

Profile of Farm women of Western Vidarbha region, Maharashtra, India

Abstract

The present study focuses on farm women as an integral part of rural society; hence the research objective was formulated to study the profile of Farm women of, Western Vidarbha region. An exploratory research design of social science was used for the investigation. Study was conducted in Akola and Washim districts in the year 2021, with 240 respondents. The findings of the study indicated that, nearly half (47.50 %) of the farm women were from middle age group i.e. 36 to 50 year, quarter of the respondent (27.50 %) were educated up to secondary school (8th to 10th), 40.42 per cent respondent belonged to medium family size (5 to 6), majority respondent (67.92 per cent) of the belonged to joint family, the respondent 36.25 per cent of the respondent belonged to marginal land holding category i.e. Up to 1.00 ha, (34.58 %) of the respondent had agriculture as their family occupation. Almost half 50.83 per cent of the respondent belonged to medium annual income of Rs. 450001 to 9, 00,000. Less than half 42.08 per cent of the farm women belonged to medium farming experiences, and similar percentage (47.08 %) belonged to medium mean man days i.e. up to 156 days. Nearly half (49.58%) of the respondent had medium level of achievement motivation. While 45.83 per cent of the had low risk orientation and nearly half (49.58 %) of the respondent had medium economic motivation, Majority of the respondent i.e. 63.33 per cent had moderate time use pattern i.e. up to 6-8 hours. Less than half the farm respondent (45.00 %) are from low decision making category. A large majority 83.75 per cent of respondent did not undergo any training. Majority of the respondent i.e. 48.33 per cent were using medium source of information and 42.92 per cent of the farm women had low market orientation.

Keywords: Profile, Rural women, Farm women, Women, Agriculture Enterprise.

1. Introduction

India is an agrarian economy with about 54.60 per cent of total workforce engaged in agricultural and allied sector activities (Census 2011). "Women are extensively engaged in the activities pertaining to agriculture and allied sector. The workforce participation rate for rural females is significantly higher at 41.8 per cent against urban women participation rate of 35.31 percent" (MoSPI, 2017).

"In rural communities, agriculture and allied sector is the primary source of livelihood that includes 80 percent of all economically active women, out of which 33 percent constitute agricultural labour force and 48 percent are self-employed farmers. Rural women are engaged at all levels of agricultural value chain; i.e., production- pre-harvest, post-harvest processing, packaging, marketing to increase productivity in agriculture" Pingali et al. (2019). As per Pingali et al. (2019), "the ratio of women to men

working in agricultural sector has increased over the time and made greater amount of contribution to GDP per capita”.

These women are also classified as 'farm women' and can be defined as 'women of a farm family whose major income comes from agricultural sources'. In villages, farm women are fully occupied and overburdened with three fold responsibilities of home, farm, and livestock management.

Farm women Scenario in Maharashtra

In Maharashtra, female population contributes 48.17 per cent and of this 55.45 per cent women are in rural region of these rural women 74.93 per cent of the women works in agriculture and allied activities (Censes, 2011)

2. Methodology

The present investigation was carried out in two districts Akola and Washim that were randomly selected from Western Vidarbha Region of Maharashtra state. A total four talukas were selected from these two districts for the study. The purposively selection of talukas were done from the selected districts on the basis of maximum number of farm women. From seven talukas in Akola district, two talukas Akola and Akot and from six talukas of Washim district, two talukas ,Washim and Malegaon, were selected for the study

From each of the selected talukas, 6 villages were selected randomly by drawing a lottery. Thus, a total of 24 villages were selected from the 4 talukas. From each of the villages in the selected talukas ,10 farm women involved in agricultural enterprises were randomly selected for study. Thus a total of 240 farm women were selected for the study.

For studying the profile of farm women included the following variables farm women. These variables included information on age, education, family size, family type, land holding, family occupation, annual income, farming experience, mean man days, achievement motivation, risk orientation, economic motivation, time use pattern, decision making, social participation, entrepreneurial training undergone, source of information and market orientation

Data was collected using pre-tested structured interview schedule in local language .The data was analyzed in terms of frequency, percentage, mean and standard deviation The final categories were made on the basis of mean± standard deviation and equal interval method.

