Report
Endline Survey
November 2019

External Monitoring and Evaluation of National Dairy Plan, Phase I (National Dairy Support Project)

Contract No. HO: PMU: M&E: NDPI/01

Submitted to

Project Management Unit (NDP I)
National Dairy Support Project
National Dairy Development Board
Anand, Gujarat, India

Submitted by

Development and Research Services Pvt. Ltd.
A1/19, Safdarjung Enclave
New Delhi - 110029
India

Study Team

Team Leader	:	G.V.L. Narasimha Rao
Statistician	:	Prof. A.K. Srivastava
Project Advisor	:	Dr. Prakash Gujarathi
Agricultural Marketing Expert	:	Prof. Mukunda Das
Live Stock Expert	:	Dr. A.J. John
Environment Expert	:	Dr. S Narendra Prasad
Project Coordinator	:	Mukund Kumar Chandan
Data Manager	:	Sandeep Kumar

Acknowledgements

The report of the Endline study for External Monitoring and Evaluation of the National Dairy Plan Phase I (National Dairy Support Project) is an outcome of the contract (No. HO: PMU: M&E: NDP I/01) between the Project Management Unit (PMU), National Dairy Plan I (National Dairy Support Project), National Dairy Development Board (NDDB), Anand and Development and Research Services Pvt. Ltd., New Delhi.

The report outlines the Endline findings on the four Project Development Objective (PDO) level result indicators and a bevy of other issues related to the dairying sector in the NDP I project area.

This study has benefited substantially from inputs and support from the senior management, officials of the PMU and technical/ sector experts of the NDDB at Anand and other locations across the country. The whole team of NDDB has worked very closely at all stages of the preparation, execution and finalization of the study. We express our gratitude to the whole team of the PMU and the NDDB.

The core study team undertook a wide range of consultations with the representatives of the World Bank Mission at different stages of the study. We would also like to gratefully acknowledge that the study team has immensely benefitted from these discussions.

We are also thankful to all the respondents who participated in the survey during field data collection.

We express our gratitude to our core team of experts, data collection team, data management team and report preparation and finalization team.

Mukund Kumar Chandan

Project Coordinator
Development & Research Services (P) Ltd.
New Delhi

Disclaimer

The Endline study findings are based on the data collected from the sample households selected from the 317 talukas across 18 NDP I project states. These have relatively superior endowment in milk production and infrastructure for milk procurement and milk processing.

All the findings in the report are with reference to only these talukas of the country. Any generalization for the whole state or the whole country based on the findings of this study may not reveal true picture of the entire geographical territory of the state or the country. Thus, comparison with secondary evidences may not be appropriate and relevant.

The responses from the sample households were obtained through recall method. The social group, economic group, land holding data are also based on the information as reported by the respondents.

Dairying in India shows a seasonal pattern. This survey was carried out during winter months and hence comparison with the findings of this study with the surveys conducted in different seasons may not be valid.

Table of Contents

List of Abbreviations

APL	Above Poverty Line
AP	Andhra Pradesh
AI	Artificial Insemination
BPL	Below Poverty Line
BUFF/ Buff	Buffalo
CB	Crossbred Cows
DCS	Dairy Cooperative Society, synonymously used for TDC
DRS	Development and Research Services Pvt. Ltd., the external M&E study agency
EIA	End Implementing Agency
FSU	First Stage Unit
GoI	Government of India
Ha	Hectare
HH	Household
IC	Indigenous Cow
Kg	Kilogram
Ltr(s)	Litre(s)
M&E	Monitoring and Evaluation
MAH	Milch Animal Owning Households
PC	Producer Company, synonymously used for NGC
PDO	Project Development Objective
PMU	Project Management Unit
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
RS	Random Start
Rs.	Indian Rupee
SC	Scheduled Caste, a social group recognized by the Government of India
SI	Sampling Interval
SOP	Standard Operating Procedure
SSU	Secondary Sampling Unit
ST	Scheduled Tribe, a social group recognized by the Government of India
ToT	Training of Trainer

List of Hindi Words

Hindi Word	Meaning
Antyodaya	Poorest among the poor, an economic group recognized by the Government. of India
Dudhia	Informal dairy trader
Kachcha	Uncemented/ made of mud
Pucca	Cemented
Taluka/Tehsil/Mandal	An administrative unit smaller than a district

EXECUTIVE SUMMARY

1. BACKGROUND

The National Dairy Plan was designed to meet the increasing demand for milk and milk products domestically by increasing animal productivity through scientific breeding & feeding and helping rural milk producers with greater access to the organized milk-processing sector. The first phase of the NDP, also referred to as NDP I, was launched on 19 April, 2012. It is a Central Sector Scheme of Government of India. It is being implemented by National Dairy Development Board (NDDB) in 18 States with the network of 172 End Implementing Agencies (EIAs) for the period 2011-12 to 2018-19.

The project was implemented in selected 18 States that are major milk producing states, viz. Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal. These states account for about 97 percent of the country's milk production and about 94 percent of the breed able cattle & buffalo population. However, the benefits from the project are expected to be accruing across the country.

The project development objectives are as follows:

- Increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk.
- Provide rural milk producers with greater access to the organised milk processing sector.

These objectives are being pursued through adoption of focused scientific and systematic processes in the provision of technical inputs supported by appropriate policy and regulatory measures.

The External Monitoring and Evaluation Study of the NDP I envisaged 7 rounds of studies, one round every year – 3 comprehensive surveys and 4 annual surveys. The comprehensive surveys were Baseline survey, Mid-term survey and Endline survey. The comprehensive surveys were proposed with a sample size of about 15,000 households, while the annual surveys were planned to be conducted employing one-third of the sample size adopted for the comprehensive surveys i.e. around 5,000 households.

The survey data for Baseline was collected from the sample households selected from the 189 districts across 15 NDP I project states. The Midline survey assessed the impact of two major interventions implemented under the NDP-I (RBP and VBMPS) which were expected to have impact on the four Project Development Objective (PDO) indicators by the time of Midline evaluation commencement. In due course, the project was extended to three more states viz., Jharkhand, Chhattisgarh and Uttarakhand and hence these states have also been covered during Endline survey. However, for the sake of consistency and comparison, the earlier 15 states have been considered for detailed

analysis. The analysis for additional three states has been provided separately in the present report.

The report presents estimates for two types of comparisons namely (i) programme versus control Group Comparisons; and (ii) Baseline versus Endline Comparisons.

Project Development Objectives (PDO)

- To help increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk.
- To help provide rural milk producers with greater access to the organised milk-processing sector.

Project Development Objective (PDO) Level Result Indicators

The following indicators have been used to measure achievement of project development objectives:

(a) Percent increase in milk production per animal

(b) Proportion of 'in-milk' female animals to adult female animals

(c) Proportion of total milk sold to total production

(d) Percent increase in share of milk sold to the organized sector (as a share of production)

In addition to the PDO level indicators, a number of intermediate outcome indicators have been defined to assess project performance under various project sub-components.

2. METHODOLOGY

The programme area was stratified by type of interventions. A random sample of programme Talukas and villages receiving major interventions were selected for the study purposes. Two major interventions implemented under the NDP I that were expected to have an impact on the four Programme Development Objective (PDO) indicators, were Ration Balancing Programme (RBP) and Village Based Milk Procurement System (VBMPS) interventions.

2.1 Sample Size

During the Endline survey, equal sample size from both the programmes i.e. RBP and VBMPS were taken to assess the impact on the PDO level indicators. However, the quantum of sample units covered in 15 states and 3 additional states varied.

The total sample size in the 15 states comprised 14,256 households from 1188 villages spread across 299 talukas. The sampling units for both programmes were equally divided in the programme and control area. Likewise, the sample size for the RBP and VBMPS programmes in the additional 3 states namely, Chhattisgarh, Jharkhand and Uttarakhand comprised 864 households in 72 villages spread across 18 talukas. The sampling units for both programmes were equally divided in the programme and control area.

2.2 Sampling Technique

A three stage sampling technique was adopted for both the programmes i.e. RBP & VBMPS.

2.2.1 Sampling in VBMPS areas

First Stage: Selection of Talukas

State - wise list of all the Talukasthat received VBMPS interventions was arranged in ascending order of their adult female livestock population. Then 10-11 Talukas from each state were selected using Probability Proportion to Size (PPS) Systematic Sampling procedure in which the size measure comprised the adult female livestock population. A total of 147 VBMPS Talukas were selected for survey.

Second Stage: Selection of Villages

List of all intervention villages in select talukas was further segregated into two groups viz., (1) villages where New DCS had been formed and (2) villages where DCSs were strengthened with Automatic Milk Collection Unit (AMC) / Data Processor and Milk Collection Unit (DPMCU) / Bulk Milk Coolers (BMC - single / cluster).

For new DCS, villages having no DCS provided frame for matching control villages. Similarly for strengthened DCSs, villages having DCS but without Automatic Milk Collection Unit (AMC) / Data Processor and Milk Collection Unit (DPMCU) / Bulk Milk Coolers (BMC - single / cluster) acted as sampling frame for selection of sample control villages.

For selecting sample programme villages, these lists were arranged in order of total number of adult female bovine (as in livestock census) in them. Two villages from list of programme villages were selected using PPS systematic random sampling procedure in each Taluka in which the adult female bovine population accounted for size measure.

For the two selected programme villages in each Taluka, two matching villages having similar characteristics in terms of total number of households and total number of adult female bovine were selected from the list of control villages in respective categories.

Thus, a total number of 294 programme and 294 control villages were selected for End Line survey in VBMPS implementation area.

Third Stage: Selection of Households

In order to select desired number of sample households, a comprehensive listing exercise was carried out in all the selected sample villages to generate the necessary frame of households. In sampled villages having less than 400 households (Stratum I), entire village was listed to develop the sampling frame. However, villages having more than 400 households (Stratum II) were

segmented into two or more segments (depending upon the number of households in the village) of approximately equal size. The segmentation of villages were natural wherever possible (such as *mohalla, pada* etc.) and were mutually exclusive, exhaustive and easily identifiable. Two segments were selected for the survey using PPS sampling. In all such large villages, the sampling design became a four- stage design.

From this list of households, "eligible" households were selected. A household having at least one adult female bovine was an eligible household for the purpose of this survey. The selection of the required number of households (12 HHs from each sampled village) was done using systematic sampling as per the total number of milch animal(s) owned by them.

2.2.2 Sampling in RBP areas

First Stage: Selection of Talukas

State-wise list of all the Talukas currently implementing RBP was arranged in ascending order of their adult female bovine population. Then 10-11 Talukas from each state were selected using Probability Proportion to Size (PPS) Systematic Sampling procedure in which size measure comprised the adult female bovine population. A total of 147 RBP Talukas were selected for survey.

Second Stage: Selection of Villages

List of all villages along-with intervention / programme villages for the selected Talukas were prepared. This list was further segregated in to two groups – 1) villages where RBP was implemented and 2) villages with no RBP implementation. First list comprising villages having RBP implementation provided the sampling frame for programme villages and second list having no RBP implementation constituted the frame for control villages.

Further, these two lists were arranged in order of total number of adult female bovine (as in livestock census) in them. 2 villages from list of programme villages were selected using PPS systematic random sampling procedure in each Taluka in which the adult female bovine population accounted for size measure.

For the 2 selected programme villages in each Taluka, 2 matching villages having similar characteristics in terms of total number of households and total number of adult female bovine were selected from the list of control villages without RBP implementation.

Thus, a total of 294 programme and 294 control villages were selected for Endline survey in RBP implementation area.

Third Stage: Selection of Households

In order to select desired number of HHs, a comprehensive listing exercise was carried out in all the selected sample villages to generate the necessary frame of households. In sampled villages having less than 400 households (Stratum I), entire village were listed to develop the sampling frame. However, villages having more than 400 households (Stratum II) were segmented into two or more

segments (depending upon the number of households in the village) of approximately equal size. The segmentation of villages was natural wherever possible (such as *mohalla, pada,* etc.) and were mutually exclusive, exhaustive and easily identifiable. Two segments were selected for the survey using PPS sampling. In all such large villages, the sampling design became a four- stage design.

From this list of households, "eligible" households were selected. A household having at least one adult female bovine was an eligible households for the purpose of this survey. The selection of the required number of households (12 HHs from each sampled village) was done using systematic sampling as per the total number of milch animal(s) owned by them.

2.2.3 Sampling for Environment & Social (E&S) Assessment

List of all the villages where E&S related programs have been implemented were taken from NDDB for 4 study states i.e. Bihar, Gujarat, Karnataka and Punjab. From this list, 15 villages were selected using Systematic Random Sampling technique. Subsequently, a listing was carried out in selected villages that acted as sampling frame for selecting the sample households. From this list of households, "eligible" households were selected. A household having at least one adult female bovine was an eligible households for the purpose of this survey. The selection of the required number of households (12 HHs from each sampled village) was done using systematic sampling as per the total number of milch animal(s) owned by them.

3. KEY FINDINGS

3.1 Animal Ownership and Milk Production

- The incidence of possessing milch bovine animals was found to be somewhat higher at 62 percent in programme areas, as compared to control area (59%).
- Across the species, buffalo constituted major share, followed by crossbred cows and indigenous cattle in both programme and control areas. The NDP I project area was better endowed with high yielding animals i.e., crossbred cows and buffaloes.
- While indigenous cows accounted for about one-fourth in terms of population, but they contributed only one-tenth of total milk production. On the other hand, about 75% of milch animal population comprising crossbred cows and buffaloes together accounted for about 90% of total milk production.
- The marginal farmers dominated in both programme and control area (43-45%). They also accounted for the largest share of milch animals (41-44%). However, the average milk yield per in-milk animal was the highest in case of semi-medium farmers in both programme and control areas. The average milk yield, in general, was better in programme area.
- The average in-milk yield of animals increased with the rise in herd size in the project area.

3.2 Milk Production, Consumption and Sale

The average milk production and sale per milk producing household was better in programme area (production-10.9 litres & sale-8.1 litres) than that in the control area (production-9.4 litres & sale-6.8 litres). Expectedly, the average milk production and sale per household increased with growing herd size.

Cash payment remained the major mode of payment to MAHs by both private dairies and cooperative sector (around 85-86% and 73% respectively) in both areas. The milk payment cycle for Cooperative and Private Players was relatively shorter than Dudhia.

- The private sector (private dairy and dudhia) reported paying equal or more than coops to the milk producers for cow and buffalo milk in both programme and control areas. Generally, in rural areas, dairy cooperatives are price setter for the milk producers and the other milk procuring channels follow the rate decided by the dairy cooperatives. The price of milk in case of cooperatives is generally decided based on quality of milk, which may not be always followed by other agencies. The quality based payment sometimes leads to lower rate for milk, but on the other hand, it cannot be overlooked that the absence of dairy cooperatives leads to exploitation of dairy farmers by other channels. Also, the dairy cooperatives provide range of input services like supply of cattle feed, subsidised AI & veterinary services, training & capacity building, which need to be taken into account while comparing milk prices.

- "Proximity to collection center" and "better milk price" were the main reasons for selling milk by MAHs to cooperative sector. The private dairies were preferred because of "Doorstep milk collection" and "better price" and preference for *dudhias was mainly due to "*Better milk price". Private agencies generally purchase milk through *dudhias* or middlemen who collect milk from individual producers. The advances/ loan given by *dudhias* were inferred as "Bonus" by the MAHs in many places. The producers that were in need of money preferred *dudhias*.

- At the aggregate level, among the milk producing households, the per capita availability (PCA) and consumption (PCC) of milk in the programme area have been estimated at 1798 and 746 grams per day respectively, whereas the same were reported at 1548 and 696 grams per day respectively in control area. The levels of PCA and PCC were found to be generally higher in programme areas than that of control areas. With the rise in operational land ownership, the PCA and PCC have been increasing, but till certain operational land holding levels. Similarly, the PCA and PCC have been increasing with the rise in herd size.

3.3 PDO level result indicators

In-Milk to Adult Female Ratio

- The proportion of 'in-milk' female animals, all categories taken together, to adult female animals has gone up by 4 percentage points over the baseline value during project period (67% *versus* 63% during baseline) against the targeted 3 percentage points' increase.

Milk Yield per In-Milk Animal

- From baseline to Endline, the in-milk yield of an animal has increased from 5.03 to 5.81 litres per day – registering an increase of 18 percent as against the targeted value of 10 percent. The growth in animal productivity was noticed across all categories of animals, but the crossbred cows contributed the most in achieving this growth.

Milk Sales to total Production

- This PDO level indicator was aimed to be kept at Baseline value of 65%. This parameter was more of a check-point than an indicator for improvement. It was envisaged that the incremental milk production quantity due to planned interventions under the project would proportionately increase milk consumption and sale at the household level – meaning that the incremental milk production would fetch higher income for the family, but without compromising family nutrition. The Endline survey findings revealed that there was a marginal increase (1%) in proportion of milk sold during the project period, despite increase in in-milk yield of animals.

Milk Sales to Organized Sector

- The proportion of milk sold to the organized sector in Endline survey was estimated at 59 percent–higher by 3 percentage points over the expected value of 56 percent.

- This indicator was found to be much higher in programme area (75 percent) in comparison to control area (51 percent) by end of the project.

The assessment of PDO level indicate successful achievement of the Project Development Objectives as all PDO indicators fared better than envisaged.

3.4 Animal Breeding Services

- Out of all the animals that received any breeding service during the last two years, about three-fifth of animals received only AI service, about 30 percent received only NS and around one-tenth received both AI service and NS in the study area. It may be mentioned that the coverage of AI reported under NDP I project area was more than the double than the same at the national level.

- NGO / private sector service providers were the major AI service providers catering to about 70 percent of the animals in both the programme and control areas, distantly followed by milk cooperatives.

- In case of Natural Service, the Private Bull facility was the most prominent source (63-69%), distantly followed by government bull facility and traditional breeders in both programme and control areas.

- The top three reasons for preferring AI service provider for animals in both areas were: Better

progeny, higher chances of conception and door step services. Whereas in case of NS, the major three reasons for the service provider were: Higher chances of conception, Better progeny and Traditional practices.

- The average amount paid by the MAH for availing AI service for cow was around Rs. 210 in programme as well as control area, whereas the same was found to be around Rs. 220 for buffalo.
- The average amount paid by the MAH for availing NS service for cow & buffalo was around Rs. 250 in programme as well as control area.
- The adoption of AI services in the Endline survey was the highest among MAH having more than 4 milch animals in both programme and control areas (96%), whereas it was the lowest among the MAH having one milch animal (63-64%).

3.5 Feed, Fodder and Grazing

- Out of total surveyed MAHs, 57 percent of the MAHs reported growing fodder. The incidence of growing fodder was reported higher in programme area as compared to control area.
- While private seed shops were the main source of seeds in both in programme (80%) and control (84%) areas, around 29 percent households reported DCS / MPI as the second most important source of fodder seeds in programme area as against 18 percent in control area. There was a marked improvement in this regard by DCS / MPI as only 3 percent of households reported DCS / MPI as source of fodder seed during baseline survey.
- Across all MAHs, the awareness about the certified / truthfully labelled seeds was higher in programme area (38%) as compared to control area (31%). However, if only fodder growing households were taken, the awareness level has been reported quite high. Almost 8 out of 10 fodder growing households informed that they had a knowledge about Certified/ Truthfully labelled seeds.
- Among fodder cultivating households, almost all of them reported using certified/ truthfully labelled seeds in both programme and control areas. Since Baseline, this was a welcoming change in the project area. During baseline, less than 10 percent of fodder growing households reported use of certified / truthfully labelled seeds, whereas about one third of them were not sure about the type of seed.
- Separate feeding for individual animals was predominantly followed in programme as well as control area for both green & dry fodder and concentrates. However, the incidence of separate feeding of animals was marginally higher in programme area. If one compares feeding practices prevailing at the time of baseline, the incidence of individual feeding, which was at about 60 percent. It has demonstrated significant improvement since then. This change may be attributed to the ration balancing programme, where separate feeding depending upon energy requirement of individual animal has been advocated.

- Nearly one out of four MAHs (26-27%) in both programme and control area sent their animals for grazing. Nearly 84 percent of MAHs send their animals for grazing for more than 3 months in a year. More than one-third of the MAHs in both programme and control areas reported sending animals for grazing for more than 9 months. Almost two-thirds of MAHs reported sending of all types of animals for grazing excepting pregnant animals. Common grazing land (85%) was the most preferred place where bovine animals were sent for regular grazing; followed by other uncultivated land (49-51%) and own grazing land (26-33%).

Animal Health and Management

- Only around one tenth of the MAH were aware about zoonotic diseases both in programme areas and control areas – higher than the same, which was at 6 percent during baseline survey.
- Almost all MAH members (98%) reported boiling of milk before its consumption.
- In general, groundwater (hand pumps, bore wells, wells) and piped water were the main source of drinking water for bovine animals. Use of surface water (pond / river / canal) increased marginally during rainy season in both the survey areas
- Around 60 percent of the MAHs stored dung in open area in both programme and control area. The storage of dung in manure / compost pits was somewhat higher in programme area (41%) as compared to control area (36%).
- Most of the MAHs used dung as manure for agricultural crop in both programme (81%) and control (71%) areas. About 60 percent of MAHs reported use of dung cake as fuel in programme and control area. However, its use as manure for biogas plant by households was minimal in both study areas.
- About one-fourth MAHs reported that there was no drainage. Close to one-third indicated having “kachcha” shed, whereas about 20 percent each reported having “pucca/ cemented” or “brick lined” shed. There was hardly any difference found in respect to drainage type between programme and control areas.
- Majority of the MAHs (40-48%) had drainage lines “leading to pits”, while another 27-33 percent of MAH reported to have drainage leading to “open area / agricultural field”. Use of waste for biogas plants has been reported just by 3 percent of MAH.

3.7 Socio-Economic Aspects

- Dairying was the most important source of income to nearly 11 percent MAH in programme area and 8 percent of MAH in control area. For another one-fourth of MAHs, it was the second most important source of income both programme and control area.
- During baseline, dairying was either the main or supplementary source of income for 27 percent of the MAH, which increased to about 34 percent in the programme area at the time of Endline, whereas the same reported at 31 percent in control areas.
- Of total time spent in dairying activities, nearly half was spent on feeding related activities (feeding of animals, fodder collection, chaffing of fodder and open grazing of animals). The

washing of animals, cleaning sheds and dung collection / cake preparation took nearly one third of the total time. Milking and milk marketing took around one-tenth of the total time.

- At the aggregated level, about 60 percent of total time spent in dairying activities was devoted by women. However, men dominated in activities relating to selling milk and open grazing of animals in both study areas. It may be observed that the engagement of women was significant in the activities like feeding of animals, milk & washing of animals, cleaning the shed, dung collection/ dung cake preparation and other miscellaneous activities. These activities are mostly confined to home, which are simultaneously performed by the women along with other household activities. This reaffirms the fact that in rural areas where alternate employment opportunities are limited, especially for women; dairying gives productive economic engagement to the women.

3.8 Extension Services

- The participation of MAH members in both training and demonstration was higher in programme area than in control area. Similarly the participation of women both in training and demonstration was almost equal or higher than men.
- About 4 out of 10 respondents expressed that there was a need for training and demonstration programmes in both survey areas.
- The involvement of women members in decisions related to dairying was marginally higher in programme area (71%) than in control area (67%). More women (67-73%) were involved in decision making on the aspects related to dairying than men (66-69%).

3.9 Assessment of Key Components of NDP I

RBP

- About 70 percent of the MAHs in RBP surveyed villages had reported that they knew about RBP programme. Almost all of them reported to have been approached by someone (LRP) to advise them to feed their animals as per RBP Nearly 79 percent of MAHs, approached by LRP, had reported coverage of their animals under RBP. On average 1.4 animals per MAH were covered under RBP.
- Out of the total animals covered under RBP, 53 percent animals were buffaloes, 33 percent crossbred cows and 14 percent indigenous cows. At the aggregated level, it was found that animals selected under RBP had completed about 2 lactations at the time of registration under RBP. About 66 percent of the animals have been ear-tagged at the time of registration.
- Average milk yield per animal in Endline survey which was 5.2 litres per day before RBP advisory had gone up to 6.3 litres per day post advisory Similarly, average feeding cost per animal in Endline survey was Rs. 143/- per day before RBP advisory. It has reduced to Rs. 136/- per day post advisory.

It may be reiterated that the changes in milk yield, cost of feeding and fat content were recorded purely based on the respondents' observations. No actual measurement was undertaken in this regard.

- As perceived by the respondents, the biggest benefit due to RBP was “increase in milk yield (92%)”, followed by “reduction in feeding cost (77%)”, “improvement in quality of milk (65%)”, “improvement in reproduction efficiency (65%)” and “overall improvement in health of animal (55%)”.
- Little less than half of the RBP beneficiary households reported that LRP visited their household more than once in a month, while around one third households cited that LRP had visited at least once in a month. Only about 2 percent RBP beneficiaries informed that LRP had never visited their household.
- More than 90 percent of the RBP beneficiary households confirmed that feed/ mineral mixture recommended by LRPs were easily available.
- The most important information provided by LRPs was importance of drinking water (93%) followed by vaccination of animals (88%), regular de worming of animals (86%), chaffing of fodder (83%), colostrums feeding (76%) and medicine spraying for controlling tick infestation (67%).
- At the project level, about two-thirds of beneficiaries were expressed their willingness to pay service charge to LRPs for their advisory services. Around 82 percent of RBP beneficiary households expressed their satisfaction with the services provided by LRPs.
- About 97 percent of RBP households that fed their animals as per RBP recommendations sometimes had discontinued the practice at the time of Endline survey. This indicates that though the satisfaction level for RBP was found to be high, it seems that the sustainability may be an area of concern after conclusion of NDP I project.

VBMPS

- Out of total sample villages selected for VBMPS component, in about 30 percent villages, “New DCS” was formed. In remaining (70%) villages, strengthening of existing Dairy Cooperative Societies (DCS) was carried out.
- Benefits of VBMPS reported by MAH included better milk price (88%); followed by no wastage of milk (74%); time saved in marketing of milk (43%); advantage of getting longer time for milk pouring (27%); availability of better AI service (27%); and subsidized cattle feed (20%).
- Only about 10 percent MAHs in the entire Endline study area faced some discrimination at milk collection centers. In West Bengal such proportion of MAH reporting discrimination was relatively high (23%).

3.10 Governance and Accountability Action Plan

- More than half of the MAHs (around 55%) felt that implementation of dairy related programs was transparent. Around one tenth (13%) of the MAH expressed their inability to respond on this aspect.
- Overall nearly half of the MAH (48.3%) are aware about documents covering the roles and responsibilities of DCS level officials.

- About availability of complaint register at DCS, about 35 percent each responded affirmatively and negatively. About 30 percent of respondents did not know about availability of register at DCS level.
- Less than 10 percent of the surveyed respondents were aware about someone who has ever lodged any complaint for redressal.
- Around 62 percent MAH in programme area and 47 percent in control area confirmed that they received farming related information–offering further scopes for covering more people for disseminating dairy related information.
- The major source of dairy farming related information in the programme area was DCS/ MPI, radio and friends & relatives (63% each); followed by LRP (61%); internet (57%) and private doctors who visited for the treatment (55%). Similar trend was noted in control area too.
- Around 96 percent of the MAHs confirmed that they did not face any kind of discrimination at DCS / MPI in the programme area.

Non-discrimination, transparency, accountability, action plan and complaint redressal mechanism are the key components of good governance. It has been observed that in general, the governance and complaint redressal mechanism in the project was properly placed. The negligible proportion of receipt of complaints itself divulges that the project has been executed without any discrimination.

3.11 Environment and Social Assessment

Coverage

- A total of 43 villages covering 720 households were surveyed for this assessment across 4 states namely Bihar, Gujarat, Karnataka and Punjab. This is primarily a household based survey in which 720 households have been covered.
- About 28 percent of the respondents were illiterate or literate without any formal education. Around 20 percent studied only “upto class 10th”, followed by “up to class 5th” (18.1%), “up to class 12th” (12.0%). Only about 7 percent members among them were graduates and rest of them had above graduation or some professional degree.
- Primary occupation of the household members was comprising of education (31% being students); crop cultivation (25%) and working as a housewife (19%).
- Only 5.3 percent of the household members out-migrated from village in last one year. Average tenure of migration was around 4 months in a year. The most important reason for migration was in search of alternative employment as cited by all the respondents.

Environmental Assessment

- Around 37 percent households were involved in some kind of fodder seed production. The pesticides are used more frequently in cash crops in comparison to the fodder crops. Among

the household involved in fodder crop cultivation, around 88 percent reported use of pesticides in cultivation of cash crops, whereas only 6 percent used pesticides in fodder crop cultivation.

- Around 84 percent households indicated receiving directions on pesticides use. The sources of these information were mainly shopkeepers (47%); followed by other farmers (45%) and label on container (36%). The sources of these information were mainly shopkeepers (47%); followed by other farmers (45%) and label on container (36%).
- 54 percent households kept it in a separate room with lock; 28 percent keep in cattle sheds; and nearly 18 percent keep it in other places.
- Type of protection used while applying pesticides was covering face and eyes (75%), wearing clothes covering whole body (38%) and only putting on the gloves (34%).
- Majority (73%) of the surveyed households washed hands with soap immediately after applying pesticides; followed by bathing and changing clothes (64%). But around one fourth of the surveyed were found to be at greater risk because they ate and drank directly without washing hands. About 13 percent reported having a bath and wearing same clothes after applying pesticides.
- Most of the respondents (44%) buried the empty container in soil; followed by throwing anywhere (34%) and selling the empty container (28%). Only 2 percent reuse it for other purpose. Around 16 percent of surveyed households feel that it has no effect on human health.
- The knowledge about effects of pesticides on human health is not very encouraging. Around 16 percent of surveyed households feel that it has no effect on human health.

Zoonosis

- One out of three households reported that they were aware about zoonosis. There has been significant improvement in awareness level with reference to baseline. The Strategic Environmental and Social Assessment (SESA) that was conducted before the launch of the project reported that the awareness about zoonosis was less than 10 percent.
- Those who knew about zoonosis, have opined that the most common communicable disease was brucellosis (44%); followed by rabies (34%).
- About 92 percent households had their animals vaccinated for some kind of infections. Most (76%) of the vaccination was administered at the home / animal shed of the surveyed households.
- Vaccination vials (61%) and gloves (21%) were the major waste materials after vaccination process, as perceived by the respondents. These vaccination wastes were mainly collected and taken away, as revealed by 78 percent of households. However, about 18 percent households expressed their inability to response to the issue.

Awareness of Water Management

- The major source of water used for milch animals in all the three seasons i.e., winter, summer

and rainy was the hand pump as reported by about three-fourths of households.

- The average requirement of water per animal per day was highest for buffaloes (88 liters). Crossbred cows and indigenous cows required 78 and 79 liters of water per day respectively.
- Major methods of water conservation as reported by the surveyed households were collecting rainwater in tank (66%); followed by creation of ponds (64%), deepening of tube wells / bore wells/well (38%) and farm bunding / watershed (28%)

Awareness of Fodder Conservation Methods

- Chaff cutting, dry fodder storage and silage making were the three most prominent methods of fodder conservation known by 76 percent, 57 percent and 41 percent households respectively. Due to high level of awareness on fodder conservation techniques, majority of about 77 percent households prefer buying of fodder in advance during the periods of fodder scarcity.
- Traditional method followed by families was the most prominent fodder conservation technique as reported by about 68 percent of the households. This apart, the other important sources were “DCS / Union” and “outside experts / extension worker”.

Bulk Milk Coolers (BMC)

- Around 60 percent of the DCS were found to have BMC installed at the milk collection centre. Most (67%) of the installed BMC were having a capacity of 1 KL and the balance 33% were of 2 KL. The main source of water for cleaning BMC in all seasons was either hand pump / bore well or piped water / village supply system.
- Major methods practiced by DCS to dispose waste water from BMC were “connected to pucca drain” (43%); followed by “nearby land” (18%); “soak pit” (15%) and “street near DCS” (10%).
- As reported by the interviewers, water was not stagnant near DCS in case of 63 percent of DCSs. Further, water was reportedly stagnant at disposal point (soak pit, drain or open land) in 28 percent of DCSs.
- Electricity was the main source of energy at all DCS collection centers across states. However, about one-third of these units in Bihar also used diesel for this purpose.

NDP - 1 in 3 Additional States

- Overall 43 percent of households in programme area reported owning milch animals, as against 34 percent in control area – indicating relatively higher incidence of milch animal ownership in programme area.
- At the aggregated level, the preponderance of crossbred cows was evident in programme as well as control area. However, this pattern differed across the states.
- The marginal farmers dominated in both programme (44%) as well as control (38%) area and the average in-milk yield was the highest in case of medium farmers. In general, milk yield is better across different land holding classes in programme area as compared to that in control area.

- Maximum of 50 percent MAH in programme area and 44 percent in control area have 2 adult female animals.

PDO level indicators

- Overall the proportion of 'in-milk' female animals to adult female animals was the highest in respect of IC (53%); followed by buffalo (52%); and lowest in case of CB (48%). Since the share of crossbred cows was higher in population, the proportion of in-milk animals at the aggregate level was broadly converging with the same in case of crossbred cows.
- Overall Milk yield per in-milk animal was the highest in respect of CB (8.3 litres/day); followed by buffalo (4.3 litres / day); and lowest in case of IC (2.8 litres / day) if all states taken together. Similar trend was noted both in the programme and control area. However, the animal productivity across all the species was found to better in programme area as compared to control area.
- About 78 percent of total milk produced was sold as liquid milk. The proportion of liquid milk sale with respect to milk production was higher in programme area (83%) than that in the control area (72%).
- About 70 percent of surplus milk was sold to organised channel. The value of this indicator was somewhat better in the programme area (71%) than in the control area (66%).
- Out of all the animals that received any breeding service during the last two years, the receipt of AI services by cattle was higher than that of buffaloes. About 67-75 percent indigenous cattle and 64 percent crossbred cows received AI services as against 33-44 percent of buffaloes that received the same in both programme and control area. About three-fourths of total households received AI service from NGO / Private Players, distantly followed by Government (17-21%).
- Relatively higher proportion of buffaloes received Natural breeding service in comparison to indigenous and crossbred cows. NGO / Private bull facility accounted for maximum share for providing natural service (NS) in both programme area (83%) and control area (72%)
- Less than 10 percent of total animals were insured in programme and control areas.
- Only few MAH in programme area (8-11%) and control area (5-9%) reported sending their animals for grazing.
- During last one year, only few animals were sick in both programme area (5% each category) and control area (7-10%).
- In general, bore-well and piped water were the main source of drinking water for bovine animals during all seasons in both programme and control areas. The dependence on bore well was noticeably higher during summer and rainy seasons.
- Majority of the MAHs stored dung in open area in programme area (73%) and control area (83%). Storage of dung as manure/compost pits was comparatively higher in programme area (39%), as compared to that in control area (32%).

- About one-third of MAHs reported having *kachcha* drainage structure in programme and control area. Around 20 percent of the MAHs reported having brick lined drainage structure in their animal sheds in both areas. Less than 10 percent of MAHs had pucca drainage in both the areas. A sizable proportion of MAH (Programme area 37%; control area 49%) did not have any type of drainage in their animal shed in both areas.
- The awareness about zoonosis was significantly low in control areas. About 25 percent of MAH in programme area knew that some diseases could be transmitted from animal to human being, whereas the same proportion was 11 percent in control area.
- The women of the family were highly associated with the activities like feeding animals and cleaning shed in both the areas. Their involvement was found to be the least as far as selling/ pouring of milk is concerned.
- While less than 5 percent of MAHs reported dairying as primary source of income, about 30 percent of MAHs indicated dairying as second important source of income. Almost cent-percent MAHs perceived that dairying was a source of income in both areas.
- About two-thirds MAHs were getting dairy farming related information in both areas. While DCS / MPI was the most important source of information in programme area, it was radio in case of control area.
- About 96 percent of the MAH in RBP surveyed villages were approached by LRP to advise them to feed their animals as per RBP; and 74 percent of them covered their animals under RBP.
- Before opening of the DCS / MPI, majority of MAH sold milk to dudhias (53%) or individual households (28%).
- Average milk price received by MAH was Rs. 24 per litre before opening of the DCS / MPI. They now receive better milk price (Rs.29 per liter) from DCS / MPI.
- The benefits of selling milk to DCS / MPI as perceived by the respondents were reduced spoilage of milk (83%); better price of milk (76%); advantage of getting longer time for pouring (52%); time saved in marketing milk (17%); and subsidised cattle feed (7%).

The insights generated through this Endline survey not only assess the achievements of the NDP I project, but it would also help in formulating necessary policy and programmes to accelerate the momentum of development and growth achieved in dairy industry on sustainable basis for social and economic development of dairy farmers in the country.

Chapter 1

Introduction

Chapter 1

Introduction

This chapter provides brief information on the NDP I, its components, project area, characteristics of the project area and overall framework of the External Monitoring & Evaluation Study over the NDP I project implementation period.

1.1 Background

India has one of the largest stocks of cattle and buffaloes - about 18 percent of the world's cattle and 65 percent of its buffaloes. Of total world's cow milk production, Indian contributes 12 percent, while its contribution to the total buffalo milk production of world is 72 percent. India has about 161 million breed able female buffaloes and cows. They are fed, largely, on agricultural by-products and residues. There is a symbiotic relationship between agriculture and livestock farming in India as by-products of agriculture provide feed and fodder for bovines and on the other hand, bovine provides manure and draught power for various agricultural activities.

About 63 million rural households spread across 640,867 villages in India are engaged in milk production -- with a very high proportion being landless, marginal and small farmers. Above 90 percent of rural households either do not possess any operational land or have less than 2 hectares of land. This group of households share only 53% of total operational area. However, they possess about 85% of cattle and buffaloes. Ownership of dairy animals is more evenly distributed in India as compared to operational land holdings or household income distribution.

The milk production in India was estimated at 187.7 million tonnes in 2018-19 as against about 80 million tonnes in 2000-01. Per capita availability of milk has increased from 217 grams per day (grams per day) in 2000-01 to 394 grams per day in 2018-19. The milk production in the country increased from 176.4 million tonnes in 2017-18 to 187.7 million tonnes in 2018-19 -- registering an increase of 6.4 percent, which was more than double the growth of world milk production. The growth in milk production is much higher than the growth in human population in the country, which has resulted in improved the per capita availability of milk.

The demand for milk is now growing much faster. The key drivers for growth in demand for milk are rising incomes due to high GDP growth, growing urbanization and changing food habits & life style, increase in population, export opportunities, etc. The rising domestic demand for milk and milk products can be met by enhancing milk production through appropriate and scientific approach.

1.2 The National Dairy Plan Phase I (NDP I)

The National Dairy Plan was designed to meet the increasing demand for milk and milk products domestically by increasing animal productivity through scientific breeding & feeding and helping rural milk producers with greater access to the organized milk-processing sector. The first phase of the NDP, also referred to as NDP I, was launched on 19 April, 2012. It

is a Central Sector Scheme of Government of India. It is being implemented by National Dairy Development Board (NDDB) in 18 States with the network of 172 End Implementing Agencies (EIAs) for the period 2011-12 to 2018-19. The selected 18 States are major milk producing States, viz. Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal. These States account for about 97 percent of the country's milk production and about 94 percent of the breed able cattle & buffalo population. However, the benefits from the project are expected to be accruing across the country.

The project development objectives are as follows:

- Increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk.
- Provide rural milk producers with greater access to the organised milk processing sector.

These objectives are being pursued through adoption of focused scientific and systematic processes in the provision of technical inputs supported by appropriate policy and regulatory measures.

NDP I is an externally aided project with the total outlay of Rs. 22,420 million comprising Rs. 15,840 million as International Development Association (World Bank) assistance, Rs. 1,760 million as GoI share, Rs. 2,820 million as share of EIAs that carried out the projects in participating States. Additional support of Rs. 2,000 million was provided by National Dairy Development Board and its subsidiaries for providing technical and implementation support to the project.

1.3. Components and Subcomponents of the NDP I

There are three interwoven components to the NDP I as mentioned below:

Component A: Productivity Enhancement

Sub-component A1:Improvement in the genetic merit of cattle and buffalo.

This sub-component is expected to support:

- Production of high genetic merit (HGM) cattle and buffalo bulls and import of Jersey/ HF Bulls for semen production
- Strengthening of Semen Stations/ starting new stations for producing high quality disease free semen doses
- Setting up a pilot model for viable doorstep AI delivery services (based on standard Operating Procedures [SOPs] through a professional service provider including animal tagging and performance record)

Sub-component A2: Scientific approach to feeding of milch animals to produce milk commensurate with their genetic potential and to reduce methane emission.

This sub-component is expected to support:

a) Ration Balancing Program (RBP)

b) Extension initiatives/ interventions for fodder development

Component B: Village based milk procurement systems for weighing, testing quality of milk received and making payments to milk producers.

This component includes:

a) Setting up / strengthening village dairy cooperative societies (DCS) and promoting new milk producer institutions (MPIs) / New Generation Cooperatives (NGCs)

b) Training and capacity building of milk producers and functionaries

c) Investments in village level infrastructure for milk collection and bulking

Component C: Project Management & Learning (PM & L)

This component focuses on ensuring smooth implementation and coordination of project activities, regular and timely monitoring of implementation process and outputs/ outcomes achieved, and learning through feedback to management.

The various Result & Output Indicators for these components of NDP I are outlined in Exhibit-I.

Exhibit–1: Result & Outcome Indicators

Impact/ Result Indicators

- Percent increase in milk production per animal
- Proportion of 'in-milk' female animals to adult female animals
- Proportion of total milk sold to total production
- Percent increase in share of milk sold to the organized sector (as a share of production)

Outcome/ Intermediate Result indicators

Component A: Productivity Enhancement

- Number of genetically improved bulls produced through progeny testing programme
- Number of genetically improved bulls produced through pedigree selection
- Number of semen doses produced (million doses)
- Number of villages covered by AI
- Number of AIs done annually (Million)
- Number of trained mobile AI technicians (MAITS) in the project
- Villages covered under RBP (No.)
- Animals covered by RBP (million)
- Percent reduction in cost of feeding per Kg of milk for animals covered by RBP
- Percent increase in proportion of area under green fodder with certified/ truthfully labeled seeds
- Number of Trained LRPs in the project
- Reduction in methane release per Kg. of milk produced

Component B: Milk Collection and Bulking

- Number of additional milk producers organized or enrolled into dairy coop societies (DCS)
- Number of milk producers covered by Producer Companies (PCs)
- Additional number of villages covered or strengthened for milk collection
- Milk quality based on MBR time

Component C: Project Management and Learning (PM&L):

- Establishment of effective project management unit at the NDP I project area level and establishment of key systems for coordination and management
- MIS installations

In addition to the PDO level indicators, a number of intermediate outcome indicators have been defined to assess project performance under various project sub-components.

1.4 Overall Framework and Scope of the External M&E Study

The External Monitoring and Evaluation Study of the NDP I envisaged 7 rounds of studies, one round every year – 3 comprehensive surveys and 4 annual surveys. The comprehensive surveys were Baseline survey, Mid-term survey and Endline survey. The comprehensive surveys were proposed with a sample size of about 15,000 households, while the annual surveys were planned to be conducted employing one-third of the sample size adopted for the comprehensive surveys i.e. around 5,000 households.

The focus of the study during the complete project period is on the following PDO level indicators:

- Percent increase in milk production per in-milk animal (to go up by 10 percent over the baseline value)
- Proportion of 'in-milk' female animals to adult female animals (to go up by 3 percentage points over the baseline value)
- Proportion of total milk sold to total production (to stay at baseline value)
- Percent increase in share of milk sold to the organized sector (to go up by 25 percent over baseline value)

The baseline survey data was collected from the sample households selected from the 189 districts across 15 NDP I project states. These districts have relatively superior endowment in milk production and infrastructure for milk procurement and milk processing.

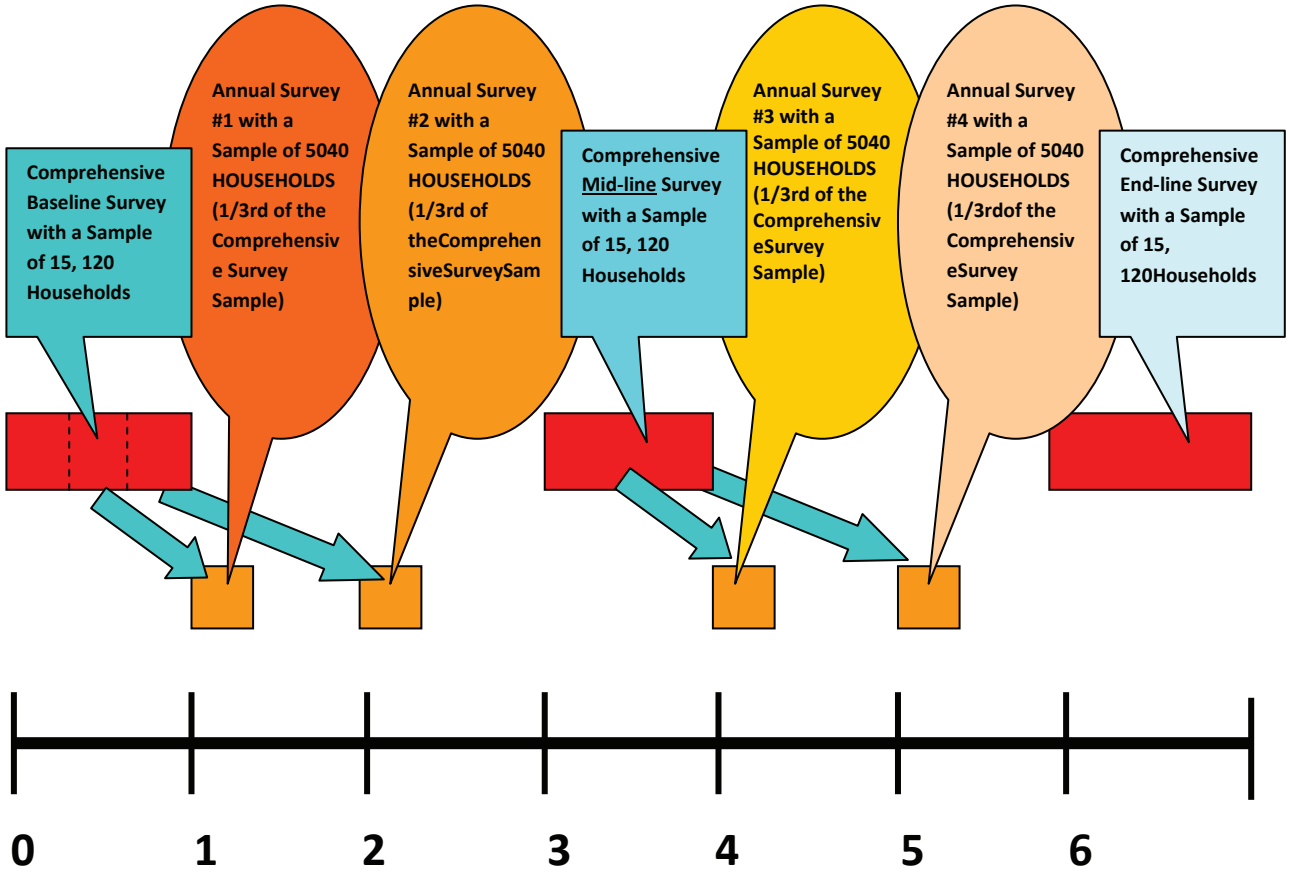
After the baseline survey, two rounds of annual surveys were undertaken followed by the Midterm survey. The Mid-term survey assessed the impact of two major interventions implemented under the NDP I (RBP and VBMPS), which were expected to have impact on the 4 (four) Project Development Objective (PDO) indicators by the time of mid-term evaluation commencement. The study also covered Environmental & Social (E & S) activities in the Progeny Testing / Pedigree Selection/Semen Station (PT / PS / SS) in implementation area. It covered 15,516 households (7980 programme + 7440 control) spread across 1285 villages (665 programme + 620 control) in 310 Talukas (156 VBMPS + 156 RBP).

Two rounds of annual surveys were undertaken again after Midterm survey followed by Endline survey. In due course, the project was extended to three more states viz., Jharkhand, Chhattisgarh and Uttarakhand and hence, these states have also been covered during Endline survey. However, for the sake of consistency and comparison, the earlier 15 states have been considered for detailed analysis. The present study report is an outcome of Endline survey undertaken by Development & Research Services, in 15 major dairying states for NDP I namely; Andhra Pradesh (divided), Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal. The analysis for additional three states has been provided separately.

The report presents estimates for two types of comparisons namely (i) programme versus control Group Comparisons; and (ii) Baseline versus Endline Comparisons.

The overall framework of the study is depicted in Exhibit-2:

Exhibit-2: Evaluation Plan



Chapter 2

Methodology

Chapter 2

Methodology

This chapter discusses aspects relating to sampling design, survey methodology (including survey tools, sample size), treatment and control samples, data collection and data quality, data analysis and estimation procedure.

2.1 Introduction

The approach and methodology for the survey proposed by DRS was finalized through close interaction and meetings with the subject experts from NDDB for better understanding of the proposed activities. The suggestions made by different stakeholders were incorporated to arrive at the appropriate research design.

2.2 Sample Size

The two flagship project components of NDP I i.e., Village Based Milk Procurement System (VBMPS) and Ration Balancing Programme (RBP) were primarily considered for arriving at sample size for assessing the progress of the project. During Endline survey, equal sample size from both the components i.e. RBP and VBMPS were taken to assess the impact on the PDO level indicators. The total sample size in the 15 states (viz., Andhra Pradesh (divided), Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal) was14,256 households from 1188 villages spread across 299 talukas. The sampling units for both programmes were equally divided in the “programme” and “control” area as provided in Table 2.1.

Table 2.1: Sample Size (14 States)

Program	Taluka	Villages			Households		
		Programme	Control	Total	Programme	Control	Total
VBMPS	152	300	300	600	3600	3600	7200
RBP	147	294	294	588	3528	3528	7056
Total	**299**	**594**	**594**	**1188**	**7128**	**7128**	**14256**

During the course of NDP I implementation, 3 additional states viz., Chhattisgarh, Jharkhand and Uttarakhand were included in the project. While these 3 states were not part of the project at the time of baseline, the study was carried out during Endline survey. On the lines of sampling methodology followed for major 15 states, the sample size for the RBP and VBMPS programmes in these 3 states comprised 864 households from 72 villages spread across 18 talukas. The sampling units for both project components were equally divided in the programme and control area as provided in Table 2.2.

Table 2.2: Sample Size (3 Additional States)

Program	Taluka	Villages			Households		
		Programme	Control	Total	Programme	Control	Total
VBMPS	6	12	12	24	144	144	288
RBP	9	18	18	36	216	216	432
Total	**15**	**30**	**30**	**60**	**360**	**360**	**720**

2.3 Sampling Technique

A three stage sampling technique was adopted for both the programmes i.e. RBP & VBMPS. The following sub-sections describe the details of the process adopted for sampling the programme and control villages for these programmes.

2.3.1 Sampling in VBMPS areas

First Stage: Selection of Talukas

State - wise list of all the Talukas that received VBMPS interventions were obtained from NDDB. This list was arranged in ascending order of their adult female livestock population. Then 10-11 Talukas from each state were selected using Probability Proportion to Size (PPS) Systematic Sampling procedure in which the size measure comprised the adult female livestock population. A total of 147 VBMPS Talukas were selected for survey.

Second Stage: Selection of Villages

List of all intervention villages for the selected Talukas were obtained. This list was further segregated into two groups –

1) villages where New DCS had been formed and

2) villages where DCSs were strengthened with Automatic Milk Collection Unit (AMC) / Data Processor and Milk Collection Unit (DPMCU) / Bulk Milk Coolers (BMC - single / cluster).

First, list comprising villages having new DCS / strengthened DCS provided the sampling frame for programme villages. For identification of control villages matching with the characteristics of programme villages, two sets of list were prepared.

For new DCS, villages having no DCS provided frame for matching control villages. Similarly for strengthened DCSs, villages having DCS but without Automatic Milk Collection Unit (AMC) / Data Processor and Milk Collection Unit (DPMCU) / Bulk Milk Coolers (BMC - single / cluster) acted as sampling frame for selection of sample control villages.

For selecting sample programme villages, these lists were arranged in order of total number of adult female bovine (as in livestock census) in them. Two villages from list of programme villages were selected using PPS systematic random sampling procedure in each Taluka in which the adult female bovine population accounted for size measure.

For the two selected programme villages in each Taluka, two matching villages having similar characteristics in terms of total number of households and total number of adult female bovine were selected from the list of control villages in respective categories.

Thus, a total number of 294 programme and 294 control villages were selected for End Line survey in VBMPS implementation area.

Third Stage: Selection of Households

In order to select desired number of sample households, a comprehensive listing exercise was carried out in all the selected sample villages to generate the necessary frame of households. In sampled villages having less than 400 households (Stratum I), entire village was listed to develop the sampling frame. However, villages having more than 400 households (Stratum II) were segmented into two or more segments (depending upon the number of households in the village) of approximately equal size. The segmentation of villages were natural wherever possible (such as *mohalla, pada* etc.) and were mutually exclusive, exhaustive and easily identifiable. Two segments were selected for the survey using PPS sampling. In all such large villages, the sampling design became a four- stage design.

From this list of households, "eligible" households were selected. A household having at least one adult female bovine was an eligible household for the purpose of this survey. The selection of the required number of households (12 HHs from each sampled village) was done using systematic sampling as per the total number of milch animal(s) owned by them.

2.4 Sampling in RBP areas

First Stage: Selection of Talukas

State - wise list of all the Talukas currently implementing RBP were obtained from NDDB. This list was arranged in ascending order of their adult female bovine population. Then 10-11 Talukas from each state were selected using Probability Proportion to Size (PPS) Systematic Sampling procedure in which size measure comprised the adult female bovine population. A total of 147 RBP Talukas were selected for survey.

Second Stage: Selection of Villages

List of all villages along-with intervention/ programme villages for the selected Talukas were prepared. This list was further segregated in to two groups – 1) villages where RBP was implemented and 2) villages with no RBP implementation. First list comprising villages having RBP implementation provided the sampling frame for programme villages and second list having no RBP implementation constituted the frame for control villages.

Further, these two lists were arranged in order of total number of adult female bovine (as in livestock census) in them. 2 villages from list of programme villages were selected using PPS systematic random sampling procedure in each Taluka in which the adult female bovine population accounted for size measure.

For the 2 selected programme villages in each Taluka, 2 matching villages having similar characteristics in terms of total number of households and total number of adult female bovine were selected from the list of control villages without RBP implementation.

Thus, a total of 294 programme and 294 control villages were selected for Endline survey in RBP implementation area.

Third Stage: Selection of Households

In order to select desired number of HHs, a comprehensive listing exercise was carried out in all the selected sample villages to generate the necessary frame of households. In sampled villages having less than 400 households (Stratum I), entire village were listed to develop the sampling frame. However, villages having more than 400 households (Stratum II) were segmented into two or more segments (depending upon the number of households in the village) of approximately equal size. The

segmentation of villages was natural wherever possible (such as *mohalla, pada,* etc.) and were mutually exclusive, exhaustive and easily identifiable. Two segments were selected for the survey using PPS sampling. In all such large villages, the sampling design became a four- stage design.

From this list of households, "eligible" households were selected. A household having at least one adult female bovine was an eligible households for the purpose of this survey. The selection of the required number of households (12 HHs from each sampled village) was done using systematic sampling as per the total number of milch animal(s) owned by them.

2.5 Sampling for Environment & Social (E & S) Assessment

List of all the villages where E&S related programs were being implemented were taken from NDDB for 4 study states i.e. Bihar, Gujarat, Karnataka and Punjab. From this list, 15 villages were selected using Systematic Random Sampling technique. Subsequently, a listing was carried out in selected villages that acted as sampling frame for selecting the sample households. From this list of households, "eligible" households were selected. A household having at least one adult female bovine was an eligible households for the purpose of this survey. The selection of the required number of households (12 HHs from each sampled village) was done using systematic sampling as per the total number of milch animal(s) owned by them.

2.6 Survey Tools

Six types of survey tools (2 for Endline evaluation and 4 for theme study) were administered in the field:

1. Listing Schedule
2. Household Schedule
3. Household Schedule for E&S
4. Farmers in ring vaccination schedule for E&S
5. MAITs Schedule for E&S
6. DCS Schedule for E&S

All the schedules were bilingual. The schedules were in English or Hindi and regional language. The schedules were translated in 9 languages, including Hindi. All the schedules were finalized after pretesting and discussions with the PMU, NDDB and the World Bank. All the schedules are furnished at Annexure-I.

2.6.1 Household Listing

House listing was administered in all selected villages to develop a comprehensive sampling frame of households through door-to-door survey of the households.

The listed households owning adult female bovine animals became the frame for selection of sample households for detailed survey. The number of households listed in each state is provided at Annexure-III.

2.7 Data Collection and Data Quality Management

The data was collected using approved bilingual schedule. From the very beginning of the survey, a number of initiatives were taken to get quality data from the field.

These initiatives included:

2.7.1 Use of Pre-tested Bilingual Schedules

Bilingual schedules were developed after several rounds of discussions with technical team on the project. These schedules were

pre-tested in actual settings. Pretesting was of immense help in firming up the flow of questions, codes, and modification in questions as well as in responses. Bilingual schedules were helpful in getting better response and were found convenient to administer in the field.

2.7.2 Training of Core Team and Trainers

NDDB team spent a week for familiarizing the experts and core team of DRS about the key subjects and issues under NDP I. Subsequent to this, two-layered training was organized – Training of Trainers (ToT) for master trainers and second layer of training for supervisors and interviewers.

Experienced field executives who had undertaken similar studies in the past in the irrespective states were selected for attending ToT. The state level training was imparted in the regional language by only those who had participated in the ToT. The duration of 2nd layer trainings were of 4 days, which included one day of field practice / visit. Uniform training content was used in each round of training. It focused on theoretical as well as the practical aspects of the issues related to the survey. This was followed by a field practice by the participants. NDDB officials were present in ToT and most of the state level trainings.

2.7.3 Deployment of Trained Team

Only trained enumerators, supervisors and state coordinators were deployed for data collection. A team of 2 persons worked in each village completing all the surveys in the selected village. Each supervisor managed 3 such teams of enumerators. Supervisors were also responsible for monitoring the quality of work in the field and sharing the summary information with the core team working on this study.

2.7.4 Quality Monitoring in the Field

Well-defined and objective quality control guidelines were prescribed. It focused oncoverage and content checks. The field supervisor and the district coordinators scrutinized some of the randomly selected schedules filled in by the interviewers, every day. They shared their observations with the interviewers during the data collection period itself for necessary improvisation. The data collection was done with prior information to NDDB.

Regular summary information was obtained from the field to monitor the quality of data by the core team.

2.7.5 Quality Check in Office

The filled in schedules were thoroughly scrutinized, edited and coded in the office before they were sent for data entry. The data entry was done using data entry software designed specifically for this project. The software had in-built logical checks. The data was again validated using software as well as manual data validation checks.

2.8 Estimation Method and Data Analysis

Estimation procedure is primarily aimed to estimate the PDO indicators of the project. Since the First Stage Units were selected using Probability Proportional to Size (PPS) Systematic Sampling method, followed by selection of second stage units by equal probability sampling, the overall sampling design is broadly self-weighting.

The analysis of data collected during Endline survey has been centered around two broad aspects:

A. Comparison of Programme versus Control

Estimates for these two groups have been made for all indicators. This is essentially "With" and "Without" comparisons. These comparisons are cross-sectional in nature. As the control villages were drawn from the same talukas with matching characteristics, the two group differences account largely for the project effects.

B. Baseline versus Endline Comparisons

Baseline and Endline estimates offer "Before" and "After" comparisons. These comparisons are temporal in nature. The baseline versus end line comparison is essentially carried out for PDO indicators only.

Most of the parameters of interest in the PDO indicators are in the form of ratios or totals. Let us consider a PDO indicator in the form of a ratio R as

$$R = Y / X$$

Where Y and X are defined as aggregated parameters, relevant to the corresponding PDO indicator. The notation used for project level parameters are R, Y, and X, whereas for state-level parameters, we use Rs, Ys and Xs. It is also noted that $Y = \sum_s Y_s$ and $X = \sum_s X_s$.

The numerator (Y) and denominator (X) for different PDO indicators in the form of ratio (R) are as follows:

PDO indicator 1: Milk Production per In-Milk Animal

Y: Total milk production

X: Number of in milk animals

PDO indicator 2: In-Milk to Adult Female Ratio

Y: Number of in milk animals

X: Number of adult female animals

PDO indicator 3: Proportion of Total Milk Sold to Total Production

Y: Total milk sold

X: Total milk produced

PDO indicator 4: Share of Milk Sold to the Organized Sector

Y: Milk sold to organized sector

X: Total milk sold

Estimation of Totals:

An estimator for the population total Y_s for s^{th} state is given by

$$\hat{Y}_s = \sum_i \sum_j \sum_k w_{sijk} y_{sijk}$$

Where $w_{sijk} = (H_{ij} Z)/(nmhZ_{ij})$ and y_{sijk} is the y-value for $(sijk)^{th}$ household. The corresponding population total for the character x i.e. X_s is estimated as

$$\hat{X}_s = \sum_i \sum_j \sum_k w_{sijk} y_{sijk}$$

The project level estimates pooled over all the states for Y and X are given as

$$\hat{Y} = \sum_s \hat{Y}_s$$

$$\hat{X} = \sum_s \hat{X}_s$$

Zi : size measure used for selecting ith FSU (taluk / mandal),

Zij = size measure used for selecting jth SSU (village) in ith FSU,

Hij = Number of listed households to be used as a frame for selection in the (ij)th village,

n: number of taluks selected in a state,

m: number of villages selected in each taluk,

h = number of households selected in (ij)th selected village.

Estimation of ratios:

Ratio $R_s = Y_s/X_s$ for s^{th} state is estimated as

$\hat{R}\hat{R}_s = \hat{Y}_s/\hat{X}\hat{X}_s$ And project level PDO indicators (in the form of ratios), pooled over all the states are estimated as

$\hat{\bar{R}}\hat{\bar{R}} = \hat{Y}/_{xx}$

However, the sampling design is almost self-weighted in nature. Therefore, sample un-weighted estimate has also been attempted.

The PDO indicators are developed for entire project area which consists of areas where programme have been implemented and those ones where it could not be done. It is assumed that these indicators in the area where programme could not be implemented, are being represented by the villages covered under control sample. Therefore, the findings related to control villages would be representative of updated baseline data without intervention and reflecting natural change only.

The baseline estimates were made for the entire proposed project area covering 1,99,515 villages. As the baseline estimates were made for the entire proposed project area – irrespective of programme and control area as the categorization not known at that point of time. Therefore, the baseline value of a particular indicator has been treated same for both the "programme" as well as "control". During Endline round, actual villages covered under NDP I project was found to be 64,140 villages. This translates into project coverage of about 32% of envisaged project area during baseline survey. Keeping this factor in mind, the Endline estimates have been suitably adjusted for coverage differences to make them comparable to the baseline estimates. The village is the unit of implementation of the programme and therefore, for comparisons purpose, number of villages has been taken as the unit. The state wise weights used for comparisons are presented in Table 2.3 below:

Table 2.3: Weights used for Baseline versus End-term Comparisons

State Code	State Name	Total Proposed Programme Villages at the time of Baseline Survey	Actual Programme Villages During End-term Survey	Uncovered Villages at the time of End-term Survey	Weights given to programme Values	Weights given to control Values
3	PUNJAB	11339	4440	6899	**0.3916**	**0.6084**
6	HARYANA	4659	1945	2714	**0.4175**	**0.5825**
8	RAJASTHAN	27634	10283	17351	**0.3721**	**0.6279**
9	UTTAR PRADESH	37894	6877	31017	**0.1815**	**0.8185**
10	BIHAR	5860	4062	1798	**0.6932**	**0.3068**
19	WEST BENGAL	19619	1678	17941	**0.0855**	**0.9145**
21	ORRISSA	16572	1970	14602	**0.1189**	**0.8811**
23	MADHYA PRADESH	10579	1774	8805	**0.1677**	**0.8323**
24	GUJRAT	15686	9936	5750	**0.6334**	**0.3666**
27	MAHRASHTRA	11191	3389	7802	**0.3028**	**0.6972**
28	ANDHRA PRADESH + TELANGANA	11119	3848	7271	**0.3461**	**0.6539**
29	KARNATKA	19141	10615	8526	**0.5546**	**0.4454**
32	KERLA	917	689	228	**0.7514**	**0.2486**
33	TAMILNADU	7305	2634	4671	**0.3606**	**0.6394**
All States		**199515**	**64140**	**135375**	**0.3215**	**0.6785**

2.9 Study Limitations

- The project was largely implemented in the districts where dairy cooperatives operate. Again, some of the components of the project like strengthening of DCS under VBMPS or RBP were generally implemented in the villages where DCS already exist. On the other hand, there may be uncovered area / districts where there is no operation of dairy cooperatives, which may generally not be under the purview of the project. The characteristics of villages belonging to these uncovered areas in terms of incidence of dairy animal ownership, herd size, composition of animals, levels of milk production and sale may be significantly different than villages attached to dairy cooperatives. Therefore, the survey data was collected from the sample households selected from the districts covered under the project may not be necessarily representative of the state and hence should be used cautiously before making any generalization for the state or the country.
- The responses from interviewees were obtained through recall method. However to minimise the recall bias, the interviewers were well trained to allow the interviewees sufficient time for adequate recall of memory.
- The findings of the study may vary to the extent of hiding information or giving wrong information by the respondents for fear of identity and other reasons.
- The actual situations at the ground level may have improved or deteriorated since the reference period of the study.

Chapter 3

Household, Animal and Milk Production

Chapter 3

Household, Animal and Milk Production

3.1 Introduction:

The rural households that own milch animals (animals that have calved at least once) have been termed as Milch Animal Owning Households (MAHs).This chapter summarises the profile of MAHs in the programme and control area. Profiling of sample households in terms of demographic indicators, milch animal herd size, composition of milch animals, their productivity and milk production pattern in programme and control area are presented in this chapter. The above parameters vary widely across states and the analysis on the same are presented in Annexure II.

3.2 Incidence of Milch Animal Ownership

As presented in Table 1 in Annexure II, about 1.09 lakh households each were listed in the programme and control villages. The incidence of possessing milch bovine animals was found to be somewhat higher at 62 percent in programme areas, as compared to control area (59%). While the incidence of milch animal ownership was relatively better in programme areas than in control areas, it may also be noted that the difference in incidence of ownership of animals in programme and control areas was statistically significant. It may be noted that during Baseline, the same proportion was reported at 35 percent.

Among the states, the difference in incidence of milch animal ownership between programme and control areas was higher in Bihar and Uttar Pradesh. The state-wise details are presented in Table 1 in Annexure-II.

3.3 Composition of Bovine Animal Holding

Though there are large number of descript and non-descript breeds among cattle and buffaloes in the project area, the study is limited to providing estimates of three broad categories of bovine namely, (i) indigenous animals (ii) crossbred animals and (iii) buffaloes.

The composition of bovine animals is furnished at Table 3.1. Across the species, buffalo constituted major share, followed by crossbred cows and indigenous cattle in both programme and control areas. In these areas, buffaloes and crossbred cows that are generally considered as better yielding animals, accounted for about 73-76 percent share.

Table 3.1: Composition of Bovine Animals (Male + Female)

Sl. No.	Animal Category	Programme	Control
1	Indigenous Cows (IC)	24	27
2	Crossbred Cows (CB)	30	29
3	Buffalo	46	44
All Categories		**100**	**100**

(State-wise analysis at Table 15 of Annexure II)

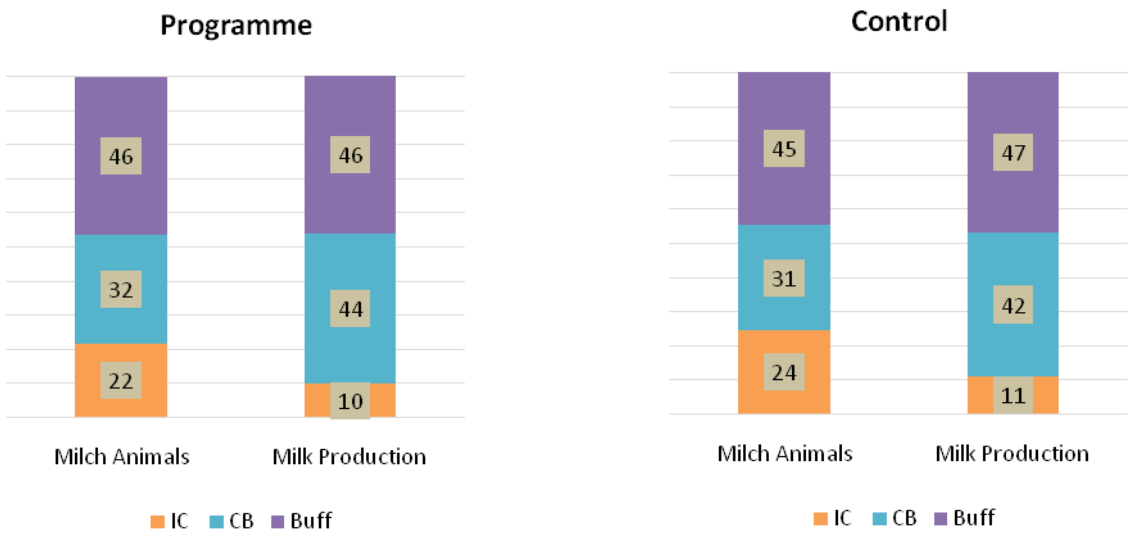
If the animal composition in NDP I project areas is compared with all the districts belonging to these 15 states, it showed a diverse pattern. The prominent difference may be observed in crossbred cows. Crossbred cattle accounted for about 30 percent in programme as well as control areas, whereas they accounted for about 18 percent, if we take all the districts of these 15 states as a base. Similarly, the population of indigenous cattle was relatively low in NDP I project areas (24-27 percent), as compared to the same at the aggregate level that was 41 percent.

These observations corroborate that NDP I project area was relatively better endowed in terms of better yielding animals.

3.4 Composition of Milch Animals and Milk Production

Animal holding profile is a reflection of the economic importance of the animals for the MAH. While the share of crossbred cows in milk production was higher than the same in milch animal population, the share of buffaloes was almost same in milk production as well as population. The indigenous cows accounted for about one-fourth in terms of population, but they contributed only one-tenth of total milk production. In other words, about 75% of milch animal population was crossbred cows and buffaloes and they together accounted for about 90% of total milk production.

Chart: 3.1 Composition of Milch Animals and Milk Production (%)

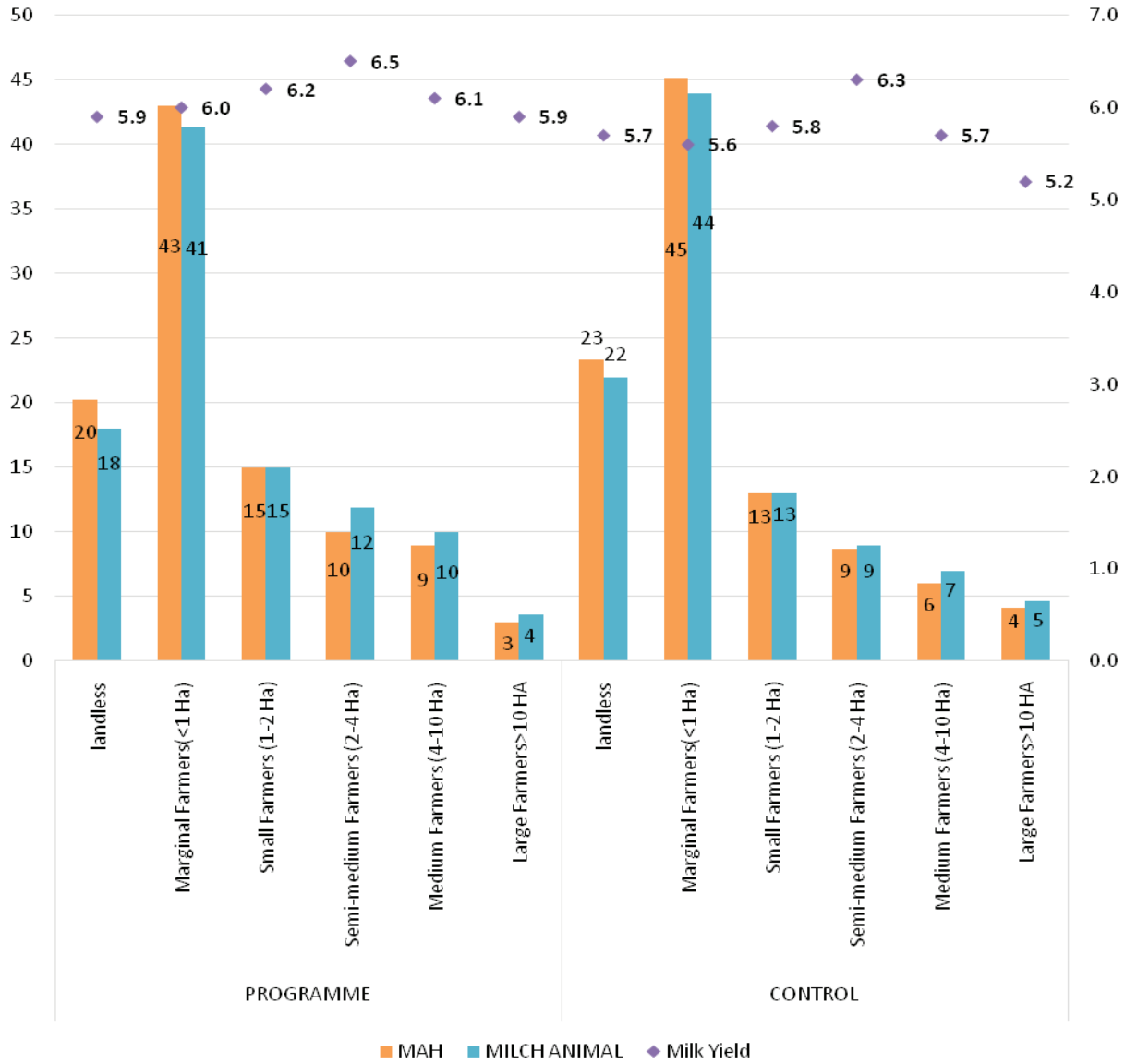


(State-wise tables at Tables 15b and 24 of Annexure II)

3.5 Distribution of MAHs, Milch Animals and In-milk Yield by Land Holding Groups

Chart 3.2 shows the distribution of MAHs, milch animals and in-milk yield by different land holding groups. In both programme and control area, similar pattern can be observed. The marginal farmers dominated in both programme area (43%) and control area (45%). They accounted for the largest share of milch animals in both programme area (41%) and control area (44%). However, the average milk yield per in-milk animal was the highest in case of semi-medium farmers in both study areas (6.3 liters in control area and 6.5 liters in programme area). In general, milk yield was better across different land holding classes in programme area as compared to that in control area. Barring large farmers, it has been observed that with the rise in operational land holding, the yield of animals were generally improving. These variations may be attributed to access to basic resources like feed and fodder contributing to milk yield.

