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### Extent of empowerment of farm women through backyard poultry farming

<sup>1</sup>Kiran Rana, <sup>2</sup>Shivani Yadav, <sup>3</sup>Anamila Sharma, <sup>4</sup>Neha Arya, <sup>5</sup>Shweta Chaudhary and <sup>6</sup>Ruchi Rani Gangwar

<sup>1,5,6</sup> Assistant Professor, Department of Agricultural Communication, College of Agriculture, G. B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India.

<sup>2,3</sup> Research Scholar, Department of Agricultural Communication, College of Agriculture, G. B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India.

<sup>5</sup> SRF, Department of Agricultural Communication, College of Agriculture, G. B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India.

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Corresponding Author: Kiran Rana

#### Abstract

Descriptive research conducted in the Kumaon division of Uttarakhand, aimed to investigate the socio-economic, communication and psychological characteristics as well as the extent of women's empowerment through backyard poultry. Additionally, it sought to understand the relationship between selected profile characteristics and women's empowerment. A sample of 92 respondents from three selected villages selected for the study, utilizing a pre-tested interview schedule for data collection. Statistical techniques including frequency, percentage, mean, standard deviation, coefficient of correlation and t-test were employed for data analysis. The findings highlighted that a majority of respondents (67.39%) were in the middle-age bracket. Furthermore, the majority possessed middle school education (35.87%) and belonged to the general category (60.87%). The respondents were primarily farmers with a medium family size (53.84%) and a moderate level of social participation (69.57%). In terms of poultry farming, many had a medium level of experience and the income derived from backyard poultry farming was predominantly at a medium level. The study revealed a medium level of overall empowerment with high levels of social and cultural empowerment. An exploration of the relationship between selected characteristics and the extent of empowerment indicated that age, family size, annual family income, flock size and risk preference did not exhibit significant relationships. Conversely, education displayed a negative and significant relationship, while positive and significant relationships were identified for social participation, poultry farming experience, information-seeking behavior, training exposure, economic motivation and decision-making ability, all at a 5% level of significance.

**Keywords:** Rural women, social economic status, extent of empowerment, backyard poultry

#### Introduction

India, predominantly reliant on agriculture, features a substantial livestock sector pivotal for sustaining rural communities. This sector constitutes about 25.6% of the agricultural GDP and contributes 4.11% to the total national GDP. Notably, poultry farming is of significant importance with approximately 89% of rural livestock households relying on it for substantial supplemental income. Globally, India holds the third position in egg production and the seventh in chicken meat production, highlighting the integral role of poultry in the livestock industry (DAHDF, 2019) [3]. The practice of poultry farming particularly in small-scale or backyard operations is recognized as a promising avenue for bolstering nutritional security and fostering empowerment within rural communities, particularly among underprivileged women. Often termed homestead poultry farming, this approach is widely adopted by Indian rural and landless families due to its economic viability and simplicity, making it accessible for women and children (ICRISAT, 2020) [6]. Despite the substantial involvement of rural women in agriculture, a significant majority lack land ownership with 85% functioning as

employees rather than landowners (Oxfam, 2013) [15]. Uttarakhand, recognizing the importance of women's empowerment, made history by becoming the first Indian state to grant married women co-ownership rights to ancestral property. Despite this progressive step, the existing agricultural scenario leaves women working on farms without formal land titles, necessitating their involvement in various farming activities to supplement family income. The state's position in poultry production, ranking 21st in India with a 0.23% share, suggests potential enhancement by focusing on the backyard poultry sector (DAHDF, 2019) [3]. According to Kisku (2016) [10], women typically take on the primary ownership role in rural poultry farming, a business model that requires minimal resources and can be entirely managed by women within the household. In Uttarakhand, young women actively participate in exclusive backyard poultry farming, not only bolstering their financial independence but also addressing challenges such as livelihood vulnerability, ensuring nutritional security and contributing to the mitigation of gender inequality. Thus, to have an in depth understanding of the current scenario and the extent to which the farm women are being empowered

through backyard poultry farming in Kumaon division of Uttarakhand, a study entitled “Women Empowerment Through Backyard Poultry Farming in Kumaon Division of Uttarakhand” has been conducted. This study meticulously explores the economic, social, cultural, psychological and technological empowerment derived from the active participation of women in backyard poultry farming. The findings underscore the transformative impact of this initiative on the overall well-being and status of women in rural Uttarakhand.

### Materials and Methods

The present study was conducted in Udham Singh Nagar district of Uttarakhand State. The Udham Singh Nagar district was selected purposively for the present study, as it ranks first in poultry production in the state and has highest number of households and poultry birds under the backyard poultry farming (Statistical Diary, Uttarakhand 2017-18)<sup>[20]</sup>. There are seven blocks in the selected district. Out of these blocks, Gadarpur block was selected purposively, as it has the highest number of poultry birds under backyard poultry system. Further, three villages of Gadarpur block were randomly and out of these villages. Purposive method of sampling was used for the selection of the respondents having at least 2 birds and 2 years of experience were selected. A sample of 92 respondents were selected for the study. The pre-tested interview schedule consisting of structured questions was used to get information regarding profile characteristics and women empowerment through backyard poultry farming. Statistical tools such as frequency, percentage, mean, standard deviation (SD), coefficient of correlation and test of significance were used for analyse of data. Scale developed by Niketha *et al.* (2017)<sup>[13]</sup> was used with modification to measure the empowerment of women through backyard poultry farming. The measurement was done for five dimensions of empowerments *viz.* social empowerment, cultural empowerment, economic empowerment, psychological empowerment and technological empowerment. It consisted of forty statements and responses for each statement were recorded on a three-point continuum namely agree, undecided and disagree with a scoring of 2,1 and 0 respectively.

