

Original Research Article

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## Perceived Social Attitude towards the Role of Women in Peri Urban Dairy Farming in Costal Belt of Odisha, India

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### ABSTRACT

Role of women in Peri urban dairy farming was studied with respect to access and control over resources and services and constraints faced by them by collecting data from 60 respondents in Cuttack and Jagatsinghpur districts of Odisha. The results indicated that the access and control over natural resources by men were higher for cultivable land and grazing resources whereas livestock was mostly under the joint control of men and women. Women had more access to intra house relation (45.0%) and self-help groups (56.7%) whereas men have more access to banking services (51.7%), participation in meetings (43.3%), management of labour(36.7%) and management of revenue earned (41.7%). More joint control over participation of meetings (38.3%) indicates the importance of the gender equity in the growing dairy sectors of Odisha. Among the constraints, access to technologies (98.3%) was found to be the major limitation followed by resources (88.3%) and infrastructure (75%). A higher joint access and control over technology and communication reflected relatively gender equity in the society showing the path of progress in peri urban dairy farming.

#### Keywords

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natural resources  
the constraints

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### Introduction

Dairy farming in India is a female dominated enterprise. About 75 million women as against 15 million men engage in dairying in India (Thakur and Chandar, 2006). Peri urban dairy farming offers employment and cash flow on a daily basis to the farm women and improve their livelihoods. In this system, intensification of livestock activities through modification of traditional practices and

increasing external input is widely advocated to achieve higher household income of the livestock keepers.

Most of the dairy units were usually located in peri-urban or urban areas and markets for selling milk and easily accessible offering employment options to a large number of people especially women. However, lack of awareness and adoption of scientific management practices in post-harvest milk

production technologies, gender asymmetries like access to market, income generated from sale of milk and milk products processing technologies and interventions, veterinary services, participation in dairy developmental programmes and policies are the major constraints for upliftment of farm women in peri-urban dairy farming.

Despite considerable involvement and contribution in animal husbandry, significant gender inequalities exist in access to technologies, credit, information, inputs and services probably because of inequities in ownership of productive assets in dairy sector. Women face greater constraints than men in accessing natural resources, extension services, marketing opportunities and financial services as well as in exercising their decision-making power. These constraints often prevent women from reaching their full potential and therefore compromise the achievement of overall household food security and income generation.

Most of the dairy units located in peri-urban or urban areas especially in Odisha supply fresh milk in the vicinity of cities which has huge demand for fresh milk. The farm women/milk producer work hard but the incentives received by them through dairy farming is very less. Information on the role of women, functioning and status of the dairy farming in peri-urban areas of Odisha is not well understood and study on existing characteristics and gender involvement in peri urban dairy farming is required for improving livelihood support of farm women. This study in two peri-urban zones of Cuttack and Jagatsinghpur districts of Odisha was undertaken to ascertain basic facts about the perceived attitude towards role of women in peri urban dairy farming, socio economic status of women and methods of animal management which could establish the ground for possible ways of improvement in dairy

farming, animal health and welfare of women.

## **Materials and Methods**

The present investigation studied the access and control over different resources and constraints faced by women in Cuttack and Jagatsinghpur districts of Odisha. Primary data related to number of milch cows owned, production of milk per day, constraints faced, and participation of men and women related to different activities were collected by personal interview method. A total of 60 respondents were selected randomly from both the districts. Data was also collected related to available natural resources, feeds, health care, maintenance, processing and marketing of milk and appropriate statistical tools were used to analyze the data.

## **Results and Discussion**

Men and women differ in the types of rights they have which also holds good in case of dairy farming. Women also differ from men in their preferences for dairying vis-à-vis other assets. Women could not buy livestock because income from both livestock and crop agriculture, including their vegetable plots, were controlled by men (Chawatama *et al.*, 2005). This concurs with more widespread evidence on the importance to women of informal mechanisms for obtaining livestock assets.