Chart : 3.2 % Distribution of MAH, Milch Animals and Milk Yield (ltrs/ animal/ day) by Land Holding Groups



(State-wise data provided in Table 7, 23 & 29 of Annexure II)

3.6 Distribution of MAH, Milch Animals and Milk Production by Herd Size

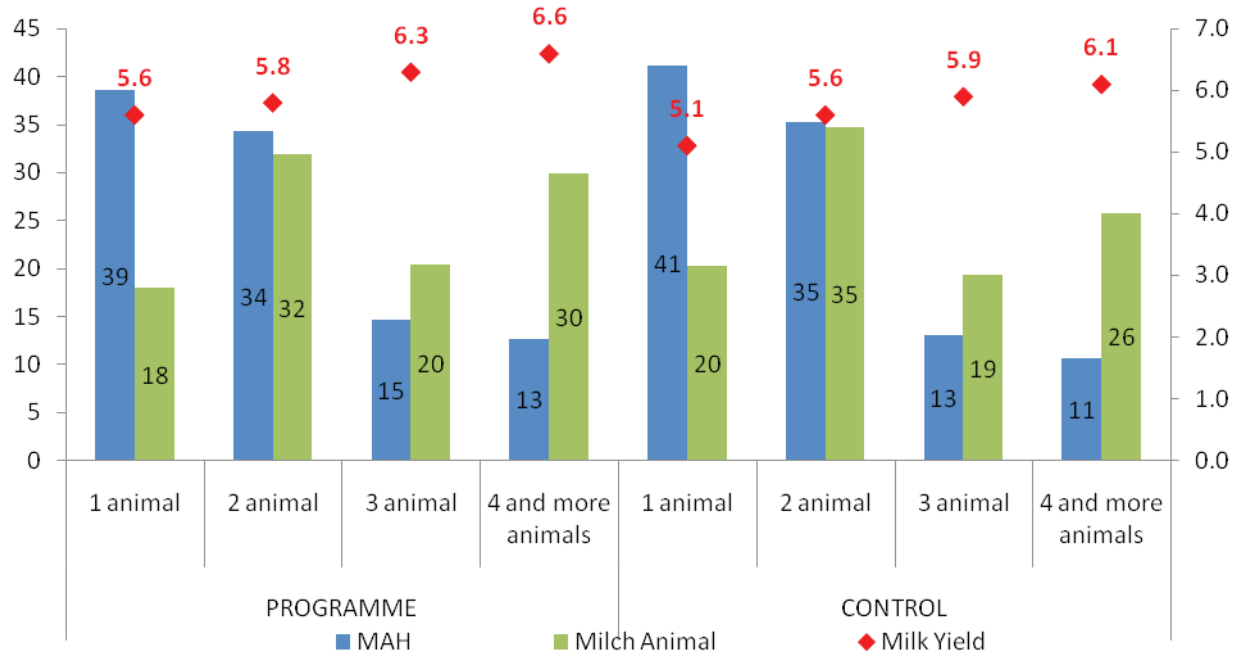
The distribution of MAHs by herd size in the project area reconfirms that the country follows small holder's centric subsistence dairy farming, essentially based on crop-residue. Only about one-tenth of MAHs reported owning more than 3 animals in both programme and control areas.

Almost 4 out of 10 MAHs owned only 1 milch animal and they accounted for about 20 percent in terms of milch animal population and milk production. About one third of MAHs reported ownership of 2 milch animals and their share in milch animal population and milk production was almost at same level.

About 15 percent of MAHs possessed 3 milch animals and they accounted for about 20 percent in milch animal population and milk production. Whereas about one-tenth of MAHs owning more than 3 milch animals accounted for more than one-fourth in total milch animal population and milk production.

With the rise in animal holding, the in-milk yield was found to be improving. This pattern was observed in both programme and control areas.

Chart 3.3 % Distribution of MAH, Milch Animals and Milk Yield (ltrs/ animal/ day) by Herd Size



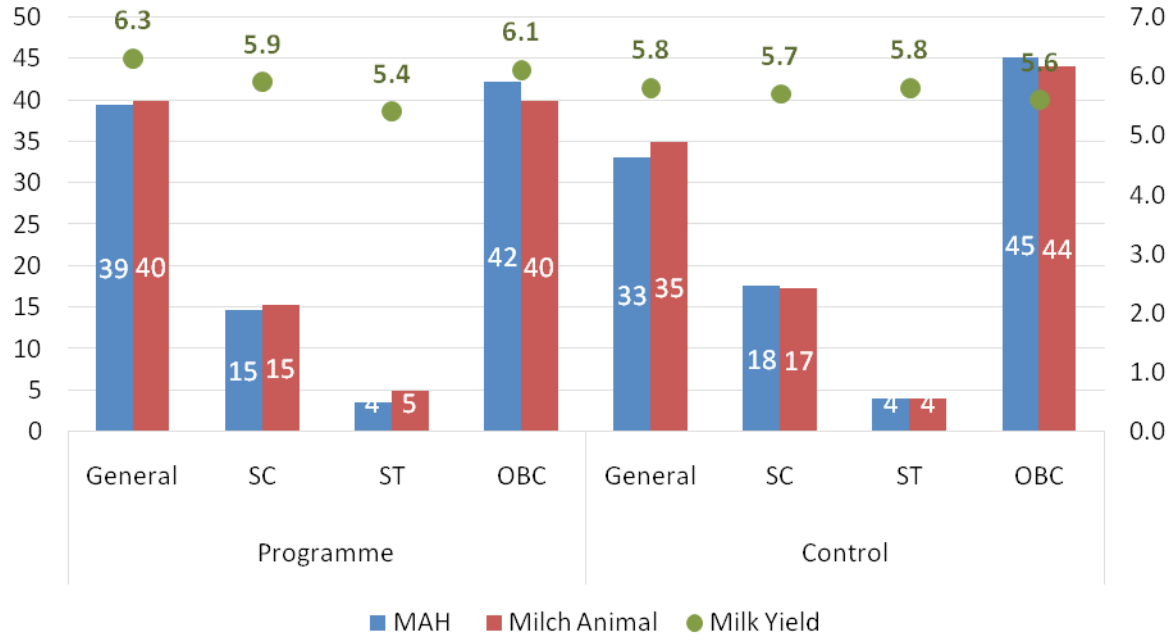
State - wise data tables can be referred to in Tables 4,7A and 26 of Annexure II.

3.7 Distribution of MAH, Milch Animals and In-milk Yield by Social Group

The pattern of distribution MAH by social groups, milch animals and in-milk yield was almost similar in both programme area and control area. OBCs, closely followed by general category of HHs, dominated in dairy animal rearing in both areas; and the ST households accounted for the lowest share (4%).

The in-milk yield levels were relatively better in case of General and OBC households in programme area. However, the same was not the case in control area.

Chart: 3.4 % Distribution of MAH, Milch Animals and Milk Yield (ltrs/ animal/ day) by Social Group



(State-wise tables provided at Tables 5, 15A and 24B of Annexure II)

Chapter 4

Milk Production, Consumption and Sale

Chapter 4

Milk Production, Consumption and Sale

4.1 Introduction

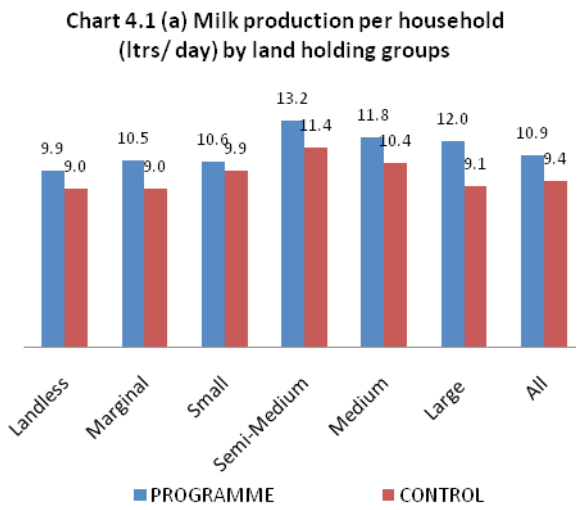
India has entered the new millennium with remarkable growth and prosperity. A major proportion of Indian economy is based on agriculture and animal husbandry wherein milk production plays vital role. India is ranked first in production of milk in the world, followed by United States. It has witnessed remarkable growth in the production and consumption of milk and dairy products in recent years. In fact India's achievement in increasing milk production is all the more commendable because unlike developed milk producing countries located in the temperate zone with a mild climate, India has a hot and humid climate -- unfavorable to milk production. Further, unlike developed dairying countries where milk is produced by a few thousand farmers with large herds, millions of small farmers in India with 1-2 animals are frontrunners in milk production system.

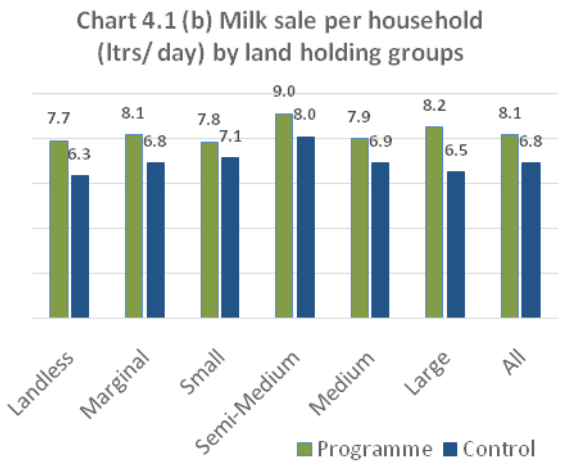
The critical factor that contributed to such an impressive growth in milk production was a successful decades-long programme -- "Operation Flood" with an objective to source milk from small farmers through formation of dairy cooperatives and link them with the urban consumers. A national milk grid was created under Operation Flood to link milk producers residing in rural hinterlands with consumers in towns and cities. The National Dairy Plan Phase I (NDP I) was launched on 19 April 2012 to further these efforts. The Plan envisaged a multi-state initiative with a focused approach to improve the productivity through scientific breeding and feeding and at the same time, providing market access to milk producers in the country.

This chapter discusses the findings on various aspects of milk production, milk sale and milk consumption in households with different characteristics in programme and control areas.

4.2 Milk Production and Sale per Milk Producing Household by Land Holding Group

Chart 4.1 displays the pattern of milk production and milk sale per milk producing household by land holding groups in programme and control area. As may be seen, in terms of both study parameters (milk production and milk sale) across all land holding classes of farmers, average milk production and sale per household was better in programme area (production 10.9 litres / HH; sale 8.1 litres / HH) than that in the control area (production 9.4 litres / HH; sale 6.8 litres / HH). In both areas, landless farmers accounted for minimum and semi-medium farmers for maximum production as well as sale of milk per household.

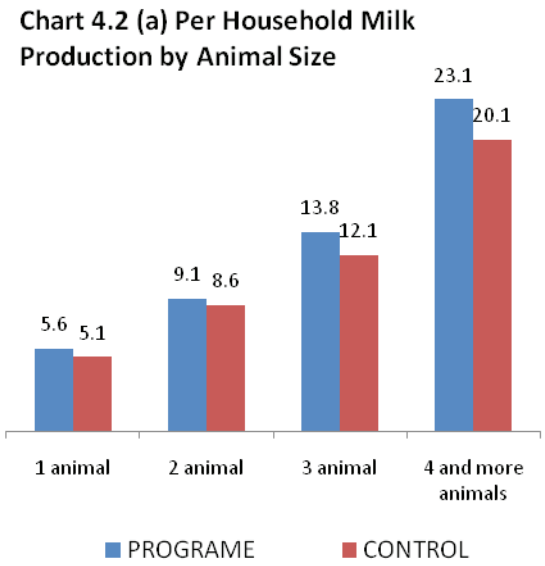


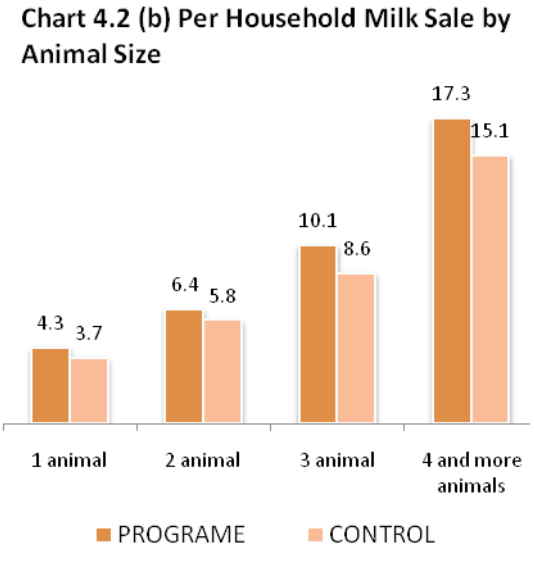


(State-wise table provided at Table 32 and 32a of Annexure II)

4.3 Milk Production and Sale per Milk Producing Household by Herd Size

It revealed that in terms of both parameters (milk production and milk sale) across the herd size groups, the output was better in programme area than that in the control area. The herd size of "4 and more animals" led in milk production and milk sale on per producing household basis in programme and control areas.





(State-wise presented in Table 33 & 33A in Annexure II)

4.4 Milk Production and Sale per Milk Producing Household by Social Group

There were not much of divergence in terms of milk production and sale per milk producing household across the social groups. However, the outcome was found to be better in programme area than that in the control area.

Chart 4.3 (a) : Per Household Milk Production by Social Group

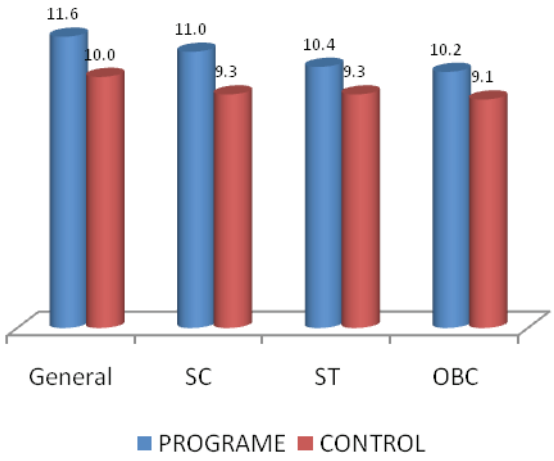
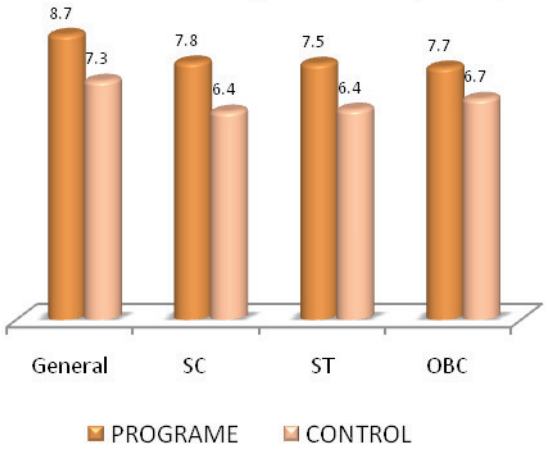


Chart 4.3 (b) : Per Household Milk Sale by Social Group



(State wise data provided at Table 30 & 30A in Annexure II)

4.5 Milk Transactions

The selection of channel for selling milk produced by the MAH depends upon host of parameters like price of milk sold, mode of payment, frequency of payments, milk testing mechanism, availability of associated input services, etc.. Discussion on these parameters is carried out in the following paragraphs.

4.5.1 Mode of Payment across Channels

Data on modes of payment to MAH by cooperative sector (DCS / MPI) and private dairies are summarized in Chart 4.4 below.

Chart 4.4a : Mode of Payment by DCS in Programme areas

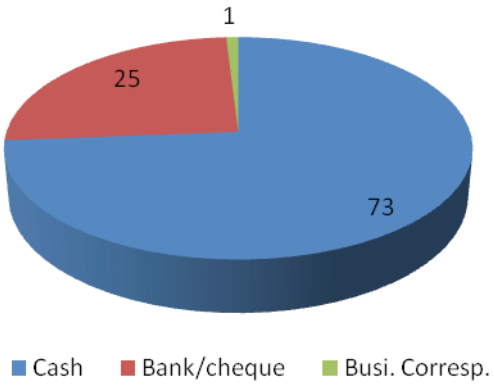


Chart 4.4b : Mode of Payment by DCS in Control areas

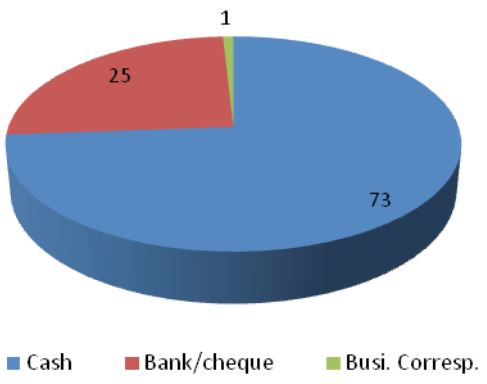


Chart 4.4c : Mode of Payment by Pvt Dairy in Program areas

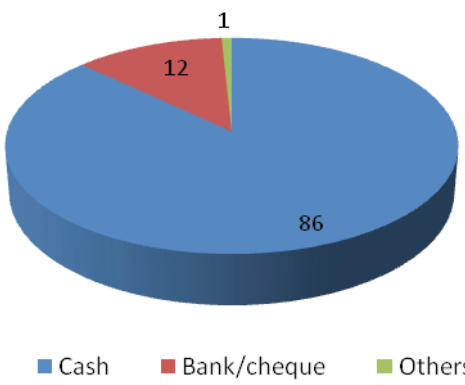
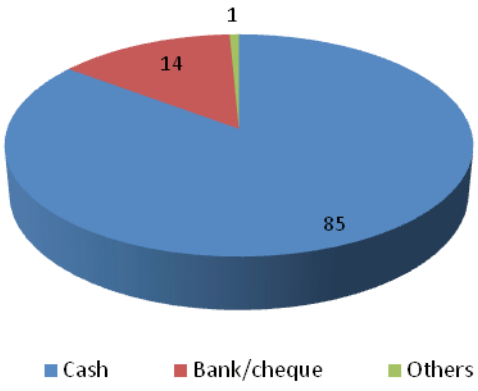


Chart 4.4d : Mode of Payment by Pvt Dairy in Control areas



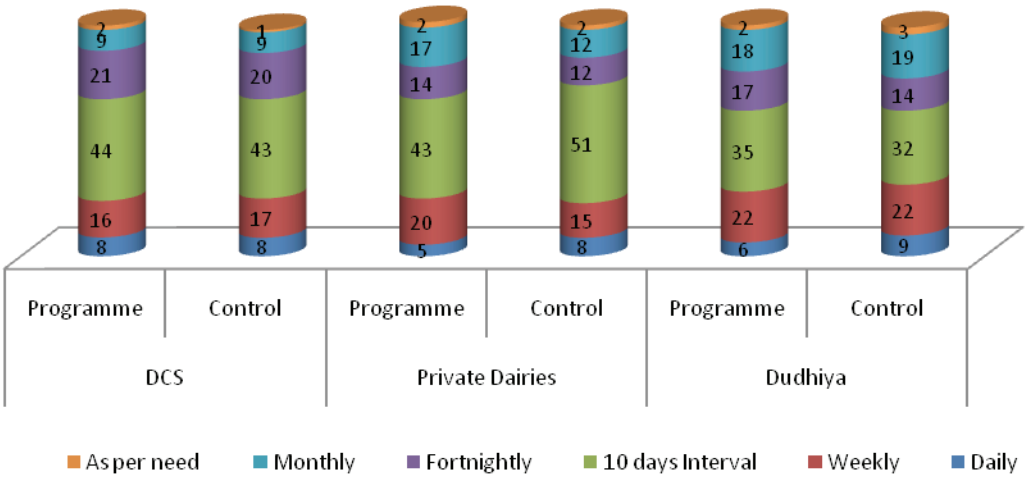
In general cash payment remained the major mode of payment to MAHs by both private dairies as well as cooperative sector (around 85-86 and 73 percent respectively). However, as compared to private dairies, there was a visible shift to payment through bank / cheque in case of dairy cooperatives both in programme as well as control areas.

State wise data tables can be referred to in Tables 37 and 38 of Annexure II.

4.5.2 Frequency of Payment across Channels

Data on frequency of payment receipts by MAH from different channels, viz. cooperative sector (DCS / NGC), private dairies and dudhias are illustrated in Chart 4.5. It can be construed that cooperative sector mostly pays the dues for milk procurement to MAH within one to two weeks' time (89% and 90% in programme and control area respectively). Among all channels, monthly payments of milk dues was quite high (18-19%) in case of dudhias in both programme and control areas.

Chart : 4.5 Frequency of Payment across Channels

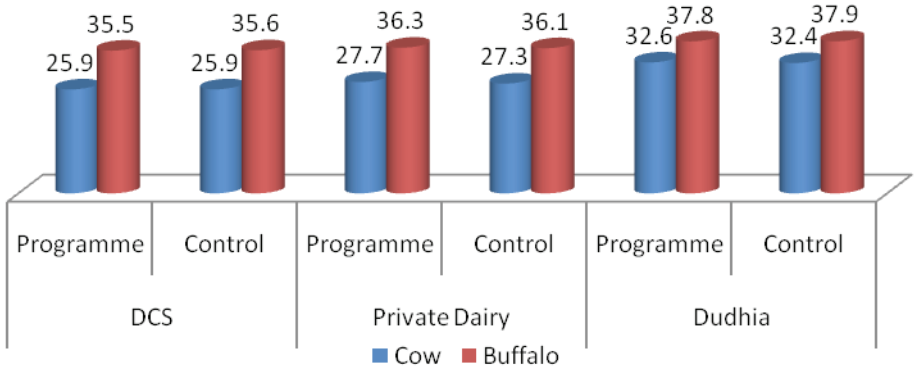


(State - wise table provided at Tables 39 to 41 of Annexure II)

4.5.3 Price Received by the Milk Producers as Reported by the MAH

From the Chart 4.6, it is apparent that the private sector (private dairy and dudhia) reported paying equal or more than coops to the milk producers for cow and buffalo milk in both programme and control areas. Generally, in rural areas, dairy cooperatives are price setter for the milk producers and the other milk procuring channels follow the rate decided by the dairy cooperatives. The price of milk in case of cooperatives is generally decided based on quality of milk, which may not be always followed by other agencies. The quality based payment sometimes leads to lower rate for milk, but on the other hand, it cannot be overlooked that the absence of dairy cooperatives leads to exploitation of dairy farmers by other channels. Also, the dairy cooperatives provide range of input services like supply of cattle feed, subsidised AI & veterinary services, training & capacity building, which need to be taken into account while comparing milk prices.

Chart :4.6 Price received by the milk producers (Rs./Ltr)



(State -wise data table furnished at Table 42 of Annexure II)

4.5.4 Reasons for Selling Milk to a Channel

Analysis of data on the reasons for selling milk to different channels viz., to cooperative sector (DCS / NGC), private Dairies and dudhias is presented in Charts 4.7, 4.8 and 4.9 respectively.

In case of dairy cooperatives, “collection centre nearby “better milk price” and “doorstep milk collection” were the main reasons for selling milk to co-operative sector, followed by “Bonus”.

In case of private dairies “doorstep milk collection” and “better price” emerged as the major reasons in both in programme and control area.

In case of Dudhias “better milk price” comes out as a major reason in both programme and control area for selling milk to this channel.

Across the channels, “Bonus” was prominent in case of dairy cooperatives. While some respondents reported “bonus” given by dudhias, but upon probing, it was learnt that the “advance money” given by dudhias was perceived as “bonus” by the respondents.

Chart : 4.7 Reasons for Selling Milk to Cooperative Sector

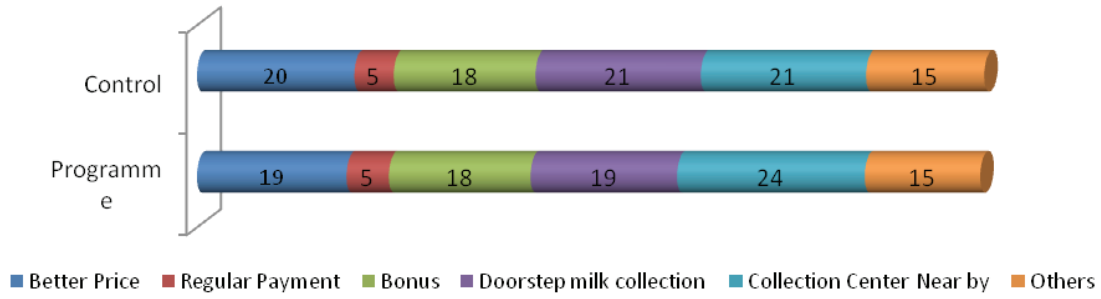


Chart :4.8 Reasons for Selling Milk to Private Dairies

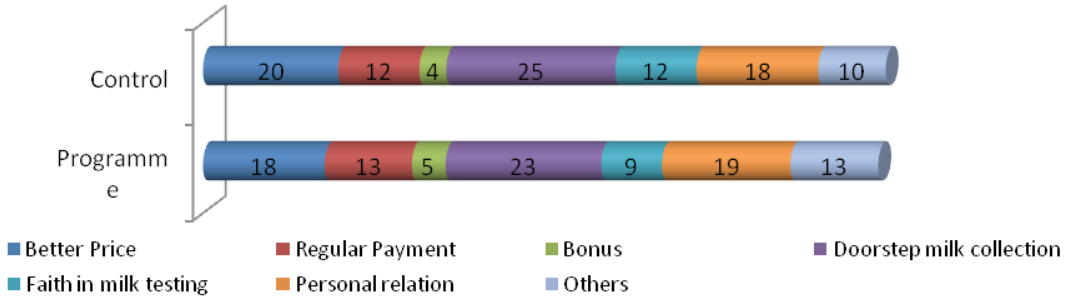
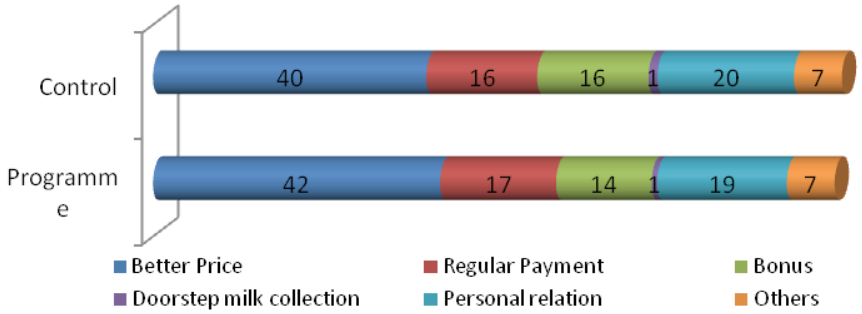


Chart :4.9 Reasons for Selling Milk to Dudhias



(State - wise details provided at Tables 43 to 45 of Annexure II)

4.5.6 Share of Different Channels in Total Milk Sold

Expectedly, the dairy cooperatives accounted for significant share in total milk sold in the programme areas, as compared to control areas. The dominance of unorganized sector has been observed in control areas.

TABLE 4.2: Share of Different Channels in Total Milk Soldin entire project area

PROGRAMME				CONTROL			
DCS/MPI	Neighbor/ Village Shop	Dudhia	Pvt. Dairies	DCS/MPI	Neighbor/ Village Shop	Dudhia	Pvt. Dairies
69	9	16	6	41	20	28	10

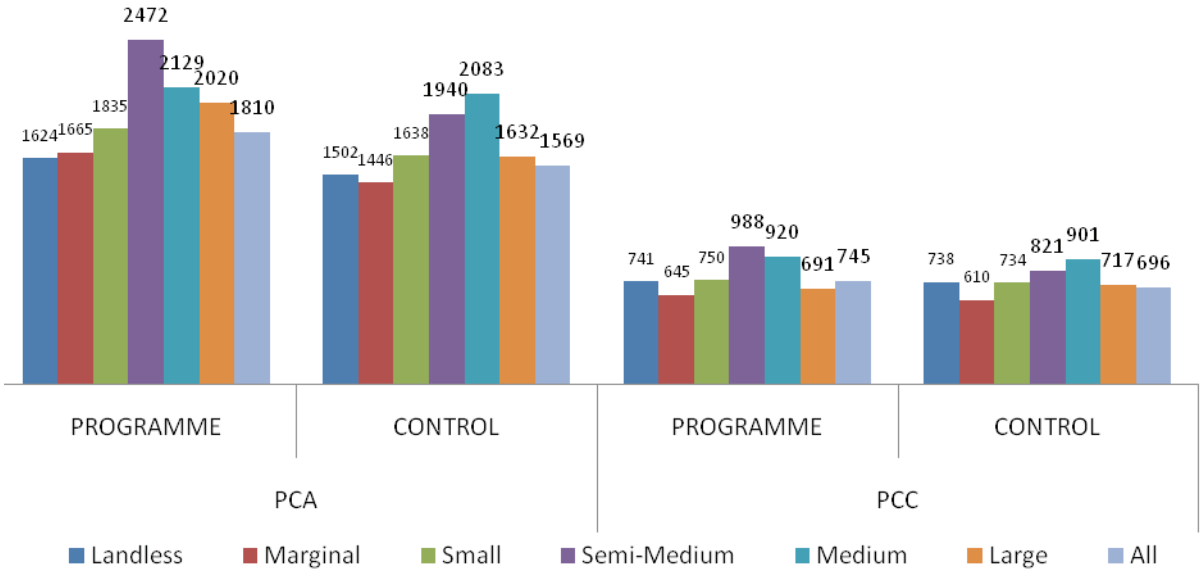
(State -wise data referred to in Table 36 of Annexure II)

4.6 Per Capita Availability and Consumption of Milk

The availability of milk and consumption is largely dependent upon socio-economic profile and dietary pattern of the households. At the aggregate level, among the milk producing households, the per capita availability (PCA) and consumption (PCC) of milk in the programme area have been estimated at 1810 and 745 grams per day respectively, whereas the same were reported at 1569 and 696 grams per day respectively in control area. With the rise in operational land ownership, the PCA and PCC have been increasing, but till certain operational land holding levels. In case of higher levels of operational land ownership, the above trend was not applicable. Also irrespective of land ownership categories, the levels of PCA and PCC were found to be generally higher in programme areas than that of control areas.

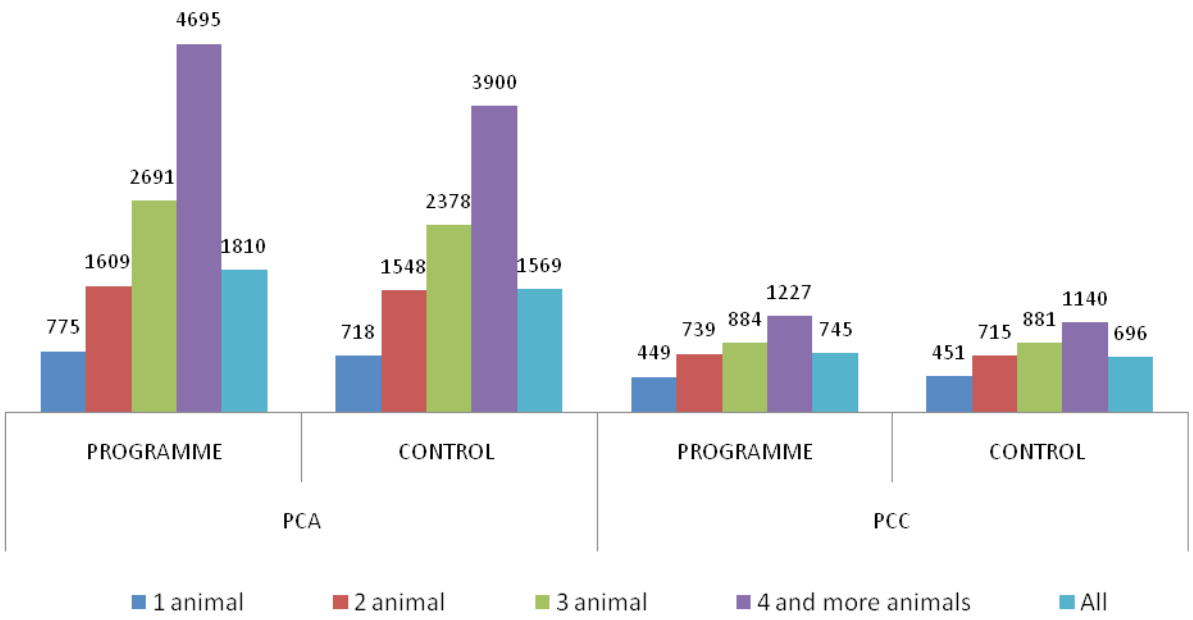
Across the herd size groups, the PCA and PCC have been increasing with the rise in herd size. The highest PCA and PCC were reported by the group owning 4 or more milch animals. If one compares PCA and PCC across different herd size groups, the rise in PCA did not translate in the proportionate rise in PCC because whatever may be the rise in supply, the consumption doesn't increase beyond a point. For instance, the PCA in "4 and more animals" household was 6 times higher than the PCA of "1 animal" households, however, the ratio of PCC between these two categories was only 3 fold.

Chart : 4.10 Per Capita Milk Availability and Consumption by Land Holding Class



(State - wise data tables furnished at Tables 45A & 45B of Annexure II)

Chart : 4.11 Per Capita Milk Availability (PCA) and Consumption (PCC) by Herd Size



(State -wise tables furnished at Tables 47 & 47A of Annexure II

Chapter 5

Assessment of Project Development Objectives

Chapter 5

Assessment of Project Development Objectives

5.1 Introduction

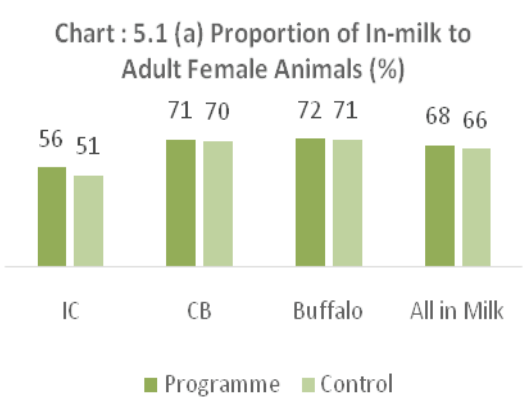
The main development objective of NDP I was to help increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk; and to help provide rural milk producers with greater access to the organized milk processing sector.

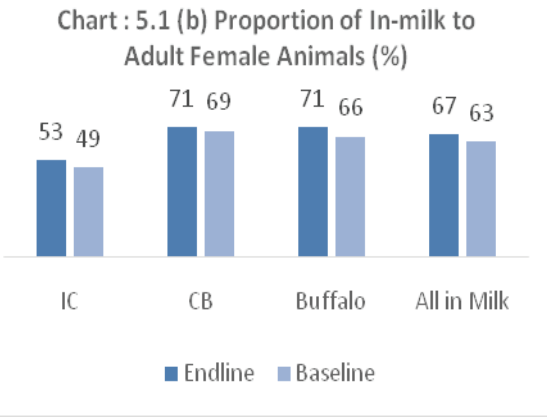
This chapter provides an assessment of the achievements of Project Development Objectives (PDO) measured through 4 PDO level result indicators that were formulated while designing the project along with their targeted values. These were: (i) Percent increase in milk production per in-milk animal (to go up by 10 percent over the baseline value); (ii) Proportion of 'in-milk' female animals to adult female animals (to go up by 3 percent over the baseline value); (iii) Proportion of total milk sold to total production (to stay at baseline value) and; (iv) Percent increase in share of milk sold to the organized sector (to go up by 25 percent over baseline value).

5.2 In-Milk to Adult Female Ratio

The in-milk to adult female ratio is an indicator of scientific animal management practices. Higher the ratio, more animals are under lactation at any point of time and hence more milk production. For improvement in this ratio, scientific animal breeding coupled with proper animal nutrition and health care are essential. In the project, the change in this parameter was envisaged mainly due to RBP intervention as genetic improvement through animal breeding is a long drawn process and during the project tenure, the impact of breeding interventions has not been envisioned on wet ratio of the herd. Evidently the proportion of 'in-milk' female animals, all categories taken together, to adult female animals has gone up by 4 percentage points over the baseline value during project period against the targeted 3 percentage points' increase.

At the aggregate level, this ratio was higher by 2 percentage points in programme area than that in control area, where the highest difference of 5 percentage points was noted in case of Indigenous cows.





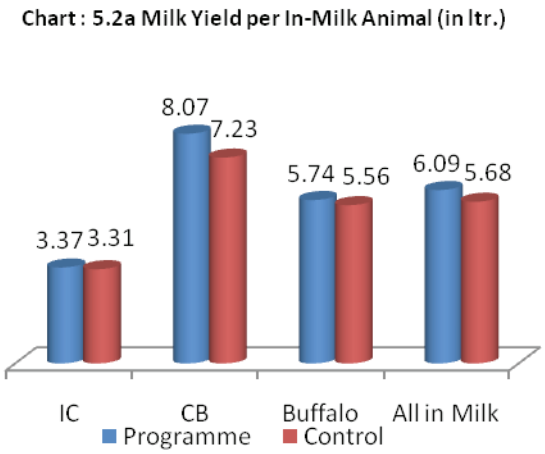
(State-wise data provided at Table 18A & 18B of Annexure II)

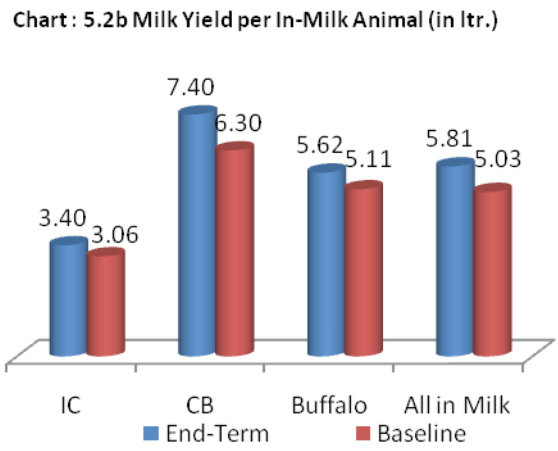
5.3 Milk Yield per In-Milk Animal

Again, this PDO level indicator is mainly related to RBP intervention, where the in-milk productivity of animal was expected to increase due to propagation and adoption of scientific feeding.

From baseline to Endline, the in-milk yield of an animal has increased from 5.03 to 5.81 litres per day – registering an increase of 18 percent as against the targeted value of 10 percent. The growth in animal productivity was noticed across all categories of animals, but the crossbred cows contributed the most in achieving this growth.

Similar pattern of growth may be witnessed across the species between programme and control areas of the project.





(State-wise data presented in Table 25A & 25B of Annexure II)

5.4 Milk Sales to total Production

"Proportion of total milk sold to total production" was one of the PDO level result indicators. This PDO level indicator was aimed to be kept at Baseline value of 65%. This parameter was more of a check-point than an indicator for improvement. It was envisaged that the incremental milk production quantity due to planned interventions under the project would proportionately increase milk consumption and sale at the household level – meaning that the incremental milk production would fetch higher income for the family, but without compromising family nutrition. The Endline survey findings revealed that there was a marginal increase (1%) in proportion of milk sold during the project period, despite increase in in-milk yield of animals.

Chart : 5.3a Liquid Milk Sold as Percent of Milk Production (%)

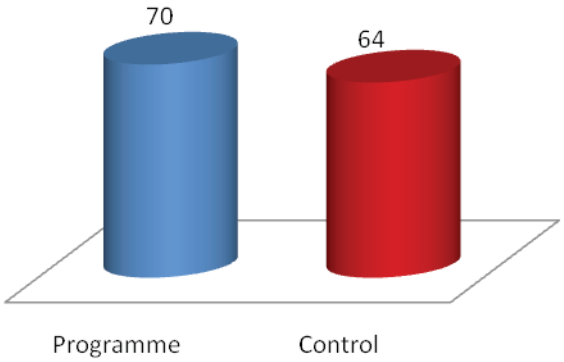
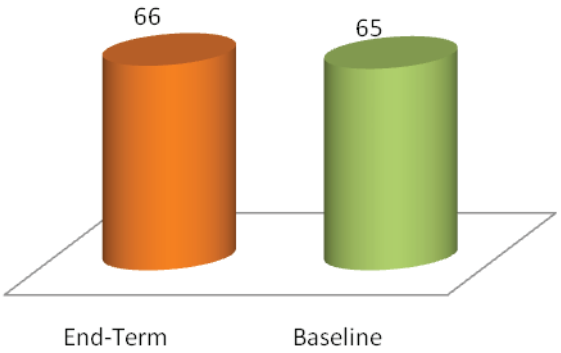


Chart : 5.3b Liquid Milk Sold as Percent of Milk Production (%)



(State - wise table provided at Table 34 of Annexure II)

5.5 Milk Sales to Organized Sector

"Share of Milk Sold to the Organized Sector is mainly related to VBMPS intervention. It was expected that there would an improvement by 25 percentage points in this indicator with increased institutional access to milk producers for selling their produce. This indicator for NDP I project area was estimated at 45 percent at the time of baseline and accordingly, its targeted value was 56 percent by end of the project.

Data on proportion of milk sold (as a share of production) to the organized sector in Endline survey is presented in Chart 5.4. The proportion of milk sold to the organized sector in Endline survey was estimated at 59 percent – higher by 3 percentage points over the expected value of 56 percent.

This indicator was found to be much higher in programme area (75 percent) in comparison to control area (51 percent) by end of the project.

Chart : 5.4 Proportion of milk sold to the organized sector (as a share of production) (in %)

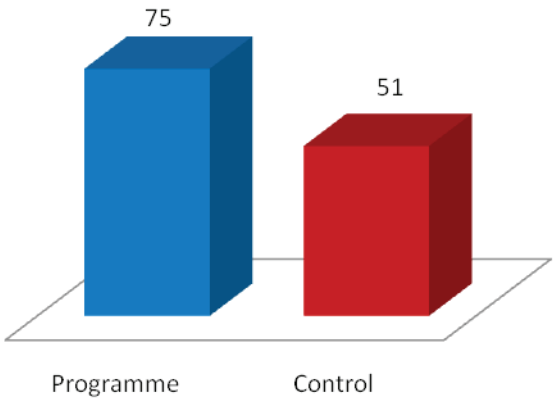
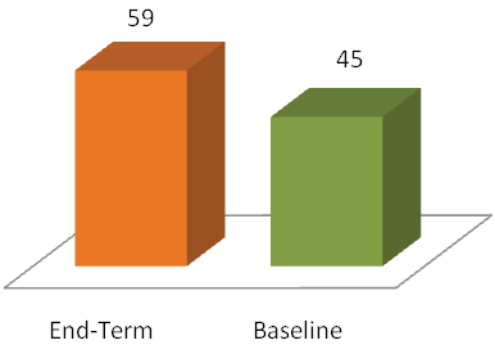


Chart : 5.4b Proportion of milk sold to the organized sector (as a share of production) (in %)



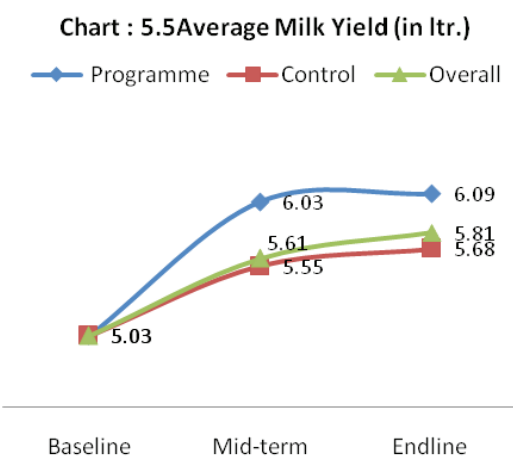
(State-wise data presented in Table 35 of Annexure II)

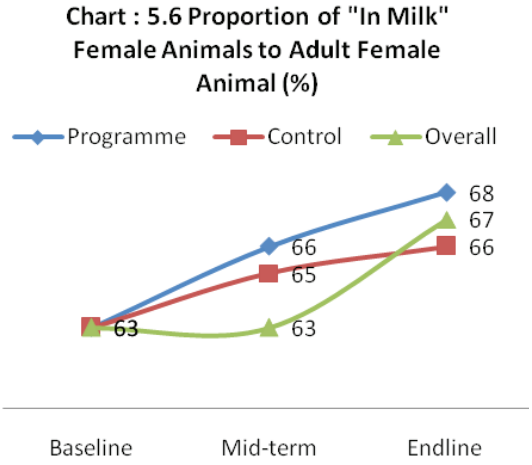
5.6 Comparative figure for PDO indicators over the years

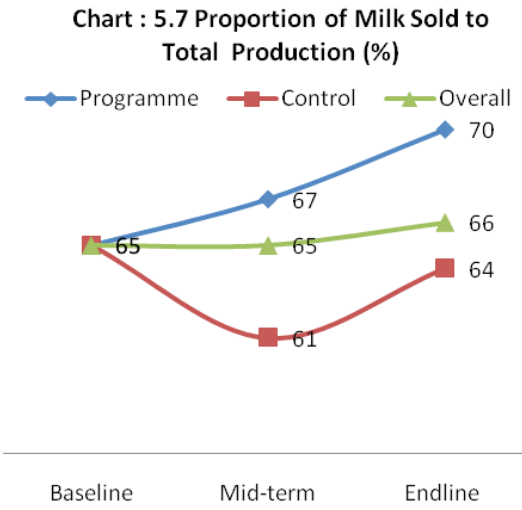
PDO INDICATORS

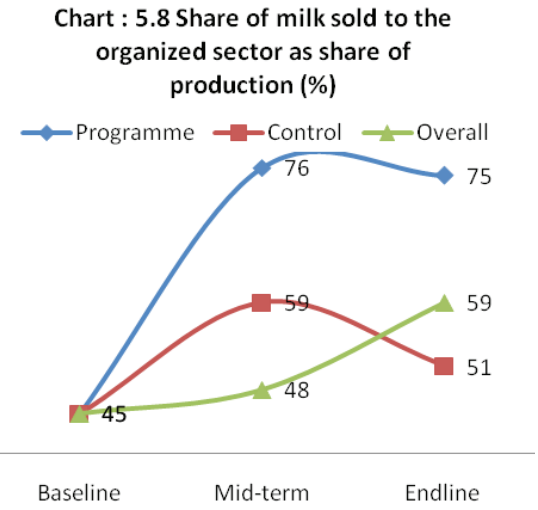
PDO Level Indicators	Unit of Measure	Baseline	Endline Expected	Endline Actual		
				Control	Project	Overall
Average Milk Yield	In Litres	**5.03**	5.53	5.68	6.09	**5.81**
Proportion of "In Milk" Female Animals to Adult Female Animal	%	**63**	66	66	68	**67**
Proportion of Milk Sold to Total Production	%	**65**	65	64	70	**66**
Share of milk sold to the organized sector (as a share of production)	%	**45**	56	51	75	**59**

The progression of PDO level indicators during the project period are furnished in the charts given below. Essentially, they are compared across three time points viz., Baseline, Midline and Endline as they are comprehensive rounds with larger sample size and hence, comparable.









The assessment of PDO level indicate successful achievement of the Project Development Objectives as all PDO indicators fared better than envisaged.

Chapter 6

Animal Breeding Services

Chapter 6

Animal Breeding Services

6.1 Introduction

Most of the breeds of bovine stock in India have evolved through natural selection by a process of adaptation to the agro-ecological conditions. World's best breeds of dairy cattle and buffaloes that have adapted to tropical conditions and resilient to diseases are available in India. However, with increasing human population, efforts are being made to improve milk production through crossbreeding of select superior indigenous breeds and upgrading of the low-milk yielding milch animals with superior exotic breeds. Artificial Insemination (AI) is being used for upgrading the non-descript local low-yielding stock of milch animals. The process provides increased safety to both animals and producer, improved production efficiency and better genetics. Proven and better genetics are becoming readily available across the nation and the quality of livestock continues to improve.

Genetic improvement programmes for various breeds of cattle and buffaloes have been undertaken under NDP I project. Considering the impact of climate change on livestock particularly on those maintained by small and marginal farmers, the programme has given priority to increasing productivity of indigenous descript breeds of cattle and buffaloes. Production of High Genetic Merit (HGM) bulls through genetic improvement programmers such as Progeny Testing (PT) and Pedigree Selection (PS), production of disease free high quality semen doses from HGM bulls produced through genetic improvement programmers, delivery of AI services at the doorstep of producers using only disease free high quality semen produced from HGM bulls have been implemented under NDP I. The Information network for Animal Productivity and Health (INAPH) application has been used for capturing data and dissemination of information across projects. NDP I has implemented the latest scientific interventions like genomic selection and OPU-IVF to further accelerate genetic gains.

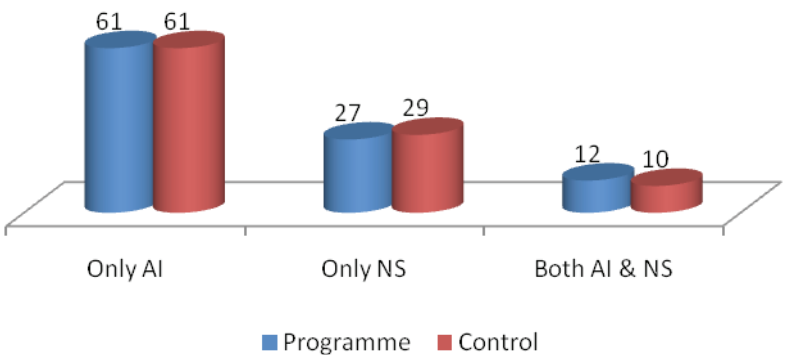
The aspects relating to animal breeding of dairy animals are covered under this Chapter. However, it may be noted that the project envisaged limited impact of animal breeding activities carried out under the NDP I project. The impact would be limited to Pilot AI Delivery System that was carried out in restricted geography of 5 states.

This chapter presents the findings related to the breeding services availed by the MAH for their animals in programme and control areas. The chapter covers subjects like coverage of breeding services, conception related issues, breeding services received by provider type, preference for provider of a breeding services, doorstep provision of breeding service, cost of breeding services, and preference for breeding service and incidence of AI in different category.

6.2 Coverage of Breeding Services

Data on breeding services availed by adult bovine animals was captured for 15,176 animals in programme area and 14,336 animals in control area during Endline survey. Out of all the animals that received any breeding service during the last two years, about three-fifth of animals received only AI service, about 30 percent received only NS and around one-tenth received both AI service and NS in the study area. It may be mentioned that the coverage of AI reported under NDP I project area was more than the double than the same at the national level.

Chart : 6.1 Coverage of Breeding Services (% of animals receiving breeding services)



(State-wise table furnished at Table 56 of Annexure II)

6.2.1 Type of breeding service preferred across Animal Categories

Across the species, in both programme and control areas, 3 out of 4 crossbred cows were bred through AI, followed by indigenous cows and buffaloes. Whereas in contrast to AI, natural service was mostly preferred in case of buffaloes and least preferred for crossbred cows.

Table: Species-wise coverage of animals by type of breeding (%)

Type of animal	AI Coverage		NS coverage	
	Programme	Control	Programme	Control
Indigenous cows	72	71	36	37
Crossbred cows	76	74	34	35
Buffaloes	70	69	44	43

(State-wise data presented in Table 57 & 58 of Annexure II)

6.3 Breeding Services Received by Provider Type

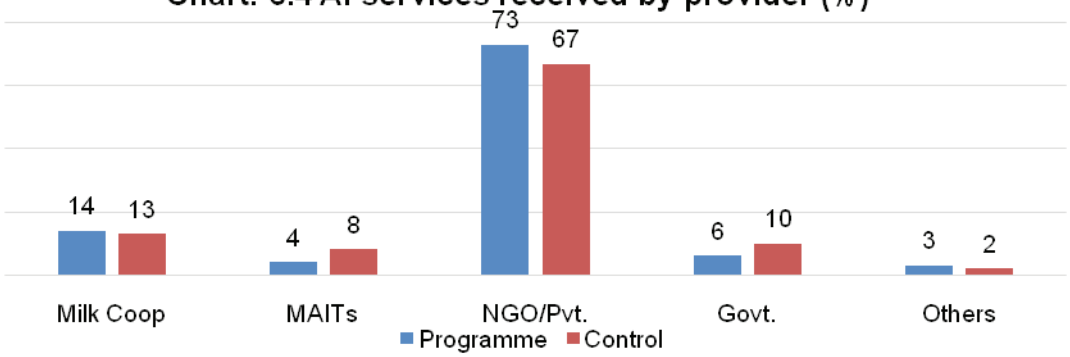
The breeding service provider related data was collected for all animals that conceived either through AI or NS during the last 2 years. This section presents information on the animals that received AI service or natural service from different providers. The findings are based on the knowledge of the MAH about association of the provider with the type of institution or provider category.

6.3.1 AI Services Received by Provider Type

Evidently, NGO / private sector service providers were the major AI service providers catering to about 70 percent of the animals in both the programme and control areas, distantly followed by milk cooperatives. During the field survey, it was noticed that in some places, the cooperatives had stopped providing AI services, but the same staff continued to provide the service independently. In such cases, the respondent may have inadvertently reported milk cooperatives as provider of AI service. Also, the presence of Mobile AI technicians of India Gen (MAITS) was only limited few states, hence its share at the aggregate level was found to be miniscule.

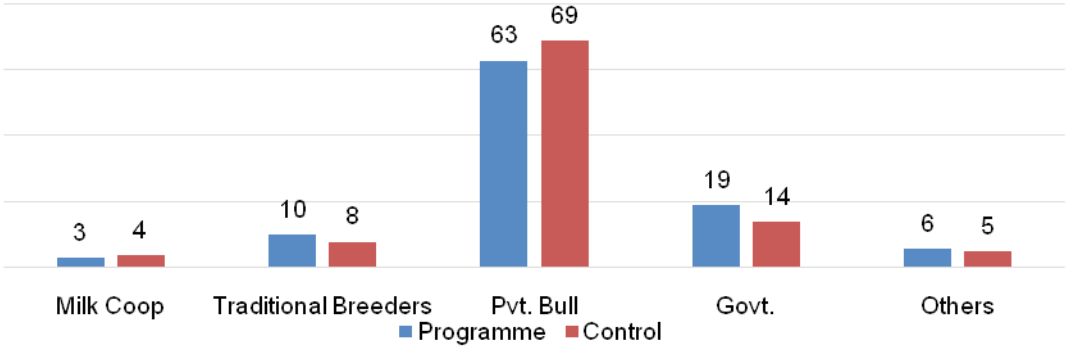
In case of Natural Service, the Private Bull facility was the most prominent source (63-69%), distantly followed by government bull facility and traditional breeders in both programme and control areas. Traditional Breeders in programme area were reported as an important NS provider only in few states. The responses towards natural breeding service provided by the scrub bulls in the villages have been included in "others" category. Such responses were found to be higher in states like Bihar, Karnataka and Punjab.

Chart: 6.4 AI services received by provider (%)



(State-wise data furnished at Table 59 of Annexure II)

Chart: 6.5 NS services received by provider (%)



(State-wise data furnished at Table 60 of Annexure II)

6.4 Reasons for Preference of Provider for Breeding Services

For the major AI service providers like NGO / Pvt., Milk coop. and Govt., the respondents were asked to provide reasons for preferring a particular agency. The responses towards major three reasons are collated in the table given below. It may be observed that the major 3 reasons for preferring particular service provider were same in both programme and control areas. "Better progeny", "Higher chances of conception" and "Doorstep service" were the major reasons for preferring AI service provider.

Table: Major 3 reasons for preference of AI service provider

Area	Reasons	NGO/ Pvt.	Milk coop	Govt.
Programme	1	Better progeny (82%)	Better progeny (89%)	Better progeny (80%)
	2	Higher chance of conception (68%)	Doorstep service (53%)	Higher chance of conception (47%)
	3	Doorstep service (47%)	Higher chance of conception (46%)	Doorstep service (40%)
Control	1	Better progeny (80%)	Better progeny (83%)	Better progeny (72%)
	2	Higher chance of conception (62%)	Higher chance of conception (41%)	Higher chance of conception (51%)
	3	Doorstep service (42%)	Doorstep service (40%)	Doorstep service (32%)

(State-wise data given at Table 61a, 61b & 62 of Annexure II)

In case of NS, three major reasons were too same across the service providers. They were "Higher chance of conception", "Better progeny" and "Traditionally availing this service".

Table: Major 3 reasons for preference of NS service provider

Area	Reasons	Private Bull	Govt.	Traditional breeders
Programme	1	Higher chance of conception (92%)	Higher chance of conception (94%)	Higher chance of conception (94%)
	2	Better progeny (83%)	Better progeny (87%)	Better progeny (88%)
	3	Traditionally availing this Service (76%)	Traditionally availing this Service (84%)	Traditionally availing this Service (64%)
Control	1	Higher chance of conception (93%)	Higher chance of conception (97%)	Higher chance of conception (89%)
	2	Better progeny (81%)	Better progeny (90%)	Better progeny (84%)
	3	Traditionally availing this Service (74%)	Traditionally availing this Service (84%)	Traditionally availing this Service (75%)

(State-wise data given at Table 63A, 63B&64of Annexure II)

6.5 Reported Cost of Breeding Services

This section presents the findings on cost of one (single) AI service (or NS service) for cows and buffaloes. The cost of AI service (or NS service) was asked for the latest service availed for any cow/buffalo in the household. The total amount paid by the MAH for availing one service for an animal was considered as the cost of breeding service (AI or NS).

The average amount paid by the MAH for availing AI service for cow was around Rs. 210 in programme as well as control area, whereas the same was found to be around Rs. 220 for buffalo. The average cost per AI was reportedly lowest in case of MAIT, whereas the respondents indicated that amount charged for AI was relatively higher in case of milk cooperatives. This observation held same for both cow and buffalo.

Chart :6.10 Cost of AI per Service (in Rs) Cows

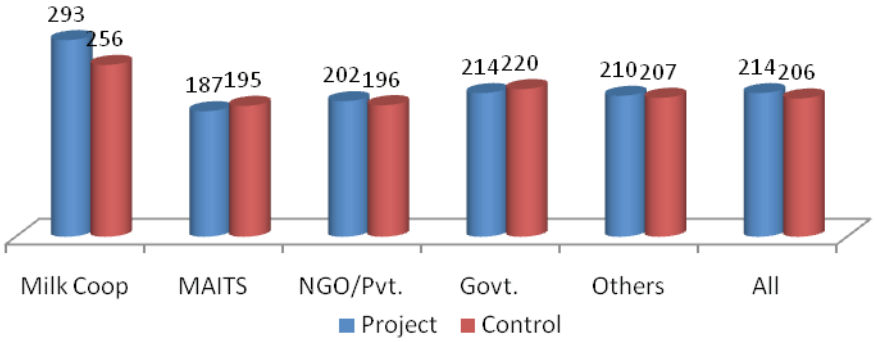
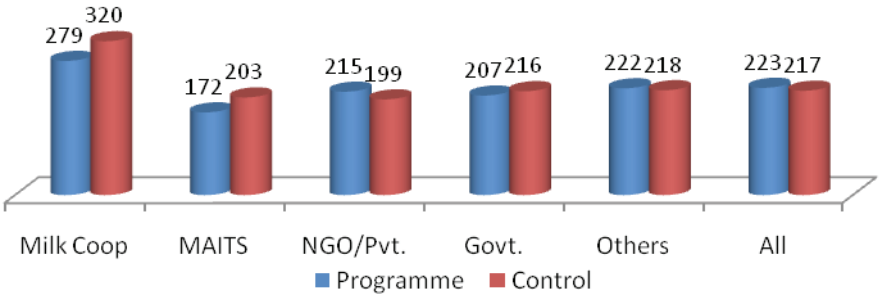


Chart :6.11 Cost of AI per Service (in Rs) Buffalo



(State-wise tables provided at Tables 67 and 68 of Annexure II)

The average amount paid by the MAH for availing NS service for cow & buffalo was around Rs. 250 in programme as well as control area. The average cost per service was almost same across all types of NS providers, irrespective of cow or buffalo.

Chart :6.12 Reproted Cost of Natural Service (Cows)

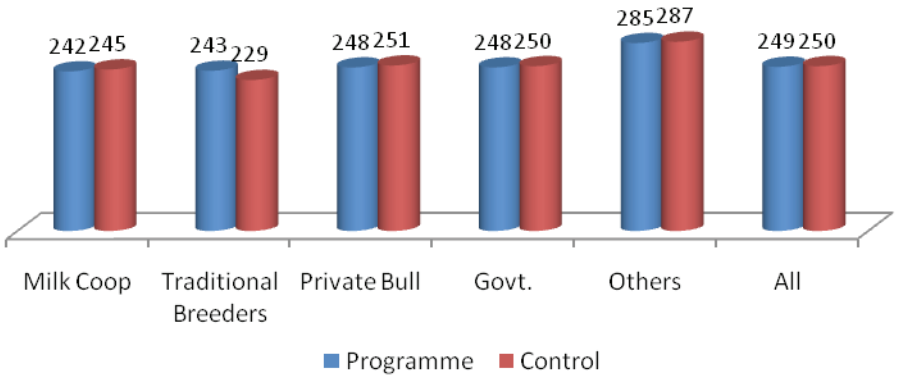
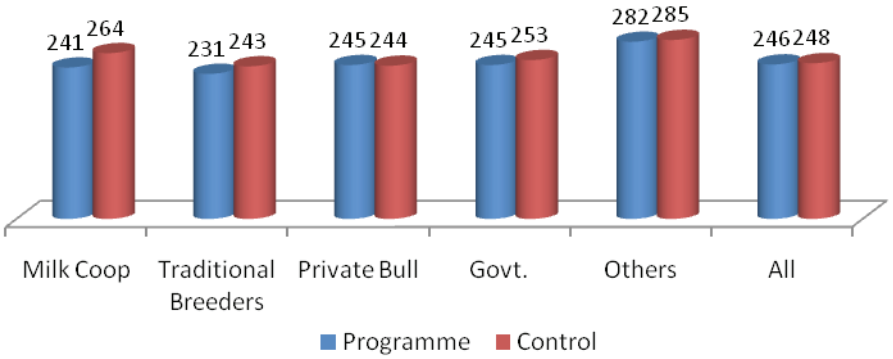


Chart :6.13 Reproted Cost of Natural Service (Buffalo))



(State-wise tables provided at Tables 69 and 70 of Annexure II)

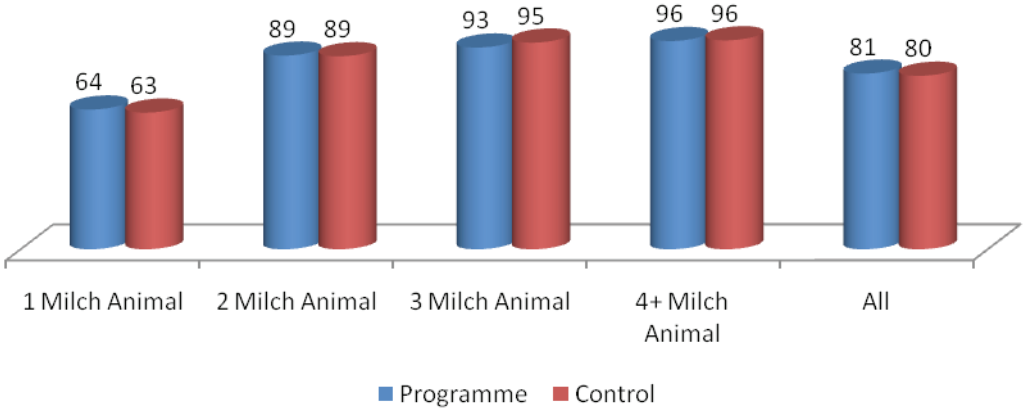
6.6 Adoption of only AI

This section presents the summary findings on the adoption of AI for animals. Adoption of AI is presented as percentage of animals availing only AI service among all the milch animals that received any type of breeding service during the last two years. The subsequent sub-sections under this head presents incidence of AI by select classification categories.

6.6.1 Adoption of Only AI in MAH by Animal Holding Size

The adoption of AI showed improvement among the households with increase in animal holding. The adoption of AI services in the Endline survey was the highest among MAH having more than 4 milch animals in both programme and control areas (96%), whereas it was the lowest among the MAH having one milch animal (63-64%).

Chart : 6.14 Adoption of AI by Animal Holding Size (Percent of Animals)



(State-wise data provided at Table 73 of Annexure II)

Chapter 7

Feed, Fodder and Grazing

Chapter 7

Feed, Fodder and Grazing

7.1 Introduction

One of the notable characteristics of India's milk economy is that most of its feed requirement is met from crop residues and by-products; green grass, weeds, tree leaves & straws gathered from cultivated & uncultivated lands and grazing on common lands & harvested fields. The land allocation to cultivation of green fodder crops is limited and has hardly ever exceeded 5 percent of the gross cropped area. Cattle feed and mineral mixtures that are available to the dairy farmers in India vary significantly with respect to their composition and nutritive value.

NDDB has taken several measures to improve animal nutrition including the 'Quality Mark' conceptualized for cattle feed and mineral mixtures manufactured in the cooperative, government/semi-government sectors. This initiative is expected to contribute significantly towards improving the quality of cattle feed sold in India which in turn would assist in improved milk production and timely reproduction in dairy animals. The well-designed "Calf Rearing Program" (CRP) includes specially designed "Pregnancy feed" to the dams two months before calving, specifically formulated Calf starter and Calf Growth Meal to the calves as well as scientific management of both the dam and the calf. The objective of such program is to gain higher birth weights of calves, lower calf mortality, earlier puberty, lower age-at-first pregnancy and optimal inter-calving periods. The feed supplement for addressing "Heat Stress" among milking animals assists in improving water retention, lowers the pulse rates & body temperatures and helps in improved feed intake and hence, milk production among lactating animals. The programme checks the loss of productivity in dairy animals during summer as the high ambient temperatures result in increased body temperature and pulse rates among animals. This results in reduction of feed intake significantly and leads to drop in milk production. The "Fertility Supplement" formulated by NDDB has proven to enhance the fertility in dairy animals. Feeding of animals in the traditional pattern often leads to a higher water footprint. In contrast, if animals are fed a balanced ration; comprising a judicious mix of green fodder, dry fodder and concentrate feed ingredients; have successfully led to a lower 'Water Footprint'.

Under NDP I, 'Ration Balancing Advisory services' have been provided to milch cattle. As part of this initiative, the Local Resource Persons (LRP) visited farmers' doorsteps to formulate least cost balanced ration for the milking animals, using specifically designed computer software.

The NDDB's RBP endeavor was adjudged the best intervention that has led to 'Sustainable Practice Change' in the livestock sector and was conferred the First Dairy Asia Sustainability Award during Dairy Asia meeting held at Nay Pyi taw, Myanmar on November 9, 2017.

To substantiate RBP programme, NDDB has made substantial effort to enhance green fodder productivity on farmers' fields through the dissemination of improved fodder cultivation technologies as well as techniques for fodder conservation, in addition to training of technical manpower of the dairy cooperatives. Technical support was provided to End Implementing Agencies (EIAs) for implementing Fodder Development Programs and to enhance availability of quality fodder seed under NDP I.

This chapter provides analytical findings on fodder cultivation, animal feeding practices and grazing practice in programme and control area.

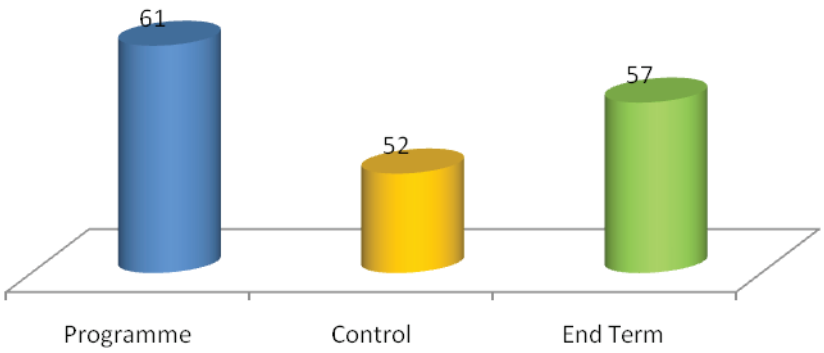
7.2 Fodder Cultivation

Fodder crops are the plant species that are cultivated and harvested for feeding in the form of forage (cut green and fed fresh), silage (preserved under anaerobic conditions) and hay (dehydrated green fodder). Sorghum (Jowar / Chari) amongst the Kharif crops and Berseem (Egyptian clover) amongst the Rabi crops occupies more than half of the total cultivated fodder cropped area. Lucerne (Alfalfa), Pearl millet (Bajra), Maize (Makka / Makai), Lobia (cowpea), Cluster Bean (Guar) and Oat (Jai) are the other important forage crops grown in the country.

7.2.1 Households Growing Fodder Crops

Out of total surveyed MAHs, 57 percent of the MAHs reported growing fodder. The incidence of growing fodder was reported higher in programme area as compared to control area. If one analyses the incidence of growing fodder across the states, the practices of fodder cultivation was found to be more prevalent in Northern states where most of the states have large population of buffaloes. Probably, the peak milking period of buffaloes coincides with winter season during which a relatively larger number of MAHs prefer to grow fodder. In the Southern states, cultivation of fodder crops in general by MAHs was relatively on lower side as compared to the Northern states.

Chart : 7.1 HH Growing Fooder



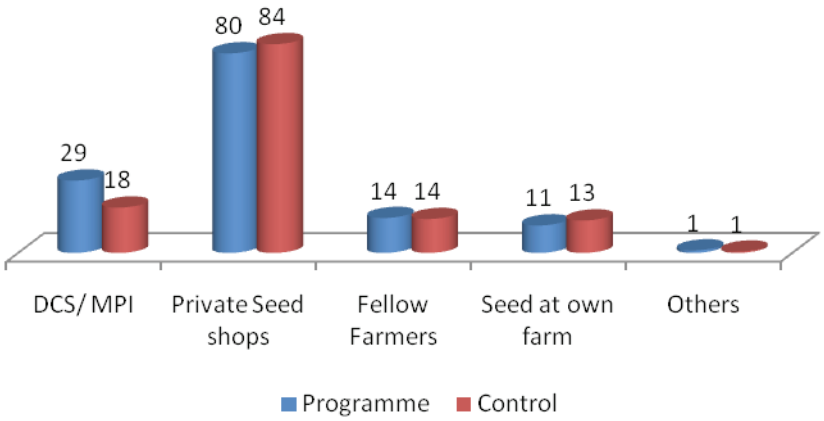
(State-wise information provided at Table 74 of Annexure II)

7.2.2 Sources of Fodder Seeds

Quality of seeds is important in determining the quality and output of fodder crops. Information on sources of fodder seeds among farmers is summarized in Chart 7.2. Evidently, private seed shops were the main source of seeds in

both in programme (80%) and control (84%) areas. Around 29 percent households reported DCS / MPI as the second most important source of fodder seeds in programme area as against 18 percent in control area. There was a marked improvement in this regard by DCS / MPI as only 3 percent of households reported DCS / MPI as source of fodder seed during baseline survey. About one out of 10 farmers reported source of seed as "own farm" or "fellow farmers".

Chart : 7.2 Sources of Fodder Seeds

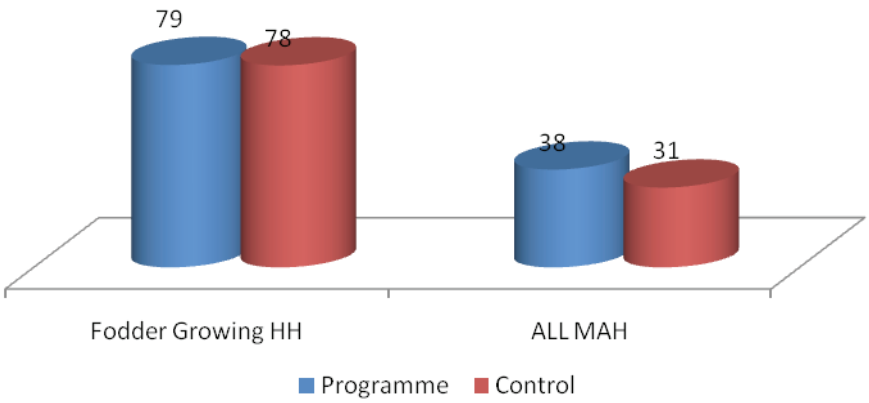


(State-wise data provided at Table 75 of Annexure II)

7.2.3 Awareness about Certified / Truthfully Labeled Seeds

Across all MAHs, the awareness about the certified / truthfully labeled seeds was higher in programme area (38%) as compared to control area (31%). However, if only fodder growing households were taken, the awareness level has been reported quite high. Almost 8 out of 10 fodder growing households informed that they had a knowledge about Certified / Truthfully labelled seeds. Also, the awareness level was found to be same in both programme and control areas.

