]	Decisiveness in financial affairs (fish farming)	-0.1579

Tabulated value of $'r'_{0.01}$ for 95 d.f. are 0.260 and 0.200 respectively,
** and * significant at P= 0.01 and P = 0.05 respectively

in poultry rearing (X_{12}), level of decisiveness in animal rearing (X_{15}), level of decisiveness in poultry (X_{16}(and decisiveness in financial affairs of animal rearing (X_{19}) were found to be significantly correlated with the dependent variable. In this table the role of formal education (X_2) had gone minimised in boosting the management of financial ingredients in poultry enterprise as well. So also were the cases for level of decisiveness in animal rearing (X_{15}), level of decisiveness in poultry rearing (X_{16}) and decisiveness in financial affairs of animal rearing (X_{19}). As a general corollary with the increase in the ambit of management of financial affairs, the need for further deliberation got reduced and vice versa. And, thus, the more was the expansion in the ambit of management, the less was the time requirement for decision making.

Table 2 present regression analysis, taking management of financial affairs in poultry rearing enterprise as consequent and rest twentyone other variables as antecedent ones. It was found that the variable viz. information use index (X_8), level of decisiveness in poultry

Table 2: Regression coefficient of antecedent variables on the consequent variable management of financial affairs in poultry rearing enterprise.

S.No.	Variables	Beta	Beta x R	Reg. Coef. -B	S.E.of B	't'
1.	[X_1] Age	-0.183	2.784	-0.074	0.040	1.847
2.	[X_2] Education	-0.217	12.399	-0.422	0.220	1.917
3.	[X_3] Family education	0.002	-0.003	0.000	0.027	0.017
4.	[X_4] Caste	-0.055	1.255	-0.278	0.451	0.615
5.	[X_5] Family type	-0.077	-0.608	-0.589	0.820	0.718
6.	[X_6] Family size	0.011	0.266	0.074	0.660	0.112
7.	[X_7] Investible surplus	-0.088	2.305	0.000	0.000	1.052
8.	[X_8] Information use index	0.238	11.096	0.219	0.087	2.508*
9.	[X_9] Level of aspiration	-0.065	0.722	-0.023	0.036	0.627
10.	[X_{10}] Management orientation (agriculture)	0.394	25.283	0.391	0.216	1.806
11.	[X_{11}] Management orientation (animal rearing)	0.090	5.399	0.089	0.102	0.875
12.	[X_{12}] Management orientation (poultry rearing)	-0.055	-2.660	-0.052	0.200	0.258
13.	[X_{13}] Management orientation (fish farming)	0.109	3.846	0.077	0.059	1.302
14.	[X_{14}] Level of decisiveness in enterprise (agriculture)	0.355	-9.529	1.012	0.821	1.232
15.	[X_{15}] Level of decisiveness in enterprise (animal rearing)	-0.297	18.086	-0.754	0.435	1.734
16.	[X_{16}] Level of decisiveness in enterprise (poultry rearing)	-0.579	31.249	-1.626	0.418	3.889**
17.	[X_{17}] Level of decisiveness in enterprise (fish farming)	0.104	-1.017	0.297	0.422	0.702
18.	[X_{18}] Decisiveness in financial affairs (agriculture)	-0.242	5.508	-0.637	0.287	2.215*
19.	[X_{19}] Decisiveness in financial affairs (animal rearing)	-0.080	3.942	-0.204	0.379	0.538
20.	[X_{20}] Decisiveness in financial affairs (fish farming)	0.240	-2.246	0.676	0.444	1.520
21.	[X_{21}] Decisiveness in financial affairs (fish farming)	0.284	-8.704	0.805	0.432	1.863

Multiple R-SQ = 0.5547; Beta = Partial contibution towards Y; Beta x R = Percentile contribution towards R^2 value of different antecedent variables; REG.COEF.-B = Regression coefficient of Xi (i= 1, 2, 3,....., 21) on Y; S.E. of B = Standard error of regression coefficient; Tabulated value of 't' 0.01 and 't' 0.05 for 95 d.f. are 2.66 and 2.00 respectively, ** and * significant at P = 0.01 and p = 0.05 respectively.

rearing enterprise (X_{16}) and decisiveness in financial affairs of agriculture (X_{18}) had contributed substantially in supporting management of financial affairs in poultry rearing enterprise. While considering the percentile contribution of different variables, it was found that the variable level of decisiveness in poultry rearing enterprise (X_{16}) exerted its influence to the extent of 31.249 per cent of followed by management orientation in agriculture (X_{10}) (25.283 per cent) and level of decisiveness in animal rearing enterprise (X_{15}) (18.086 per

cent). The R^2 value was found 0.5547, i.e., it indicated that all variables put together in this web of interaction explained 55.47 per cent of the total variation.

The stepdown regression (Table 3) depicted that at the 14th step the variables retained were age (X_1), education (X_2), information use index (X_8), management orientation in agriculture (X_{10}), level of decisiveness in agriculture enterprise (X_{14}), level of decisiveness in animal rearing enterprise (X_{15}) and level of decisiveness in poultry rearing enterprise to provide 46.75 per cent of explicable variation. While all variables put together the percentage of explicable variation had been 55.47 per cent (Table 2).

