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#### **Research Article**

# SOCIO-PERSONAL AND ECONOMIC PROFILE OF PERI-URBAN AND RURAL DAIRY FARMERS IN REWADISTRICT OF MADHYA PRADESH

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Abstract- Study was conducted in purposively selected Rewa district in Madhya Pradesh as in 2012 livestock census the district comprises of highest number of livestock population in the State. Selection of 60 peri-urban and 60 rural dairy farmers was done randomly from the study area. The peri-urban was defined as the surrounding area 5 kilometers radius from the Nagar Nigam while rest of the district was taken as rural area as whole. Schedule was developed for the study of socioeconomic profile of the respondents in the study area. Ranks correlation method was used to study the correlation coefficient between independent socio-personal and economic characteristics and knowledge of respondents about improved dairy farming practices. Data were collected by personal interview method, analyzed through various appropriate statistical tools as frequency, percentage. Peri-urban farmers belonged to 55.00% middle age, 33.33% young age and 11.67% old age with education of high school 38.33%, followed by higher secondary 31.67%, primary 15.00%, graduation 11.67%, post-graduation and above 1.66% and illiterate 1.67% while rural dairy farmers 46.67% belonged to middle age followed by old age 30.00% and young age 23.33% with education 33.33% up to high school followed by primary 26.67%, higher secondary 20.00%, illiterate level 13.33%, graduation 5.00%, and post-graduation 01.67% respectively. Peri-urban respondents belongs to OBC 38.33% followed by general 28.33%, SC 21.67%, ST 11.67% with marital status as married 88.33% followed by single 10.00%, divorced 1.67% and in rural respondents OBC 41.67% followed by general 28.33%, SC 16.67%, ST 13.33% and marital status as 92.50% married followed by single 7.50% and divorced 0.00%. Majority of the peri-urban respondents had agriculture (38.33%) as primary occupation with marginal-small land holding group 55.00% followed by labor 31.67% while rural respondents 78.33% had agriculture as primary occupation with 33.33% small-medium land holding group followed by dairying 08.33%. Peri-urban respondents were in small-medium herd size category 88.33% while rural respondents belonged medium-large herd group 68.33%. In extension contacts peri-urban respondents were under medium to high category 71.67 %while majority of the peri-rural respondents were under medium to low category 70.00%. Majority of the farmers in periurban area belonged to medium to high income group (76.67%) while rural dairy farmers belonged to low to medium income group (90.00%). It was concluded that the peri-urban dairy farmers were younger, comparatively more educational level, more extension contacts as compared to the rural farmers. Peri-urban dairy farmers were belonging to the nuclear family with more economic stability and less family stability with small herd size as compared to the rural farmers. Occupation, herd size and annual income of peri-urban and rural dairy farmers had positive and significant correlation with the knowledge about improved dairy farming practices.

**Keywords**- Socio-personal and economic profile, Peri-urban, rural, Dairy farmer

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#### Introduction

Socio-economic status (SES) of the individuals is the combination of the measurements of economic and social positions of an individual or groups in relation to others in the society. Dairying is an indispensable component of agriculture and also the important suitable production system that has most huge potential for the improvement of socio economic status of the farmers. The bulk of milk production is done by the numerous landless farmers, marginal and small farmers scattered in the rural areas of all over the country. Dairying have huge potential to provide balanced diet to poor people in form of milk, power and energy to cook food in form of dung, organic manure for their field in the form of farm waste and residual dung and one of the most important task employment to marginal and landless labors in their native place.

Different studies revealed that animal husbandry programs and/or other external

inputs in form of finance or assistance improved the productivity and socioeconomic status of the dairy farmers [1-3]. Young farmers, who are beneficiaries and have a high education were active and dynamic related to animal husbandry and women with high educational level chose to get involved in animal husbandry practices [4]. Due to lack of literacy, rural people of the locality could not successfully participate in dairy management practices [5]. There is a positive association between productivity of labor and capital and number of years of education [6]. Majority of mini dairy holders were young, educated up to middle and metric level, landless and poor social participation level [7]. Education, land holding and subsidiary occupations were positively related to income of the respondents. Keeping in view findings in respect of respondents' socio-personal and economic variables namely age, education, caste, occupation, land holding, herd size, annual income, family size, sources of information of peri-urban and

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rural dairy farmer was studied in the study area. These findings are the part of the special problem studied during Ph.D. research work of the author.

