Available Online at ESci Journals
International Journal of Agricultural Extension
ISSN: 2311-6110 (Online), 2311-8547 (Print)
http://www.escijournals.net/IJAE

PROFILE ANALYSIS OF DAIRY FARM WOMEN IN ADOPTION OF SCIENTIFIC PRACTICES

[a]Krunal D. Gulkari, [b]Nethravathi G. [c]Onima V. Phodiyil, [a]Yogesh Gade

[a] Department of Extension Education, B. A. College of Agriculture, Anand Agricultural University, Anand, India.
[b] Department of Extension Education ,College of Agriculture, Bharuch, Navasari Agricultural University, Gujarat, India.
[c] Department of Extension Education, N.M College of Agriculture, Navasari Agricultural University, Navasari, Gujarat, India.

A B S T R A C T

Dairy farming is the one of the important livelihood activity in Gujarat involving women significantly. For the adoption of new technologies in dairy, profile of the farm women is an important factor in developing countries like India. By considering this aspect the study was undertaken in eight talukas of Anand district in Gujarat with sample size of 160. The result indicates that great majority of the dairy farm women belongs to middle aged (35 to 40 yrs) educated up to higher secondary level and they were having medium level (6 to 10 years) of experience in dairy farming. In the study half the respondents belong to nuclear family majority of them were the members in only one organization like dairy with medium level of income and an average 4 to 5 mulching animals. They were less exposed to mass media and extension contact due to they were having lack of knowledge regarding scientific aspects of dairy and moderate risk taking capacity. To compete with the world food market with the best quality of produce, use and adoption of new and scientific technology is important and it is linked with the profile of the respondents.

Keywords: Adoption, Clean milk production, Dairy farm women.

INTRODUCTION:

India has been a predominantly an agrarian economy since time immemorial. Majority of the population is depending on agriculture & agriculture is the mainstay of national economy even today (Singh, 2010). In India, farms are depending on animals for their farming activities and keeping milch animals is the part of the agriculture; also major source of income to the small and marginal farmers. Indians are the first to achieve the white revolution in the world, with that background India ranks first in the world milk production (Reddy, 2010). Dairy industry plays a crucial role in Indian economy by exporting the dairy products to other countries. Along with this it helps in augmenting food supply, generating employment and raising nutritional level. The major advantage of dairy farming is its minimum land dependency and resource flexibility. Even though, country is first in the world's milk production still facing problems in the world food market because of poor quality of milk and milk products. India has developed modern technologies to increase the quality of milk but lagging behind in adoption of these new technologies. They are number of factors that affecting the clean, nutritive and quality milk production (Ngongoni *et al.,* 2006). Along with this effective and efficient adoption and use of new technologies is most important to compete with the world food markets.

In the modern day's women play very important role in industry, agricultural and allied activities for the development of rural house hold economy. Especially the agriculture allied sectors like diary is the house hold activity in India, women were responsible for all the diary activities like mulching, feeding, cleaning the cattle and cattle shed. Competing with the world milk market by adopting new innovative technologies is most important for the rural house hold sector to increase their income and to sustain in growing world milk market. Gujarat is the one of the largest milk producing state in India, across the Gujarat, Anand occupies largest milk producing

* Corresponding Author:
Email: g.nethravathi@gmail.com

district with the support of AMUL and National Dairy Development Board (NDDB). The use and adoption of any new technologies, profile of the individuals like education, income, exposure to any external information sources plays an important role. With this background the present study was conducted to study investigate the profile of dairy farm women in adoption of scientific practices in Anand district of Gujarat.

METHODOLOGY

Women play an important role in animal husbandry activities as manager, decision makers and skilled workers (Randhawa and Chandra, 1993). The recent advances in dairy science technology have demonstrated that scientific management has great potential for increasing the milk production. Therefore, raising adoption of clean milk production practices is of paramount importance for dairy farm women. Based on this background the study has been conducted in Anand District of Gujarat. Simple random sampling technique was used to select 16 villages and 160 dairy farm women's from eight talukas of Anand district with two villages in each talukas and 10 respondents from each village. Based on the review of literature and experts guidance twelve suitable variables were selected for the study. The data was collected by the investigator with the help of the pre tested interview schedule by using personal contact method. The data were gathered, processed, analyzed and grouped in to three categories based on the standard deviation and mean with the help of SPSS to draw the meaningful conclusion.