3. Results and Discussion

3.1 Age

Table 1 indicates that, nearly half (47.50 %) of the farm women were from middle age group (36 to 50 year), followed by 34.58 per cent of the farm women were from young age group (up to 35 year) and 17.92 per cent of the farm women were from old age group (Above 50 year). Hence the findings show that, majority of the farm women belongs to middle age group. The middle age farm women were more enthusiastic, have ability to work more than old age farm women and have more experience than young age farm women along with fewer liabilities of child. They always ready to accept the farm work.

The findings are similar to Meena *et. al.* (2009), Warkade (2010), Kumar (2011), Ekatpure *et. al.* (2011), Rathod *et.al.* (2011), Upadhyay *et. al.* (2011), Gondaliya (2012), Lahoti *et. al.* (2012), Anitha and Kanimozhi (2013), Chayal *et. al.* (2013), Kathiriya *et al.* (2013), Meti (2013), Sharma (2013), Singh (2013), Chouhan *et. al.* (2014), Pandya *et.al.* (2014), Gulkari *et al.* (2014), Khatun *et al.* (2014), Reshma *et al.* (2014), Saumya (2014), Tripathi *et al.* (2015), Lavanya (2016), Patel (2016), Sarita *et al.* (2016) and Walke (2018).

3.2 Education

It is operationally defined as number of year of formal schooling completed by the farm women. Table 1, shows 27.50 per cent of the farm women were educated up to secondary school, followed by 25.50 per cent of the farm women educated up to higher secondary school/ Junior College level, 15.42 per cent of the farm women had education up to middle school, 12.92 per cent of the farm women education up to primary school, 11.67 per cent of the farm women educated up to primary school, 04.16 per cent of the farm women had educated up to under graduate, 02.50 per cent of the farm women had educated up to diploma or technical education and 0.83 per cent of the farm women had educated up to post Graduate

It was observed that, maximum number of farm women educated up to Secondary school level i.e. 8th to 10th standard and Higher Secondary School. Education is very important key to success and plays important role in motivating individuals to accept the new enterprise. It helps to get information and knowledge about enterprise.

The findings are similar to Facoya *et. al.* (2007), Upadhyay *et.al.* (2011), Lahoti *et. al.* (2012), Soni *et. al.* (2014) and Srichandan (2016).

3.3 Family size

In the present study family size considered as an essential aspect because family size has an effect on social and economical development, It is revealed from Table 1 that, 40.42 per cent of the farm women belonged to medium family size (5 to 6), followed by 30.00 per cent of the farm women belonged to large family size and 29.58 per cent the farm women belonged to medium small size.

It is observed that, majority of the farm women belonged to medium family size. The size of family is a matter of great importance not only for the country as a whole but also for the welfare of the society.

The findings are similar to Bhairve (2013), Sharma (2013), Singh (2013) Chouhan *et. al.* (2014), Walke (2018) and Ritu shah (2019)

3.4 Family type

Family type is one of the important aspects in the socio-personal characteristic of the respondent farm women, which has influence on their social and economical attributes. It is revealed from Table 1

that, 67.92 per cent of the farm women belonged to joint family and 32.08 per cent of the farm women belonged to nuclear family.

It is observed that, the majority of the respondents belonged to joint family. The reason might be that the joint families have more manpower and have an active social participation.

The findings are similar to Sahastrabuddhe (2003) and Sharma (2013).

3.5 Land holding

Table 1 indicates, 36.25 per cent of the farm women belonged to marginal land holding category, followed by 27.08 per cent of the farm women belonged to small land holding category, 17.92 per cent of the farm women belonged to Semi medium land holding category, 12.92 per cent of the farm women belonged to medium land holding category and 05.83 per cent of the farm women belonged to large land holding category.

It was observed that, majority of the farm women had marginal and small land holding. The probable reason might be that size of land holding reduced day by day due to fragmentation of land.

The findings are similar to Warkade (2010), Rathod *et. al.* (2011), Shingh (2013), Chauhan *et. al.* (2014), Chouhan *et. al.* (2014), Khatun *et. al.* (2014, Wakle (2018)) and Ritu shah (2019).

