

Proposed Extension Strategy for Improving the Productivity of Cow in Dahod District under ATMA project

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ABSTRACT

The study was carried out in Dahod district. 94.96 per cent of farmers were belonged to schedule tribes from which 60.14 per cent falls under marginal farmers having less than 1 hectare land. Dahod district is second largest in cow population (5,10,442) in Gujarat State. The average daily milk production of Dahod district was 0.849 litre/day which was nearly 1.5 times less than Gujarat State (2.11 Litre/day). The recommended productivity is 2 to 3 litre/day. Thus, there was a wide gap in milk yield. SWOT analysis for cow was carried out and the gap in adoption of breed Upgradation, feed management inter calving period, health care, general management and average milk yield were suggested. Milk productivity depends on knowledge and adoption of many practices. The result shows that there was a full gap in Breed upgradation, Feed management, Washing and Cleaning of cows whereas the partial gap was observed in practices like Health care, Drinking water facility and inter calving period. To fulfill this gap, the strategies were proposed by farmers were: (1) Provide technical awareness (2) Providing technical staff, (3) Making availability of fodder and fodder seed and (4) timely availability of concentrates at low cost.

Keywords: Extension strategy, productivity of cow

INTRODUCTION

Agricultural Technology Management Agency (ATMA) project was launched in Gujarat in December, 2005. Initially in first phase, 8 districts were selected and Dahod is one of them. The Dahod district falls in middle Gujarat region of agro - climate zone. The majority of population (71.00 per cent) is tribal. This district is popularly known as "Adivasi Region". In Dahod district, 94.96 per cent farmers are belonging to schedule tribes among farming community from which 60.14 percent falls under marginal farmers having less than one hectare land. Dahod district is second and third largest in cow and goat population, respectively.

METHODOLOGY

Under ATMA project for developing the SREP the four AES of Dahod district were selected. From which four

villages viz., Bhe, Vatli, Ved and Vanzaria were selected which was represented the identical situation of AES. The participatory data collection by the multidisciplinary team (including AAU scientists and officers from all line departments) was conducted in the representative villages. The team was provided with a set of checklist and formats for collection of information. The information of Dahod district was collected in depth through Participatory Rural Appraisal (PRA) technique by multidisciplinary team during 17 to 26 July, 2006.

RESULTS AND DISCUSSION

Dahod district is second largest in cow population (i.e. 5,10,442) in Gujarat State

Table : 1 Average milk production of animals of dahod district as comparision of gujarat

Sr. No.	Animal	Dahod	Gujarat
1	Cow (Deshi)	0.849 Lit/Day	2.11 Lit/Day
2	Cow (Cross Breed)	4.694 Lit/Day	6.07 Lit/Day
3	Buffalo	1.568 Lit/Day	2.79 Lit/Day
4	Goat	0.196 Lit/Day	0.231 Lit/Day

The Table 5 indicated that the average daily milk production of Dahod district was 0.849 litre/day which was nearly 1.5 times less than Gujarat State (2.11 Litre/day). The recommended productivity is 2 to 3 litre/day. From the above data, it is clearly indicated that there is a wide gap in milk yield.

Table : 2 SWOT analysis for cow

Strengths	Weaknesses
<ul style="list-style-type: none"> ◆ Experience in dairy management ◆ Available of veterinary facilities ◆ Farmers family background is good ◆ Ready to prepare milk products after getting training in it ◆ Good market facilities 	<ul style="list-style-type: none"> ◆ Low market price ◆ Lack of finance for purchasing new cross breeds ◆ Delayed payments by the milk dairies ◆ In month of May or June cross breed animal face problem due to hot weather condition ◆ Unavailability of green fodder
Opportunities	Threats
<ul style="list-style-type: none"> ◆ Available of good cross breeds in the market ◆ Bank is ready for lending loans for purchase of animal ◆ Selling of milk in towns by milk society 	<ul style="list-style-type: none"> ◆ Private dairy is not giving better price for the milk ◆ Private dairy is not collecting the milk properly form the milk society ◆ Non available of sufficient green fodder for animals due to frequent drought conditions. ◆ May or June is very hot climate ◆ Disease problem in animals ◆ Criminalization in society

The Table 2 clearly shows the Strengths, Weakness, opportunities and Threats for developing the strategy for improving the productivity of cow.