### Results and Discussion

The results presented in Table 1 depict the demographic characteristics and attributes of the respondents. The majority of the respondents (67.39%) fall within the middle age group with 17.39% and 15.22% belonging to the younger and elder age groups, respectively. In terms of education, 35.87% of respondents have completed education up to the middle school level, while 19.56% are illiterate. Additionally, 18.48% have attained education up to high school, 11.96% up to primary and intermediate levels each and only 2.17% have pursued education at the graduation level or above. Family size distribution reveals that a significant portion of respondents (73.91%) belongs to the category of medium family size comprising 4 to 8 members. Furthermore, 15.22% of respondents have a large family size and 10.87% have a small family size. Analysis of social participation indicates that the majority of respondents (69.57%) exhibit a medium level of social participation followed by 21.74% with low social participation and only 8.70% with high social participation. Concerning experience in backyard poultry farming, the findings show that 65.22% of respondents have a medium level of experience, 19.56% have low experience and only 15.22% possess high experience. Income distribution highlights that 75% of respondents fall into the medium-income category, 14.13% into the high-income category and 10.87% into the low-income category. It is noteworthy that majority of the respondents (61.96%) have no training exposure regarding poultry farming. The level of information-seeking behaviour reveals that the majority of respondents (73.91%) display a medium level with 15.22% having a high level and 10.87% having a low level. Regarding risk preference, 67.50% of respondents have a medium level, 18.50% have a low level and only 14% have a high level of risk preference. Economic motivation is predominantly at a medium level for most respondents (73.91%) followed by 15.22% with a high level and 10.87% with a low level. Analyzing decision-making ability, 59.78% of respondents exhibit a medium level, 23.91% have a high level and 16.30% have a low level of decision-making ability. These findings align closely with studies conducted by Rahman (2017)<sup>[17]</sup>, Nirimala *et al.* (2020)<sup>[14]</sup>, Chaturvedani *et al.* (2015)<sup>[11]</sup>, Dumrya, *et al.* (2015)<sup>[5]</sup>, Singh *et al.* (2015)<sup>[19]</sup>, Kavitha and Rajkumar (2017)<sup>[9]</sup>, Padsala (2021)<sup>[16]</sup> and Kaur (2015)<sup>[8]</sup>.

**Table 1:** Socio-Economic, Communication and Psychological characteristics of the farm women engaged in backyard poultry farming

S. No.	Characteristics	Category	Mean	SD	Frequency	Percentage
1.	Age	Younger (<26years)	36.07	10.22	16	17.39
		Middle (26-46 years)			62	67.39
		Elder (>46 years)			14	15.22
2.	Education	Illiterate			18	19.56
		Primary			11	11.96
		Middle School			33	35.87
		High School			17	18.48
		Intermediate			11	11.96
		Graduation and above			2	2.17
3.	Family Size	Small (<4 members)	5.54	1.90	10	10.87
		Medium (4-8 members)			68	73.91
		Large (>8 members)			14	15.22
4.	Social Participation	Low (<2)	3.17	1.72	20	21.74
		Medium (2-5)			64	69.57
		High (>5)			8	8.70
5.	Poultry farming Experience	Low (<3years)	10.01	7.28	18	19.56

		Medium (3-17 years)			60	65.22
		High (>17 years)			14	15.22
6.	Annual Family Income	Low (<44,970)	51,332	37,728	10	10.87
		Medium (44,970-1,86,700)			69	75
		High (>1,86,700)			13	14.13
7.	Training Exposure	No training			57	61.96
		One Training			28	30.43
		Two Training			6	6.52
		Three Training			1	1.09
8.	Information Seeking Behaviour	Low (<29)	32.11	3.01	10	10.87
		Medium (29-35)			68	73.91
		High (>35)			14	15.22
9.	Risk Preference	Low (<17)	19.57	2.88	17	18.50
		Medium (17-22)			62	67.50
		High (>22)			13	14
10.	Economic Motivation	Low (<21)	23.09	2.39	10	10.87
		Medium 21-25)			68	73.91
		High (>25)			14	15.22
11.	Decision Making Ability	Low (<17)	21.60	4.32	15	16.30
		Medium (17-25)			55	59.78
		High (>25)			22	23.91

### Extent of empowerment of farm women through backyard poultry farming

In this study, empowerment is specifically defined as the process enabling women to recognize and actualize their identity, capabilities, strengths, decision-making abilities and influence through their engagement in backyard poultry farming. The examination of women's empowerment in the context of backyard poultry farming encompasses five distinct dimensions: Social, cultural, psychological, economic and technological.