3.6 Family occupation

Occupation refers to the activities in which the respondents were regularly engaged and get major income out of them. In the present study occupation considered as a main aspect because it affects the social and economical characteristics of the respondents.

It is revealed from Table 1 that, majority (34.58 %) of the farm women had agriculture as their family occupation, 30.83 per cent of the farm women had Agriculture + allied as their family occupation, 23.75 per cent of the farm women had agriculture + labour as their family occupation, 09.17 per cent of the farm women had agriculture+ business as their family occupation and 01.67 per cent of farm women had agriculture + services as their family occupation.

It was observed from above table that, majority of the farm women had agriculture as their main family occupation. It might be due to ancestral traditional occupation, financial support and to fulfill the daily needs of family.

The findings are similar to Rathod *et. al.* (2011) Upadhyay *et. al.* (2011), Lahoti *et. al.* (2012), Varalakshimi *et. al.* (2012), Parmar (2013), Lavanya (2016) and Ritu shah (2019).

3.6 Annual income

Annual income provides the information regarding the availability of the capital for farming. Annual income was operationally defined as gross income in rupees received by the farm women and her family members, from all the sources.

It is revealed from Table 1 that, nearly half 50.83 per cent of the farm women belonged to medium annual income of Rs. 450001/- to 9,00000/- followed by 40.42 per cent of the farm women

belonged to low annual income of Rs. Up to 450001/- and 8.75 per cent of the farm women belonged to high annual income of Above Rs. 9,00000/- .

It is observed from above table that, majority of the farm women were from medium to low annual income group. Such findings are due to the adoption of various farm enterprises had lead to subsidiary income generation along with their main income generation activity. Knowledge gained about various farm enterprises (Dairy, sheep rearing etc.) and practically putting those in to use had certainly contributed to increase in income level.

The findings are similar to Sharma *et al.* (2011), Girade and Shambharkar (2012), Upadhyay *et al.* (2011), Koli (2012), Bhairav (2013), Singh (2013), Sharma (2013), Rashmita saikia (2014), Gulkari *et al.* (2014), Lavanya (2016) and Walke (2018).

3.8 Farming experience

Farming experience is an important character which is not transferable but earned by the respondent farm women them self. It is revealed from Table 1 that, 42.08 per cent of the farm women belonged to medium farming experiences followed by 38.75 per cent of the farm women belonged to low farming experiences and 19.17 per cent of the farm women belonged to high farming experiences.

It is observed that, majority of the farm women were from medium farming experience group. Farm experience mainly depends up on age of the individual. The findings of this study shows majority of farm women are from medium age category and are therefore also from medium farming experience group. It can be said that the farm women had quite good experience in farming that might have placed some influence on their attitude.

The findings are similar to Warkhade (2010), Rathod (2011), Upadhyay *et al.* (2011), Gondaliya (2012), Devaki *et.al* (2015) and Srichandan (2016).

3.9 Mean man days

As presented in Table 1 only 11.67 per cent of the farm women belonged to high mean man days category of 212 days(% days annually) while

nearly half of the farm women belonged to medium mean man days of up to 156 days (% of days annually) followed by 41.25 per cent of the farm women belonged to low mean man days i.e. 157 to 212 days

It is evident from table 1 that, in middle category significant number of farm women is depicted, this may due to the engagement of farm women in farming as well as in allied enterprises such as, These women are aware that they have to contribute to family earnings and undertake livelihood activities , which results in not getting enough work though out year in high category. In low category farm women are fully dependent on agriculture or they may not getting the enough work to get employment around the year.

The findings are similar to Meenakshi (2014).

3.10 Achievement motivation

It is revealed from Table 1 that, nearly half (49.58%) of the farm women had medium level of achievement motivation followed by low level and high level with 32.08 per cent and 18.34 per cent respectively.

Achievement motivation is a psychological variable which varies from individual to individual and also influence the goals which have been set for themselves. Higher the association with the individual, higher will be the efforts. Achievement motivation helps an individual to decide and complete the task in a certain direction which in turn helps in achieving the desired and complete the tasks in a certain direction which in turn help in achieving the desired goals.

