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Study on Socio-Economic Profile of the Dairy Stakeholders in Haryana State

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ABSTRACT
The study was conducted on 120 dairy stakeholders of Haryana state to ascertain their socio-economic and psychological characteristics. A well-structured interview schedule was developed to collect the data from the dairy stakeholders. The findings of the study revealed that majority of the respondents were middle-aged, having medium family- size and completed post graduation level of education. Most of the dairy stakeholders were having more than 10 years of experience n dairying. The majority were having large herd size and fall under semi-medium land holding category and earned a higher level of annual income. More than three-fourths (78.33%) of respondents belonged to a high level of information-seeking behaviour and two-thirds of the respondents had a high level of mass media exposure.
KEYWORDS*: Profile characteristics, Dairy stakeholders, Mass media exposure, Information seeking behaviour and mass media exposure.*

INTRODUCTION

Access to information and improved communication is a crucial requirement for sustainable dairy development. There is a concern that the gap between the 'Information – rich' and 'Information – poor' is getting wider. Farmers are the traditional innovators, and are actively engaged in communication about innovation. ICT provides a new channel for this type of communication. The key for development actors is to understand the traditional process of farmers' innovations in order to succeed in bringing ICT in line to support it. Communities themselves will also drive this through their own choices around technology and its applications.

ICTs in dairy farming facilitate easier communication of innovation to the farming community, provide better access to information, and enhance production utilization of knowledge. The most commonly available ICT tools in the Indian context are: Radio, Television, Telephone, Mobile, Computer, Multimedia, CD-ROM, Video Conferencing, Expert System, Geographical Information System (GIS), Internet, etc. ICT has many potential applications in agricultural extension. It can bring new information services to rural areas where farmers are the end-users, as it will have much greater control than before over current information channels. This capacitating calls for providing access to information, innovation and appropriate technologies, skill and knowledge building which requires integrated, need-based and timely delivery of services as close to the people as possible [10].

In view of all these aforesaid discussions, it is expected that this proposed project will take care of the specific needs of the desirous stakeholders, while providing them with a kind of platform for seeking information through "Web-enabled Interactive Information Delivery System"(WIIDS).

MATERIALS AND METHODS

The study was conducted in Haryana state. From this state two districts namely Karnal and Haryana were selected purposively keeping in view the fact that the district has the highest population of livestock and Karnal is having Dairy Extension Division of National Dairy Research Institute, which is operating its field extension activities. Likewise, Lala Lajpat Rai Veterinary & Animal Sciences University is functioning in Hisar district. A total of 120 dairy stakeholders were selected randomly from two districts. Thus a total of 120 respondents were taken for the study. The data were collected with the help of pre-tested structured interview schedule during 2014-15.

RESULTS AND DISCUSSION
Age
A perusal of Table 1 revealed that most of the dairy stakeholders (48.33%) in the study area belonged to the middle-age group, whereas 27.50 percent of respondents were found to be in old age group, and the remaining 24.17 percent were in the young age group. It can be envisaged that more emphasis should be given to dairy stakeholders of middle-age groups as they were energetic and dynamic so as to derive all the benefits associated with the Information & Communication Technologies. Almost similar findings were also observed by Saha *et al.* [8] and Raval and Chandawat [7].

Table 1: Distribution of respondents according to their age (n=120)

Category (In years)	$R_1(n_1=60)$	$R_2 (n_2=60)$	Total (n=120)
Young (Up to 35 years)	17 (28.34)	12 (20.00)	29 (24.17)
Middle (36-55 years)	28 (46.66))	30 (50.00)	58 (48.33)
Old (Above 55 years)	15 (25.00)	18 (30.00)	33 (27.50)

Note: Figures in parentheses indicate percentage

Family-size
The data in Table 2 depict that majority (51.67%) of dairy stakeholders had medium family- size (ranging from 4 to 7 members), followed by those (33.33%) having large family-size (i.e., more than 7 members in a family): while the remaining 15.00 percent respondents were having small family-sizes. Hence, medium-size families could be targeted to increase the dairy entrepreneurship in the study area. Again the results of the present study are similar to the findings of Meena *et al.* [6].

