



Adoption of dairy farming practices and productivity status of milch cows in the Union Territory of Puducherry

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Supplementary Table 1. Socio-economic profile of sample respondents

Particular	Karaikal district	Puducherry district	Overall
<i>Age of head of household (yrs)</i>			
≤ 30	0	7 (4.67)	7 (3.50)
31-40	6 (12.00)	20 (13.33)	26 (13.00)
41-50	8 (16.00)	29 (19.33)	37 (18.50)
51-60	22 (44.00)	53 (35.33)	75 (37.50)
> 60	14 (28.00)	41 (27.33)	55 (27.50)
Total	50 (100.00)	150 (100.0)	200 (100.0)
<i>Educational level</i>			
Primary	32 (64.00)	110 (73.33)	142 (71.00)
Middle school	7 (14.00)	8 (5.33)	15 (7.50)
High school	7 (14.00)	24 (16.00)	31 (15.50)
Higher secondary	2 (4.00)	2 (1.33)	4 (2.00)
Graduation	2 (4.00)	6 (4.00)	8 (4.00)
Total	50 (100.0)	150 (100.0)	200 (100.0)
<i>Dairy farming</i>			
Primary occupation	3 (6.00)	48 (32.00)	51 (25.50)
Secondary occupation	47 (94.00)	102 (68.00)	149 (74.50)
Total	50 (100.0)	150 (100.0)	200 (200.0)

Figures in parentheses indicate percentage to total.

Supplementary Table 2. Land holding pattern of sample dairy farmers

Category of farm	Karaikal		Puducherry		Overall	
	Number	Area (ha)	Number	Area (ha)	Number	Area (ha)
Marginal (≤ 1.0 ha)	8 (16.00)	5.46 (29.74)	30 (20.00)	17.21 (35.41)	38 (19.0)	22.67 (33.85)
Small (1.01-2.0 ha)	5 (10.00)	6.90 (37.58)	14 (9.33)	14.20 (29.21)	19 (9.50)	21.10 (31.50)
Medium (2.01-10.0 ha)	1 (2.00)	6.00 (32.68)	2 (1.33)	17.20 (35.38)	3 (1.50)	23.20 (34.65)
No land ownership	36 (72.00)	--	104 (69.33)	--	140 (70.0)	--
Total	50 (100.0)	18.36 (100.0)	150 (100.0)	48.61 (100.0)	200 (100.0)	66.97 (100.0)

Figures in parentheses indicate percentage to respective column total.

Supplementary Table 3. Livestock inventory in dairy farms

Particular	Karaikal (nos)	Puducherry (nos)
Native / Cross bred cows		
Milch	127	338
Dry	78	251
Repeat breeders	01	--
Total	206	589
Other livestock		
Heifers	43	148
Male calves	38	157
Female calves	31	172
Breeding bulls / Bullocks / Buffaloes	--	--
Total	112	477

Supplementary Table 4. Housing and rearing system in dairy farms

Housing/rearing system	Karaikal (206)*	Puducherry (589)*	Overall (795)*
<i>Type of housing</i>			
Pucca	5 (10.00)	26 (17.33)	31 (15.50)
Semi-pucca	11 (22.00)	25 (16.67)	36 (18.00)
Kutcha (Thatched)	34 (68.00)	99 (66.00)	133 (66.50)
Total	50 (100.0)	150 (100.0)	200 (100.0)
<i>Location</i>			
Attached to house	9 (18.00)	40 (26.67)	49 (24.50)
Separate shed	41 (82.00)	110 (73.33)	151 (75.50)
Total	50 (100.0)	150 (100.0)	200 (100.0)
<i>Flooring material</i>			
Mud	42 (84.00)	112 (74.67)	154 (77.00)
Cement	8 (16.00)	38 (25.33)	46 (23.00)
Total	50 (100.0)	150 (100.0)	200 (100.0)
<i>Type of roofing material</i>			
Asbestos	18 (36.00)	38 (25.33)	56 (28.00)
Thatched	31 (62.00)	98 (65.33)	129 (64.50)
Galvalume sheet	1 (2.00)	9 (6.00)	10 (5.00)
Tiled roofing	0	5 (3.33)	5 (2.50)
Total	50 (100.0)	150 (100.0)	200 (100.0)
<i>Rearing system</i>			
Extensive	20 (40.00)	105 (70.00)	125 (62.50)
Semi-intensive	10 (20.00)	26 (17.33)	36 (18.00)
Intensive	20 (40.00)	19 (12.67)	39 (19.50)
Total	50 (100.0)	150 (100.0)	200 (100.0)