In this study, farm women were found to have a medium level of achievement motivation. This is reflected in their ability to obtain a higher economic preference and a sustainable livelihood on a local level.

The findings are similar to Kiran *et. al.* (2012) and Rashmita saikia (2014)

3.11 Risk orientation

It is revealed from Table 1 that, 45.83 per cent of the farm women had low risk orientation, 36.67 per cent of the farm women had medium risk orientation and 17.50 per cent of the farm women had high risk orientation.

It is observed that, agriculture is the traditional occupation of the families, most of them depend on their land for their livelihood and they bond to their family business and unskilled about other entrepreneurial activities this might have promoted them not to take risk.

The findings are similar to Meti *et .al.* (2013).

3.12 Economic Motivation

It is revealed from Table 1 that, nearly half (49.58 %) of the farm women had medium economic motivation, 32.08 per cent of the farm women had low economic motivation and 18.34 per cent of the farm women had high economic motivation.

Most of the respondents had medium economic motivations, it was found. The most likely explanation is that greater agricultural productivity depends on the timely availability of inputs and a resource base for cultivation. This might be due to the medium annual income and medium sources of information which provide information about economic sources leads to better economic motivation.

The findings are similar to Vasave (2005), Patel (2006), Sharma *et. al.* (2011), Mehta and Sonawane (2012) and Sharma (2013).

3.13 Time use pattern

It is revealed from Table 1 that, 63.33 per cent of the farm women had moderate time use pattern i.e. up to 6-8 hours followed by, 30.83 per cent of the farm women had less time use pattern i.e. up to 5 hours and 05.83 per cent of the farm women had high time use pattern i.e. above 8 hours.

Working efficiency of farm women may be having some limitations, as they are engaged whole day in household activities and drudgery work. According to age working efficiency of farm women also increases up to middle age beyond that decreases up to old age.

The findings are in line with the Walke (2018)

3.14 Decision Making

Table 1 Shows that 45.00 per cent of the farm women are followed by low decision making, followed by 41.67 per cent of their from medium decision making, and 13.33 per cent of farm women are followed by high decision making.

It is possible that the decision made was heavily influenced by the attitude and opinion of their partners; as a result, a correct understanding of the decision-making process in rural families and determining the role of farm women in the process will aid in the country's agricultural modernization as well as the transformation of rural family life detailing how farm women are categorised in terms of their methods for making decisions about agricultural pursuits.

The findings are similar to FAO (2010), Chayal *et. al.* (2013), Mihiret and Tadesse. (2014), and Sharma *et. al.* (2014).

3.15 Social participation

Their level of social activity or participation in society reflected their contribution to the growth of a linked business. It is revealed from Table 1 that, above half (53.75 %) of the farm women had medium social participation, 33.75 per cent of the farm women had low social participation and 12.50 per cent of the farm women had high social participation.

Thus, it can be concluded that majority of the farm women belonged to medium level of social participation This might be due to they had membership of one or two organizations like cooperative society, self help group, Grampanchayat, etc. for personal interest and benefits. As women constitute a vital segment of the society due importance has to be accorded to the role and contribution of women in various social activities. The data indicated that in present scenario the participation of rural women in social and political activities is increasing.

The findings are similar to Bhairve (2013), Shingh (2013), Devaki *et. al.* (2015), and Walke (2018).

3.16 Entrepreneurial training undergone

It revealed from Table no. 1 that out of 240 farm women 83.75 per cent of farm women did not undergone any such training, followed by 16.25 per cent of the farm women taken training.

It appeared that, lack of awareness for training and self motivation to explore to new thing that might be the reason behind less percentage of training received by farm women.

The findings are similar to Ekka and Sing (2005), Kumar (2013), and Rashmita saikia (2014).

3.17 Sources of information

It was revealed from table no. 1 that majority of the farm women 48.33 per cent were using medium source of information, followed by low 33.33 per cent and 18.34 per cent high.

Due to their educational background, rural women tend to be medium to poor information consumers. Another reason might be that they believe the knowledge they have is sufficient to perform tasks relating to the home. The findings are similar to Tripathi (2007), Badodiya *et.al* (2011), Shingh (2011), Shiroya (2014)) and Walke (2018).