#### Materials and Methods

Study was conducted in Rewa district of Madhya Pradesh. 60 dairy farmers each from peri-urban area and rural area, rearing at least one animal in milk at the time of investigation were selected randomly. Schedule was developed for the study of socioeconomic profile of the respondents in the study area. Age and land holding was classified as reported by Government of India [8], education was classified as years of respondents attended teaching institution while other variables were classified by using cumulative cube root frequency distribution into low, medium and high category. Ranks correlation method was used to study the correlation

coefficient between independent socio-personal and economic characteristics and knowledge of respondents about improved dairy farming practices. Data were collected by personal interview method, analyzed through various appropriate statistical tools as frequency, percentage and data were interpreted to get logical results and fruitful conclusion of the study.

#### **Results and Discussion**

### Socio-personal profile of peri-urban and rural dairy farmers

Majority (55.00%) of the peri-urban farmers belonged to middle age group followed by 33.33 per cent young age and 11.67 per cent old age group while most of rural dairy farmers (46.67%) belonged to middle age group followed by old age group (30.00%) and young age group (23.33%) [Table-1].

**Table-1** Socio-personal and economic profile of peri-urban and rural respondents of the study area

S. No.	Variables	Category		Peri-urban (60) Rura			
				Frequency	Percent	Frequency	Percent
1.	Age (years)	Young (Up	to 35 Yrs)	20	33.33	14	23.33
"	3- ()/	Middle (36-50 Yrs)		33	55.00	28	46.67
		Old (above		07	11.67	18	30.00
2.	Education	Illiterate		01	01.67	08	13.33
		Primary		09	15.00	16	26.67
		High school		23	38.33	20	33.33
		Higher Secondary		19	31.67	12	20.00
		Graduate		07	11.67	03	05.00
		Postgraduate and above		01	01.66	01	01.67
3.	Caste	General		17	28.33	17	28.33
		Other backward classes Scheduled caste		23	38.33	25	41.67
				13	21.67	10	16.67
		Scheduled Tribes		07	11.67	08	13.33
4.	Marital	Single		06	10.00	05	08.33
	Status	Married		53	88.33	55	91.67
		Divorced		01	01.67	00	00.00
5.	Family Size	Joint	Small	03	05.00	11	18.33
٠.		Family	Medium	16	26.67	28	46.67
			Large	04	06.67	02	03.33
		Nuclear	Small	10	16.66	05	08.33
		Family	Medium	22	36.67	13	21.67
			Large	05	08.33	01	01.67
6.	Occupation	Primary	Agriculture	23	38.33	47	78.33
٥.	Cccupation	Tilliary	Dairying	13	21.67	05	08.33
			Labor	19	31.67	04	06.67
			Business	02	3.33	03	05.00
			Service	03	5.00	01	01.67
			Total	- 00	0.00	V1	01.01
		Secondar	Agriculture	34	56.67	20	33.33
		у	Dairying	16	26.67	33	55.00
			Labor	07	11.67	03	05.00
			Business	03	05.00	04	06.67
			Service	00	00.00	00	00.00
			Total		00.00	00	00.00
7.	Land	Landless		10	16.67	07	11.67
···	Holding	Marginal (<1 ha)		19	31.67	19	31.67
		Small (1-2 ha)		14	23.33	16	26.67
		Semi -Medium (2-4 ha )		13	21.67	11	18.33
		Medium ( 4-10 ha)		03	05.00	04	06.66
		Large (>10 ha)		01	01.66	03	05.00
8.	Herd size	Small (2-5)		28	46.67	19	31.67
0.	11010 0120	Medium (6-7)		25	41.67	31	51.66
		Large (8-9)		07	11.66	10	16.67
9.	Sources of	Personal		17	28.33	14	23.33
] ,	information	localites	Medium	27	45.00	34	56.67
			High	16	26.67	12	20.00
		Personal	Low	07	11.67	35	58.33
		Cosmopo	Medium	34	56.66	18	30.00
		lite	High	19	31.67	07	11.67
		Mass	Low	04	06.67	23	38.33
		media	Medium	39	65.00	28	46.67
		exposure	High	17	28.33	09	15.00
10.	Annual	Low (<50000)		14	23.33	41	68.33
10.	Income	Medium (50000)		37	61.67	13	21.67
	moonic	High (80000		09	15.00	06	10.00
	l .	1 11911 (00000	.00000)	33	10.00	VV	10.00