Table 2: Distribution of respondents according to their family- size (n=120)

Category (In numbers)	$R_1(n_1=60)$	$R_2 (n_2=60)$	Total (n=120)
Small (<4)	8 (13.33)	10 (16.67)	18 (15.00)
Medium (4-7)	34 (56.67)	28 (46.67)	62 (51.67)
Large (>7)	18 (30.00)	22 (36.66)	40 (33.33)

Note: Figures in parentheses indicate percentage

Education
Education is the instruction that goes to cultivate mental power, shape the mind and form the character of a person. A cursory glance of Table 3 indicated that 25.83 percent of the dairy stakeholders were having post-graduation, 20.00 & 16.67 percent of the respondents completed a degree and higher secondary, respectively. Further, 11.66 percent of the dairy stakeholders had high school and 10.83 percent of the respondents had a primary level of education. It was observed that there were no illiterates among the respondents. They were formed to be able to read, write and do simple arithmetic for day-to-day life. It can be concluded that 'ICT-based educational technology' would be the prominent option to disseminate the need-based information to dairy stakeholders. These findings are in line with the results of Gautam *et al.*, [4] and contrary to the results of Aulakh *et al.*, [1] and Lohakare *et al.*, [5].

Table 3: Distribution of respondents according to their level of education (n=120)

Category	$R_1(n_1=60)$	$R_2 (n_2=60)$	Total (n=120)
Illiterate	0 (0.00)	0 (0.00)	0 (0.00)
Primary School	5 (8.33)	8 (13.33)	13 (10.83)
Middle School	10 (16.67)	8 (13.33)	18 (15.00)
High School	9 (15.00)	5 (8.33)	14 (11.66)
Higher Secondary School	6 (10.00)	14 (23.33)	20 (16.67)
Graduation	14 (23.33)	10 (16.67)	24 (20.00)
Post-graduation	16 (26.66)	15 (25.00)	31 (25.83)

Note: Figures in parentheses indicate percentage

Experience in dairy in
It is the total no. of years involved in dairy farming or processing field. The Table 4 clearly indicated that majority (80.84%) of the dairy stakeholders had high level of experience on dairying, followed by medium (10.83%) and remaining (8.33%) of respondents had low level of experience. These results clearly depicted that in the study area, high experienced dairy farmers were predominant. Dairy stakeholders were associated with production or processing aspects of dairying. Hence, information needs play pivotal role in their dairy development.

Table 4: Distribution of respondents according to their experience in Dairying (n=120)

Category (In years)	R₁(n₁=60)	R₂ (n₂=60)	Total (n=120)
Less (up to 5 years)	8 (13.33)	2 (3.33)	10 (8.33)
Medium (5-10 years)	5 (8.33)	8 (13.33)	13 (10.83)
High (above 10 years)	47 (78.33)	50 (83.33)	97 (80.84)

Note: Figures in parentheses indicate percentage

Herd-size
Herd-size and its composition in agriculture indicate its importance and position in the livelihood of farmers. The classification of respondents with respect to total herd-size have been given in the Table 5. It could be seen from the data that 65.00 percent of them belonged to large category herd-size having (more than seven animals), whereas 19.16 percent of the dairy stakeholders were having medium herd-size (5 to 6 animals) and only 15.84 percent dairy farmers were having low herd size i.e., up to 4 animals. It might be due to the fact that majority of the respondents in the study area were depended on dairying for their livelihood. Vidya *et al.* [10] found that a high majority (88.33 %) possessed small herd and the rest (11.67 %) had a large herd.

Table 5: Distribution of respondents according to Herd- Size (n=120)

Category (In numbers)	R₁(n₁=60)	R₂ (n₂=60)	Total (n=120)
Small (up to 3 animals)	12 (20.00)	7 (11.67)	19 (15.84)
Medium (4 to 6 animals)	11 (18.33)	12 (20.00)	23 (19.16)
Large (more than 6 animals)	37 (61.67)	41 (68.33)	78 (65.00)

Note: Figures in parentheses indicate percentage

Land-holding
Land-holding considered for this study included only the lands which had been under cultivation at the time of the investigation. It was evident from the Table 6 that greater chunk of farmers (47.50%) had come under semi- medium farmers category, followed by medium (19.16%), marginal farmers (18.34%), small farmers (10.84%), and large farmers category (4.16%), respectively. It could be attributed that semi-medium farmers could be targeted for the dissemination of dairy information for dairy development. These findings are in agreement with the findings of Verma *et al.*, [9] who also reported that majority of respondents were small and marginal.

