

ASSESSMENT OF FOOD AND NUTRITIONAL SECURITY STATUS OF FARM WOMEN

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ABSTRACT

The present study was conducted in Solapur district of Maharashtra. From Solapur district, two tashils namely Barshi and Madha were purposively selected for the present study. From each village, 15 farm women were randomly selected. The data was collected by interviewing 150 farm women allotted to with well-designed and pre-tested schedules. Later simple mean, percentage, correlation coefficient, and range method were used to know the characteristics of selected independent and dependent variables. Majority of the farm women under the study were found to be young age group, almost all literate, belonged to small size of family, had small size of land holding, majority of respondents had low level of indebtedness, were from low annual income category, had fair cropping pattern, majority of the farm women had medium level of social participation, medium level of aspiration. The study revealed that age had negative and non-significant relation with food and nutritional security status while, education, family size, land holding, annual income, cropping pattern, social participation, and aspiration had positive and very strong correlation with their food and nutritional security status. Indebtedness had positive and strong correlation with their dependent variable. The data in respect of utilization pattern of annual income shows that most of the income is invested in Farm for crop cultivation i.e. from preparatory tillage to marketing of various crops cultivated in a farm. Near about ten percent income is utilized for attending social functions, marriages and very merge is invested in savings.

Keywords : aspiration, farm women, food, nutritional & security

INTRODUCTION

Food and nutrition security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preference for an active and healthy life and is supported by an environment of adequate sanitation, health services and care, allowing for a healthy active life (FAO). Food security entails ensuring adequate food supply to people, especially those who are deprived of basic nutrition. Food security has been a major concern in India (Vinaya and Shirur, 2021). Climate Change and Resilient Food Systems Issues, Challenges, and Way Forward, Springer. ISBN 978-981-334-537-9, DOI 10.1007/978-981-33-4538-6). According to UN-India there are nearly 195 million undernourished people in India. Also roughly 43 per cent children in India are chronically undernourished (Jadeja *et al.*, 2020; Mehta *et al.*, 2020). India ranks 74 out of 113 major countries in terms of Food Security Index. Food security is required to ensure that each individual of a country has access to safe and healthy food at all times of year. India is one of the few countries, which have experimented with a broad spectrum of programmes for improving food security (Vinaya and Babu, 2021).

Women as farmers, labourers and entrepreneurs are the significant driving force of India's agriculture. According to OXFAM agriculture sector employs 80 per cent of all active women in India; women comprise 33 per cent of the agriculture labour force and 48 per cent of the self-employed farmers. Women are thus impaired in fulfilling their potential socio-economic roles in food and nutrition security and in ensuring care, health and hygiene for themselves and their families. This is aggravated by the fact that women themselves are often more vulnerable or more affected by hunger and malnutrition than men, especially by iron deficiency and undernourishment during pregnancy and lactation. Losses at the time of harvesting, processing still more losses at the time of storage, wastage of meals 25 to 30 per cent food loss, hence the food security is important. In tribal areas there is mal nutrition so many incidences of death, handicap happens. While in rich families also we do not observe balance diet. Most of the families go for fast food, Jung food which are poor in many minerals, vitamins, carbohydrates, protein fat so in some families only 2-3 vegetables are cooked so they don't get balanced diet and people are occasionally ill, hence the nutritional security is important. . This study throws light on the food and nutritional security status of farm women.

Hence, the present study entitled “Assessment of Food and Nutritional Security Status of Farm Women” was undertaken.

OBJECTIVE

To know the food and nutritional security status of farm women

METHODOLOGY

The “Ex-post-facto” research design was used for the study. This “Ex-post-facto” design was considered appropriate because the phenomenon has already occurred. The investigation was conducted in the Solapur district of Maharashtra. Solapur district comprises of eleven tashils. From the eleven tashils, two tashils namely Barshi and Madha were purposively selected for the present study. From each tashil, five villages were selected, thus total ten villages were selected for the present study. From each of the selected village, fifteen farm women were selected as respondents for the present investigation, thus making a total of 150 respondents for the study by following simple random sampling method. An interview schedule was developed to collect relevant information in line with the objectives. The information collected from respondents through personal interview schedule was processed through primary and secondary tables. The data were processed and tabulated by using simple frequencies and parameters like percentage, mean, arbitrary method were used as per need of the study.

