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PPR Control Programme (PPR-CP) in small ruminant farming: A pathway of women empowerment

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Abstract

Gender-based social restrictions limit women's access to animal health service in small ruminant farming. Peste-des-Petits Ruminants (PPR) outbreak undesirably affects women. Therefore, the study the effect of PPR outbreak in women's say in decision-making, their financial freedom and their share of female in labour workforce in small ruminant farming. The study was carried out in PPR outbreak villages and PPR non-outbreak villages in Cuddalore and Tiruvallur districts, Tamil Nadu where PPR outbreaks were recorded. Data were collected from 210 small ruminant farm families comprising each 35 small ruminant farm families from the study area using personal interview method twice *i.e.*, during PPR outbreak (2020) and after three years (2023) of carrying out PPR vaccination to small ruminants. The data were subjected to percentage analysis. The study conducted during outbreak reveals that women had better say in decision-making, financial freedom and share of female in labour workforce in PPR non-outbreak villages than PPR outbreak villages. However, the study repeated after three years of PPR vaccination reveals that women had better say in decision-making, financial freedom and share of female in labour workforce in PPR vaccinated villages than PPR non-vaccinated villages. The results imply the need for gender-accommodative and gender-responsive interventions in small ruminant health service delivery including PPR-CP to strategically support the women empowerment through enhancing the health status of the small ruminants.

Keywords: Peste-des-Petits Ruminants (PPR), small ruminants, vaccination, women empowerment

Introduction

Small ruminants play vital role in food security and livelihood resilience and are key livestock species in supporting women empowerment (Omondi *et al*., 2022) [7]. As per the 20th quinquennial livestock census 2019, India had 74.26 million and 148.88 million sheep and goat population, respectively. The total sheep and goat population in Tamil Nadu was 4.5 million and 9.89 million (GoI, 2019) [3]. PPR, a highly contagious and economically important transboundary viral disease of sheep and goats with as high as 90% mortality and 100% morbidity (Govindaraj *et al*., 2016) [4]. The disease is spreading at an alarming rate over the last 15 years (OIE and FAO, 2015) [6] and a global threat (OIE, 2019) [5]. PPR is widely prevalent and endemic in almost all parts of India. Government of India (GoI) implemented National Control Programme on PPR (PPR-CP) since 2010–11 (Balamurugan *et al*., 2021) [1]. The vital role of women in small ruminant farming enables PPR-Control Programme (PPR-CP) as a mean to empower women. However, gender-based social restrictions limit women's access to animal health service and PPR outbreak undesirably affects women. While growing empirical evidence reveals that PPR vaccination supports women empowerment (Omondi *et al*., 2022) [7], there is need to study the effect of PPR outbreak in women's say in decision-making, their financial freedom and their share of female in labour workforce in small ruminant farming, as empowering women entrepreneurs can play a pivotal role in inclusive reshaping of business ecosystem (Prakruthi, 2024) [8].

Materials and Methods

The study was carried out in PPR outbreak villages and PPR non-outbreak villages in Cuddalore and Tiruvallur districts in Tamil Nadu state. Data were collected from 210 small ruminant farm families comprising each 35 small ruminant farm families from the study area using personal interview method twice *i.e.*, during PPR outbreak (2020) and three years after (2023) vaccinating small ruminants. The collected data were subjected to percentage analysis.

Table 1: Selection of respondents from Tamil Nadu

District	Block	Village	Respondent farmers (Nos.)
Cuddalore	Cuddalore	MP agaram*	35*
		Kutiyankuppam	35
	Mangalur	Korakkai	35
Tiruvallur	Ellapuram	Kalpattu*	35*
		Melmaligaipattu	35
	Kadambathur	Karanai	35
2	4	6	210 (70*+140)

*PPR outbreak village

The study conducted during outbreak reveals that women had better say in decision-making, financial freedom and share of female in labour workforce in PPR non-outbreak villages than PPR outbreak villages. However, the study repeated after three years of PPR vaccination reveals that women had better say in decision-making, financial freedom and share of female in labour workforce in PPR vaccinated villages than PPR non-vaccinated villages.