3.18 Market orientation

It is revealed from Table 1 that, 42.92 per cent of the farm women had low market orientation, 44.50 per cent of the farm women had medium market orientation and 14.58 per cent of the farm women had high market orientation.

Most of the respondents were found to have low to medium market orientation. The most likely explanation is that improved agriculture productivity depends on the timely availability of market inputs and a base of agricultural resources, both of which are often administered by male members. Being a women farm women face hug problems to rich her produce up to market.

The findings are similar to Ranuji (2006), Rashmita saikia (2014).

Table 1: Distribution of respondents according to their profile characteristics

(n=240)

Sl. No.	Characteristics	Categories	Frequency	Percentage
1	Age	Young (up to 35 year)	83	34.58
		Middle (36 to 50 year)	114	47.50
		Old (Above 50 year)	43	17.92
2	Education	Illiterate (Cannot read and write)	28	11.67
		Primary school (1 st to 4 th)	31	12.92
		Middle school (5 th to 7 th)	37	15.42
		Secondary school (8 th to 10 th)	66	27.50
		Higher Secondary School/Junior College (11 th to 12 th)	60	25.00
		Diploma or Technical education (Based on 10 th or 12 th)	06	02.50

		Under Graduate (12+3 / 12+4 / 12+5)	10	04.16
		Post Graduate (Post graduate courses (UG+2/3))	02	00.83
3	Family size	Small (Up to 4)	71	29.58
		Middle (5 to 6)	97	40.42
		Large (Above 6)	72	30.00
4	Family type	Nuclear family	77	32.08
		Joint family	163	67.92
5.	Land holding	Marginal [Up to 1.00 ha]	87	36.25
		Small [1.01 to 2.00 ha]	65	27.08
		Semi medium [2.01 to 4.00 ha]	43	17.92
		Medium [4.01 to 10.00 ha]	31	12.92
		Large [Above 10.01 ha]	14	05.83
6	Family occupation	Agriculture	83	34.58
		Agriculture + labour	57	23.75
		Agriculture+ allied occupation	74	30.83
		Agriculture+ business	22	09.17
		Agriculture +services	04	01.67
7	Annual income	Low (Rs. Up to 4,50000)	97	40.42
		Middle (Rs. 450001 to 9,00000)	122	50.83
		High (Above Rs. 9,00000)	21	08.75
8	Farming Experience	Low (Up to 14)	93	38.75
		Middle (15 to 28)	101	42.08
		High (Above 28)	46	19.17
9	Mean man days	Low (Up to 156 days)	99	41.25
		Middle (157 to 212 days)	113	47.08
		High (Above 212 days)	28	11.67
10	Achievement motivation	Low (Up to 14)	77	32.08
		Middle (15 to 23)	119	49.58
		High (Above 23)	44	18.34

11	Risk orientation	Low (Up to 12)	110	45.83
		Middle (13 to 23)	88	36.67
		High (Above 23)	42	17.50
12	Economic Motivation	Low (Up to 10)	77	32.08
		Middle (11 to 21)	119	49.58
		High (Above 21)	44	18.34
13	Time Use Pattern	Less (Up to 5 hours)	74	30.83
		Moderate (6-8 hours)	152	63.33
		High (Above 8 hours)	14	05.83
14	Decision making	Low (Up to 8)	108	45.00
		Medium (9 to 13)	100	41.67
		High (Above 13)	32	13.33
15	Social participation	Low (Up to 0)	81	33.75
		Middle (1 to 2)	129	53.75
		High (Above 2)	30	12.50
16	Entrepreneurial training undergone	Yes	39	16.25
		No	201	83.75
17	Sources of information	Low (Up to 7)	80	33.34
		Middle (8 to 19)	116	48.33
		High (Above 19)	44	18.34
18	Market orientation	Low (Up to 10)	103	42.92
		Middle (11 to 22)	102	42.50
		High (Above 22)	35	14.58

4. Conclusion

From the results it was concluded that, relatively high per cent of the respondent farm women were middle aged, having education up to secondary school level and belonged to joint type of family with 5 to 6 members in their respective families having marginal land holding. it was observed that these women y mainly depended upon agriculture and earn major income generated from it. They had medium extent of farming experience with middle mean man days along with that they have middle level of achievement motivation. They were having low risk orientation with the medium economic motivation and spend moderate time in agriculture. Women were not empowered to take decision and medium level of

social participation. Very few respondents received training regarding agriculture and allied enterprise. Farm women used more information from personnel of their own social system and had hesitated in market oriented activities regarding their produce.