Even though in cases where livestock assets are owned by women, their lack of access to complementary assets and services for livestock health, production and marketing, and commercialization, particularly of milk and dairy enterprises may leads to low income. Reducing these threats may help in securing livestock assets a viable pathway out of poverty for women. In the present study, characterization of socio-economic status of farmers in dairy farming revealed that

population density, sex ratio and literacy level in Jagatsinghpur is more than Cuttack (Table 1). However, dairy animals especially cows and buffaloes are more in Cuttack and rearing of cows per household in Jagatsinghpur is more than Cuttack. Animals per household rearing level in both the districts was higher than the average level of Odisha and India reflecting the advancement in dairy farming in both the districts of Odisha.

Despite crucial contribution to livestock sector and food security, women's access to and control over natural resources remains lower than men. Access of men for natural resources is higher in cultivable land (51.7%) and grazing resources (41.7%) while the joint access is more for livestock (41.3%) and water resources (41.7%) (Table 2). Although, the control over cultivable land (45%), grazing resources (40%) is mostly the domain of men, livestock as an asset was mostly under the joint control (41.7%). In consistent with the present findings, access to green fodder throughout the year was found to be less being 57.14% in marginal farmers and 52.38% in landless labourers (Garg *et al.*, 2005; Kumar *et al.*, 2006; Kaushal *et al.*, 2012). The availability of green fodder is necessary to feed the milch animals in order to obtain higher milk production. Thus, there is need to educate the farmers about the nutritional significance of fodders so that they could grow it round the year. Further, increasing the grazing area and quality of the herbage especially the leguminous fodder through converting the waste land of the village in to pasture land in coastal belt of Odisha could contribute a lot to far.

The access (%) over financial assets especially liquid assets, credit, capital, income and critical input which is mostly in the domain of men (50, 41.7, 41.7, 50 and 51.7) (Table 3). The lower level of access and control over financial assets by the women

leads to lack of decision making which is a major limitation for women empowerment. Rural women perceived control over the activities of getting loans/credits from the banks as the responsibility of men showing very low level of participation by women (21.7%). In contrast, to present findings, 49.2% of women were found to be involved in this activity in south India (Devaki, 1999). The low participation in the study area reflects awareness and capacity building needs to be developed for farm women involved in dairy farming in Odisha.

The access (%) over physical assets showed that men have higher access on means of transport, communication, marketing and health care (50, 40, 51.7 and 40). Socio-cultural barriers continue to hinder women's access to animal health services at community level. However, more joint access over house (38.3%) and technology (45%) reflected gender equity in the society showing the path of progress in peri urban dairy farming. Similarly, men showed to have more control (%) over transport, marketing and health care (53.3, 58.3 and 41.7) where as women have more control over house asset (48.3%) and joint control over communication (55%).

The access over human assets indicates that women have more access (40%) to local knowledge which is more than men. Whereas men have more access (%) to education, training and skill up gradation, information, extension functionaries, hired labour (46.7, 50, 50, 45 and 46.7) as compared to women (Table 5). However, women have more access on family labour (40%). Similar trend was also followed in control over human assets. Women provide more labour in dairy enterprises than men, but the level of women's control of the dairy income does not commensurate with their contribution. There may be more awareness on importance of gender in market-related livestock projects.

Similar to the present findings a majority of the dairy respondents (51.67%) residing in the peri urban areas had medium level of management knowledge followed by 31.67% low and 16.66% high level of knowledge on dairy farming (Ahirwar *et al.*, 2016). The women have more access to intra house

relation (45%) and self help groups (SHG) (56.7%) whereas men have more access to banking services (51.7%), participation in meetings (43.3%), management of labour (36.7%) and management of revenue earned (41.7%) (Table 6).