#### Social Empowerment

Data from Table 2 indicates that a significant portion of the respondents (56.53%) experienced a high level of social empowerment. Following closely, 41.30% of respondents reported a medium level of social empowerment, while only 2.17% expressed a low level of social empowerment. The heightened social empowerment observed is attributed to the active engagement of respondents in backyard poultry farming. This involvement has afforded them opportunities to visit diverse locations and institutions, fostering interactions with fellow women involved in similar activities and granting them the freedom to work beyond the confines of their homes.

#### Cultural Empowerment

As shown in Table 2, a predominant majority of respondents (93.48%) reported a high level of cultural empowerment with 6.52% indicating a medium level of cultural empowerment. Notably, none of the respondents reported a low level of cultural empowerment. This widespread high level of cultural empowerment is indicative of a positive cultural environment that actively promotes and supports women's participation in socio-cultural activities.

#### Psychological Empowerment

As indicated by the data in Table 2, a substantial portion of the respondents (61.96%) reported a medium level of psychological empowerment. Following closely, 29.35% expressed a high level of psychological empowerment, while approximately 8.70% reported a low level of

psychological empowerment. The prevalence of a medium extent of psychological empowerment among the majority of respondents may be attributed to an increase in self-confidence and self-independence stemming from their participation in backyard poultry farming activities.

#### Economic Motivation

The data from Table 2 indicates that a substantial portion of respondents, specifically 51.09%, reported a medium level of economic empowerment. In close succession, 27.10% expressed a high level of economic empowerment, while approximately 21.74% reported a low level of economic empowerment. The prevalent medium extent of economic empowerment among the majority of respondents can be attributed to factors such as maintaining personal banking accounts, exercising control over their earnings and expenditures, availability of loans, and increased access to various resources. Additionally, Krishna *et al.* (2020) <sup>[11]</sup> highlighted the significance of adopting backyard poultry farming for the economic upliftment of rural underprivileged women.

#### Technological Empowerment

The data in Table 2 indicates that a substantial portion of the respondents, specifically 46.74% reported a medium level of technological empowerment. Following closely, 34.78% expressed a low level of technological empowerment, while approximately 18.48% reported a high level of technological empowerment. The prevalence of a medium extent of technological empowerment may be attributed to the respondents' freedom to consult with experts and make decisions regarding the use of available technology. Notably, a lack of scientific knowledge in raising poultry birds emerged as a significant factor contributing to respondents reporting a low level of technological empowerment.

#### Overall Empowerment

The information presented in Table 2 provides insights into the overall empowerment of rural women. Approximately 55.43% of respondents reported a medium level of overall

empowerment, while about 29.35% indicated a low level and around 15.22% reported a high level of overall empowerment. The prevalence of a medium extent of overall women empowerment can be attributed to a significant shift from dependency on male counterparts to becoming self-sufficient. This transformation has exposed

women to various social interactions, participation in programs and institutions and active involvement in decision-making processes. These findings align with the observations made by Niketha *et al.* (2017) [13], who similarly reported that a majority of respondents experienced a moderate level of overall empowerment.

**Table 2:** Distribution of respondents on the basis of social empowerment, N=92

S. No.	Components	Category	Frequency	Percentage
1	Social Empowerment	Low (<10)	2	2.17
		Medium (10 to 14)	38	41.30
		High (>14)	52	56.53
2	Cultural Empowerment	Low (<9)	0	0.00
		Medium (9 to 11)	6	6.52
		High (>11)	86	93.48
3	Psychological Empowerment	Low (<9)	8	8.70
		Medium (9 to 12)	57	61.96
		High (>12)	27	29.35
4	Economic Empowerment	Low (<13)	20	21.74
		Medium (13 to 16)	47	51.09
		High (>16)	25	27.10
5	Technological Empowerment	Low (<8)	32	34.78
		Medium (8 to 12)	43	46.74
		High (>12)	17	18.48
6	Overall Empowerment	Low (<59)	27	29.35
		Medium (59 to 68)	51	55.43
		High (>68)	14	15.22

## Conclusion

Backyard poultry emerges as a promising avenue for promoting women's empowerment. The study evaluates five dimensions of women's empowerment, revealing that respondents demonstrate elevated levels of social and cultural empowerment through engagement in backyard poultry farming. However, a noticeable deficit in technological empowerment is observed among the majority of participants. To bridge this gap, initiatives should be undertaken to enhance awareness regarding the technological and scientific aspects of backyard poultry farming. Overall, the empowerment level for the majority of respondents falls within a moderate range. The absence of training in backyard poultry farming is recognized as a significant constraint, emphasizing the need for training programs facilitated by organizations such as Krishi Vigyan Kendras, agricultural and veterinary colleges. Respondents exhibit a high level of economic motivation, positioning them as potential beneficiaries for forthcoming poultry-related initiatives. To effectively disseminate information, especially considering the moderate information-seeking behaviour observed among respondents, the study recommends utilizing diverse communication channels with a particular focus on text and social media platforms.

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