Chart : 7.3 Awareness about Certified / Truthfully Labelled Seeds



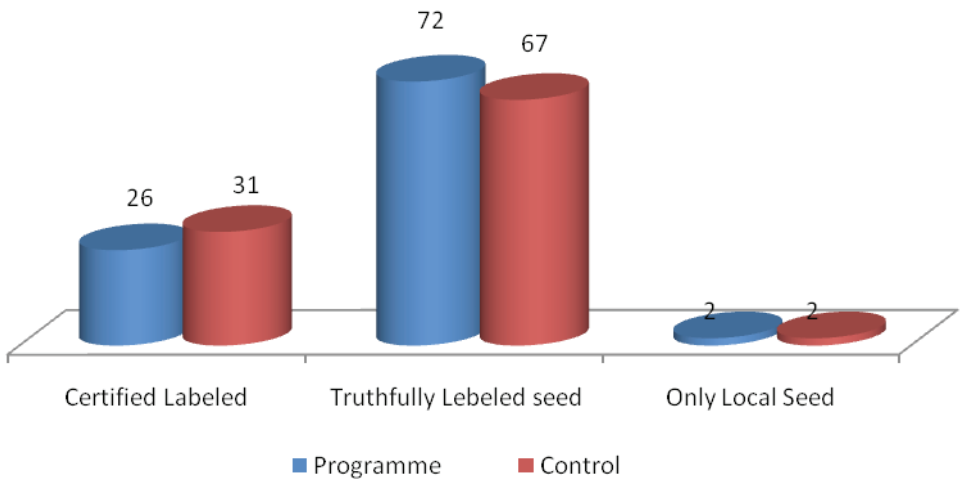
(State-wise data referred to in Table 76 of Annexure II)

7.2.4 Types of Seeds Used for Fodder Cultivation

Chart 7.4 demonstrates the data on types of seeds for fodder cultivation used by fodder growing MAH. It is encouraging to note that almost all MAHs reported fodder cultivation

using certified / truthfully labeled seeds in their household in both programme and control areas. Since Baseline, this was a welcoming change in the project area. During baseline, less than 10 percent of fodder growing households reported use of certified / truthfully labeled seeds, whereas about one third of them were not sure about the type of seed.

Chart : 7.4 Types of Seeds used for Fodder Cultivation (% of fodder growing MAH)

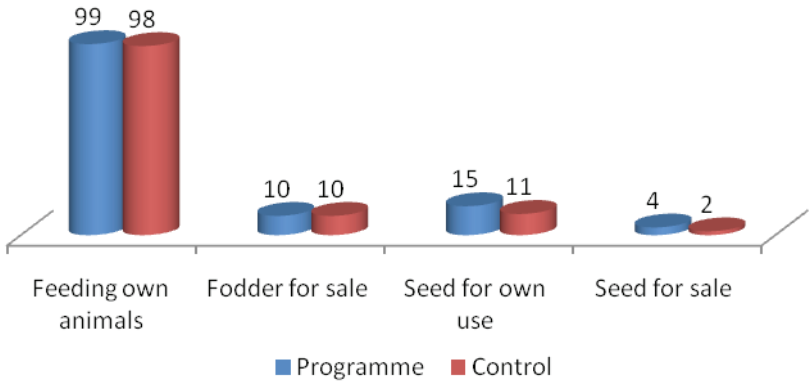


(State-wise data furnished at Table 77 of Annexure II)

7.2.5 Purpose of Growing Fodder Crops

Generally farmer grows a fodder crop to support the fodder requirement of his own animals. In case of progressive farmers, growing of a fodder crop is also combined with selling of fodder seeds as well as fodder as such. Expectedly, the main reason for growing fodder crops by almost all milch animal owning households in both programme (99%) and control (98%) areas was to satisfy their own need for feeding of their milch animals.Cultivation of fodder crops for seed production for own use was another important reason for growing fodder crop (15% in programme area; 11% in control area).

Chart : 7.5 Purpose of Growing Fodder Crops

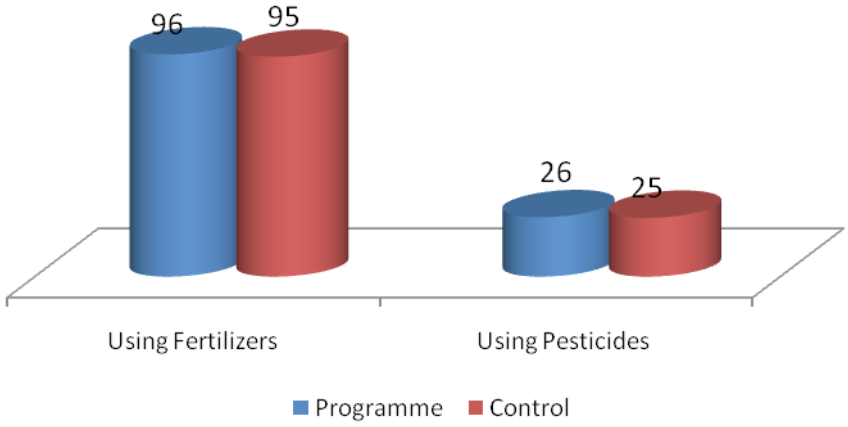


(State-wise data given at Table 78 of Annexure II)

7.2.6 Households Using Chemical Fertilizers and Pesticides for Fodder Cultivation

Use of chemical fertilizers and pesticides is the major input in cultivation of fodder crops. Almost all fodder growing households in both programme and control areas reported use of chemical fertilizers, whereas about one-fourth of the fodder growing households reported use of pesticides.

Chart : 7.6 Households using Chemical Fertilizers/Pesticides for fodder Cultivation (% of fodder growing MAH)



(State-wise data presented at Table 79 of Annexure II)

7.3 Animal Feeding Practices

Though cultivated fodder (green or dry) is fed to milch animals in cattle sheds, sending them out for grazing is a common practice in rural India. Animal feed from different sources is traditionally classified as concentrates and roughage – dry and green fodder. A properly balanced dairy cattle ration should consist of both roughage and concentrates. The animals generally get roughage either by grazing, stall-feeding or through a combination of both types of feeding. In Indian context, it is generally challenging to arrive at a quantitative measurement of feed/ fodder consumption by animals. This is mainly because most of animals are fed crop-residue that is mostly home-grown and hence, its quantity is generally not measured at the farmers' doorstep. In some cases, animals are sent to grazing and therefore, quantity consumed by them cannot be estimated. However, qualitative information on feeding and grazing practices would be useful in analysing and understanding the relative fodder consumption pattern.

Role of Common Property Resources (CPR) is very important. It has been a tradition to have community pasture land in each village, which has been an important source of feed for cattle particularly for weaker sections like landless / small / marginal farmers. Similarly, forest areas also substantially cater the needs of animal feed and fodder especially in the tribal belts. (Source: *Ramesh Raval, Feed & Fodder Requirements for Milk Production in India, BAIF Development Research Foundation, New Delhi)*

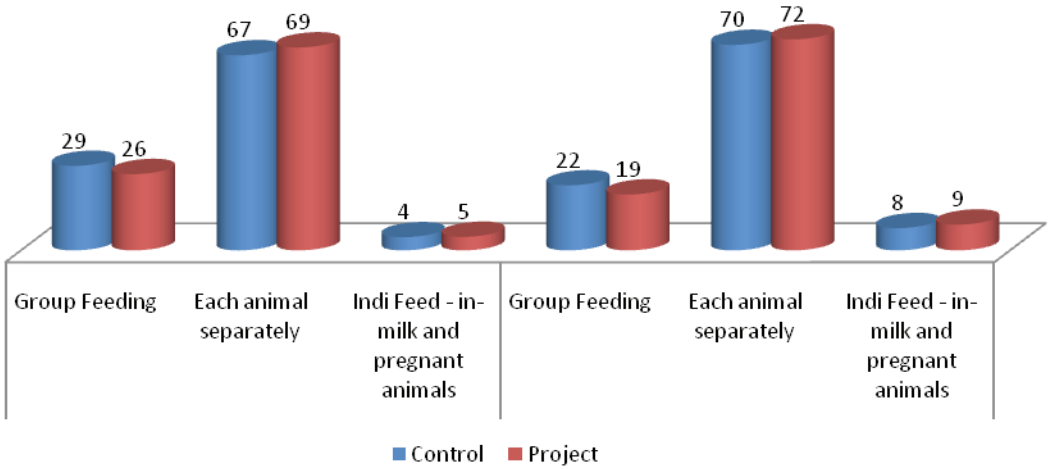
Following sub-sections analyze various facets of animal feeding practices followed in the project area.

7.3.1 Animal Feeding Practice by Group

Separate feeding for individual animals was predominantly followed in programme as well

as control area for both green & dry fodder and concentrates. However, the incidence of separate feeding of animals was marginally higher in programme area. If one compares feeding practices prevailing at the time of baseline, the incidence of individual feeding, which was at about 60 percent. It has demonstrated significant improvement since then. This change may be attributed to the ration balancing programme, where separate feeding depending upon energy requirement of individual animal has been advocated.

Table 7.7: Household Feeding Practice by Group



State - wise data can be referred to in Table 80 of Annexure II.

7.4 Grazing Practice

This section deliberates on various issues related with the grazing of animals such as places and duration of grazing by animal types and category as observed during Endline survey.

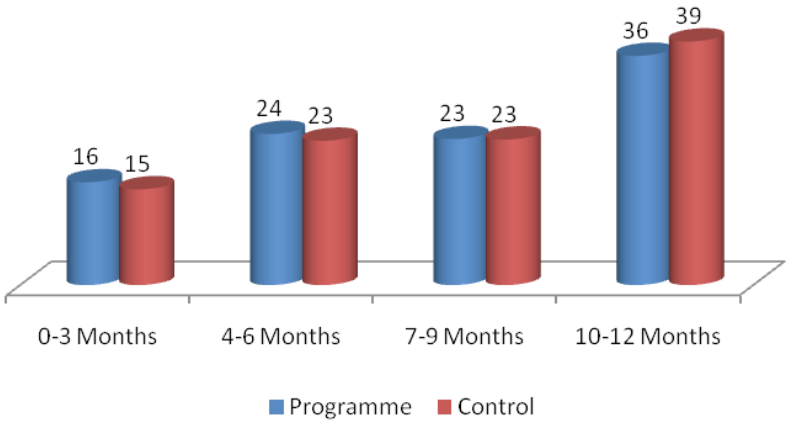
7.4.1 Incidence of MAH Sending Animals for Grazing

Information collected during Endline survey on incidence of MAHs sending their animals for grazing is presented in Table 81 of Annexure II. Nearly one out of four MAHs (26-27%) in both programme and control area sent their animals for grazing. However, there were large variations across various states in this regard. In the states of Andhra Pradesh, Karnataka, Odisha, Gujarat & Tamil Nadu; relatively more number of households sent their animals for grazing. Since Baseline, there was a reduction witnessed in grazing incidence in NDP I project area where the same was at 39 percent.

7.4.2 Duration of Grazing

While there was relative decline in incidence of sending animals for grazing, it has been observed that sending animals for grazing for long duration in a year was dominant in the entire study area in the Endline survey. Nearly 84 percent of MAHs send their animals for grazing for more than 3 months in a year. More than one-third of the MAHs in both programme and control areas reported sending animals for grazing for more than 9 months.

Chart : 7.8 Duration of Grazing



(State-wise data provided at Table 82 in Annexure II)

7.5.3 Grazing Trend in Regular Grazing Households

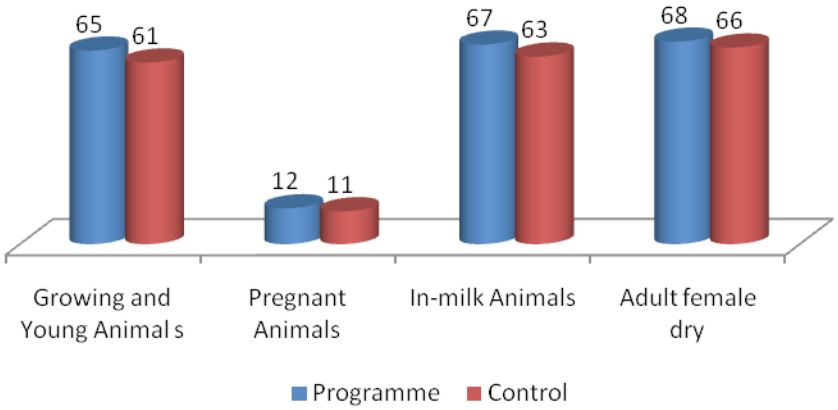
The MAH reported sending their animals for grazing outside the animal shed for more than 3 months have been termed as regular grazing household. The following sub-sections present the findings for only those households that sent their animals for grazing regularly (i.e., for more than 3 months in a year).

Regular Grazing by Animal Type: Almost two-thirds of MAHs reported sending of all types of animals for grazing excepting pregnant animals. Only about one-tenth of MAH indicated that they sent pregnant animals for regular grazing. Almost similar grazing pattern was followed in both programme and control areas. (Chart 7.9)

Regular Grazing by Animal Category: Similarly, across the species, matching pattern was observed pertaining to prevalence of sending animals for grazing in both programme and control areas. About 40-50% animals across the species were sent for grazing from regular grazing households. (Chart 7.10)

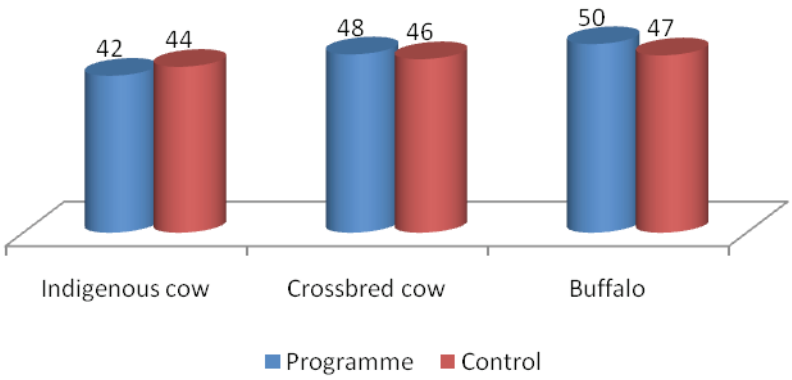
Place of Regular Grazing: Common grazing land (85%) was the most preferred place where bovine animals were sent for regular grazing; followed by other uncultivated land (49-51%) and own grazing land (26-33%) in both programme and control areas during Endline survey.

Chart : 7.9 Regular Grazing By Animal Type



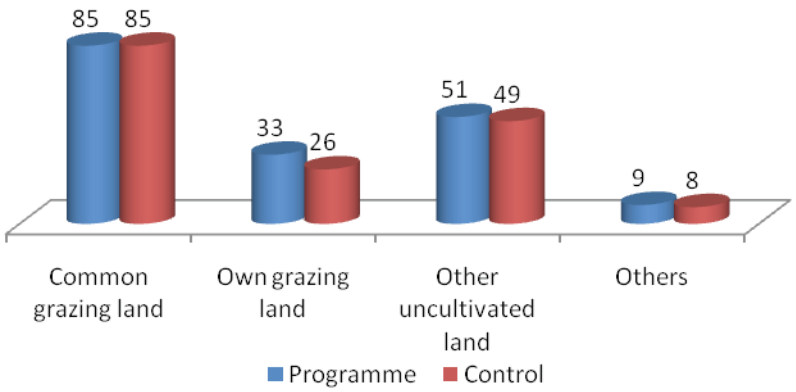
(State-wise data furnished at Table 83 of Annexure II)

Chart : 7.10 Regular Grazing by Animal Category



(State-wise data furnished at Table 84 of Annexure II)

Chart : 7.11 Place for Regular Grazing



(State-wise data furnished at Table 84 of Annexure II).

Chapter 8

Animal Health and Management

Chapter 8

Animal Health and Management

8.1 Introduction

A sound animal health care system and efficient management practices are essential for protection and development of livestock. Poor health facilities and diseases adversely impact dairy farming. They often cause high mortality and incidence of morbidity -- leading to reduced milk production. NDDB plays an active role in disseminating cost effective field models to control diseases of economic importance. Efforts are made to ensure that such models are eco-friendly, easy to adopt, cost effective, improve work efficiency and more importantly, help in reducing the usage of drugs, especially antibiotics. The availability of veterinary health care facilities in terms of quality and extent differs from state to state.

Based on the Endline survey, this chapter consolidates findings on animal health and animal management aspects by rural households in the programme versus control area. Some of these may qualify as environmental issues as well.

8.2 Animal Health

This section covers awareness on zoonotic diseases and practice of boiling milk before its consumption by milch animal owning households.

8.2.1 Awareness on Zoonotic Diseases

Zoonosis are diseases and infections that are naturally transmitted between vertebrate animals and humans. Zoonosis constitute 61% of all known infectious diseases. It may also be noted that out of the 175 diseases considered to be emerging, 75% are zoonotic. Poor hygiene, poverty, malnutrition, lack of education, close contact with animals are predisposing factors causing zoonotic diseases. There are some 45 zoonotic diseases purported to be transmitted from cattle. Dairy farmers who are in close contact with their animals, are always at risk of acquiring infections from animals because most of these diseases are prevalent in our country. Information on awareness of MAHs on zoonotic diseases is provided in Table 86 of Annexure II. The findings indicate that only around one tenth of the MAH were aware about zoonotic diseases both in programme areas and control areas – higher than the same, which was at 6 percent during baseline survey. Across the states, the level of awareness was relatively high in Karnataka and Tamil Nadu.

8.2.2 Practice of Boiling Milk before Consuming

Consumption of boiled milk is recommended for preventing the transmission of tuberculosis.

Almost all MAHs (98%) reported boiling of milk before its consumption. The state-wise details are presented in Table 87 of Annexure II.

8.3 Animal Management

In this section, the facets such as sources of drinking water for bovine animals, dung management, drainage type and disposal of waste water are discussed.

8.3.1 Main Sources of Drinking Water for Bovine Animals

Water is an important commodity in animal rearing and its adequate and timely availability plays a crucial role in animal health and management.

In general, groundwater (hand pumps, bore wells, wells) and piped water were the main source of drinking water for bovine animals. Use of surface water (pond / river / canal) increased marginally during rainy season in both the survey areas. This apart, there was no significant difference witnessed across the seasons in terms of sources of drinking water for bovine animals.

Chart : 8.1 Sources of Drinking Water during Winters (Percent of MAH)

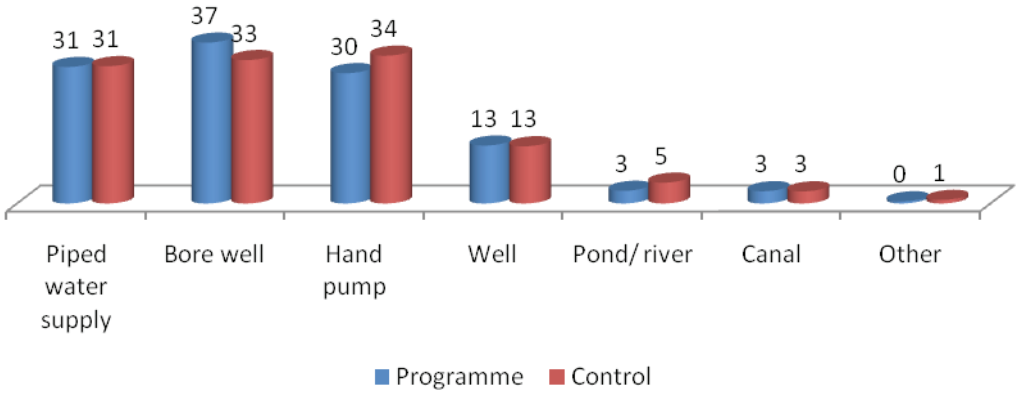


Chart : 8.2 Sources of Drinking Water during Summer (Percent of MAH)

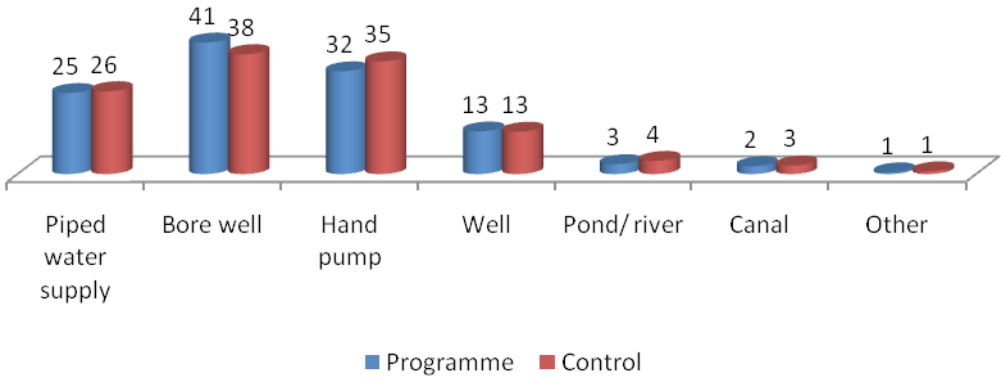
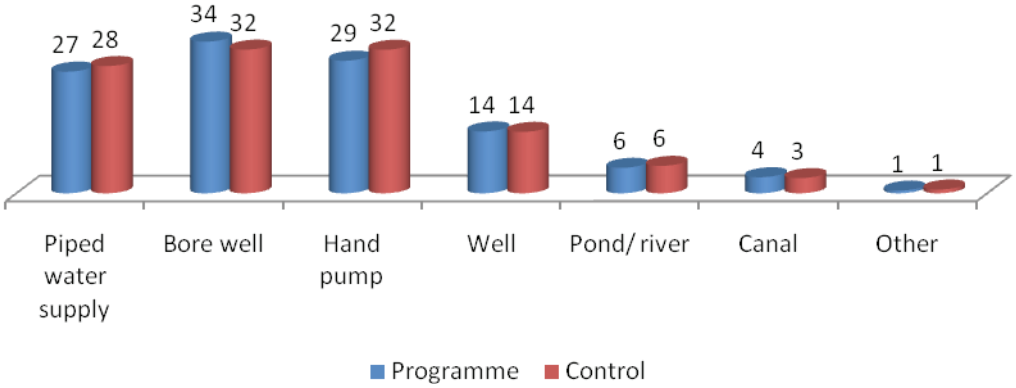


Chart : 8.3 Sources of Drinking During Rainy Season (Percent of MAH)



State - wise data tables can be referred to in Tables 90-92 of Annexure – II.

8.3.2 Dung Management in the Households

Dung management is an integral part of bovine animal rearing in India. Dung is used both as a cooking fuel as well as organic fertilizer. Aspects related with the methods of dung storage and dung uses are discussed in the following sub-sections.

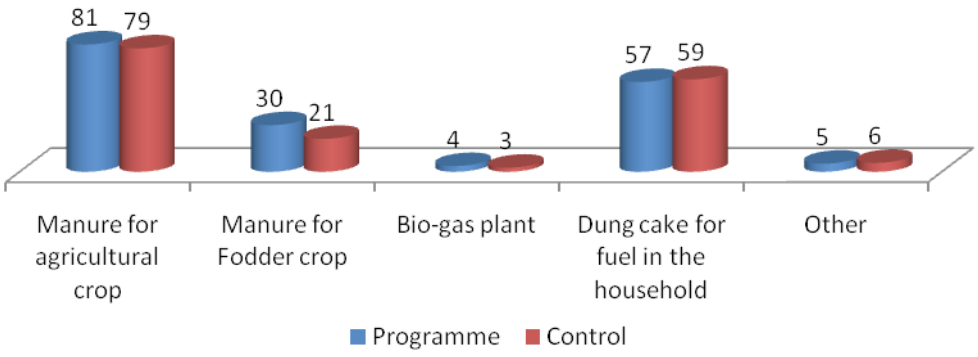
8.3.2.1 Methods of Dung Storage

Around 60 percent of the MAHs stored dung in open area in both programme and control area. The storage of dung in manure / compost pits was somewhat higher in programme area (41%) as compared to control area (36%).

8.3.2.2 Uses of Dung

In rural area dung can be used as organic manure, in biogas plants as well in preparing dung cakes which are widely used as a cooking fuel. Information collected on various uses of dung by MAHs in Endline survey revealed that most of the MAHs used dung as manure for agricultural crop in both programme (81%) and control (71%) areas. About 60 percent of MAHs reported use of dung cake as fuel in programme and control area. However, its use as manure for biogas plant by households was minimal in both study areas.

Chart : 8.4 Uses of Dung in Programme and Control Area (Percent of MAH)

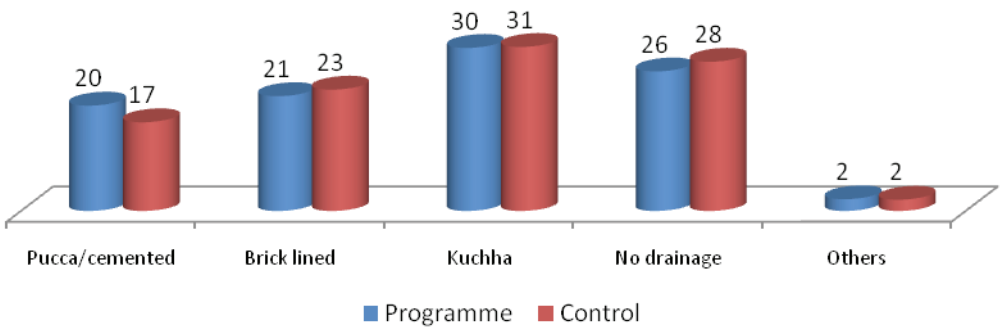


(State-wise data furnished at Table 94 of Annexure II)

8.3.3 Drainage Type

In terms of type of drainage in animal shed, about one-fourth MAHs reported that there was no drainage. Close to one-third indicated having "kachcha" shed, whereas about 20 percent each reported having "pucca / cemented" or "brick lined" shed. There was hardly any difference found in respect to drainage type between programme and control areas.

Chart : 8.5 Drainage Type (Percent Of MAH)

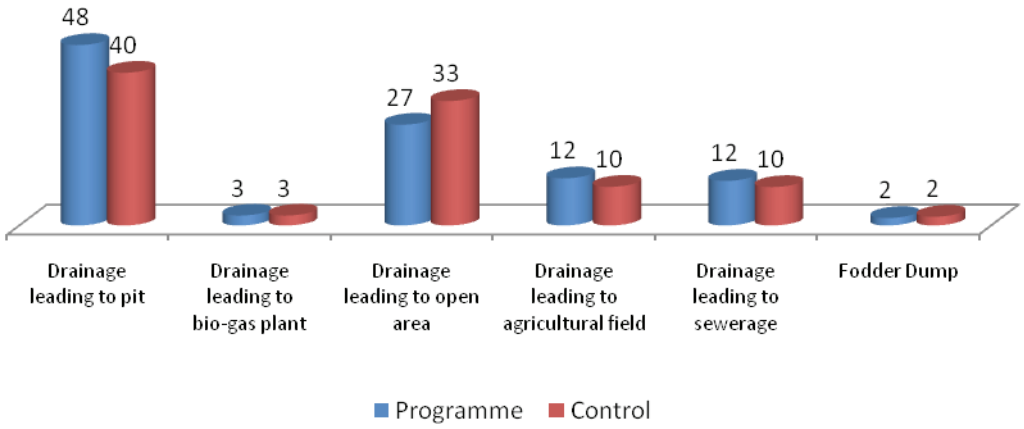


(State-wise table referred to in Table 95 of Annexure II)

8.3.4 Disposal of Waste Water

Data on modes of disposal of waste water from washing of animals and cleaning of animal sheds is presented in Chart 8.6. Majority of the MAHs (40-48%) had drainage lines "leading to pits", while another 27-33 percent of MAH reported to have drainage leading to "open area / agricultural field". Use of waste for biogas plants has been reported just by 3 percent of MAH. The drainage leading to pit is higher in programme area (48%) as compared to control area (40%).

Chart : 8.6 Disposal of Waste Water (Percent of MAH)



(State-wise table can be referred to in Table 96 of Annexure II)

Chapter 9

Socio-Economic Aspects

Chapter 9

Socio-Economic Aspects

9.1 Introduction

Dairy development in India is recognized as an effective instrument for ameliorating the economic conditions of rural families, particularly those of the small and marginal farmers, landless agricultural labourers, socially and economically disadvantaged sections of the society. The dairy sector continues to be crucial to the Indian rural economy. There is a close relationship between dairy and agriculture sector in our country. Participation of women in both dairying and agriculture plays critical role in driving these sectors. Agriculture and Dairying are interdependent sectors. Crop residue and grain from agriculture reduces dependence of the MAHs on purchase of feed and fodder for both human and animals. In rural areas, owning of milch animals contributes not only to the dairy sector, but also to agriculture by way of providing manure, dung fuel, utilising feed wastages and providing animal labour.

In this chapter, an attempt has been made to analyse the socio-economic aspects of dairy sector as a result of the NDP I based on the Endline survey.

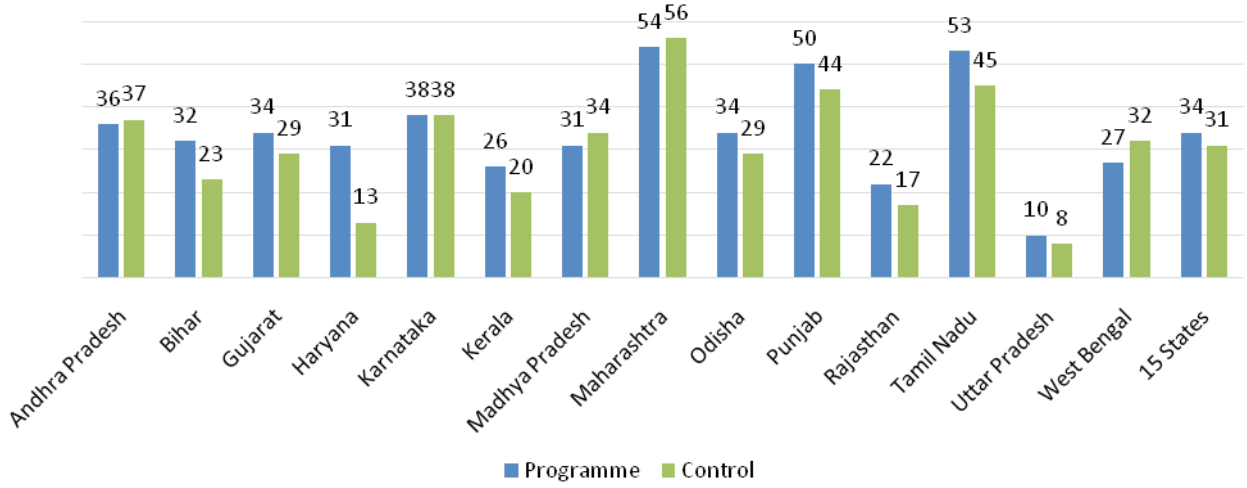
9.2 Dairying as a Source of Income

During the Endline survey, for about 11 percent of MAHs, dairying was the most important source of income in programme area and the same was 8 percent in control area. For another one-fourth of MAHs, it was the second most important source of income both programme and control area.

If one compares the same statistics with the baseline, it gives interesting insights. During baseline, dairying was either the main or supplementary source of income for 27 percent of the MAH, which increased to about 34 percent in the programme area at the time of Endline, whereas the same reported at 31 percent in control areas.

It would be interesting to know how the above overall project area level scenario looks across the project areas of the states. The contribution of income from dairying was found to be relatively higher in states of Maharashtra, Punjab, Tamil Nadu, Karnataka and Andhra Pradesh.

Chart 9.1: Dairying as a source of primary or supplementary income (% of MAH)



9.3 Involvement in Dairying

Questions related to involvement in dairying were asked for only those persons who were above 14 years of age.

9.3.1 Time Spent in Dairying by Activity

The overall analysis of the time spent in different dairying activities indicated similar trend in both programme and control areas. Nearly half of the total time by MAHswas spent on feeding related activities (feeding of animals, fodder collection, chaffing of fodder and open grazing of animals). The washing of animals, cleaning sheds and dung collection / cake preparation took nearly one third of the total time. Milking and milk marketing took around one-tenth of the total time.

Chart 9.2 : % time spent by activity type in Programme areas

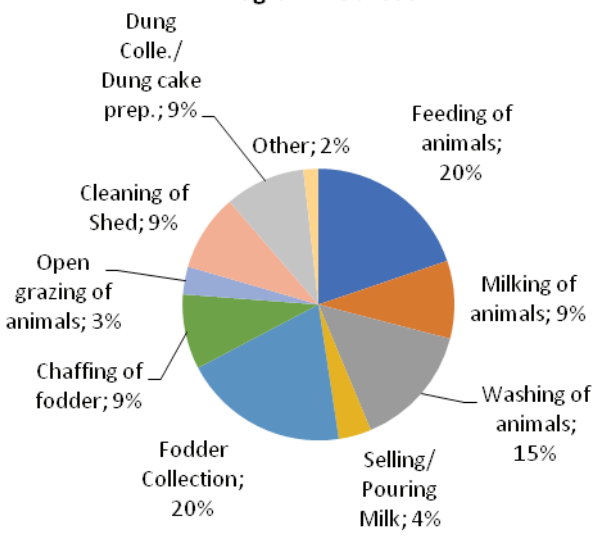
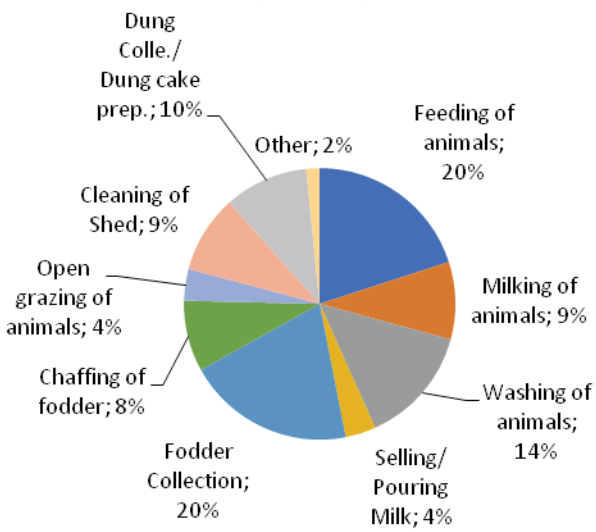


Chart 9.3: % time spent by activity type in Control areas



State-wise data table can be referred to in Table 99 of Annexure II.

9.3.2 Engagement on Dairying Activities by Gender

The overall engagement of women for different dairying activities, in terms of time spent, was found to be higher than that of men in both programmed and control areas. At the aggregated level, about 60 percent of total time spent in dairying activities was devoted by women. However, men dominated in activities relating to selling milk and open grazing of animals in both study areas. It may be observed that the engagement of women was significant in the activities like feeding of animals, milk & washing of animals, cleaning the shed, dung collection/ dung cake preparation and other miscellaneous activities. These activities are mostly confined to home, which are simultaneously performed by the women along with other household activities. This reaffirms the fact that in rural areas where alternate employment opportunities are limited, especially for women; dairying gives productive economic engagement to the women.

Chart : 9.4 % Time Spent on Dairying Activities by Gender in Program Areas

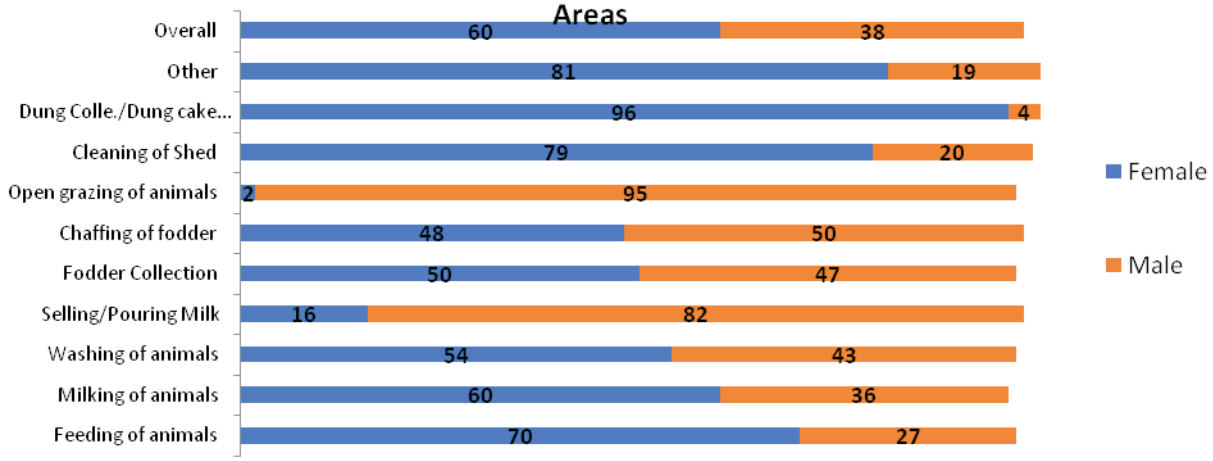
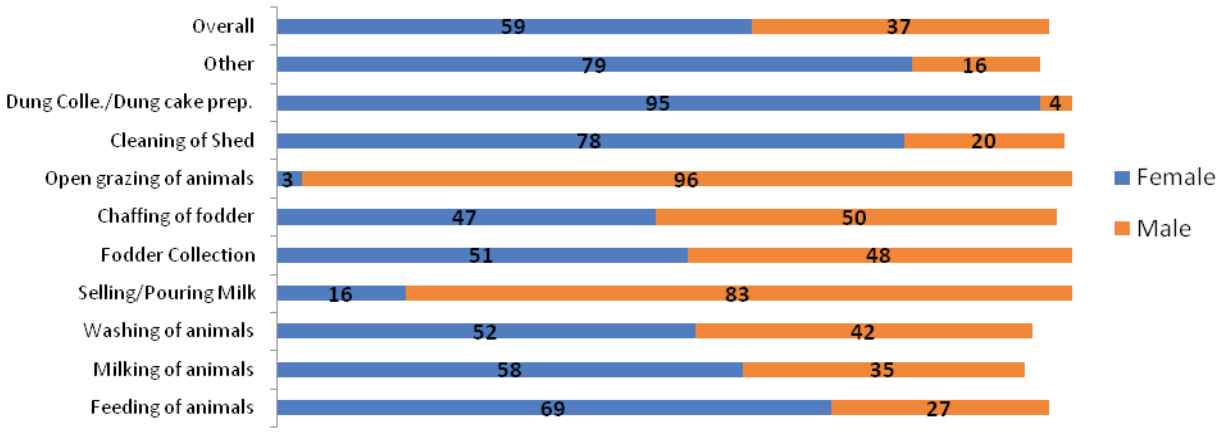


Chart : 9.5 Time Spent on Dairying Activities by Gender in Control areas



State - wise data tables can be referred to in Tables 100 & 101 of Annexure II.

Chapter 10

Extension Services

Chapter 10

Extension Services

10.1 Introduction

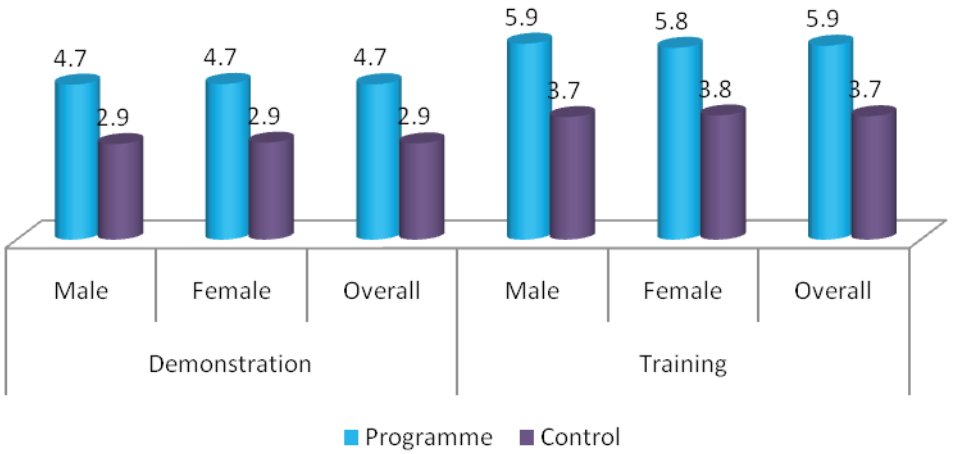
For effective implementation of the NDP I, the training and capacity building programmes are being regularly organized by both NDDB and End Implementing Agencies (EIAs) for milk producers, Executives of the union, Village Resource Persons and Board Members of the union. The key objectives of the training programmes were to impart knowledge and skill up-gradation of human resources; to increase productivity and efficiency of human resources; and to enhance quality of outcome. While implementing the activities under NDP I, social inclusion and environment mitigation measures were undertaken with emphasis on increasing participation of vulnerable sections of the society like women, small holders and scheduled caste & scheduled tribes across the activities.

This chapter is based on the data collected for each household member above 14 years of age among the respondent households. The broad areas covered were participation of household members in training and demonstration, their felt needs, involvement in dairying and decision making in dairying, DCS membership and women membership in DCS in programme versus control area.

10.2 Participation in Training & Demonstration

Each family member above the age of 14 years was asked whether they have participated in training on any dairying related subject during the last one year. A similar question was also asked about their participation in demonstration also.It can be seen that participation of MAH members in both training and demonstration was higher in programme area than in control area. Similarly the participation of women both in training and demonstration was almost equal or higher than men.

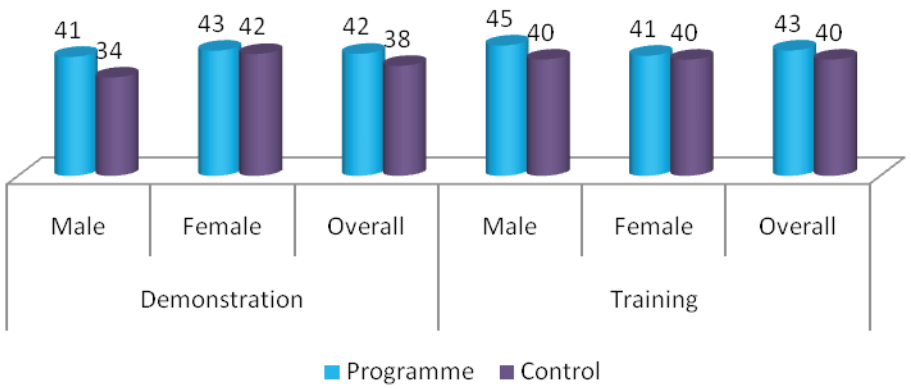
Chart : 10.1 Participation in Training and Demonstration



(State-wise tables provided at Tables 102-104 of Annexure II)

About 4 out of 10 respondents expressed that there was a need for training and demonstration programmes in both survey areas.

Chart :10.2 Felt Need for Training and Demonstration (% of MAH)

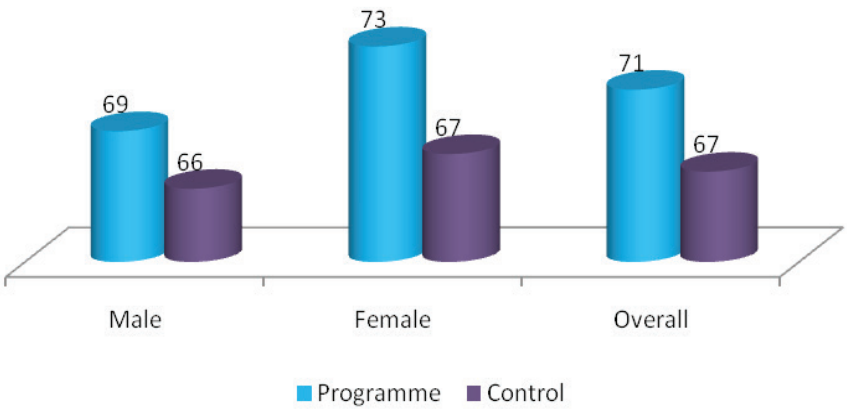


(State-wise tables provided at Tables 105–107of Annexure II)

10.3 Decision Making at Household Level

It can be seen that involvement of women members in decisions related to dairying was marginally higher in programme area (71%) than in control area (67%). More women (67-73%) were involved in decision making on the aspects related to dairying than men (66-69%).

Chart :10.3 Decision Making at Household Level



State - wise data tables can be referred to in Table 108 – 110 of Annexure II.

10.4 Share of Women in DCS Membership

One of the initiatives that was promoted under the project was to increase women membership in the dairy cooperatives. Out of total members, it was targeted to enroll 50 percent women.

About 29 percent of the MAH members aged 14 years and above of the villages having DCS / MPI in programme area and 30 percent in control area were members of DCS / NGC. Among all the members of the DCS / NGC, 50 percent members in programme area and 48 percent in control area are women.

State - wise data tables can be referred to in Tables 111 & 112 of Annexure II.

Chapter 11

Assessment of Key Components of NDP I

Chapter 11

Assessment of Key Components of NDP I

11.1 Introduction

During NDP I, there were many interventions undertaken in the areas of animal breeding, feeding and providing market access to dairy farmers. However, the interventions that directly involved and influenced milk producers at a larger scale were Ration Balancing Programme (RBP) and Village Based Milk Procurement System (VBMPS).

Ration Balancing Program (RBP) was an advisory programme of NDP I to educate the farmers on balanced feeding of animals to optimize milk production by efficient utilization of locally available feed resources at the possible least cost. The balanced feeding provides host of benefits to the farmers. These are: efficient utilization of available feed resources at possible least cost; improving animal productivity; improvement in milk quality in terms of Fat and SNF; increase in net daily income to beneficiaries by possible reduction in dairy feeding cost; Improvement in general health of animals; better immunity and hence better resistance against diseases; improving reproduction efficiency; reducing inter-calving period and increasing productive life of animals; improving the health and nutrition of growing calves and thereby reducing age at first calving.

As part of this initiative, the Local Resource Persons (LRP) visited farmers' doorsteps to formulate least cost balanced ration for the milking animals, using specifically designed computer software. The ration of an animal is balanced by taking into account the attributes of the animal like breed, weight, milk productivity, stage of lactation, etc. It also takes into account locally available feed resources for formulating balanced ration.

Another important project component of NDP I was Village Based Milk Procurement System (VBMPS). Activities under this initiative include mobilization and institution building of smallholder milk producers through expansion / up-gradation of milk procurement system in existing Milk Unions through strengthening of existing village Dairy Cooperative Societies (DCS) and organizing new DCS in uncovered villages; support existing Milk Producer Institutions and promote new ones which would form part of a Milk Producer Company; training and capacity building of milk producers & other functionaries; investment in the village level infrastructure for milk collection and bulking such as milk cans, Bulk Milk Coolers (BMCs) for cluster of villages, associated weighing and testing equipment and related IT requirements. Large number of milk producers were benefited from increased access to fair and transparent mechanism of milk collection at the village level.

This chapter presents field assessment of the performance of these programmes before and after their implementation as observed in the Endline survey. It may also be noted that the

following section has been prepared based on the responses given by the sample households - mostly on recall basis. To the extent possible, a due was taken to guide the respondents properly to provide proper responses.

11.2 Field Evaluation of Performance of RBP in Endline Survey

- About 70 percent of the MAHs in RBP surveyed villages had reported that they knew about RBP programme. Almost all of them reported to have been approached by someone (LRP) to advise them to feed their animals as per RBP *(Tables 113 and 114 of Annexure II)*.
- Nearly 79 percent of MAHs, approached by LRP, had reported coverage of their animals under RBP. On average 1.4 animals per MAH were covered under RBP *(Tables 115 and 116 of Annexure II)*.
- Out of the total animals covered under RBP, 53 percent animals were buffaloes, 33 percent crossbred cows and 14 percent indigenous cows. However, there were wide variations among various states in this regard, which is mostly due to animal composition in the respective states *(Table 117 of Annexure II)*.
- At the aggregated level, it was found that animals selected under RBP had completed about 2 lactations at the time of registration under RBP. State-wise the average number of lactations varied from 1.4 to 2.3 *(Table 118 of Annexure II)*.
- About 66 percent of the animals have been ear-tagged at the time of registration. Across the states, more than 90 percent of animals were found to have ear-tagged in Karnataka and Odisha; whereas the ear-tagging was low in Tamil Nadu, Punjab and Haryana states *(Table 119 of Annexure II)*.
- Average milk yield per animal in Endline survey which was 5.2 litres per day before RBP advisory had gone up to 6.3 litres per day post advisory. In all the states, the increase in milk yield of animals has been observed *(Table 120 of Annexure II)*.
- Similarly, average feeding cost per animal in Endline survey was Rs. 143/- per day before RBP advisory. It has reduced to Rs. 136/- per day post advisory. However, there were wide variations in this regard across various states *(Table 121 of Annexure II)*.
- Average fat content of milk in Endline survey was 4.0 percent before RBP advisory. It has gone up to 4.8 percent post advisory *(Table 122 of Annexure II)*.

It may be reiterated that the changes in milk yield, cost of feeding and fat content were recorded purely based on the respondents' observations. No actual measurement was undertaken in this regard and hence, the variations in the results cannot be ruled out.

- Nearly 65 percent of animals still continued to be fed as per RBP advisory. Following RBP advice was found to be higher among the respondents in the states of Bihar, Gujarat, Tamil Nadu and West Bengal *(Table 123 of Annexure II)*.
- As perceived by the respondents, the biggest benefit due to RBP was "increase in milk yield (92%)", followed by "reduction in feeding cost (77%)", "improvement in quality of milk (65%)", "improvement in reproduction efficiency (65%)" and "overall improvement in health of animal (55%)" *(Table 124 of Annexure II)*.
- While the above benefits rated by the

respondents were their perceptions and understanding about balanced feeding, the actual improvement noticed in their animals are reported here. Around 84 percent MAH reported that the major improvement by adopting RBP was an improvement in overall health of the animals, followed by reduced inter-calving period (69%) and reduced age at first calving (60%) *(Table 125 of Annexure II)*.

- Little less than half of the RBP beneficiary households reported that LRP visited their household more than once in a month, while around one third households cited that LRP had visited at least once in a month. Only about 2 percent RBP beneficiaries informed that LRP had never visited their household. However, there were large variations among the states in this regard *(Table 126 of Annexure II)*.
- Around 91 percent of the RBP beneficiary households confirmed that feed/mineral mixture recommended by LRPs were easily available. Though there were variations among the states, more than 80 percent respondents in all states reported easy availability of feed / mineral mixture *(Table 127 of Annexure II)*.
- Apart from ration balancing of animals, the LRPs were also trained to provide related information on different aspects of animal management. About 93 percent beneficiaries reported that information on importance of drinking water was provided by the LRP, followed by vaccination of animals (87.9%), regular de-worming of animals (85.5%), chaffing of fodder (82.6%), colostrum feeding (75.5%) and medicine spraying for controlling tick infestation (66.9%) *(Table 128 of Annexure II*).
- At the project level, about two-thirds of beneficiaries were expressed their willingness to pay service charge to LRPs for their advisory services. However, the same was relatively less in the states of Kerala, Madhya Pradesh, Rajasthan and Tamil Nadu *(Table 129 of Annexure II)*.
- Around 82 percent of RBP beneficiary households expressed their satisfaction with the services provided by LRPs *(Table 130 of Annexure II)*.
- About 97 percent of RBP beneficiary households reported that their animals were fed as per RBP recommendations for some time after the advisory. Only 3 percent of beneficiaries reported that they had never fed as per the advisory *(Table 131 of Annexure II)*.

Though the satisfaction level for RBP was found to be high, it seems that the sustainability may be an area of concern after conclusion of NDPI project.

11.3 Field Evaluation of Performance of VBMPS in Endline Survey

- Out of total sample villages selected for VBMPS component, in about 30 percent villages, “New DCS” was formed. In remaining (70%) villages, strengthening of existing Dairy Cooperative Societies (DCS) was carried out. There was a large scale variation in this regard across various states covered in the study area *(Table 132 of Annexure II)*.
- In VBMPS villages, before opening up of DCS / NGC centre, only 17 percent of milk was sold to organised sector i.e., Private Dairies. Highest proportion of milk surplus was to dudhias (42%), followed by local sale

within the village (27%).Across the states, the above scenario differed substantially. In newly covered villages under the ambit of dairy cooperatives, the presence of organised sector (i.e., private dairies) was earlier negligible in Madhya Pradesh (3%), followed by Rajasthan (9%), Odisha (10%), Gujarat (13%) and Bihar (16%) *(Table 133 of Annexure II)*.

- A question was asked to know whether there was any change in price of milk after opening up of DCS / NGC. At the project level, it was found that there was an increase of about 23 percent in the milk price due to establishment of DCS / NGC. Before implementation of the VBMPS, average milk price received by MAH was Rs. 23.9 per litre, which rose to Rs. 29.3 for one litre of milk sold *(Table 134 of Annexure II)*.
- An attempt was made to analyze benefits of establishment of DCS / NGC. The ranking of benefits of VBMPS, as reported by MAH is as follows:
    - Better milk price (88%)
    - No wastage of milk (74%)
    - Advantage of getting longer time for milk pouring (58%)
    - Time saved in marketing of milk (43%)
    - Availability of better AI service (27%)
    - Subsidized cattle feed (20%)

There were large variations as perceived by MAHs on benefits derived from VBMPS programme across different states under study *(Table 136 of Annexure II).*

- Only about 10 percent MAHs in the entire Endline study area reported facing discrimination at milk collection centers. In West Bengal, the same was as high as 23 percent, which needs further probing *(Table 137 of Annexure II)*.
- Satisfaction levels with different facets of VBMPS components are provided as under:
    - Behavior of appointed persons at milk collection centers (95%)
    - Milk testing (85%)
    - Milk price received (75%)
    - Other subsidized/free services (33%)

Many DCSs / NGCs were not supplying any cattle feed or providing any subsidized / free services and therefore, the proportion of respondents expressed satisfaction towards “other subsidized / free services” was found to be low *(Table 138 of Annexure II)*.

- When a question was asked to MAHs in VBMPS villages on increase in number of animals in their village due to starting of new DCS or transparency in milk payment system or flexibility in milk pouring timings, nearly 43 percent MAHs could not answer this question. However, nearly 38 percent MAH opined that they noticed the increase in number of animals in the village because of VBMPS programme *(Table 139 of Annexure II)*.

Similar trend was noticed when the same question was asked whether they had a plan to increase the herd size *(Table 140 of Annexure II)*.

Chapter 12

Governance and Accountability Action Plan

Chapter 12

Governance and Accountability Action Plan

12.1 Introduction

Under NDP I, it was aimed to strengthen the governance, accountability and transparency of systems and processes. Data pertaining to these aspects were captured at household level in the programme villages covered under both the programs i.e. RBP and VBMPS. This chapter presents an assessment of the perception of MAHs on these aspects in the study area.

- More than half of the MAHs (around 55%) felt that implementation of dairy related programs was transparent. Around one tenth (13%) of the MAH expressed their inability to respond on this aspect *(Table 141 of Annexure II)*.
- Overall, nearly half of the MAHs (48%) were aware about documents covering the roles and responsibilities of DCS level officials *(Table 142 of Annexure II)*.
- About availability of complaint register at DCS, about 35 percent each responded affirmatively and negatively. About 30 percent of respondents did not know about availability of register at DCS level *(Table 143 of Annexure II)*.
- Less than 10 percent of the surveyed respondents were aware about someone who has ever lodged any complaint for redressal *(Tables 144 of Annexure II)*.
- Dairy farming related information are very critical for the dairy farmers. Around 62 percent MAH in programme area and 47 percent in control area confirmed that they received farming related information *(Tables 147 of Annexure II)* – offering further scopes for covering more people for disseminating dairy related information *(Table 146 of Annexure II)*.
- Further, the source of dairy related information was inquired upon. The major source of dairy farming related information in the programme area was DCS/MPI, radio and friends & relatives (63% each); followed by LRP (61%); internet (57%) and private doctors who visited for the treatment (55%). Similar trend was noted in control area too *(Table 147 of Annexure II)*.
- Discrimination in availing services at DCS / MPI was not reported. Around 96% of the MAH confirmed that they did not face any kind of discrimination at DCS / MPI in the programme area *(Table 148 of Annexure II)*.

Non-discrimination, transparency, accountability, *action plan and complaint redressal mechanism are the key components of good governance. It has been observed that in general, the governance and complaint redressal mechanism in the project was properly placed. The negligible proportion of receipt of complaints itself divulges that the project has been executed without any discrimination.*

Chapter 13

Environment and Social Assessment

Chapter 13

Environment and Social Assessment

13.1 Introduction

The various activities proposed under different components/ sub components of NDP I were expected to result in social and environmental impacts. Hence, during the Endline survey, an assessment of the social and environmental conditions of the MAHs has been carried in the Progeny Testing / Pedigree Selection / Semen Station (PT / PS / SS) implementation area.

13.2 Coverage

This was primarily a household based survey in which 720 households were covered from 43 villages spread across 4 states namely Bihar, Gujarat, Karnataka and Punjab, wherein total population was 2,934. Of total population in the sample households, the female members (42.6%) were less than male members (57.4%). The higher proportion of male among the sample households was noted across all states. State-wise variations can be referred to in Table 149 of Annexure II.

As far as literacy is concerned, about 28 percent of the respondents were illiterate or literate without any formal education. Around 20 percent studied only "upto class 10th", followed by "up to class 5th" (18.1%), "up to class 12th" (12.0%). Only about 7 percent members among them were graduates and rest of them had above graduation or some professional degree *(State-wise details at Table 150 of Annexure II)*.

Primary occupation of the household members was comprising of education (31%); crop cultivation (25%) and working as a housewife (19%). All other occupational activities including dairying, agricultural / non-agricultural wage workers etc. accounted for only about 5% *(State-wise details at Table 151 of Annexure II)*.

As regards migration of household members, only about 5 percent members migrated from village in last one year with an average tenure of migration of around 4 months in a year. Majority of members migrated outside the state (60%); followed by nearby town (22%); and within the state (other than nearby town) (12%). The most important reason for migration was in search of alternative employment as cited by all the respondents *(State-wise variations in Tables 152 to 154 of Annexure II)*.

While most of the parameters related to social assessment like involvement of women in dairying, women membership and participation in dairy cooperative institutions, rearing and management practices of dairy animals, etc. in earlier sections, the following section specifically addresses the aspects relating to environment.

13.3 Environmental Assessment

13.3.1 Pesticide Management

Around 37 percent households were involved in some kind of fodder seed production. The pesticides are used more frequently in cash

crops in comparison to the fodder crops. Among the household involved in fodder crop cultivation, around 88 percent reported use of pesticides in cultivation of cash crops, whereas only 6 percent used pesticides in fodder crop cultivation.

When enquired about receiving any directions on pesticides use, around 84 percent household answered affirmatively. The sources of these information were mainly shopkeepers (47%); followed by other farmers (45%) and label on container (36%). The Krishi Vikas Kendras (KVK), television and training / meetings under NDP I accounted for only 2 percent share each in this regard.

Place of storing pesticides in house is one of the major safety measures to avoid pesticide related hazards in human and animals. The survey revealed that 54 percent households kept it in a separate room with lock; 28 percent keep in cattle sheds; and nearly 18 percent keep it in other places.

Type of protection used while applying pesticides was covering face and eyes (75%), wearing clothes covering whole body (38%) and only putting on the gloves (34%).

Majority (73%) of the surveyed households washed hands with soap immediately after applying pesticides; followed by bathing and changing clothes (64%). But around one fourth of the surveyed were found to be at greater risk because they ate and drank directly without washing hands. About 13 percent reported having a bath and wearing same clothes after applying pesticides.

There are different ways of disposing pesticides container as mentioned by surveyed households. Most of them (44%) buried the empty container in soil; followed by throwing anywhere (34%) and selling the empty container (28%). Only 2 percent reuse it for other purpose. Around 16 percent of surveyed households feel that it has no effect on human health.

State - wise data tables can be referred to in Tables 167-176 of Annexure II.

13.3.2 Zoonosis

Zoonosis is the awareness about communicable diseases from animals to humans. One out of three households reported that they were aware about this. There has been significant improvement in awareness level with reference to baseline. The Strategic Environmental and Social Assessment (SESA) that was conducted before the launch of the project reported that the awareness about zoonosis was less than 10 percent.

Those who knew about zoonosis, have opined that the most common communicable disease was brucellosis (44%); followed by rabies (34%). Rest of the listed diseases got less than 10 percent response. When inquired about the precautions to prevent humans from infected animals, around 59 percent expressed their ignorance about such measures. As opined by one-fourth of respondents, timely vaccinations of animals and disposal of dead animal / fetus in covered pit were the most prevalent precautions that human could take to prevent from these infections.

State-wise data tables can be referred to in Tables 177 to 179 of Annexure II.

Vaccination

Vaccination of animals to prevent infections is one of the most important measures. It was encouraging to note that about 92 percent

households had their animals vaccinated for some kind of infections. Most (76%) of the vaccination was administered at the home / animal shed of the surveyed households. Needle and syringe (8%), vaccination vials (61%) and gloves (21%) were the major waste materials after vaccination process, as perceived by the respondents. These vaccination wastes were mainly collected and taken away,as revealed by 78 percent of households. However, about 18 percent households expressed their inability to response to the issue.

State - wise data tables can be referred to in Tables 180 – 183 of Annexure II.

13.3.3 Awareness of Water Management Options

The major source of water used for milch animals in all the three seasons i.e., winter, summer and rainy was the hand pump as reported by about three-fourths of households.

As reported by the respondents, the average requirement of water per animal per day was highest for buffaloes (88 liters). Crossbred cows and indigenous cows required 78 and 79 liters of water per day respectively. Water was adequately available for animals in all the study states. Only few households (2.5%) revealed that there was water shortage during some period of the year.

Major methods of water conservation known to the surveyed households were collecting rainwater in tank (66%); followed by creation of ponds (64%), deepening of tube wells / bore wells/well (38%) and farm bunding / watershed (28%).

Source of information about increasing water availability as reported by households was mainly television and radio (86% each); closely followed by newspaper (84%) About 10-15 percent of them reported “other farmers” and “NGOs” as a source of information.

State - wise data tables can be referred to in Table 184 to 188 of Annexure II.

13.3.4 Awareness of Fodder Conservation Methods

Fodder conservation technologies are critical for dairy farming. It provides year-long nutritious fodder to animals, especially during scarce season. Chaff cutting, dry fodder storage and silage making were the three most prominent methods of fodder conservation known by 76 percent, 57 percent and 41 percent households respectively.

Due to high level of awareness on fodder conservation techniques, majority of about 77 percent households prefer buying of fodder in advance during the periods of fodder scarcity.

Regarding the source of fodder conservation methods, “Traditional method” was the most prevalent method as reported by about 68 percent of the households. This apart, the other important sources were “DCS / Union” and “outside experts / extension worker”.

State - wise data tables can be referred to in Tables 189-191 of Annexure II.

13.4 Dairy Cooperative Societies

Questions related to this section were asked from DCS office bearers. Findings related to this section are being presented below:

13.4.1 Bulk Milk Coolers (BMC)

Around 60 percent of the DCS were found to have BMC installed at the milk collection centre.

Most (67%) of the installed BMC were having a capacity of 1 KL and the balance 33% were of 2 KL. The main source of water for cleaning BMC in all seasons was either hand pump / bore well or piped water / village supply system.

Major methods practiced by DCS to dispose waste water from BMC were “connected to pucca drain” (43%); followed by “nearby land” (18%); “soak pit” (15%) and “street near DCS” (10%).

Further, interviewers observed that water was not stagnant near DCS in case of 63 percent of DCSs. Further, water was reportedly stagnant at disposal point (soak pit, drain or open land) in 28 percent of DCSs. In about one tenth of DCSs, there was a smell near wastewater disposal site.

Electricity was the main source of energy at all DCS collection centers across states. However, about one-third of these units in Bihar also used diesel for this purpose.

State - wise data tables can be referred to in Tables 192 to 197 of Annexure II.

Chapter 14

NDP - 1 in 3 Additional States

Chapter 14

NDP - 1 in 3 Additional States

14.1 Introduction

During the course of implementation, three states namely, (i) Chhattisgarh; (ii) Jharkhand; and (iii) Uttarakhand were covered under NDP I, which was not envisaged at the beginning of the project. For the sake of consistency and comparison, Chapter 1 to 14 of this report covers the background and key findings of the Endline survey in major dairying states namely, Andhra Pradesh (undivided), Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

This chapter focuses on the findings and analysis of the similar data captured in respect of three additional NDP I states. It may be mentioned that since the three states were not the part of baseline survey, inter-temporal (i.e. before-after) comparison is not possible and hence, the analysis of programme and control areas (i.e., with-without scenario) has been carried out. There are about 5000 households were surveyed from each of programme and control areas in these 3 states.

14.2 Incidence of Milch Animal Ownership

There are about 5,000 households were listed from each of programme and control areas in these 3 states. Among these households, 43 percent of households in programme area reported owning milch animals, as against 34 percent in control area – indicating relatively higher incidence of milch animal ownership in programme area. The same pattern held true across these states, albeit with varying magnitude *(Table 1A of Annexure II)*.

14.3 Composition of Bovine Animal Holding and Milk Production

At the aggregated level, the preponderance of crossbred cows was evident in programme as well as control area. However, this pattern differed across the states. In Chhattisgarh, the share of crossbred cows in total milch animal population was as high as 96-97 percent, followed by Jharkhand, whereas the indigenous cattle formed major part of the milch herd in Uttarakhand. Expectedly, the share of milk production across the species followed similar distribution as witnessed in case of population *(Tables 4A & 5A of Annexure II)*.

14.4 Distribution of MAH, Milch Animals and Milk Production by Land Holding Groups

About 80 percent of farmers did not own any operational land or had less than 2 hectares of land. These group of households accounted for almost similar share in milch animal population. The marginal farmers dominated in both programme (44%) as well as control (38%) area. Also, the average milk yield per in-milk animal was found to be the highest in case of

medium farmers in both study areas. In general, milk yield was relatively better across different land holding classes in programme area as compared to that in control area *(Tables 6A, 7A and 8A of Annexure II)*.

14.5 Distribution of MAH by number of adult female bovine animals

One out of 2 MAHs had 2 adult female animals both in the programme area and the same was 44 percent in the control area. Only one out of 10 MAHs owned 4 or more animals in both programme as well as control areas. However, there were shuttle differences in the pattern across the states *(Table 9A of Annexure II)*.

14.6 Status of PDO Level Result Indicators

In-Milk to Adult Female Ratio

- Overall the proportion of 'in-milk' female animals to adult female animals was the highest in respect of IC (53%); followed by buffalo (52%); and lowest in case of CB (48%).
- Since the share of crossbred cows was higher in population, the proportion of in-milk animals at the aggregate level was broadly converging with the same in case of crossbred cows.

State-wise information is given in following Table 14.1

Table 14.1: Proportion of In-milk to Adult Female Animals (in%)

State	PROGRAME				CONTROL				END-TERM			
	IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk
Chhattisgarh	40	48	80	48	50	43	80	44	43	46	80	46
Jharkhand	39	47	70	47	35	51	42	46	37	49	45	47
Uttrakhand	64	53	50	59	68	63	83	67	66	58	75	63
Overall	53	48	71	49	52	48	47	49	53	48	52	49

Milk Yield per In-Milk Animal

- Milk yield per in-milk animal was the highest in respect of CB (8.3 litres / day); followed by buffalo (4.3 litres / day); and lowest in case of IC (2.8 litres / day) if all states taken together.
- Similar trend was noted both in the programme and control area. However, the animal productivity across all the species was found to better in programme area as compared to control area.

State-wise information is given in following Table 14.2

Table 14.2: Average Milk Yield of In-Milk Animals (Litres/Day)

State	PROGRAME				CONTROL				ENDTERM			
	IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk
Chhattisgarh	5.0	8.6	5.5	8.4	4.0	9.2	6.0	9.0	4.7	8.8	5.8	8.7
Jharkhand	3.4	8.8	4.1	7.9	3.1	8.0	4.0	6.6	3.2	8.4	4.0	7.2
Uttrakhand	2.5	6.4	6.0	4.1	2.5	4.8	3.4	3.4	2.5	5.5	3.9	3.7
Overall	2.9	8.5	4.8	7.4	2.8	8.2	4.1	6.7	2.8	8.3	4.3	7.1

Milk Sales to total Production

- About 78 percent of total milk produced was sold as liquid milk.
- The proportion of liquid milk sale with respect to milk production was higher in programme area (83%) than that in the control area (72%).
- The same trend witnessed across the states, as given in following Table 14.3.

Table 14.3: Liquid Milk Sold as Percent of Milk Production (%)

State	PROGRAMME	CONTROL	ENDLINE
Chhattisgarh	86	77	82
Jharkhand	85	72	79
Uttarakhand	62	51	57
Overall	**83**	**72**	**78**

Milk Sales to Organized Sector

- About 70 percent of surplus milk was sold to organised channel.
- The value of this indicator was somewhat better in the programme area (71%) than in the control area (66%).
- This pattern was similar across states, as provided in the Table 14.4.

Table 14.4: Proportion of milk sold to the organized sector (in %)

State	PROGRAMME	CONTROL	ENDLINE
Chhattisgarh	62	57	60
Jharkhand	82	77	80
Uttarakhand	78	73	76
Overall	71	66	69

14.7 Animal Breeding Services

- Out of all the animals that received any breeding service during the last two years, the receipt of AI services by cattle was higher than that of buffaloes. About 67-75 percent indigenous cattle and 64 percent

crossbred cows received AI services as against 33-44 percent of buffaloes that received the same in both programme and control area *(Table 10A of Annexure II)*.

- Relatively higher proportion of buffaloes received Natural breeding service in comparison to indigenous and crossbred cows *(Table 11A of Annexure II)*.
- Maximum of AI services in both programme area (60%) and control area (58%) resulted in conception *(Table 12A of Annexure II)*.
- About three-fourths of total households received AI service from NGO / Private Players, distantly followed by Government (17-21%) *(Tables 13A of Annexure II)*.
- NGO / Private bull facility accounted for maximum share for providing natural service (NS) in both programme area (83%) and control area (72%) *(Table 14A of Annexure II)*.
- Less than 10 percent of total animals were insured in programme and control areas *(Table15A of Annexure II)*.

14.8 Feed, Fodder and Grazing

- In these states, the general practices are to send animals for grazing. However, only few MAH in programme area (8-11%) and control area (5-9%) reported sending their animals for grazing *(Tables 16A of Annexure II)*.

14.9 Animal Health and Management

- During last one year, only few animals were sick in both programme area (5% each category) and control area (7-10%).
- In general, bore-well and piped water were the main source of drinking water for bovine animals during all seasons in both programme and control areas. The dependence on bore well was noticeably higher during summer and rainy seasons.
- Majority of the MAHs stored dung in open area in programme area (73%) and control area (83%). Storage of dung as manure / compost pits was comparatively higher in programme area (39%), as compared to that in control area (32%).
- About one-third of MAHs reported having *kachcha* drainage structure in programme and control area. Around 20 percent of the MAHs reported having brick lined drainage structure in their animal sheds in both areas. Less than 10 percent of MAHs had pucca drainage in both the areas. A sizable proportion of MAH (Programme area 37%; control area 49%) did not have any type of drainage in their animal shed in both areas.
- The awareness about zoonosis was significantly low in control areas. About 25 percent of MAH in programme area knew that some diseases could be transmitted from animal to human being, whereas the same proportion was 11 percent in control area.

State-wise data tables are provided at Table 17A to 23A of Annexure II.

14.10 Socio-Economic Aspects

- The women of the family were highly associated with the activities like feeding animals and cleaning shed in both the areas. Their involvement was found to be the least as far as selling / pouring of milk is concerned *(Table 24A of Annexure II)*.

- In 85% of MAHs, the contribution of women in dairying was recognised in programme as well as control areas *(Table 25A of Annexure II)*.
- Majority of MAHs (programme area 88%; control 85%) felt that engagement of women in dairy activities resulted in increased status of women in the household *(Table 26A of Annexure II)*.

14.11 Extension Services

- Participation of MAH family members aged 14+ in training and demonstration was higher in programme area (Training 6.6%, Demonstration 6.4%) than in control area (Training 2.1%, Demonstration 1.9%) *(Table 27A of Annexure II)*.
- About two-fifth of MAH felt need for training in both areas. The felt need for demonstration programme was higher in control area (50%) than that in the programme area (33%) *(Table 28A of Annexure II)*.
- While less than 5 percent of MAHs reported dairying as primary source of income, about 30 percent of MAHs indicated dairying as second important source of income. Almost cent-percent MAHs perceived that dairying was a source of income in both areas *(Tables 29A & 30A of Annexure II)*.
- About two-thirds MAHs were getting dairy farming related information in both areas *(Tables 31A of Annexure II)*. While DCS / MPI was the most important source of information in programme area, it was radio in case of control area *(Table 32A of Annexure II)*.

14.12 Assessment of Key Components of NDP I

RBP

- About 96 percent of the MAHs in RBP surveyed villages had been approached by LRP to advise them to feed balanced ration to their animals *(Table 33A of Annexure II)*.
- About 74 percent of the MAH approached reported coverage of their animals under RBP *(Table 34A of Annexure II)*.