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Competing Interests

Authors have declared that no competing interests exist.

Author's Contributions

This work was carried out in collaboration among all authors. The lead author Sawandkar D.N. conducted the research study, analyzed data, interpreted the results and wrote the draft of manuscript, under the guidance and supervision of author Dr. Wakle P. K, research guide and co-author Dr. Lambe S. P. All authors read and approved the final manuscript.

References

- Anitha, R. and Kanimozhi, V., 2013, Women entrepreneurs in sericulture: their participation and problems faced. *Asia Pacific J. Res.* 1(7).
- Badodiya, S. K., Shakya, S. K., & Daipuria, O. P. 2008. A study on Swarn Jayanti Gram Swarozgar Yozna with reference to increase in annual income of Swarozgaries. *Bhartiya Krishi Anusandhan Patrika*, 23 (3and4), 184-189.
- Bhairve, R. 2013. A study on women's participation and decision making pattern in agriculture activities in Sehore district of M. P. M.Sc. (Agri.) Thesis submitted to JNKVV, Jabalpur.
- Chayal, K., Dhaka, B. L., Poonia, M. K., Tyagi, S. V. S. and Verma, S. R. 2013. Involvement of farm women in decision making in agriculture. *Stud Home Com Sci.*, 7(1): 35-37.
- Devaki, K., Senthilkumar, K. and Subramanian, R., 2015, Socio-economic profile of livestock farm women of Thiruvallur district, Tamil Nadu. *Int. J. Sci. Environ. Tech.*, 4 (5):1322-1329.
- Ekka, V. S. and Singh, S. P. 2005. Perceived training need of paddy growers in Bihar. Haryana- Agril- Uni- J-Res. 35(1):77-83.
- Ekatpure, S. M., Kale, M. T., Bodake, H. D. and Antwal, P. N., 2011, Study of the constraints faced by the farm women in production of vermicompost. *Intl. J. Agric. Sci.*, 7(1):113-115.
- Fakoya, E. O. Agbonlahor, M. U. and Dipeol, A. O., 2007, Attitude of women farmer towards sustainable land management practices in *South-Western Nigeria*. *World J. Agric. Sci.*, 3(4): 536-542.

- FAO, 2011. The State of Food and Agriculture 2010-11: Women in agriculture: Closing the gender gap for development. ESA Working Paper No. 11-02. Agricultural Development Economics Division, The Food and Agriculture Organization of the United Nations. [http:// www.fao.org/publications/sofa/en](http://www.fao.org/publications/sofa/en).
- Shital Girade, and Shambharkar, Y. 2012. Profile of farm women and constraints faced by them in participation of farm and allied activities. *Indian J. of Appl Sci.* 1(12): 69-71.
- Gondaliya, R. H. And Patel 2012. Participation of farm women in decision making process in relation to agriculture activities. M.Sc. (Agri.) Thesis submitted to the AAU, Anand.
- Gulkari Krunal D., Netravathi Gangireddy, Onima V. Phodiyil, Yogesh Gade (2014)* Profile analysis of dairy farm women in adoption of scientific practices. *Int. J. Agr. Ext.* 02(03) 2014. 159-16
- Kiran, D. D., Gupta, B. K. And Pandey D. K., 2012, Entrepreneurial behaviour in rural women of Sultanpur District of Uttar Pradesh, *Indian Res. J. Extn. Edu.*, 12 (2):29-33
- Koli, M. A. 2012. Knowledge and adoption of coconut production technology in Junagadh district of Gujarat State, M.Sc. Thesis, Junagadh Agricultural University, Junagadh.
- Khatun, M. F., Hossain, M. K., Hossain, K. A. and Rahman, M. M., 2014, Participati on potential of rural women in different homestead farm activities. *A Scientific J. Krishi Foundation. The Agriculturists* 12(1): 57-67.
- Kumar, A., 2011, An analytical study on women dairy entrepreneurs in Mandya district of Karnataka. M.Sc. (Agri.) Thesis, Univ. Agric. Sci, Raichur (India).
- Lahoti, S. R., Chole. S. R. and Rathi. N. S., 2012, Role of women in dairy farming. *Indian J. Dairy Sci.*, 65(5):442-446.
- Lavanya, D. N. (2016) Involvement of farm women in different farm enterprises: a critical analysis. Department of agricultural extension education college of agriculture, Raichur university of agricultural sciencesraichur-584-104
- Mehta B. M. and Madhuri Sonawane (2012) Entrepreneurial Behaviour of Mango Growers of Valsad District of Gujarat State. *Indian Res. J. Ext. Edu.* 12 (1), January, 2012
- Meena, M. S., Kumar, Ashwani, K. M. Shing and Meena H. R. 2009. Farmers attitude towards post harvest issues of horticultural crops. *Indian Res. J. Ext. Edu.* 9(3):15-19.
- Meenakshi Kalita (2014) Socio-economic Impact of Labour Migration on the Families Left Behind in Golaghat District of Asam. M. Sc. (Agri.) Thesis, PDKV, Akola Maharashtra (unpublished).