Results and Discussion

Table 2: Effect of PPR vaccination during outbreak and three years after vaccination

Particulars	Outbreak villages (n_1=70)			Non-outbreak villages (n_2=140)		
	During outbreak	3 years after PPR vaccination	Effect	During outbreak	3 years after PPR vaccination	Effect
1. Women's say in decision-making						
No	47.14	24.29	-22.86↓	47.86	44.29	-3.57↓
Partial	40.00	48.57	8.57↑	22.86	25.00	2.14↑
Yes	12.86	27.14	14.29↑	29.29	30.71	1.43↑
2. Women's Financial freedom						
No	25.71	15.71	-10.00↓	40.71	35.71	-5.00↓
Partial	41.43	45.71	4.29↑	21.43	23.57	2.14↑
Yes	32.86	38.57	5.71↑	37.86	40.71	2.86↑
3. Women's share of female in labour workforce (in man-days)						
Low (≤190.61)	8.57	4.29	-4.29↓	10.00	7.14	-2.86↓
Medium (190.62 - 276.29)	47.14	48.57	1.43↑	38.57	40.00	1.43↑
High (≥ 276.30)	44.29	47.14	2.86↑	51.43	52.86	1.43↑

The study conducted during outbreak reveals that women had better say in decision-making, financial freedom and share of female in labour workforce in PPR non-outbreak villages than PPR outbreak villages. However, the study repeated after three years of PPR vaccination reveals that women had better say in decision-making, financial freedom and share of female in labour workforce in PPR vaccinated villages than PPR non-vaccinated villages. Villages with required veterinary access facilities can provide opportunities for farm women to access animal healthcare facilities and positively influences adoption of vaccination practices (Thakur *et al*., 2024) [2]. The results imply the need for gender-accommodative and gender-responsive interventions in small ruminant health service delivery including PPR-CP to strategically support the women empowerment.

Conclusion

Rural women have greater control over small ruminants. PPR largely affects women. The differing PPR-CP facets for men and women enables differed empowerment. The global efforts aimed to achieve the goal of eradicating PPR by 2030 to confront the global threat posed by PPR which affects food system. The study states that the PPR-CP betters the women's say in decision-making, their financial freedom and their share of female in labour workforce.

References

1. Balamurugan V, Vinod Kumar K, Dheeraj R, Kurli R, Suresh KP, *et al*. Temporal and spatial epidemiological analysis of Peste des Petits Ruminants outbreaks from the past 25 years in sheep and goats and its control in India. Viruses. 2021;13:480.
2. Thakur D, Ahuja R, Sharma M, Dinesh K, Sambyal MS, Khurana SK. Adoption of scientific animal health practices among women dairy farmers in Himachal Pradesh: An ex post facto research study. Int J Agric Ext Soc Dev. 2024;7(11):158-161. DOI: https://doi.org/10.33545/26180723.2024.v7.i11c.1300.
3. Government of India. [Internet]. 2019. [cited 2024 Dec 12]. Available from: https://dahd.nic.in/sites/default/filess/Key%20Results%2BAnnexure%2018.10.2019.pdf
4. Govindaraj G, Balamurugan V, Rahman H. Estimation of economic loss of PPR in sheep and goats in India: An annual incidence-based analysis. Br J Virol. 2016;3(3s):77-85.
5. World Organisation for Animal Health. Terrestrial Animal Health Code, Volume I, General provisions, XXVIIIth edition. 2019. Paris: OIE.
6. OIE and FAO. Global strategy for the control and eradication of PPR. 2015. [Internet]. [cited 2024 Dec 16]. Available from: http://www.fao.org/3/a-i4460e.pdf
7. Omondi I, Galiè A, Teufel N, Loriba A, Kariuki E, Baltenweck I. Women's empowerment and livestock vaccination: Evidence from Peste des Petits Ruminants vaccination interventions in Northern Ghana. Animals. 2022;12(6):717.
8. Prakruthi RS. Empowering women entrepreneurs: Shaping India's inclusive future through networking. Int J Agric Ext Soc Dev. 2024;7(12):176-182. DOI: https://doi.org/10.33545/26180723.2024.v7.i12c.1398.