VBMPS

- Before opening of the DCS / MPI, majority of MAH sold milk to dudhias (53%) or individual households (28%) *(Table 35A of Annexure II)*.
- Average milk price received by MAH was Rs. 24 per litre before opening of the DCS / MPI. They now receive better milk price (Rs.29 per liter) from DCS / MPI *(Table 36A of Annexure II)*. .
- The benefits of selling milk to DCS/MPI as perceived by the respondents were reduced spoilage of milk (83%); better price of milk (76%); advantage of getting longer time for pouring (52%); time saved in marketing milk (17%); and subsidised cattle feed (7%) *(Table 37A of Annexure II)*.

Based on the findings, it can be concluded that the interventions under NDP I have a positive impact in the study areas of all the 3 states. In terms of all study parameters and PDO level result indicators, in general, the status of MAHs in these states was better in programme area than that in the control area.

Chapter 15

Impact of NDP 1

Chapter 15

Impact of NDP 1

15.1 Introduction

The components under NDP I aimed at increasing the productivity of dairy animals and improving the market access of milk producers in the project area. These objectives were pursued through adoption of scientific and systematic processes in provision of technical inputs and services to milk producers at their doorsteps and facilitating access to milk producers to the organized milk processing sector. The important focus area of the project included fodder development, strengthening computerised information system for collection of data and dissemination of information related to breeding, door step AI delivery services nutrition and village based milk procurement systems.

Based on the study findings and interaction with the key stakeholders, the impact and outcome of the main project interventions under NDP I are as under.

15.2 Awareness Generation

As per interaction with concerned authorities in the Animal Nutrition & Fodder Department, NDDB, Gujarat; about 50,000 campaigns were organized to generate awareness about animal nutrition among farmers in 30,000 villages spread across 18 states covered under NDP I. Through these campaigns, about 30 lakh farmers have been benefited. In addition, about 20 lakh farmers have been benefitted through advisory services provided by LRPs deployed to educate them for animal management and providing balanced nutrition to their milch animals.

15.3 Increased Milk Productivity

The key challenges to the small herd holders in the project area have been the high cost of feed and fodder and low price of milk realized by them. Further, non-availability of adequate marketing opportunities and institutional credit were the two other challenges faced by the milk producers. The project effectively worked towards moderating the impact of these challenges to a great extent.

15.3.1 Animal Breeding

The NDP I pursued increase in milk production by increasing productivity of milch animals and helping rural milk producers with greater access to the organized milk processing sector. The focused approach on breeding and feeding has yielded positive results. The activities undertaken In the areas of improvement in the genetic merit of cattle and buffalo were production of high genetic merit (HGM) cattle and buffalo bulls; import of Jersey / HF Bulls for semen production; strengthening Semen Stations / starting new stations for producing high quality disease free semen doses and setting up a pilot model for viable doorstep AI delivery services through professional service providers including animal tagging and performance record.

For preservation and promotion of native descript breeds, the scientific selection process introduced in the breeding tracts of the identified breeds under NDP I has strived towards increasing productivity through genetic improvement of animals, bull selection process and frozen semen production infrastructure for different indigenous dairy breeds.

15.3.2 Ration Balancing Programme (RBP)

The scientific approach to feeding of milch animals to produce milk commensurate with their genetic potential and to reduce methane emission was helpful in supporting Ration Balancing Program (RBP); and Extension initiatives / interventions for fodder development.

The improvement in milk yield became visible in a short term through effective implementation of the Ration Balancing Programme (RBP). Breed improvement would be helpful to sustain the momentum of improvement in milk yield in the long run.

The benefits of the RBP have been manifold. In the Endline survey, the increase in yield was found to be around 1.4 litres per day, while the reduction in cost was reported by Rs. 7 per day per animal. While these findings were arrived at by an inquiry of sample beneficiary households through recall method at particular point of time, the detailed analysis of transaction data for the entire project period as reported under Information Network for Animal Productivity & Health (INAPH) indicated an increase in milk yield by 300 ml per animal per day, whereas there was a reduction in cost of feeding by Rs. 16 per day per animal. The fat content in the milk yield has increased by 0.1 percent, which translated into an increase in income by Rs. 10 per animal per day. Thus, the programme has benefitted the farmers by contributing net incremental income of Rs. 26 per animal per day.

15.3.3 Fodder Development

16.3.3.1 Fodder cultivation

Green fodder, being the basic source of roughage for dairy animals, is helpful in reducing the overall cost of feeding the animals. NDDB has made substantial effort to enhance green fodder productivity on farmers' fields through the dissemination of improved fodder cultivation technologies and techniques for fodder conservation besides training the technical manpower of the dairy cooperatives. Technical support has been provided to End Implementing Agencies (EIAs) for implementing Fodder Development Programs and to enhance availability of quality fodder seed under NDP I.

The strategic programme interventions have shown a definite positive change in pattern of fodder development during the plan period. The proportion of MAH growing fodder has increased from 33 percent households in Baseline to 55 percent households in programme area in Midline and 57 percent households in Endline.

It may be mentioned that the fodder cultivation is more prevalent in Northern states where most of the states have large population of buffaloes. The peak milking period of buffaloes coincides with winter season during which a relatively larger number of MAHs prefer to grow fodder. In the Southern states, in general, cultivation of fodder crops by milch animal owning households is relatively on lower side as compared to that in the Northern states.

During the baseline, while majority of the farmers reported sourcing of fodder seed through private seed shops, only few households reported purchasing fodder seed through dairy cooperatives. By end of the project, though private seed shops remained major source of purchasing fodder seeds, the

dairy cooperatives made notable inroads where about one-fourth of fodder growing households reported sourcing of fodder seeds through dairy cooperatives.

15.3.3.2 Awareness and use of certified seeds

Awareness about certified or truthfully labeled seeds among fodder growing households increased from 72 percent during baseline to 79 percent at the time of Endline.

During Baseline, most of the fodder growing households used local seeds for fodder cultivation. The incidence of use of certified / truthfully labelled seeds has improved significantly during the tenure of the project. Among fodder growing households, less than 10 percent of them reported use of certified/ truthfully labelled seeds at the time of Baseline and by end of the project, almost all the fodder growing households have reported use of certified / truthfully labelled seeds for fodder cultivation.

The preponderance of high yielding animals like crossbred cows and buffaloes has been observed in the programme area. While their combined share in population has been about three-fourths, their contribution in total milk production is around 90%. Further, the growth in yield of these animals was found to be higher in the programme area as compared to control area.

15.4 Village Based Milk Procurement Systems (VBMPS)

The households selling milk to organized sector prefer the channel primarily due to price of milk and regular / timely payment. The main benefit of the VBMPS programme was providing better milk price to milk selling MAH. This apart, many spin-off benefits were derived like reduced wastage of milk, time saved in marketing of milk, advantage of getting longer time for milk pouring, availability of better AI service and getting subsidized cattle feed. As a result of the establishment of new DCS / MPI, transparency in milk payment system and flexibility in milk pouring timings under VBMPS programme; many households have increased the number of milch animals owned by them leading to increased household income. Also, due to VBMPS intervention, it has been observed that the DCS / MPI became a yardstick for setting a price of milk in not only that village, but also in surrounding vicinity. The other milk procuring channels also followed the suite as far as prices of milk were concerned.

The results of Endline survey indicated that the incremental milk production at the household level due to increase in milk productivity of animals has proportionately translated into increase in both consumption and sale. During Baseline, the average milk production per milk producing household was 7.2 litres per day, which increased to 10.9 litres per day in programme area and 9.4 litres per day control area by end of the plan period. Though milk production per household has increased, the proportion of milk sold has remained almost constant at 65 percent – meaning that the incremental quantity of milk produced has got proportionately distributed across household consumption and sale. Also, the increased access to organized sector, as designed under the project, led to increased share of organized sector in total milk sale from 45 percent to 59 percent.

The changes in the value of the Project Development Objective (PDO) indicators are indicative of the extent of impact made by the project interventions.

Chapter 16

Areas for Improvement

Chapter 16

Areas for Improvement

The study findings reveal scope for improvement in the following areas:

- While the AI coverage has been found impressive during the Endline survey, there is a scope for improvement as it was relatively low among the MAH having one milch animal in both survey areas. Incidentally, these group of MAHs accounted for about 40 percent of total MAHs.
- About 95 percent of MAH have been using chemical fertilizers in cultivation of fodder crops in the study area. Use of pesticides has also been reported by nearly one fourth of the MAH in both areas. It is important to promote methods that involve no use of chemical fertilisers and pesticides in animal feed and fodder cultivation to check risk to animal health, surface / groundwater and air contamination; and also benefit farmer, public health, and farm economics. Methods like use of organic manure need to be evolved and deployed to reduce use of chemical fertilisers and pesticides in animal feed and fodder cultivation.
- Only around one tenth of the MAH were aware about zoonotic diseases. The awareness and education about maintaining hygiene to prevent diseases and infections that are naturally transmitted between vertebrate animals and humans needs to be created.
- About 40-41 percent of the MAHs had either having pucca cemented or brick lined drainage structure in their animal sheds. About one-fourth of MAH did not have any type of drainage in their animal shed in both areas. About 27-33 percent of MAH had drainage leading to open area / agricultural field. Such practices lead to unhygienic conditions and origin of many diseases and infections.
- Use of dung for biogas plants has been reported by just 3 percent MAH. The use of bio-gas plant for producing fuel for cooking and slurry as fertilizer in the agriculture field need to be propagated, which will be helpful in increasing the income by reducing the cost of fuel for cooking and fertiliser.
- Training and demonstration programmes have ample scope to improve the coverage, particularly in case of women. About 40-43 percent of MAH felt the need of these programmes in the project areas. Appropriate interventions should be taken to promote greater participation of MAH members in training and demonstration programmes; involvement and decision making in dairying; and strengthening DCS membership.
- Though the satisfaction level for RBP according to the beneficiaries was found to be high, it seems that the sustainability

may be an area of concern after conclusion of NDP I project. Regular visits of LRPs and continuation of following the advice by the milk producers are difficult to sustain for longer period. Instead, a localised ingenious system of arriving at balanced ration for different type of animals needs to be evolved for its effective propagation in the villages.

- A significant proportion of MAHs in both areas (38% in programme area and 53% in control area) did not receive any farm related information.
- At the DCS / MPI level, stagnancy of water at disposal point (soak pit, drain, open land) was found in 28 percent cases. On an average in one tenth of DCS, there was smell near wastewater disposal site. The Standard Operating Procedures need to be followed in this regard to take adequate measures for ensuring no water stagnation and foul smell near wastewater disposal site of DCS / MPI.

ANNEXURE - I

Data Collection Tools

Listing Schedule for Control Villages

Listing Schedule	NDP-I, Govt. of India / NDP-I, भारत सरकार	End-term Survey	7

State/ राज्य | District/ जिला | Tehsil/Block/ तहसील/ब्लॉक | Village / गाँव

Is there any DCS/NGC/ Pvt. Dairy Milk Collection Facility in the village/ क्या इस गाँव में दुग्ध समिति/एन०जी०सी०/प्राइवेट डेयरी का दूध संकलन केन्द्र हैं ? 1. Yes (हाँ) 2. No (नहीं)

Sl No. for HH Selection परिवार चूनने के लिए कम संख्या

SL No कम संख्या	House No. मकान संख्या	Name of head of Household घर के मुखिया का नाम	Animals that calved at least once / ऐसे पशु जो कम से कम एक बार बच्चा दिया हो							
			Does the household have cows/ buffaloes क्या घर में गाय/भैंस हैं Y-1 / N -2	Indigenous Cow देशी गाय		Crossbred Cow संकर नस्ल की गाय		Buffalo/ भैंस		Total No. of cows/ buffaloes कुल गाय/भैंसों की संख्या
				Total कुल	In milk दूध देने वाली	Total कुल	In milk दूध देने वाली	Total कुल	In milk दूध देने वाली	
1	2	3	4	5	6	7	8	9	10	11
			1 2							

(Rows repeated 1 2 for 30 rows)

Listing Schedule for RBP Villages

Listing Schedule	NDP-I, Govt. of India / NDP-I, भारत सरकार	End-term Survey	7
State/ राज्य	District/ जिला	Tehsil/Block/ तहसील / ब्लॉक	Village / गाँव

Is there any DCS/NGC/ Pvt. Dairy Milk Collection Facility in the village/ क्या इस गाँव में दुग्ध समिति / एन०जी०सी० / प्रइवेट डेयरी का दूध संकलन केन्द्र हैं ? 1. Yes (हाँ) 2. No (नहीं)

SL No क्रम संख्या	House No. मकान संख्या	Name of head of Household घर के मुखिया का नाम	Animals that calved at least once / ऐसे पशु जो कम से कम एक बार बच्चा दिया हो: Does the household have cows/ buffaloes क्या घर में गाय / भैंस हैं Y-1 / N -2		Indigenous Cow देशी गाय: Total कुल	Indigenous Cow देशी गाय: In milk दूध देने वाली	Crossbred Cow संकर नस्ल की गाय: Total कुल	Crossbred Cow संकर नस्ल की गाय: In milk दूध देने वाली	Buffalo/ भैंस: Total कुल	Buffalo/ भैंस: In milk दूध देने वाली	Total No. of cows/ buffaloes कुल गाय / भैंसों की संख्या	Ask only in RBP Villages: Have you taken any benefit of RBP Scheme in present or past? (Circle if Yes)	Sl No. for HH Selection परिवार चूनने के लिए कम संख्या	
1	2	3	4		5	6	7	8	9	10	11	12	P	C
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		

Listing Schedule for VBMPS Villages

Listing Schedule | **NDP-I, Govt. of India / NDP-I, भारत सरकार** | **End-term Survey** | **7**

State/ राज्य | District/ जिला | Tehsil/Block/ तहसील / ब्लॉक | Village / गाँव | Ask only in VBMPS Villages

Is there any DCS/NGC/ Pvt. Dairy Milk Collection Facility in the village/ क्या इस गाँव में दुग्ध समिति / एन०जी०सी० / प्रइवेट डेयरी का दूध संकलन केन्द्र हैं ? 1. Yes (हाँ) 2. No (नहीं)

SL No क्रम संख्या	House No. मकान संख्या	Name of head of Household घर के मुखिया का नाम	Animals that calved at least once / ऐसे पशु जो कम से कम एक बार बच्चा दिया हो: Does the household have cows/ buffaloes क्या घर में गाय / भैंस हैं Y-1 / N -2		Indigenous Cow देशी गाय: Total कुल	Indigenous Cow देशी गाय: In milk दूध देने वाली	Crossbred Cow संकर नस्ल की गाय: Total कुल	Crossbred Cow संकर नस्ल की गाय: In milk दूध देने वाली	Buffalo/ भैंस: Total कुल	Buffalo/ भैंस: In milk दूध देने वाली	Total No. of cows/ buffaloes कुल गाय / भैंसों की संख्या	Does your household pour milk in DCS? (Circle if Yes)	Sl No. for HH Selection परिवार चूनने के लिए क्रम संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13	P	C
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		
			1	2								1		

National Dairy Plan (NDP I) of Government of India
Household Schedule for the Endterm Survey

I am from DRS Pvt. Ltd., a Delhi based survey Research Company. Currently we are conducting a survey for National Dairy Plan (NDP I), Government of India among households owning cows and buffaloes to understand animal rearing practices, milk production and milk utilisation at the household level. The information provided by you will be used for planning policies and activities that will help milk production in this area.

मैं दिल्ली के एक शोध संस्थान **डी. आर. एस. प्रा. लि.** से हूँ। वर्तमान में हमलोग **राष्ट्रीय डेयरी योजना-I (NDP-I), भारत सरकार** लिए सर्वेक्षण कर रहे है। इस सर्वेक्षण में हम गाय और भैंस पालने वाले परिवारों का साक्षात्कार कर रहे है। ताकि परिवार के स्तर पर पशुपालन के तरीकों, दूध उत्पादन और दूध के उपयोग को समझा जा सके। आपके द्वारा प्रदान की गई सूचना का उपयोग योजना और नीतियॉ बनाने में किया जाएगा। जिससे इस क्षेत्र में दूध उत्पादक को बढ़ाया जा सके।

State Name / राज्य का नाम									**Code/** कोड			
District Name / जिला का नाम									**Code/** कोड			
Tehsil/Taluk/Mandal/ Block Name / तहसिल / तालुका / मंडल / ब्लॉक का नाम									**Code/** कोड			
Village Name / गाँव का नाम									**Code/** कोड			
Does this village have DCS/ MPI or is attached to any DCS/ MPI? / क्या इस गाँव में डीसीएस / एम पी आई है या डीसीएस / एम पी आई से सम्बद्ध है?	**DCS/ MPI /** डीसीएस / एमपीआई	1	**Attached to any DCS/ MPI /** डीसीएस / एम पी आई से सम्बद्ध						**2**	**No / नहीं**	**3**	
The component under which village is covered in NDP I project / इनमें से कौन सा अवयव एनडीपी-1 के तहत गांव में कवर है	RBP / आरबीपी	1	VBMPS/ विबीएमपीएस	2	Both दोनों	3	None कोई नहीं	**4**				
If VBMPS, whether / यदि विबीएमपीएस है तो	**New / नया**	**1**	**Strengthening/ मजबुत करना**	**2**								
Sl No as in Listing Schedule लिस्टिंग में क्रम संख्या				**House No as in Listing Schedule/** लिस्टिंग सूची में मकान संख्या								
GPS position जीपीएस की स्थिति	**Latitude/ अक्षांश: N**			.			.					
	Longitude/देशान्तर: E			.			.					
Name of the Respondent उत्तरदाता का नाम												
Name of Head of Household परिवार के मुखिया का नाम												
Social Group/ सामाजिक समूह	1. General		2. SC		3. ST		4. OBC					
Economic Group / आर्थिक समूह	1. APL		2. BPL		3. Antodaya							
Whether household is covered under इनमें से परिवार किसके तहत कवर है	**RBP/** आरबीपी	**1**	**VBMPS/** विबीएमपीएस	**2**	**None/** कोई नहीं	**3**						
Survey (Month & Year) सर्वेक्षण (महिना / वर्ष)	**Month/** माह **(MM)**			**Year/** वर्ष **(YYYY)**								
Particulars of field work फिल्ड वर्क का विवरण	**Name** नाम					**Signature** हस्ताक्षर		**Survey Date:** सर्वे की तिथि				
Enumerator / सर्वेक्षक												
Supervisor/ सुपरवाईजर												

Section – I: Demographic Characteristics

Q 1.0 Demographic characteristics of Usual Residents of the Household

SL No क्रमांक	1.1 Name/ नाम	1.2 What is the **age** of this member ? **(in Completed years)** इस सदस्य का उम्र कितना हैं?	1.3 What is the **relationship** of this member with current head of the household? सदस्य का परिवार के वर्तमान मुखिया से क्या सबंध है? ***(Use code)***	1.4 What is the **Gender** of the Member? सदस्य का लिंग क्या है ***1= Male 2= Female***	1.5 What is the **highest level of education** completed by this member? इस सदस्य द्वारा प्राप्त की गई उच्चतम शिक्षा क्या हैं? ***Use code (Above 6 Years)***	1.6 What is the **primary occupation** of the member? सदस्य का प्राथमिक व्यवसाय क्या है? ***Use code***	1.7 Does this member **live in the village** through out the year? क्या यह सदस्य सालभर गाँव मे रहता है? 1. Yes 2. No	1.8 If No in the previous question? For **how many months** does he live **outside the village/** अगर पिछले प्रश्न मे ना है तो, पिछले साल में वह कितने महीने गाँव से बाहर था	1.9 Where does he/ she go during these months? वह इन महीनों मे कहां जाता है? ***Use code***	1.10 Which is the most **important reason** for this person to go outside the village during these months? इन महीनों मे यह सदस्य किस उद्देश्य से गाँव से बाहर जाते है? ***Use code***	1.11: Whether this member consumes milk? (Tea, Coffee, Dahi, Chach) क्या यह सदस्य दूध पीता है? **1. Yes 2. No**
1	2	3	4	5	6	7	8	9	10	11	12
1											1 2
2											1 2
3											1 2
4											1 2
5											1 2
6											1 2
7											1 2
8											1 2
9											1 2
10											1 2
11											1 2

(Please attach a separate sheet if household has more than 11 members)

Code for Column 4 Relationship / संबंध	Code for Column 6 Education levels/शिक्षा का स्तर	Code for Column 7 Occupation / व्यवसाय
1. Head of the HH / परिवार का मुखिया	1. Illiterate / निरक्षर	1. Crop Cultivation / फसल की खेती
2. Wife/ Husband /पत्नी / पति	2. Literate but no formal education / साक्षर लेकिन औपचारिक शिक्षा नही	2. Agriculture Wage labourer / खेतीहर मजदूर
3. Son/ Daughter/बेटा / बेटी	3. Up to class 5th / कक्षा 5 तक	3. Dairying / दूधउत्पादन
4. Son-in-law/ daughter-in-law/दामाद / बहु	4. Up to class 8th / कक्षा 8 तक	4. Non-agricultural wage labourer / गैर खेतीहर मजदूर
5. Grand Child / नाती / पोता	5. Up to class 10th / कक्षा 10 तक	5. Self employed/ family business (excluding cultivation, dairying) *Own account worker/Employer/ Family worker* / पारिवारिक व्यवसाय / स्वरोजगार (खेती / दूधउत्पादन को छोड़कर) स्वनियोजित, नियोक्ता, पारिवारिक मजदूर
6. Parent / माता / पिता	6. Up to class 12th / कक्षा 12 तक	6. Regular salaried/wage employee / वेतनभोगी / कर्मचारी
7. Parent-in-law / सास / ससुर	7. Graduation / स्नातक	7. Not able to work due to disability/ old age / विकलांगता / अधिक उम्र के कारण कार्य करने में अक्षम
8. Brother-in-law/ Sister-in-law / जेठ / भाभी	8. Above Graduation स्नातक से आगे	8. Recipient of rent/pension/ other income / किराया / पेंशन / अन्य से आय
9. Step child / सौतेला बच्चा	9. Professional Course / व्यवसायिक शिक्षा	9. Housewife / गृहिणी
10. Brother /Sister / भाई / बहन	10. Others/ अन्य (Specify)	10. Student / विद्यार्थी
11. Unrelated / संबंधित नहीं		11. Unemployed / helping in household chore / बेरोजगार / परिवार के कार्यो मे सहायता
12. Worker / मजदूर		12. Others/ अन्य (Specify)
13. Nephew /Niece / भतिजा / भतिजी		
14. Others relative / अन्य संबंधी		

Code for Column 10	Code for Column 11
1. Nearby town /शहर के नजदीक	1. Alternative employment / वैकल्पिक रोजगार
2. Within the state (other than nearby town) राज्य मे / (शहर के नजदीक को छोडकर)	2. Non-availability of **fodder/ feed** for animals in the village पशुओं के लिए गाँव में चारा आहार की अनुपल्बधता
3. Outside the state/ राज्य के बाहर	3. Non-availability of **water** for animals in the village पशुओं के लिए गाँव में पानी की अनुपल्बधता
4. Other / अन्य	4. Other / अन्य

Section-II: Animal profile, Milk Production, Awareness Access and Utilization of Animal Breeding Services

Q	Questions		ID No. of Animals											
			1	2	3	4	5	6	7	8	9	10	11	12
2.1	Animal Category (Indigenous cow=1, Crossbred cow=2, Buffalo=3) पशु की श्रेणी (देशी पशु-=1, संकर पशु =2, भैस =3)													
2.2	Gender of Animal / पशु का लिंग (नर =1, मादा = 2)													
2.3	Age-group of Animal (Less than 2.5/3 years=1, More than 2.5/3 years=2) / पशु का आयु वर्ग (2.5/3वर्ष से कम – 1, 2.5/3 वर्ष से ज्यादा – 2)													
2.4	(To be Asked for all females) Has she calved at least once? (Yes=1, No=2) / (सारी मादा पशुओं के लिए पूछें) क्या वह कभी भी बच्चा दी है? (हॉ – 1, नहीं – 2)													
2.5	No. of calvings completed / कुल प्रजनन की संख्या													
2.6	Status of the animal which is more than 2.5/3 years (Inmilk =1, Dry=2, Others=3)/ 2.5/3 साल से उपर के पशुओं की स्थिति (दूध में – 1, सूखी हुई – 2, अन्य – 3)													
2.7	If In milk or Dry, Since how many months? / यदि दुधारू या सूखी हुई है तो कितने महीनों से?													
2.8	**(Ask only if the animal is in milk)** (यदि पशु दुध में है तो पूछें) what was the milk yield of these animals yesterday/ कल इन पशु का दुग्ध उत्पादन कितना था?	Morning Yield (in litres)												
		Evening Yield (in litres)												
		Total yield (in litres)												
(To be asked for all female animals who have calved at least once) / (सारी महिला पशुओं के लिए पूछें जिन्होंने कम से कम एक बार बच्चा दिया हो)														
Following questions should be asked for services availed during last 2 years for last/current pregnancy / निम्नलिखित प्रश्न को पिछले दो साल के दरम्यान/वर्तमान गर्भावस्था से संबधित लिये गये सेवाओं के बारे मे पूछें?														
2.9	What types of breeding services has this animal received for the last/current conception (Tick applicable) / अंतिम या वर्तमान गर्भाधान के लिए इस पशु ने किस प्रकार की प्रजनन सेवायें प्राप्त की? (उपयुक्त को √ करे)	AI												
		NS												
		Open												
2.10	How much did you pay for these service (Rs./ service) इस सेवा के लिए आपने कितना भुगतान किया (रूपया प्रति)	AI												
		NS												
		Open												
2.11	If animal has received AI/NS, how many services received for the last conception यदि पशु ने AI/NS, प्राप्त किया है तो पिछले गर्भाधान के लिए कितनी बार सेवायें ली है?	No. of AI Services												
		No. of NS Services												

Q	Questions	ID No. of Animals											
		1	2	3	4	5	6	7	8	9	10	11	12
2.12	Which type of service resulted in last conception? (AI=1, Natural=2, Open=3, Not known/ Not sure=4) / पिछला गर्भ किस सेवा से ठहरा था? (AI–1, प्राकृतिक– 2, खुला– 3, पता नहीं–4)												
Ask if AI/NS resulted in the last conception / यदि **AI/NS** से पिछला गर्भ ठहरा हो तो पूछें?													
2.13	Who provided breeding service that resulted in conception इस गर्भाधान के लिए किसने प्रजनन सेवा प्रदान की थी? *(**AI:** Milk Coop. Worker=A1, Indiagen (Mobile Technicians) – MAITS=A2, NGO/Pvt. Doctor/AI service provider=A3, Govt. Vet. Doctor or Livestock Inspector=A4, Others=A9)* (**AI:** दुग्ध सहकारीकर्मी– *A1*, इंडियाजेन (मोबाईल टेक्निशियन) *MAITS=A2,* एनजीओ/निजी डॉक्टर/एआई सेवा प्रदाता= *A3,* सरकारी पशु चिक्तिसक या पशु निरीक्षक=*A4,* अन्य =*A9)* *NS: Milk Cooperative=N1, Traditional Breeders=N2, Private Bull Facility=N3, Govt. Bull Facility=N4, Others=N9)* (**NS:** दुग्ध सहकारिता =*N1,* पारम्परिक प्रजननकर्ता=*N2,* निजी सांड़ सुविधा =*N3,* सरकारी सांड सुविधा =*N4,* अन्य =*N9)*												
2. 14	Where was the service provided (Doorstep=1, Other place=2) यह सेवा कहाँ प्रदान की गई थी? (घर पर –1, अन्य जगह पर –2)												
Following Questions Should be Asked for All the Animals / निम्नलिखित प्रश्नों को सारे पशुओं के लिए पूछें?													
2.15	Whether the animal is insured? (1 Yes 2 No) क्या पशु का बीमा हुआ है? (हाँ–1, नहीं–2)												
2.16	Whether the animal is sent for grazing? (1 Yes 2 No) क्या पशु को चरने के लिए भेजा जाता है? (हाँ–1, नहीं–2)												
2.17	If Yes, for how many months in a year यदि हाँ तो, साल मे कितने महीने के लिए												
2.18	Whether the animal fell sick during last one year due to any infectious disease? (Yes=1, No=2) क्या पशु पिछले एक साल में किसी संक्रमण संबंधी बीमारी से पीड़ीत हुआ है? (हाँ–1, नहीं–2)												

Q.	Question	Options
Ask Q 2.19 to Q 2.21, if the Animals in the HH received AI, else code 9 यदि इस परिवार के किसी भी पशु ने एआई सेवा प्राप्त की है तो **Q 2.19** से **Q 2.21,** पुछें अन्यथा **9** कोड करे		
2.19	Which service provider provided **AI services** to your animals most of the time? कौन सेवा प्रदाता आपके पशुओं को सबसे ज्यादा बार **AI** सेवा दिया है?	1. Milk Coop worker / दूध सहकारी कर्मचारी 2. Indiagen (Mobile Technicians)-MAITS / इंडियाजेन (मोबाईल तकनीशियन) 3. NGO/Private Doctor/ AI service provider / गैर सरकारी चिकित्सक **/ AI** सेवा प्रदाता 4. Govt. Veterinary Doctor or Livestock Inspector / सरकारी पशुपालन चिकित्सक या इंस्पेक्टर 5. Other/ अन्य.....
2.20	What are the **reasons for availing AI services** for animals of this service provider most of the time? (Multiple Response Possible) पशुओं के लिए इस सेवा प्रदाता से अधिक बार पशुओं को AI सेवा दिलवाने का क्या कारण है? (कई प्रतिक्रिया संभव)	**USE CODE**
2. 21	Are you satisfied with the services of this service provider? क्या आप इस सेवा प्रदाता के सेवाओं से संतुष्ट हैं?	1. Yes/ हॉ 2. No / नहीं
Ask Q 2.22 to Q 2.24, if the Animals in the HH have received NS, else code 9 यदि इस परिवार के किसी भी पशु ने एनएस सेवा प्राप्त की है तो **Q 2.22** से **Q 2.24,** पुछें अन्यथा **9** कोड करे		
2. 22	Which service provider provides **NS services** to your animals most of the time? कौन सेवा प्रदाता आपके पशूओं को सबसे ज्यादा बार **NS** सेवा दिया है?	1. Milk Coop / दूधसहकारी 2. Traditional Breeders /परंम्परागत प्रजनन 3. Private Bull facility / गैर सरकारी साड/ भैंस सुविधा 4 Govt. Bull facility / सरकारी साँड़ सुविधा 5. Other/ अन्य.
2.23	What are the **reasons for taking NS services** for animals of this service provider most of the time? (Multiple Response Possible)/ पशुओं के लिए इस सेवा प्रदाता से अधिक बार पशुओं को NS सेवा दिलवाने का क्या कारण है? (कई प्रतिक्रिया संभव)	**USE CODE**
2.24	Are you satisfied with the services of this service provider? क्या आप इस सेवा प्रदाता के सेवाओं से संतुष्ट हैं?	1. Yes / हॉ 2. No / नहीं
2. 25	**Ask if the HH has cows/ अगर परिवार के पास गाय हो तो पूछे?** Between AI and NS which one do you prefer for your cows? आप गाय के लिए AI और NS के बीच किसको पंसद करते है?	1. AI 2. NS
2. 26	What are the important reasons for preferring this type of service for cows? गाय के लिए इस तरह की सेवा को पसंद करने का महत्वपूर्ण कारण क्या है? **Multiple Response Possible/ एक से ज्यादा उत्तर संभंव**	
2.27	**Ask if the HH has buffaloes/अगर परिवार के पास भैंस हो तो पूछे?** Between AI and NS which one do you prefer for your buffaloes?/ आप अपनी भैंसों के लिए AI और NS के बीच किसे पसंद करते हैं? **Multiple Response Possible/ एक से ज्यादा उत्तर संभंव**	1.AI 2. NS
2.28	What are the important reasons for preferring this type of service for buffaloes? भैंस के लिए इस तरह की सेवा को पसंद करने का महत्वपूर्ण कारण क्या है? **Multiple Response Possible/ एक से ज्यादा उत्तर संभंव**	

Reasons for preferring AI / CODE for Q 2.20, 2.26 and 2.28:	Reasons for preferring NS / CODE Q 2.23, 2.26 and 2.28:
1. Door step service /घर पर सेवा	1. Door step service /घर पर सेवा
2. Higher chances of conception / गर्भधान की ज्यादा संभावना	2. Higher chances of conception / गर्भधान की ज्यादा संभावना
3. Better progeny / अच्छे बच्चा	3. Better progeny / अच्छे बच्चा
4. Low cost of service / सस्ती सेवा	4. Low cost of service / सस्ती सेवा
5. Using this method for long time / बहुत पहले से उपयोग करते आ रहे है	5. Traditionally using this method / परम्परागत रूप से यह तरीका उपयोग करते आ रहे है
6. Bull not available in the village /गॉव मे सॉड़ उपलब्ध नही है	6. Bull available in the village /गॉव मे सॉड़ उपलब्ध है
7. Confidence in the service provider/ सेवा प्रदाता पर भरोसा	7. No other option/ कोई विकल्प नहीं
8. No other option / कोई विकल्प नहीं	8. Not Aware of AI / एआई के बारे मे पता नही
9. Others/ अन्य.....	9. Others/ अन्य.....

Section–III: Milk Purchase and Milk Utilization on the Previous Day of Interview

Q.	Question	Options
3.1	Did you purchase milk during last 7 days? / क्या आपने पिछले 7 दिनों में दूध खरीदा हैं? 1. Yes हॉ 2. No/ नही (***Go to Q.3.4)***	
3.2	For how many days do you purchase milk in last seven days? आप एक सप्ताह में कितने दिन दूध खरीदते है?	Count / संख्या:
3.3	How much quantity of cow and buffalo milk do you buy in a day? (in Litres)/ कितने मात्रा में गाय और भैस का दूध एक दिन में खरीदते हैं?(लीटर)	Cow / गाय Buffalo / भैस Mixed / मिश्रित Total / योग
3.4	Do you sell milk?/ क्या आप दूध बेचते है 1. Yes / हॉ 2. No / नही **Go to Q. 3.14**	

Q	Question		Channel of Milk Sales: DCS/ डीसीएस MPI/ एमपीआई		Individual Household/ Shops in village / गांव में व्यक्तिगत एचएच/ दुकानें		Dudhia/ दुधिया		Private Dairy/ निजी डैरी		Total/ कुल
3.5	Do you sell milk to **… / क्या आप.....को दूध बेचते हैं? (CODE: Yes: 1, No: 2)**		1. Yes	2. No	1. Yes	2. No	1. Yes	2. No	1. Yes	2. No	XXX
3.6	**If not selling to DCS/ MPI** What is the most important **reason for not selling milk** to this channel? / **अगर** DCS/ MPI, को नही बेचते है तो इस चैनल को दूध नहीं बेचने का सबसे महत्वपूर्ण कारण क्या है? **(USE CODE)**				**XXXX**		**XXX**		**XXX**		**XX**
3.7	How much cow and buffalo **milk do you sell** in a day regularly to this channel? (in Litres)/ आप कितना गाय और भैस का दूध नियमित रूप से इस चैनल को बेचते है? (लीटर में)	Cow / गाय									
		Buffalo / भैंस									
		Mixed / मिश्रित									
	Total Milk Sold (Ltrs/Day)										
3.8	In this channel, how much do you get **paid for one Liter** of milk sold presently? (inRs.) / इस चैनल द्वारा एक लीटर दूध बेंचने पर वर्तमान में कितना भुगतान पाते है?(रूपये में)	Cow / गाय									**XX**
		Buffalo / भैंस									**XX**
		Mixed / मिश्रित									
3.9	How much did you get **paid for one Liter** of milk sold before 5years during same period? (in Rs.) / इस चैनल को एक लीटर दूध बेंचने पर 5 साल पहले इसी समय कितना भुगतान पाते थै? (रूपये में) ***Not selling that time/*** उस समय नहीं बेचते थे- ***99***	Cow / गाय									
		Buffalo / भैंस									
		Mixed / मिश्रित									
3.10a	On what **basis the payment** is made in this channel? इस चैनल (माध्यम) द्वारा भुगतान करने का आधार क्या है ? **(USE CODE)**										**XX**
3.10b	On what **basis the payment** was made before 5 years? / 5 साल पहले इस चैनल (माध्यम) द्वारा भुगतान करने का आधार क्या था ? **(USE CODE)**										
3.11a	What is the **Mode of payment** used in this channel? **इस चैनल (माध्यम) द्वारा भुगतान करने की क्या प्रणाली है (USE CODE)**										**XX**
3.11b	What was the **Mode of payment** before 5 years? 5 साल पहले **इस चैनल (माध्यम) द्वारा भुगतान करने की क्या प्रणाली थी (USE CODE)**										
3.12a	Generally **how frequently** do you receive the payment for milk sold to this channel? **आप समान्यतः इस चैनल (माध्यम) द्वारा कितने दिनो के अन्तर पर बेचे गये दूध का भुगतान प्राप्त करते है? (USE CODE)**										**XX**

3.12b	Generally **how frequently** did you receive the payment for milk sold before 5 years? 5 साल पहले आप समान्यतः इस चैनल (माध्यम) द्वारा कितने दिनो के अन्तर पर बेचे गये दूध का भुगतान प्राप्त करते थे ? **(USE CODE)**					
3.13	Which are the two most important **reasons for selling milk to** this channel? / इस चैनल (माध्यम) को दूध बेचने का सबसे महत्वपूर्ण दो कारणं क्या **है? (USE CODE)**					**XX**
3.14	Out of the total milk produced or purchased **how much milk do you retain** for..... (in Litres)/**कुल उत्पादित दूध या खरीदे गए दूध का कितना भाग रखते हैं ? Code 99 if not applicable / यदि लागू नहीं हो तो 99 कोड करें**		**Cow**	**Buff**	**Mixed**	**Total**
	a. Household consumption (Liquid Milk/ Milk product) / परिवार के उपयोग के लिए (तरल दुध/ दूध उत्पाद)					
	b. Milk Product conversion and Sale / दूध उत्पाद में बदलने/ बेचने					

Code. SL No. 3.6: Reasons forNot Selling Milk/ दूध नही बेचने के कारण

1. Less payment/ कम भुगतान
2. Delay in payment/ भुगतान मे देरी
3. Collection center far off/ संकलन केन्द्र का दूर होना
4. Manipulation in milk testing / दूध के जाँच में हेरा फेरी
5. Inappropriate behaviour of person/व्यक्ति का खराब व्यवहार
6. Channel not available/ चैनल (माध्यम) नही है
7. Discrimination in giving benefits / training/ लाभ/प्रशिक्षण देनें मे भेदभाव
8. Others/ अन्य.....

Code. SL 3.10 a, b: Basis of payment :/ भुगतान का आधार

1. Flat rate per litre / प्रति लीटर एक समान दर
2. Only fat / सिर्फ फैट
3. Fat &SNF/LR /
4. Equivalent fat basis / फैट के बराबरी के आधार पर
5. Other/ अन्य...
9. Not applicable / लागू नहीं

Code. SL 3.11: Mode of payment:/ भुगतान की प्रणाली

1. Cash / नगद
2. Bank/ cheque/ बैंक/चैक
3. Business Correspondent/ व्यापार करने वाले का आदमी
4. Other/ अन्य....
9. Not applicable / लागू नहीं

Code. SL 3.12: Frequency of Payment/ भुगतान का अंतराल

1. Daily/ रोज
2. Weekly / सप्ताहिक
3. 10 days interval / 10 दिन का अंतराल
4. Fortnightly (15 days)/ पाक्षिक
5. Monthly / मासिक
6. As and when needed / जब जरूरत हो

Code. SL 3.13: Reasons for selling milk:

1. Better price / अच्छा मूल्य	8. Personal relation/व्यक्तिगत संबंध
2. Regular Payment/Timely payment / समय से/ नियमित भुगतान	9. Education/Training / demonstration/ Exposure visit / शिक्षा / प्रशिक्षण/प्रदर्शन / एक्सपोजर यात्रा
3. Bonus/ Price differential / बोनस /मूल्य का अंतर	10. Animal husbandry /veterinary services /पशुपालन/पशु चिकित्सा सेवा
4.Doorstep milk collection/ घर से दूध का संग्रहण	11. Subsidized cattle feed / Mineral Mixture /रियायती दर पर पशु आहार/मिनरल मिक्सचर
5. Collection center near by/ संग्रहण केन्द्र का नजदीक होना	12. Feed / fodder on credit/ उधार पर आहार /चारा
6. Loan for animal purchase/ other purposes पशु खरीदने या अन्य कामो के लिए ऋण	13. Cash Payment / नगद भुगतान
7. Faith in milk testing / दूध के जाँच पर भरोसा	14.Other/ अन्य.....

3.15 Cost of major items of milk production / दुग्ध उत्पादन के प्रमुख अवयवों पर खर्च (Rs. per year / रु. प्रति वर्ष)

1. Feed/ fodder cost / **चारा पर खर्च**	
a -Green / **हरा**	
b -Dry / **सूखा**	
c -Cattle feed/ concentrate / पशु अहार	
d -Mineral mixture/ खनिज मिश्रण	
2. Breeding and Veterinary cost / प्रजनन और पशु चिकित्सा लागत	
3. Other costs (electricity, water, fuel, marketing, etc.) / अन्य खर्च	

** include value of home grown fodder/ feed*

3.16 Average wages paid to hired labour (Rs./ day) / किराए पर श्रमिकों को भुगतान की गई औसत मजदूरी (रुपये / दिन)

Male	
Female	

3.17 Annual milk production and price of milk / वार्षिक दूध उत्पादन और दूध की कीमत

Particulars	**Cow**	**Buffalo**	**Mixed**
Milk production (Liters/ year)			
Average price (Rs./ liter)			

Section-IV: Feeding Practices

Q.	Question	Options	Response
4.1	Which of these feeding practices are adopted in this household for feeding **green and dry fodder** to animals? इस परिवार द्वारा पशूओं को हरा और सूखा चारा खिलाने के लिए इनमें से कौन सा तरीका अपनाया जाता है?	1. Group Feeding / समूह मे खिलाने का 2. Feeding of each animal separately / पशूओं को अलग अलग खिलाने का 3. Individual feeding for in-milk and pregnant animals / दूध देने वाली और गर्भवती पशुओं को अलग से खिलाते हैं?	
4.2	Which of these feeding practices are adopted in this household for feeding **concentrates** to animals? इस परिवार द्वारा पशूओं को ठोस आहार खिलाने के लिए इनमें से कौन सा तरीका अपनाया जाता है?	1. Group Feeding / समूह मे खिलाने का 2. Feeding of each animal separately / पशूओं को अलग अलग खिलाने का 3. Individual feeding for in-milk and pregnant animals /दूध देने वाली और गर्भवती पशुओं को अलग से खिलाते हैं?	

Grazing practices/ चराई का तरीका

4.3	Do you send your animals for grazing? क्या आप अपने पशुओं को चरने के लिए भेजते है?	1. Yes/ हॉ **CONTINUE** 2. No/ नही **(Go to Q. 4.13)**	1	2
4.4	For how many months in a year do you send your animals for grazing? \आप अपने पशुओं को साल में कितना महीने चरने के लिए भेजते हैं?	No. of months/ **महिनों की संख्या :**		
4.5	For how many days in a month do you send your animals for grazing? आप अपने पशुओं को महीनें में कितना दिन चरने के लिए भेजते हैं?	Number of days in a month/ **एक महीने में दिनो की संख्या :**		
4.6	For how many hours in a day the animals go for grazing?/आप अपने पशुओं को कितना घंटा चरने के लिए भेजते हैं?	**Hours of grazing per day/ एक दिन में घंटो की संख्या**		

		Grazing place	Yes	No
4.7	Are the animals taken for grazing to.....? वे चरने के लिए कहॉ जाते है...?	1. Common grazing land/ आम चराई की जमीन	1	2
		2. Own grazing land / अपना चराई की जमीन	1	2
		3. Other uncultivated land / गैर कृषि जमीन	1	2
		4. Any other /कोई अन्य.....	1	2
4.8	What category of animals do you send for grazing? / किस श्रेणी के पशु को आप चरने के लिए भेजते हैं?	1. Indigenous cow / देशी	1	2
		2. Crossbred cow / संकर	1	2
		3. Buffalo / भैस	1	2
4.9	Which type of animals do you send for grazing? / किस तरह के पशुओं को आप चरने के लिए भेजते हैं?	1. All types of animals \ सभी प्रकार के पशु	1	2
		2. Growing Animals/ Young stock / बाल पशुधन	1	2
		3. Pregnant animals / गर्भवती पशु	1	2
		4. In-milk animals / दूध देने वाली पशु	1	2
		5. Adult female dry /व्यस्क मादा दूध नही देने वाली	1	2
		6. Any other cow/ buffalo / कोई अन्य गाय/भैस	1	2
4.10	Is dung of your animals collected by your household from grazing place? / क्या चरने वाले जगह से आपके परिवार द्वारा गोबर को इक्कठा किया जाता है?	1. Yes/ हॉ 2. No/ नही	1	2

Ask Q. Nos. 4.11 to 4.15 only if option for Q.No 4.7 is 2 or else go to Section -V
अगर प्र0 4.7 में विकल्प कोड़ 2 हाँ हो तो प्र0 संख्या 4.11 से 4.15 पूछे?

4.11	Is there a common grazing land in this village? क्या आपके गॉव में आम चराई की जमीन है?	1. Yes / हॉ **Continue** 2. No / नही **(Go to Section VII)**	
4.12	Do villagers take their animals for grazing there? / अगर हॉ तो क्या गॉव के लोग अपने पशु को वहॉ चराने के लिए ले जाते है?	1. Yes / हॉ 2. No / नही **(Go to Section VII)**	

4.13	**If No in Q. 4.3, Ask /** अगर उपर प्रश्न 4.3 में नहीं हो तो पूछे What are the reasons for not sending your animals for grazing to the common grazing land in the village? / क्या कारण है कि आप अपने पशुओं को चरने के लिए आम चराई की जमीन में नहीं भेजते है?	1. No Need / कोई जरूरत नहीं	1
		2. Far off / बहुत दूर	2
		3. My Community /HH is not allowed / मेरे समाज / परिवार को इजाज्त नहीं है	3
		Available grazing area is not sufficient उपलब्ध चराई की जमीन पर्याप्त नही है	4
		Quality of available grass is not good उपलब्ध घास की गुणवता अच्छी नही है	5
		Grazing land reduced from past पहले की अपेक्षा चराई की जमीन कम हो गई है	6
		4. Other/ अन्य.....	9
4.14	Any revegetation effort for grazing land has been taken up / क्या चराई की जमीन पर किसी तरह के पुनर्वनस्पतिकरण का प्रयास किया गया है?	Yes / हॉ	1
		No / नही (Go to Section V)	2
4.15	Is the revegetation useful? क्या पुनर्वनस्पतिकरण का यह प्रयास उपयोगी साबित हुआ?	Yes / हॉ	1
		No / नही	2

Section- V: Cultivated Area, Fodder Cultivation and Storage/

Q	Question	Options	Response
5.1	Which are the most popular local pucca units of agricultural land area in the village? आपके गॉव में कृषि योग्य भूमि को नापने के लिए सबसे प्रचलित स्थानीय पक्का इकाई क्या है?	*How many of this unit makes one acre?* जमीन का कितना स्थानीय इकाई मिलकर 1 एकड़ होता है?	
	Code 1: Local unit (write name of the unit): स्थानीय इकाई (इकाई का नाम लिखें) _____ **Code for Area:** 1: Local Unit 2. Acre	1 acre = _____ Local unit	

Q	Question	Options	Write Area and Unit as reported by the resepondent \ उत्तरदाता के द्वारा बताये गये क्षेत्रफल एवं इकाई को लिखे		
			Area	Name and Code of the Unit	
				Unit	Code
5.2	In how much area do you cultivate? आप कितने क्षेत्र मे खेती करते है?	Total cultivated area (owned + leased in) - Leased out (for Crop and fodder) / कुल कृषि योग्य क्षेत्र (अपना + पटटे पर लिया - पटटे पर दिया गया)			
5. 3	**Out of the total cultivated area**, in how much area do you grow fodder? / आप कुल खेती करने वाले जमीन में से कितने क्षेत्र मे चारा उगाते है?	Area under fodder crop / चारा फसल के अन्तर्गत क्षेत्र			
5. 4	Out of the total cultivated area, how much is Irrigated Area? / आपके कुल खेती करने वाले जमीन में से कितना सिंचित क्षेत्र	Total irrigated area/ कुल सिचित क्षेत्र			

5.5	What are the sources of irrigation water that you use? / आप सिचाई के लिए पानी के किस स्रोत का उपयोग करते है? **(MULTIPLE RESPONSE POSSIBLE)**	**Sources of Irrigation Water/ सिचाई के लिए पानी का स्रोत**	
		Bore well/ pumping set / बोरवेल	1
		Well / कुआ	2
		Pond/ river / तलाब / नदी	3
		Canal / नहर	4
		Other/ अन्य.....	9
5.6	Did you receive any training on water harvesting? क्या आपने पानी संचयन के लिए प्रशिक्षण प्राप्त किया था?	Yes / हॉ	1
		No / नही	2
5.7	Have you adopted any water conservation practices? / क्या आपने कभी भी पानी सरक्षण के लिए कोई तरीका अपनाया था? **(MULTIPLE RESPONSE POSSIBLE)**	Reduced water consumption\ पानी की खपत मे कमी	1
		Started rain water harvesting वर्षा के जल का संचयन	2
		Recycling of water \ जल का पुनर्चक्रण	3
		Multiple use of water / जल का विभिन उपयोग	4
		None / कोई नही	5
		Any Other / कोई अन्य 1	9

5.8	**(Ask if Coded '5' in Q 5.7)** यदि प्र0 सं0 5.7 में 5 कोड किया हो तो पूछें If not started any process, what were the reasons यदि कोई प्रकिया नही शुरू की है तो उसके क्या कारण थे? **(MULTIPLE RESPONSE POSSIBLE)**	Lack of money/ आर्थिक तंगी	1
		Lack of technical support/ तकनीकी सहायता का अभाव	2
		Not required / आवश्यक्ता नही	3
		Not aware / जानकारी की कमी	4
		Not feasible / संभव नही	5
		Any Other / कोई अन्य	9
5.9	Do you grow fodder / क्या आप चारा उगाते हैं?	Yes / हॉ **Continue**	1
		No / नही Go to next section (Section VI)	2

Continue if the farmer grows fodder, else go to next section (Section-VI)
यदि किसान चारे की उपज करता है तो जारी रखे

5.10	From which all sources do you get/ buy fodder seeds? आप बीज किन स्रोतों से खरीदतें है? **(MULTIPLE RESPONSES POSSIBLE)** **एक से ज्यादा उत्तर संभव)**	**Source of fodder seed /** चारे की बीज का स्रोत	**Code**
		DCS/ MPI/ दूधसंघ	1
		Private Seed shops/ निजी बीज की दुकान	2
		Fellow Farmers// साथी किसान	3
		Seed grown at own farm/ अपने खेत में बीज उगाते है	4
		Any Other ..... अन्य.....	9
5. 11	Are you aware of certified / truthfully labeled seeds? क्या आप प्रमाणित/विश्वसनीय लेबलयुक्त बीज को जानते है?	Yes/ हॉ	1
		No/ नही (**GO TO Q. 5.14**)	2
5.12	What **types of seeds** do you use for growning fodder/ seed? \ आप चारा / बीज उगाने के लिए किस तरह के बीज का प्रयोग करते है?	Certified seed / प्रमाणित बीज	1
		Truthfully labeled seed/ विश्वसनीय लेबलयुक्त बीज	2
		Local seed/ स्थानीय बीज	3

5.13	Do you use any chemical fertilizer for growning fodder crops? क्या आप चारा उगाने के लिये किसी रासायनिक उर्वरक का प्रयोग करते है?	Yes/ हॉ	1
		No/ नही	2
5.14	Do you use any pesticide for growning fodder crops? क्या आप चारा उगाने के लिये किसी कीटनाशक का प्रयोग करते है?	Yes/ हॉ	1
		No/ नही	2
5.15	Are you aware of safety guidelines of pesticide use क्या आप को कीटनाशक उपयोग के सुरक्षा नियमों की जानकारी है?	Yes/ हॉ	1
		No/ नही	2
5.16	Do you use precautions in use of pesticides? क्या आप कीटनाशक उपयोग में सावधानी अपनाते है?	Yes/ हॉ	1
		No/ नही	2
5.17	Is there any advisory for safe handling of pesticide usage available to you? क्या कीटनाशक उपयोग का कोई सुरक्षा सलाहकार आपके लिए उपलब्ध है?	Yes/ हॉ	1
		No/ नही	2
5.18	Do you use mechanical methods such as mower for harvesting fodder crops in the field? क्या आप चारा काटने के लिए चारा कटाई के मशीन का प्रयोग करते हैं?	Yes/ हॉ	1
		No/ नही	2

5.19	Which of the fodder storage practices do you adopt? आप किस तरह के **चारा भंडारण के तरीकों को अपनाते** है?	**Practice**	**Yes**	**No**	**Not Aware**
		1.Silage making	1	2	3
		2. Straw enrichment	1	2	3
		3. Hay making	1	2	3

5.20	For what purposes do you grow fodder? आप किस उददेश्य से चारा उगाते है? **(MULTIPLE RESPONSE POSSIBLE)** **एक से ज्यादा उत्तर संभव))**	**Purpose of fodder cultivation**	**Yes**	**No**
		1. Feeding own animals/ अपने पशु को खिलाते है	1	2
		2. Fodder for sale / चारा बेंचते है	1	2
		3. Seed for own use / अपने उपयोग के लिए बीज	1	2
		4. Seed for sale / बीज बेंचने के लिए	1	2
5.21	**(Ask if coded '1' in Q5.20_4)** **यदि प्र0 सं0 5.20_4 में 1 कोड किया हो तो पूछें** Whom do you sell the fodder seed? / **आप चारा का बीज किसको बेचते है?** **(MULTIPLE RESPONSE POSSIBLE)** **एक से ज्यादा उत्तर संभव)**	**Options**	**Yes**	**No**
		1. DCS/MPI	1	2
		2. Private Seed shops/ निजी बीज की दुकान	1	2
		3. Fellow Farmers/ साथी किसान को	1	2
		4. Other// अन्य	1	2

Section- VI: Animal Management/
Milking related Issues

Q. No.	Question	Options Code 99 : If not applicable	
6.1	At what time the animals are milked? पशुओं को किस समय दुहते है?	Morning/सुबह : AM	Evening/ शाम : PM
6.2	At what time the milk is sold/ poured at the milk collection center(s)? / दुघ को किस समय बेचते है?/ दूध संकलन केन्द्र को देते है?	Morning/सुबह: AM	Evening / शाम : PM

Use of Water in Dairying/

Q. No.	Question	Options	A- Winter सर्दी		B-Summer गर्मी		C-Rainy बरसात	
			Yes	No	Yes	No	Yes	No
6.3	What are the main sources of **drinkingwater** for bovine animals in winter, summer and rainy seasons? दुधारू पशुओं के लिए पानी का मुख्य स्रोत तीनो मौसमो मे क्या हैं?	1. Piped water supply / पाईप द्वारा पानी की आपूर्ती	1	2	1	2	1	2
		2. Bore well/ वोरवेल /	1	2	1	2	1	2
		3. Hand pump / हैण्ड़ पम्प	1	2	1	2	1	2
		4. Well / कुआ	1	2	1	2	1	2
		5. Pond/ river / नदी / तलाब	1	2	1	2	1	2
		6. Canal / नहर	1	2	1	2	1	2
		7. Other/ अन्य.....	1	2	1	2	1	2
6.4	Total time taken to collect water in different seasons from major source / विभिन्न मौसमो में मुख्य स्रोत से पानी इक्कठा करने मे कुल कितना समय लगता है?	Hour घंटा						
		Minute मिनट						

Dung, Drainage and Animal Washing (Observe along with Probing & Record)
गोबर, ड्रेनेजऔरपशु धुलाई(जॉच और रिकार्ड के साथ निरीक्षण)

Q. No.	Question	Options		Yes	No
6.5	How do you store dung? आप गोबर को कैसे जमा करते हैं?	1. Manure/ compost pit / खाद का गडढ़ा		1	2
		2. Open storage / खुली जगह में		1	2
		3. Biogas pit / बायोगैस के गडढ़ा में		1	2
		4. Slurry pit / गारा के गडढ़ा		1	2
		5. Other / अन्य		1	2
6.6	For what purposes do you use dung? आप गोबर को किस काम मे प्रयोग करते हैं? **(Multiple Response possible/ एक से ज्यादा उत्तर संभव))**	**Usage of Dung/ गोबर का उपयोग**		**Yes**	**No**
		1. Manure for agricultural crop कृषि फसल के लिए खाद		1	2
		2. Manure for Fodder crop / चारा फसल के लिए खाद		1	2
		3. Bio-gas plant / बायोगैस प्लांट		1	2
		4. Dung cake for fuel in the household / घर के इंधन के लिए उपला		1	2
		5. Other/ अन्य.....		1	2
6.7	**Ask only if, option 3 or 4 in Above Question** **अगर उपर के प्रश्न में विकल्प 3 और 4 हो तो पूछे** What percent of the total dung do you use for fuel purpose in biogas plant and as dung cake? आप कुल गोबर का कितना प्रतिशत बायोगैस प्लांट और गोएठा / उपला में जलावन के उददेश्य से करते हैं?	***Record proportion under the same column in which use is recorded*** **अनुपात दर्ज करे, उसी कॉलम मे जहॉ उपयोग दर्ज है**	*Dung cake* उपला *(%)*		
			Biogas plant बायोगैस प्लांट (%)		
6.8	What type of drainage do you have in the animal shed? आपके पशुशाला में किस प्रकार की नाली हैं?	1. Pucca – cemented/ पक्काहुआ–सिमेन्टेड 2. Brick lined / ईट का 3. Kuchha/ कच्चा 4. No drainage /कोई नाली नही **G0 to Q 6.10** 5. Others/ अन्य.....			

6.9	Where do you drain the water used for washing animal and cleaning animal shed? पशु और पशुशाला को साफ करने में जिस पानी का प्रयोग होता हैं वह कहॉ बहता हैं?	**Option**	**Yes**	**No**
		1. Drainage leading to pit / नाली जो गडढ़े में गिरती हो	1	2
		2. Drainage leading to bio-gas plant / नाली जो बायोगैस संयंत्र में गिरती हैं?	1	2
		3. Drainage leading to open area / नाली जो खुले क्षेत्र में गिरती हैं?	1	2
		4. Drainage leading to agricultural field / नाली जो खेत में गिरती हैं?	1	1
		5. Drainage leading to sewerage / नाली जो गंदे नाले में गिरती हैं?	1	2
		6. Fodder Dump / चारा का ढेंर	1	2
		7. Other/ अन्य.....	1	2

6.10	How frequently do you wash your animals and cattleshed? आप पशुशाला और पशु को प्रायः कितने अन्तराल पर धोते है?	**Frequency**	**Milch**	**Non-milch**	**Cattle shed**
		Daily / रोज	1	1	1
		Weekly / साप्ताहिक	2	2	2
		Fortnightly/ 15 दिनों पर	3	3	3
		Not fixed/ तय नही	4	4	4
6.11	What are the sources of water for washing your animals आपने पशुशाला और पशु को धोने के लिए पानी के किस स्रोत का इस्तेमाल करते है? (Multiple Response Possible) (एक से अधिक से उत्तर संभव)	1. Piped water supply नल–जल की आपूर्ती	1	1	1
		2. Bore well/ बोरवेल	2	2	2
		3. Hand pump / हैंड पम्प	3	3	3
		4. Well / कुआ	4	4	4
		5. Pond/ river/तलाब / नदी	5	5	5
		6. Canal / नाला	6	6	6
		7. Other / अन्य	9	9	9

Zoonotic Diseases / पशुजन्य रोग

6.12	Do you know that some diseases can be transmitted from animals to human beings? क्या आप को पता है कि कुछ रोग पशुओ से आदमी मे फैलता हैं?	1. Yes / हाँ **CONTINUE**	2. No / नही **Go to Q. 6.14**	
6.13	Do you know which of the diseases people can get through a diseased animal while working at the animal farm / field or drinking milk/eating meat? क्या आपको पता है कि बिमार पशुओं से / पशु फॉर्म में काम करने से / मीट खाने से यॉ दूध पीने वालों को कौन सा रोग होने की संभवना है? ***(UNPROMPTED, MULTIPLE RESPONSE POSSIBLE/ बताये नहीं एक से ज्यादा उत्तर संभव)***	**Diseases**	**Yes**	**No**
		1. Tuberculosis (TB) / रोग	1	2
		2. Brucellosis (Knee Joint swelling, high fever and abortion)	1	2
		3. Leptospirosis (Abortion)	1	2
		4. Mentioned other disease / अन्य रोग बताया	1	2
		5. Not aware / नही जानते है	1	2
6.14	Is milk **always** boiled in your household before consuming? क्या आपके परिवार में दूध को उपयोग करने के पहले हमेशा खौलाया जाता है?	Yes / हाँ	1	
		No / नही	2	

Section-VII: Role of Women in Dairying and Farming perspectives

Q. 7.1	On an average how many hours/ minutes need to be spent in a day on each of these activities by all the persons put together? / व्यक्तियों को मिलाकर औसतन 1 दिन में कितना घंटा इन कार्यो पर दिया जाता है?
Q.7.2	Who does most of these activities most of the time? / इसको सबसे ज्यादा बार कौन करता है?
Q.7.3	On an average how many hours/ minutes female members of your family spend on each of these activites in day? / आपके परिवार के महिला सदस्यों द्वारा औसतन 1 दिन में कितना घंटा इन कार्यो पर दिया जाता है?
Q. 7.4	On an average how many hours/ minutes male members of your family spend on each of these activites in day? / आपके परिवार के पुरूष सदस्यों द्वारा औसतन 1 दिन में कितना घंटा इन कार्यो पर दिया जाता है?

SL NO	ACTIVITY / कार्य	Q. 7.1 Total no. of hours spent in a day on this activity इस कार्य पर दियें गये एक दिन के कुल घंटे		Q. 7.2 Who does it most of the time? इस कार्य को सबसे ज्यादा बार कौन करता है?					Q.7.3 Total time spent by female family member परिवार के महिला सदस्य द्वारा दिया गया कुल घंटा		Q.7.4 Total timespent by male family member परिवार के पुरूष सदस्य द्वारा दिया गया कुल घंटा	
		Hrs	Min	Not applicable लागू नही	Female Family member परिवार का महिला सदस्य	Male family members परिवार का पुरूष सदस्य	Any member कोई सदस्य	Hired labour मजदूर द्वारा	Hrs	Min	Hrs	Min
1	2	3		4	5	6	7	8	9		10	
1	Feeding of animals / पशुओं को खिलाना			1	2	3	4	5				
2	Milking of animals / दूध दुहना			1	2	3	4	5				
3	Washing of animals / पशुओं को धोना			1	2	3	4	5				
4	Selling/Pouring Milk/ दूध बेंचना / सहकारिता में देना			1	2	3	4	5				
5	Fodder Collection / चारा इक्कठा करना			1	2	3	4	5				
6	Chaffing of fodder/ चारा कटाई			1	2	3	4	5				
7	Open grazing of animals / पशुओं को खुलें में चराना			1	2	3	4	5				
8	Cleaning of Shed / सेड की सफाई			1	2	3	4	5				
9	Dung Collection / Dung Cake preparation / गोबर इक्कठा करना / उपला बनाना			1	2	3	4	5				
10	Other / अन्य			1	2	3	4	5				
Q7.5	Do you think that the contribution of women in dairying is recognised by the household/ society? **क्या आपको लगता है कि दुग्ध उत्पादन में महिलाओं की भूमिका को परिवार / समाज ने पहचाना है?**								Yes / हाँ		1	
									No / नहीं		2	
Q7.6	Has dairying resulted in increased status of women in household/ society? **क्या आपको लगता है कि दुग्ध व्यवसाय ने परिवार / समाज में महिलाओं कि स्थिति को सुधारा है?**								Yes / हाँ		1	
									No / नहीं		2	

Section-VIII: Participation in Dairying, Training and Demonstration: Participation & Need

Q. No	Copy Sl No and Name of the person (s) from the first table for Persons above14 years of age (पहले तालिका से 14वर्ष से उपर व्यक्तियों का क्रमांक संख्या दर्ज करे)											
	Sl. No. Of members /व्यक्ति का क्रम सं0	1	2	3	4	5	6	7	8	9	10	11
Participation in Dairying/ दूध उत्पादन में सहभागिता		**Yes - 1, No- 2**										
8.1	Is this person currently **involved in dairying**? क्या अभी यह व्यक्ति डेयरी के काम में सक्रिय हैं?											
8.2	**Ask if DCS/ MPI exists in the village /** अगर गाँव में **DCS/ MPI** हो तो पूछे Is this person a **member of DCS/MPI**? क्या यह व्यक्ति **DCS/MPI** का सदस्य हैं?											
8.3	Whether this person receives **money** from sale of milk? क्या यह बेचे हुए दुध का पैसा लेता है?											
8.4	Whether this person takesdecision **on dairying** activities? क्या यह डेयरी के कार्यो के बारे में निर्णय लेता है?											
Training Attended or Needed/ प्रशिक्षण में भागीदारी या जरूरत												
8.5	In the last 12 months, has this person received any **training on any dairying** related topic? पिछले 12 महीनों में, क्या यह व्यक्ति डेयरी से संबंधीत किसी विषय पर प्रशिक्षण प्राप्त किया है?											
Ask for only those members who have received any training जिस सदस्य ने कोई भी प्रशिक्षण लिया है उन्ही के लिए पूछें												
8.6	**What were the topics of training** received? जो प्रशिक्षण लिया गया उसका विषय क्या था? **(USE CODE)**											
8.7	What were the **duration of the trainings**? (in days) प्रशिक्षण का अवधि क्या था (दिनों में)											
8.8	Were the **tranings useful** to the person? क्या प्रशिक्षण सदस्य के लिए उपयोगी था?											
8.9	**(Ask for all members)** Does this person need training on any dairying related topic/ क्या इस व्यक्ति को डेयरी से संबधित किसी विषय पर प्रशिक्षण की जरूरत है?											
Demonstration Attended or Needed / प्रदर्शन में भागीदारी या जरूरत												
8.10	In the last 12 months, has this person **attended demonstration** on any dairying related topic?/ पिछले 12 महीनों में, क्या यह व्यक्ति डेयरी से संबंधीत किसी विषय पर प्रदर्शन में भाग लिया है?											
Ask for only those members who have attended any demonstration जो सदस्य प्रदर्शन में भाग लिया है तो उसी के लिए पूछें												
8.11	What were the **topics of Demonstrations**? **(USE CODE)** प्रदर्शनी के क्या विषय थे (कोड का उपयोग करे)											
8.12	Were the **demonstrations useful** to the person? क्या इस तरह के प्रशिक्षण और प्रदर्शन उस व्यक्ति के लिए उपयोगी है?											
8.13	**(Ask for all members)** Does this person need demonstration on any dairying related topic? क्या इस व्यक्ति को डेयरी से संबधित किसी विषय पर प्रदर्शन में भाग लेने की जरूरत है?											

Type of Training Received (CODE for 8.6)

1. Breed improvement / प्रजनन में सुधार के लिए
2. Feeding / खिलाने के लिए
3. Fodder cultivation / चारा की खेती के लिए
4. Fodder/fodder seed production or processing / चारा/चारा के बीज का उत्पादन या प्रसंस्करण के लिए
5. Silage making
6. Vaccination and First Aid / टीकाकरण और प्राथमिक चिकित्सा
7. General Animal Husbandry Practices /सामान्य पशुपालन की जानकारी
8. Other/ अन्य.....

Topics of Demonstration (Code for Q. 8.11

1. Use of mower for fodder harvesting / चारा काटने के लिए मशीन के प्रयोग के लिए
2. Fodder/ Fodder seed production and storage / चारा एवं चारा बीज का उत्पादन और भंण्डारण
3. Silage preparation
4. Benefit of RBP- use of balanced feed ingredients / का लाभ और संतुलित आहार के तत्वों का प्रयोग
5. Bio-gas/ Gobar gas plant / बायोगैस/गोबरगैस प्लांट
6. Other/ अन्य.....

Section-IX: Major Sources of Income

Q.	Question			Response	
9.1	During last year, which activity contributed to the maximum income of the household? पिछले साल किस काम से परिवार की सबसे ज्यादा आमदनी हुई थी? ***(Use occupation code as on Page 3) (व्यवसाय कोड का प्रयोग करें जैस पेज 3 पर है)***				
9.2	During last year, which was the second most important source of income? **Use Occupation code as on Page 3** ***(Code 99: if none)*** पिछले साल कौन सा दुसरा सबसे बडा आमदनी का श्रोत था? (99 कोड करे अगर कोई नही है)				
9.3	On what two items was the income used the most? / आपकी आय किन दो अवयवों पर सबसे ज्यादा खर्च होती है?	Regular food items / नियमित खाद्य पदार्थों पर	1	1	
		Regular non-food items / नियमित गैर खाद्य पदार्थों पर	2		
		Education/ शिक्षा	3		
		Travel / यातायात	4		
		Clothes / कपड़े	5	2	
		Social ceremony / सामाजिक उत्सव	6		
		Festivals / त्योहर	7		
		Medical / चिकित्सा	8		
		Other/ अन्य	9		
9.4	Do you have a bank account in your name?/ क्या आपका किसी बैन्क में खाता है?	Yes / हाँ	1		
		No / नहीं	2		
9.5	How far is the nearest bank/ ATM from your village? आपके गाँव साए नजदीकी बैंक / एटीएम कि दूरी कितनी है ? (in KM)				

Section-X: Governance and Accountability Action Plan (ONLY FOR PROGRAM VILLAGE)

Q.	Question/	Response	Codes	
10.1	Do you think there is adequate transparency in the implementation of Dairy related programmes? / क्या आपको लगता है कि डेयरी से सबंधित कार्यक्रमो के क्रियावनयन मे प्रर्याप्त पारदर्शिता है?	Yes / हाँ	1	
		No / नहीं	2	
		Don't Know/Can't Say / पता नहीं/कह नही सकते	3	
10.2	In case of any grievance/ complaint about the activities being performed at the DCS, whom would you approach first? / यदि डीसीएस के क्रियाकलापों से सम्बंधित कोई शिकायत हो तो आप सबसे पहले किससे सम्पर्क करते हैं?	DCS secretary / डीसीएस सेक्रेटरी	1	
		Field supervisor / क्षेत्र सूपर वाइज़र	2	
		Procurement incharge of the milk union / दुग्ध उपार्जन प्रभारी	3	
		MD of the milk union / मिल्क युनियन का प्रबन्ध निदेशक	4	
		Others (specify) / अन्य	9	
10.3	Do you know their contact numbers? / क्या आप उनका फोन नम्बर जानते हैं?	Yes/हाँ	1	
		No/ नहीं	2	
10.4	Have the contact numbers of DCS/ Milk union officials been displayed anywhere at the DCS/ Milk union? / डीसीएस / मिल्क युनियन के अधिकारियों का नम्बर डीसीएस / मिल्क युनियन में कहीं पर लिखा हुआ है?	Yes/हाँ	1	
		No/ नहीं	2	
		Don't Know/Can't Say / पता नहीं/कह नही सकते	3	

10.5	Do you know about any document covering all the roles and responsibility of DCS level officials? / क्या आपको किसी ऐसे दस्तावेज की जानकारी है जो डीसीएस स्तर के अधिकारियों के कार्य और जिम्मेदारियों की पूरी जानकारी देता है?	Yes/हाँ	**1**	
		No/ नहीं	**2**	
10.6	Whether any complaint register is available with DCS in your village? / क्या आपके गॉव मे डीसीएस के पास कोई शिकायत पुस्तिका उपलब्ध है?	Yes/हाँ	**1**	
		No/ नहीं	**2**	
		Don't Know/Can't Say/ पता नहीं/कह नही सकते	**3**	
10.7	Whether you or someone known to you have ever lodged any complaint for redressal? / क्या आपने या आपके किसी जानने वाले ने शिकायत दर्ज करायी	Yes/हाँ	**1**	
		No/ नहीं	**2**	
		Don't Know/Can't Say/ पता नहीं/कह नही सकते	**3**	
10.8	If yes, what is the average time taken to dispose of complaints or redressal of grievances as per your experience? / यदि हाँ तो आपके शिकायत के निवारण में औसतन कितना समय लगा?	Less than a week/ एक सप्ताह से कम	**1**	
		One week/ एक सप्ताह	**2**	
		Two weeks/ दो सप्ताह	**3**	
		More than two weeks/ दो सप्ताह से अधिक	**4**	
		Other (specify)/ अन्य	**9**	

Section-XI: Sources of Information

Source of Dairy related Information

Q.11.1	Do you get dairy farming related information from? आपको डेयरी से संबंधित जानकारी प्राप्त होती है?	Yes/हाँ	**1**	
		No/ नहीं	**2 (Skip to Q. 11.3)**	
Q.11..2	Fromwhich source do you get most useful dairy related information? किस स्रोत से आपको डेयरी से संबंधित सबसे उपयोगी जानकारी प्राप्त हुई?			

Sl No	**Sources of information /** सूचना के स्रोत	**Sources of Information** सूचना के स्रोत		**Most useful source of information /** सबसे ज्यादा उपयोगी सूचना के स्रोत
		Yes	No	
1	Radio / रेडियो	1	2	
2	TV / टीवी	1	2	
3	Newspaper / समाचार पत्र	1	2	
4	Banners/Hoardings	1	2	
5	DCS/ MPI टीडीसी/ (दूध संघ के अधिकारी)	1	2	
6	Private Doctor who visits for the treatment/ निजी चिकित्सक जो उपचार के लिए आता है	1	2	
7	LRP / एलआरपी	1	2	
8	Internet/ Facebook	1	2	
9	Friends/ Relatives/ Fellow Producers	1	2	
10	Others....	1	2	

Q.11.3	Do you face any discrimination in availing the services at the DCS/ MPI? / क्या आप DCS/ MPI के स्तर पर इन सेवाओं के उपयोग में किसी भेद–भाव का सामना करते है?	Yes/हाँ	1
		No/ नहीं	2
		Not a member of DCS/ MPI का सदस्य नहीं	3
		DCS/MPI does not exist DCS/MPI नहीं हैं	4
Q. 11.4	If yes, describe the nature of discrimination? अगर हाँ तो भेदभाव के प्रकार के बारे में बताये?		