**Table.1** Socio-economic Status of farmer and dairy scenario of study area

Attributes	Cuttack	Jagatsingpur	Odisha	India
<b>Total person(m)</b>	2.6	1.14	41.9	1210.7
<b>Male population (m)</b>	1.4	0.58	21.2	623.2
<b>Female population(m)</b>	1.3	0.56	20.8	587.5
<b>Density</b>	667	682	270	382
<b>Sex ratio</b>	940	968	979	943
<b>Total literacy (%)</b>	85.5	86.6	72.9	73.0
<b>Male literacy (%)</b>	91.1	92.4	81.6	80.9
<b>Female literacy (%)</b>	79.6	80.6	64.0	64.6
<b>Gender gap in literacy (%)</b>	11.6	11.8	17.6	16.2
<b>Livestock population</b>				
<b>Cattle (,000)</b>	534.6	296.9	116.2	190902.4
<b>Buffalo (,000)</b>	22.5	11.2	72.6	108702.1
<b>Livestock density (no/sq km)</b>				
<b>Cattle</b>	136.0	178.0	74.6	60.3
<b>Buffaloes</b>	5.7	6.7	4.7	34.3
<b>Percent households rearing livestock</b>				
<b>cattle_H</b>	35.6	46.9	39.1	25.9
<b>Buffaloes_H</b>	0.6	0.4	1.8	15.7
<b>Number of livestock species per 1000 human being</b>				
<b>Cattle</b>	204	261	277	158
<b>Buffaloes</b>	9	10	17	90

**Table.2** Access and control over natural resources by respondents in peri-urban dairy farming

Natural resources	Access			Control		
	Men	Women	Joint	Men	Women	Joint
<b>Cultivable land</b>	31 (51.7)	15 (25)	14 (23.3)	27 (45)	14 (23.3)	19 (31.7)
<b>Livestock</b>	23 (38.3)	12 (20)	25 (41.7)	20 (33.3)	15 (25)	25 (41.7)
<b>Grazing resources</b>	25 (41.7)	15 (25)	20 (33.3)	24 (40)	12 (20)	24 (40)
<b>Water resources</b>	15 (25)	20 (33.3)	25 (41.7)	16 (26.7)	22 (36.7)	22 (36.7)

(Figures in parenthesis indicates percentage)

**Table.3** Access and control over financial assets by respondent in peri-urban dairy farming

Financial Assets Attributes	Access			Control		
	Men	Women	Joint	Men	Women	Joint
<b>Liquid assets (money)</b>	30 (50)	15 (25)	15 (25)	22 (36.7)	18 (30)	20 (33.3)
<b>Credit/loan</b>	25 (41.7)	17 (28.3)	18 (30)	29 (48.3)	13 (21.7)	18 (30)
<b>Capital</b>	25 (41.7)	18 (30)	17 (28.3)	18 (30)	25 (41.7)	17 (28.3)
<b>Income</b>	30 (50)	20 (33.3)	10 (16.7)	22 (36.7)	28 (46.7)	10 (16.7)
<b>Critical Inputs</b>	25 (41.7)	21 (35)	14 (23.3)	27 (45)	19 (31.7)	14 (23.3)

(Figures in parenthesis indicates percentage)

**Table.4** Access and control over physical assets by respondent in peri-urban dairy farming

Physical Assets. Attributes	Access			Control		
	Men	Women	Joint	Men	Women	Joint
<b>Transport</b>	30 (50)	14 (23.3)	16 (26.7)	32 (53.3)	19 (31.7)	9 (15)
<b>Technology</b>	20 (33.3)	13 (21.7)	27 (45)	21 (35)	15 (25)	24 (40)
<b>House</b>	17 (28.3)	20 (33.3)	23 (38.3)	13 (21.7)	29 (48.3)	18 (30)
<b>Communication</b>	24 (40)	14 (23.3)	22 (36.7)	15 (25)	12 (20)	33 (55)
<b>Market</b>	31 (51.7)	14 (23.3)	15 (25)	35 (58.3)	11 (18.3)	14 (23.3)
<b>Health Centre</b>	24 (40)	15 (25)	21 (35)	25 (41.7)	14 (23.3)	21 (35)

(Figures in parenthesis indicates percentage)