RESULTS AND DISCUSSION

Profile of farm women

Table 1: Profile of farm women

(n=150)

Sr. No.	Characteristics	Number	Per cent
A	Personal characteristics		
1	Age		
	Young (Up to 35 years)	81	54.00
	Middle (36 to 55 years)	61	40.66
	Old (above 55 years)	08	5.34
2	Education		
	Illiterate (No education)	14	9.33
	Primary education (up to 4 th)	16	10.67
	Middle education (5 th to 7 th std)	33	22.00
	Secondary education (8 th to 10 th std)	70	46.66
	Higher secondary (11 th to 12 th std)	11	07.34
	Graduate (Degree)	06	04.00

Sr. No.	Characteristics	Number	Per cent
3	Type of family		
	Small (1 to 5 members)	64	42.66
	Medium (6 to 10 members)	58	38.67
	Large (11 members and above)	28	18.67
B	Socio-economic variables		
4	Land holding		
	Marginal (up to 1 ha)	45	30.00
	Small (1.01 to 2 ha)	68	45.33
	Semi-Medium (2 to 4 ha)	27	18.00
	Medium (4.01 to 10 ha)	10	06.67
5	Annual income		
	Low (Up to ₹ 3,33,333/-)	89	59.33
	Medium (₹ 3,33,334 to ₹ 6,16,666/-)	40	26.67
	High (₹ 6,16,667/- and above)	21	14.00
6	Indebtedness		
	Low (Up to 1.66)	120	80.00
	Medium (1.67 to 3.33)	22	14.66
	High (3.34 and above)	08	05.34
7	Social participation		
	Low (Up to 2.33)	32	21.34
	Medium (2.34 to 3.66)	88	58.66
	High (3.67 and above)	30	20.00
8	Cropping pattern		
	Poor (Up to 5.00)	41	27.33
	Fair (5.01 to 8.00)	93	62.00
	Good (8.01 and above)	16	10.67
9	Psychological variable		
	Aspiration		
	Low (Up to 4.00)	41	27.33
	Medium (5 to 6)	76	50.67
	High (7 and above)	33	22.00

The data presented in Table 1 revealed that more than one half (54.00 per cent) of the farm women respondents belonged to the young age group followed by two fifth (40.66 per cent) of the respondents belonged to middle age group and a merge (5.34 per cent) of the respondents were found to belonged in the old age group. Less than one half (46.66 per cent) of the respondents were educated up to secondary education level and 22.00 per cent of the respondents were educated up to middle school level. It can be noticed from data presented in Table 1 that nearly two fifth (42.66 per cent) of farm women respondents had small size of family (1 to 5 members) followed by 38.67 per cent of the respondents had medium size of family (6 to 10 members) and 18.67 per cent had large size of family (11 members and above). It was

observed that 45.33 per cent of the respondents had small size of land holding followed by 30.00 per cent and 18.00 per cent of the respondents with marginal and medium size of land holding respectively. It was noticed that 59.33 per cent of the farm women respondents had low level of annual income while, 26.67 per cent had medium level of annual income. Majority (80.00 per cent) of the respondents were under low indebtedness category followed by 14.66 per cent of the respondents under medium indebtedness category and only 5.34 per cent of the respondents in high indebtedness category. It was revealed that more than three fifth (62.00 per cent) of the respondents had fair cropping pattern followed by 27.33 per cent and 10.67 per cent had poor and good cropping pattern respectively. Regarding social participation it was observed that nearly three-fifth (58.66 per cent) of the respondents had medium level of social participation. The data from Table 1 indicated that slightly more than half (50.67 per cent) of the respondents had medium level of aspiration whereas, 27.33 and 22.00 per cent of them had low and high level of aspiration, respectively.

Food and nutritional security status

The information regarding food and nutritional security status of farm women is deprecated in Table 2.

Table 2: Distribution of respondents according to food and nutritional security status (n=150)

Sr. No.	Category (Score)	Frequency	Percentage
1	Low (Up to 16)	43	28.67
2	Medium (17 to 21)	79	52.67
3	High (22 and above)	28	18.66
Range = 5 Max =27 Mini =11			

It was observed from Table 2 that more than half (52.67 per cent) of farm women respondents belonged to the medium level of food and nutritional security category, followed by 28.67 per cent of the farm women respondents had belonged to low level of food and nutritional security status while only 18.66 per cent of the farm women respondents had high food and nutritional security status. Thus it could be inferred that majority of farm women were possessing medium level of food and nutritional security status.

These findings are in line with Anusha (2012) and Ifeoma (2014)

Utilization pattern of the annual income

It was operationally defined as the annual expenditure of an individual respondent on Food, Shelter, Health, Children

education, Investment in Farm for crop cultivation, Purchase of Farm Machinery, creation of irrigation facilities etc., Purchase of household items, Savings in banks, post office, Loan Repayment, Attending social functions, marriage etc. The expenditure pattern of farm women respondent was ascertained in term of per cent of each item.