Section: XII: RBP: Ration Balancing Programme (For RBP Villages only)

Q	Question	Options	Code
12.1	Do you know about Ration Balancing Programme-RBP? क्या आप RBP के बारे में जानते है	Yes / हॉ (**CONTINUE**)	1
		No/ नही **(Go to Section-XIII)**	2
12.2	Have you ever been approached by someone to feed your animals as per RBP? / क्या कोई आपके पास के RBP के अनुसार पशुओं को खिलाने के बारे मैं बात करने आया था ?	Yes/ हॉ (**CONTINUE**)	1
		No/ नही **(Go to Section-XIII)**	2
12.3	Was/ is any of your animals covered under RBP? क्या/आपका कोई पशु RBP के अंतर्गत आता है?	Yes/हा (**CONTINUE**)	1
		No/ हॉ (**Go to Section XIII**)	2
12.4	If yes, how many? यदि हॉ, तो कितने		

Q. 12.5 Details of animals covered under RBP

Q	Particulars / ब्यौरा	Animal 1	Animal 2	Animal 3	Animal 4	Animal 5
12.6	Type of animal (IC=1, CB=2, BF=3)/ पशु का प्रकार (IC=1, CB=2, BF=3)					
12.7	Month & year of registration (Put in MM-YYYY) पंजीकरण का माह और वर्ष (माह–वर्ष.....)					
12.8	No. of lactations completed at the time of registration पंजीकरण के समय पर पशु के कुल बायत की संख्या क्या थी?					
12.9	Was the animal ear-tagged at the time of registration? (Yes=1, No=2) / क्या पंजीकरण के समय पशु का कान टैग किया गया था? (हाँ–1, नहीं–2)					
	Ear-tag number / कान टैंग संख्या					
12.10	What was the yield **before** RBP advisory? (litres/ day) आरबीपी के सलाह से पूर्व उत्पादन कितना था? (लीटर/प्रतिदिन)					
12.11	What was the yield **after** following RBP advisory? (litres/ day) आरबीपी के सलाह के उपरान्त उत्पादन कितना था? (लीटर/प्रतिदिन)					
12.12	What was the feeding cost **before** RBP advisory? (Rs./ day) आरबीपी के सलाह से पूर्व आहार की लागत कितनी थी? (रूपया/प्रतिदिन)					
12.13	What was the feeding cost **after** following RBP advisory? (Rs./ day)/ आरबीपी के सलाह के उपरान्त आहार की लागत कितनी थी? (रूपया/प्रतिदिन)					
12.14	What was the FAT **before** RBP advisory? (%) आरबीपी के सलाह के पूर्व वसा कितनी थी? (%)					
12.15	What was the FAT **after** following RBP advisory? (%) आरबीपी के सलाह के उपरान्त वसा कितनी थी? (%)					
12.16	Are you still feeding the animal as per RBP advice? (Yes=1, No=2)/ क्या आप अभी भी आरबीपी सलाह के अनुसार पशु को चारा (आहार) दे रहे है?					
12.17	If No, when did you stop following RBP advice? Give Month & year (Put in MM-YYYY)/ यदि नही आपने कब आरबीपी सलाह के अनुसार चारा देना बंद कर दिया था? (माह और वर्ष मे बताये)					

If Yes=1 in Q 12.16 for any animal, fill Q. 12.18 to Q. 12.24 / यदि प्र0 सं0 12.16 मे किसी भी प्रकार के पशु के लिए हाँ कोड किया हो तो प्रश्न 12.18 से 12.24 तक पूछें

If No=2 Q 12.16 for any animal, fill Q. 12.25 to Q. 12.26 / यदि प्र0 सं0 12.16 मे किसी भी प्रकार के पशु के लिए नहीं कोड किया हो तो प्रश्न 12.25 से 12.26 तक पूछें

12.18	What are the benefits of RBP? RBP के क्या लाभ हैं? **(Multiple Response Possible)** एक से ज्यादा उत्तर संभव**)**	**Options**	**Yes**	**No**
		1. Increase in milk yield / दूधमें वृद्वि	1	2
		2. Reduction in feeding cost / खिलाने के किमत में कमी	1	2
		3. Improvement in reproduction efficiency / पुर्न प्रजनन क्षमतामें वृद्वि	1	2
		4. Improvement in quality of milk / दूधके गुणवता में सुधार	1	2
		5. Improvement in overall health of the animal / पशु के संपूर्ण स्वास्थय में सुधार	1	2
		6. Other/ अन्य.....	1	2
12.19	By using RBP, have you found any improvement in .....? RBP के उपयोग से क्या आपने कोई .....में सुधार पाया?	**Improvement Areas**	**Yes**	**No**
		1. Reduced Inter calving period / दो बायत के बीच का अंतर	1	2
		2. Reduced Age at first calving / पहले गर्भ के समय उम्र घटी	1	2
		3. Improvement in Overall health / संपूर्ण स्वास्थय में सुधार	1	2
12.20	How frequently does LRP visit you/ LRP आपके यहॉ कितने बार आते है?	1. More than once in a month/महीने में कई बार		
		2. Monthly / महीने में एक बार		
		3. Once in two months / महीने में दो बार		
		4. No visit / कोई दौरा नहीं		
12.21	Are the feed / mineral mixture recommended by LRP is easily available in your area? क्या LRP द्वारा बताया गया चारा/आहार/खनीज मिश्रण आपके क्षेत्र में आसानी से उपलब्ध है?	Yes /हा	1	
		No / नही	2	
12.22	Whether LRP provides other information on..... ? क्या LRP .....इसके बारे में सूचना देता है? **(MULTIPLE RESPONSE POSSIBLE/ (एक से ज्यादा उत्तर संभव)**	**Options**	**Yes**	**No**
		1. Importance of Drinking water / पीने के पानी का महत्व	1	2
		2. Colostrum feeding/कोलस्ट्रम खिलाना	1	2
		3. Chaffing of fodder / चारा की कटाई	1	2
		4. Regular de-worming / कीटाणुमुक्त	1	2
		5. Vaccination / टीकाकरण	1	2
		6. Medicine spraying for controlling tick infestation / इन्फेस्टेशन को रोकने के लिए दवाई का छिडकाव	1	2
		7. Other/ अन्य.....	1	2
12.23	Would you be willing to pay him some service charge in future? क्या आप भविष्य में कोई सेवा शुल्क उनको देना पंसद करेगें?	Yes	1	
		No	2	
12.24	Are you satisfied with the services of the LRP? या आप LRP के सेवा से संतुष्ट है?	**Yes**	1	
		No	2	
12.25	In past have you ever given feed to your animals as per the recommendations of RBP? / क्या आपने पहले कभी RBP के सलाह के अनुसार अपने जानवरों को खिलाया है?	**Yes fed but have discontinued** हाँ खिलाया लेकिन बंद कर दिया है	1	
		Never followed/ पालन नहीं किया	2	
Go to Q 14.0 (Reason for discontinuing/ not followed)				
12.26	What are the reasons for not adopting /discontinuing RBP – balance ration? / RBP को नही अपनाने का कारण क्या है? **(Multiple Response Possible)** (एक से ज्यादा उत्तर संभव**)**	1. Traditional knowledge / परम्परागत जानकारी	1	
		2. Visible impact is marginal / प्रत्यक्ष प्रभाव बहुत कम	2	
		3. Increase in milk production is not substantial दूधके उत्पादन में कोई खास वृद्वि नही	3	
		4. Difficulty in understanding the changes in feed items / आहार के परिवर्तनों को समझने में कठिनाई	4	
		5. Feed items suggested not easily available / बताया गया आहार आसानी से उपलब्ध नही	5	
		6. Cost of feeding RBP unaffordable / RBP सलाह के अनुसार आहार की कीमत ज्यादा	6	
		7. Improvement in physical condition is not noticeable / शारिरिक स्थिति में सुधार नही दिखता	7	
		8.Apprehension of changes in existing feeding practices due to traditional beliefs / परम्परागत विश्वास के कारण वर्तमान चारा/आहार को बदलने में डर	8	

Section: XIII: VBMPS: Village Based Milk Procurement System (For VBMPS Villages only)

13.1	Type of VBMPS component implemented (under NDP I) in the village/ गाँव में वीबीएमपीएस का कौन सा प्रारूप (DCS/ MPI) कार्यरत है? (एनडीपी.1 के अतंर्गत)	1. New DCS/ नई डीसीएस **(CONTINUE)** 2. Stregthening of DCS/ डीसीएस का सुदृढ़ीकरण **(Go to Q.13.5)**	
13.2	Where were you selling milk before opening of DCS/ MPI/ डीसीएस/एमपीआई के खुलने से पहले आप दूध कहां बेचते थें?	1. Individual HH/ Shops in village/ गांव में अलग-अलग एचएच / दुकानें 2. Dudhia/ दुदिया 3. Private dairies / निजी डैरी 4. Outside village/ गांव के बाहर 5. Not selling milk/milk products/ दूध / दूध उत्पादों की बिक्री नहीं 6. Was not rearing animals/ जानवर नहीं पाल रहे 7. Others/ अन्य	
13.3	What price of milk did you get **before** opening of DCS/ MPI? (Rs./ litre)/ डीसीएस/एमपीआई के खुलने से पहले आप दूध की क्या कीमत मिलती थी? (रूपया/प्रति लीटर)		
13.4	What price of milk did you get **after** opening of DCS/ MPI? (Rs./ litre)/ डीसीएस/एमपीआई के खुलने के बाद दूध की क्या कीमत मिलती थी? (रूपया/प्रति लीटर)		

Ask 13.5 to 13.7 if pouring milk in DCS/MPI (Check Q 3.6 in Section III) **यदि डीसीएस/एमपीआई मे दुग्ध देते है**

13.5	Have you been benefitted in any of these manners? आपको इनमें से किसी भी तरह से लाभ हुआ है? ***(Multiple Response Possible)*** **(एक से अधिक उत्तर संभव)**	1. Better price of milk/दूध का बेहतर मूल्य	**1**
		2. No wastage of milk/दूध खराब नही होता	2
		3. Advantage of getting longer time for pouring milk दूध डालने के लिए ज्यादा समय मिलने की सुविधा	3
		4. Availability of better AI service /बेहतर AI सेवा की उपलबधता	4
		5. Subsidised Cattle Feed/ रियायती पशु आहार	5
		6. Time saved in marketing milk/दूध विक्री के लिए समय की बचत	6
		7. Any Other/अन्य कोई.....	7
13.6	Have you ever faced any discrimination at the milk collection center? / क्या आपको दूध संग्रहण केन्द्र पर कभी भी भेदभाव का सामना करना पड़ा है?	1. Yes / हॉ 2. No / नही	

13.7	Are you satisfied with .....? क्या आप .....से संतुष्ट हैं ? ***(Multiple Response Possible)*** ***(Circle the Code if Yes)*** **(एक से अधिक उत्तर संभव)**	**Options**	**Yes**	**No**
		1. Behavior of the appointed person at milk collection center/ दूध संग्रह केन्द्र पर नियुक्तव्यक्ति का व्यवहार	1	2
		2. Milk Testing / दूध की जाँच	1	2
		3. Milk Price received/ दूध की मिलने वाली कीमत	1	2
		4. Other subsidised or free service/ अन्य रियायती या मुफ्त सेवा	1	2
		5. Any Other/अन्य कोई.....	1	2

13.8	Did you notice increase in animals in your village due to starting of new DCS or transparency in payment system or flexibility in milk pouring timings? / क्या आपको लगता है कि नये डीसीएस के खुलने या भुगतान मे पारदर्शिता अथवा दूग्ध डालने के समय में बडी सुविधा की वजह से आपके गाँव मे पशुओं की संख्या मे वृद्वि हुई है?	1. Yes/हाँ 2. No/ नहीं 3. Can't Say / कह नही सकते	
13.9	Do you plan to increase animals in your house due to starting of new DCS or transparency in payment system or flexibility in milk pouring timings? / क्या आपको लगता है कि नये डीसीएस के खुलने या भुगतान मे पारदर्शिता अथवा दूग्ध डालने के समय में बडी सुविधा की वजह से आप अपने घर मे पशुओं की संख्या मे वृद्वि करेगें?	1. Yes/हाँ 2. No/ नहीं 3. Not sure/निश्चित नहीं	

Section-XIV: FILL UP BEFORE TERMINATING THE INTERVIEW /

BEFORE YOU LEAVE THE HOUSEHOLD (Match the Production with Sale & Purchase – sell & consumption data) / घर छोड़ने से पहले (उत्पाद को क्रय और विक्रय से मिलायें)

PRODUCTION, PURCHASE, SALE AND HOUSEHOLD CONSUMPTION OF MILK AND ITS PRODUCTS
उत्पाद, क्रय, विक्रय और घर मे दुग्ध और दुग्ध उत्पाद की खपत

Copy data from relevant places and Cross-tally Data before Terminating the Interview
डाटा को प्रासंगिक जगह से प्रतिलिपी करे और साक्षात्कार समाप्त करने से पहले जाँचे

Sl No	Animal Category पशु की श्रेणी	Total Milk Production कुल दूध का उत्पादन (in Litres)	Total Milk Purchase कुल दूध की खरीद (in Litres)	Total Milk Available कुल उपलब्ध दूध (in Litres)	Total Milk Sold कुल बेचा हुआ दुध (in Litres)	Milk retained for consumption at home दूध उत्पाद और विकी के लिए रखा गया दूध (in Litres)	Milk retained for conversion into milk product and sale घर मे खपत के लिए रखा गया दूध (in Litres)	Total Milk Sold or Retained कुल बेचा हुआ या रखा हुआ दुध
1	2	3	4	5= (3+4)	6	7	8	9=(6+7+8)
		(copy from Q. 2.8 Section II)	(copy from Q. 3.3 in Section III)		(copy from Total in Q NO 3.7 of milk utilization table)	(copy from Q No 3.14 (a) of Milk Utilization table)	(copy from Q No 3.14 (b) of Milk Utilization table)	
1	Cow							
2	Buffalo							
3	Mixed							
4	**Total**							

Household's Address (Details):											
Village Name:											
House No:											
Post:											
Thana:											
District:											
Landmark											
Mobile No. (if any)											
Landline No. (if any)	STD code							Phone No.			

National Dairy Plan (NDP I) of Government of India
Household Schedule for the End-term
(Environmental & Social Issues)

I am from DRS Pvt. Ltd., a Delhi based survey Research Company. Currently we are conducting a survey for National Dairy Plan (NDP I), Government of India among households owning cows and buffaloes to understand animal rearing practices, milk production and milk utilisation at the household level. The information provided by you will be used for planning policies and activities that will help milk production in this area.

मैं दिल्ली के एक शोध संस्थान **डी. आर. एस. प्रा. लि.** से हूँ। वर्तमान में हमलोग **राष्ट्रीय डेयरी योजना-I (NDP-I), भारत सरकार** लिए सर्वेक्षण कर रहे है। इस सर्वेक्षण में हम गाय और भैंस पालने वाले परिवारों का साक्षात्कार कर रहे है। ताकि परिवार के स्तर पर पशुपालन के तरीकों, दूध उत्पादन और दूध के उपयोग को समझा जा सके। आपके द्वारा प्रदान की गई सूचना का उपयोग योजना और नीतियॉ बनाने में किया जाएगा। जिससे इस क्षेत्र में दूध उत्पादक को बढ़ाया जा सके।

State Name / राज्य का नाम								**Code/** कोड		
District Name / जिला का नाम								**Code/** कोड		
Tehsil/Taluk/Mandal/ Block Name / तहसिल / तालुका / मंडल / ब्लॉक का नाम								**Code/** कोड		
Village Name / गाँव का नाम								**Code/** कोड		
Sl No. as in Listing Schedule लिस्टिंग में क्रम संख्या				**House No as in Listing Schedule/** लिस्टिंग सूची में मकान संख्या						
Name of the Respondent उत्तरदाता का नाम										
Name of Head of Household परिवार के मुखिया का नाम										
Social Group/ सामाजिक समूह	1. General		2. SC		3. ST		4. OBC			
Economic Group / आर्थिक समूह	1. APL		2. BPL		3. Antodaya					
Survey (Month & Year) सर्वेक्षण (महिना / वर्ष)	**Month/** माह **(MM)**			**Year/** वर्ष **(YYYY)**						
Survey Round	1. Baseline		2. Midline							
	3. Endline		4. Annual Round							

Particulars of field work फिल्ड वर्क का विवरण	**Name** नाम	**Signature** हस्ताक्षर	**Survey Date:** सर्वे की तिथि
Enumerator / सर्वेक्षक			
Supervisor/ सुपरवाईजर			

Section – I: Demographic Characteristics

Q .1.0.Demographic characteristics of Usual Residents of the Household

SL No क्रमांक	1.1 Name/ नाम	1.2 What is the **age** of this member? **(in Completed years)** इस सदस्य का उम्र कितना हैं?	1.3 What is the **relationship** of this member with current head of the household? सदस्य का परिवार के वर्तमान मुखिया से क्या सबंध है? ***(Use code)***	1.4 What is the **Gender** of the Member? सदस्य का लिंग क्या है ***1= Male 2= Female***	1.5 What is the **highest level of education** completed by this member? इस सदस्य द्वारा प्राप्त की गई उच्चतम शिक्षा क्या हैं? ***Use code (Above 6 Years)***	1.6 What is the **primary occupation** of the member? सदस्य का प्राथमिक व्यवसाय क्या है? ***Use code***	1.7 Does this member **live in the village** throughout the year? क्या यह सदस्य **सालभर** गाँव मे रहता है? 1. Yes 2. No	1.8 If No in the previous question? For **how many months** does he live **outside the village/** अगर पिछले प्रश्न मे ना है तो, पिछले साल में वह कितने महीने गाँव से बाहर था	1.9 Where does he/ she go during these months? वह इन महीनों मे कहां जाता है? ***Use code***	1.10 Which is the most **important reason** for this person to go outside the village during these months? इन महीनों मे यह सदस्य किस उद्देश्य से गाँव से बाहर जाते है? ***Use code***
1	2	3	4	5	6	7	8	9	10	11
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										

(Please attach a separate sheet if household has more than 11 members

Code for Column 4 Relationship / संबंध	Code for Column 6 Education levels/शिक्षा का स्तर	Code for Column 7 Occupation / व्यवसाय
1. Head of the HH	1. Illiterate	1. Crop Cultivation
2. Wife/ Husband	2. Literate but no formal education	2. Agriculture Wage labourer
3. Son/ Daughter	3. Up to class 5th	3. Dairying
4. Son-in-law/ daughter-in-law	4.Up to class 8th	4. Non-agricultural wage labourer
5. Grand Child	5. Up to class 10th	5. Self employed/ family business (excluding cultivation, dairying)*Own account worker/Employer/Family worker*
6. Parent	6. Up to class 12th	6. Regular salaried/wage employee
7. Parent-in-law	7. Graduation	7. Not able to work due to disability/ old age
8. Brother-in-law/ Sister-in-law	8. Above Graduation	8. Recipient of rent/pension/other income
9. Step child	9. Professional Course	9. Housewife
10. Brother /Sister	10. Others (Specify)	10. Student
11. Unrelated		11. Unemployed / helping in household chore
12. Worker		12. Others (Specify)
13. Nephew /Niece		
14. Others relative		

Code for Column 10	Code for Column 11
1. Nearby town	1. Alternative employment
2. Within the state (other than nearby town)	2. Non-availability of **fodder/ feed** for animals in the village
3. Outside the state	3. Non-availability of **water** for animals in the village
4. Other	4. Other

Section-II: Animal Profile, Milk production and Sale

Q.No.	Questions	Options	Codes	
2.1	Availability of different types of animals with the households? परिवार के साथ उपलब्ध विभिन्न जानवरों का विवरण/ संख्या	**Type of Animals**	**Total** कुल	**In milk** दूध में
		Indigenous Cow/ देशी गाय		
		Crossbreed Cow/ संकर गाय		
		Buffalo/ भैंस		
		Other/ अन्य		
2.2	What was the milk yield of these animals Yesterday? (in litres) ऊपर बताये गए जानवरों ने कल कितना दूध दिया था? (लीटर में)	**Type of Animals**	**Morn. Yield**	**Eve. Yield**
		Indigenous Cow/ देशी गाय		
		Crossbreed Cow/ संकर गाय		
		Buffalo / भैंस		
		Total/ अन्य		
2.3	How much cow and buffalo **milk do you sell** in a day regularly? (in Litres) आप नियमित रूप से एक दिन में कितनी गाय और भैंस का दूध बेचते हैं? (लीटर में)	**Type of Animals**		**Quantity (In Ltr)**
		Cow/ गाय		
		Buffalo / भैंस		
		Mixed / मिश्रित		
2.4	How much do you get **paid for one Litre** of milk sold? (In Rs.) एक लीटर दूध बेचने के लिए आपको कितना भुगतान मिलता हैं?	**Type of Animals**		**Price (In Rs.)**
		Cow/ गाय		
		Buffalo / भैंस		
		Mixed / मिश्रित		
2.5	What is the total monthly income from sale of milk products? / दूध उत्पादों की बिक्री से आपकी कुल मासिक आये कितनी होती हैं?	**(Amount in Rs. _____)** 99. Not applicable		

Section–III: Social Assessment

		Type of members	Total No.	No. in dairying
3.1	How many members of your household are engaged in dairying activities? / डेयरी के काम में आपके परिवार के कितने सदस्य शामिल हैं?	Male		
		Female		
		Total		

		Activities	Male	Female
3.2	In your household, who are engaged in following activities? आपके परिवार में दिए गए कार्यो में कौन कौन लोग शामिल हैं?	Feeding of animals / पशुओ को खिलाना	1	2
		Milking of animals/ दूध निकलना	1	2
		Washing of animals/ पशुओ को धोना	1	2
		Selling/Pouring Milk/ दूध बेचना और डेयरी में देना	1	2
		Fodder Collection/ चारा इकट्ठा करने में	1	2
		Chaffing of fodder/ चारा काटने में	1	2
		Open grazing of animals/ पशुओ को खुले में चराने में	1	2
		Cleaning of Shed / पशुशाला की सफाई	1	2
		Dung Collection / Dung Cake preparation / उपला बनाना एवं इकट्ठा करने में	1	2
		Other (Specify) अन्य	1	2

3.3	Is anyone from your household a member of DCS? क्या आपके परिवार से कोई DCS का सदस्य है?	Yes	1
		No	2
3.3 (a)	If yes, who? यदि हाँ, तो कौन?	Male	1
		Female	2
		Both	3
3.4	Does this member participate in DCS meetings? क्या यह सदस्य DCS की बैठकों में भाग लेता है?	Yes	1
		No	2
3.5	Does this member take active part in decision making of DCS? क्या DCS के निर्णयों में यह सदस्य सक्रिय भूमिका निभाते हैं?	Yes	1
		No	2

ENVIRONMENTAL ASSESSMENT

Section–IV: PESTICIDE MANAGEMENT

Q. No.	Questions	Options	Codes
4.1	Are you involved in fodder seed production? क्या आप चारा बीज उत्पादन में शामिल हैं?	Yes	1
		No	2
4.2	Do you cultivate your own green fodder? क्या आप अपना हरा चारा खुद उगाते हैं?	Yes	1
		No	2
4.3	Do you use pesticides in cultivation of fodder crops? क्या आप चारा फसलों को उगाने में कीटनाशक का उपयोग करतें हैं?	Yes	1
		No	2
4.4	Do you use pesticides in cultivation of other crops? क्या आप खाद्य फसलों को उगाने में कीटनाशक का उपयोग करतें हैं?	Yes	1
		No	2
4.5	Did you receive directions on using pesticides? क्या कीटनाशक के उपयोग के लिए आपको कोई निर्देश मिलता हैं?	Yes	1
		No	2
4.6	If yes, what is the source of information? यदि हाँ, तो मिले हुए निर्देश का स्रोत क्या है? (बहुविकल्पीय) **(Multiple Response)**	Label on container	1
		From shopkeeper	2
		Television	3
		KVK (Krishi Vigyan Kendra)	4
		Extension worker	5
		Training/meeting under NDP I	6
		From other farmer	7
		Other (Specify)	9
4.7	Where do you keep the pesticide container? आप कीटनाशक के कंटेनर को कहा रखतें हैं?	In a Separate Room with lock	1
		In the kitchen	2
		In cattle shed	3
		Other place (Specify)	9

Q. No.	Questions	Options	Codes
4.8	Do you use any protection while applying pesticide? / कीटनाशक का उपयोग करते समय आप कौन सी सुरक्षा अपनाते हैं? (बहुविकल्पीय) **(Multiple Response)**	Cover face & eyes/ मुह और आख ढकते हैं	1
		Gloves/ ग्लव्स पहन्तें हैं	2
		Wear clothes covering whole body/ पुरे शारीर को ढकने वाले कपडे	3
		Other (Specify) अन्य	9
4.9	What do you do immediately after applying/spraying pesticides? कीटनाशक छिड़कने के तुरंत बाद आप क्या करते हैं? **(Multiple Response)**	Wash hands with soap/ साबुन से हाथ धोना	1
		Have a bath and wear same clothes/ नहाने के बाद दोबारा वही कपडे पहन लेना	2
		Have bath & change clothes/ नहाने के बाद कपडे बदलना	3
		Directly eat or drink without washing hands/ बिना हाथ धोये ही खाना और पीना	4
		Continue with other work/ दुसरे काम में लग जाना	5
4.10	What do you do with the empty containers/bottles of pesticides? कीनाशाको के खाली कंटेनरों/ बोतलों के साथ आप क्या करते हैं?	Sell/ बेच देना	1
		Puncture/break the container and sell it / कंटेनर तोड़ कर बेच देना	2
		Throw anywhere/ कही भी फेक देना	3
		Bury the empty container in soil/ खाली कंटेनर को मिटटी के गड्ढे में गाड़ना	4
		Reuse for other purpose/ अन्य काम के लिए फिर से उपयोग करना (storing water, food, grains, milk collection?)	5
4.11	Are there any effects of pesticides on humans? क्या कीटनाशको के उपयोग से इंसानों पर कोई बुरा असर होता है? **(Multiple Response)**	No effect/ कोई असर नहीं	1
		Pollute water/ पानी प्रदूषित होता	2
		Poisoning/ वातावरण जहरीला होना	3
		Fever/ बुखार	4
		Vomiting / उलटी	5
		Breathing problem/ सांस लेने में दिक्कत	6
		Cancer/ कैंसर	7
		Other (Specify)/ अन्य कोई	9

Section–V: ZOONOSES

Q. No.	Questions	Options	Codes
5.1	Do you own any milch animal? क्या आपके पास कोई दूध देने वाला कोई पशु हैं?	Yes	1
		No	2
5.2	Do you own animals other than milch animals? क्या आपके पास दूध देने वाले पशु के अलावा कोई और पशु हैं?	Yes	1
		No	2
5.3	Can diseases be passed/transmitted from animals to Human? क्या पशुओ से मनुष्यों में कोई बिमारी पारित होती हैं?	Yes	1
		No	2
5.4	If yes, give names of diseases यदि हाँ, तो कौन कौन सी बीमारी हो सकती है? (Multiple Response Possible)	Malaria	1
		Brucellosis	2
		Bovine tuberculosis	3
		Bird flu	4
		Swine flu	5
		Rabies	6
		Plague	7
		Other	9

Q. No.	Questions	Options	Codes
5.5	What precautions can be taken to prevent spread of infection/diseases from animals to humans? जानवरों से मनुष्यों तक संक्रमण/ बिमारियों के प्रसार को रोकने के लिए क्या सावधानी बरतनी चाहिए? **(Multiple Response)**	Do not know	1
		Timely vaccination of animals	2
		Disposal of dead diseased animal/ fetus in covered pit/deep burial	3
		Washing hands with soap before eating food	4
		Not eating uncooked meat	5
		Not consuming milk without boiling	6
		Other	9
5.6	Do you get your animal vaccinated? / क्या आप अपने पशु को टीका लगवाते हैं?	Yes	1
		No	2
5.7	If yes, then where is vaccination done? / यदि हाँ, तो टीका कहा से लगता है?	At home/animal shed	1
		At AI Centre/ vet. Centre	2
		Vaccination camp	3
5.8	What is the importance of vaccination? टीकाकरण का क्या महत्व हैं? **(Multiple Response)**	Animal will remain healthy	1
		Getting better price of milk	2
		For increase in milk production	3
		Early first calving	4
		Do not know	9
5.9	What are the wastes of vaccination process? / टीकाकरण प्रक्रिया में क्या कचरा निकलता है? **(Multiple Response)**	Empty Vaccination vials	1
		Used Gloves	2
		Used Needle & syringe	3
		Cotton	4
5.10	What does the service provider do with these wastes? सेवा प्रदाता इन कचरों का क्या करता है?	Thrown at vaccination site	1
		Collected and taken away	2
		Do not know	3
5.11	From where did you get information about zoonosis? जूनोसिस के बारे में आपको कहा से जानकारी मिली? **(Multiple Response)**	Television	1
		Radio	2
		Newspaper/brochure	3
		Animal husbandry department	4
		Village meeting/Awareness Programmes under NDP I	5
		Veterinary Doctor	6
		Family/Friend	7
		Other	9
5.12	What precautions can be taken to prevent the spread of such diseases? ऐसी बिमारियों के फैलाव से बचने के लिए क्या - क्या सावधानी बरतनी चाहिए **(Multiple Response)**	Do not know	1
		Timely vaccination of animals	1
		Disposal of dead diseased animal/ foetus in covered pit/deep burial	2
		Washing hands with soap before eating food	3
		Not eating uncooked meat	4
		Not consuming milk without boiling	5
		Other	9
5.13	Have you attended any vaccination camp? क्या आपने किसी टीकाकरण कैंप में भाग लिया है?	Yes	1
		No	2
5.14	Have you attended any awareness camp on zoonosis? क्या आपने जूनोसिस पर किसी जागरूगता कैंप में भाग लिया है?	Yes	1
		No	2
5.15	If yes, have you applied any knowledge gained at the camp? What are they? यदि हां, तो क्या आपने कैंप में बताये गए ज्ञान को कही लागू किया है? वे क्या हैं?		
5.16	Who conducted the camp? / कैंप किसके द्वारा आयोजित किया जाता हैं?		
5.17	When was it conducted? / कैंप कब आयोजित किया गया था?		

Section–VI: AWARENESS OF WATER MANAGEMENT OPTIONS

6.1	What is the source of water used for milch animals? / दूध देने वाले जानवरों के लिए पानी का मुख्य स्रोत क्या है?	**Options**	**Winter**	**Summer**	**Rainy**
		1. Piped water supply	1	2	3
		2. Bore well	1	2	3
		3. Hand pump	1	2	3
		4. Well	1	2	3
		5. Pond/ river	1	2	3
		6. Canal	1	2	3
		7. Other	1	2	3
6.2	How much water is needed per animal per day? (In ltr.) / एक दिन में एक जानवर के लिए कितने पानी की जरुरत होती है?	**Animal Type**			**Quanity**
		Indigenous Cow			
		Crossbreed Cow			
		Buffalo			
6.3	Is adequate water available क्या प्रयाप्त पानी उपलब्ध है?	Yes			1
		Scarce during some periods			2
		Scarce throughout year			3
6.4	Do you know about methods for increasing water availability? / क्या आपको पानी की उपलब्धता बढ़ने के उपायों के बारे में जानकारी हैं?	Yes	1		
		No	2		**Skip to 6.6**
6.5	If yes, then which methods? यदि हाँ, तो कौन सी विधि हैं? **(Multiple Response)**	Tube-well/well, well deepening			1
		Collecting rainwater in tank (Roof/ground)			2
		Farm bunding, watershed			3
		Pond			4
		Micro-irrigation			5
		Planting more trees			6
		Other traditional method (Specify)			7
6.6	What is the source of this information (increasing water availability) यह जानकारी आपको कहा से मिली? **(Multiple Response)**	TV			1
		Radio			2
		Newspaper			3
		Awareness by govt. department			4
		Awareness by NGO			5
		Awareness Programmes under NDP I			6
		From other farmers			7
6.7	Are you aware about water conservation? क्या आप जल संरक्षण के बारे में जानते हैं?	Yes			1
		No			2
6.8	What is the source of this information (water conservation) यह जानकारी आपको कहा से मिली? **(Multiple Response)**	TV			1
		Radio			2
		Newspaper			3
		Awareness by govt. department			4
		Awareness by NGO			5
		Awareness Programmes under NDP I			6
		From other farmers			7

Section–VII: AWARENESS OF FODDER CONSERVATION METHODS

7.1	Do you know about fodder conservation technologies? / क्या आप चारा संरक्षण प्रणाली के बारे में जानते हैं? **(Multiple Response)**	Silage making	1
		Chaff cutting	2
		Mowers to reduce waste	3
		Storage of dry fodder	4
		Other	9
7.2	During period of fodder scarcity (drought), what measures do you undertake? चारा की कमी की अवधी के दौरान आप क्या उपाए करते हैं? **(Multiple Response)**	Buy fodder	1
		Obtain free fodder from relief camp	2
		Use alternative fodder resource	3
		Buy fodder in advance (post harvest season) and store it for use during scarcity period	4
		Sell animal	5
		Migrate with animal	6

7.3	What other type of fodder do you feed to your animals (apart from cultivated fodder/fodder crops)? खेत में उगाय हुए चारा या चारा फसल के अलावा आप अपने जानवरों की किस प्रकार का चारा खिलते हैं?		
7.4	From where did you get information about fodder conservation? चारा संरक्षण के बारे में आपको कहा से जानकारी मिली? **(Multiple Response)**	Traditional method, done in family	1
		Training	2
		Outside experts/extension workers	3
		DCS/Milk Union in Awareness Programmes	4
		From other farmers	5
		Other	9

Section–VIII: AWARENESS OF GOVT. SCHEMES
(To be asked only in SC/ST households)

		Options	Yes	No
8.1	Has any member from your family getting benefits from any government scheme/govt. deptt./NGO? क्या आपके परिवार के किसी भी सदस्य को किसी भी सरकारी योजना/ सरकार/ गैर सरकारी संस्था से लाभ मिल रहा है?	Food/Food subsidy	1	2
		Maternity benefits	1	2
		Education	1	2
		Health treatment/medicines	1	2
		Employment benefits (e.g. MGNREGA)	1	2
		Skill training	1	2
		Agriculture/irrigation	1	2
		Animal purchase / insurance /shelter	1	2
		Access to credit under any government scheme	1	2
		Membership of any community associations –Savings group, Cooperative Credit Societies, Livelihood Group	1	2
		Other (Specify)	1	2
8.2	From where did you get information about this scheme/program? इस योजना कार्यकर्म के बारे में जानकारी कहा से मिली?	TV	1	2
		Radio	1	2
		Newspaper	1	2
		NDP I	1	2
		NGO	1	2
		Govt. Deptt	1	2
		Sarpanch/panchayat/sahayak	1	2
		Anganwadi	1	2
		Other villagers	1	2
		Other (Specify)	1	2

Household's Address (Details) :																						
Village Name:																						
House No :																						
Post:																						
Thana :																						
District:																						
Landmark																						
Mobile No. (if any)																						
Landline No. (if any)	STD code									Phone No.												

National Dairy Plan (NDP I) of Government of India
DCS Schedule for the End-term

I am from DRS Pvt. Ltd., a Delhi based survey Research Company. Currently we are conducting a survey for National Dairy Plan (NDP I), Government of India. Information provided by you will be used for planning policies and activities that will help milk production in this area.

मैं दिल्ली के एक शोध संस्थान **डी. आर. एस. प्रा. लि.** से हूँ। वर्तमान में हमलोग **राष्ट्रीय डेयरी योजना - I (NDP-I), भारत सरकार** लिए सर्वेक्षण कर रहे है। आपके द्वारा प्रदान की गई सूचना का उपयोग योजना और नीतियॉ बनाने में किया जाएगा। जिससे इस क्षेत्र में दूध उत्पादक को बढ़ाया जा सके।

State Name / राज्य का नाम		**Code**/ कोड	
District Name/ जिला का नाम		**Code**/ कोड	
Tehsil/ Taluk/ Mandal/ Block Name / हसिल/तालुका/मंडल/ ब्लॉक का नाम		**Code**/ कोड	
Village / गाँव का नाम		**Code**/ कोड	
Name of the Respondent: उत्तरदाता का नाम			
Gender of Respondent: उत्तरदाता का लिंग	Male..... 1 Female 2		
Social Category of Respondent सामाजिक समूह	Gen.....1 SC..... 2 ST..... 3 OBC..... 4		
Contact Number of Respondent / मोबाइल नंबर			

Particulars of field work फिल्ड वर्क का विवरण	**Name** नाम	**Signature** हस्ताक्षर	**Survey Date:** सर्वे की तिथि
Enumerator/ सर्वेक्षक			
Supervisor / सुपरवाईजर			

Q. No.	**Questions**	**Options**		
			Male पुरुष	**Female** महिला
1	What is the break-up of DCS membership according to social categories? सामाजिक श्रेणी के अनुसार डी सी एस के कितने सदस्य हैं?	Total No. of Members/ कुल सदस्य		
		No. of SC Members/ SC सदस्य		
		No. of ST Members/ ST सदस्य		
		No. of OBC Members/ OBC सदस्य		
2	What is the frequency of DCS meetings? डी सी एस के बैठकों की आव्रि क्या होती हैं?	Weekly/ साप्ताहिक		1
		Fortnightly/ पाक्षिक		2
		Monthly/ महीने में एक बार		3
		Half Yearly/ छः महीने में		4
		As and when required/ जब जब जरुरत हो		5
		Other अन्य		9

3	What are the steps you have taken to encourage the farmers of weaker sections including women to join DCS? महिलाओं और कमजोर वर्ग के किसानो को डी सी एस में शामिल होने के लिए आपने क्या - क्या कदम उठाये हैं?		
4	Is BMC installed at your DCS Collection Centre? क्या आपके डी सी एस संग्रहण केंद्र पर बी ऍम सी (बल्क मिल्क कूलर) स्थापित हैं?	Yes/ हाँ	1
		No/ नही	2
5	If yes, what is the capacity of installed BMC? यदि हाँ, तो स्थापित बी ऍम सी की क्षमता कितनी हैं?	1 KL	1
		2 KL	2
		3KL	3
		5 KL	4
		10 KL	5
6	If no, what are the reasons for not getting BMC installed? / यदि नहीं, तो बीऍमसी ना स्थापित करने की क्या वजह हैं?		

7	What is the main source of water for BMC and DCS cleaning? BMC और DCS की सफाई के लिए पानी के मुख्या स्रोत क्या हैं?	**Source of water supply**	**Summer**	**Winter**	**Rainy**
		Piped water/village supply system	1	2	3
		Hand pump/Bore well	1	2	3
		Well	1	2	3
		Purchase water in tankers	1	2	3
		Other	1	2	3
8	How do you dispose the waste water from BMC, can and floor cleaning? BMC और भवन की सफाई से निकले हुए गंदे पानी का निपटान कहा करतें हैं? ***(Validate through observation of disposal site)***	Not enough waste water to dispose/ निपटान के लिए पर्याप्त पानी नहीं होता			1
		Let out into street near DCS/ DCS के पास सड़क पे निकला जाता हैं			2
		Let out into nearby land/ पास की जमीन में निकला जाता है			3
		Let out into trees/ पेड़ो में बहा दिया जाता हैं			4
		Through kaccha drain to far off place/ कच्ची नाली के माध्यम से दूर बहाया जाता हैं			5
		Connected to pucca drain of the village/ गाँव की पक्की नाली से जोड़ा गया है			6
		Soak pit/ सोखता			7
		Other/ अन्य			9
9	Interviewer's observation on the wastewater / अपशिष्ट पानी पर साक्षात्कार का अवलोकन (Multiple Response Possible)	Water is not stagnant near DCS/ DCS के पास पानी इकठ्ठा नहीं होता			1
		Water is stagnant at disposal point (soak pit, drain, open land)/ निपटान की जगह पर पानी स्थिर हैं			2
		Smell of stagnant waste water near DCS/ DCS के पास गंदे पानी की बदबू			3
		Waste water is managed properly by making connection to the village waste water drains/soakpits etc. / गाँव की अपशिष्ट जल निकासी से कनेक्शन बनाकर गंदे पानी को ठीक से प्रबंधन किया जाता हैं			4
10	What are the sources of energy at DCS/ collection centre? DCS संग्रह केंद्र पर उर्जा का स्रोत क्या है? (Multiple response possible)	Electricity/ बिजली			1
		Solar/ सौर्य उर्जा (conversion into heat, into electricity)			2
		Diesel/ डीजल			3
		Wood/ लकड़ी			4
		Biogas/ बायोगैस			5
		Other/ अन्य			6

National Dairy Plan (NDP I) of Government of India

MAITs Schedule for the End-term

I am from DRS Pvt. Ltd., a Delhi based survey Research Company. Currently we are conducting a survey for National Dairy Plan (NDP I), Government of India. Information provided by you will be used for planning policies and activities that will help milk production in this area.

मैं दिल्ली के एक शोध संस्थान **डी. आर. एस. प्रा. लि.** से हूँ। वर्तमान में हमलोग **राष्ट्रीय डेयरी योजना-I (NDP-I), भारत सरकार** लिए सर्वेक्षण कर रहे है। आपके द्वारा प्रदान की गई सूचना का उपयोग योजना और नीतियॉ बनाने में किया जाएगा। जिससे इस क्षेत्र में दूध उत्पादक को बढ़ाया जा सके।

State Name / राज्य का नाम		**Code/** कोड	
District Name/ जिला का नाम		**Code/** कोड	
Tehsil/ Taluk/ Mandal/ Block Name / तहसिल/तालुका/मंडल/ ब्लॉक का नाम		**Code/** कोड	
Village / गाँव का नाम		**Code/** कोड	
Name of the Respondent: उत्तरदाता का नाम			
Gender of Respondent: उत्तरदाता का लिंग	Male..... 1 Female 2		
Social Category of Respondent सामाजिक समूह	Gen.....1 SC..... 2 ST..... 3 OBC..... 4		
Contact Number of Respondent मोबाइल नंबर			

Particulars of field work फिल्ड वर्क का विवरण	**Name** नाम	**Signature** हस्ताक्षर	**Survey Date:** सर्वे की तिथि
Enumerator/ सर्वेक्षक			
Supervisor / सुपरवाईजर			

Q. No.	Questions	Options	Codes
1	How many villages are being covered by you? आपके द्वारा कितने गावों को कवर किया जा रहा है?	No. of Villages/ कुल गावो की संख्या _____	
2	Where do you perform the AI? आप AI कहा करते हैं? **(Multiple Response Possible)**	At AI Centre/Vet Centre AI सेंटर या पशुचिकित्सलाये में	1
		At house of farmer/ किसान के घर पे	2
		Other/ अन्य	9
3	Do you perform any other activity than AI for earning? / क्या आप पैसे कमाने के लिए AI के अलावा कोई और कार्य भी करते हैं?	Yes	1
		No	2
4	If yes, what is the activity? यदि हां, तो कौन सा काम करतें हैं?		

Q. No.	Questions	Options	Codes
5	How much do you earn monthly from AI? (In Rs.) AI के काम से एक महीने में आपकी आये कितनी हैं?	☐☐☐☐☐	
6	What is your monthly income from other than AI activities, if any? / अगर आप AI के अलावा कोई और काम कर रहे हैं तो उससे आपकी एक महीने की आये कितनी हैं?	☐☐☐☐☐	
7	What is your educational qualification? आपकी शैक्षिक योग्यता कितनी हैं?		
8	What is your age? आपकी उम्र कितनी हैं?	☐☐	
9	From how many years are you performing AI? आप कितने साल से AI का काम कर रहे हैं?	☐☐	
10	What are the wastes produced after AI? AI करने के बाद क्या क्या कचरा निकलता हैं? (Multiple Response Possible)	Semen Straws	1
		Sheath	2
		Glove	3
		All of the above	4
		Other	9
		None	5
11	What do you do with these wastes? आप AI के बाद निकले हुए कचरे का क्या करतें हैं? (Multiple Response Possible)	Throw in open place near site of AI	1
		Throw the waste at waste dump site in village	2
		Collect the waste produced and Carry to another place/ AI Centre/Vet. Centre	3
		Bury the waste in soil/Deep Burial	4
		Burn the waste	5
		Other	9
12	Can diseases be transferred from animal to humans? क्या जानवरों द्वारा मनुष्यों में कोई बीमारी हो सकती हैं?	Yes	1
		No	2
13	If yes, can you tell me the name of the diseases that can be transferred from animal to human? यदि हाँ, तो उन बिमारियों का नाम बताएं जो जानवरों द्वारा मनुष्यों में हो सकती हैं? (Multiple Response Possible)	Malaria	1
		Brucellosis	2
		Bovine tuberculosis	3
		Bird flu	4
		Swine flu	5
		Rabies	6
		Plague	7
		Other	9
14	Can we stop spread of these diseases? क्या हम ऐसी बिमारियों को फैलने से बचा सकतें हैं?	Yes	1
		No	2
15	Do you know about any method which can be taken as precaution to spread these diseases? / क्या आप कोई तरीका जानते हैं जिसे इन बिमारियों को फैलाने क लिए सावधानी के रूप में लिया जा सकता हैं?	Yes	1
		No	2
16	If yes, what are the precautions one can take to prevent these? यदि हाँ, तो इन्हें रोकने के लिए क्या क्या सावधानी बरतनी चाहिए? (Multiple Response Possible)	Hand washing with soap before and after AI	1
		Using disposable gloves	2
		Disinfection of equipment	3
		Periodic medical check of self	4
		All of the above	5
		Other	9

National Dairy Plan (NDP I) of Government of India

Semen Station Schedule for the End-term

I am from DRS Pvt. Ltd., a Delhi based survey Research Company. Currently we are conducting a survey for National Dairy Plan (NDP I), Government of India. The information provided by you will be used for planning policies and activities that will help milk production in this area.

मैं दिल्ली के एक शोध संस्थान **डी. आर. एस. प्रा. लि.** से हूँ। वर्तमान में हमलोग **राष्ट्रीय डेयरी योजना-I (NDP-I), भारत सरकार** लिए सर्वेक्षण कर रहे है। आपके द्वारा प्रदान की गई सूचना का उपयोग योजना और नीतियॉ बनाने में किया जाएगा। जिससे इस क्षेत्र में दूध उत्पादक को बढ़ाया जा सके।

State Name / राज्य का नाम		**Code /** कोड	
District Name /जिला का नाम		**Code /** कोड	
Tehsil/ Taluk/ Mandal/ Block Name तहसिल/तालुका/मंडल/ब्लॉक का नाम		**Code /** कोड	
Village /गाँव का नाम		**Code /** कोड	
Name of the Respondent: उत्तरदाता का नाम			
Designation of Respondent उत्तरदाता का **पद**			
Contact Number of Respondent **मोबाइल नंबर**			
Type of centre/ सेंटर का प्रकार	Semen Station 1		

Particulars of field work फिल्ड वर्क का विवरण	**Name** नाम	**Signature** हस्ताक्षर	**Survey Date:** सर्वे की तिथि
Enumerator/ सर्वेक्षक			
Supervisor / सुपरवाईजर			

Section–I

Q. No.	Questions	Options		Codes
1.1	How many villages are falling in the ring vaccination zone (10 Km radius) of Semen station? / **इस सीमेन स्टेशन के** 10 KM **के आस - पास रिंग टीकाकरण के कितने गाँव हैं?**	No. of Villages**/गाँव की संख्या** _____		
1.2	When did you commence the implementation of the sub-project under NDP I? / **आपने** NDP I **के तहत उप परियोजना का कार्यान्वयन कब से शुरु किया?**	MM/YYYY_____		
1.3	How many villages have been covered for awareness camps under NDP I? / NDP I **के तहत जागरूकता कैंप में कितने गाँव शामिल किये गए हैं?**	No. of Villages**/ गाँव की संख्या** _____		
1.4	How many of these camps were organized? **इस तरह के कितने कैंप आयोजित किये गए हैं?**	**Type**		**No of Villages**
		Ring Vaccination Camps**/ रिंग टीकाकरण कैंप**		
		Awareness Camp on Zoonotic disease**/** Zoonotic **बीमारी पर जागरूकता शिविर**		
		Both**/ दोनों**		
1.5	Did you organize any awareness camp in the past prior to NDP I? / **क्या** NDP I **से पहले भी कभी ऐसे कैंप आयोजिते किये गए थे?**	Yes		1
		No		2
1.6	If yes, What was the camp related to? **यदि हाँ, तो कैंप किससे सम्बंधित था?**	Ring Vaccination Camps**/ रिंग टीकाकरण कैंप**		1
		Awareness Camp on Zoonotic disease**/** Zoonotic **बीमारी पर जागरूकता शिविर**		2
		Both**/ दोनों**		3
		Other (Specify)**/ अन्य**		9
1.7	How many of awareness camps on zoonotic diseases have been organized for Schools? / **स्कूलों में** zoonotic **बीमारी से सम्बंधित कितने जागरूकता कैंप आयोजित किये गए हैं?**	**No.**_____		
1.8	What were the issues raised in the awareness camps? **जागरूकता कैंप में उठाये गए मुद्दे क्या थे?**			
1.9	What are the Bio-security measures applicable in your semen station? **आपके** semen station **में जैव - सुरक्षा उपाए क्या - क्या लागु किये गए हैं?**			
1.10	Do you have a fire safety system in place? **क्या आपके स्टेशन में आग सुरक्षा प्रणाली हैं?**	Yes	1	
		No	2	**Skip to -1.13**
1.11	If Yes, what does it include? **यदि हाँ, क्या क्या प्रणालियाँ हैं?**	Brief Description **संक्षिप्त विवरण दें** (of the equipment/items in place for fire management) :		

Q. No.	Questions	Options		Codes
1.12	If fire Extinguishers available? **अगर अग्निरोधक उपलब्ध हैं** **अग्निरोधक यन्त्र कहा रखे गए हैं?** Where the fire Extinguishers are placed (Location of Fire Extinguishers within the station)?	Administration Block/Building Only / **सिर्फ प्रशाशनिक भवन में**		1
		Laboratory / **प्रयोगशाला में**		2
		Store Rooms/ **स्टोर रूम में**		3
		Bull sheds/ **सांड को रखने की जगह में**		4
		Canteen/ **कैंटीन में**		5
		Dry Fodder Storage area/ **सुखा चारा भण्डारण क्षेत्र में**		6
		All the above/ **ऊपर के सभी**		7
		None of the above/ **इनमे से कोई नहीं**		8
1.13	Are you aware about the Bio-Medical Waste? **क्या आप बायो मेडिकल अपशिष्ट के बारे में जानते हैं?**		Yes	1
			No	2
1.14	Are you aware about the Bio-Medical Waste Management and applicable Rules? **क्या आपको बायो मेडिकल अपशिष्ट प्रबंधन और उसके नियमों के बारे में जानकारी हैं?**		Yes	1
			No	2
1.15	What are the wastes produced in your work? **आपके काम में क्या - क्या अपशिष्ट निकलता है?** (Multiple Response Possible)	Cotton, bandages contaminated with blood/other body fluid **रक्त या अन्य कोई तरल पदार्थ से दूषित पट्टियाँ**		1
		Waste sharp objects like needles, broken glassware **सुई या शीशे के टुकड़े जैसी धार दार चीज़े**		2
		Bottles of used chemicals & medicines (empty/expired) **प्रयुक्त रसायनों और दवाओं की बोतलें**		3
		Gloves, tubing/ **दस्ताने, ट्यूबिंग**		4
		Culture media, vaccines/ **संस्कृति मीडिया, टीके**		5
		Dead diseased animal/ **मृत रोगग्रस्त पशु**		6
		Cleaning materials/ **सफाई की सामग्री**		7
		Eatables & egg shells/ **खाने की चीज़े**		8
		Stationery waste/ **स्टेशनरी उप्सिष्ट**		9
1.16	Where do you keep these wastes? **आप निकले हुए अपशिष्ट का क्या करतें है?**	Throw In open area / **खुले में फेकना**		
		Store In One common dustbin/ **एक आम कचरे के डिब्बे में इकट्ठा करना**		
		Store In Separate colour bins for different types of waste/ **विभिन्न प्रकार के कचरे अलग अलग रंगीन डिब्बे में इकट्ठा करना**		
1.17	Mechanism of disposal of these wastes in your station? **आपके केंद्र में अपशिष्ट के निपटान के लिए क्या प्रबंधन है?**	Throw in open area and burn it/ **खुले में फेककर जलाना**		
		Store in One common dustbin and later burn it in open **एक आम कचरे के डिब्बे में इकट्ठा करके बाद में खुले में जलाना**		
		Store in separate room/area **(in single bag)** for collection by another agency (hired for waste collection and management) **अन्य एजेंसी द्वारा संग्रह के लिए एक बैग में रखा जाता हैं**		
		Store in separate room/area **(in separate bags)** for collection by another agency (hired for waste collection and management) **अन्य एजेंसी द्वारा संग्रह के लिए अलग अलग बैग में रखा जाता हैं**		
		Other **अन्य**		
1.18	Are messages on safety displayed in your organization**?** **क्या आपके स्टेशन पर सुरक्षा संदेश प्रदर्शित है?**	Yes, in almost all Work places/ **हाँ, लगभग सभी जगहों पे**		1
		Yes, in some places/ **हाँ, कुछ जगहों पर**		2
		No/ **नहीं**		3

Q. No.	Questions	Options	Codes
1.19	Do you understand the safety messages displayed in your work area? / **क्या आप प्रदर्शित सुरक्षा संदेशों को समझतें हैं?**	Yes	1
		No	2
1.20	Do you have any livestock/Animal waste management system in place (for Animal dung and feed & fodder wastes) / **क्या आपके स्टेशन पर कोई पशुधन / पशु अपशिष्ट प्रबंधन प्रणाली हैं?**	Yes	1
		No	2
1.21	Where are these Livestock wastes (Animal dung and feed & fodder wastes) disposed? **पशुवों से निकले हुए कचरे /मल का निपटान कहा होता है?**	In open area near semen station/ **स्टेशन के पास खुले जगह पर**	1
		In open pit near semen station/ **स्टेशन के पास खुले गड्ढे पर**	2
		In closed pit near semen station / **स्टेशन के पास बंद गड्ढे में**	3
		Far away from semen station / **स्टेशन से बहुत दूर**	4
		Used in biogas plant/ **बायोगैस प्लांट में प्रयोग किया जाता है**	5
		Used as manure in fodder farms/ **चारा के खेती में खाद के लिए प्रयोग होता है**	6
		Don't Know/ **पता नहीं**	7
		Others/ **अन्य**	9
1.22	Do you have any biogas plant? **क्या यहाँ कोई बायो गैस प्लांट है?**	Yes	1
		No	2
1.23	Is it operational? **क्या यह परिचालित है?**	Yes	1
		No	2
1.24	How is the Bio-gas used? **आप बायो गैस का प्रयोग किस कार्य के लिए करतें हैं?** **(Multiple Response)**	Cooking/ **खाना पकाने के लिए**	1
		Lighting / **उजाले के लिए**	2
		Production of electricity/ **बिजली के उत्पादन के लिए**	3
		For Running DG Set as (partial fuel supplement) **जनरेटर चलने के लिए**	4
		Any other/ **अन्य कोई**	5
1.25	Do you have Personal Protective Equipment (PPEs) **क्या आपके पास व्यक्तिगत सुरक्षा उपकरण है?**	Yes	1
		No	2
1.26	If Yes, Do you use personal protective equipment? **यदि हाँ, तो क्या आप व्यक्तिगत सुरक्षा उपकरण का प्रयोग करतें हैं?**	Yes	1
		No	2
1.27	Which of these personal protective equipment are being used by you? (Multiple response possible) **आप कौन - कौन से व्यक्तिगत सुरक्षा उपकरण का प्रयोग करतें हैं?**	Steel toed shoes	1
		Gloves	2
		Apron	3
		Face mask/Head cover	4
		Lab coat	5
		Helmet	6
		Other	9
1.28	Have you received training to use the fire extinguisher? / **क्या आपको आग बुझाने के यंत्र को प्रयोग करने का प्रशिक्षण मिला है?**	Yes	1
		No	2
1.29	Are fire safety drills conducted in your organization? / **क्या आपके स्टेशन पे अग्नि सुरक्षा अभ्यास किये जातें हैं?**	Yes	1
		No	2
1.30	Where is the first aid box kept? First aid box **कहा रखा गया है?** **(चेक करने के बाद ही कोड करें)** (Investigator should check before coding)	Do not know	1
		In common area	2
		In a particular room	3
		Not available	4

Q. No.	Questions	Options	Codes
1.31	Have you received training on Environmental, health and safety (other than ISO)? / **क्या आपको पर्यावरण, स्वास्थ और सुरक्षा पर प्रशिक्षण प्राप्त हुआ है?**	Yes	1
		No	2
1.32	If Yes, what topics were covered in the training? **यदि हाँ, तो कौन कौन से विषयों में प्रशिक्षण प्राप्त हुआ?**	Use & maintenance of PPEs	1
		General first aid	2
		Fire safety and use of fire safety equipment	3
		Fire mock drills	4
		Use of mechanical and electrical equipment	5
		Safe Handling of Animals	6
		Safe handling, Segregation and disposal of Bio-medical waste	7
		Record keeping	8
		Other	9

Section–II PESTICIDE MANAGEMENT

Q. No.	Questions	Options	Codes
2.1	Are you involved in fodder seed production **/ क्या आप चारा बीज उत्पादन करतें हैं?**	Yes	1
		No	2
2.2	Do you cultivate your own green fodder?**/ क्या आप हरा चारा की खेती खुद करतें हैं?**	Yes	1
		No	2
2.3	Do you use pesticides in cultivation of fodder crops? **क्या चारा फसल उगने में आप कीटनाशक का प्रयोग करतें हैं?**	Yes	1
		No	2
2.4	Do you use pesticides in cultivation of other crops? **क्या आप खेती करने के लिए कीटनाशक का प्रयोग करतें हैं?**	Yes	1
		No	2
2.5	Did you receive directions on using pesticides? / **क्या कीटनाशक के उपयोग के लिए आपको कोई निर्देश मिलता हैं?**	Yes	1
		No	2
2.6	If yes, what is the source of information? **यदि हाँ, तो मिले हुए निर्देश का स्रोत क्या है? (बहुविकल्पीय)** **(Multiple Response)**	Label on container	1
		From shopkeeper	2
		Television	3
		KVK	4
		Extension worker	5
		Training/meeting under NDP I	6
		From other farmer	7
		Other	9
2.7	Where do you keep the pesticide container? **आप कीटनाशक के कंटेनर को कहा रखतें हैं?**	In a Separate Room with lock**/ अलग से बंद कमरे में**	1
		In the kitchen**/ रसोई घर में**	2
		In cattle shed**/ पशुशाला में**	3
		Other place**/ अन्य जगह पर**	9

Q. No.	Questions	Options	Codes
2.8	Do you use any protection while applying pesticide? **कीटनाशक का उपयोग करते समय आप कौन सी सुरक्षा अपनाते हैं?**	Cover face & eyes/ **मुह और आख ढकते हैं**	1
		Gloves/ **ग्लव्स पहन्तें हैं**	2
		Wear clothes covering whole body/ **पुरे शारीर को ढकने वाले कपडे**	3
		Other (Specify) **अन्य**	9
2.9	What do you do immediately after applying/spraying pesticides? **कीटनाशक छिड़कने के तुरंत बाद आप क्या करते हैं?**	Wash hands with soap/ **साबुन से हाथ धोना**	1
		Have a bath and wear same clothes/ **नहाने के बाद दोबारा वही कपडे पहन लेना**	2
		Have bath & change clothes/ **नहाने के बाद कपडे बदलना**	3
		Directly eat or drink without washing hands/ **बिना हाथ धोये ही खाना और पीना**	4
		Continue with other work/ **दुसरे काम में लग जाना**	5
2.10	What do you do with the empty containers/bottles of pesticides? **कीनाशाको के खाली कंटेनरों/ बोतलों के साथ आप क्या करते हैं?**	Sell/ **बेच देना**	1
		Puncture/break the container and sell it **कंटेनर तोड़ कर बेच देना**	2
		Throw anywhere/ **कही भी फेक देना**	3
		Bury the empty container in soil/ **खाली कंटेनर को मिटटी के गड्ढे में गाड़ना**	4
		Reuse for other purpose/ **अन्य काम के लिए फिर से उपयोग करना** (storing water, food, grains, milk collection?)	5
2.11	Are there any effects of pesticides on humans? **क्या कीटनाशको के उपयोग से इंसानों पर कोई बुरा असर होता है?**	No effect/ **कोई असर नहीं**	1
		Pollute water/ **पानी प्रदूषित होता**	2
		Poisoning/ **वातावरण जहरीला होना**	3
		Fever/ **बुखार**	4
		Vomiting / **उलटी**	5
		Breathing problem/ **सांस लेने में दिक्कत**	6
		Cancer/ **कैंसर**	7
		Other (Specify)/ **अन्य कोई**	9

ANNEXURE - II

Tables

Table 1: Incidence of Milch Animal Ownership (%)

Sl No	STATE	PROGRAMME		CONTROL	
		Base#	Milch Animal Owning HHs	Base#	Milch Animal Owning HHs
			Percent		Percent
1	2	3	4	5	6
1	ANDHRA PRADESH	9820	72	8980	67
2	BIHAR	7984	49	7974	37
3	GUJARAT	8932	70	8380	79
4	HARYANA	6813	66	6684	58
5	KARNATAKA	8842	36	8267	42
6	KERALA	7289	36	8071	33
7	MADHYA PRADESH	7705	83	7434	75
8	MAHARASHTRA	8515	69	8708	71
9	ODISHA	7841	86	7227	86
10	PUNJAB	7544	45	7187	43
11	RAJASTHAN	7150	72	6607	66
12	TAMIL NADU	6652	33	7884	30
13	UTTAR PRADESH	7836	70	8473	60
14	WEST BENGAL	8193	73	7972	81
All states		**111116**	**62**	**109848**	**59**

Base: Total No. of HHListed

z-value =24.081, p-value = 0.00000 (Proportions significantly different at 99%)

Table 2: Household size of MAH (Average)

Sl No.	STATE	PROGRAMME		CONTROL	
		Base#	AVGHH SIZE	Base#	AVGHH SIZE
1	2	3	4	5	6
1	ANDHRA PRADESH	528	4.8	528	5.0
2	BIHAR	504	5.6	504	5.5
3	GUJARAT	528	4.9	528	4.9
4	HARYANA	480	4.5	480	4.3
5	KARNATAKA	528	4.1	528	4.2
6	KERALA	480	6.4	480	6.2
7	MADHYA PRADESH	528	4.1	528	4.1
8	MAHARASHTRA	528	6.8	528	6.5
9	ODISHA	480	6.1	480	6.2
10	PUNJAB	504	3.9	504	3.9
11	RAJASTHAN	504	3.9	504	4.1
12	TAMIL NADU	528	4.8	528	4.9
13	UTTAR PRADESH	528	4.7	528	4.7
14	WEST BENGAL	480	5.0	480	4.5
All States		**7128**	**5.0**	**7128**	**4.9**

Base: Total No. of HH

Table 3: Adult Female Animal Holding Size per MAH (Average)

Sl No.	STATE	Size of Animal Holding			
		PROGRAMME		CONTROL	
		Base#	AVGHH SIZE	Base#	AVGHH SIZE
1	2	3	4	5	6
1	ANDHRA PRADESH	528	1.8	528	1.6
2	BIHAR	504	1.6	504	1.4
3	GUJARAT	528	3.2	528	2.9
4	HARYANA	480	2.7	480	2.4
5	KARNATAKA	528	2.0	528	2.1
6	KERALA	480	1.9	480	2.1
7	MADHYA PRADESH	528	2.5	528	2.0
8	MAHARASHTRA	528	2.1	528	2.3
9	ODISHA	480	1.7	480	1.8
10	PUNJAB	504	2.8	504	2.5
11	RAJASTHAN	504	2.2	504	2.2
12	TAMIL NADU	528	2.1	528	1.9
13	UTTAR PRADESH	528	1.7	528	1.5
14	WEST BENGAL	480	1.7	480	1.9
All States		**7128**	**2.2**	**7128**	**2.0**

Base: Total No. of HH

Table 4: Distribution of MAH by Number of Adult Female Bovine Animals (%)

Sl No	STATE	PROGRAMME						CONTROL					
		No. of Adult Females						No. of Adult Females					
		Base#	1 animal	2 animal	3 animal	4 and more animals	All	Base#	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	528	52	31	8	9	100	528	59	29	7	5	100
2	BIHAR	504	58	31	6	5	100	504	73	20	4	2	100
3	GUJARAT	528	23	26	20	31	100	528	24	33	16	27	100
4	HARYANA	480	11	43	23	24	100	480	13	55	20	12	100
5	KARNATAKA	528	37	41	14	9	100	528	38	37	15	10	100
6	KERALA	480	45	34	14	7	100	480	38	36	13	12	100
7	MADHYA PRADESH	528	25	40	18	17	100	528	36	43	14	8	100
8	MAHARASHTRA	528	35	34	18	13	100	528	29	33	19	19	100
9	ODISHA	480	51	34	9	6	100	480	49	34	9	7	100
10	PUNJAB	504	27	33	16	24	100	504	32	35	14	19	100
11	RAJASTHAN	504	34	34	20	13	100	504	34	36	19	11	100
12	TAMIL NADU	528	37	34	21	8	100	528	38	40	17	5	100
13	UTTAR PRADESH	528	56	29	8	7	100	528	63	28	6	3	100
14	WEST BENGAL	480	50	36	9	5	100	480	50	35	9	7	100
All States		**7128**	**39**	**34**	**15**	**13**	**100**	**7128**	**41**	**35**	**13**	**11**	100

Base: Total No. of HH

Table 5: Distribution of MAH by Social Group (%)

Sl No	STATE	PROGRAMME						CONTROL					
		Base#	General	SC	ST	OBC	Total	Base#	General	SC	ST	OBC	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	528	22	18	2	57	100	528	21	27	2	50	100
2	BIHAR	504	12	9	2	77	100	504	14	16	2	68	100
3	GUJARAT	528	33	9	19	40	100	528	17	12	20	51	100
4	HARYANA	480	46	21	1	32	100	480	38	31	0	30	100
5	KARNATAKA	528	60	17	7	16	100	528	60	14	4	23	100
6	KERALA	480	48	6	0	46	100	480	49	5	0	46	100
7	MADHYA PRADESH	528	20	32	5	42	100	528	19	32	7	43	100
8	MAHARASHTRA	528	47	5	3	45	100	528	36	7	9	48	100
9	ODISHA	480	52	17	1	31	100	480	32	19	2	48	100
10	PUNJAB	504	75	21	0	4	100	504	51	39	0	10	100
11	RAJASTHAN	504	18	8	6	68	100	504	16	11	6	66	100
12	TAMIL NADU	528	46	10	0	44	100	528	38	4	0	58	100
13	UTTAR PRADESH	528	25	15	2	58	100	528	21	17	2	60	100
14	WEST BENGAL	480	52	19	2	28	100	480	54	15	3	28	100
All States		**7128**	**39**	**15**	**4**	**42**	**100**	**7128**	**33**	**18**	**4**	**45**	**100**

Base: Total No. of HH

Table 6: Distribution of MAH by Economic Group (%)

SI No	STATE	PROGRAMME				CONTROL			
		Base#	APL	BPL + Antyodaya	Total	Base#	APL	BPL + Antyodaya	Total
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	528	8	92	100	528	10	90	100
2	BIHAR	504	31	69	100	504	25	75	100
3	GUJARAT	528	77	23	100	528	76	24	100
4	HARYANA	480	73	27	100	480	64	36	100
5	KARNATAKA	528	50	50	100	528	79	21	100
6	KERALA	480	76	24	100	480	50	50	100
7	MADHYA PRADESH	528	62	38	100	528	45	55	100
8	MAHARASHTRA	528	48	52	100	528	45	55	100
9	ODISHA	480	42	58	100	480	32	68	100
10	PUNJAB	504	80	20	100	504	67	33	100
11	RAJASTHAN	504	81	19	100	504	75	25	100
12	TAMIL NADU	528	25	75	100	528	16	84	100
13	UTTAR PRADESH	528	59	41	100	528	57	43	100
14	WEST BENGAL	480	55	45	100	480	40	60	100
All States		**7128**	**55**	**45**	**100**	**7128**	**49**	**51**	**100**

Base: Total No. of HH

Table 7: Distribution of MAH by Land Holding Class(%)

Sl No	STATE	PROGRAMME								CONTROL							
		Base*	landless	Marginal Farmers(<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA	All	Base*	landless	Marginal Farmers(<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers >10 HA	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	528	13	44	24	5	6	8	100	528	20	37	22	3	3	14	100
2	BIHAR	504	20	60	7	7	4	2	100	504	29	58	4	8	1	0	100
3	GUJARAT	528	13	40	16	13	14	3	100	528	17	39	15	12	12	5	100
4	HARYANA	480	14	10	12	31	32	1	100	480	25	8	9	30	27	1	100
5	KARNATAKA	528	23	66	5	3	1	1	100	528	27	64	6	2	1	0	100
6	KERALA	480	25	46	16	11	0	1	100	480	20	45	19	15	0	1	100
7	MADHYA PRADESH	528	13	25	23	22	14	2	100	528	18	45	17	12	7	1	100
8	MAHARASHTRA	528	13	52	7	4	14	9	100	528	13	53	9	3	5	17	100
9	ODISHA	480	16	56	16	6	4	1	100	480	23	50	16	8	3	0	100
10	PUNJAB	504	32	27	17	15	6	4	100	504	44	20	10	13	7	7	100
11	RAJASTHAN	504	6	46	27	12	7	3	100	504	3	60	17	5	8	7	100
12	TAMIL NADU	528	50	36	2	4	4	4	100	528	49	45	1	1	1	2	100
13	UTTAR PRADESH	528	15	49	18	10	7	1	100	528	16	51	18	9	5	0	100
14	WEST BENGAL	480	28	47	14	3	9	1	100	480	24	55	14	3	4	1	100
All States		**7128**	**20**	**43**	**15**	**10**	**9**	**3**	**100**	**7128**	**23**	**45**	**13**	**9**	**6**	**4**	**100**

Table 7A: Distribution of Milch Animal by Herd Size(%)

Sl No	STATE	PROGRAMME						CONTROL					
		Base	1 animal	2 animal	3 animal	4 and more animals	All	Base	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	956	29	34	14	24	100	862	36	35	13	16	100
2	BIHAR	819	36	38	11	15	100	686	54	30	10	6	100
3	GUJARAT	1687	7	16	19	58	100	1507	8	23	17	52	100
4	HARYANA	1298	4	32	25	40	100	1128	5	47	25	22	100
5	KARNATAKA	1063	18	41	21	21	100	1086	18	36	22	24	100
6	KERALA	895	24	37	22	17	100	1015	18	34	19	29	100
7	MADHYA PRADESH	1322	10	32	21	37	100	1047	18	43	21	18	100
8	MAHARASHTRA	1113	17	32	26	25	100	1215	13	29	24	34	100
9	ODISHA	838	29	39	15	16	100	869	27	38	16	19	100
10	PUNJAB	1402	10	24	17	49	100	1245	13	28	17	42	100
11	RAJASTHAN	1116	15	31	27	27	100	1092	16	33	26	25	100
12	TAMIL NADU	1101	18	33	31	19	100	1027	19	41	26	13	100
13	UTTAR PRADESH	894	33	34	14	19	100	798	41	37	13	9	100
14	WEST BENGAL	822	29	42	16	13	100	891	27	37	14	22	100
All States		**15326**	**18**	**32**	**20**	**30**	**100**	**14468**	**20**	**35**	**19**	**26**	**100**

Table 8: Average Land Holding by Land Holding Class (in Ha)

Sl No	STATE	PROGRAMME					CONTROL				
		Marginal Farmers(<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA	Marginal Farmers(<1 Ha)	Small Farmers(1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	0.4	1.2	2.4	5.6	13.5	0.4	1.2	2.4	4.4	13.9
2	BIHAR	0.2	1.3	2.7	5.8	11.2	0.2	1.4	2.9	5.7	12.7
3	GUJARAT	0.4	1.5	2.6	5.8	12.7	0.4	1.4	2.6	5.4	13.6
4	HARYANA	0.7	1.4	2.6	5.9	15.7	0.6	1.4	2.5	5.9	11.6
5	KARNATAKA	0.2	1.4	2.3	5.4	12.3	0.1	1.4	2.3	6.1	12.5
6	KERALA	0.5	1.4	2.0	0.0	14.2	0.5	1.4	2.0	0.0	13.6
7	MADHYA PRADESH	0.5	1.4	2.5	5.1	12.3	0.5	1.4	2.6	6.0	16.8
8	MAHARASHTRA	0.5	1.4	2.8	6.9	13.5	0.5	1.6	2.5	5.6	14.1
9	ODISHA	0.5	1.4	2.4	5.0	13.4	0.5	1.3	2.3	5.8	11.8
10	PUNJAB	0.6	1.3	2.8	5.7	11.9	0.6	1.4	2.5	6.7	12.7
11	RAJASTHAN	0.5	1.3	2.5	5.6	12.7	0.5	1.3	2.5	6.1	13.7
12	TAMIL NADU	0.5	1.3	2.5	6.1	12.8	0.5	1.4	2.7	4.7	14.1
13	UTTAR PRADESH	0.4	1.3	2.7	6.2	10.7	0.4	1.4	2.8	5.4	16.0
14	WEST BENGAL	0.6	1.3	2.1	5.5	10.8	0.6	1.4	2.1	5.6	13.0
All States		**0.4**	**1.4**	**2.6**	**5.8**	**12.9**	**0.4**	**1.4**	**2.5**	**5.7**	**13.8**