The gap in adoption of breed Upgradation, feed management inter calving period, health care, general management and average milk yield were presented in Table 3.

Table : 3 Gap in adoption and proposed extension strategy for improving the productivity/income of cow

Sr. No.	Items	Exist	Recomomded	Gap (*)	Sp. Reasons (**)	Farmer Strat. (***)	
1	Breed upgradation						
	*	A.I.					
	a	Breed	Local	HF, Jersey	F	1,4,6	2
	b	Location					
	*	Natural Insemination :					
	a	Breed	Natural	-	F	1,4	1
b	Location						
2	Feed Management						
	a	Green fodder (Kg/day)	No fixed	20	F	2,3	1
	b	Dry fodder (Kg/day)	-	7	F	2,5	1,3
	c	Concent. gm/day	-	3000	F	1,3	1,4
	d	Minerals (gms/day)	-	50	F	1,3	1
	e	Vitamins (ml/day)	-	-	F	1,3	1

Sr. No.	Items	Exist	Recomomded	Gap (*)	Sp. Reasons (**)	Farmer Strat. (***)
3	Inter calving period	25	15	P	1,4	1
4	Health care / year					
	a HSBQ (No. of vacn.)	-	Twice/Year	P	1	1,2
	b FMD	-	Twice/Year	P	1	1,2
	c Rinder pest	-	1 / life time	P	1	1,2
	d Mastitis test	-	1-2/year	P	1	1,2
	e Thilaris	-	-	-	-	-
	f Deworming	-	Every 6 month	P	1	1,2
5	General Management					
	a. Washing/day	-	2	F	1,3,5	1
	b. Cleaning/day	-	1	F	1,3,5	1
	c. Housing (Pacca/Katcha)	K	P	P	1,3,5	1
	d. Drinking water (lts./day)	10	20	P	1,3,5	1
6	Average Milk yield lts/day	0.5-1.5	2-3	P	1 to 6	1,2,3,4
*F = Full gap		P = Partial gap		N = No gap		
** Reasons for gaps:			*** Farmer proposed extension strategies:			
1 Lack of awareness / knowledge			1 Provide technical awareness			
2 Lack of availability of fodder			2 Providing technical staff			
3 Economic poor condition			3 Making availability of fodder and fodder seeds			
4. Repeated breeding			4 Availability of concentrate at low cost			
5. Poor Management practices						
6. Lack of AI facilities						

The table 3 shown the existing gap in adoption of improved technology with their specific reasons and the proposed and the proposed extension strategies.

The reason for full gap in breed upgradation were : (i) Lack of awareness (ii) Repeated breeding and (iii) Poor management practices which will be fulfilled by farmer's proposed extension strategies i.e. Provide technical awareness and technical staff.

The main reasons for full gap in feed management were (i) Lack of awareness (ii) Lack of availability of fodder (iii) Economic poor condition and (iv) Poor management practices which will be reduced by i.e. Provide technical awareness, making availability of fodder and fodder seed and available of concentrate at low cost.

The partial gap was seen for intercalving period due to lack of awareness and repeated breeding which will be improved by providing technical awareness to farmers. The partial gap was observed in health care due to lack of awareness which will be fulfilled by providing technical

awareness and technical staff to the farming community.

In general management for washing and cleaning and partial gap for housing and drinking water were due to: (i) Lack of awareness (ii) Economic poor condition and (iii) Poor management practices which will be fulfilled by only providing technical awareness to farmers.

The partial gap was observed in average milk yield. The main reasons for the gap were : 1. Lack of awareness / knowledge 2. Lack of availability of fodder 3. Economic poor condition 4. Repeated breeding 5. Poor management practices 6. Lack of AI facilities. This gap can be improved by applying farmers proposed extension strategies, i.e. 1. Provide technical awareness 2. Providing technical staff, 3. Making availability of fodder and fodder seed and 4. Available of concentrates at low cost.

CONCLUSION

REFERENCE

Anonymous (2006) Strategic research and Extension plan of Dahod District, ATMA Project Dahod, Guajrat.