**Table.5** Access and control over human assets by respondent in peri-urban dairy farming

Human assets Attributes	Access			Control		
	Men	Women	Joint	Men	Women	Joint
<b>Local knowledge</b>	20 (33.3)	24 (40)	16 (26.7)	21 (35)	24 (40)	15 (25)
<b>Formal education</b>	28 (46.7)	16 (26.7)	16 (26.7)	21 (35)	20 (33.3)	19 (31.7)
<b>Training and skill up gradation</b>	30 (50)	15 (18.3)	15 (31.7)	28 (46.7)	19 (31.7)	13 (21.7)
<b>Access to information</b>	30 (50)	20 (33.3)	10 (16.7)	29 (48.3)	20 (33.3)	11 (18.3)
<b>Access to extension functionaries</b>	27 (45)	15 (25)	18 (30)	30 (50)	18 (30)	12 (20)
<b>Family labour</b>	10 (16.7)	24 (40)	26 (43.3)	14 (23.3)	26 (43.3)	20 (33.3)
<b>Hired labour</b>	28 (46.7)	17 (28.3)	15 (25)	30 (50)	15 (25)	15 (25)

(Figures in parenthesis indicates percentage)

**Table.6** Access and control over social assets by respondent in peri-urban dairy farming

Social Assets	Access			Control		
	Men	Women	Joint	Men	Women	Joint
<b>Intra house relation</b>	14 (23.3)	27 (45)	19 (31.7)	12 (20)	27 (45)	21 (35)
<b>Members community: GP/NGO/SHG</b>	20 (33.3)	30 (50)	10 (16.7)	24 (40)	29 (48.3)	7 (11.7)
<b>Access to institutions: Banks/Research institutes</b>	31 (51.7)	14 (23.3)	15 (25)	27 (45)	15 (25)	18 (30)
<b>Participation in meetings</b>	26 (43.3)	17 (28.3)	17 (28.3)	22 (36.7)	15 (25)	23 (38.3)
<b>Management of labour</b>	22 (36.7)	18 (30)	20 (33.3)	25 (41.7)	18 (30)	17 (28.3)
<b>Management of revenue earned</b>	25 (41.7)	20 (33.3)	15 (25)	23 (38.3)	15 (25)	22 (36.7)

(Figures in parenthesis indicates percentage)

**Table.7** Constraints faced by respondents in peri-urban dairy farming

Constraints	Yes	No
Resources	53(88.3)	7(11.7)
Technology	59(98.3)	1(1.7)
Financial	30(50.0)	30(50.0)
Infrastructure	45(75.0)	15(25.0)
Marketing	42(70.0)	18(30.0)
Environment	35(58.3)	25(41.7)

(Figures in parenthesis indicates percentage)

Similarly, women had higher control over intra house relation (45%) and SHG (48.3%). More joint control over participation of meetings (38.3%) indicates the importance of the gender equity in the growing dairy sectors of Odisha. The respondents faced constraints in different aspects like resources, technology, financial, infrastructure, marketing and environment (Table 7). Access over technologies (98.3%) was found to be a major limitation followed by resources (88.3%) and infrastructure (75%).

Similar to present findings, 50 to 75 % urban milk producers lack proper marketing facilities and skill based capacity development programmes through need-based and well-tailored training programmers suitable for farm women would in turn help them to have more contacts with extension agencies (Sowjanya and Halakatti, 2015).

Peri-urban dairy farming is mostly practised to meet the demand for fresh milk in the study area revealed that the access and control over different resources and services of men is much higher than women. However, women have more access over local knowledge, family labour, intra house relations and self-help groups whereas more control of women over capital, income, house property contributed by men shows developing owning of income by women. Farm women have more power and confidence to grow through dairy farming in entrepreneurship mode for

higher income through self-help groups and cooperatives. Apart from that the access to green fodder round the year was very less and the availability of green fodder, converting grazing area and quality pasture land should be prioritized to augment milk production. There is also a need to increase the training and demonstration of technologies for farm women to have more power and confidence to grow through dairy farming in entrepreneurship mode for higher income. Despite having constrained by a number of factors, dairying in urban and peri urban areas would create employment opportunities leading to women empowerment.

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