Table 9: Women to Men Ratio (Sex Ratio)

Sl No.	STATE	PROGRAMME		CONTROL	
		Base#	Ratio	Base#	Ratio
1	2	3	4	5	6
1	ANDHRA PRADESH	2517	988	2621	1022
2	BIHAR	2810	877	2761	950
3	GUJARAT	2578	971	2571	973
4	HARYANA	2154	934	2080	994
5	KARNATAKA	2157	926	2211	948
6	KERALA	3064	850	2973	894
7	MADHYA PRADESH	2183	990	2174	948
8	MAHARASHTRA	3584	856	3428	890
9	ODISHA	2929	874	2986	874
10	PUNJAB	1957	955	1954	931
11	RAJASTHAN	1968	887	2049	966
12	TAMIL NADU	2532	1003	2571	975
13	UTTAR PRADESH	2492	976	2470	1005
14	WEST BENGAL	2423	972	2171	984
All States		**35348**	**926**	**35020**	**949**

Base: All MAH Member

Table 10: Human Population Distribution by Age Group (%)

Sl No.	STATE	PROGRAMME							CONTROL						
		upto 5	6 to 10	11 to 18	19 to 45	46 to 60	>60	Total	upto 5	6 to 10	11 to 18	19 to 45	46 to 60	>60	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	7	7	16	48	14	8	100	9	7	15	48	14	7	100
2	BIHAR	12	11	18	41	12	6	100	11	10	16	45	12	6	100
3	GUJARAT	8	7	15	48	15	7	100	8	8	16	47	15	7	100
4	HARYANA	10	9	14	44	14	8	100	9	11	14	42	15	9	100
5	KARNATAKA	8	8	13	49	15	7	100	8	8	12	50	14	7	100
6	KERALA	14	16	23	36	9	4	100	14	15	20	36	10	5	100
7	MADHYA PRADESH	7	7	15	48	15	8	100	7	8	13	49	15	8	100
8	MAHARASHTRA	14	15	18	37	9	6	100	14	15	20	36	11	4	100
9	ODISHA	13	14	19	38	10	6	100	14	14	18	38	10	5	100
10	PUNJAB	7	8	14	46	15	9	100	5	8	16	48	15	8	100
11	RAJASTHAN	8	9	14	48	13	8	100	8	9	13	47	15	7	100
12	TAMIL NADU	8	7	15	48	15	7	100	8	7	14	49	16	7	100
13	UTTAR PRADESH	9	7	16	46	14	8	100	9	8	13	47	15	7	100
14	WEST BENGAL	12	13	17	39	14	5	100	12	13	15	40	13	6	100
All States		**10**	**10**	**17**	**43**	**13**	**7**	**100**	**10**	**10**	**16**	**44**	**13**	**6**	**100**

Base: Head of the MAH

Table 11: Educational Qualification of Head of the MAH(%)

Sl No.	STATE	Base#	PROGRAMME					Base#	CONTROL				
			Illiterate	till class 8	class 9 to 12	Graduation and above	Total		Illiterate	till class 8	class 9 to 12	Graduation and above	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	528	53	29	15	3	100	528	57	29	11	4	100
2	BIHAR	504	18	45	27	10	100	504	29	41	21	9	100
3	GUJARAT	528	36	34	25	5	100	528	34	40	20	6	100
4	HARYANA	480	19	33	40	9	100	480	16	33	41	10	100
5	KARNATAKA	528	47	26	22	5	100	528	50	23	22	5	100
6	KERALA	480	7	50	39	3	100	480	10	56	30	4	100
7	MADHYA PRADESH	528	27	43	24	6	100	528	26	53	17	3	100
8	MAHARASHTRA	528	16	61	17	5	100	528	12	63	20	5	100
9	ODISHA	480	17	59	20	4	100	480	14	60	21	5	100
10	PUNJAB	504	6	42	44	8	100	504	10	42	43	5	100
11	RAJASTHAN	504	31	40	23	6	100	504	36	46	13	4	100
12	TAMIL NADU	528	26	50	22	2	100	528	35	40	22	3	100
13	UTTAR PRADESH	528	31	33	27	9	100	528	33	36	24	7	100
14	WEST BENGAL	480	26	49	21	3	100	480	25	47	26	2	100
All States		**7128**	**26**	**42**	**26**	**6**	**100**	**7128**	**28**	**43**	**24**	**5**	**100**

Base: All MAH

Table 12: Main Occupation of the MAH Members (%)

S No.	STATE	PROGRAMME												CONTROL											
		Crop cultivation	Agri wage aboror	Dairying	Non agri wage labrour	Self employed	Salaried	Disable/old adg	Rent/pension/oth	Housewife	Student	Unemployed	Other	Crop cultivation	Agri wage laboror	Dairying	Non agri wage labrour	Self employed	Salaried	Disable/old adg	Rent/pension/oth	Housewife	Student	Unemployed	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	ANDHRA PRADESH	23	14	0	3	21	2	1	0	5	27	3	0	20	19	0	2	22	2	1	0	6	24	3	0
2	BIHAR	14	4	0	10	13	3	1	0	17	34	4	0	11	5	0	11	14	3	2	0	17	33	4	0
3	GUJARAT	14	13	4	4	18	3	2	0	9	27	5	0	14	16	2	3	16	2	2	0	10	30	5	0
4	HARYANA	21	6	5	6	14	1	1	1	11	28	6	0	19	8	2	5	11	2	1	1	14	31	6	0
5	KARNATAKA	20	17	3	4	11	3	1	0	12	25	4	0	18	19	2	3	12	3	1	0	13	25	5	0
6	KERALA	1	7	4	21	2	4	1	1	9	42	4	3	1	6	4	23	3	5	1	2	10	38	4	1
7	MADHYA PRADESH	28	6	1	4	6	2	1	0	17	30	5	0	25	9	0	4	7	2	1	0	16	29	6	0
8	MAHARASHTRA	9	8	3	4	22	1	1	0	8	40	4	0	10	9	4	3	22	1	0	0	10	38	3	0
9	ODISHA	13	8	0	5	16	3	1	0	12	38	4	0	13	7	0	4	16	2	1	1	13	38	5	0
10	PUNJAB	15	10	6	5	7	3	2	0	23	27	3	0	13	12	4	7	6	3	1	0	23	27	4	0
11	RAJASTHAN	26	3	3	5	6	1	1	0	23	30	3	0	26	3	1	5	7	1	1	0	22	30	3	0
12	TAMIL NADU	13	15	3	4	14	2	0	0	14	30	4	0	14	15	1	5	16	2	0	0	13	30	4	0
13	UTTAR PRADESH	22	5	0	6	10	2	1	0	18	31	5	0	21	5	0	7	10	3	1	0	18	30	5	0
14	WEST BENGAL	12	10	1	12	4	2	1	0	20	34	3	0	14	12	1	12	3	1	1	0	19	33	3	0
Grand Total		**16**	**9**	**2**	**7**	**12**	**2**	**1**	**0**	**14**	**32**	**4**	**0**	**15**	**10**	**2**	**7**	**12**	**2**	**1**	**0**	**14**	**31**	**4**	**0**

Base: No. of members in MAH (above 6 Years)

Table 13: Incidence of Milk Consumption by Gender

Sl No.	STATE	PROGRAMME						CONTROL					
		Base#			Milk Consuming Population (%)			Base#			Milk Consuming Population (%)		
		Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	917	939	1856	96	98	97	1067	1028	2095	97	98	97
2	BIHAR	857	935	1792	98	97	97	913	969	1882	99	98	99
3	GUJARAT	1110	1140	2250	100	99	99	1100	1120	2220	100	99	99
4	HARYANA	981	1047	2028	99	99	99	961	966	1927	100	96	98
5	KARNATAKA	639	688	1327	99	95	97	897	942	1839	99	97	98
6	KERALA	983	1173	2156	100	100	100	1099	1235	2334	100	100	100
7	MADHYA PRADESH	849	836	1685	99	100	99	822	856	1678	100	100	100
8	MAHARASHTRA	1171	1335	2506	99	97	98	1227	1369	2596	92	90	91
9	ODISHA	521	555	1076	100	97	98	728	830	1558	98	99	99
10	PUNJAB	922	966	1888	98	98	98	827	895	1722	99	100	99
11	RAJASTHAN	822	927	1749	98	99	99	887	912	1799	97	99	98
12	TAMIL NADU	648	649	1297	99	83	91	894	896	1790	98	85	92
13	UTTAR PRADESH	1027	1076	2103	98	98	98	1036	1042	2078	98	98	98
14	WEST BENGAL	464	474	938	92	94	93	578	590	1168	98	98	98
All States		**11911**	**12740**	**24651**	**99**	**97**	**98**	**13036**	**13650**	**26686**	**98**	**97**	**97**

Base: No. of members in the Milk consuming HHs
z-value = 7.098, p value = 0.00000 (Proportion significantly different at 99%)

Table 14: Incidence of Milk Consumption by Age Groups

Sl No.	STATE	Base	PROGRAMME						Base	CONTROL					
			Milk Consumption Population (%)							Milk Consumption Population (%)					
			Up to 5	6 to 10	11 to 18	19 to 45	46 to 60	>60		Up to 5	6 to 10	11 to 18	19 to 45	46 to 60	>60
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	1856	100	100	100	96	98	91	2095	100	100	97	97	96	96
2	BIHAR	1792	100	100	98	97	95	93	1882	100	100	99	98	97	100
3	GUJARAT	2250	100	100	100	99	100	99	2220	100	100	100	99	99	98
4	HARYANA	2028	100	100	99	99	100	99	1927	100	100	100	98	96	95
5	KARNATAKA	1327	100	100	100	97	93	92	1839	100	100	99	98	95	97
6	KERALA	2156	100	100	100	99	100	100	2334	100	100	100	100	100	100
7	MADHYA PRADESH	1685	100	100	100	100	98	99	1678	100	100	100	100	100	98
8	MAHARASHTRA	2506	100	100	98	97	94	97	2596	99	100	84	87	93	88
9	ODISHA	1076	100	100	99	98	93	100	1558	100	100	98	98	99	99
10	PUNJAB	1888	99	100	99	98	98	97	1722	100	100	99	99	99	99
11	RAJASTHAN	1749	99	100	100	98	99	100	1799	100	100	98	97	99	100
12	TAMIL NADU	1297	100	100	100	91	80	78	1790	100	100	100	91	83	85
13	UTTAR PRADESH	2103	100	100	99	98	98	96	2078	100	100	96	97	98	100
14	WEST BENGAL	938	100	100	93	90	91	94	1168	100	100	98	97	98	99
All States		24651	100	100	99	97	96	96	26686	100	100	97	97	96	97

 # Base: No. of Milk Consuming HH members

Table 15: Composition of Bovine Animal Holding (%)

Sl No.	STATE	Base	PROGRAMME				Base	CONTROL			
			IC	CB	Buffalo	Total		IC	CB	Buffalo	Total
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	999	8	23	69	100	866	9	20	71	100
2	BIHAR	1551	29	33	39	100	1327	41	24	35	100
3	GUJARAT	2290	19	10	71	100	2011	26	9	65	100
4	HARYANA	2003	9	19	71	100	1841	11	15	73	100
5	KARNATAKA	1504	25	46	29	100	1499	24	48	28	100
6	KERALA	1369	25	71	4	100	1498	25	72	3	100
7	MADHYA PRADESH	2452	35	16	49	100	1753	45	14	41	100
8	MAHARASHTRA	1345	1	30	69	100	1388	1	31	69	100
9	ODISHA	1700	54	44	2	100	1699	59	37	4	100
10	PUNJAB	2259	8	28	64	100	2077	8	27	65	100
11	RAJASTHAN	2252	25	16	59	100	2157	31	15	54	100
12	TAMIL NADU	1323	23	68	9	100	1177	22	62	16	100
13	UTTAR PRADESH	1791	18	18	63	100	1626	17	16	67	100
14	WEST BENGAL	1673	56	31	13	100	1620	51	40	9	100
All States		**24511**	**24**	**30**	**46**	**100**	**22539**	**27**	**29**	**44**	**100**

 # Base: Total Bovine animals
IC – z value = -7.464, p value = 0.00000 (Proportion significantly different at 99%)
CB– z value = 2.376, p value = 0.01753 (Proportion significantly different at 95%)
Buff – z value = 4.356, p value = 0.00001 (Proportion significantly different at 99%)

Table 15 A: Distribution of Milch Animal by Social Group (%)

Sl No	STATE	PROGRAMME						CONTROL					
		Base#	General	SC	ST	OBC	Total	Base#	General	SC	ST	OBC	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	956	22	17	3	58	100	862	26	25	2	47	100
2	BIHAR	819	12	9	2	77	100	686	15	15	1	69	100
3	GUJARAT	1687	34	10	18	37	100	1507	18	11	19	52	100
4	HARYANA	1298	45	24	1	31	100	1128	39	31	0	30	100
5	KARNATAKA	1063	59	17	7	16	100	1086	60	15	3	22	100
6	KERALA	895	51	5	0	44	100	1015	53	3	0	44	100
7	MADHYA PRADESH	1322	20	34	5	41	100	1047	17	34	7	43	100
8	MAHARASHTRA	1113	51	4	3	41	100	1215	37	7	8	48	100
9	ODISHA	838	49	18	1	31	100	869	31	18	3	48	100
10	PUNJAB	1402	74	21	1	4	100	1245	51	38	0	11	100
11	RAJASTHAN	1116	20	8	4	68	100	1092	19	11	6	65	100
12	TAMIL NADU	1101	45	9	0	46	100	1027	39	4	0	57	100
13	UTTAR PRADESH	894	24	17	2	58	100	798	21	18	2	59	100
14	WEST BENGAL	822	52	18	3	27	100	891	53	13	3	31	100
All States		**15326**	**40**	**15**	**5**	**40**	**100**	**14468**	**35**	**17**	**4**	**44**	**100**

Base: Total No. of Milch Animal

Table 15B: Composition of Milch Animal Holding (%)

Sl No.	STATE	Base	PROGRAMME				Base	CONTROL			
			IC	CB	Buffalo	Total		IC	CB	Buffalo	Total
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	956	8	23	70	100	862	9	20	71	100
2	BIHAR	819	29	36	35	100	686	44	23	32	100
3	GUJARAT	1687	17	12	71	100	1507	21	12	66	100
4	HARYANA	1298	5	24	71	100	1128	6	18	76	100
5	KARNATAKA	1063	25	51	23	100	1086	22	55	23	100
6	KERALA	895	25	72	3	100	1015	32	65	2	100
7	MADHYA PRADESH	1322	34	16	49	100	1047	47	15	39	100
8	MAHARASHTRA	1113	1	31	68	100	1215	1	32	67	100
9	ODISHA	838	60	38	2	100	869	66	31	3	100
10	PUNJAB	1402	7	32	61	100	1245	8	27	65	100
11	RAJASTHAN	1116	23	17	60	100	1092	31	15	54	100
12	TAMIL NADU	1101	20	70	10	100	1027	17	66	17	100
13	UTTAR PRADESH	894	12	17	71	100	798	11	17	71	100
14	WEST BENGAL	822	60	26	14	100	891	50	40	10	100
All States		**15326**	**22**	**32**	**46**	**100**	**14468**	**24**	**31**	**45**	**100**

Table 16: Profile of Bovine Animals by Gender (%)

Values as percent of base

Sl. No	STATE	PROGRAMME												CONTROL											
		Indigenous Cattle			Crossbred Cattle			Buffalo			All			Indigenous Cattle			Crossbred Cattle			Buffalo			All		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	ANDHRA PRADESH	1	99	100	0	100	100	0	100	100	0	100	100	1	99	100	0	100	100	0	100	100	0	100	100
2	BIHAR	15	85	100	22	78	100	14	86	100	17	83	100	16	84	100	25	75	100	12	88	100	17	83	100
3	GUJARAT	12	88	100	3	97	100	6	94	100	7	93	100	10	90	100	0	100	100	7	93	100	7	93	100
4	HARYANA	30	70	100	19	81	100	10	90	100	14	86	100	35	65	100	29	71	100	13	87	100	18	82	100
5	KARNATAKA	2	98	100	2	98	100	2	98	100	2	98	100	8	92	100	4	96	100	1	99	100	4	96	100
6	KERALA	15	85	100	11	89	100	8	92	100	12	88	100	13	87	100	14	86	100	9	91	100	13	87	100
7	MADHYA PRADESH	19	81	100	33	67	100	20	80	100	21	79	100	17	83	100	37	63	100	21	79	100	22	78	100
8	MAHARASHTRA	7	93	100	2	98	100	5	95	100	4	96	100	0	100	100	2	98	100	7	93	100	6	94	100
9	ODISHA	11	89	100	44	56	100	19	81	100	26	74	100	14	86	100	45	55	100	46	54	100	27	73	100
10	PUNJAB	3	97	100	19	81	100	13	87	100	14	86	100	9	91	100	20	80	100	19	81	100	18	82	100
11	RAJASTHAN	27	73	100	43	57	100	22	78	100	26	74	100	23	77	100	39	61	100	20	80	100	24	76	100
12	TAMIL NADU	7	93	100	4	96	100	2	98	100	4	96	100	9	91	100	3	97	100	4	96	100	4	96	100
13	UTTAR PRADESH	44	56	100	30	70	100	19	81	100	26	74	100	49	51	100	27	73	100	22	78	100	27	73	100
14	WEST BENGAL	24	76	100	39	61	100	20	80	100	28	72	100	15	85	100	33	67	100	18	82	100	22	78	100
All States		**17**	**83**	**100**	**19**	**81**	**100**	**12**	**88**	**100**	**16**	**84**	**100**	**17**	**83**	**100**	**19**	**81**	**100**	**13**	**87**	**100**	**16**	**84**	**100**

Base: Total bovine animals in the respective categories

All Female – z value = 0.000, p value = 1.00000 (Proportion are not significantly different)

Table 17: Profile of Female Bovine Animals by Growth Stage

Values as percent of base

Sl. No	STATE	PROGRAMME												CONTROL											
		IC			CB			Buffalo			All			IC			CB			BUFFALO			All		
		Young Stock	Adult	Total	Young Stock	Adult	Total	Young Stock	Adult	Total	Young Stock	Adult	Total	Young Stock	Adult	Total	Young Stock	Adult	Total	Young Stock	Adult	Total	Young Stock	Adult	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	ANDHRA PRADESH	5	95	100	5	95	100	4	96	100	4	96	100	2	98	100	0	100	100	0	100	100	0	100	100
2	BIHAR	46	54	100	42	58	100	52	48	100	47	53	100	44	56	100	49	51	100	53	47	100	48	52	100
3	GUJARAT	33	67	100	11	89	100	26	74	100	26	74	100	37	63	100	0	100	100	23	77	100	25	75	100
4	HARYANA	65	35	100	19	81	100	35	65	100	35	65	100	68	32	100	29	71	100	36	64	100	39	61	100
5	KARNATAKA	30	70	100	21	79	100	42	58	100	29	71	100	30	70	100	18	82	100	40	60	100	27	73	100
6	KERALA	32	68	100	33	67	100	43	57	100	33	67	100	11	89	100	38	62	100	42	58	100	31	69	100
7	MADHYA PRADESH	47	53	100	43	57	100	46	54	100	46	54	100	38	62	100	38	62	100	43	57	100	40	60	100
8	MAHARASHTRA	50	50	100	14	86	100	18	82	100	17	83	100	0	100	100	9	91	100	14	86	100	12	88	100
9	ODISHA	44	56	100	58	42	100	32	68	100	50	50	100	41	59	100	55	45	100	55	45	100	47	53	100
10	PUNJAB	47	53	100	29	71	100	41	59	100	38	62	100	41	59	100	40	60	100	40	60	100	40	60	100
11	RAJASTHAN	55	45	100	46	54	100	49	51	100	50	50	100	51	49	100	49	51	100	49	51	100	49	51	100
12	TAMIL NADU	20	80	100	14	86	100	8	92	100	15	85	100	31	69	100	6	94	100	4	96	100	11	89	100
13	UTTAR PRADESH	66	34	100	55	45	100	44	56	100	50	50	100	66	34	100	49	51	100	48	52	100	51	49	100
14	WEST BENGAL	38	62	100	58	42	100	46	54	100	46	54	100	45	55	100	44	56	100	36	64	100	44	56	100
All States		**43**	**57**	**100**	**33**	**67**	**100**	**36**	**64**	**100**	**37**	**63**	**100**	**41**	**59**	**100**	**32**	**68**	**100**	**34**	**66**	**100**	**35**	**65**	**100**

#Base: Total female bovine animals in of the respective animal categories

All Adult– z value = -5.413, p value = 0.00000 (Proportion significantly different at 99%)

Table 18A: Proportion of In-milk to Adult Female Animals (in%)

Sl. No	STATE	PROGRAME				CONTROL			
		IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	47	56	62	60	35	57	67	62
2	BIHAR	49	59	65	58	43	56	59	51
3	GUJARAT	60	75	67	67	55	73	67	65
4	HARYANA	75	70	84	80	71	64	81	77
5	KARNATKA	64	69	69	68	60	69	66	66
6	KERALA	72	84	64	80	59	80	54	73
7	MADHYA PRADESH	49	70	55	56	50	67	56	55
8	MAHARASHTRA	86	83	80	81	67	84	81	82
9	ODISHA	47	65	80	55	45	68	68	53
10	PUNJAB	68	75	82	79	63	69	78	74
11	RAJASTHAN	61	78	72	71	59	74	68	66
12	TAMIL NADU	69	75	87	75	68	76	85	77
13	UTTAR PRADESH	50	62	68	65	48	61	65	62
14	WEST BENGAL	48	40	68	49	39	50	67	46
All States		**56**	**71**	**72**	**68**	**51**	**70**	**71**	**66**

Table 18B: Proportion of In-milk to Adult Female Animals (in%)

Sl. No	STATE	ENDLINE				BASELINE			
		IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	40	56	65	61	36	55	58	55
2	BIHAR	47	58	63	56	44	55	59	52
3	GUJARAT	58	74	67	66	53	69	65	63
4	HARYANA	73	66	82	78	63	63	79	76
5	KARNATKA	62	69	68	67	57	67	66	64
6	KERALA	69	83	62	78	44	81	76	77
7	MADHYA PRADESH	50	68	56	55	48	65	69	58
8	MAHARASHTRA	72	83	81	81	51	72	66	64
9	ODISHA	46	67	69	53	43	65	54	50
10	PUNJAB	65	71	80	76	61	68	76	73
11	RAJASTHAN	60	76	69	68	57	74	67	65
12	TAMIL NADU	68	76	86	76	66	76	82	75
13	UTTAR PRADESH	49	61	66	63	42	60	62	59
14	WEST BENGAL	40	49	67	47	35	48	83	38
All States		**53**	**71**	**71**	**67**	**49**	**69**	**66**	**63**

3.735, p value = 0.00074 (Proportion significantly different at 99%)

S. E. = 0.006

Table 19: DISTRIBUTION OF COW (%)

Sl No.	STATE	PROGRAMME			CONTROL		
		Base#	Indigenous Cattle	Crossbred Cattle	Base#	Indigenous Cattle	Crossbred Cattle
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	305	26	74	252	32	68
2	BIHAR	950	47	53	859	64	36
3	GUJARAT	665	66	34	700	73	27
4	HARYANA	572	33	67	493	43	57
5	KARNATAKA	1072	36	64	1078	33	67
6	KERALA	1320	26	74	1453	26	74
7	MADHYA PRADESH	1251	69	31	1043	76	24
8	MAHARASHTRA	422	3	97	436	3	97
9	ODISHA	1669	55	45	1630	62	38
10	PUNJAB	823	22	78	734	23	77
11	RAJASTHAN	931	61	39	998	68	32
12	TAMIL NADU	1204	25	75	991	26	74
13	UTTAR PRADESH	662	50	50	539	50	50
14	WEST BENGAL	1462	64	36	1473	56	44
All States		**13308**	**45**	**55**	**12679**	**48**	**52**

IC – z value = -4.847, p value = 0.00000 (Proportion significantly different at 99%)
CB – z value = 4.0847, p value = 0.00000 (Proportion significantly different at 99%)

Table 20: Distribution of Milch Animals by Number of Calves Born–IC(%)

Values as percent of base													
Sl. No	STATE	PROGRAMME						CONTROL					
		Base#	No. of Calves born					Base#	No. of Calves born				
			1	2	3	4	>4		1	2	3	4	>4
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	74	35	36	12	11	5	79	34	41	19	4	3
2	BIHAR	240	30	29	21	13	8	304	43	28	20	4	5
3	GUJARAT	292	42	31	18	5	4	324	46	30	19	5	1
4	HARYANA	65	71	25	5	0	0	68	74	21	3	3	0
5	KARNATAKA	269	46	39	14	1	1	241	64	23	12	0	0
6	KERALA	221	66	22	9	2	1	327	69	17	8	3	2
7	MADHYA PRADESH	453	36	32	19	9	4	487	58	28	7	4	2
8	MAHARASHTRA	7	100	0	0	0	0	12	58	17	25	0	0
9	ODISHA	503	36	29	21	8	6	571	38	33	16	8	6
10	PUNJAB	97	21	49	24	2	4	99	26	39	25	8	1
11	RAJASTHAN	254	39	36	15	7	2	334	40	34	18	4	3
12	TAMIL NADU	224	31	25	36	7	0	175	50	27	13	10	0
13	UTTAR PRADESH	111	44	33	15	4	4	91	43	35	18	2	2
14	WEST BENGAL	495	51	30	12	5	2	444	49	32	12	3	3
All States		**3305**	**42**	**31**	**18**	**6**	**3**	**3556**	**49**	**29**	**14**	**5**	**3**

Base: Mich animals (Indigenous cows)
1 Calf – z value = -7.464, p value = 0.00000 (Proportion significantly different at 99%)
2 Calves – z value = 0.000, p value = 1.00000 (Proportion are not significantly different)
3 Calves - z value = 3.457, p value = 0.00055 (Proportion significantly different at 99%)
4 Calves - z value = 8.378, p value = 0.00000 (Proportion significantly different at 99%)
>4 Calves – z value = 0.000, p value = 0.10000 (Proportion are not significantly different)

Table 21: Distribution of Milch Animals by Number of Calves Born: CB

Values as percent of base													
Sl. No	STATE	Base#	PROGRAMME					Base#	CONTROL				
			No. of Calves born						No. of Calves born				
			1	2	3	4	>4		1	2	3	4	>4
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	216	25	40	24	9	2	171	34	30	24	12	1
2	BIHAR	293	30	30	26	12	3	160	31	33	24	9	4
3	GUJARAT	200	33	31	21	10	6	187	26	42	18	9	6
4	HARYANA	310	33	46	20	1	0	201	43	45	11	0	0
5	KARNATAKA	546	70	25	5	1	0	595	65	27	8	0	1
6	KERALA	646	58	31	7	2	2	664	60	29	8	3	1
7	MADHYA PRADESH	218	33	31	18	13	5	152	45	41	11	2	1
8	MAHARASHTRA	349	55	31	13	1	0	384	62	31	7	0	0
9	ODISHA	315	34	38	19	6	2	270	25	40	19	7	9
10	PUNJAB	453	19	46	23	8	3	340	30	46	18	6	1
11	RAJASTHAN	193	25	51	17	6	1	164	35	49	12	4	0
12	TAMIL NADU	769	32	38	18	11	1	673	32	42	20	6	0
13	UTTAR PRADESH	149	38	36	19	5	2	137	31	39	20	7	4
14	WEST BENGAL	216	54	30	10	4	3	358	45	33	13	6	3
All States		**4873**	**41**	**36**	**16**	**6**	**2**	**4456**	**44**	**36**	**14**	**4**	**2**

 # Base: Milch animals (Crossbred cows)

1 Calf – z value = -3.885, p value = 0.00010 (Proportion significantly different at 99%)

2 Calves – z value = 0.000, p value = 1.00000 (Proportion are not significantly different)

3 Calves - z value = 2.681, p value = 0.00736 (Proportion significantly different at 99%)

4 Calves - z value = 4.381, p value = 0.00001 (Proportion significantly different at 99%)

>4 Calves – z value = 0.000, p value = 0.10000 (Proportion are not significantly different)

Table 22: Distribution of Milch Animals by Number of Calves Born: Buffaloes

Values as percent of base													
Sl. No	STATE	Base#	PROGRAMME					Base#	CONTROL				
			No. of Calves born						No. of Calves born				
			1	2	3	4	>4		1	2	3	4	>4
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	666	29	40	20	9	3	612	38	32	20	8	1
2	BIHAR	286	44	30	16	6	3	222	39	31	15	8	7
3	GUJARAT	1195	36	35	20	5	3	996	48	28	15	5	4
4	HARYANA	923	54	35	10	1	0	859	42	36	14	5	3
5	KARNATAKA	248	69	27	3	0	0	250	64	28	7	0	0
6	KERALA	28	61	29	0	11	0	24	88	0	0	13	0
7	MADHYA PRADESH	651	33	32	17	13	4	408	55	31	10	4	1
8	MAHARASHTRA	757	72	25	3	0	0	819	80	18	2	1	0
9	ODISHA	20	25	60	10	5	0	28	21	71	7	0	0
10	PUNJAB	852	30	36	23	9	3	806	27	39	24	9	1
11	RAJASTHAN	669	40	37	14	6	3	594	35	33	20	8	4
12	TAMIL NADU	108	22	56	19	3	0	179	21	49	26	3	1
13	UTTAR PRADESH	634	31	36	23	6	4	570	33	33	25	7	2
14	WEST BENGAL	111	40	32	18	8	2	89	39	35	17	6	3
All States		**7148**	**42**	**34**	**16**	**6**	**2**	**6456**	**45**	**31**	**16**	**6**	**2**

Base: Milch Animals Buffaloes
1 Calf – z value = -3.516, p value = 0.00044 (Proportion significantly different at 99%)
2 Calves – z value = 2.470, p value = 0.01353 (Proportion significantly different at 99%)
3 Calves - z value = 0.000, p value = 0.10000 (Proportion are not significantly different)
4 Calves - z value =0.000, p value = 0.10000 (Proportion are not significantly different)
>4 Calves – z value = 0.000, p value = 0.10000 (Proportion are not significantly different)

Table 23: MILCH ANIMAL BY LAND HOLDING (%)

Sl. No	STATE	PROGRAMME						CONTROL					
		LANDLESS	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA	LANDLESS	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	12	43	22	3	7	11	16	39	24	2	4	15
2	BIHAR	17	61	9	6	5	2	26	59	5	8	2	0
3	GUJARAT	12	46	12	13	14	3	16	39	14	13	12	6
4	HARYANA	15	9	13	30	32	1	24	9	9	30	27	1
5	KARNATAKA	22	65	7	3	1	1	23	65	7	3	1	0
6	KERALA	26	46	15	12	0	1	18	47	19	15	0	1
7	MADHYA PRADESH	14	23	22	24	14	3	18	43	16	12	9	2
8	MAHARASHTRA	10	52	9	5	14	10	10	52	11	4	5	18
9	ODISHA	16	55	17	7	4	1	22	48	20	7	3	0
10	PUNJAB	27	26	16	19	7	4	44	18	12	14	7	6
11	RAJASTHAN	6	47	24	11	7	5	3	62	17	4	7	7
12	TAMIL NADU	46	40	3	4	4	4	47	46	1	1	1	4
13	UTTAR PRADESH	14	47	18	12	9	2	14	47	19	12	8	0
14	WEST BENGAL	25	34	19	11	9	2	24	63	7	3	3	0
All States		**18**	**41**	**15**	**12**	**10**	**4**	**22**	**44**	**13**	**9**	**7**	**5**

Landless – z value = -2.908, p value = 0.00365 (Proportion significantly different at 99%)
Marginal – z value = -3.526, p value = 0.00042 (Proportion significantly different at 99%)
Small – z value = -1.699, p value = 0.08943 (Proportion significantly different at 90%)
Semi-Small – z value = 3.706, p value = 0.00021 (Proportion significantly different at 99%)
Medium – z value = 6.223, p value = 0.00000 (Proportion significantly different at 99%)
Large – z value = -2.810, p value = 0.00496 (Proportion significantly different at 99%)

Table 24: Share of Milk Production by Animal Category

Values as percent of total milk production

Sl. No	STATE	PROGRAMME				CONTROL			
		Animal Category				Animal Category			
		IC	CB	Buff	All	IC	CB	Buff	All
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	5	31	64	100	4	24	71	100
2	BIHAR	12	51	36	100	22	37	41	100
3	GUJARAT	11	23	66	100	14	21	65	100
4	HARYANA	3	25	73	100	3	15	82	100
5	KARNATAKA	14	70	16	100	14	71	15	100
6	KERALA	10	88	2	100	14	84	2	100
7	MADHYA PRADESH	17	31	52	100	25	25	50	100
8	MAHARASHTRA	0	40	60	100	0	39	60	100
9	ODISHA	31	66	3	100	32	64	4	100
10	PUNJAB	4	40	56	100	5	36	60	100
11	RAJASTHAN	15	24	62	100	21	20	59	100
12	TAMIL NADU	11	80	9	100	8	76	16	100
13	UTTAR PRADESH	6	20	74	100	6	18	76	100
14	WEST BENGAL	48	27	25	100	29	57	13	100
All States		**10**	**44**	**46**	**100**	**11**	**42**	**47**	**100**

IC– z value = -1.897, p value = 0.05785 (Proportion significantly different at 90%)
CB– z value = 2.347, p value = 0.01898 (Proportion significantly different at 95%)
Buffalo– z value = -1.165, p value = 0.24414 (Proportion are not significantly different)

Table 24A: Share of Milk Production by Herd Size

Values as percent of total milk production									
Sl. No	STATE	PROGRAMME				CONTROL			
		1	2	3	4+	1	2	3	4+
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	26	39	13	22	34	39	11	16
2	BIHAR	39	36	14	10	50	30	12	8
3	GUJARAT	9	15	17	58	11	24	17	49
4	HARYANA	3	33	26	37	4	48	26	21
5	KARNATAKA	22	42	19	16	22	36	21	21
6	KERALA	23	33	26	18	19	34	21	26
7	MADHYA PRADESH	11	30	20	39	17	46	21	16
8	MAHARASHTRA	17	31	27	25	14	26	23	37
9	ODISHA	27	34	16	23	27	36	17	19
10	PUNJAB	10	23	17	50	12	28	16	45
11	RAJASTHAN	17	31	26	27	19	35	22	24
12	TAMIL NADU	15	31	30	23	19	41	25	15
13	UTTAR PRADESH	34	31	14	21	39	38	13	10
14	WEST BENGAL	30	43	12	15	29	34	12	26
All States		**17**	**30**	**21**	**32**	**18**	**35**	**20**	**27**

Table 24B: Share of Milk Production by Social Group

Values as percent of total milk production

Sl. No	STATE	PROGRAMME				CONTROL			
		General	SC	ST	OBC	General	SC	ST	OBC
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	21	18	2	58	26	22	2	50
2	BIHAR	11	11	1	78	15	14	3	68
3	GUJARAT	34	8	16	42	17	10	19	54
4	HARYANA	45	24	1	30	38	30	1	32
5	KARNATAKA	61	18	6	15	59	15	3	23
6	KERALA	50	4	0	45	52	4	0	44
7	MADHYA PRADESH	20	29	5	45	17	36	7	39
8	MAHARASHTRA	47	4	3	46	32	8	7	53
9	ODISHA	52	20	1	27	34	14	3	49
10	PUNJAB	71	23	0	5	50	40	0	10
11	RAJASTHAN	20	8	4	68	18	10	7	65
12	TAMIL NADU	39	9	0	52	40	3	0	57
13	UTTAR PRADESH	25	17	1	56	21	22	2	55
14	WEST BENGAL	58	18	5	19	49	14	3	35
All States		**42**	**15**	**4**	**39**	**36**	**17**	**4**	**43**

Table 25A: Milk Yield per In-Milk Animal (Litres/Day)

Sl. No	STATE	PROGRAMME				CONTROL			
		IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	4.27	6.98	4.23	4.82	3.89	6.27	4.34	4.67
2	BIHAR	2.25	6.42	4.25	4.54	2.11	5.18	3.96	3.57
3	GUJARAT	4.50	10.99	5.83	6.31	4.48	8.74	5.65	5.87
4	HARYANA	3.84	8.33	6.83	7.00	3.73	6.75	6.74	6.57
5	KARNATAKA	3.88	8.82	4.28	6.55	3.88	7.14	3.84	5.73
6	KERALA	3.59	9.60	7.50	8.22	4.19	8.93	9.49	7.70
7	MADHYA PRADESH	2.72	7.07	5.00	4.74	2.45	5.87	5.29	4.20
8	MAHARASHTRA	3.75	7.56	5.40	6.08	3.23	7.00	5.22	5.78
9	ODISHA	2.24	5.45	3.31	3.72	1.78	5.03	3.00	3.12
10	PUNJAB	4.74	9.79	6.68	7.52	4.73	9.72	6.12	6.94
11	RAJASTHAN	4.93	8.14	6.54	6.53	4.84	7.12	6.55	6.18
12	TAMIL NADU	3.69	7.28	5.21	6.37	3.37	7.02	5.02	6.08
13	UTTAR PRADESH	3.41	6.72	5.36	5.39	3.36	5.55	5.20	5.10
14	WEST BENGAL	2.49	3.84	4.05	3.08	2.52	4.75	3.31	3.60
All States		**3.37**	**8.07**	**5.74**	**6.09**	**3.31**	**7.23**	**5.56**	**5.68**

Table 25B: Milk Yield per In-Milk Animal (Litres/Day)

Sl. No	STATE	ENDLINE				BASELINE			
		IC	CB	Buffalo	All in Milk	IC	CB	Buffalo	All in Milk
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	4.02	6.51	4.30	4.72	3.40	5.90	3.70	4.20
2	BIHAR	2.20	6.04	4.16	4.25	2.00	4.70	3.50	3.30
3	GUJARAT	4.49	10.17	5.76	6.15	4.30	8.60	5.30	5.30
4	HARYANA	3.77	7.41	6.78	6.75	3.50	6.30	6.60	6.40
5	KARNATAKA	3.88	8.07	4.08	6.19	3.50	6.40	3.60	4.80
6	KERALA	3.74	9.43	8.00	8.09	2.70	9.40	9.60	9.00
7	MADHYA PRADESH	2.50	6.07	5.24	4.29	2.40	5.50	4.30	3.60
8	MAHARASHTRA	3.38	7.17	5.27	5.87	3.20	6.10	4.90	5.00
9	ODISHA	1.84	5.08	3.04	3.20	1.70	4.40	2.60	2.70
10	PUNJAB	4.73	9.74	6.34	7.17	4.60	9.10	5.60	6.20
11	RAJASTHAN	4.87	7.50	6.54	6.31	4.70	6.80	6.20	5.90
12	TAMIL NADU	3.49	7.12	5.09	6.18	3.40	6.60	4.60	6.00
13	UTTAR PRADESH	3.37	5.76	5.23	5.15	2.90	5.00	5.10	4.90
14	WEST BENGAL	2.51	4.67	3.37	3.56	1.70	3.40	4.40	2.20
All States		**3.33**	**7.50**	**5.62**	**5.81**	**3.06**	**6.30**	**5.11**	**5.03**

Table 26: Milk yield by milch animal holding size

Sl No.	STATE	PROGRAME					CONTROL				
		1	2	3	4+	All	1	2	3	4	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	4.4	5.2	4.7	4.7	4.8	4.2	4.1	3.1	4.2	4.0
2	BIHAR	4.3	4.7	5.7	4.1	4.5	3.4	2.3	2.5	2.8	2.8
3	GUJARAT	6.6	5.9	6.0	6.5	6.3	6.0	4.3	3.8	5.0	4.7
4	HARYANA	5.9	6.9	7.1	7.1	7.0	6.8	5.7	5.3	5.1	5.5
5	KARNATAKA	8.0	6.5	6.5	5.4	6.6	5.8	4.3	4.1	4.0	4.4
6	KERALA	8.5	7.3	8.6	9.1	8.2	8.4	5.8	6.2	6.2	6.4
7	MADHYA PRADESH	4.4	4.5	4.7	5.0	4.7	3.2	3.1	2.5	2.6	2.9
8	MAHARASHTRA	5.5	5.7	6.6	6.5	6.1	5.7	4.4	4.5	5.3	4.9
9	ODISHA	3.5	3.4	3.7	4.9	3.7	2.6	2.2	2.0	2.3	2.3
10	PUNJAB	6.9	6.9	7.3	8.1	7.5	6.3	5.7	5.2	7.4	6.3
11	RAJASTHAN	6.0	6.5	6.8	6.7	6.5	5.8	4.5	3.5	4.7	4.5
12	TAMIL NADU	6.9	5.9	6.3	6.8	6.4	6.9	4.9	4.6	6.7	5.3
13	UTTAR PRADESH	5.2	5.4	5.1	5.9	5.4	4.8	3.8	3.4	4.0	4.1
14	WEST BENGAL	3.3	3.0	2.8	3.3	3.1	3.5	2.3	1.6	3.2	2.6
All States		**5.6**	**5.8**	**6.3**	**6.6**	**6.1**	**5.1**	**5.6**	**5.9**	**6.1**	**5.7**

Table 27: Milk Yield by Social Group

Values in liters per day per in-milk animal

Sl. No	STATE	PROGRAME					CONTROL				
		Social Group					Social Group				
		General	SC	ST	OBC	All	General	SC	ST	OBC	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	4.9	5.1	4.1	4.7	4.8	4.9	4.5	5.4	4.6	4.7
2	BIHAR	4.3	4.5	6.0	4.6	4.5	3.6	2.9	3.8	3.7	3.6
3	GUJARAT	6.4	5.4	5.8	6.7	6.3	5.5	5.9	6.1	5.9	5.9
4	HARYANA	7.2	6.9	6.7	6.8	7.0	6.5	6.5	6.4	6.7	6.6
5	KARNATAKA	6.7	7.2	5.2	6.2	6.6	5.6	5.6	6.3	6.0	5.7
6	KERALA	8.0	6.4	-	8.7	8.2	7.3	8.1	-	8.1	7.7
7	MADHYA PRADESH	4.8	4.2	5.3	5.0	4.7	3.9	4.6	5.0	3.9	4.2
8	MAHARASHTRA	5.9	5.5	6.6	6.3	6.1	5.5	5.7	5.9	6.0	5.8
9	ODISHA	3.9	4.1	3.8	3.2	3.7	3.4	2.7	3.8	3.0	3.1
10	PUNJAB	7.4	7.8	1.6	9.2	7.5	6.9	7.0	-	7.2	6.9
11	RAJASTHAN	6.5	6.7	6.1	6.5	6.5	6.2	6.1	6.5	6.2	6.2
12	TAMIL NADU	5.7	6.6	-	7.0	6.4	6.0	7.2	-	6.0	6.1
13	UTTAR PRADESH	5.5	5.4	4.7	5.4	5.4	5.2	5.6	4.8	4.9	5.1
14	WEST BENGAL	3.1	3.1	4.0	2.8	3.1	3.2	3.6	3.1	4.3	3.6
All States		**6.3**	**5.9**	**5.4**	**6.1**	**6.1**	**5.8**	**5.7**	**5.8**	**5.6**	**5.7**

Table 28: Milk Yield by Economic Group

Values in liters per day per in-milk animal

Sl. No	STATE	PROGRAME			CONTROL		
		Economic Group			Economic Group		
		APL	BPL+Antyodaya	All	APL	BPL+Antyodaya	All
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	5.0	4.8	4.8	5.1	4.6	4.7
2	BIHAR	4.7	4.5	4.5	3.6	3.6	3.6
3	GUJARAT	6.1	7.0	6.3	5.9	5.8	5.9
4	HARYANA	7.2	6.5	7.0	6.6	6.5	6.6
5	KARNATAKA	5.6	7.8	6.6	5.7	5.9	5.7
6	KERALA	7.6	10.3	8.2	7.9	7.5	7.7
7	MADHYA PRADESH	4.8	4.5	4.7	3.9	4.4	4.2
8	MAHARASHTRA	5.9	6.2	6.1	5.6	5.9	5.8
9	ODISHA	3.8	3.7	3.7	3.1	3.1	3.1
10	PUNJAB	7.5	7.7	7.5	7.0	6.8	6.9
11	RAJASTHAN	6.5	6.6	6.5	6.2	6.1	6.2
12	TAMIL NADU	6.4	6.3	6.4	6.1	6.1	6.1
13	UTTAR PRADESH	5.3	5.5	5.4	5.1	5.1	5.1
14	WEST BENGAL	3.1	3.1	3.1	3.8	3.5	3.6
All States		6.2	5.9	6.1	5.9	5.4	5.7

Table 29: Milk Yield by Land Holding Class

Sl No	STATE	PROGRAME							CONTROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	4.2	4.9	5.1	5.3	4.7	4.6	4.8	5.0	4.4	4.7	4.8	4.9	4.6	4.7
2	BIHAR	3.5	4.8	4.9	4.7	4.3	3.0	4.5	3.1	3.7	4.1	4.1	1.5	2.0	3.6
3	GUJARAT	5.9	6.5	6.8	6.0	6.0	6.2	6.3	5.6	5.8	6.1	6.1	5.9	5.9	5.9
4	HARYANA	7.5	7.6	6.6	7.1	6.8	5.2	7.0	6.6	7.1	6.8	6.7	6.2	6.0	6.6
5	KARNATAKA	8.4	6.1	6.5	5.0	4.5	5.0	6.6	6.0	5.7	5.5	5.2	4.9	4.0	5.7
6	KERALA	7.2	8.2	8.7	9.4	0.0	12.7	8.2	8.5	7.3	7.5	8.2	0.0	8.0	7.7
7	MADHYA PRADESH	4.1	4.8	4.4	5.3	4.8	5.2	4.7	4.4	3.9	4.4	4.4	4.4	4.5	4.2
8	MAHARASHTRA	5.3	6.7	7.0	7.3	4.1	4.4	6.1	5.1	6.5	6.2	6.7	3.7	3.5	5.8
9	ODISHA	3.6	3.6	4.1	3.9	3.7	4.0	3.7	2.4	3.2	3.7	3.1	2.8	3.0	3.1
10	PUNJAB	6.9	6.7	8.4	7.7	8.9	9.9	7.5	6.6	7.2	6.5	7.6	7.2	7.3	6.9
11	RAJASTHAN	6.2	6.6	6.6	6.4	6.7	6.0	6.5	5.9	6.3	6.4	6.3	5.4	5.7	6.2
12	TAMIL NADU	5.7	6.9	5.6	7.1	7.3	7.2	6.4	5.8	6.1	9.9	5.9	9.0	7.9	6.1
13	UTTAR PRADESH	5.5	5.2	5.4	5.5	6.0	5.5	5.4	4.8	4.9	5.3	5.0	6.4	4.5	5.1
14	WEST BENGAL	3.0	3.1	3.0	3.3	3.4	3.1	3.1	3.7	3.5	3.2	5.1	3.5	2.5	3.6
All States		**5.9**	**6.0**	**6.2**	**6.5**	**6.1**	**5.9**	**6.1**	**5.7**	**5.6**	**5.8**	**6.3**	**5.7**	**5.2**	**5.7**

Table 30: Milk Production per Milk Producing Household by Social Group

Values in litres per day											
Sl. No	STATE	PROGRAMME					CONTROL				
		Social Group					Social Group				
		General	SC	ST	OBC	All	General	SC	ST	OBC	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	7.3	7.1	5.0	7.7	7.4	8.1	6.1	8.1	6.4	6.7
2	BIHAR	5.7	6.4	6.0	5.7	5.8	4.6	3.3	4.3	4.4	4.3
3	GUJARAT	14.9	14.9	13.5	15.1	14.7	11.9	10.8	11.5	12.2	11.9
4	HARYANA	15.9	17.9	15.7	15.0	16.0	12.8	12.7	16.0	14.3	13.2
5	KARNATAKA	11.1	11.4	8.7	10.4	10.9	9.0	8.9	9.3	9.2	9.0
6	KERALA	15.2	10.3		14.0	14.3	14.1	10.5		13.3	13.6
7	MADHYA PRADESH	8.3	7.8	7.4	8.6	8.2	5.0	6.8	6.5	5.5	5.9
8	MAHARASHTRA	10.9	9.1	11.2	11.0	10.9	10.2	11.8	9.3	12.2	11.2
9	ODISHA	5.6	6.6	7.5	4.3	5.4	4.5	3.7	6.0	4.1	4.2
10	PUNJAB	16.4	19.0	13.0	25.0	17.3	15.1	14.1		13.9	14.6
11	RAJASTHAN	12.1	10.1	8.1	11.1	11.0	10.4	9.4	10.3	9.2	9.5
12	TAMIL NADU	10.9	12.4		13.9	12.5	10.5	12.7		10.8	10.7
13	UTTAR PRADESH	7.3	8.6	5.3	7.7	7.7	6.6	7.7	5.4	6.3	6.6
14	WEST BENGAL	4.2	4.1	11.2	3.3	4.1	4.7	4.6	3.7	6.0	5.0
All States		**11.6**	**11.0**	**10.4**	**10.2**	**10.9**	**10.0**	**9.3**	**9.3**	**9.1**	**9.4**

Table 30A: Milk Sale per Milk Selling Household by Social Group

Values in litres per day

Sl. No	STATE	PROGRAME					CONTROL				
		Social Group					Social Group				
		General	SC	ST	OBC	All	General	SC	ST	OBC	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	3.6	3.8	3.1	4.2	4.0	3.1	3.1	3.4	3.4	3.2
2	BIHAR	4.6	4.3	4.0	4.2	4.2	3.1	2.7	3.0	3.2	3.1
3	GUJARAT	10.4	9.8	9.2	11.5	10.6	7.4	6.2	6.9	7.7	7.4
4	HARYANA	8.9	9.8	8.7	8.8	9.1	7.7	6.6	8.0	7.2	7.2
5	KARNATAKA	8.7	9.4	6.9	8.2	8.6	6.7	6.7	7.4	7.0	6.8
6	KERALA	12.3	10.5		12.1	12.1	10.1	7.1		10.2	10.0
7	MADHYA PRADESH	6.0	5.7	5.6	6.3	6.0	4.8	5.1	5.1	4.4	4.8
8	MAHARASHTRA	9.5	8.1	10.2	9.8	9.6	8.7	10.6	7.4	10.5	9.6
9	ODISHA	4.4	5.5	6.0	3.8	4.4	3.9	3.7	4.6	3.6	3.7
10	PUNJAB	11.5	12.9	8.8	17.3	12.0	10.3	9.7		8.8	9.9
11	RAJASTHAN	8.8	7.7	5.9	7.8	7.9	7.7	6.4	7.4	6.3	6.6
12	TAMIL NADU	9.0	9.3		10.4	9.6	7.4	7.5		7.7	7.6
13	UTTAR PRADESH	4.7	4.9	2.6	4.9	4.8	4.0	3.9	3.6	4.2	4.1
14	WEST BENGAL	4.3	4.2	10.8	3.6	4.2	4.0	3.7	2.2	7.1	4.7
All States		**8.7**	**7.8**	**7.5**	**7.7**	**8.1**	**7.3**	**6.4**	**6.4**	**6.7**	**6.8**

Table 31: Milk Production per Milk Producing Household by Economic Group

Values in litres per day

Sl. No	STATE	PROGRAME			CONTROL		
		Economic Group			Economic Group		
		APL	BPL+ Antyodaya	All	APL	BPL+ Antyodaya	All
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	9.1	7.3	7.4	7.5	6.6	6.7
2	BIHAR	6.2	5.6	5.8	4.3	4.2	4.3
3	GUJARAT	14.8	14.5	14.7	12.7	9.3	11.9
4	HARYANA	16.4	15.2	16.0	13.2	13.2	13.2
5	KARNATAKA	9.6	12.3	10.9	8.9	9.5	9.0
6	KERALA	13.7	16.3	14.3	14.4	12.7	13.6
7	MADHYA PRADESH	8.5	7.6	8.2	5.6	6.1	5.9
8	MAHARASHTRA	10.1	11.5	10.9	10.2	12.1	11.2
9	ODISHA	5.7	5.1	5.4	4.3	4.2	4.2
10	PUNJAB	17.1	17.7	17.3	15.1	13.6	14.6
11	RAJASTHAN	11.2	10.0	11.0	9.4	9.7	9.5
12	TAMIL NADU	12.8	12.4	12.5	11.2	10.6	10.7
13	UTTAR PRADESH	7.4	8.3	7.7	6.7	6.5	6.6
14	WEST BENGAL	4.3	3.9	4.1	5.2	4.9	5.0
All States		**11.6**	**9.9**	**10.9**	**10.2**	**8.6**	**9.4**

Table 32: Milk Production per Milk Producing Household by Land Holding Class

Values in ml/day

Sl No	STATE	PROGRAMME							CONTROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	7.4	7.2	7.5	6.7	7.3	9.3	7.4	6.2	6.7	7.4	4.8	8.0	6.7	6.7
2	BIHAR	3.7	6.4	6.4	5.7	5.1	3.0	5.8	3.3	4.5	5.1	5.0	3.0	2.0	4.3
3	GUJARAT	12.0	18.0	11.9	13.5	12.7	13.9	14.7	10.4	11.5	12.2	12.6	12.8	14.1	11.9
4	HARYANA	17.5	15.9	16.3	15.8	15.8	11.2	16.0	13.0	14.6	14.7	13.3	12.4	12.0	13.2
5	KARNATAKA	13.4	10.0	13.5	8.7	10.0	6.3	10.9	8.7	9.0	10.0	13.5	7.3	4.0	9.0
6	KERALA	12.8	14.7	13.7	16.7		17.8	14.3	13.6	13.2	13.5	15.0		12.0	13.6
7	MADHYA PRADESH	7.0	8.1	7.1	10.1	7.8	11.4	8.2	6.3	5.4	5.9	6.0	6.7	7.7	5.9
8	MAHARASHTRA	6.0	12.4	17.4	16.2	6.8	7.6	10.9	6.3	13.6	15.4	16.6	6.1	5.8	11.2
9	ODISHA	5.2	5.2	6.4	6.0	4.4	4.8	5.4	3.0	4.2	6.4	3.8	3.7	3.0	4.2
10	PUNJAB	13.7	14.5	19.1	21.9	26.0	25.6	17.3	13.8	13.2	16.9	16.6	15.4	14.8	14.6
11	RAJASTHAN	10.0	11.4	9.3	9.9	14.1	18.4	11.0	8.4	10.0	9.2	8.0	8.2	9.0	9.5
12	TAMIL NADU	9.6	15.3	15.7	14.6	14.6	14.4	12.5	9.9	10.6	18.2	10.8	15.8	22.3	10.7
13	UTTAR PRADESH	7.5	7.2	7.6	9.1	9.4	8.8	7.7	5.9	5.9	7.1	7.9	10.2	9.0	6.6
14	WEST BENGAL	4.2	4.2	3.9	3.5	3.8	2.0	4.1	4.6	5.2	4.8	7.6	4.1	5.3	5.0
All States		**9.9**	**10.5**	**10.6**	**13.2**	**11.8**	**12.0**	**10.9**	**9.0**	**9.0**	**9.9**	**11.4**	**10.4**	**9.1**	**9.4**

Table 32A: - Milk Sale per Selling Household by Land Holding Class Values in ml/day

Sl No	STATE	PROGRAME							CONTROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	4.4	3.8	4.0	3.3	3.7	5.0	4.0	2.8	3.2	3.6	2.7	4.0	3.5	3.2
2	BIHAR	3.0	4.7	4.1	3.8	3.4	2.0	4.2	2.9	3.2	3.1	3.4	1.7	2.0	3.1
3	GUJARAT	7.9	13.7	8.3	9.4	8.3	9.7	10.6	6.0	7.0	7.2	8.6	8.4	10.0	7.4
4	HARYANA	9.4	8.4	8.9	9.0	9.3	7.3	9.1	6.2	7.5	7.1	7.5	7.6	8.8	7.2
5	KARNATAKA	10.8	7.9	11.2	6.2	4.2	4.5	8.6	6.6	6.8	7.1	8.8	5.2	3.0	6.8
6	KERALA	11.8	11.8	11.8	14.0		14.0	12.1	10.7	9.6	9.8	11.4		3.5	10.0
7	MADHYA PRADESH	6.0	5.4	5.8	7.4	5.4	5.1	6.0	5.5	4.3	4.7	5.0	5.3	5.8	4.8
8	MAHARASHTRA	4.8	11.2	16.3	14.8	5.3	6.4	9.6	4.1	11.8	14.0	15.5	5.1	4.7	9.6
9	ODISHA	4.8	4.1	4.9	5.1	3.7	3.6	4.4	2.9	3.7	5.3	3.0	2.8	2.0	3.7
10	PUNJAB	8.8	9.6	13.4	15.7	19.8	21.6	12.0	9.1	8.4	12.3	11.6	11.0	11.2	9.9
11	RAJASTHAN	6.2	8.5	6.9	7.0	10.4	8.4	7.9	6.5	6.8	6.2	5.7	6.1	6.4	6.6
12	TAMIL NADU	8.6	11.2	9.5	8.9	9.5	8.9	9.6	6.8	7.7	10.8	7.3	7.3	19.4	7.6
13	UTTAR PRADESH	4.7	4.5	4.9	5.1	5.7	5.9	4.8	3.7	3.7	4.4	4.5	5.6	6.0	4.1
14	WEST BENGAL	4.4	4.0	4.1	5.0	4.1	5.5	4.2	4.5	5.1	2.9	6.0	3.9	2.0	4.7
All States		**7.7**	**8.1**	**7.8**	**9.0**	**7.9**	**8.2**	**8.1**	**6.3**	**6.8**	**7.1**	**8.0**	**6.9**	**6.5**	**6.8**

Table 33: Milk Production per Milk Producing Household by Herd Size

Values in litres per day

Sl. No	STATE	PROGRAME					CONTROL				
		1 animal	2 animal	3 animal	4 and more animals	All	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	4.4	8.2	9.9	14.6	7.4	4.2	8.2	9.4	16.6	6.7
2	BIHAR	4.3	6.4	10.4	10.1	5.8	3.4	4.5	7.6	11.3	4.3
3	GUJARAT	6.6	8.9	12.2	25.7	14.7	6.0	8.7	11.5	19.9	11.9
4	HARYANA	5.9	12.6	18.3	23.4	16.0	6.8	11.4	16.0	20.5	13.2
5	KARNATAKA	8.0	10.5	13.2	17.3	10.9	5.8	8.5	12.2	15.9	9.0
6	KERALA	8.5	12.5	22.9	33.7	14.3	8.4	11.6	18.6	24.9	13.6
7	MADHYA PRADESH	4.4	6.2	8.1	16.3	8.2	3.2	6.2	7.5	10.5	5.9
8	MAHARASHTRA	5.5	9.6	15.8	20.3	10.9	5.7	8.8	13.4	21.1	11.2
9	ODISHA	3.5	4.7	7.1	15.8	5.4	2.6	4.4	6.0	9.0	4.2
10	PUNJAB	6.9	12.0	17.9	34.9	17.3	6.3	11.4	15.7	29.5	14.6
11	RAJASTHAN	6.0	9.7	13.5	21.6	11.0	5.8	9.0	10.5	18.7	9.5
12	TAMIL NADU	6.9	10.4	14.9	28.7	12.5	6.9	9.9	13.8	26.9	10.7
13	UTTAR PRADESH	5.2	7.8	10.7	17.8	7.7	4.8	7.6	10.1	16.2	6.6
14	WEST BENGAL	3.3	4.0	4.4	8.9	4.1	3.5	4.5	4.9	12.8	5.0
All States		**5.6**	**9.1**	**13.8**	**23.1**	**10.9**	**5.1**	**8.6**	**12.1**	**20.1**	**9.4**

Table 33A: Milk Sale per Selling Household by Herd Size

Values in litres per day

Sl. No	STATE	PROGRAME					CONTROL				
		1 animal	2 animal	3 animal	4 and more animals	All	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	2.4	3.9	5.4	8.8	4.0	2.6	3.8	4.1	4.6	3.2
2	BIHAR	3.3	4.5	6.4	6.5	4.2	2.9	3.0	4.2	6.2	3.1
3	GUJARAT	3.9	5.5	7.9	19.9	10.6	2.9	4.7	6.6	13.7	7.4
4	HARYANA	4.1	6.3	10.5	14.2	9.1	5.2	6.1	9.0	11.8	7.2
5	KARNATAKA	6.7	8.1	10.4	13.3	8.6	4.2	6.5	9.1	12.4	6.8
6	KERALA	6.8	10.3	19.2	30.2	12.1	5.3	8.7	13.9	19.9	10.0
7	MADHYA PRADESH	3.4	4.2	5.5	12.2	6.0	3.4	4.6	5.6	6.5	4.8
8	MAHARASHTRA	4.4	8.4	14.3	19.1	9.6	4.0	6.9	12.0	20.1	9.6
9	ODISHA	3.2	3.8	5.4	11.1	4.4	2.4	3.5	4.7	7.8	3.7
10	PUNJAB	4.1	6.4	11.9	27.5	12.0	3.4	6.6	10.4	22.1	9.9
11	RAJASTHAN	4.0	6.9	10.0	15.9	7.9	4.4	6.3	7.6	11.8	6.6
12	TAMIL NADU	6.1	9.1	12.0	20.1	9.6	5.0	6.6	9.6	22.5	7.6
13	UTTAR PRADESH	3.6	5.2	6.1	8.8	4.8	3.6	4.4	4.8	5.7	4.1
14	WEST BENGAL	3.5	4.0	4.0	8.3	4.2	3.6	4.0	4.9	9.5	4.7
All States		**4.3**	**6.4**	**10.1**	**17.3**	**8.1**	**3.7**	**5.8**	**8.6**	**15.1**	**6.8**

Table 33B: Milk Producing and Milk Selling MAH

Values as percent of MAH

Sl No	STATE	PROGRAMME		CONTROL	
		Milk Producing MAH	Milk Selling MAH	Milk Producing MAH	Milk Selling MAH
1	2	3	4	5	6
1	ANDHRA PRADESH	70	68	70	65
2	BIHAR	74	65	59	40
3	GUJARAT	91	89	91	88
4	HARYANA	94	94	90	74
5	KARNATAKA	82	81	86	84
6	KERALA	86	82	87	86
7	MADHYA PRADESH	80	73	78	58
8	MAHARASHTRA	95	95	97	97
9	ODISHA	66	61	71	55
10	PUNJAB	96	94	88	84
11	RAJASTHAN	93	92	93	88
12	TAMIL NADU	80	74	84	83
13	UTTAR PRADESH	77	67	73	52
14	WEST BENGAL	63	42	62	43
All States		**82**	**77**	**81**	**71**

Milk Producing MAH– z value = 1.537, p value = 0.12422 (Proportion are not significantly different)
Milk Selling MAH– z value = 6.940, p value = 0.00000 (Proportion significantly different at 99%)

Table 34: Liquid Milk Sold as Percent of Milk Production (%)

Sl No	STATE	PROGRAMME	CONTROL	END-TERM	BASELINE
		Milk Sold (%)	Milk Sold (%)	Milk Sold (%)	Milk Sold (%)
1	2	3	4	5	6
1	ANDHRA PRADESH	52	45	47	83
2	BIHAR	65	50	60	40
3	GUJARAT	71	60	67	68
4	HARYANA	57	45	50	40
5	KARNATAKA	78	73	76	82
6	KERALA	80	73	78	90
7	MADHYA PRADESH	67	61	62	48
8	MAHARASHTRA	88	86	87	75
9	ODISHA	75	68	69	60
10	PUNJAB	68	65	67	56
11	RAJASTHAN	71	65	67	52
12	TAMIL NADU	72	69	70	90
13	UTTAR PRADESH	55	44	46	56
14	WEST BENGAL	69	65	65	63
All States		**70**	**64**	**66**	**65**

Z-value = 7.618, p value = 0.00000 (Proportion significantly different at 99%)

Table 35: Proportion of milk sold to the organized sector (as a share of total sale) (in %)

Sl No	STATE	PROGRAMME	CONTROL	END-TERM	BASELINE
1	2	3	4	5	6
1	ANDHRA PRADESH	85	69	75	67
2	BIHAR	63	23	51	19
3	GUJARAT	93	85	90	83
4	HARYANA	59	22	37	16
5	KARNATAKA	93	90	92	90
6	KERALA	69	61	67	66
7	MADHYA PRADESH	74	47	52	48
8	MAHARASHTRA	83	76	78	77
9	ODISHA	70	32	36	32
10	PUNJAB	59	20	35	22
11	RAJASTHAN	70	35	48	37
12	TAMIL NADU	82	38	54	39
13	UTTAR PRADESH	63	13	22	13
14	WEST BENGAL	66	16	21	11
All States		**75**	**51**	**59**	**45**

Z-value =36.558, p value = 0.00000 (Proportion significantly different at 99%)
S.E. = 0.008

Table 36: Share of Different Channels in Total Milk Sold

Sl No	STATE	PROGRAMME					CONTROL				
		DCS/MPI	Neighbor/ Village Shop	Dudhia	Pvt. Dairies	All	DCS/MPI	Neighbor/ Village Shop	Dudhia	Pvt. Dairies	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	74	0	15	11	100	56	8	22	14	100
2	BIHAR	60	12	25	3	100	22	54	23	1	100
3	GUJARAT	90	2	5	3	100	75	7	8	10	100
4	HARYANA	56	20	21	3	100	22	41	37	0	100
5	KARNATAKA	93	1	5	0	100	87	5	5	3	100
6	KERALA	63	13	18	5	100	60	14	26	1	100
7	MADHYA PRADESH	72	10	16	2	100	47	16	37	0	100
8	MAHARASHTRA	57	5	12	26	100	21	12	13	55	100
9	ODISHA	64	11	19	5	100	32	26	42	0	100
10	PUNJAB	56	12	29	3	100	20	34	46	0	100
11	RAJASTHAN	69	12	18	0	100	35	23	42	0	100
12	TAMIL NADU	78	5	13	5	100	32	21	41	6	100
13	UTTAR PRADESH	58	16	21	5	100	13	29	57	0	100
14	WEST BENGAL	66	22	12	0	100	16	51	32	0	100
All States		**69**	**9**	**16**	**6**	**100**	**41**	**20**	**28**	**10**	**100**

#: Weighted Estimate
DCS/MPI- z value =28.864, p value = 0.00000 (Proportion significantly different at 99%)
Individual/Village Shop - z- value = -17.205, p value = 0.00000 (Proportion significantly different at 99%)
Dudhia- z- value =17.205, p value = -0.00000 (Proportion significantly different at 99%)
Pvt. Dairies-z- value = -8.802, p value = 0.00000 (Proportion significantly different at 99%)

Table 37: Mode of Payment: Cooperative Sector(DSC/MPI)

Values as percent of total milk sold

Sl No	STATE	PROGRAMME						CONTROL					
		Base#	Mode					Base#	Mode				
			Cash	Bank	Buss. Correspondent	Others	All		Cash	Bank	Buss. Correspondent	Others	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	264	77	23	1	0	100	179	70	30	0	0	100
2	BIHAR	147	87	12	1	0	100	35	83	17	0	0	100
3	GUJARAT	388	66	33	0	0	100	276	63	36	0	0	100
4	HARYANA	274	71	25	4	0	100	69	70	26	3	1	100
5	KARNATAKA	384	70	28	2	1	100	351	78	18	2	2	100
6	KERALA	232	75	24	0	1	100	203	71	29	0	0	100
7	MADHYA PRADESH	224	77	21	1	1	100	113	72	22	5	1	100
8	MAHARASHTRA	286	59	41	0	0	100	177	69	31	0	0	100
9	ODISHA	166	93	7	1	0	100	72	93	7	0	0	100
10	PUNJAB	321	64	35	1	0	100	102	71	28	1	0	100
11	RAJASTHAN	288	76	24	0	0	100	166	80	19	1	0	100
12	TAMIL NADU	278	74	24	1	1	100	108	78	22	0	0	100
13	UTTAR PRADESH	184	76	24	1	0	100	30	80	17	3	0	100
14	WEST BENGAL	118	93	3	3	0	100	9	33	67	0	0	100
All States		**3554**	**73**	**25**	**1**	**0**	**100**	**1890**	**73**	**25**	**1**	**0**	**100**

Respondents who reported

Table 38: Mode of Payment: Private Dairy

#Values as percent of total milk sold

Sl No	STATE	PROGRAMME						CONTROL					
		Base#	Mode					Base#	Mode				
			Cash	Bank	Buss. Correspondent	Others	All		Cash	Bank	Buss. Correspondent	Others	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	45	93	2	2	2	100	41	93	7	0	0	100
2	BIHAR	4	100	0	0	0	100	1	100	0	0	0	100
3	GUJARAT	17	94	6	0	0	100	43	81	19	0	0	100
4	HARYANA	24	92	8	0	0	100	0	0	0	0	0	100
5	KARNATAKA		0	0	0	0	100	19	95	0	0	5	100
6	KERALA	17	76	18	0	6	100	7	100	0	0	0	100
7	MADHYA PRADESH	9	89	11	0	0	100	0	0	0	0	0	100
8	MAHARASHTRA	90	80	20	0	0	100	188	84	15	0	1	100
9	ODISHA	7	71	14	0	14	100	0	0	0	0	0	100
10	PUNJAB	8	63	38	0	0	100	0	0	0	0	0	100
11	RAJASTHAN	1	100	0	0	0	100	0	0	0	0	0	100
12	TAMIL NADU	18	100	0	0	0	100	11	73	18	9	0	100
13	UTTAR PRADESH	14	93	7	0	0	100	0	0	0	0	0	100
14	WEST BENGAL	0	0	0	0	0	100	0	0	0	0	0	100
All States		**254**	**86**	**12**	**0**	**1**	**100**	**310**	**85**	**14**	**0**	**1**	**100**

Table 39:Frequecy of Receiving Payment from DCS/NGC

Values as percent of base

Sl No	STATE	PROGRAMME							CONTROL						
		Base#	Mode						Base#	Mode					
			Daily	Weekly	Every 10 Days	Fort Nightly	Monthly	As per Need		Daily	Weekly	Every 10 Days	Fort Nightly	Monthly	As per Need
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	264	7	20	31	31	10	0	179	7	18	39	24	11	1
2	BIHAR	147	6	19	31	33	12	0	35	11	23	37	17	11	0
3	GUJARAT	388	13	25	33	18	9	3	276	6	31	25	28	9	1
4	HARYANA	274	9	25	34	22	8	3	69	9	13	43	16	16	3
5	KARNATAKA	384	4	18	45	21	9	4	351	7	21	33	28	10	1
6	KERALA	232	18	11	68	2	2	0	203	16	7	76	0	0	0
7	MADHYA PRADESH	224	8	17	48	15	9	3	113	5	15	56	15	7	2
8	MAHARASHTRA	286	6	8	73	7	5	0	177	5	9	51	25	10	0
9	ODISHA	166	5	4	43	33	16	0	72	11	11	38	31	8	1
10	PUNJAB	321	6	10	27	37	17	3	102	10	16	37	21	14	3
11	RAJASTHAN	288	8	32	26	25	8	1	166	13	23	34	19	11	0
12	TAMIL NADU	278	4	10	68	9	4	5	108	4	6	58	13	17	2
13	UTTAR PRADESH	184	9	7	58	20	6	0	30	17	17	53	7	7	0
14	WEST BENGAL	118	9	8	35	29	18	1	9	0	0	100	0	0	0
All States		**3554**	**8**	**16**	**44**	**21**	**9**	**2**	**1890**	**8**	**17**	**43**	**20**	**9**	**1**

#Base: No. of HH Selling Milk to DCS/NGC

Table 40: Frequency of Receiving Payment from Dudhias

Values as percent of base

Sl No	STATE	PROGRAMME							CONTROL						
		Base#	Mode						Base#	Mode					
			Daily	Weekly	Every 10 Days	Fort Nightly	Monthly	As per Need		Daily	Weekly	Every 10 Days	Fort Nightly	Monthly	As per Need
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	54	6	28	50	11	4	2	87	11	14	36	21	13	6
2	BIHAR	106	5	19	30	16	30	0	40	3	13	48	20	18	0
3	GUJARAT	46	11	0	37	11	41	0	87	5	30	23	18	24	0
4	HARYANA	87	1	26	38	9	24	1	120	9	8	46	20	9	8
5	KARNATAKA	37	8	22	32	16	22	0	48	2	21	25	19	29	4
6	KERALA	102	1	23	28	10	34	5	128	9	23	16	13	30	9
7	MADHYA PRADESH	92	5	28	42	16	5	2	126	6	21	36	14	22	1
8	MAHARASHTRA	79	8	25	28	28	9	3	81	15	21	33	12	14	5
9	ODISHA	75	11	19	16	28	21	5	124	12	27	18	12	29	2
10	PUNJAB	51	4	10	16	37	33	0	177	3	22	35	21	19	1
11	RAJASTHAN	126	6	3	54	24	10	3	188	11	30	24	18	14	3
12	TAMIL NADU	61	8	41	34	8	7	2	212	8	20	37	5	28	1
13	UTTAR PRADESH	65	12	31	42	6	5	5	163	19	13	50	3	12	2
14	WEST BENGAL	35	6	63	26	0	6	0	87	0	49	24	21	6	0
All States		**1016**	**6**	**22**	**35**	**17**	**18**	**2**	**1668**	**9**	**22**	**32**	**14**	**19**	**3**