*Total Milch Animals. Figures in parentheses indicate percentage to respective column total.

Supplementary Table 5. Milking practices adopted in the sample farms

Particular	Karaikal	Puducherry	Overall
Washing of hands before milking	50 (100.0)	150 (100.0)	200 (100.0)
Washing of udder and teats before milking	48 (96.00)	125 (83.33)	173 (86.50)
Method of milking			
Full hand milking	22 (44.00)	50 (33.33)	72 (36.00)
Stripping	28 (56.00)	100 (66.67)	128 (64.00)
Knuckling	0	0	0
Testing for mastitis detection	2 (4.00)	20 (13.33)	22 (11.00)
Total farms	50	150	200 (100.0)

Figures in parentheses indicate percentage to total farms.

Supplementary Table 6. Calf management practices adopted in the sample farms

Particular	Karaikal	Puducherry	Overall
Feeding of colostrum to new born calves within one hour of birth	50 (100.0)	150 (100.0)	200 (100.0)
Use of sterilized scissors/knife for cutting naval cord and application of tincture iodine on the naval cord	31 (62.00)	45 (30.00)	76 (38.00)
Hoof trimming	46 (92.00)	53 (35.33)	99 (49.50)
Cleaning of calves soon after delivery	50 (100.0)	114 (76.00)	164 (82.00)
Disbudding of calves	3 (6.00)	52 (34.67)	55 (27.50)
Deworming of calves	50 (100.0)	116 (77.33)	166 (83.00)
Total farms	50	150	200 (100.0)

Figures in parentheses indicate percentage to total farms.

Supplementary Table 7. Constraints faced by farmers in dairy farming

Constraint	Karaikal		Puducherry	
	Garrett Score	Rank	Garrett Score	Rank
<i>Production constraints</i>				
No-availability of green fodder	59.48	II	55.95	II
Lack of grazing lands	65.48	I	57.41	I
Inadequate veterinary services	59.28	III	53.12	III
Labour scarcity	38.62	V	39.53	VI
Outbreak of diseases	35.84	VI	46.17	V
Incidence of reproductive disorders	41.30	IV	48.77	IV
<i>Technological constraints</i>				
Lack of technical support at doorsteps	59.16	III	46.13	III
Lack of training on scientific dairying	46.14	V	41.00	V
Non-availability of latest machineries	38.40	VI	39.20	VI
High cost of machineries	32.84	VII	35.98	VIII
Non-availability of improved breeds	32.70	VIII	44.75	IV
Lack of scientific knowledge on dairy farming	54.98	IV	36.25	VII
Inadequate knowledge on balanced feeding	65.96	II	65.55	II
Poor productivity of animals	70.36	I	69.54	I
<i>Socio-economic constraints</i>				
High cost of concentrates / feed	64.70	II	47.01	III
Higher wages for farm labour	48.54	III	48.05	II
High cost of medicines / treatment	39.52	V	35.06	V
High cost of parent stock cows	40.76	IV	40.20	IV
Limited land for expansion	38.52	VI	30.50	VI
Lack of government support for dairying	67.94	I	68.07	I
<i>Marketing constraints</i>				
Lack of Cooperative Milk Societies	62.20	II	50.03	VI
Lack of transport facilities	36.20	V	37.97	V
Delay in payment by Cooperatives	42.72	IV	51.93	III
Low price of milk	68.44	I	67.06	I
Distance to Cooperative Societies	58.74	III	54.96	II
Exploitation by middlemen	33.00	VI	39.11	IV