It was concluded that more middle to young people participating in dairying business in peri-urban area while middle to old age in rural area. Majority of respondents belonged to young age group [9-11] while majority of respondents belonged to middle age group [12-14]. Maximum number of the peri-urban respondents fell under the category of high school (38.33%), followed by higher secondary level (31.67%), primary level (15.00%), graduation level (11.67%), post graduation and above level (1.66%) and illiterate (1.67%) while most of rural respondents (33.33%) educated up to high school level followed by primary level (26.67%), higher secondary level (20.00%), illiterate level (13.33%), graduation level (5.00%), and post graduation level (01.67%) respectively [Table-1]. It was concluded that amongst rural education level was less than peri-urban. Education was one of the factors which were influenced by the locality and educational facilities availability in the surroundings. Similar findings reported by other scientists [11,15].

Maximum number of respondents belongs to OBC (38.33%) in peri-urban area followed by general (28.33%), SC (21.67%), ST (11.67%) and in rural area OBC (41.67%) are highest followed by general (28.33%), SC (16.67%), ST (13.33%) [Table-1].

Marital status of maximum respondents belonging to peri-urban area was married (88.33%) followed by single (10.00%), divorced (1.67%) and in rural area (92.50%) respondents were married followed by single (7.50%) and divorced (0.00%) [Table-1]. Prosperity of the peri-urban area was positively promoting independent living in peri-urban areas which was lacking in rural area.

Majority of the peri-urban respondents were under nuclear family umbrella while rural dairy farmers under nuclear family umbrella. It was concluded that family residing in peri-urban areas were self sustaining as nuclear family while rural families have diversified tasks and they need more assistance and to reduce the chance of vulnerability they decide to with his other family members as joint family. Findings reported by scientist were contradictory to the above findings [10].

Majority of the peri-urban respondents had agriculture (38.33%) as primary occupation followed by labor (31.67%), dairying (21.67%), service (5.00%) and business (03.33%) while majority of the rural respondents (78.33%) had agriculture as primary occupation followed by dairying (08.33%), labor (06.67%), business (05.00%) and (01.67%) service class respectively [Table-1]. It was concluded that peri-urban respondents had agriculture and labor dependent while rural respondents were dependent on agriculture dairying and labor.

On the basis of findings, most of the peri-urban respondents had agriculture (56.67%) as secondary occupation followed by dairying (26.67%), labor (11.67%), business (05.00%) and service (00.00%) respectively while majority of the rural respondents had dairying (55.00%), as secondary occupation followed by agriculture (33.33%), business (06.67%), labor (05.00%) and service (00.00%) respectively [Table-1]. Agriculture and dairying were the two major occupations in the study area, majority of the peri-urban and rural dairy farmers had agriculture as the major primary occupation and dairying as the major secondary occupation. Most of the peri-urban dairy farmers were belonging to marginal land holding group (31.67%) followed by small (23.33%), semi-medium (21.67%), landless (16.67%), medium (5.00%) and 01.67% were in large farmers category respectively while principally the rural respondents were belonging to marginal land holding (31.67%) followed by small (26.67%), semi-medium (18.33%), landless (11.67%), medium (06.66%) and 05.00% respondent were large farmers respectively [Table-1]. Majority of the peri-urban and rural dairy farmers belongs to small and marginal land holding but rural dairy farmers had comparatively more land holding than peri-urban dairy farmers. Similar findings reported by various scientists [11,13].