Table 41: Frequency of Receiving Payment from Private Dairies

Values as percent of base

Sl No	STATE	PROGRAMME							CONTROL						
		Base#	Mode						Base#	Mode					
			Daily	Weekly	Every 10 Days	Fort Nightly	Monthly	As per Need		Daily	Weekly	Every 10 Days	Fort Nightly	Monthly	As per Need
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	45	2	13	51	20	11	2	41	12	17	34	17	17	2
2	BIHAR	4	0	50	0	50	0	0	1	0	0	0	100	0	0
3	GUJARAT	17	6	35	53	0	6	0	43	12	16	33	28	9	2
4	HARYANA	24	0	13	46	29	8	4	0	0	0	0	0	0	0
5	KARNATAKA	0	0	0	0	0	0	0	19	0	0	42	26	26	5
6	KERALA	17	6	41	0	24	29	0	7	0	14	86	0	0	0
7	MADHYA PRADESH	9	0	89	0	11	0	0	0	0	0	0	0	0	0
8	MAHARASHTRA	90	8	12	57	10	11	2	188	8	15	59	6	12	1
9	ODISHA	7	0	57	0	0	43	0	0	0	0	0	0	0	0
10	PUNJAB	8	13	25	25	13	25	0	0	0	0	0	0	0	0
11	RAJASTHAN	1	0	0	0	0	100	0	0	0	0	0	0	0	0
12	TAMIL NADU	18	6	6	33	0	56	0	11	9	18	55	0	0	18
13	UTTAR PRADESH	14	0	7	50	14	29	0	0	0	0	0	0	0	0
14	WEST BENGAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All States		**254**	**5**	**20**	**43**	**14**	**17**	**2**	**310**	**8**	**15**	**51**	**12**	**12**	**2**

Table 42: Price Received by the Milk Producers as Reported by the MAH

Average Price in Rs. Per Litre

Sl No	STATE	PROGRAMME												CONTROL											
		DCS/NGC				Private Dairy Company				Dudhia				DCS/NGC				Private Dairy Company				Dudhia			
		Base#		Average Price		Base#		Average Price		Base#		Average Price		Base#		Average Price		Base#		Average Price		Base#		Average Price	
		Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo	Cow	Buffalo
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	ANDHRA PRADESH	96	174	26.7	35.3	23	25	27.8	36.4	14	50	33.1	38.2	61	127	26.7	35.7	14	28	27.9	35.0	26	64	32.8	37.9
2	BIHAR	104	42	25.3	36.4	4		28.3		67	62	32.7	37.7	18	17	26.7	36.1		1		31.0	42	18	32.9	37.5
3	GUJARAT	75	276	26.9	35.0	1	16	27.0	35.9	6	39	32.2	37.6	61	174	27.6	35.5	10	30	27.3	35.0	27	67	32.8	37.8
4	HARYANA	75	194	26.6	35.6	5	19	28.4	34.4	52	59	32.9	37.6	13	50	27.4	34.9					78	93	32.5	37.8
5	KARNATAKA	296	83	24.6	34.7					29	11	33.1	38.0	275	70	24.7	34.7	11	6	28.3	34.0	36	12	32.7	38.3
6	KERALA	226	6	27.3	36.7	16	1	27.8	40.0	114	3	32.9	38.7	200	5	26.8	35.0	7		27.3		134		32.6	
7	MADHYA PRADESH	84	95	25.4	35.6	1	7	26.0	36.3	47	46	32.5	37.5	41	45	25.4	35.1					99	54	32.6	37.8
8	MAHARASHTRA	95	212	25.8	36.3	38	65	27.7	36.7	21	64	33.0	37.8	38	146	25.5	36.2	88	138	27.0	36.8	32	57	32.4	37.7
9	ODISHA	161	5	25.5	36.8	7		26.6		107		32.2		70	2	26.4	32.5					136	1	32.3	39.0
10	PUNJAB	130	233	25.6	35.7	5	5	27.8	36.2	44	36	32.8	38.4	34	76	25.4	35.9					123	131	32.5	37.9
11	RAJASTHAN	120	147	25.7	35.4					45	105	32.5	37.8	90	68	25.9	36.2					95	95	32.6	37.9
12	TAMIL NADU	252	28	25.8	36.2	18		27.7		43	18	32.0	37.5	87	20	25.0	35.7	7	4	28.9	33.0	180	36	32.1	38.6
13	UTTAR PRADESH	41	148	24.6	35.5	5	12	28.0	36.8	39	44	32.6	38.0	12	18	26.8	35.8					63	128	32.3	37.8
14	WEST BENGAL	94	25	27.2	34.7					68		32.3		8	1	29.4	32.0					102	5	32.4	38.4
All States		**1849**	**1668**	**25.9**	**35.5**	**123**	**150**	**27.7**	**36.3**	**696**	**537**	**32.6**	**37.8**	**1008**	**819**	**25.9**	**35.6**	**137**	**207**	**27.3**	**36.1**	**1173**	**761**	**32.4**	**37.9**

Table 43: Reasons for Selling Milk to a Channel: DCS/NGC

Values as percent of base

Sl No	STATE	PROGRAMME									CONTROL								
		Base#	Better Price	Regular Payment	Bonus	Doorstep milk collection	Collection Center Near by	Loan for animal purchase	Faith in milk testing	Others	Base#	Better Price	Regular Payment	Bonus	Doorstep milk collection	Collection Center Near by	Loan for animal purchase	Faith in milk testing	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	ANDHRA PRADESH	264	21	4	15	23	20	6	9	2	179	22	6	22	14	17	6	12	1
2	BIHAR	147	14	5	17	32	22	2	5	3	35	26	3	31	11	6	9	11	3
3	GUJARAT	388	23	5	16	18	21	2	10	5	276	26	6	15	17	19	3	9	5
4	HARYANA	274	21	7	20	18	21	2	8	3	69	20	1	23	13	23	4	7	7
5	KARNATAKA	384	30	4	17	17	18	1	9	4	351	25	7	13	17	20	3	11	5
6	KERALA	232	15	8	23	25	29	0	1	0	203	17	7	16	39	21	0	0	0
7	MADHYA PRADESH	224	17	3	16	25	21	4	11	3	113	9	4	22	25	23	5	10	3
8	MAHARASHTRA	286	14	5	16	16	38	2	5	3	177	17	5	24	18	23	1	10	3
9	ODISHA	166	14	5	11	2	45	1	15	7	72	8	3	18	15	44	4	6	1
10	PUNJAB	321	25	6	20	13	17	4	9	6	102	27	9	14	13	22	2	9	5
11	RAJASTHAN	288	13	5	20	28	20	5	5	3	166	18	0	19	30	20	4	5	2
12	TAMIL NADU	278	12	5	20	19	22	8	12	2	108	7	5	15	21	27	12	11	2
13	UTTAR PRADESH	184	14	4	18	20	32	3	6	3	30	27	10	10	20	23	0	3	7
14	WEST BENGAL	118	26	3	20	13	20	6	8	4	9	0	22	44	33	0	0	0	0
All States		**3554**	**19**	**5**	**18**	**19**	**24**	**3**	**8**	**4**	**1890**	**20**	**5**	**18**	**21**	**21**	**4**	**8**	**3**

Table 44: Reasons for Selling Milk to a Channel: Private Dairies

Values as percent of base

Sl No	STATE	PROGRAMME									CONTROL								
		Base#	Better Price	Regular Payment	Bonus	Doorstep milk collection	Loan for animal purchase	Faith in milk testing	Personal relation	Others	Base#	Better Price	Regular Payment	Bonus	Doorstep milk collection	Loan for animal purchase	Faith in milk testing	Personal relation	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	ANDHRA PRADESH	45	7	11	7	20	16	11	20	9	41	12	15	2	20	12	12	22	5
2	BIHAR	4	0	25	0	75	0	0	0	0	1	0	0	0	0	0	0	0	100
3	GUJARAT	17	6	29	6	29	6	0	18	6	43	16	7	7	30	7	14	12	7
4	HARYANA	24	17	21	0	25	8	13	17	0	0	0	0	0	0	0	0	0	0
5	KARNATAKA	0	0	0	0	0	0	0	0	0	19	5	0	5	47	5	11	26	0
6	KERALA	17	29	18	6	6	6	6	18	12	7	14	0	0	43	0	14	29	0
7	MADHYA PRADESH	9	22	11	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0
8	MAHARASHTRA	90	24	9	2	22	4	10	22	6	188	22	14	4	22	3	12	18	4
9	ODISHA	7	14	14	0	57	0	0	0	14	0	0	0	0	0	0	0	0	0
10	PUNJAB	8	25	0	25	13	13	0	25	0	0	0	0	0	0	0	0	0	0
11	RAJASTHAN	1	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0
12	TAMIL NADU	18	22	11	11	33	0	0	17	6	11	45	18	0	27	0	0	0	9
13	UTTAR PRADESH	14	14	7	7	21	0	29	21	0	0	0	0	0	0	0	0	0	0
14	WEST BENGAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All States		**254**	**18**	**13**	**5**	**23**	**7**	**9**	**19**	**6**	**310**	**20**	**12**	**4**	**25**	**5**	**12**	**18**	**5**

Table 45: Reasons for Selling Milk to a Channel: Dudhias

Values as percent of base

Sl No	STATE	PROGRAMME							CONTROL						
		Base#	Better Price	Regular Payment	Bonus	Doorstep milk collection	Personal relation	Others	Base#	Better Price	Regular Payment	Bonus	Doorstep milk collection	Personal relation	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	54	33	26	13	2	20	6	87	37	16	21	2	16	8
2	BIHAR	106	46	18	10	0	14	11	40	23	18	23	0	25	13
3	GUJARAT	46	41	11	9	0	30	9	87	48	18	13	0	11	9
4	HARYANA	87	41	20	16	3	8	11	120	35	15	13	4	26	8
5	KARNATAKA	37	62	14	5	0	14	5	48	65	10	2	0	17	6
6	KERALA	102	52	16	11	0	16	6	128	49	20	13	0	14	4
7	MADHYA PRADESH	92	52	15	9	1	17	5	126	41	16	10	1	25	7
8	MAHARASHTRA	79	39	19	20	0	18	4	81	21	9	26	0	35	10
9	ODISHA	75	53	8	8	0	27	4	124	44	18	28	1	6	3
10	PUNJAB	51	39	24	14	0	16	8	177	28	19	17	1	26	10
11	RAJASTHAN	126	37	13	17	3	24	6	188	47	9	17	0	20	6
12	TAMIL NADU	61	25	16	16	0	28	15	212	39	14	11	0	25	10
13	UTTAR PRADESH	65	32	20	29	0	9	9	163	34	20	22	0	17	8
14	WEST BENGAL	35	17	20	26	0	37	0	87	47	17	16	2	14	3
All States		**1016**	**42**	**17**	**14**	**1**	**19**	**7**	**1668**	**40**	**16**	**16**	**1**	**20**	**7**

Table 45A: Per Capita Milk Availability by Land Holding Class (in ml/day)

Sl No	STATE	PROGRAMME							CONTROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	996	1047	1288	1495	1104	1166	1130	1087	892	1158	728	1240	1145	1029
2	BIHAR	488	886	832	720	643	500	781	425	517	631	583	425	222	502
3	GUJARAT	2233	3299	2245	2624	2474	2387	2752	2128	2100	2381	2313	2368	2739	2235
4	HARYANA	3497	3271	3018	3493	3454	2577	3386	2535	2746	3303	2691	2946	3429	2772
5	KARNATAKA	2613	2034	2605	1733	2500	833	2183	1898	1791	2172	2250	2000	1000	1855
6	KERALA	1865	1950	1849	2072	-	3423	1942	1980	1947	1798	1970	-	1800	1926
7	MADHYA PRADESH	1542	1564	1419	2067	1284	2018	1608	1073	1058	1130	1089	1477	1688	1116
8	MAHARASHTRA	799	1661	2395	2623	1067	1295	1528	886	2027	2367	2153	903	903	1673
9	ODISHA	516	574	624	749	490	632	581	327	505	671	513	244	462	484
10	PUNJAB	3406	3460	4889	5561	6094	6319	4254	3099	3010	3662	3967	3906	3011	3295
11	RAJASTHAN	2617	2757	2202	2170	3583	4221	2627	1551	2303	2118	1550	2037	2323	2184
12	TAMIL NADU	1577	2700	1932	2028	1752	3047	2073	1698	1859	3303	2708	1465	4123	1860
13	UTTAR PRADESH	1225	1110	1381	1635	2013	1294	1279	868	894	1262	1465	1810	1357	1059
14	WEST BENGAL	525	529	533	483	483	125	520	675	755	730	848	984	1250	745
All States		**1624**	**1665**	**1835**	**2472**	**2129**	**2020**	**1810**	**1502**	**1446**	**1638**	**1940**	**2083**	**1632**	**1569**

Table 45B: Per Capita Milk Consumption in MAH Consuming Milk by Land Holding Class

Sl No	STATE	PROGRAMME							CONTROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	633	801	762	918	784	887	781	701	688	880	492	1043	800	752
2	BIHAR	375	493	424	360	317	409	448	353	393	336	406	333	-	379
3	GUJARAT	843	953	866	1023	990	817	931	1158	980	1103	1021	1049	1044	1042
4	HARYANA	1712	1668	1479	1602	1502	808	1568	1284	1413	1628	1144	1136	929	1247
5	KARNATAKA	749	812	642	782	2900	318	789	540	539	556	796	591	250	547
6	KERALA	485	548	510	553	-	762	532	532	657	634	649	-	1091	635
7	MADHYA PRADESH	514	699	609	816	577	1280	678	481	558	521	517	543	594	532
8	MAHARASHTRA	329	243	250	286	282	244	260	398	344	348	211	272	353	345
9	ODISHA	293	393	403	347	367	400	374	229	288	336	309	258	286	285
10	PUNJAB	1283	1377	1570	1599	1457	1181	1409	1284	1423	1155	1426	1201	970	1295
11	RAJASTHAN	953	805	682	687	992	1112	792	400	699	765	663	716	766	701
12	TAMIL NADU	425	460	778	789	602	691	499	801	766	1458	875	2111	633	797
13	UTTAR PRADESH	527	577	571	765	825	630	603	509	515	667	688	907	500	581
14	WEST BENGAL	392	487	500	875	469	-	465	555	582	469	810	587	781	566
All States		**741**	**645**	**750**	**988**	**920**	**691**	**745**	**738**	**610**	**734**	**821**	**901**	**717**	**696**

Table 46: Per Capita Milk Consumption in MAH Consuming Milk by Social Group (ml/day)

Sl No	STATE	PROGRAMME					CONTROL				
		General	SC	ST	OBC	All	General	SC	ST	OBC	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	768	804	462	796	781	939	622	1000	719	752
2	BIHAR	343	620	353	446	448	396	352	189	388	379
3	GUJARAT	1005	998	917	862	931	1081	1116	974	1045	1042
4	HARYANA	1612	1847	2333	1317	1568	1150	1202	2667	1390	1247
5	KARNATAKA	856	646	641	789	789	545	586	510	532	547
6	KERALA	659	307	-	444	532	738	620	-	527	635
7	MADHYA PRADESH	766	664	591	661	678	478	537	518	559	532
8	MAHARASHTRA	264	244	189	263	260	341	289	338	356	345
9	ODISHA	439	355	158	308	374	304	280	357	272	285
10	PUNJAB	1331	1593	944	2052	1409	1359	1212	-	1320	1295
11	RAJASTHAN	943	639	579	794	792	591	694	710	731	701
12	TAMIL NADU	559	565	-	439	499	716	594	-	878	797
13	UTTAR PRADESH	579	599	571	617	603	620	659	476	549	581
14	WEST BENGAL	492	471	1182	347	465	545	571	606	591	566
All States		**825**	**873**	**699**	**635**	**745**	**724**	**763**	**704**	**650**	**696**

Table 47: Per Capita Milk Consumption in MAH Consuming Milk by Herd Size

Values in ml/day

Sl No	STATE	PROGRAMME					CONTROL				
		1 animal	2 animal	3 animal	4 and more animals	All	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	511	950	960	1237	781	442	978	1173	1833	752
2	BIHAR	347	442	969	700	448	318	460	545	804	379
3	GUJARAT	597	772	1000	1217	931	778	932	1112	1298	1042
4	HARYANA	537	1390	1804	2054	1568	469	1127	1453	2029	1247
5	KARNATAKA	555	822	783	1172	789	420	483	754	805	547
6	KERALA	384	579	740	837	532	542	507	984	925	635
7	MADHYA PRADESH	452	627	664	1063	678	418	536	592	805	532
8	MAHARASHTRA	285	240	265	257	260	323	404	344	266	345
9	ODISHA	288	333	419	643	374	237	322	313	321	285
10	PUNJAB	773	1535	1472	1865	1409	809	1219	1410	2004	1295
11	RAJASTHAN	560	795	941	1092	792	461	800	795	862	701
12	TAMIL NADU	290	594	506	676	499	680	763	943	960	797
13	UTTAR PRADESH	438	590	1033	1243	603	418	661	979	1760	581
14	WEST BENGAL	423	455	581	630	465	448	538	529	1271	566
All States		**449**	**739**	**884**	**1227**	**745**	**451**	**715**	**881**	**1140**	**696**

Table 47A: Per Capita Milk Availability by Herd Size

Values in ml/day											
Sl. No	STATE	PROGRAMME					CONTROL				
		Herd Size					Herd Size				
		1 animal	2 animal	3 animal	4 and more animals	All	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	605	1457	1615	2578	1130	627	1400	1567	2608	1029
2	BIHAR	540	890	1864	1664	781	374	661	1168	1855	502
3	GUJARAT	1106	1619	2452	5086	2752	1049	1609	2304	3926	2235
4	HARYANA	1152	2591	4167	5193	3386	1061	2474	3505	4601	2772
5	KARNATAKA	1337	2255	2880	4251	2183	1124	1798	2589	3461	1855
6	KERALA	963	1915	3548	5791	1942	1009	1737	3023	4174	1926
7	MADHYA PRADESH	716	1217	1734	3732	1608	543	1191	1667	2262	1116
8	MAHARASHTRA	754	1366	2274	2931	1528	826	1302	2039	3216	1673
9	ODISHA	306	575	1043	2351	581	265	518	900	1240	484
10	PUNJAB	1665	3036	4287	8725	4254	1268	2543	3819	7721	3295
11	RAJASTHAN	1343	2321	3546	5496	2627	1243	2158	2652	4213	2184
12	TAMIL NADU	861	1923	2887	5708	2073	950	1864	2890	5185	1860
13	UTTAR PRADESH	801	1358	2132	3690	1279	682	1433	1967	3422	1059
14	WEST BENGAL	303	633	769	1579	520	448	719	1021	2706	745
All States		**775**	**1609**	**2691**	**4695**	**1810**	**718**	**1548**	**2378**	**3900**	**1569**

Table 48: Per Capita Milk Consumption in MAH Consuming Milk by Economic Group

Values in liters per day per in-milk animal

Sl. No	STATE	PROGRAMME			CONTROL		
		APL	BPL+Antyodaya	All	APL	BPL+Antyodaya	All
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	954	764	781	913	733	752
2	BIHAR	499	426	448	404	372	379
3	GUJARAT	953	854	931	1066	971	1042
4	HARYANA	1531	1673	1568	1234	1270	1247
5	KARNATAKA	838	739	789	533	597	547
6	KERALA	557	470	532	849	450	635
7	MADHYA PRADESH	691	656	678	519	543	532
8	MAHARASHTRA	252	267	260	321	362	345
9	ODISHA	439	329	374	282	286	285
10	PUNJAB	1349	1659	1409	1364	1164	1295
11	RAJASTHAN	788	811	792	688	739	701
12	TAMIL NADU	521	491	499	946	769	797
13	UTTAR PRADESH	576	640	603	563	611	581
14	WEST BENGAL	500	423	465	595	552	566
All States		**820**	**649**	**745**	**775**	**622**	**696**

Table 50: Per MAH Milk Consumption in Milk Consuming MAH by Social Group

Values in litres per day											
Sl. No	STATE	PROGRAMME					CONTROL				
		Social Group					Social Group				
		General	SC	ST	OBC	All	General	SC	ST	OBC	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	3.8	3.6	2.1	3.6	3.6	4.8	3.0	4.8	3.4	3.6
2	BIHAR	1.9	3.1	1.5	2.6	2.5	2.3	1.9	1.4	2.1	2.1
3	GUJARAT	4.7	5.0	4.5	4.3	4.5	5.3	5.5	5.3	4.9	5.1
4	HARYANA	7.0	8.0	7.0	6.1	7.0	4.5	5.4	8.0	6.2	5.3
5	KARNATAKA	3.3	2.7	2.9	2.9	3.1	2.3	2.3	1.9	2.2	2.3
6	KERALA	4.2	2.0		2.9	3.4	4.4	3.7		3.3	3.9
7	MADHYA PRADESH	3.0	2.9	2.6	2.6	2.8	2.0	2.3	2.2	2.2	2.2
8	MAHARASHTRA	1.7	1.8	1.5	1.8	1.7	1.9	1.6	2.2	2.1	2.0
9	ODISHA	2.3	2.3	1.5	1.8	2.1	1.9	1.5	2.0	1.8	1.8
10	PUNJAB	5.1	5.9	4.3	7.6	5.4	5.2	4.6		5.2	5.0
11	RAJASTHAN	3.4	2.6	2.4	3.1	3.1	2.5	2.7	2.7	2.9	2.8
12	TAMIL NADU	2.9	2.2		1.9	2.2	3.4	3.8		3.6	3.5
13	UTTAR PRADESH	2.7	3.1	2.5	2.8	2.8	2.5	3.0	2.4	2.6	2.6
14	WEST BENGAL	2.2	2.1	6.5	1.9	2.2	2.3	2.4	2.2	3.0	2.5
All States		**3.9**	**4.0**	**3.4**	**3.1**	**3.5**	**3.4**	**3.4**	**3.6**	**3.1**	**3.3**

Table 51: Per MAH Milk Consumption in Milk Consuming MAH by Herd Size

Values in liters per day

Sl. No	STATE	PROGRAMME					CONTROL				
		1	2	3	>4	All	1	2	3	>4	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	2.4	4.3	4.5	5.8	3.6	2.1	4.6	5.4	9.9	3.6
2	BIHAR	1.9	2.6	4.7	4.1	2.5	1.7	2.5	3.3	5.1	2.1
3	GUJARAT	3.0	3.7	4.5	6.1	4.5	3.8	4.6	5.3	6.3	5.1
4	HARYANA	2.4	6.3	7.7	9.1	7.0	2.1	4.7	6.4	8.6	5.3
5	KARNATAKA	2.1	3.1	3.4	4.4	3.1	1.7	2.0	3.1	3.5	2.3
6	KERALA	2.5	3.7	4.9	4.9	3.4	3.3	3.2	5.8	5.6	3.9
7	MADHYA PRADESH	1.9	2.5	2.8	4.3	2.8	1.7	2.2	2.4	3.5	2.2
8	MAHARASHTRA	1.8	1.6	1.8	1.7	1.7	1.9	2.4	2.0	1.5	2.0
9	ODISHA	1.6	1.9	2.3	3.8	2.1	1.5	1.9	2.0	2.2	1.8
10	PUNJAB	2.9	5.7	5.9	7.3	5.4	3.0	4.9	5.3	7.4	5.0
11	RAJASTHAN	2.2	3.1	3.5	4.3	3.1	1.9	3.1	3.1	3.7	2.8
12	TAMIL NADU	1.2	2.6	2.5	3.1	2.2	2.8	3.5	3.9	4.6	3.5
13	UTTAR PRADESH	2.0	2.8	5.0	5.9	2.8	1.9	3.0	4.5	8.5	2.6
14	WEST BENGAL	2.0	2.2	2.4	3.2	2.2	2.0	2.4	2.5	5.1	2.5
All States		**2.2**	**3.5**	**4.2**	**5.7**	**3.5**	**2.2**	**3.4**	**4.1**	**5.4**	**3.3**

Table 52: Per MAH Milk Consumption in Milk Consuming MAH by Economic Group

Values in litres per day

		PROGRAMME			CONTROL		
Sl. No	STATE	APL	BPL+ Antyodaya	All	APL	BPL+ Antyodaya	All
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	4.9	3.5	3.6	4.1	3.5	3.6
2	BIHAR	2.8	2.4	2.5	2.3	2.0	2.1
3	GUJARAT	4.6	4.2	4.5	5.1	5.0	5.1
4	HARYANA	6.9	7.0	7.0	5.2	5.6	5.3
5	KARNATAKA	3.3	2.9	3.1	2.2	2.4	2.3
6	KERALA	3.5	3.2	3.4	4.8	3.0	3.9
7	MADHYA PRADESH	2.8	2.8	2.8	2.1	2.3	2.2
8	MAHARASHTRA	1.7	1.8	1.7	1.8	2.2	2.0
9	ODISHA	2.4	1.9	2.1	1.7	1.8	1.8
10	PUNJAB	5.2	6.2	5.4	5.2	4.6	5.0
11	RAJASTHAN	3.1	3.1	3.1	2.8	2.8	2.8
12	TAMIL NADU	2.3	2.2	2.2	4.1	3.4	3.5
13	UTTAR PRADESH	2.6	3.1	2.8	2.6	2.6	2.6
14	WEST BENGAL	2.3	2.0	2.2	2.4	2.6	2.5
All States		**3.8**	**3.2**	**3.5**	**3.5**	**3.1**	**3.3**

Table 53: Per MAH Milk Consumption in Milk Consuming MAH by Land Holding Class

Values in litres per day

Sl No	STATE	PROGRAMME							CONTROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	3.1	3.5	3.7	3.5	3.6	4.4	3.6	3.3	3.5	4.2	2.5	4.1	3.6	3.6
2	BIHAR	1.9	2.8	2.7	2.1	1.9	1.8	2.5	1.7	2.2	2.3	2.5	1.8		2.1
3	GUJARAT	4.3	4.7	4.2	4.5	4.7	4.5	4.5	5.1	5.0	5.4	5.1	5.0	4.9	5.1
4	HARYANA	8.1	7.3	7.2	6.8	6.6	3.5	7.0	6.0	6.4	7.0	4.9	4.4	3.3	5.3
5	KARNATAKA	3.0	3.0	2.9	3.6	9.7	1.8	3.1	2.2	2.2	2.4	3.9	2.2	1.0	2.3
6	KERALA	2.8	3.6	3.4	3.7		3.2	3.4	3.1	4.0	4.1	4.2		6.0	3.9
7	MADHYA PRADESH	2.0	2.9	2.5	3.3	2.5	5.8	2.8	2.0	2.2	2.2	2.3	2.1	2.7	2.2
8	MAHARASHTRA	2.3	1.8	1.7	1.7	1.6	1.4	1.7	2.5	2.1	2.1	1.6	1.4	1.6	2.0
9	ODISHA	1.8	2.2	2.4	2.1	1.8	2.0	2.1	1.5	1.7	2.1	1.9	2.7	2.0	1.8
10	PUNJAB	5.0	5.2	5.8	6.1	6.2	4.0	5.4	4.9	5.4	4.6	5.5	4.3	3.6	5.0
11	RAJASTHAN	3.6	3.1	2.6	2.9	3.7	4.3	3.1	2.0	2.8	2.7	3.1	2.8	3.0	2.8
12	TAMIL NADU	1.8	2.0	4.7	4.5	3.6	3.2	2.2	3.4	3.6	5.8	3.5	6.3	3.2	3.5
13	UTTAR PRADESH	2.4	2.8	2.6	3.4	3.5	2.9	2.8	2.5	2.3	3.0	3.3	4.3	1.8	2.6
14	WEST BENGAL	1.9	2.3	2.1	2.8	2.3		2.2	2.4	2.7	2.2	3.4	1.9	4.2	2.5
All States		**3.4**	**3.2**	**3.5**	**4.4**	**4.3**	**3.3**	**3.5**	**3.4**	**3.0**	**3.5**	**4.0**	**3.7**	**3.2**	**3.3**

Table 54: Milk Production and Milk Consumption per MAH

Values in litres per day

		PROGRAMME		CONTROL	
Sl No	STATE	Milk Production per MAH	Milk Consumption per MAH	Milk Production per MAH	Milk Consumption per MAH
1	2	3	4	5	6
1	ANDHRA PRADESH	5.2	2.7	4.7	2.9
2	BIHAR	4.3	1.6	2.5	1.4
3	GUJARAT	13.4	3.9	10.8	4.4
4	HARYANA	15.1	6.6	11.9	4.9
5	KARNATAKA	8.9	1.9	7.8	1.9
6	KERALA	12.3	2.4	11.8	3.1
7	MADHYA PRADESH	6.6	2.2	4.6	1.7
8	MAHARASHTRA	10.4	1.2	10.9	1.5
9	ODISHA	3.5	0.8	3.0	0.9
10	PUNJAB	16.5	5.2	12.7	4.4
11	RAJASTHAN	10.2	2.7	8.8	2.5
12	TAMIL NADU	9.9	1.1	9.1	2.5
13	UTTAR PRADESH	5.9	2.4	4.8	2.2
14	WEST BENGAL	2.6	0.8	3.1	1.3
All States		**8.9**	**2.5**	**7.6**	**2.5**

Table 55: Per Capita Milk Availability and per Capita Milk Consumption

Consumption					
Sl No	STATE	PROGRAMME		CONTROL	
		Per Caita Milk Availability	Per Capita Milk Consumption	Per Caita Milk Availability	Per Capita Milk Consumption
1	2	3	4	5	6
1	ANDHRA PRADESH	1130	560	1029	584
2	BIHAR	781	278	502	254
3	GUJARAT	2752	808	2235	893
4	HARYANA	3386	1464	2772	1132
5	KARNATAKA	2183	471	1855	446
6	KERALA	1942	373	1926	497
7	MADHYA PRADESH	1608	521	1116	410
8	MAHARASHTRA	1528	177	1673	237
9	ODISHA	581	135	484	146
10	PUNJAB	4254	1338	3295	1131
11	RAJASTHAN	2627	697	2184	603
12	TAMIL NADU	2073	232	1860	510
13	UTTAR PRADESH	1279	500	1059	479
14	WEST BENGAL	520	168	745	298
All States		**1810**	**509**	**1569**	**516**

Table 56: Coverage of Breeding Services

Sl. No	STATE	PROGRAMME				CONTROL			
		Base	Only AI	Only NS	Both AI & NS	Base	Only AI	Only NS	Both AI & NS
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	940	58	36	6	857	56	41	3
2	BIHAR	812	78	16	6	650	77	20	3
3	GUJARAT	1686	54	28	18	1506	58	26	15
4	HARYANA	1297	50	31	19	1128	50	38	11
5	KARNATAKA	1046	75	15	9	1077	73	16	11
6	KERALA	861	65	31	4	996	61	30	9
7	MADHYA PRADESH	1316	60	27	13	1046	63	31	6
8	MAHARASHTRA	1105	63	31	6	1210	62	32	7
9	ODISHA	820	61	34	5	866	64	30	6
10	PUNJAB	1400	63	16	22	1237	62	19	19
11	RAJASTHAN	1111	51	32	17	1085	49	37	14
12	TAMIL NADU	1075	65	30	6	1006	62	34	3
13	UTTAR PRADESH	885	66	26	8	783	64	31	5
14	WEST BENGAL	822	56	37	7	889	61	25	14
All States		**15176**	**61**	**27**	**12**	**14336**	**61**	**29**	**10**

Only AI -z value =0.000, p value = 1.00000 (Proportion are not significantly different)
Only NS - z value = -5.738, p value = 0.00000 (Proportion significantly different at 99%)

Table 57: AI Coverage across Animal Categories

Values as percent of base

Sl. No	STATE	PROGRAMME			CONTROL		
		IC	CB	Buffalo	IC	CB	Buffalo
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	63	65	63	69	55	59
2	BIHAR	84	84	85	80	81	79
3	GUJARAT	72	74	72	78	59	75
4	HARYANA	78	97	59	84	95	52
5	KARNATAKA	84	87	80	79	86	84
6	KERALA	73	67	82	71	69	88
7	MADHYA PRADESH	79	72	70	69	68	70
8	MAHARASHTRA	86	71	68	83	67	68
9	ODISHA	65	69	60	71	68	61
10	PUNJAB	85	89	82	74	83	81
11	RAJASTHAN	45	81	73	53	79	64
12	TAMIL NADU	74	69	71	73	64	67
13	UTTAR PRADESH	83	88	69	66	93	63
14	WEST BENGAL	64	62	59	70	78	91
All States		**72**	**76**	**70**	**71**	**74**	**69**

IC-z value =3.596, p value = 0.00032 (Proportion significantly different at 99%)
CB-z value =0.000, p value = 1.00000 (Proportion are not significantly different)**Buff-** z value = -1.740, p value = 0.08182(Proportion significantly different at 90%)

Table 58: NS Coverage across Animal Categories

Values as percent of base

Sl. No	STATE	PROGRAMME			CONTROL		
		IC	CB	Buffalo	IC	CB	Buffalo
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	40	36	44	33	45	45
2	BIHAR	19	23	22	22	22	26
3	GUJARAT	45	49	46	40	55	40
4	HARYANA	49	19	61	51	18	57
5	KARNATAKA	25	24	27	27	27	25
6	KERALA	28	38	27	41	38	50
7	MADHYA PRADESH	30	41	46	34	35	41
8	MAHARASHTRA	29	32	39	17	39	38
9	ODISHA	38	39	60	34	37	68
10	PUNJAB	16	33	42	28	32	42
11	RAJASTHAN	63	34	48	55	38	52
12	TAMIL NADU	32	37	33	34	38	38
13	UTTAR PRADESH	35	26	36	47	14	40
14	WEST BENGAL	39	46	59	42	37	34
All States		**36**	**34**	**44**	**37**	**35**	**43**

Table 59: AI Services Received by Provider Type

Sl. No	STATE	PROGRAMME							CONTROL						
		Base#	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others/ don't KNOW	Total	Base#	Milk Coop	MAITS	NGO/ Pvt.	Govt.	Others don't KNOW	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	599	2	0	88	6	4	100	509	2	1	89	4	4	100
2	BIHAR	686	55	0	38	3	4	100	519	29	1	64	3	3	100
3	GUJARAT	1216	31	9	52	6	3	100	1114	23	19	39	17	2	100
4	HARYANA	897	0	9	79	10	1	100	698	1	16	63	18	2	100
5	KARNATAKA	885	33	1	62	1	4	100	905	27	0	65	5	4	100
6	KERALA	592	1	17	66	15	2	100	698	19	29	34	16	2	100
7	MADHYA PRADESH	966	4	0	88	4	4	100	721	3	0	89	4	4	100
8	MAHARASHTRA	762	0	1	90	7	2	100	825	2	0	82	14	1	100
9	ODISHA	543	1	1	91	5	2	100	606	1	1	83	14	1	100
10	PUNJAB	1183	31	3	61	2	4	100	1001	30	0	63	4	3	100
11	RAJASTHAN	756	1	1	90	6	3	100	683	2	0	91	5	2	100
12	TAMIL NADU	756	0	1	86	11	2	100	662	2	0	82	15	1	100
13	UTTAR PRADESH	655	4	0	86	5	5	100	537	5	0	87	4	4	100
14	WEST BENGAL	517	0	16	70	11	2	100	669	15	33	30	20	1	100
All States		**11013**	**14**	**4**	**73**	**6**	**3**	**100**	**10147**	**13**	**8**	**67**	**10**	**2**	**100**

Table 60: Natural Service Received by Provider Type

Sl. No	STATE	PROGRAMME							CONTROL						
		Base#	Milk Coop	Traditional Breeders	Pvt. bull	Govt.	Scrub bull/ No Response/other	Total	Base#	Milk Coop	Traditional Breeders	Pvt. bull	Govt.	Scrub bull/ No Response/other	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	341	4	6	69	16	4	100	348	5	4	79	10	3	100
2	BIHAR	126	0	2	62	12	24	100	131	0	15	71	3	11	100
3	GUJARAT	470	3	10	61	18	7	100	392	1	9	68	16	6	100
4	HARYANA	400	5	18	54	24	1	100	430	0	6	76	17	1	100
5	KARNATAKA	161	1	9	67	5	18	100	172	2	10	58	10	19	100
6	KERALA	269	2	11	65	21	1	100	298	3	13	59	20	5	100
7	MADHYA PRADESH	350	2	10	73	8	7	100	325	4	4	69	18	6	100
8	MAHARASHTRA	343	3	9	62	24	2	100	385	5	8	71	15	2	100
9	ODISHA	277	7	4	62	25	2	100	260	4	15	59	20	2	100
10	PUNJAB	217	2	16	51	12	20	100	236	2	4	75	5	15	100
11	RAJASTHAN	355	2	5	62	28	3	100	402	8	6	67	17	1	100
12	TAMIL NADU	319	3	12	56	26	2	100	344	6	3	72	17	2	100
13	UTTAR PRADESH	230	4	9	72	7	8	100	246	2	2	84	5	7	100
14	WEST BENGAL	305	1	8	65	25	1	100	220	6	20	53	15	5	100
All States		**4163**	**3**	10	63	19	6	100	**4189**	**4**	8	69	14	5	100

Table 61A: Reasons for Preferring Milk Coop as service Provider for AI Service

Sl. No	STATE	PROGRAMME									CONTROL								
		Base	Doorstep Service	Higher chances of Conception	Better Progeny	Low Service Cost	Availing this Service for long time	Bull not Available in the Village	Confidence in the Service Provider	No alternative	Base	Doorstep Service	Higher chances of Conception	Better Progeny	Low Service Cost	Availing this Service for long time	Bull not Available in the Village	Confidence in the Service Provider	No alternative
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	ANDHRA PRADESH	9	22	44	78	44	0	11	0	0	9	56	22	89	11	0	0	0	0
2	BIHAR	210	64	56	95	0	9	7	2	0	108	29	23	83	2	3	14	6	1
3	GUJARAT	84	67	24	71	27	17	4	12	0	104	71	42	77	27	8	2	5	0
4	HARYANA	1	100	100	100	0	0	0	0	0	-	-	-	-	-	-	-	-	-
5	KARNATAKA	106	46	53	88	13	1	1	2	0	101	43	61	91	25	1	0	0	0
6	KERALA	5	0	40	80	20	40	0	80	0	66	38	64	71	17	26	2	52	0
7	MADHYA PRADESH	8	25	38	100	0	0	0	0	0	6	33	17	100	0	0	17	0	0
8	MAHARASHTRA	-	-	-	-	-	-	-	-	-	5	40	80	60	80	0	0	40	0
9	ODISHA	4	25	50	75	25	25	25	0	0	3	0	0	100	0	0	0	0	0
10	PUNJAB	57	26	25	95	2	7	0	4	0	71	23	23	93	6	4	0	1	0
11	RAJASTHAN	-	-	-	-	-	-	-	-	-	5	20	40	80	0	0	0	20	0
12	TAMIL NADU	1	0	100	100	0	0	0	0	0	3	67	33	67	67	0	0	0	33
13	UTTAR PRADESH	11	64	55	91	0	9	0	0	0	11	55	45	100	9	0	0	0	0
14	WEST BENGAL	5	20	20	100	0	0	0	0	0	46	13	39	74	7	13	0	11	0
All States		501	53	46	89	9	8	4	4	0	538	40	41	83	15	7	4	10	0

Table 61B: Reasons for Preferring Govt as service Provider for AI Service

Sl. No	STATE	PROGRAMME									CONTROL								
		Base	Doorstep Service	Higher chances of Conception	Better Progeny	Low Service Cost	Availing this Service for long time	Bull not Available in the Village	Confidence in the Service Provider	No alternative	Base	Doorstep Service	Higher chances of Conception	Better Progeny	Low Service Cost	Availing this Service for long time	Bull not Available in the Village	Confidence in the Service Provider	No alternative
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	ANDHRA PRADESH	21	29	33	76	14	10	10	0	0	9	33	33	78	22	11	11	0	0
2	BIHAR	8	88	75	88	0	13	0	0	0	12	25	25	75	8	0	17	8	0
3	GUJARAT	14	50	43	86	14	14	0	0	0	46	59	33	67	26	11	2	4	0
4	HARYANA	38	8	18	76	5	13	0	5	0	74	11	47	64	0	19	0	18	0
5	KARNATAKA	9	67	56	100	0	0	0	0	0	18	17	72	89	11	0	0	0	0
6	KERALA	90	34	37	78	1	74	0	31	0	127	35	80	72	2	61	1	39	0
7	MADHYA PRADESH	18	11	17	94	6	0	0	0	0	14	0	7	100	0	0	0	0	0
8	MAHARASHTRA	27	74	63	81	19	11	0	7	0	50	52	60	88	20	12	10	2	0
9	ODISHA	17	35	59	88	6	6	0	6	0	44	48	43	80	16	5	0	0	0
10	PUNJAB	4	50	50	75	25	0	0	0	0	13	0	0	100	0	0	0	0	0
11	RAJASTHAN	10	10	90	40	0	30	10	20	0	15	27	67	40	7	13	13	27	0
12	TAMIL NADU	32	63	81	75	25	9	0	3	0	47	49	49	47	17	17	17	11	21
13	UTTAR PRADESH	14	57	43	100	0	0	0	0	0	13	31	23	100	15	8	0	0	0
14	WEST BENGAL	29	48	62	76	7	14	3	10	0	73	14	40	67	1	21	10	11	0
All States		331	40	47	80	8	27	1	12	0	555	32	51	72	9	24	5	15	2

Table 62: Reasons for Preferring NGO/Private as AI Service Provider for Animals

Sl. No	STATE	PROGRAMME									CONTROL								
		Base	Doorstep Service	Higher chances of Conception	Better Progeny	Low Service Cost	Availing this Service for long time	Bull not Available in the Village	Confidence in the Service Provider	No alternative	Base	Doorstep Service	Higher chances of Conception	Better Progeny	Low Service Cost	Availing this Service for long time	Bull not Available in the Village	Confidence in the Service Provider	No alternative
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	ANDHRA PRADESH	353	40	68	83	14	10	11	7	0	334	36	64	79	15	8	15	7	1
2	BIHAR	222	60	70	95	0	8	8	1	0	259	35	39	64	3	10	30	6	4
3	GUJARAT	342	60	56	85	21	5	3	3	0	301	68	49	68	26	16	1	9	0
4	HARYANA	373	20	66	72	4	17	1	8	0	317	10	56	88	1	8	0	5	0
5	KARNATAKA	354	45	64	88	9	1	0	1	0	353	37	57	90	21	2	0	0	0
6	KERALA	262	49	66	80	6	36	2	30	0	178	44	77	78	2	46	2	34	0
7	MADHYA PRADESH	418	41	84	98	5	1	2	2	0	403	25	64	98	4	1	1	0	0
8	MAHARASHTRA	413	47	82	82	23	14	7	6	0	407	50	81	81	25	14	9	2	0
9	ODISHA	330	47	45	82	14	4	1	3	0	340	38	44	85	8	6	0	2	0
10	PUNJAB	371	80	97	90	12	9	0	1	0	337	73	89	89	13	9	1	0	0
11	RAJASTHAN	372	20	69	63	13	9	13	16	0	344	34	72	70	3	6	9	15	0
12	TAMIL NADU	393	68	75	70	18	14	4	5	2	367	60	68	63	20	15	4	5	8
13	UTTAR PRADESH	375	34	47	95	6	2	4	0	0	333	31	48	96	7	2	0	0	0
14	WEST BENGAL	312	55	53	71	34	12	12	7	0	245	48	47	53	35	18	10	12	1
All States		4890	47	68	82	13	10	5	6	0	4518	42	62	80	13	10	5	6	1

Table 63A: Reasons for Preferring Private bull as NS Service Provider for Animals (% HH)

		PROGRAMME										CONTROL									
Sl. No	STATE	No. of Respondents	Doorstep Service	Higher Chances of Conception	Better Progeny	Low Service Cost	Traditionally availing this Service	Bull Available in the Village	No alternative	not aware of AI	others	No. of Respondents	Doorstep Service	Higher Chances of Conception	Better Progeny	Low Service Cost	Traditionally availing this Service	Bull Available in the Village	No alternative	not aware of AI	others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	ANDHRA PRADESH	190	0	97	95	2	91	5	1	0	1	217	3	93	93	4	87	6	0	1	1
2	BIHAR	72	10	93	89	0	79	6	1	0	1	89	3	94	79	6	73	16	2	0	0
3	GUJARAT	207	14	79	71	20	57	2	4	0	10	177	11	80	75	11	64	1	7	1	11
4	HARYANA	191	7	95	76	10	81	1	4	0	1	288	7	98	63	3	61	0	11	0	1
5	KARNATAKA	85	1	86	86	0	69	0	0	0	2	86	6	84	83	12	67	0	0	0	5
6	KERALA	148	1	98	88	0	86	0	0	0	0	143	0	90	88	0	78	0	0	0	0
7	MADHYA PRADESH	170	1	99	92	9	55	4	0	0	0	189	2	97	96	10	69	3	0	0	0
8	MAHARASHTRA	175	17	95	79	13	88	2	2	1	1	215	13	90	78	24	80	2	5	0	2
9	ODISHA	147	0	100	99	0	99	0	0	0	0	136	0	100	100	0	99	0	0	0	0
10	PUNJAB	110	15	97	91	19	73	0	0	0	0	175	12	96	91	32	60	2	1	0	0
11	RAJASTHAN	212	0	85	55	24	67	11	3	1	0	256	4	94	58	11	74	4	1	0	1
12	TAMIL NADU	145	2	99	86	8	85	0	0	0	0	202	3	98	87	7	84	1	0	0	0
13	UTTAR PRADESH	154	0	77	90	6	62	1	1	5	0	196	1	84	79	3	66	2	1	2	0
14	WEST BENGAL	178	3	98	90	10	75	4	0	0	0	104	2	98	88	5	92	0	4	0	0
All States		**2184**	**5**	**92**	**83**	**10**	**76**	**3**	**1**	**1**	**1**	**2473**	**5**	**93**	**81**	**9**	**74**	**2**	**3**	**0**	**1**

Table 63B: Reasons for Preferring Private bull as NS Service Provider for Animals (% HH)

Sl. No	STATE	PROGRAMME										CONTROL									
		No. of Respondents	Doorstep Service	Higher Chances of Conception	Better Progeny	Low Service Cost	Traditionally availing this Service	Bull Available in the Village	No alternative	not aware of AI	others	No. of Respondents	Doorstep Service	Higher Chances of Conception	Better Progeny	Low Service Cost	Traditionally availing this Service	Bull Available in the Village	No alternative	not aware of AI	others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	ANDHRA PRADESH	41	2	93	100	2	83	5	0	0	0	25	0	100	100	0	84	4	0	0	0
2	BIHAR	10	10	80	90	0	90	0	0	0	0	4	0	100	100	0	100	0	0	0	0
3	GUJARAT	32	6	81	72	9	81	0	0	0	9	26	12	92	81	12	58	0	8	0	4
4	HARYANA	63	8	98	79	2	90	0	2	0	0	36	11	100	64	0	81	0	8	0	0
5	KARNATAKA	7	0	100	43	0	43	0	0	0	0	7	0	86	100	0	86	0	0	0	0
6	KERALA	35	0	86	86	3	74	0	0	0	0	32	0	91	88	0	78	0	0	0	0
7	MADHYA PRADESH	16	0	100	100	25	38	0	0	0	0	43	5	93	95	5	65	5	0	0	0
8	MAHARASHTRA	51	12	90	80	24	84	2	8	0	0	31	3	100	97	13	84	0	0	0	0
9	ODISHA	50	0	100	100	0	100	0	0	0	0	37	0	100	100	0	100	0	0	0	0
10	PUNJAB	22	5	86	77	5	77	23	0	0	0	9	11	89	89	11	44	0	0	0	0
11	RAJASTHAN	87	0	97	89	5	98	1	0	0	0	60	0	100	87	0	98	0	2	0	0
12	TAMIL NADU	59	2	95	81	10	80	2	0	0	2	33	0	100	100	0	100	0	0	0	0
13	UTTAR PRADESH	14	0	93	100	7	71	0	0	0	0	13	0	100	92	0	85	8	0	0	0
14	WEST BENGAL	44	0	98	95	11	80	2	0	0	0	21	0	100	86	5	90	5	0	0	0
All States		**531**	**3**	**94**	**87**	**7**	**84**	**2**	**1**	**0**	**1**	**377**	**3**	**97**	**90**	**3**	**84**	**1**	**2**	**0**	**0**

Table 64: Reason for Preferring Traditional Breeders as NS Service Provider for Animals

Values as Percent of HHs

Sl. No	STATE	PROGRAMME										CONTROL									
		No. of Respondents	Doorstep Service	Higher Chances of Conception	Better Progeny	Low Service Cost	Traditionally availing this Service	Bull Available in the Village	No alternative	not aware of AI	others	No. of Respondents	Doorstep Service	Higher Chances of Conception	Better Progeny	Low Service Cost	Traditionally availing this Service	Bull Available in the Village	No alternative	not aware of AI	others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	ANDHRA PRADESH	10	0	100	100	0	90	0	10	0	0	10	0	100	90	10	100	0	0	0	0
2	BIHAR	3	0	100	100	0	100	0	0	0	0	17	0	100	100	0	88	0	0	0	0
3	GUJARAT	21	5	86	81	10	76	0	5	0	0	22	5	82	55	23	50	5	5	0	9
4	HARYANA	56	11	96	100	30	34	0	0	0	0	19	5	74	100	74	37	0	0	0	0
5	KARNATAKA	13	0	92	85	0	77	0	0	0	8	14	0	64	71	0	36	0	0	7	21
6	KERALA	21	0	95	81	0	81	0	0	0	5	29	0	93	100	0	93	0	0	0	0
7	MADHYA PRADESH	22	5	100	100	23	50	9	0	0	0	5	0	100	100	0	60	0	0	0	0
8	MAHARASHTRA	22	23	95	73	5	95	5	5	0	0	18	0	89	89	6	83	0	0	0	11
9	ODISHA	9	0	100	100	0	100	0	0	0	0	28	0	100	100	0	100	0	0	0	0
10	PUNJAB	33	15	97	100	52	36	0	0	0	0	9	11	100	89	0	89	0	0	0	0
11	RAJASTHAN	9	0	89	56	22	78	0	0	0	0	17	0	71	24	29	35	6	6	6	0
12	TAMIL NADU	23	0	100	61	9	61	0	0	0	0	3	0	100	100	0	100	0	0	0	0
13	UTTAR PRADESH	18	6	67	83	0	78	6	0	0	0	6	17	83	33	0	50	17	0	0	0
14	WEST BENGAL	15	7	100	93	7	87	7	0	0	0	31	3	97	94	0	100	0	0	0	0
All States		**275**	**7**	**94**	**88**	**17**	**64**	**2**	**1**	**0**	**1**	**228**	**2**	**89**	**84**	**11**	**75**	**1**	**1**	**1**	**3**

Table 65: Doorstep Delivery of AI by Provider Type

Service Provider for the Animals that received doorstep service (AI) (%)													
		PROGRAMME						CONTROL					
Sl. No	STATE	Base#	Milk Coop	MAITS	NGO/ Pvt.	Others	Total	Base#	Milk Coop	MAITS	NGO/ Pvt.	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	599	1.7	0.0	82.1	3.2	87.0	509	2.0	0.6	82.1	3.1	87.8
2	BIHAR	686	55.0	0.1	30.9	3.1	89.1	519	28.3	0.0	57.0	2.5	87.9
3	GUJARAT	1216	29.6	8.1	38.3	2.1	78.1	1114	22.4	17.9	33.5	2.0	75.7
4	HARYANA	897	0.0	8.6	61.0	1.2	70.8	698	0.7	16.3	40.0	1.7	58.7
5	KARNATAKA	885	31.5	0.0	54.2	3.2	88.9	905	26.3	0.1	60.1	2.9	89.4
6	KERALA	592	0.5	16.4	52.2	1.9	70.9	698	16.9	28.7	25.1	1.1	71.8
7	MADHYA PRADESH	966	2.9	0.0	83.1	2.9	88.9	721	2.2	0.0	82.9	3.6	88.8
8	MAHARASHTRA	762	0.3	0.3	79.3	2.1	81.9	825	1.2	0.4	64.6	1.2	67.4
9	ODISHA	543	0.9	0.2	83.2	2.2	86.6	606	0.7	0.7	68.5	1.0	70.8
10	PUNJAB	1183	28.9	2.4	54.9	3.0	89.2	1001	29.2	0.0	55.3	2.5	87.0
11	RAJASTHAN	756	0.8	0.8	82.1	2.6	86.4	683	1.5	0.0	84.9	2.0	88.4
12	TAMIL NADU	756	0.3	0.7	71.4	1.7	74.1	662	1.4	0.0	62.5	0.6	64.5
13	UTTAR PRADESH	655	3.1	0.0	80.9	3.2	87.2	537	3.9	0.0	81.6	3.9	89.4
14	WEST BENGAL	517	0.4	15.9	52.2	2.1	70.6	669	12.7	32.1	25.1	0.9	70.9
All States		**11013**	**13.0**	**3.6**	**63.3**	**2.5**	**82.5**	**10147**	**12.0**	**7.3**	**57.0**	**2.1**	**78.3**

Table 66: Doorstep Delivery of NS by Provider Type

Service Provider for the Animals that received doorstep service (NS) (%)													
Sl. No	STATE	PROGRAMME						CONTROL					
		Base#	Milk Coop	Traditional Breeder	Pvt. Bull Facility	Govt. Bull Facility	Total	Base#	Milk Coop	Traditional Breeder	Pvt. Bull Facility	Govt. Bull Facility	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	341	0.0	0.0	0.0	0.0	0.0	348	0.0	0.0	0.3	0.0	0.3
2	BIHAR	126	0.0	0.0	0.0	0.0	0.0	131	0.0	0.0	0.0	0.0	0.0
3	GUJARAT	470	0.0	0.4	1.3	0.4	2.1	392	0.3	0.0	0.5	0.0	0.8
4	HARYANA	400	0.0	0.8	2.0	1.0	3.8	430	0.0	0.0	0.5	0.0	0.5
5	KARNATAKA	161	0.0	0.0	0.0	0.0	0.0	172	0.0	0.6	0.0	0.0	0.6
6	KERALA	269	0.4	0.0	0.7	0.7	1.9	298	0.0	0.7	2.0	0.0	2.7
7	MADHYA PRADESH	350	0.0	0.3	0.0	0.0	0.3	325	0.0	0.0	0.3	0.0	0.3
8	MAHARASHTRA	343	0.0	0.0	0.6	0.6	1.2	385	0.0	1.0	0.0	0.0	1.0
9	ODISHA	277	0.0	0.4	0.4	0.4	1.1	260	0.0	1.2	0.4	0.4	1.9
10	PUNJAB	217	0.0	0.9	0.0	0.0	0.9	236	0.0	0.4	0.0	0.0	0.4
11	RAJASTHAN	355	0.0	0.0	0.3	0.0	0.3	402	0.0	0.2	0.0	0.0	0.2
12	TAMIL NADU	319	0.0	0.9	0.3	0.6	1.9	344	0.0	0.3	0.3	0.0	0.6
13	UTTAR PRADESH	230	0.0	0.4	0.0	0.0	0.4	246	0.0	0.0	0.0	0.0	0.0
14	WEST BENGAL	305	0.0	0.0	1.3	0.7	2.0	220	0.5	0.9	1.8	0.0	3.2
All States		**4163**	**0.0**	**0.3**	**0.6**	**0.4**	**1.3**	**4189**	**0.0**	**0.4**	**0.4**	**0.0**	**0.9**

Table 67: Cost of AI per Service (in Rs) Cows

Sl. No	STATE	PROGRAMME							CONTROL						
		Base#	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others	ALL	Base#	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others	ALL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	179	220	-	261	242	225	258	146	267	-	251	-	236	251
2	BIHAR	445	309	350	223	274	205	271	344	336	333	233	314	279	265
3	GUJARAT	359	259	161	185	178	204	204	365	327	222	214	240	236	243
4	HARYANA	352	160	163	164	229	203	168	248	160	160	163	167	158	163
5	KARNATAKA	686	328	310	235	328	220	265	701	311	350	196	276	238	232
6	KERALA	574	196	206	175	204	173	185	684	162	186	189	230	196	189
7	MADHYA PRADESH	517	206	250	233	244	242	233	436	160	-	236	230	200	232
8	MAHARASHTRA	248	217	170	187	207	183	189	268	177	185	175	198	166	178
9	ODISHA	531	189	180	187	242	197	190	589	172	164	169	186	203	172
10	PUNJAB	485	269	208	219	270	194	233	351	302	350	189	257	175	224
11	RAJASTHAN	269	250	234	248	245	250	247	303	197	200	199	236	193	202
12	TAMIL NADU	680	200	166	175	188	212	177	542	175	160	167	176	160	168
13	UTTAR PRADESH	219	235		236	250	226	237	186	181	-	213	288	174	212
14	WEST BENGAL	451	150	165	165	180	175	167	588	165	191	202	233	156	197
All States		**5995**	**293**	**187**	**202**	**214**	**210**	**214**	**5751**	**256**	**195**	**196**	**220**	**207**	**206**

Table 68: Reported Cost of AI Service (Buffaloes)

Sl. No	STATE	PROGRAMME							CONTROL						
		Base#	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others	ALL	Base#	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others	ALL
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	420	250		258	263	245	258	363	194	275	238	262	207	238
2	BIHAR	241	319		227	300	237	282	175	343	250	239	350	329	282
3	GUJARAT	857	274	169	188	182	196	215	749	333	206	211	240	246	245
4	HARYANA	545	160	160	161	160	197	161	450	153	160	166	160	158	163
5	KARNATAKA	199	331	350	238		241	275	204	315		200	300	183	237
6	KERALA	18		340	162	168		203	14		160	165	287	150	189
7	MADHYA PRADESH	449	232	300	244	270	224	244	285	170		227	258	223	226
8	MAHARASHTRA	514		170	185	184	204	185	557	176	155	171	185	204	174
9	ODISHA	12			179			179	17			167			167
10	PUNJAB	698	255	167	229	211	234	235	650	336	350	196	289	240	245
11	RAJASTHAN	487	200	175	229	268	226	230	380	158		189	268	196	191
12	TAMIL NADU	76			191	178	167	189	120	160		167	184	160	170
13	UTTAR PRADESH	436	207		242	265	228	241	351	158	300	200	204	188	198
14	WEST BENGAL	66	160	160	163	159	160	161	81	160	287	286	257	350	274
All States		**5018**	**279**	**172**	**215**	**207**	**222**	**223**	**4396**	**320**	**203**	**199**	**216**	**218**	**217**

Table 69: Reported Cost of Natural Service (Cows)

Sl. No	STATE	PROGRAMME							CONTROL						
		Base#	Milk Coop	Traditional Breeders	Private Bull	Govt.	Others	All	Base#	Milk Coop	Traditional Breeders	Private Bull	Govt.	Others	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	99	250	250	246	250	263	248	99	250	250	240	250	250	242
2	BIHAR	83		300	267	225	300	272	84		208	280	300	300	273
3	GUJARAT	133	209	229	249	242	300	245	146	300	245	261	242	294	259
4	HARYANA	23			250	257		252	21			253	283	250	257
5	KARNATAKA	112	300	250	273	300	300	277	133	300	230	275	247	300	274
6	KERALA	265	292	244	244	240	225	244	296	226	223	256	251	296	252
7	MADHYA PRADESH	153	257	264	247	281	282	254	202	258	250	248	254	273	250
8	MAHARASHTRA	100		236	242	253	240	245	128	250	217	236	248	250	238
9	ODISHA	269	244	249	246	248	245	246	249	211	220	232	252	250	233
10	PUNJAB	64		300	300	300	300	300	83		300	300	300	300	300
11	RAJASTHAN	173	233	250	249	248	248	248	192	250	250	252	250	250	251
12	TAMIL NADU	288	201	219	225	245	248	229	285	250	250	230	254	242	236
13	UTTAR PRADESH	36	250	300	252	267	290	264	41		250	230	275	275	238
14	WEST BENGAL	260	300	238	250	249	233	249	212	228	226	261	236	300	251
All States		**2058**	**242**	**243**	**248**	**248**	**285**	**249**	**2171**	**245**	**229**	**251**	**250**	**287**	**250**

Table 70: Reported Cost of Natural Service (Buffaloes)

Sl. No	STATE	PROGRAMME							CONTROL						
		Base#	Milk Coop	Traditional Breeders	Private Bull	Govt.	Others	All	Base#	Milk Coop	Traditional Breeders	Private Bull	Govt.	Others	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	242	255	250	247	250	259	249	249	250	250	249	250	250	249
2	BIHAR	43			254	243	300	263	47		214	282	300	300	274
3	GUJARAT	337	259	222	249	240	288	249	246	300	237	256	257	300	258
4	HARYANA	377	217	222	231	244	225	231	409		248	231	256	233	237
5	KARNATAKA	49		233	271	300	300	276	39		271	271	233	300	272
6	KERALA	4			263			263	2			275			275
7	MADHYA PRADESH	197	300	248	249	261	281	253	123	275	250	251	250	275	253
8	MAHARASHTRA	243	223	238	238	250	246	240	257	234	227	231	243	250	233
9	ODISHA	8	250		230	225		231	11		250	231	230	250	234
10	PUNJAB	153	275	200	251	214	300	246	153	300	300	248	300	300	264
11	RAJASTHAN	182	245	248	248	245	248	247	210	250	250	250	250	250	250
12	TAMIL NADU	31	240	245	249	244	240	246	59	250	234	228	250		230
13	UTTAR PRADESH	194	261	268	246	265	281	252	205	300	250	250	259	277	253
14	WEST BENGAL	45		260	238	267		244	8	300		250	200	300	263
All States		**2105**	**241**	**231**	**245**	**245**	**282**	**246**	**2018**	**264**	**243**	**244**	**253**	**285**	**248**

Table 71: Preference between AI and NS

Sl. No	STATE	COW				BUFFALOES			
		PROGRAMME		CONTROL		PROGRAMME		CONTROL	
		AI	NS	AI	NS	AI	NS	AI	NS
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	99	1	95	5	72	28	69	31
2	BIHAR	90	10	67	33	18	82	13	87
3	GUJARAT	67	33	70	30	50	50	51	49
4	HARYANA	69	31	47	53	22	78	17	83
5	KARNATAKA	96	4	96	4	45	55	45	55
6	KERALA	100	0	100	0	17	83	6	94
7	MADHYA PRADESH	73	27	82	18	10	90	6	94
8	MAHARASHTRA	98	3	95	5	44	56	49	51
9	ODISHA	96	4	96	4	67	33	69	31
10	PUNJAB	86	14	70	30	60	40	57	43
11	RAJASTHAN	60	40	66	34	56	44	49	51
12	TAMIL NADU	98	2	96	4	72	28	32	68
13	UTTAR PRADESH	75	25	75	25	16	84	13	87
14	WEST BENGAL	87	13	82	18	4	96	19	81
All States		**87**	**13**	**84**	**16**	**40**	**60**	**38**	**62**

Table 73: Adoption of Only AI in MAH by Milch Animal Holding Size

Sl No	STATE	PROGRAMME					CONTROL				
		1 Milch Animal	2 Milch Animal	3 Milch Animal	>4 Milch Animal	All	1 Milch Animal	2 Milch Animal	3 Milch Animal	>4 Milch Animal	All
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	62	82	95	98	74	58	82	92	89	69
2	BIHAR	84	96	100	100	89	70	96	100	100	77
3	GUJARAT	63	88	94	96	86	74	93	96	97	90
4	HARYANA	43	85	87	97	84	49	84	89	100	83
5	KARNATAKA	79	97	97	98	91	81	96	98	96	90
6	KERALA	59	88	94	97	76	60	85	94	97	78
7	MADHYA PRADESH	68	88	87	93	84	65	91	95	93	82
8	MAHARASHTRA	70	89	97	97	85	73	91	96	93	87
9	ODISHA	61	84	100	93	74	69	90	98	97	81
10	PUNJAB	58	96	96	100	87	53	98	99	100	84
11	RAJASTHAN	43	85	88	97	73	28	88	96	96	70
12	TAMIL NADU	58	93	96	98	81	62	85	97	92	79
13	UTTAR PRADESH	64	93	98	100	77	53	94	91	100	68
14	WEST BENGAL	60	82	91	78	72	73	84	80	97	79
All States		**64**	**89**	**93**	**96**	**81**	**63**	**89**	**95**	**96**	**80**

Table 74: HH Growing Fodder (%)

S No	STATE	PROGRAMME			CONTROL			End Term		
		Base	Yes	No	Base	Yes	No	Base	Yes	No
1	2	3	4	5	6	7	8	9	10	11
1	ANDHRA PRADESH	459	38	62	420	29	71	879	34	66
2	BIHAR	401	60	40	360	58	42	761	59	41
3	GUJARAT	458	88	12	437	82	18	895	86	15
4	HARYANA	411	82	18	359	74	26	770	78	22
5	KARNATAKA	404	42	58	387	43	57	791	43	58
6	KERALA	360	48	52	385	32	68	745	40	60
7	MADHYA PRADESH	457	57	44	433	23	77	890	40	60
8	MAHARASHTRA	458	99	1	462	100	0	920	99	1
9	ODISHA	401	15	85	371	12	88	772	13	87
10	PUNJAB	342	93	7	283	89	11	625	92	9
11	RAJASTHAN	476	82	18	487	76	24	963	79	21
12	TAMIL NADU	262	52	48	271	21	79	533	36	64
13	UTTAR PRADESH	449	78	22	443	70	30	892	74	26
14	WEST BENGAL	347	1	99	365	0	100	712	1	99
All States		**5685**	**61**	**39**	**5463**	**52**	**48**	**11148**	**57**	**43**

Base- Households having agricultural land

Table 75: Sources of Fodder Seeds

Values as percent of base

Sl No	STATE	PROGRAMME						CONTROL					
		Base*	DCS/ NGC	Private Seed Shop	Fellow Farmers	Seed at own Farm	Others	Base*	DCS/ NGC	Private Seed Shop	Fellow Farmers	Seed at own Farm	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	173	30	79	1	1	0	122	8	93	0	0	2
2	BIHAR	240	50	83	0	1	0	209	22	92	6	1	0
3	GUJARAT	405	31	87	18	20	4	360	15	86	11	11	1
4	HARYANA	336	5	93	2	3	0	264	0	99	2	4	0
5	KARNATAKA	169	57	39	16	15	8	167	29	54	22	16	2
6	KERALA	173	8	91	3	3	1	125	4	96	2	2	0
7	MADHYA PRADESH	258	10	92	4	2	0	99	1	80	8	11	0
8	MAHARASHTRA	454	47	87	16	13	1	460	43	84	17	11	0
9	ODISHA	60	8	12	20	70	7	43	21	19	12	67	0
10	PUNJAB	319	59	55	55	16	0	253	41	58	36	23	0
11	RAJASTHAN	392	5	93	12	23	0	372	2	96	12	29	0
12	TAMIL NADU	136	39	43	20	4	9	58	34	47	24	7	3
13	UTTAR PRADESH	351	21	89	4	3	0	308	4	93	16	9	0
14	WEST BENGAL	4	0	100	0	0	0	0	0	0	0	0	0
All States		**3470**	**29**	**80**	**14**	**11**	**1**	**2840**	**18**	**84**	**14**	**13**	**1**

Base Fodder Growing HH

Table 76: Awareness about Certified / Truthfully Labelled Seeds

Values as percent of base

Sl No	STATE	PROGRAMME				CONTROL			
		Fodder Growing HH		ALL MAH		Fodder Growing HH		ALL MAH	
		Base*	Aware	Base*	Aware	Base*	Aware	Base*	Aware
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	173	65	528	21	122	61	528	14
2	BIHAR	240	65	504	31	209	65	504	27
3	GUJARAT	405	73	528	56	360	81	528	55
4	HARYANA	336	94	480	66	264	97	480	54
5	KARNATAKA	169	92	528	30	167	79	528	25
6	KERALA	173	100	480	36	125	98	480	26
7	MADHYA PRADESH	258	79	528	39	99	46	528	9
8	MAHARASHTRA	454	95	528	81	460	96	528	84
9	ODISHA	60	23	480	3	43	37	480	3
10	PUNJAB	319	97	504	62	253	96	504	48
11	RAJASTHAN	392	78	504	61	372	81	504	60
12	TAMIL NADU	136	27	528	7	58	19	528	2
13	UTTAR PRADESH	351	61	528	41	308	50	528	29
14	WEST BENGAL	4	100	480	1	0	0	480	0
All States		**3470**	**79**	**7128**	**38**	**2840**	**78**	**7128**	**31**

Table 77: Types of Seed Used for Fodder Cultivation

Sl No	STATE	PROGRAMME								CONTROL							
		Fodder Growing HHs				All MAH				Fodder Growing HHs				All MAH			
		Base	Certified Labeled	Truthfully leveled seed	Only Local Seed	Base	Certified Labeled	Truthfully labeled seed	Only Local Seed	Base	Certified Labeled	Truthfully leveled seed	Only Local Seed	Base	Certified Labeled	Truthfully Leveled seed	Only Local Seed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	113	50	50	1	528	6	8	1	75	40	56	4	528	11	11	0
2	BIHAR	155	52	48	0	504	12	14	1	136	46	52	2	504	16	15	0
3	GUJARAT	296	28	68	4	528	15	40	1	291	26	73	1	528	16	38	2
4	HARYANA	316	20	77	3	480	17	36	1	257	31	68	1	480	13	51	2
5	KARNATAKA	156	17	76	6	528	5	17	2	132	21	70	9	528	5	23	2
6	KERALA	173	36	64	0	480	11	14	0	123	44	56	0	480	13	23	0
7	MADHYA PRADESH	204	19	78	3	528	5	3	0	46	61	39	0	528	7	30	1
8	MAHARASHTRA	430	19	78	3	528	23	60	1	443	27	71	1	528	15	64	2
9	ODISHA	14	0	100	0	480	1	2	0	16	31	69	0	480	0	3	0
10	PUNJAB	311	17	81	2	504	11	37	0	243	23	76	1	504	10	50	1
11	RAJASTHAN	305	20	80	0	504	16	44	0	302	27	73	0	504	12	48	0
12	TAMIL NADU	37	19	81	0	528	2	1	0	11	73	27	0	528	1	6	0
13	UTTAR PRADESH	214	41	58	0	528	12	17	0	153	41	58	1	528	17	24	0
14	WEST BENGAL	4	50	50	0	480	0	0	0	0	0	0	0	480	0	0	0
All States		**2728**	**26**	**72**	**2**	**7128**	**10**	**21**	**0**	**2228**	**31**	**67**	**2**	**7128**	**10**	**28**	**1**

Table 78: Purpose of Growing Fodder Crops

Values as percent of base

Sl No	STATE	PROGRAMME					CONTROL				
		Base*	Purpose of Growing Fodder				Base*	Purpose of Growing Fodder			
			For Own Animals	Fodder for Sale	Fodder Seed for Own Use	For Sale of Fodder Seed		For Own Animals	Fodder for Sale	Fodder Seed for Own Use	For Sale of Fodder Seed
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	173	96	14	3	2	122	99	6	0	0
2	BIHAR	240	96	5	0	0	209	98	3	0	4
3	GUJARAT	405	99	17	28	10	360	96	13	14	2
4	HARYANA	336	100	16	26	3	264	99	29	14	2
5	KARNATAKA	169	100	2	21	1	167	100	8	11	1
6	KERALA	173	99	20	7	0	125	100	18	19	5
7	MADHYA PRADESH	258	99	2	24	0	99	99	10	20	1
8	MAHARASHTRA	454	98	1	0	0	460	97	3	1	0
9	ODISHA	60	97	7	88	32	43	93	14	81	19
10	PUNJAB	319	98	3	14	17	253	100	1	7	6
11	RAJASTHAN	392	100	29	21	0	372	99	17	27	1
12	TAMIL NADU	136	100	8	14	1	58	91	7	10	2
13	UTTAR PRADESH	351	99	2	2	0	308	98	2	1	0
14	WEST BENGAL	4	100	100	100	0	0	-	-	-	-
All States		**3470**	**99**	**10**	**15**	**4**	**2840**	**98**	**10**	**11**	**2**

* Base Fodder Growing HH

Table 79: Incidence of Households using Chemical Fertilizers/Pesticides for Fodder Cultivation

Values as percent of base

Sl No	STATE	PROGRAMME			CONTROL		
		Base*	Using Fertilizers	Using Pesticides	Base*	Using Fertilizers	Using Pesticides
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	173	99	14	122	99	20
2	BIHAR	240	100	15	209	96	28
3	GUJARAT	405	99	35	360	97	36
4	HARYANA	336	94	24	264	84	23
5	KARNATAKA	169	91	28	167	85	19
6	KERALA	173	87	23	125	98	22
7	MADHYA PRADESH	258	85	17	99	97	22
8	MAHARASHTRA	454	98	29	460	98	23
9	ODISHA	60	97	23	43	93	21
10	PUNJAB	319	100	21	253	100	18
11	RAJASTHAN	392	98	32	372	95	30
12	TAMIL NADU	136	100	19	58	98	21
13	UTTAR PRADESH	351	95	32	308	97	27
14	WEST BENGAL	4	50	50	0	0	0
All States		**3470**	**96**	**26**	**2840**	**95**	**25**