RESULTS AND DISCUSSION

Family profile of the dairy farm women in adoption of modern dairy farming: The family profile of the respondents plays an important role in the adoption of any farm technologies, (Gour, 2002, Toppo, 2005; Khokhar, 2007) some of the following family profile variables were selected, analyzed and are presented in Table 1. From the table around 73.35 per cent of the respondents were belong to the middle age, i.e. around 31 to 45 years of age group, around 36.87 per cent of the farm women were having medium level of land holdings, i.e. is 2.01 to 3.00 ha., nearly 84.37 per cent of the respondents earning medium level (Rs. 50001 to 100000) of annual income. Among the respondents selected for the study around 56.87 per cent of them were belongs to the nuclear family and nearly 63.75 per cent of them were having only three to four milch animals. Some of the scientific studies explained that first users of the innovative technologies are young farmers with large land holdings and higher annual income (Halakatti *et al*., 2007; Nehete, 2010). In the study around 94 per cent of the farm women were young to middle age, around 84 per cent and 91 per cent of respondent were having marginal to medium size of land holdings with low to medium level of annual income respectively. Among the 160 respondents around 57 per cent and 82 per cent of them were belongs to small family with small to medium herd size.

Table 1. Family profile of the dairy farm women in adoption of modern dairy farming.

Variables	Categories	Measurement	Number	Percent
Age	Young (up to 30)	Years	32	20.00
	Middle (31 to 45)		118	73.75
	Old (> 45)		10	06.25
Land Holding	Marginal (up to 1.00)	Hectors	23	14.37
	Small (1.01 to 2.0)		55	34.38
	Medium (2.01 to 3.00)		59	36.87
	Large (>3.00)		23	14.38
Annual Income	Low (up to 50000)	Rupees	11	06.88
	Medium (50001 to 100000)		135	84.37
	High (>100000)		14	8.75
Size of Family	Small (up to 5)	Number of members	91	56.87
	Large(> 5)		69	43.13
Herd Size	Small herd size (up to 2)	Number of milch animals	30	18.75
	Medium herd size (3 to 4)		102	63.75
	Large herd size (> 4)		28	17.5

Personal profile of farm women regarding diary sector: Adoption of any innovative technologies personal profile like education, experience, mass media and contact with extension persons play major role (Rai and Saharia, 2004). In the study Table 2 specify the personal profile of the dairy farmers in adoption of innovative technologies. From the table it's implicit that 41.88 per cent of the farm dairy women were educated up to higher secondary level (11th to 12th class) and around 65.63 per cent of the respondents were practicing in dairy farming since from six to 10 years. Almost 71.88 per cent of the respondents were having medium level of extension contact and around 63.12 per cent of women dairy farmers were having medium level of mass media exposure. Some of the scientific studies explained that innovative technologies were easily adopted by well-educated farmer with superior mass media exposure and extension contact (Upadhyay, 2010; Premavathi and Setharaman, 2005). From the table it's understood that almost 65 per cent of the dairy farm women were educated up to secondary level and above secondary level education along with this 72 per cent of the respondents were practicing dairy farming from six years and above. Around 84 per cent of the dairy farm women were having medium level and higher level of extension contact and 75 per cent of the respondents were having medium to high level of mass media contact.

Table 2. Personal profile of farm women regarding diary sector.

Variables	Categories	Measurement	Number	Per cent
Education	Illiterate	Standard	06	03.75
	Primary (1st to 7th		26	16.25
	Secondary (8th to 10th)		37	23.12
	Higher secondary (11th to 12th)		67	41.88
	Graduate and above		24	15.00
Experience in Dairy Farming	Low (3 to 5)	Years	44	27.50
	Medium (6 to 10)		105	65.63
	High (> 10)		11	06.87
Extension Contact	Low (>13.40)	Mean ± SD	25	15.62
	Medium (13.40 to 22.18)		115	71.88
	High (> 22.18)		20	12.50
Mass Media Exposure	Low (< 12.09)	Mean ± SD	40	25.00
	Medium (12.09 to 18.21)		101	63.12
	High (> 18.21)		19	11.88

Self-assurance level of farm women in diary sector: Adoption and use of new technologies in agriculture and allied sectors is most important in the globalised economy to compete with the world markets. For the adoption of the new technologies self-assurance level of the respondents plays an important role (Nehete (2010) and Upadhyay (2010)). In the study self-assurance level of dairy farm women was analyzed with the help of some variables and presented in the Table 3. In the table Social participation variable indicates the membership of the respondents in different organizations helps to facilitates adoption of scientific dairy practices. In the study 76.88 per cent of the respondents were having member ship in only one organization i.e. dairy. Around 66.87 per cent of the women dairy farmers having medium level of scientific orientation towards dairy practices like clean milk practices, nutrient feeding scientific cattle management. Nearly 63.75 per cent of the women dairy farmers were having medium level of risk orientation like they can adopt scientific technologies by taking slight risk. The research findings explained that adoption of modern technologies includes some amount of risk factors, to face that risk farm women has to develop scientific knowledge by taking the guidance from the respected organizations (Temkar, 2000; Rani, 2009). From the table it is identified that almost 75 percent of the farm women were having membership in only one organization i.e. dairy. Around 85 percent of the respondents were having low to medium level scientific orientation and risk taking capacity.