Most of the peri-urban respondents were in small herd size category (46.67%), followed by medium (41.67%) and large (11.66%) while that of majority of the rural respondents belonged (51.66%) were in medium category followed by small (31.67%) and large (16.67%) herd size [Table-1]. Similar findings revealed by other scientists [16].

In personal localite extension contact, most of the peri-urban respondents were under medium category (45.00%), followed by low (28.33%) and high category (26.67%) while majority of the peri-rural respondents (56.67%) were under medium category followed by low (23.33%) and high category (20.00%)

respectively. In personnel cosmopolite extension contact, majority of the periurban respondents were under medium category (56.66%), followed by high (31.67%) and low category (11.67%) while majority of the rural respondents (58.33%) were under low category followed by medium (30.00%) and high category (11.67%), respectively [Table-1]. It was concluded that majority of the rural farmers belonged to the medium localite and low cosmopolite extension contact because of high dependency on fellow farmers and majority of peri-urban farmers had medium personnel localite and personal cosmopolite extension as they had higher educational status and they are easily accessing sources of information due to their locality and reach. Similar findings reported in support of above result [11,17]. Most of the peri-urban respondents were having medium (65.00%) mass media exposure followed by high (28.33%) and low (06.67%) mass media exposure while maximum number rural respondents (46.67%) were having medium level mass media exposure followed by low (38.33%) and high (15.00%) respectively [Table-1]. Similar findings revealed by other researchers in different studies [10,15,17,18,19].

Majority of the farmers in peri-urban area belonged to medium income group (61.67%) followed by low (23.33%) and high (15.00%) while rural dairy farmers belonged to low income group (68.33%) followed by medium (21.67%) and high income group (10.00%) [Table-1]. It was concluded that there was more prosperity in the peri-urban area as compared to rural area.

On the basis of present findings it was concluded that the peri-urban dairy farmers were younger, comparatively more educational level, more extension contacts as compared to the rural farmers. Peri-urban dairy farmers were belonging to the nuclear family with more economic stability and less family stability with small herd size as compared to the rural farmers.

# Correlation between independent variables of respondents and knowledge of respondents about improved dairy farming practices

Age, caste, marital status, land holding, source of information of both the periurban and rural dairy farmers was observed non-significantly correlated with the knowledge at 5% level of significance. Education, occupation, herd size and annual income of peri-urban dairy farmers has positive significant correlation with the knowledge about improved dairy farming practices while occupation, herd size and annual income of rural dairy farmers was observed significantly correlated.

**Table-2** Correlation between independent variables of respondents and knowledge of respondents about improved dairy farming practices: n=120

S. No.	Independent variable	Correlation coefficient		
		Peri-urban	Rural	
1.	Age	0.132	0.171	
2.	Education	0.199*	0.163	
3.	Caste	0.165	0.115	
4.	Marital status	0.127	0.097	
5.	Family size	0.129	0.071	
6.	Occupation	0.201*	0.209*	
7.	Land holding	0.091	0.165	
8.	Herd size	0.213*	0.201*	
9.	Sources of information	0.176	0.114	
10.	Annual income	0.219*	0.226*	

\*Significant at 5% level

#### Conclusion

It was concluded that the peri-urban dairy farmers were younger, comparatively more educational level, more extension contacts as compared to the rural farmers. Peri-urban dairy farmers were belonging to the nuclear family with more economic stability and less family stability with small herd size as compared to the rural farmers. Occupation, herd size and annual income of peri-urban and rural dairy farmers had positive and significant correlation with the knowledge about improved dairy farming practices.

Conflict of Interest: None declared

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