- Meti, S. K., 2013, Social and economic empowerment off farm women in agrobased entrepreneurship for sustainable income. *Proceeding International Conference On Social Science Research*, ICSSR. 1021-1031.
- Meti, S. K., Jagrati B. D. and Sidram B.Y. 2013 Entrepreneurial behaviour of rural women involved in income generated by SHGs, *Journal of extension education* Vol. XVIII, No. 1, 2013.
- Mihiret, M. and Tadesse, A. 2014. Women's role and their decision making in livestock and household management. *J. Agric. Ext. Rural Dev.* 6(11): 347-353.
- Ministry of Statistics and Programme Implementation (2017) Women & Men In India–2017. [http:// www.mospi.gov.in/ sites/ default/ files/ reports & publication / statistical publication/social statistics/ Chapter 4.pdf](http://www.mospi.gov.in/sites/default/files/reports%20&%20publication/statistical%20publication/social%20statistics/Chapter%204.pdf)
- Mohanty, S. and Mohanty, M. (2010). Training need of rural women in family resource management. *Advance Research Journal of Social Science* (December, 2010), 1(2), pp.130-132.
- Mulugeta, M. and Amsalu, T., 2014, Women's role and their decision making in livestock and house hold management. *J. Agric .Extn., and rural development*, 6(11):347-353.
- MoSPI, 2017. Participation in economy, Chapter 4, Ministry of Statistics & Programme Implementation. WM 17 Chapter 4. pdf (mospi.nic.in)
- Nain M. S. and Kumar Praveen, 2010, A Study of women participation and decision making in farm management. *J. Community Mobilization and Sustainable Development.* 5(1):67-71.
- Parmar, K. M. 2013. Attitude of farmers towards rose cultivation. M.Sc. (Agri.) Thesis submitted to Anand Agricultural University, Anand.
- Patel D. F. 2006. A Study on an attitude of the paddy growers towards the use of pesticides in Tarapur, Sojitra and PetInd talukas of anand district.. M.Sc. (Agri.) Thesis submitted to Anand Agricultural University, Anand.
- Patel Raziyanav (2016) Attitude of farm women towards post-harvest management of fruit and vegetable, department of agricultural extension, college of agriculture university Junagadh-362001.
- Prabhu Pingali, Anaka Aiyar Mathew Abraham and Andaleeb Rahman, 2019. Transforming Food Systems for a Rising India. Palgrave Studied in Agricultural Economics and Food Policy. ISBN 978-3-030 14408-1 ISBN 978-3-030-14409-8 (eBook) <https://doi.org/10.1007/978-3-030-14409-8>