Table 6: Distribution of respondents according to Land-holding (n=120)

Category (In ha.)	R₁(n₁=60)	R₂ (n₂=60)	Total (n=120)
Marginal Farmers (less than 1)	12 (20.00)	10 (16.67)	22 (18.34)
Small Farmers (1-2)	9 (15.00)	4 (6.66)	13 (10.84)
Semi Medium Farmers (2-4)	25 (41.67)	32 (53.33)	57 (47.50)
Medium Farmers (4-10)	11 (18.33)	12 (20.00)	23 (19.16)
Large Farmers (More than 10)	3 (5.00)	2 (3.33)	5 (4.16)

Note: Figures in parentheses indicate percentage

Annual income

Annual income is an important parameter to evaluate the economic status of dairy farmers. Income from various sources viz., agriculture, dairying, labour, service etc. as reported by the respondents were considered to calculate the annual income. The data presented in Table 7 revealed that majority (66.67%) of the respondents had earned higher level of annual income, i.e., Rs (above than 1,06,979) While 20.00 percent fell under lower level of annual income (Up to 76,092) and 13.33 percent fell under medium level income (76,092 to 1,06,979). The probable reason for this might be due to the fact that majority of the respondents were having large herd size provide subsistence income and dairy farming is the main source of income along with land cultivation. Similar findings were reported by Bhople and Alka [3].

Table 7: Distribution of respondents according to their annual income (n=120)

Category (In rupees)	R₁(n₁=60)	R₂ (n₂=60)	Total (n=120)
Low (up to 76,092)	11 (18.33)	13 (21.67)	24 (20.00)
Medium (76,092 - 1,06,979)	10 (16.67)	6 (10.00)	16 (13.33)
High (Above 1,06,979)	39 (65.00)	41 (68.33)	80 (66.67)

Note: Figures in parentheses indicate percentage

Information- seeking behavior

It is the process of receiving and utilization of information pertaining to dairying. The glance at Table 8 indicating that more than three-fourths (78.33%) of respondents belonged to a high level of information-seeking behaviour whereas, 16.67 and 5.00 percent of respondents fell under the low and medium category of information-seeking behaviour, respectively. The rationale behind this was that majority of respondents were middle-aged, enthusiastic and optimistic to get innovative information through different information sources.

Table 8: Distribution of respondents according to their information-seeking behaviour (n=120)

Category	R₁(n₁=60)	R₂ (n₂=60)	Total (n=120)
Low	6 (10.00)	14 (23.33)	20 (16.67)
Medium	4 (6.67)	2 (3.33)	6 (5.00)
High	50 (83.33)	44 (73.33)	94 (78.33)

Note: Figures in parentheses indicate percentage

Mass media exposure

It could be observed from Table 9 that nearly two-thirds of the respondents had a high level of mass media exposure; whereas 22.50 and 12.50 percent of respondents had a medium and low level of mass media exposure, respectively. This thing is undesirable and is indicative of limited information access especially about improved dairy husbandry practices including animal welfare. Again, Bhanotra *et al.* [2] found that majority (55.00%) of the farmers were having low access to mass media sources followed by 35.83 percent having medium exposure in Kathua district of Jammu and Kashmir.

Table 9: Distribution of respondents according to their mass media exposure (n=120)

Category	R₁(n₁=60)	R₂ (n₂=60)	Total (n=120)
Low (Up to 12)	5 (8.33)	10 (16.67)	15 (12.50)
Medium (12-17)	15 (25.00)	12 (20.00)	27 (22.50)
High (above 17)	40 (66.67)	38 (63.33)	78 (65.00)

Note: Figures in parentheses indicate percentage

CONCLUSION

Dairying is an important part of Indian agro-based economy; it not only provides income but also offers employment opportunities to the poor and weaker sections of the society. Now a day's Indian dairy industry is at crossroads of industry which have been dominated by government sector and working in co-operative mode. So in order to improve the same an extension agent has to work on disseminating

dairy innovations through modern ICT tools to needy farmers. It is implicated from the study that the reach of extension contact is need of the hour to strengthen the communication channels and various sources of information so that each technology is being developed in research institutes could reach the farmers at large which would uplift their socioeconomic status and livelihood status.

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