Table 3: Step down regression analysis : The 14th step showing regression of antecedent variables on the consequent variable management of financial affairs in poultry rearing enterprise.

S.No.	Variables	Beta	Beta x R	Reg. Coef. -B	S.E.of B	't'
1.	[X_1] Age	-0.204	3.690	-0.082	0.035	2.372*
2.	[X_2] Education	-0.308	20.856	-0.598	0.182	3.295**
3.	[X_8] Information use index	0.203	11.204	0.186	0.073	2.551*
4.	[X_{10}] Management orientation (agriculture)	0.0335	25.519	0.333	0.079	4.184**
5.	[X_{14}] Level of decisiveness in enterprise (agriculture)	0.697	-22.217	1.989	0.450	4.422**
6.	[X_{15}] Level of decisiveness in enterprise (animal rearing)	-0.399	28.870	-1.015	0.267	3.797**
7.	[X_{16}] Level of decisiveness in enterprise (poultry rearing)	-0.501	32.078	-1.407	0.394	3.575**

Multiple R-SQ =0.4675; Beta = Partial contibution towards $\bar{Y}$; Beta x R = Percentile contribution towards R^2 value of different antecedent variables; REG.COEF.-B = Regression coefficient of Xi (i= 1, 2, 8,10, 14, 15 & 16) on Y; S.E. of B = Standard error of regression coefficient; Tabulated value of 't' 0.01 and 't' 0.05 for 95 d.f. are 2.66 and 2.00 respectively, ** and * significant at P = 0.01 and p = 0.05 respectively.

Study reveald that the path analysis with direct and indirect effect of antecedent variables on the management of financial affairs in poultry rearing enterprise. It was found that the variables (information use index (X_8), management orientation in agriculture (X_{10}), level of decisiveness in agriculture enterprise (X_{14}), level of decisiveness in animal rearing enterprise (X_{15}), level of decisiveness in poultry rearing enterprise (X_{16}), level of decisiveness fish farming enterprise (X_{17}), decisiveness in financial affairs of agriculture (X_{18}), decisiveness in financial affairs of poultry rearing (X_{20}) and decisiveness in financial affairs of fish farming (X_{21})] had exerted their substantive direct effect on the very performance of the consequent variable, i.e., management of financial affairs in poultry enterprise. The information use index (X_8), management orientation in agriculture (X_{10}), level of decisiveness in agriculture enterprise (X_{14}), decisiveness in financial affairs of poultry (X_{20}) and decisiveness in financial affairs of fish farming (X_{21}) all went in a positive and additive way to characterise the performing behaviour of management of financial affairs in poultry rearing and thus, did uphold a reticulate functioning of a typical farming system where different enterprises are not only interrelated but also mutually contributive. Having a positive and substantive total indirect effect on the consequent variable, i.e., management of financial affairs in poultry rearing, the antecedent variable viz. level of decisiveness in poultry enterprise (X_{16}) had exerted a substantive direct and negative influences on the consequent variable. This might by evincing of the performing trend that proper and efficient management of financial affairs helped reduce the critical time requirement to be spent on process of decisioning. So also the results had gone in ful compliance with the relation output between level of decisiveness in poultry enterprise and the consequent variable

(already discussed). The variable level of decisiveness in poultry enterprise (X_{16}) had been supported with the highest number of largest indirect effect of as many as nine antecedent variables (education (X_2), management orientation in agriculture (X_{10}), level of decisiveness in agriculture enterprise (X_{14}), level of decisiveness in animal rearing enterprise (X_{15}), level of decisiveness in fish farming enterprise (X_{17}), decisiveness in financial affairs of agriculture (X_{18}), decisiveness in financial affairs of animal rearing (X_{19}), decisiveness in financial affairs of poultry rearing (X_{20}) and decisiveness in financial affairs of fish farming (X_{21}) to mould the behaviour of the consequent variable followed by other variables viz. X_{10} (management orientation in agriculture) [family education (X_3), family type (X_5), family size (X_9), investible surplus (X_7), management orientation in animal rearing (X_{11}) and management orientation in poultry rearing (X_{12})]; X_2 (education) [age (X_1), caste (X_4) and level of aspiration (X_9)]; X_8 (information use index) [management orientation in fish farming (X_{13})]; X_{14} (level of decisiveness in agricultural enterprise) [level of decisiveness in poultry rearing enterprise (X_{16}) and X_{18} (decisiveness in financial affairs of agriculture) [information use index (X_8)].

The residual effect being 0.4453, it was to infer that the residue of uninterpreted variability of the consequent variable through causal factors went as high as 44.53 percent and, thus, stood amply to justify the logistic of selecting the variables.

CONCLUSION

In present time the mutual interdependency among different components in the small niche of domestic agriculture goes very common. The need of the hour is to investigate more and more into the nature of interactiveness. In doing so some relevant issues like gender, policy, environment, social ecosystem are coming in a big and interactive way. Thus, productivity and utility are being redefined and reperceived such that the new factors can well be accommodated into the conventional approaches of rural development and researching. The incoming study areas are opened where pachage approaches and holistic views can be an enduring match.

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