Table 3. Self-assurance level of farm women in diary sector.

Variables	Categories	Measurement	Number	Per cent
Social Participation	No	Membership in organizations	00	00.00
	One		123	76.88
	Two		17	10.62
	More than two		13	08.12
	Holding position		07	04.38
Scientific Orientation	Low (> 16.72)	Mean ± SD	29	18.13
	Medium (16.72 to 24.03)		107	66.87
	High (> 24.03)		24	15.00
Risk Orientation	Low (<13.12)	Mean ± SD	30	18.75
	Medium (13.12 to 19.26)		102	63.75
	High (> 19.26)		28	17.50

CONCLUSION

From the above findings it's concluded that 95 percent of the farmers were belongs to young and middle age but they are having medium size of land and small to medium herd size it might be the reason for medium level of income. Maximum number respondents were higher secondary level of education but they were practicing the dairy farming since from more than six years. Due to lack of education they were having medium level of extension contact and the mass media exposure. Among them three fourth of the respondent were having membership in only village dairy where they going to sale the raw milk, because of lack of mass media exposure towards processing activities and extension contact, farmer women were having medium level of scientific orientation and risk taking capacity. From the study finally it's concluded that even though the farmer were middle aged they were interrupted in adoption of scientific dairy technologies because lack of mass media exposure and extension contact. The problem can be solved by providing better extension contact with the mass media exposure to the dairy farm women regarding various innovative technologies. The financial assistance can ensure the respondents confidence by increasing the risk taking capacity defiantly then can able to adopt the scientific technologies in the dairy farming by contacting the extension persons through mass media. With these efforts dairy farmer women can adopt the innovative technologies by competing with the globalised world milk market.

REFERENCES

Gour, A. K. (2002). Factors influencing adoption of some improved animal husbandry practices of dairying in Anand and Vadodara districts of Gujarat state (Unpublished) Ph.D. thesis, Gujarat Agricultural University, (GAU), Anand.

Halakatti, S. V., Sajjan C. M., Gowda D.S.M. and Vijaylaxmi K. (2007). Empowerment of women through dairy training. Karnataka J. Agril. Sci., 20 (1), 89-92.

Singh, K. (2010). Rural Development: Principles, Policies and Management. Sage Publications. New Delhi. 3:1-6.

Kerlinger, F. N. (1976). Foundation of behavior research. New Delhi, Surjee pub., 198-204.

Khokhar, S.R. (2007). A study on adoption of dairy innovation by dairy farm women in Anand district. M.Sc. (Agri.) Thesis (Unpublished), Anand Agricultural University (AAU), Anand.

Nehete, N.C. (2010). Management efficiency of milk producers in Anand taluka of Gujarat state. M.Sc. (Agri.) Thesis (Unpublished), AAU, Anand.

Ngongoni,T., Mapiye, C., Mwale, M., and Mupeta, B. (2006), Livestock Research for Rural Development Factors affecting milk production in the smallholder dairy sector of Zimbabwe Livestock Research for Rural Development 18 (5).

Premavathi,R. and Setharaman, R. N. (2005). Factors influencing the decision making and involvement of farm women in farm and home activities. Madras Agril. J., 92 (7-9): 508-510.

Rai, M.N. and Saharia, K.K. (2004) Socio-personal and economic profile of the dairy farmer in the Kamrup district of Assam, Rural India, 67 (4): 61-64.

Randhawa, A. and S. Chandra. (1993). Changing role of home science scientists in transferring farm technologies to farm women in agriculture, Paper presented at national seminar on 'Women in

agriculture- development issues' at NAARM.

Rani, D. V. (2009). Crisis management practices adopted in dairy farming by the farmers of Anand district of Gujarat State. Ph.D. (Agri.) Thesis (Unpublished), AAU, Anand.

Reddy, B. P. (2010). Growth and Trends Discerning of Indian Dairy Industry. Asia Pacific Journal of Social Sciences, II (2), 105-125.

Temkar, G. K. (2000). A study on knowledge and attitude towards artificial insemination in the milch animal of the dairy farmers of Anand district. (Unpublished) M.Sc. (Agri). thesis, GAU, Anand.

Toppo, A. (2005). A study of participation and decision making of farm women in dairy occupation in Anand district of Gujarat state. (Unpublished) M.Sc. (Agri). thesis, GAU, Anand.

Upadhyay, S. (2010). A study on participation of dairy farm women in animal husbandry occupation. M.Sc. (Agri.) Thesis (Unpublished), AAU, Anand.