Table 3: Distribution of annual income according to utilization pattern by the respondents

(n= 150)

Sr. No.	Particular	Total Income (₹)	Percentage
1	Food	30932.40	6.92
2	Shelter	24942.60	5.58
3	Health	28384.50	6.35
4	Children education	15466.20	3.46
5	Investment in Farm for crop cultivation	213174.30	47.69
6	Purchase of Farm Machinery, creation of irrigation facilities etc.	31781.70	7.11
7	Purchase of household items	34419.00	7.70
8	Savings in banks, post office	6928.50	1.55
9	Loan Repayment	14572.20	3.26
10	Attending social functions, marriage etc.	46398.60	10.38
	Total	447000	100.00

From the data presented in Table 3, it was observed that 47.69 per cent amount was spend on investment in farm for crop cultivation followed by 10.38 per cent on attending social functions, marriage etc., 7.70 percent on purchase of household items, 7.11 percent on purchase of farm machinery, creation of irrigation facilities, 6.92 per cent on food, 6.35 percent on health, 5.58 per cent on shelter, 3.46 percent on children education, 3.26 per cent on loan repayment, 1.55 percent on savings in banks, post office.

The above findings are in the line with those of Maruthesha, A.M (2018) and Rooparani (2011).

Relationship between dependent and independent variables

The coefficient of correlation of each of the independent variables with food and nutritional security status of farm women in Solapur district has been furnished in Table 4.

Age and food and nutritional security status

The relationship between age of farm women and their food and nutritional security status was negative and non-significant ($r = 0.118$ NS). This indicate that the food and nutritional security status was not influenced by the age of farm women.

Education and food and nutritional security status

The relationship between education and food and nutritional security status of farm women was positive and highly significant ($r = 0.520^{**}$) Meaning there by that the family education of the farm women had positive relationship with food and nutritional security status.

Family size and food and nutritional security status

The relationship between family size and food and nutritional security status of farm women was positive and highly significant ($r = 0.342^{**}$) meaning there by that the size of family had remarkable influence upon their food and nutritional security status.

Land holding and food and nutritional security status

Table 4: Relationship between the independent variables and their food and nutritional security status

(n=150)

Sr. No	Components	Correlation Coefficients (r)
X ₁	Age	0.118 ^{NS}
X ₂	Education	0.520 ^{**}
X ₃	Size of Family	0.342 ^{**}
X ₄	Land Holding	0.375 ^{**}
X ₅	Annual Income	0.561 ^{**}
X ₆	Cropping Pattern	0.450 ^{**}
X ₇	Indebtedness	0.158 [*]
X ₈	Social participation	0.325 ^{**}
X ₉	Aspiration	0.409 ^{**}

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

NS Non-significant

The data in Table 4 revealed ‘r’ value computed between land holding of farm women and nutritional security status was 0.375, which was observed to be significant at 0.01 levels.

The relationship between land holding and food and nutritional security status of farm women was positive and highly significant ($r = 0.375^{**}$). It means that the land

holding had remarkable influence upon their food and nutritional security status.

Annual income and food and nutritional security status

The relationship between annual income and the food and nutritional security status of farm women was positive and highly significant ($r = 0.561^{**}$) meaning there by that the annual income had remarkable influence upon their food and nutritional security status.

Cropping pattern and food and nutritional security status

The relationship between cropping pattern and food and nutritional security status of farm women was positive and highly significant ($r = 0.450^{**}$).

Indebtedness and food and nutritional security status

The data in Table 4 revealed that indebtedness had a positively significant correlation ($r = 0.158^{*}$) with the nutritional security status of the farm women.

Social participation food and nutritional security status

The data presented in table 4 reflects that the Social participation was recorded to be related significantly with their nutritional security status as evident from ‘r’ value (0.325^{**}) which proved to be significant at 0.01 levels.

Aspiration and food and nutritional security status

The findings shown in Table 4 make it clear that aspiration of farm women was positively and significantly ($r = 0.409^{**}$) correlated with their nutritional security status. It means that aspiration had remarkable influence upon their food and nutritional security status.

CONCLUSION

Thus, it can be concluded that majority of respondents are from young and middle age group, educated up to secondary level, belonged to small size of family followed by medium size family, small to marginal land holding. The annual income of majority of the respondents is low to medium and majority of the respondents were in low indebtedness category. More than half (58.66 per cent) of the respondents had medium level of social participation and slightly more than half (50.67 per cent) of the respondents had medium level of aspiration.

Regarding food and nutritional security of the farm women, more than half (52.67 per cent) of farm women respondents belonged to the medium level of food and nutritional security category, followed by 28.67 per cent of the farm women respondents had belonged to low level

of food and nutritional security status. The data in respect of utilization pattern of annual income shows that most of the income is invested in Farm for crop cultivation i.e. from preparatory tillage to marketing of various crops cultivated in a farm. Near about ten percent income is utilized for attending social functions, marriages and very merge is invested in savings.

Independent variables, viz. Education, family size, land holding, Annual income, cropping pattern, social participation, and aspiration had positive and very strong correlation with their food and nutritional security status. Indebtedness had positive and strong correlation with their food and nutritional security status. These variables should be appropriately modified in order to increase their contribution to raising the respondents' milk output.

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