- Ranuji ratan (2006). A study on entrepreneurial behaviour of dairy farmers. Ph.D. Thesis, University of Agricultural Sciences, Dharwad, Karnataka (India).
- Rathod, P. K., Nikam, T.R., Sariput, L., Rajeshwari, S. and Hatey, A. 2011. Participation of rural women in dairy farming in Karnataka. *Indian journal of Extension Education*, 11(2): 31-36.
- Rashmita Saikia 2014, Study on attitude towards farm enterprises and their adoption level by the youth farm women in Raichur District. M.Sc (Agri.) Thesis, Univ. of Agril. Science Raichur, Karnataka.
- Ritu Shah (2019), Development of a scale to measure farmer's attitude towards farming as an occupation, *Journal of Pharmacognosy and Phytochemistry* 2019; 8(2): 411-414
- Ritu Shah, A.K. Singh and Manohar Saryam. 2019. Profile and Opinion of Women Farmer towards Farming as an Occupation in Tribal Setting of Uttarakhand India. *Int. J. Curr. Microbiol. App. Sci.* 8(01): 13841392. doi: <https://doi.org/10.20546/ijcmas>. 2019.801.147
- Sahastrbudhe, S. S. (2003) A Study of Motivational Aspects and Aspirations of Women Agricultural Labour. M.Sc. (Agri.) Thesis, MPKV, Rahuri, Maharashtra (unpublished).
- Saumya, S. 2014. Attitude of rural women towards employment in dairing. *Int. J. Sci. Res.* 3(7): 105-106.
- Sharma, P. Patel, M.M. and Singh, V. B. 2011. Enterprineurial orientation of garlic producers. *Indian J. of Ext. Edu.* 47(1-2): 107-112.
- Sharma N. K., 2013, A study on attitude of rural women toward agro-based enterprise under District poverty initiative Project (DPIP) in Rewa Block of Rewa district. M.Sc. (Agri.) thesis, Univ.Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (India).
- Shital Girde, 2012 Participation of farm women in farm and allied activities M.Sc.(Agri) Thesis (unpub), Dr. PDKV, Akola.
- Shiroya, M. 2014 A study on perception, decision making and participation of farm women in dairy occupation, Gujarat M. Sc. (Agri.) thesis, NAU, Nvsari.
- Shing,P., Choudhry, M. and Lakhera, J. P. 2014. Knowledge and attitude of farmers towards improved wheat production technology. *Indian Res. J. Ext. Edu.* 14(2): 54-59.
- Soni, D. N., Pastagia, J., J. and Soni, A., N. 2014. Impact of fruits and vegetable preservation training on women. *Guj. J. Ext. Edu.* 25(1): 110-113.
- Singh Thakur, P. 2013. A study on role of farm women in decision making process in vegetable cultivation in Panagar block of Jabalpur district M.P. M.Sc. (Agri.) Thesis (unpublished), JNKVV, Jabalpur.

- Srichandan K. 2016 A Study on the Empowerment of Farm Women in Khordha District of Odisha. M.S.c (Agri.) Thesis, Orissa University of Agriculture and Technology Bhubaneswar, Odisha.
- Tripathi, P. C., Babu, N. and Prustry, M., 2015, Analysis of participation of women in horticultural activities in Odhisha. *J. Business Mgmt. Social Sci. Res.*, 4(3).
- Upadhyay and Desai. C.P., 2011, Participation of farm women in animal husbandry in Anand district of Gujarat. *J. Community Mobilization and Sustainable Development*. 6(2):117-121.
- Varalakshmi, R., Kumari, A. K. and Anangamathi, E., 2012, Vermicompost as a micro -enterprise to improve the economic status of self-help group women *Current Biotica* 5(4):487-499.
- Vasava, J. M. 2005. Knowledge and adoption of recommended pigeon pea production technology by pigeon pea growers. M.Sc.(Agri.) Thesis submitted to Anand Agricultural University, Anand.
- Walke D. S. 2018, Decision making behaviour of farm women about agriculture. Ph.D. (Agri.) Thesis, submitted to MPKV, Rahuri.
- Warkade, P. 2010. A study on role of tribal farmwomen in decision making towards agricultural operations in Bichhia block of Mandla district M.P. M.Sc. (Agri.) Thesis (unpublished), JNKVV, Jabalpur.