Table 80: Household Feeding Practice by Group

Values as percent of base

SI	STATE	PROGRAMME							CONTROL						
		Base*	Feeding for Green & Dry Fodder			Feeding for Concentrates			Base*	Feeding for Green & Dry Fodder			Feeding for Concentrates		
			Group Feeding	Each animal Separately	Individual Feeding for In-Milk & Pregnant Animals	Group Feeding	Each animal Separately	Individual Feeding for In-Milk & Pregnant Animals		Group Feeding	Each animal Separately	Individual Feeding for In-Milk & Pregnant Animals	Group Feeding	Each animal Separately	Individual Feeding for In-Milk & Pregnant Animals
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	528	60	34	7	42	50	7	528	63	28	9	48	44	8
2	BIHAR	504	33	61	6	32	61	7	504	29	68	3	27	65	9
3	GUJARAT	528	27	61	12	22	53	25	528	22	75	3	12	75	12
4	HARYANA	480	15	85	0	5	95	0	480	5	94	2	1	89	10
5	KARNATAKA	528	57	39	5	47	45	8	528	53	44	3	41	54	5
6	KERALA	480	22	69	9	19	71	10	480	28	70	1	23	76	1
7	MADHYA PRADESH	528	13	81	7	9	75	15	528	35	61	4	34	61	5
8	MAHARASHTRA	528	19	76	5	1	71	28	528	19	72	10	1	73	26
9	ODISHA	480	9	90	1	10	89	1	480	12	87	1	13	86	2
10	PUNJAB	504	35	65	0	15	85	0	504	19	81	0	11	88	1
11	RAJASTHAN	504	16	83	1	9	90	1	504	22	77	1	10	89	1
12	TAMIL NADU	528	27	63	10	27	61	13	528	42	35	23	41	41	18
13	UTTAR PRADESH	528	13	87	1	11	86	3	528	12	87	1	9	85	6
14	WEST BENGAL	480	16	83	1	16	83	1	480	39	60	1	39	60	1
All States		7128	**26**	**69**	**5**	**19**	**72**	**9**	7128	**29**	**67**	**4**	**22**	**70**	**8**

Base: All MAH

Table 81: Incidence of MAH Sending Animals for Grazing

Sl No	STATE	PROGRAMME			CONTROL		
		Base	HHs Sending Animals for Grazing		Base	HHs Sending Animals for Grazing	
			No.	Percent		No.	Percent
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	528	409	77	528	392	74
2	BIHAR	504	29	6	504	56	11
3	GUJARAT	528	217	41	528	201	38
4	HARYANA	480	1	0	480		0
5	KARNATAKA	528	397	75	528	370	70
6	KERALA	480	108	23	480	119	25
7	MADHYA PRADESH	528	75	14	528	116	22
8	MAHARASHTRA	528	4	1	528	5	1
9	ODISHA	480	296	62	480	297	62
10	PUNJAB	504	8	2	504	6	1
11	RAJASTHAN	504	31	6	504	40	8
12	TAMIL NADU	528	191	36	528	289	55
13	UTTAR PRADESH	528	60	11	528	34	6
14	WEST BENGAL	480	35	7	480	33	7
All States		**7128**	**1861**	**26**	**7128**	**1958**	**27**

Table 82: Duration of Grazing

Values as percent of base

Sl No	STATE	PROGRAMME						CONTROL					
		Base#	0 Month - 3 Months	4 Months - 6 Months	7 Months - 9 Months	10 Months - 12 Months	Total	Base#	0 Month - 3 Months	4 Months - 6 Months	7 Months - 9 Months	10 Months - 12 Months	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	409	11	19	14	56	100	392	13	23	15	49	100
2	BIHAR	29	21	31	24	24	100	56	30	61	4	5	0
3	GUJARAT	217	7	24	26	43	100	201	1	11	29	59	100
4	HARYANA	1	100	0	0	0	100	0	0	0	0	0	100
5	KARNATAKA	397	30	23	28	20	100	370	22	34	31	13	100
6	KERALA	108	4	68	29	0	100	119	1	48	51	0	100
7	MADHYA PRADESH	75	17	11	37	35	100	116	76	9	2	13	100
8	MAHARASHTRA	4	25	25	25	25	100	5	20	40	40	0	100
9	ODISHA	296	12	32	28	28	100	297	9	20	38	33	100
10	PUNJAB	8	100	0	0	0	100	6	100	0	0	0	100
11	RAJASTHAN	31	16	35	26	23	100	40	5	33	28	35	100
12	TAMIL NADU	191	6	3	17	74	100	289	3	0	6	91	100
13	UTTAR PRADESH	60	37	22	18	23	100	34	24	53	6	18	100
14	WEST BENGAL	35	43	31	20	6	100	33	12	45	42	0	100
All States		**1861**	**16**	**24**	**23**	**36**	**100**	**1958**	**15**	**23**	**23**	**39**	**100**

Base: Number of HHs sending animals for grazing

Table 83: Regular Grazing by Animal Type

Values as percent of base		PROGRAMME							CONTROL						
Sl No	STATE	Base*	All types	Growing and Young Animal s	Pregnant Animals	In-milk Animals	Adult female dry	Any others	Base*	All types	Growing and Young Animals	Pregnant Animals	In-milk Animals	Adult female dry	Any others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	409	97	97	11	97	97	100	392	93	89	7	89	89	95
2	BIHAR	29	97	45	10	52	48	45	56	64	16	16	29	27	4
3	GUJARAT	217	71	14	11	28	16	29	201	69	9	6	18	13	24
4	HARYANA	1	100	100	0	100	100	100	0	0	0	0	0	0	0
5	KARNATAKA	397	100	100	5	100	100	100	370	100	99	2	100	100	100
6	KERALA	108	100	31	81	35	100	100	119	99	10	70	8	98	97
7	MADHYA PRADESH	75	100	99	0	97	97	97	116	100	99	3	100	100	100
8	MAHARASHTRA	4	100	50	0	50	50	50	5	60	40	0	40	40	40
9	ODISHA	296	90	5	3	10	4	4	297	94	4	4	14	3	3
10	PUNJAB	8	88	75	0	88	75	75	6	100	100	0	100	100	100
11	RAJASTHAN	31	100	39	0	39	39	39	40	98	55	0	60	58	60
12	TAMIL NADU	191	96	97	17	92	87	84	289	96	91	19	91	87	86
13	UTTAR PRADESH	60	97	32	2	32	32	33	34	100	21	0	21	21	21
14	WEST BENGAL	35	86	54	0	51	54	54	33	79	12	0	6	9	6
All States		**1861**	**93**	**65**	**12**	**67**	**68**	**69**	**1958**	**92**	**61**	**11**	**63**	**66**	**67**

All Type - z-value = 1.257, p-value = 0.20872 (Proportions are not significantly different)

Table 84: Regular Grazing by Animal Category

Values as percent of base

Sl No	STATE	PROGRAMME				CONTROL			
		Base*	Indigenous Cows	Crossbred Cows	Buffalo	Base*	Indigenous Cows	Crossbred Cows	Buffalo
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	409	13	36	75	392	14	28	77
2	BIHAR	29	34	17	90	56	41	7	71
3	GUJARAT	217	51	6	92	201	59	8	84
4	HARYANA	1	0	100	100	0	0	0	0
5	KARNATAKA	397	26	68	55	370	28	69	51
6	KERALA	108	56	53	11	119	50	51	8
7	MADHYA PRADESH	75	52	12	75	116	74	29	46
8	MAHARASHTRA	4	25	0	100	5	0	20	100
9	ODISHA	296	86	63	2	297	90	58	1
10	PUNJAB	8	38	50	75	6	17	33	67
11	RAJASTHAN	31	65	16	61	40	80	33	33
12	TAMIL NADU	191	36	86	7	289	31	75	34
13	UTTAR PRADESH	60	50	15	93	34	41	18	91
14	WEST BENGAL	35	63	43	34	33	48	45	27
All States		**1861**	**42**	**48**	**50**	**1958**	**44**	**46**	**47**

Table 85: Place for Regular Grazing

Sl No	STATE	PROGRAMME					CONTROL				
		Base*	Common Grazing land	Own grazing Land	Other uncultivated Land	Others	* Base*	Common Grazing land	Own grazing Land	Other uncultivated Land	Others
1	2	3	4	5	6	7	8	9	10	11	12
1	ANDHRA PRADESH	409	78	41	80	7	392	72	34	84	4
2	BIHAR	29	41	10	72	0	56	36	4	64	5
3	GUJARAT	217	94	8	3	13	201	92	13	3	13
4	HARYANA	1	100	0	0	0	0	0	0	0	0
5	KARNATAKA	397	95	53	50	7	370	100	49	51	1
6	KERALA	108	67	5	100	6	119	52	0	100	8
7	MADHYA PRADESH	75	100	23	35	3	116	99	7	14	2
8	MAHARASHTRA	4	100	50	50	0	5	60	20	0	20
9	ODISHA	296	91	18	34	7	297	90	15	40	6
10	PUNJAB	8	75	25	0	0	6	100	0	17	0
11	RAJASTHAN	31	13	39	61	13	40	40	0	58	15
12	TAMIL NADU	191	96	55	51	13	289	98	37	34	21
13	UTTAR PRADESH	60	57	12	43	3	34	56	15	47	0
14	WEST BENGAL	35	80	14	34	49	33	97	0	55	55
All States		**1861**	**85**	**33**	**51**	**9**	**1958**	**85**	**26**	**49**	**8**

Common Grazing Land - z-value = 1.764, p-value = 0.07787 (Proportions significantly different at 90%)

Table 86: Awareness on Zoonotic Diseases

Values as percent of base

Sl. No	STATE	PROGRAMME		CONTROL	
		Base#	Percent	Base#	Percent
1	2	3	4	5	6
1	ANDHRA PRADESH	528	9	528	11
2	BIHAR	504	1	504	3
3	GUJARAT	528	15	528	9
4	HARYANA	480	8	480	9
5	KARNATAKA	528	27	528	31
6	KERALA	480	5	480	8
7	MADHYA PRADESH	528	1	528	3
8	MAHARASHTRA	528	5	528	4
9	ODISHA	480	1	480	3
10	PUNJAB	504	8	504	3
11	RAJASTHAN	504	2	504	2
12	TAMIL NADU	528	23	528	22
13	UTTAR PRADESH	528	8	528	7
14	WEST BENGAL	480	4	480	3
All States		**7128**	**9**	**7128**	**8**

Base: All MAH

Table 87: Practice of Boiling Milk Before Consuming

Values as percent of base					
Sl. No	STATE	PROGRAMME		CONTROL	
		Base#	Percent	Base#	Percent
1	2	3	4	5	6
1	ANDHRA PRADESH	528	99	528	100
2	BIHAR	504	99	504	99
3	GUJARAT	528	93	528	93
4	HARYANA	480	100	480	100
5	KARNATAKA	528	95	528	93
6	KERALA	480	99	480	100
7	MADHYA PRADESH	528	100	528	100
8	MAHARASHTRA	528	94	528	93
9	ODISHA	480	99	480	98
10	PUNJAB	504	100	504	100
11	RAJASTHAN	504	100	504	100
12	TAMIL NADU	528	97	528	99
13	UTTAR PRADESH	528	99	528	99
14	WEST BENGAL	480	99	480	100
All States		7128	98	7128	98

Base: All MAH

Table 88: Time Lag between Milking and Milk Selling/ Pouring Time: Morning

Values as percent of base

Sl. No	STATE	PROGRAMME							CONTROL						
			Time Lag in Minutes							Time Lag in Minutes					
		Base#	1 to 15	16 to 30	31 to 60	More than 1 hour	More than 2 hours	All	Base#	1 to 15	16 to 30	31 to 60	More than 1 hour	More than 2 hours	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	528	4	33	56	8	0	100	528	3	32	55	9	1	100
2	BIHAR	504	22	26	48	3	0	100	504	7	35	57	2	0	100
3	GUJARAT	528	3	46	39	11	1	100	528	5	51	35	9	0	100
4	HARYANA	480	4	43	42	11	1	100	480	1	41	44	13	0	100
5	KARNATAKA	528	2	45	51	1	0	100	528	4	50	45	0	0	100
6	KERALA	480	34	25	38	3	0	100	480	33	33	28	5	0	100
7	MADHYA PRADESH	528	4	32	53	9	2	100	528	3	41	53	3	0	100
8	MAHARASHTRA	528	0	23	73	4	0	100	528	0	27	69	4	0	100
9	ODISHA	480	1	20	70	8	1	100	480	4	27	62	6	1	100
10	PUNJAB	504	6	14	35	40	5	100	504	7	23	48	19	3	100
11	RAJASTHAN	504	2	45	35	16	1	100	504	3	40	36	20	1	100
12	TAMIL NADU	528	2	28	68	2	0	100	528	10	26	60	4	0	100
13	UTTAR PRADESH	528	7	47	43	2	1	100	528	7	52	39	2	0	100
14	WEST BENGAL	480	1	15	77	7	0	100	480	3	14	80	3	0	100
All States		**7128**	**6**	**32**	**52**	**9**	**1**	**100**	**7128**	**6**	**35**	**51**	**7**	**1**	**100**

Table 89: Time Lag between Milking and Milk Selling/ Pouring Time: Evening

Values as percent of base

Sl. No	STATE	PROGRAMME							CONTROL						
		Time Lag in Minutes							Time Lag in Minutes						
		Base#	1 to 15	16 to 30	31 to 60	More than 1 hour	More than 2 hours	All	Base#	1 to 15	16 to 30	31 to 60	More than 1 hour	More than 2 hours	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ANDHRA PRADESH	528	2	33	56	9	1	100	528	3	46	37	13	1	100
2	BIHAR	504	4	22	74	1	0	100	504	6	37	55	1	0	100
3	GUJARAT	528	4	40	43	12	1	100	528	5	44	38	13	1	100
4	HARYANA	480	2	28	61	8	0	100	480	2	31	57	9	0	100
5	KARNATAKA	528	2	50	47	1	0	100	528	2	58	39	1	0	100
6	KERALA	480	26	30	34	10	0	100	480	30	34	24	12	0	100
7	MADHYA PRADESH	528	3	39	56	3	0	100	528	3	50	43	3	0	100
8	MAHARASHTRA	528	0	23	72	4	0	100	528	0	24	71	4	0	100
9	ODISHA	480	1	12	83	4	0	100	480	1	16	76	6	1	100
10	PUNJAB	504	5	21	59	13	1	100	504	6	24	54	15	1	100
11	RAJASTHAN	504	1	25	68	4	1	100	504	1	27	66	4	1	100
12	TAMIL NADU	528	12	33	51	3	0	100	528	14	39	42	4	0	100
13	UTTAR PRADESH	528	2	25	72	1	1	100	528	2	34	61	1	1	100
14	WEST BENGAL	480	2	12	85	1	0	100	480	3	18	78	2	0	100
All States		**7128**	**5**	**28**	**60**	**7**	**1**	100	**7128**	**5**	**28**	**61**	**5**	**0**	**100**

Table 90: Main Sources of Drinking Water for Bovine Animals during Rainy Season

Values as percent of base																	
Sl. No	STATE	PROGRAMME								CONTROL							
		Base#	Piped ater supply	Bore Well/ Pumping Set	Hand Pump	Well	Pond/River	Canal	Other	Base#	Piped Water supply	Bore Well/ Pumping Set	Hand Pump	Well	Pond/River	Canal	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	528	37	20	41	8	5	9	1	528	40	17	43	4	9	9	3
2	BIHAR	504	2	1	92	2	5	0	0	504	7	3	88	1	13	1	0
3	GUJARAT	528	38	48	26	16	26	8	5	528	40	52	24	23	18	5	3
4	HARYANA	480	22	61	2	0	6	21	0	480	27	61	10	0	1	4	0
5	KARNATAKA	528	63	28	0	0	13	4	0	528	60	35	0	0	7	5	0
6	KERALA	480	47	7	2	73	5	5	1	480	59	5	5	73	8	7	0
7	MADHYA PRADESH	528	9	51	37	23	3	0	0	528	4	26	43	20	10	0	0
8	MAHARASHTRA	528	65	8	9	6	0	0	0	528	73	7	10	2	1	0	0
9	ODISHA	480	10	47	20	19	2	2	0	480	3	53	22	20	1	2	0
10	PUNJAB	504	25	62	26	0	0	0	0	504	22	59	21	1	0	0	0
11	RAJASTHAN	504	11	84	11	9	5	1	0	504	16	80	13	13	3	4	4
12	TAMIL NADU	528	26	37	3	20	4	1	0	528	26	37	7	20	7	8	1
13	UTTAR PRADESH	528	2	10	86	1	1	0	0	528	3	4	91	2	1	1	0
14	WEST BENGAL	480	17	6	54	17	4	1	0	480	9	7	68	13	4	1	0
All States		**7128**	**27**	**34**	**29**	**14**	**6**	**4**	**1**	**7128**	**28**	**32**	**32**	**14**	**6**	**3**	**1**

Table 91: Main Sources of Drinking Water for Bovine Animals during Summer

Values as percent of base

Sl. No	STATE	PROGRAMME								CONTROL							
		Base#	Piped Water supply	Bore Well/ Pumping Set	Hand Pump	Well	Pond/River	Canal	Other	Base#	Piped Water supply	Bore Well/ Pumping Set	Hand Pump	Well	Pond/River	Canal	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	528	34	23	46	9	5	6	1	528	40	20	47	4	6	6	1
2	BIHAR	504	0	3	93	2	5	0	0	504	0	10	95	1	13	1	0
3	GUJARAT	528	40	42	3	18	4	5	4	528	39	33	3	23	7	5	3
4	HARYANA	480	24	90	12	0	1	17	0	480	20	94	29	0	0	3	0
5	KARNATAKA	528	57	41	4	0	9	2	0	528	54	44	10	0	2	5	0
6	KERALA	480	44	17	12	69	1	2	1	480	59	15	15	68	2	1	0
7	MADHYA PRADESH	528	9	52	38	23	2	0	0	528	4	26	44	20	9	0	0
8	MAHARASHTRA	528	64	9	12	5	0	0	1	528	77	7	11	3	0	0	4
9	ODISHA	480	7	50	28	17	2	0	0	480	3	53	24	20	1	2	0
10	PUNJAB	504	24	63	40	0	0	0	0	504	20	60	29	1	0	0	0
11	RAJASTHAN	504	11	85	12	9	4	0	0	504	14	81	13	14	3	5	2
12	TAMIL NADU	528	21	65	8	20	3	1	0	528	22	44	12	20	8	8	1
13	UTTAR PRADESH	528	0	11	87	1	2	0	0	528	0	7	93	2	1	1	0
14	WEST BENGAL	480	18	28	55	16	3	0	0	480	8	38	70	12	3	0	0
All States		**7128**	**25**	**41**	**32**	**13**	**3**	**2**	**1**	**7128**	**26**	**38**	**35**	**13**	**4**	**3**	**1**

Table 92: Main Sources of Drinking Water for Bovine Animals during Winter

Values as percent of base

Sl. No	STATE	PROGRAMME								CONTROL							
		Base#	Piped Water supply	Bore Well/ Pumping Set	Hand Pump	Well	Pond/River	Canal	Other	Base#	Piped Water supply	Bore Well/ Pumping Set	Hand Pump	Well	Pond/River	Canal	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	528	39	24	42	9	5	7	1	528	46	20	44	3	8	7	1
2	BIHAR	504	2	3	91	2	5	0	0	504	7	10	88	1	12	0	0
3	GUJARAT	528	56	34	1	12	3	5	3	528	50	27	2	20	6	4	3
4	HARYANA	480	42	58	31	0	1	17	0	480	38	68	49	0	0	1	0
5	KARNATAKA	528	66	32	0	0	6	3	0	528	63	38	0	0	2	5	0
6	KERALA	480	51	17	3	73	5	5	1	480	64	11	7	73	9	7	0
7	MADHYA PRADESH	528	10	52	36	23	2	0	0	528	5	27	44	20	9	0	0
8	MAHARASHTRA	528	66	9	10	5	0	0	0	528	78	8	10	3	0	0	0
9	ODISHA	480	11	55	19	16	1	1	0	480	4	54	23	19	1	2	0
10	PUNJAB	504	28	60	25	0	0	0	0	504	24	59	20	1	0	0	0
11	RAJASTHAN	504	12	85	11	9	3	0	0	504	18	79	15	10	5	2	4
12	TAMIL NADU	528	28	66	3	20	4	1	0	528	27	44	9	21	9	9	2
13	UTTAR PRADESH	528	2	11	87	0	1	0	0	528	3	7	92	2	0	1	0
14	WEST BENGAL	480	18	6	55	17	3	0	0	480	9	8	69	13	3	0	0
All States		**7128**	**31**	**37**	**30**	**13**	**3**	**3**	**0**	**7128**	**31**	**33**	**34**	**13**	**5**	**3**	**1**

 # Base: All MAH **Note**: Multiple response question

Table 93: Methods of Dung Storage

Sl. No	STATE	PROGRAMME						CONTROL					
		Base#	Methods of Dung Storage					Base#	Methods of Dung Storage				
			Manure Pit/Compost Pit	Open Storage	Bio-gas Plant	Slurry pit	Others		Manure Pit/compost Pit	Open Storage	Bio-gas Plant	Slurry pit	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	528	33	68	0	0	0	528	40	59	0	0	0
2	BIHAR	504	16	82	1	1	0	504	9	91	0	0	0
3	GUJARAT	528	54	58	6	8	5	528	45	57	4	1	3
4	HARYANA	480	41	77	1	3	0	480	30	78	0	1	0
5	KARNATAKA	528	89	8	0	1	1	528	90	8	2	2	3
6	KERALA	480	29	45	6	12	20	480	15	57	8	12	27
7	MADHYA PRADESH	528	46	62	3	2	0	528	35	60	2	2	0
8	MAHARASHTRA	528	85	1	0	0	0	528	96	2	0	0	0
9	ODISHA	480	36	68	1	3	0	480	38	69	1	2	2
10	PUNJAB	504	32	68	0	2	0	504	18	79	0	4	0
11	RAJASTHAN	504	29	72	1	0	0	504	20	78	2	0	0
12	TAMIL NADU	528	34	61	0	0	2	528	32	37	1	0	2
13	UTTAR PRADESH	528	30	70	0	0	1	528	18	84	0	1	1
14	WEST BENGAL	480	14	74	1	11	1	480	11	85	0	4	1
All States		**7128**	**41**	**58**	**1**	**3**	**2**	**7128**	**36**	**60**	**1**	**2**	**3**

#Base: All MAH Note: Total may not upto 100 Percent as it is a multiple response question

Table 94: Uses of Dung

Sl. No	STATE	PROGRAMME						CONTROL					
		Base#	Different usage of Dung					Base#	Different usage of Dung				
			Manure for Agricultural crop	Manure for Fodder crop	Biogas Plant	Dung cake for Fuel in the HH	Others		Manure for Agricultural crop	Manure for Fodder crop	Biogas Plant	Dung cake for Fuel in the HH	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	528	88	12	0	8	2	528	89	9	1	11	2
2	BIHAR	504	71	42	3	87	1	504	63	14	5	94	1
3	GUJARAT	528	86	44	8	30	7	528	86	34	6	31	6
4	HARYANA	480	94	80	5	95	2	480	95	82	0	98	1
5	KARNATAKA	528	88	18	0	2	10	528	91	19	1	3	8
6	KERALA	480	53	6	1	2	42	480	36	8	1	4	51
7	MADHYA PRADESH	528	83	50	7	98	0	528	71	14	3	97	0
8	MAHARASHTRA	528	84	0	1	30	0	528	93	0	0	27	3
9	ODISHA	480	85	8	1	85	2	480	87	3	3	82	3
10	PUNJAB	504	96	66	2	95	0	504	94	37	2	96	1
11	RAJASTHAN	504	90	63	9	92	2	504	93	57	4	93	1
12	TAMIL NADU	528	73	13	0	8	4	528	52	9	0	10	3
13	UTTAR PRADESH	528	74	16	9	90	1	528	70	11	5	95	1
14	WEST BENGAL	480	73	1	5	91	2	480	85	0	4	94	1
All States		**7128**	**81**	**30**	**4**	**57**	**5**	**7128**	**79**	**21**	**3**	**59**	**6**

Table 95: Type of Drainage used in Animal Shed

Sl. No	STATE	PROGRAMME						CONTROL					
		Base#	Pucca Cemented	Brick Lined	Kachcha	No Drainage	Other	Base#	Pucca Cemented	Brick Lined	Kachcha	No Drainage	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	ANDHRA PRADESH	528	2	5	8	85	0	528	3	3	9	84	0
2	BIHAR	504	4	13	12	71	0	504	2	6	4	88	0
3	GUJARAT	528	10	10	55	24	0	528	10	10	58	22	0
4	HARYANA	480	12	11	31	45	1	480	6	21	35	38	0
5	KARNATAKA	528	28	27	29	1	15	528	20	33	34	2	11
6	KERALA	480	64	9	22	1	4	480	72	3	20	0	5
7	MADHYA PRADESH	528	12	20	41	23	3	528	6	29	44	18	4
8	MAHARASHTRA	528	9	48	43	0	0	528	10	51	38	0	0
9	ODISHA	480	28	23	38	10	0	480	25	21	44	10	0
10	PUNJAB	504	38	57	5	1	0	504	47	45	6	3	0
11	RAJASTHAN	504	1	15	50	34	0	504	2	10	51	38	0
12	TAMIL NADU	528	45	20	14	13	7	528	23	43	11	13	8
13	UTTAR PRADESH	528	3	16	52	29	0	528	2	17	43	39	0
14	WEST BENGAL	480	23	26	23	28	0	480	8	24	32	35	0
All States		**7128**	**20**	**21**	**30**	**26**	**2**	**7128**	**17**	**23**	**31**	**28**	**2**

Table 96: Disposal of Waste Water

Sl No	STATE	PROGRAMME								CONTROL							
		Base	Drainage Leading to Pit	Drainage leading to Biogas Plant	Drainage leading to open area	Drainage leading to agricultural field	Drainage leading to sewerage	Fodder pump	Other	Base	Drainage Leading to Pit	Drainage leading to Biogas Plant	Drainage leading to open area	Drainage leading to agricultural field	Drainage leading to sewerage	Fodder pump	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	ANDHRA PRADESH	79	0	0	30	20	46	5	0	83	0	0	24	18	57	0	0
2	BIHAR	144	11	10	51	10	1	0	0	61	7	3	64	8	0	3	0
3	GUJARAT	401	21	3	56	12	18	1	0	412	22	2	58	12	12	1	0
4	HARYANA	264	41	3	32	3	22	1	0	298	48	1	42	3	7	1	0
5	KARNATAKA	524	44	2	16	17	22	3	0	519	42	1	16	20	26	5	0
6	KERALA	476	46	4	10	1	7	0	0	480	24	5	14	2	9	0	0
7	MADHYA PRADESH	405	9	2	65	7	31	1	0	433	15	1	70	4	13	0	0
8	MAHARASHTRA	527	83	0	2	4	2	0	0	528	94	0	1	2	2	0	0
9	ODISHA	432	69	1	18	51	5	7	0	431	65	1	19	20	5	11	0
10	PUNJAB	500	68	0	16	2	14	0	0	489	45	0	30	5	20	0	0
11	RAJASTHAN	335	25	1	71	10	1	0	0	313	11	5	81	9	1	0	0
12	TAMIL NADU	457	57	1	16	5	2	0	0	457	26	1	28	3	0	0	0
13	UTTAR PRADESH	377	60	4	20	16	8	2	0	324	59	2	24	23	6	4	0
14	WEST BENGAL	346	50	11	14	23	11	9	0	310	32	16	40	25	8	5	0
All States		**5267**	**48**	**3**	**27**	**12**	**12**	**2**	**0**	**5138**	**40**	**3**	**33**	**10**	**10**	**2**	**0**

Table 97: Dairying as a Most Important Source of Income (In %)

Sl No	STATE	PROGRAMME		CONTORL	
		Base#	Most Important	Base#	Most Important
1	2	3	4	5	6
1	ANDHRA PRADESH	528	2	528	5
2	BIHAR	504	12	504	9
3	GUJARAT	528	15	528	7
4	HARYANA	480	16	480	5
5	KARNATAKA	528	10	528	7
6	KERALA	480	19	480	18
7	MADHYA PRADESH	528	3	528	5
8	MAHARASHTRA	528	18	528	20
9	ODISHA	480	11	480	9
10	PUNJAB	504	20	504	14
11	RAJASTHAN	504	9	504	4
12	TAMIL NADU	528	12	528	5
13	UTTAR PRADESH	528	7	528	3
14	WEST BENGAL	480	5	480	4
All States		**7128**	**11**	**7128**	**8**

Table 98: Dairying as the 2nd most important source of Income (In %)

SI No	STATE	Base#	PROGRAMME	CONTORL	
			most imp 2		most imp
1	2	3	4	5	6
1	ANDHRA PRADESH	528	34	528	32
2	BIHAR	504	20	504	14
3	GUJARAT	528	19	528	22
4	HARYANA	480	15	480	8
5	KARNATAKA	528	28	528	31
6	KERALA	480	7	480	2
7	MADHYA PRADESH	528	28	528	29
8	MAHARASHTRA	528	36	528	36
9	ODISHA	480	23	480	20
10	PUNJAB	504	30	504	30
11	RAJASTHAN	504	13	504	13
12	TAMIL NADU	528	41	528	40
13	UTTAR PRADESH	528	3	528	5
14	WEST BENGAL	480	22	480	28
All States		**7128**	**23**	**7128**	**23**

Table 99: Time Spent in Dairying by Activity: Overall (In %)

Values as percent of Total Spent on Routine Dairying Activities																							
Sl No	STATE	PROGRAMME											CONTROL										
		Base#	Feeding animals	Milking Animals	Washing Animals	Marketing Milk	Fodder Collection	Chaffing of fodder	Open grazing of animals	Cleaning Shed	Dung Collection / Cake Preparation	Other	Base#	Feeding animals	Milking Animals	Washing Animals	Marketing Milk	Fodder Collection	Chaffing of fodder	Open grazing of animals	Cleaning Shed	Dung Collection / Cake Preparation	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	ANDHRA PRADESH	528	15	7	11	3	22	8	9	9	13	2	528	16	8	14	3	19	9	10	9	9	2
2	BIHAR	504	26	8	16	4	19	9	1	8	8	1	504	26	7	17	2	18	9	2	10	8	1
3	GUJARAT	528	17	11	14	4	20	8	5	9	10	2	528	16	9	12	4	23	8	5	9	12	2
4	HARYANA	480	21	9	16	5	20	10	0	8	9	2	480	19	10	14	4	21	10	0	9	10	3
5	KARNATAKA	528	22	9	15	4	16	9	8	9	8	1	528	22	8	13	4	18	8	10	7	8	2
6	KERALA	480	17	11	15	4	20	9	3	10	9	2	480	18	10	14	4	21	7	3	10	12	1
7	MADHYA PRADESH	528	22	8	14	5	18	10	2	10	9	2	528	26	10	17	4	16	7	3	10	8	0
8	MAHARASHTRA	528	24	11	17	6	17	8	0	9	7	1	528	25	11	15	5	18	9	0	8	8	1
9	ODISHA	480	19	7	14	3	20	10	9	7	9	3	480	16	8	14	2	21	9	8	9	10	2
10	PUNJAB	504	17	11	16	4	20	10	0	10	10	2	504	19	13	15	5	19	5	0	11	11	1
11	RAJASTHAN	504	21	11	15	6	17	8	1	11	8	2	504	24	10	15	5	18	9	1	8	8	1
12	TAMIL NADU	528	22	8	15	3	19	9	5	8	9	2	528	19	9	13	4	19	10	8	7	9	2
13	UTTAR PRADESH	528	18	9	15	3	22	9	1	9	10	3	528	17	8	13	2	24	10	1	10	14	2
14	WEST BENGAL	480	17	9	14	2	24	8	1	11	14	0	480	18	8	14	3	22	8	2	11	11	2
All States		**7128**	**20**	**9**	**15**	**4**	**20**	**9**	**3**	**9**	**9**	**2**	**7128**	**20**	**9**	**14**	**4**	**20**	**8**	**4**	**9**	**10**	**2**

Table 100: Time Spent on Dairying Activities By Female family Member (In %)

Sl No	STATE	TIME SPENT BY FEMALE PROGRAMME											TIME SPENT BY FEMALE CONTROL										
		Feeding animals	Milking Animals	Washing Animals	Marketing Milk	Fodder Collection	Chaffing of fodder	Open grazing of animals	Cleaning Shed	Dung Collection / Cake Preparation	Other	Overall	Feeding animals	Milking Animals	Washing Animals	Marketing Milk	Fodder Collection	Chaffing of fodder	Open grazing of animals	Cleaning Shed	Dung Collection / Cake Preparation	Other	Overall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	ANDHRA PRADESH	72	50	57	23	60	54	3	82	96	79	61	79	79	67	13	53	50	3	79	95	82	61
2	BIHAR	75	66	56	11	46	44	0	77	94	89	62	64	57	36	14	34	35	1	68	94	95	52
3	GUJARAT	67	53	55	19	52	53	3	83	96	75	59	74	54	63	24	61	55	5	81	95	75	64
4	HARYANA	57	42	36	17	44	39	0	72	96	76	51	63	49	55	19	39	37	0	83	92	74	56
5	KARNATAKA	64	56	40	14	34	36	0	70	93	92	48	63	43	52	15	51	46	2	80	93	71	52
6	KERALA	81	85	64	10	51	52	1	80	96	85	66	78	64	63	17	64	64	6	82	98	97	69
7	MADHYA PRADESH	81	76	67	15	52	52	0	78	93	88	67	64	44	28	6	35	31	1	65	96	84	48
8	MAHARASHTRA	69	53	41	8	40	37	0	66	95	90	53	65	62	45	17	35	39	0	79	93	84	55
9	ODISHA	59	54	45	16	34	35	1	82	93	78	48	68	54	57	19	55	52	4	80	94	71	59
10	PUNJAB	78	78	65	12	57	53	0	85	98	98	69	78	63	51	13	60	66	0	71	97	76	66
11	RAJASTHAN	84	68	57	16	63	64	5	78	97	88	69	72	61	53	10	43	41	0	74	92	89	58
12	TAMIL NADU	59	36	45	23	52	42	8	72	94	73	53	57	49	41	18	33	32	2	80	93	77	47
13	UTTAR PRADESH	64	49	59	17	46	43	3	82	94	72	59	67	54	53	20	59	54	0	82	96	75	65
14	WEST BENGAL	74	70	64	26	61	60	0	87	99	100	71	82	78	70	24	72	69	13	81	97	88	76
All States		**70**	**60**	**54**	**16**	**50**	**48**	**2**	**79**	**96**	**81**	**60**	**69**	**58**	**52**	**16**	**51**	**47**	**3**	**78**	**95**	**79**	**59**

Table 101: Time Spent on Dairying Activities By Male Family Member (In %)

Sl No	STATE	TIME SEPNT BY MALE PROGRAMME											TIME SEPNT BY MALE CONTROL										
		Feeding animals	Milking Animals	Washing Animals	Marketing Milk	Fodder Collection	Chaffing of fodder	Open grazing of animals	Cleaning Shed	Dung Collection / Cake Preparation	Other	Overall	Feeding animals	Milking Animals	Washing Animals	Marketing Milk	Fodder Collection	Chaffing of fodder	Open grazing of animals	Cleaning Shed	Dung Collection / Cake Preparation	Other	Overall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	ANDHRA PRADESH	27	46	41	77	40	45	97	18	3	16	38	18	21	32	86	46	48	97	20	5	17	37
2	BIHAR	23	22	37	84	52	52	81	19	4	5	34	29	37	57	84	63	61	97	27	4	5	43
3	GUJARAT	30	43	42	80	46	44	97	17	4	25	39	25	43	37	76	38	44	95	19	4	19	35
4	HARYANA	36	52	59	82	53	58	100	24	3	19	45	33	46	42	80	59	59	0	16	8	26	41
5	KARNATAKA	29	38	53	85	62	60	93	26	5	8	47	34	50	44	81	46	48	98	16	6	27	45
6	KERALA	17	15	34	89	47	46	99	19	4	14	33	21	30	33	82	35	36	92	17	1	0	29
7	MADHYA PRADESH	19	23	31	85	47	47	100	21	6	11	32	31	43	61	90	60	64	75	29	1	1	45
8	MAHARASHTRA	28	35	51	87	57	59	100	29	3	1	41	28	33	49	82	60	57	100	18	6	16	40
9	ODISHA	34	40	50	82	62	61	99	16	6	17	48	29	42	41	81	44	46	96	19	6	29	40
10	PUNJAB	20	21	32	88	42	46	100	14	2	1	29	21	30	45	86	38	33	91	28	2	24	32
11	RAJASTHAN	15	28	40	84	36	35	93	21	2	12	30	26	29	40	87	54	56	94	22	6	5	38
12	TAMIL NADU	36	58	50	74	46	54	91	24	5	25	44	35	46	53	80	63	64	98	17	6	19	49
13	UTTAR PRADESH	31	46	38	82	51	53	97	17	6	28	39	31	43	45	80	40	45	100	18	4	19	34
14	WEST BENGAL	23	30	34	74	37	38	100	13	1	0	27	18	22	29	75	27	30	87	19	3	12	24
All States		**27**	**36**	**43**	**82**	**47**	**50**	**95**	**20**	**4**	**19**	**38**	**27**	**35**	**42**	**83**	**48**	**50**	**96**	**20**	**4**	**16**	**37**

Table 102: Participation in Training & Demonstration Overall

Values as percent of base							
Sl. No	STATE	PROGRAMME			CONTROL		
		Base#	Participation in Training (Male + Female)	Participation in Demonstration (Male + Female)	Base#	Participation in Training (Male + Female)	Participation in Demonstration (Male + Female)
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	1991	6.5	4.7	2037	2.9	1.9
2	BIHAR	1930	10.2	8.5	1973	9.9	8.2
3	GUJARAT	2033	1.4	0.5	1977	1.2	0.3
4	HARYANA	1586	2.7	2.6	1527	3.5	2.8
5	KARNATAKA	1685	1.9	1.8	1719	7.4	6.9
6	KERALA	1802	7.2	6.7	1814	1.5	1.0
7	MADHYA PRADESH	1739	4.0	3.2	1711	2.7	1.4
8	MAHARASHTRA	2193	11.4	10.2	2117	2.7	1.6
9	ODISHA	1860	4.8	4.2	1856	3.8	3.1
10	PUNJAB	1530	13.9	6.7	1532	1.6	1.4
11	RAJASTHAN	1499	2.9	2.3	1560	2.5	2.3
12	TAMIL NADU	2001	2.1	1.9	2057	5.5	5.1
13	UTTAR PRADESH	1914	2.2	1.7	1929	2.6	1.4
14	WEST BENGAL	1620	11.3	10.4	1475	4.0	3.3
All States		**25383**	**5.9**	**4.7**	**25284**	**3.7**	**2.9**

Base: Total No. of MAH member Above 14 Years of age

Table 103: Participation in Training and Demonstration: women

Values as percent of base of total female							
Sl. No	STATE	PROGRAMME			CONTROL		
		Base#	Participation in Training	Participation in Demonstration	Base#	Participation in Training	Participation in Demonstration
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	984	7.1	5.4	1046	2.8	2.0
2	BIHAR	939	10.0	8.5	972	9.1	7.7
3	GUJARAT	1011	1.4	0.6	984	1.3	0.3
4	HARYANA	785	2.5	2.4	769	3.8	3.0
5	KARNATAKA	817	2.2	2.2	857	7.1	6.9
6	KERALA	847	6.6	6.3	852	1.3	0.9
7	MADHYA PRADESH	867	4.0	3.3	843	2.7	1.3
8	MAHARASHTRA	1054	11.3	10.1	992	3.0	1.7
9	ODISHA	869	4.4	3.5	871	4.0	3.2
10	PUNJAB	736	14.0	7.1	750	1.5	1.3
11	RAJASTHAN	727	2.9	2.2	778	2.8	2.4
12	TAMIL NADU	1003	1.7	1.7	1032	5.1	4.7
13	UTTAR PRADESH	967	2.4	1.9	980	3.0	1.5
14	WEST BENGAL	812	11.7	11.1	740	4.9	3.9
All States		**12418**	**5.8**	**4.7**	**12466**	**3.8**	**2.9**

Table 104: Participation in Training and Demonstration: MEN

Values as percent of base total male							
Sl. No	STATE	PROGRAMME			CONTROL		
		Base#	Participation in Training	Participation in Demonstration	Base#	Participation in Training	Participation in Demonstration
			Percent	Percent		Percent	Percent
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	1007	6.0	4.1	991	3.1	1.8
2	BIHAR	991	10.3	8.6	1001	10.7	8.7
3	GUJARAT	1022	1.4	0.4	993	1.0	0.2
4	HARYANA	801	2.9	2.7	758	3.2	2.6
5	KARNATAKA	868	1.6	1.5	862	7.8	7.0
6	KERALA	955	7.7	7.0	962	1.7	1.1
7	MADHYA PRADESH	872	4.0	3.1	868	2.8	1.5
8	MAHARASHTRA	1139	11.6	10.4	1125	2.5	1.4
9	ODISHA	991	5.1	4.9	985	3.6	2.9
10	PUNJAB	794	13.9	6.4	782	1.7	1.5
11	RAJASTHAN	772	2.8	2.3	782	2.2	2.2
12	TAMIL NADU	998	2.6	2.1	1025	5.9	5.4
13	UTTAR PRADESH	947	2.1	1.6	949	2.3	1.3
14	WEST BENGAL	808	10.9	9.8	735	3.1	2.7
All States		**12965**	**5.9**	**4.7**	**12818**	**3.7**	**2.9**

Table 105: Felt Need for Training & Demonstration Overall

Values as percent of base					
Sl. No	STATE	PROGRAMME		CONTROL	
		Felt Need for Training	Felt Need for Demonstration	Felt Need for Training	Felt Need for Demonstration
1	2	3	4	5	6
1	ANDHRA PRADESH	32.3	20.2	36.7	51.3
2	BIHAR	47.4	66.1	68.7	54.9
3	GUJARAT	75.0	50.0	4.3	20.0
4	HARYANA	62.8	65.9	35.8	20.9
5	KARNATAKA	50.0	58.1	7.8	8.4
6	KERALA	27.7	23.3	7.4	5.3
7	MADHYA PRADESH	51.4	48.2	34.0	66.7
8	MAHARASHTRA	23.5	16.1	32.8	48.5
9	ODISHA	40.4	48.1	70.0	52.6
10	PUNJAB	75.6	56.3	41.7	40.9
11	RAJASTHAN	51.2	52.9	59.0	38.9
12	TAMIL NADU	32.6	26.3	36.3	38.5
13	UTTAR PRADESH	72.1	75.8	23.5	33.3
14	WEST BENGAL	27.9	50.3	35.6	32.7
All States		**43.2**	**42.0**	**40.0**	**37.9**

Table 106: Felt Need for Training & Demonstration: WOMEN

Values as percent of base total female					
Sl. No	STATE	PROGRAMME		CONTROL	
		Felt Need for Training	Felt Need for Demonstration	Felt Need for Training	Felt Need for Demonstration
1	2	3	4	5	6
1	ANDHRA PRADESH	31.4	17.0	37.9	52.4
2	BIHAR	44.7	70.0	72.7	64.0
3	GUJARAT	71.4	50.0	0.0	0.0
4	HARYANA	55.0	47.4	27.6	13.0
5	KARNATAKA	44.4	55.6	6.6	6.8
6	KERALA	25.0	22.6	0.0	0.0
7	MADHYA PRADESH	60.0	55.2	26.1	54.5
8	MAHARASHTRA	23.5	16.0	36.7	64.7
9	ODISHA	44.7	63.3	68.6	71.4
10	PUNJAB	73.8	50.0	36.4	40.0
11	RAJASTHAN	52.4	56.3	54.5	42.1
12	TAMIL NADU	11.8	11.8	37.7	40.8
13	UTTAR PRADESH	60.9	72.2	27.6	40.0
14	WEST BENGAL	24.2	57.8	44.4	44.8
All States		**41.4**	**43.1**	**40.0**	**42.0**

Table 107: Felt Need for Training & Demonstration: MEN

Values as percent of base of total male					
Sl. No	STATE	PROGRAMME		CONTROL	
		Felt Need for Training	Felt Need for Demonstration	Felt Need for Training	Felt Need for Demonstration
1	2	3	4	5	6
1	ANDHRA PRADESH	33.3	24.4	35.5	50.0
2	BIHAR	50.0	62.4	65.4	47.1
3	GUJARAT	78.6	50.0	10.0	50.0
4	HARYANA	69.6	81.8	45.8	30.0
5	KARNATAKA	57.1	61.5	9.0	10.0
6	KERALA	29.7	23.9	12.5	9.1
7	MADHYA PRADESH	42.9	40.7	41.7	76.9
8	MAHARASHTRA	23.5	16.1	28.6	31.3
9	ODISHA	37.3	38.8	71.4	34.5
10	PUNJAB	77.3	62.7	46.2	41.7
11	RAJASTHAN	50.0	50.0	64.7	35.3
12	TAMIL NADU	46.2	38.1	35.0	36.4
13	UTTAR PRADESH	85.0	80.0	18.2	25.0
14	WEST BENGAL	31.8	41.8	21.7	15.0
All States		**44.9**	**41.0**	**40.0**	**33.9**

Table 108: Involvement of MAH Members in Decision Making for Dairying: Overall

Values as percent of base

Sl No	STATE	PROGRAMME		CONTROL	
		Base#	Decision Making Percent	Base#	Decision Making Percent
1	2	3	4	5	6
1	ANDHRA PRADESH	1991	48.1	2037	55.1
2	BIHAR	1930	79.4	1973	73.9
3	GUJARAT	2033	72.7	1977	63.6
4	HARYANA	1586	85.6	1527	72.6
5	KARNATAKA	1685	47.0	1719	70.6
6	KERALA	1802	19.3	1814	26.2
7	MADHYA PRADESH	1739	83.3	1711	70.6
8	MAHARASHTRA	2193	62.7	2117	69.9
9	ODISHA	1860	75.6	1856	68.0
10	PUNJAB	1530	88.3	1532	75.0
11	RAJASTHAN	1499	90.4	1560	78.2
12	TAMIL NADU	2001	79.5	2057	70.2
13	UTTAR PRADESH	1914	83.0	1929	70.1
14	WEST BENGAL	1620	84.8	1475	73.6
All States		**25383**	**70.7**	**25284**	**66.6**

 # Base: Total No. of MAH member Above 14 Years of age

Table 109: Involvement of MAH Members in Decision Making for Dairying: FEMALE

Values as percent of base of total female					
SI No	STATE	PROGRAMME		CONTROL	
		Base#	Decision Making	Base#	Decision Making
1	2	3	4	5	6
1	ANDHRA PRADESH	984	50.8	1046	54.7
2	BIHAR	939	85.3	972	74.3
3	GUJARAT	1011	70.8	984	63.7
4	HARYANA	785	88.8	769	73.0
5	KARNATAKA	817	47.2	857	71.1
6	KERALA	847	18.4	852	27.3
7	MADHYA PRADESH	867	83.2	843	72.8
8	MAHARASHTRA	1054	63.5	992	70.7
9	ODISHA	869	79.5	871	69.6
10	PUNJAB	736	90.2	750	75.9
11	RAJASTHAN	727	94.2	778	78.9
12	TAMIL NADU	1003	79.8	1032	71.0
13	UTTAR PRADESH	967	88.5	980	70.6
14	WEST BENGAL	812	87.9	740	75.4
All States		**12418**	**72.9**	**12466**	**67.5**

Table 110: Involvement of MAH Members in Decision Making for Dairying: MALE

Values as percent of base total male		PROGRAMME		CONTROL	
Sl No	STATE	Base#	Decision Making Percent	Base#	Decision Making Percent
1	2	3	4	5	6
1	ANDHRA PRADESH	1007	45.5	991	55.6
2	BIHAR	991	73.8	1001	73.6
3	GUJARAT	1022	74.7	993	63.4
4	HARYANA	801	82.5	758	72.3
5	KARNATAKA	868	46.8	862	70.1
6	KERALA	955	20.0	962	25.2
7	MADHYA PRADESH	872	83.4	868	68.4
8	MAHARASHTRA	1139	61.9	1125	69.2
9	ODISHA	991	72.3	985	66.6
10	PUNJAB	794	86.5	782	74.2
11	RAJASTHAN	772	86.8	782	77.5
12	TAMIL NADU	998	79.3	1025	69.3
13	UTTAR PRADESH	947	77.3	949	69.5
14	WEST BENGAL	808	81.7	735	71.7
All States		**12965**	**68.6**	**12818**	**65.7**

Table 111: Membership of DCS

Values as percent of base		PROGRAMME		CONTROL	
Sl. No	STATE	Base#	Membership (%)	Base#	Membership (%)
			Percent		Percent
1	2	3	4	5	6
1	ANDHRA PRADESH	1769	31.4	1102	39.5
2	BIHAR	1930	28.7	313	34.2
3	GUJARAT	1891	34.6	1845	34.7
4	HARYANA	1586	29.9	781	27.5
5	KARNATAKA	1132	25.3	1124	31.7
6	KERALA	1056	16.2	1225	13.6
7	MADHYA PRADESH	1656	31.3	806	30.1
8	MAHARASHTRA	2193	35.7	726	36.9
9	ODISHA	1828	31.0	412	33.3
10	PUNJAB	1356	25.3	673	31.4
11	RAJASTHAN	1499	24.5	575	33.0
12	TAMIL NADU	1076	24.0	1029	24.8
13	UTTAR PRADESH	1271	24.1	137	20.4
14	WEST BENGAL	1620	31.5	94	16.0
All States		**21863**	**29.0**	**10842**	**30.1**

Base: All the MAH Members aged 14+ years of the Villages having DCS/MPI

Table 112: DCS WOMEN MEMBER

Values as percent of base		PROGRAMME		CONTROL	
Sl. No	STATE	Base#	Women Membership (%)	Base#	Women Membership (%)
			Percent		Percent
1	2	3	4	5	6
1	PUNJAB	555	51	435	47
2	HARYANA	553	50	107	47
3	RAJASTHAN	654	51	641	49
4	UTTAR PRADESH	474	51	215	51
5	BIHAR	286	52	356	52
6	WEST BENGAL	171	42	166	45
7	ODISHA	518	48	243	51
8	MADHYA PRADESH	783	48	268	46
9	GUJARAT	567	48	137	43
10	MAHARASHTRA	343	49	211	44
11	ANDHRA PRADESH	368	51	190	47
12	KARNATAKA	258	52	255	45
13	KERALA	306	53	28	54
14	TAMIL NADU	511	53	15	53
All States		**6347**	**50**	**3267**	**48**

Base: MAH members reported DCS membership

Table 113: Do you know about Ration Balancing Programme-RBP

Sl. No	STATE	Yes	No	Base#
1	2	3	4	5
1	ANDHRA PRADESH	66.5	33.5	176
2	BIHAR	80.6	19.4	160
3	GUJARAT	68.8	31.3	176
4	HARYANA	88.8	11.3	160
5	KARNATAKA	64.2	35.8	176
6	KERALA	58.1	41.9	160
7	MADHYA PRADESH	52.8	47.2	176
8	MAHARASHTRA	68.2	31.8	176
9	ODISHA	54.4	45.6	160
10	PUNJAB	100.0	.0	160
11	RAJASTHAN	76.9	23.1	160
12	TAMIL NADU	98.9	1.1	176
13	UTTAR PRADESH	60.8	39.2	176
14	WEST BENGAL	23.1	76.9	160
All States		68.7	31.3	2352

#Base – Total MAH in RBP villages

Table 114: Ever been approached by someone to feed animals as per RBP

Sl. No	STATE	Yes	No	Base#
1	2	3	4	5
1	ANDHRA PRADESH	94.0	6.0	117
2	BIHAR	93.8	6.2	129
3	GUJARAT	95.0	5.0	121
4	HARYANA	100.0	.0	142
5	KARNATAKA	83.2	16.8	113
6	KERALA	95.7	4.3	93
7	MADHYA PRADESH	100.0	.0	93
8	MAHARASHTRA	88.3	11.7	120
9	ODISHA	98.9	1.1	87
10	PUNJAB	96.9	3.1	160
11	RAJASTHAN	100.0	.0	123
12	TAMIL NADU	99.4	.6	174
13	UTTAR PRADESH	100.0	.0	107
14	WEST BENGAL	97.3	2.7	37
All States		**95.9**	**4.1**	**1616**

#Base – Total MAH aware about RBP

Table 115: Was/ is any animals of households covered under RBP

Sl. No	STATE	Yes	No	Base#
1	2	3	4	5
1	ANDHRA PRADESH	69.1	30.9	110
2	BIHAR	71.1	28.9	121
3	GUJARAT	94.8	5.2	115
4	HARYANA	85.9	14.1	142
5	KARNATAKA	75.5	24.5	94
6	KERALA	84.3	15.7	89
7	MADHYA PRADESH	86.0	14.0	93
8	MAHARASHTRA	95.3	4.7	106
9	ODISHA	72.1	27.9	86
10	PUNJAB	56.8	43.2	155
11	RAJASTHAN	92.7	7.3	123
12	TAMIL NADU	77.5	22.5	173
13	UTTAR PRADESH	71.0	29.0	107
14	WEST BENGAL	86.1	13.9	36
All States		**79.0**	**21.0**	**1550**

#Base – Total MAH approached by anyone for RBP advice

Table 116: Average number of Animals covered under RBP

Sl. No	STATE	Average No. of Animals	Base#
1	2	3	4
1	ANDHRA PRADESH	1.1	76
2	BIHAR	1.2	86
3	GUJARAT	1.2	109
4	HARYANA	2.0	122
5	KARNATAKA	1.2	71
6	KERALA	1.2	75
7	MADHYA PRADESH	1.5	80
8	MAHARASHTRA	1.2	101
9	ODISHA	1.3	62
10	PUNJAB	1.9	88
11	RAJASTHAN	1.4	114
12	TAMIL NADU	1.1	134
13	UTTAR PRADESH	1.3	76
14	WEST BENGAL	1.4	31
All States		**1.4**	**1225**

#Base – Total MAH covered under RBP

Table 117: Type of Animals under RBP

Sl. No	STATE	IC	CB	Buffalo	Base#
1	2	3	4	5	6
1	ANDHRA PRADESH	3.6	19	77.4	84
2	BIHAR	22.9	51.4	25.7	105
3	GUJARAT	4.4	17.6	77.9	136
4	HARYANA	5.8	16.2	78.0	241
5	KARNATAKA	16.1	64.4	19.5	87
6	KERALA	28	66.7	5.4	93
7	MADHYA PRADESH	21.6	8.6	69.8	116
8	MAHARASHTRA	1.6	14.4	84.0	125
9	ODISHA	60.0	40.0	0.0	80
10	PUNJAB	5.5	24.4	70.1	164
11	RAJASTHAN	17.3	16	66.7	156
12	TAMIL NADU	16	79.2	4.9	144
13	UTTAR PRADESH	11.8	22.5	65.7	102
14	WEST BENGAL	2.3	86	11.6	43
All States		**14.0**	**32.8**	**53.2**	**1676**

#Base – Total Animals covered under RBP

Table 118: Average number of lactation completed at the time of RBP registration

Sl. No	STATE	Average no. of Lactation	Base#
1	2	3	4
1	ANDHRA PRADESH	2.3	84
2	BIHAR	2.1	105
3	GUJARAT	2.1	136
4	HARYANA	1.8	241
5	KARNATAKA	1.4	87
6	KERALA	1.7	93
7	MADHYA PRADESH	2.0	116
8	MAHARASHTRA	1.7	125
9	ODISHA	1.8	80
10	PUNJAB	1.8	164
11	RAJASTHAN	1.8	156
12	TAMIL NADU	2.3	144
13	UTTAR PRADESH	1.8	102
14	WEST BENGAL	1.9	43
All States		**1.9**	**1676**

#Base – Total Animals covered under RBP

Table 119: Incidence of ear-tagging of animals at the time of registration (%)

Sl. No	STATE	Yes	No	Base#
1	2	3	4	5
1	ANDHRA PRADESH	79.8	20.2	84
2	BIHAR	71.4	28.6	105
3	GUJARAT	78.7	21.3	136
4	HARYANA	53.5	46.5	241
5	KARNATAKA	92.0	8.0	87
6	KERALA	79.6	20.4	93
7	MADHYA PRADESH	75.9	24.1	116
8	MAHARASHTRA	72.8	27.2	125
9	ODISHA	92.5	7.5	80
10	PUNJAB	39.6	60.4	164
11	RAJASTHAN	74.4	25.6	156
12	TAMIL NADU	21.5	78.5	144
13	UTTAR PRADESH	76.5	23.5	102
14	WEST BENGAL	79.1	20.9	43
All States		**66.2**	**33.8**	**1676**

#Base – Total Animals covered under RBP

Table 120: Yield before and after RBP advisory

Sl. No	STATE	Average Yield (Ltr/day		
		Before	After	Base#
1	2	3	4	5
1	ANDHRA PRADESH	3.7	4.8	84
2	BIHAR	3.9	4.9	105
3	GUJARAT	5.3	6.4	136
4	HARYANA	6.0	7.1	241
5	KARNATAKA	8.3	9.4	87
6	KERALA	7.7	8.8	93
7	MADHYA PRADESH	3.4	4.4	116
8	MAHARASHTRA	3.7	4.8	125
9	ODISHA	2.4	3.3	80
10	PUNJAB	6.1	7.1	164
11	RAJASTHAN	5.6	6.7	156
12	TAMIL NADU	5.3	6.4	144
13	UTTAR PRADESH	4.6	5.7	102
14	WEST BENGAL	7.4	8.4	43
All States		**5.2**	**6.3**	**1676**

#Base – Total Animals covered under RBP

Table 121: Feeding cost before and after RBP advisory

Sl. No	STATE	Feeding Cost in INR		
		Before	After	Base#
1	2	3	4	5
1	ANDHRA PRADESH	131	134	84
2	BIHAR	158	142	105
3	GUJARAT	137	142	136
4	HARYANA	137	141	241
5	KARNATAKA	138	138	87
6	KERALA	138	142	93
7	MADHYA PRADESH	143	123	116
8	MAHARASHTRA	148	137	125
9	ODISHA	148	126	80
10	PUNJAB	148	138	164
11	RAJASTHAN	151	137	156
12	TAMIL NADU	149	136	144
13	UTTAR PRADESH	135	133	102
14	WEST BENGAL	126	125	43
All States		**143**	**136**	**1676**

#Base – Total Animals covered under RBP

Table 122: Fat content before and after RBP advisory

Sl. No	STATE	Fat		
		Before	After	Base#
1	2	3	4	5
1	ANDHRA PRADESH	3.9	5.1	84
2	BIHAR	4.1	4.7	105
3	GUJARAT	4.1	5.1	136
4	HARYANA	3.9	4.7	241
5	KARNATAKA	3.8	4.5	87
6	KERALA	4.1	5.2	93
7	MADHYA PRADESH	4.0	4.8	116
8	MAHARASHTRA	3.9	4.6	125
9	ODISHA	4.0	5.1	80
10	PUNJAB	4.0	4.7	164
11	RAJASTHAN	3.9	4.7	156
12	TAMIL NADU	4.1	4.7	144
13	UTTAR PRADESH	4.0	5.2	102
14	WEST BENGAL	4.4	5.1	43
All States		**4.0**	**4.8**	**1676**

#Base – Total Animals covered under RBP

Table 123: Still feeding animals on RBP advice

Sl. No	STATE	Yes	No	Base#
1	2	3	4	5
1	ANDHRA PRADESH	69.0	31.0	84
2	BIHAR	86.7	13.3	105
3	GUJARAT	86.0	14.0	136
4	HARYANA	67.2	32.8	241
5	KARNATAKA	57.5	42.5	87
6	KERALA	54.8	45.2	93
7	MADHYA PRADESH	44.8	55.2	116
8	MAHARASHTRA	40.8	59.2	125
9	ODISHA	70.0	30.0	80
10	PUNJAB	47.0	53.0	164
11	RAJASTHAN	65.4	34.6	156
12	TAMIL NADU	88.9	11.1	144
13	UTTAR PRADESH	56.9	43.1	102
14	WEST BENGAL	97.7	2.3	43
All States		**65.3**	**34.7**	**1676**

#Base – Total Animals covered under RBP

Table 124: Benefits of RBP

Sl. No	STATE	Increase in milk yield	Reduction in feeding cost	Improvement in reproduction efficiency	Improvement in quality of milk	Improvement in overall health of the animal	Base#
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	89.1	81.8	69.1	70.9	56.4	55
2	BIHAR	88.0	84.0	74.7	78.7	85.3	75
3	GUJARAT	91.4	71.0	67.7	68.8	53.8	93
4	HARYANA	98.0	87.8	74.5	76.5	67.3	98
5	KARNATAKA	97.7	77.3	38.6	45.5	29.5	44
6	KERALA	79.1	65.1	32.6	53.5	60.5	43
7	MADHYA PRADESH	87.5	60.0	45.0	52.5	50.0	40
8	MAHARASHTRA	87.5	43.8	37.5	43.8	37.5	48
9	ODISHA	95.3	93.0	67.4	74.4	46.5	43
10	PUNJAB	92.2	86.3	72.5	52.9	41.2	51
11	RAJASTHAN	91.9	70.9	59.3	57.0	41.9	86
12	TAMIL NADU	93.3	84.9	79.8	75.6	65.5	119
13	UTTAR PRADESH	97.9	83.0	85.1	61.7	46.8	47
14	WEST BENGAL	90.3	67.7	54.8	64.5	41.9	31
All States		**91.9**	**77.1**	**64.8**	**65.2**	**54.8**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 125: Improvement by adopting RBP

Sl. No	STATE	Reduced Inter calving period	Reduced Age at first calving	Improvement in Overall health	Base#
1	2	3	4	5	6
1	ANDHRA PRADESH	81.8	89.1	80.0	55
2	BIHAR	40.0	13.3	93.3	75
3	GUJARAT	60.2	52.7	75.3	93
4	HARYANA	76.5	68.4	90.8	98
5	KARNATAKA	45.5	88.6	97.7	44
6	KERALA	34.9	90.7	62.8	43
7	MADHYA PRADESH	57.5	67.5	77.5	40
8	MAHARASHTRA	45.8	56.3	68.8	48
9	ODISHA	76.7	46.5	88.4	43
10	PUNJAB	100.0	76.5	96.1	51
11	RAJASTHAN	80.2	59.3	86.0	86
12	TAMIL NADU	86.6	69.7	84.9	119
13	UTTAR PRADESH	85.1	36.2	87.2	47
14	WEST BENGAL	64.5	32.3	77.4	31
All States		**69.0**	**60.4**	**84.1**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 126: Frequency of LRP Visit

Sl. No	STATE	More than once in a month	Monthly	Once in two months	No visit	Base#
1	2	3	4	5	6	7
1	ANDHRA PRADESH	63.6	29.1	7.3	.0	55
2	BIHAR	28.0	48.0	24.0	.0	75
3	GUJARAT	59.1	22.6	16.1	2.2	93
4	HARYANA	42.9	20.4	36.7	.0	98
5	KARNATAKA	13.6	70.5	15.9	.0	44
6	KERALA	9.3	88.4	2.3	.0	43
7	MADHYA PRADESH	37.5	52.5	10.0	.0	40
8	MAHARASHTRA	75.0	22.9	.0	2.1	48
9	ODISHA	44.2	18.6	32.6	4.7	43
10	PUNJAB	80.4	9.8	3.9	5.9	51
11	RAJASTHAN	46.5	36.0	10.5	7.0	86
12	TAMIL NADU	42.9	29.4	23.5	4.2	119
13	UTTAR PRADESH	48.9	29.8	21.3	.0	47
14	WEST BENGAL	67.7	12.9	19.4	.0	31
All States		**46.8**	**33.3**	**17.6**	**2.2**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 127: Availability of recommended feed/mineral mixture in the area

Sl. No	STATE	Yes	No	Base
1	2	3	4	5
1	ANDHRA PRADESH	90.9	9.1	55
2	BIHAR	97.3	2.7	75
3	GUJARAT	94.6	5.4	93
4	HARYANA	93.9	6.1	98
5	KARNATAKA	97.7	2.3	44
6	KERALA	83.7	16.3	43
7	MADHYA PRADESH	90.0	10.0	40
8	MAHARASHTRA	85.4	14.6	48
9	ODISHA	88.4	11.6	43
10	PUNJAB	90.2	9.8	51
11	RAJASTHAN	87.2	12.8	86
12	TAMIL NADU	89.9	10.1	119
13	UTTAR PRADESH	93.6	6.4	47
14	WEST BENGAL	93.5	6.5	31
All States		**91.4**	**8.6**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 128: Information Provided by LRPs

Sl. No	STATE	Importance of Drinking water	Colostrums feeding	Chaffing of fodder	Regular de-worming	Vaccination	Medicine spraying for controlling tick infestation	Other	Base#
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	98.2	74.5	83.6	98.2	96.4	58.2	27.3	55
2	BIHAR	98.7	89.3	90.7	80.0	81.3	61.3	4.0	75
3	GUJARAT	93.5	71.0	86.0	84.9	93.5	71.0	34.4	93
4	HARYANA	98.0	77.6	88.8	84.7	90.8	79.6	60.2	98
5	KARNATAKA	97.7	59.1	50.0	93.2	84.1	31.8	13.6	44
6	KERALA	86.0	83.7	44.2	81.4	74.4	39.5	14.0	43
7	MADHYA PRADESH	65.0	55.0	50.0	72.5	70.0	30.0	17.5	40
8	MAHARASHTRA	87.5	45.8	64.6	66.7	68.8	25.0	8.3	48
9	ODISHA	100.0	88.4	97.7	72.1	79.1	62.8	37.2	43
10	PUNJAB	100.0	82.4	98.0	94.1	100.0	94.1	90.2	51
11	RAJASTHAN	96.5	76.7	84.9	95.3	93.0	77.9	70.9	86
12	TAMIL NADU	90.8	88.2	97.5	91.6	97.5	90.8	67.2	119
13	UTTAR PRADESH	100.0	72.3	97.9	100.0	100.0	95.7	23.4	47
14	WEST BENGAL	77.4	58.1	67.7	51.6	61.3	38.7	12.9	31
All States		**93.4**	**75.5**	**82.6**	**85.5**	**87.9**	**66.9**	**40.1**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 129: Willingness to pay some charge to LRP

Sl. No	STATE	Yes	No	Base
1	2	3	4	5
1	ANDHRA PRADESH	58.2	41.8	55
2	BIHAR	88.0	12.0	75
3	GUJARAT	66.7	33.3	93
4	HARYANA	72.4	27.6	98
5	KARNATAKA	70.5	29.5	44
6	KERALA	39.5	60.5	43
7	MADHYA PRADESH	42.5	57.5	40
8	MAHARASHTRA	66.7	33.3	48
9	ODISHA	67.4	32.6	43
10	PUNJAB	70.6	29.4	51
11	RAJASTHAN	45.3	54.7	86
12	TAMIL NADU	55.5	44.5	119
13	UTTAR PRADESH	70.2	29.8	47
14	WEST BENGAL	80.6	19.4	31
All States		**63.7**	**36.3**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 130: Satisfaction with the services provided by LRPs

Sl. No	STATE	Yes	No	Base
1	2	3	4	5
1	ANDHRA PRADESH	83.6	16.4	55
2	BIHAR	90.7	9.3	75
3	GUJARAT	81.7	18.3	93
4	HARYANA	88.8	11.2	98
5	KARNATAKA	90.9	9.1	44
6	KERALA	69.8	30.2	43
7	MADHYA PRADESH	80.0	20.0	40
8	MAHARASHTRA	70.8	29.2	48
9	ODISHA	86.0	14.0	43
10	PUNJAB	82.4	17.6	51
11	RAJASTHAN	74.4	25.6	86
12	TAMIL NADU	77.3	22.7	119
13	UTTAR PRADESH	91.5	8.5	47
14	WEST BENGAL	87.1	12.9	31
All States		**82.2**	**17.8**	**873**

#Base – Total MAH currently feeding their animals as per RBP

Table 131: Ever fed animals as per RBP recommendation

Sl. No	STATE	Yes, but discontinued	Never	Base
1	2	3	4	5
1	ANDHRA PRADESH	100.0	.0	21
2	BIHAR	72.7	27.3	11
3	GUJARAT	100.0	.0	16
4	HARYANA	100.0	.0	24
5	KARNATAKA	96.3	3.7	27
6	KERALA	93.8	6.3	32
7	MADHYA PRADESH	97.5	2.5	40
8	MAHARASHTRA	98.1	1.9	53
9	ODISHA	94.7	5.3	19
10	PUNJAB	97.3	2.7	37
11	RAJASTHAN	100.0	.0	28
12	TAMIL NADU	100.0	.0	15
13	UTTAR PRADESH	93.1	6.9	29
14	WEST BENGAL	100.0	.0	21
All States		**96.6**	**3.4**	**352**

#Base – Total MAH who are not currently feeding their animals as per RBP

Table 132: Type of VBMPS Implementation

Sl. No	STATE	New DCS	Strengthening of DCS	Base
1	2	3	4	5
1	ANDHRA PRADESH	14	86	176
2	BIHAR	82	18	176
3	GUJARAT	23	77	176
4	HARYANA	55	45	160
5	KARNATAKA	0	100	176
6	KERALA	0	100	160
7	MADHYA PRADESH	18	82	176
8	MAHARASHTRA	14	86	176
9	ODISHA	25	75	160
10	PUNJAB	64	36	176
11	RAJASTHAN	50	50	176
12	TAMIL NADU	0	100	176
13	UTTAR PRADESH	23	77	176
14	WEST BENGAL	75	25	160
All States		**31**	**69**	**2400**

Table 133: Where were you selling milk before opening of DCS/ MPI

Sl. No	STATE	Individual HH/ Shops in village	Dudhia	Private dairies	Outside village	Not selling milk/milk products	Was not rearing animals	Others	Base
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	25.0	41.7	29.2	0.0	4.2	0.0	0.0	24
2	BIHAR	34.7	36.8	16.0	6.9	3.5	2.1	0.0	144
3	GUJARAT	25.0	52.5	12.5	2.5	2.5	2.5	2.5	40
4	HARYANA	26.1	38.6	19.3	6.8	4.5	3.4	1.1	88
5	MADHYA PRADESH	21.9	46.9	3.1	12.5	9.4	6.3	0.0	32
6	MAHARASHTRA	8.3	29.2	33.3	8.3	20.8	0.0	0.0	24
7	ODISHA	25.0	52.5	10.0	7.5	5.0	0.0	0.0	40
8	PUNJAB	19.6	48.2	20.5	5.4	5.4	0.0	0.9	112
9	RAJASTHAN	34.1	36.4	9.1	8.0	5.7	3.4	3.4	88
10	UTTAR PRADESH	30.0	27.5	22.5	7.5	10.0	2.5	0.0	40
11	WEST BENGAL	26.7	45.8	20.0	4.2	1.7	0.8	0.8	120
All States		**27.1**	**41.6**	**17.2**	**6.3**	**5.1**	**1.9**	**0.9**	**752**

Table 134: What price of milk did you get before opening of DCS/ MPI? (Rs./ litre)

Sl. No	STATE	Base	Average
1	2	3	4
1	ANDHRA PRADESH	24	22.7
2	BIHAR	144	22.8
3	GUJARAT	40	23.1
4	HARYANA	88	24.6
5	MADHYA PRADESH	32	22.3
6	MAHARASHTRA	24	22.6
7	ODISHA	40	24.5
8	PUNJAB	112	24.3
9	RAJASTHAN	88	25.6
10	UTTAR PRADESH	40	25.6
11	WEST BENGAL	120	23.3
All States		**752**	**23.9**

Table 135: What price of milk did you get after opening of DCS/ MPI? (Rs./ litre)

Sl. No	STATE	N	Mean
1	2	3	4
1	ANDHRA PRADESH	24	29.4
2	BIHAR	144	28.5
3	GUJARAT	40	27.8
4	HARYANA	88	30.6
5	MADHYA PRADESH	32	28.2
6	MAHARASHTRA	24	28.3
7	ODISHA	40	29.9
8	PUNJAB	112	29.2
9	RAJASTHAN	88	30.6
10	UTTAR PRADESH	40	31.1
11	WEST BENGAL	120	28.4
All States		**752**	**29.3**

Table 136: Have you been benefited in any of these manners

Sl. No	STATE	Better price of milk	No wastage of milk	Advantage of getting longer time for pouring milk	Availability of better AI service	Subsidised Cattle Feed	Time saved in marketing milk	Any Other	Base
1	2	3	4	5	6	7	8	9	10
1	ANDHRA PRADESH	88.6	75.0	54.5	33.0	21.6	34.1	.0	88
2	BIHAR	97.1	79.4	58.8	44.1	26.5	38.2	.0	34
3	GUJARAT	86.8	76.7	68.2	33.3	14.7	38.8	3.9	129
4	HARYANA	89.3	80.6	58.3	24.3	12.6	42.7	.0	103
5	KARNATAKA	90.5	62.8	56.1	17.6	20.3	43.9	2.0	148
6	KERALA	84.2	72.3	49.5	18.8	17.8	52.5	5.9	101
7	MADHYA PRADESH	81.9	79.5	51.8	12.0	8.4	56.6	2.4	83
8	MAHARASHTRA	90.1	69.3	64.4	34.7	34.7	36.6	2.0	101
9	ODISHA	87.5	75.0	68.8	31.3	31.3	37.5	.0	16
10	PUNJAB	89.0	85.4	74.4	32.9	19.5	36.6	12.2	82
11	RAJASTHAN	91.7	78.7	49.1	27.8	18.5	42.6	6.5	108
12	TAMIL NADU	77.8	81.0	66.7	36.5	23.8	46.0	14.3	63
13	UTTAR PRADESH	87.1	64.3	44.3	20.0	25.7	47.1	4.3	70
14	WEST BENGAL	92.3	69.2	51.3	30.8	23.1	38.5	.0	39
All States		**88.0**	**74.4**	**57.9**	**26.9**	**20.0**	**42.7**	**4.0**	**1165**

Table 137: Have you ever faced any discrimination at the milk collection center?

Sl. No	STATE	Yes	No	Base
1	2	3	4	5
1	ANDHRA PRADESH	11.4	88.6	88
2	BIHAR	5.9	94.1	34
3	GUJARAT	8.5	91.5	129
4	HARYANA	12.6	87.4	103
5	KARNATAKA	10.1	89.9	148
6	KERALA	11.9	88.1	101
7	MADHYA PRADESH	12.0	88.0	83
8	MAHARASHTRA	15.8	84.2	101
9	ODISHA	6.3	93.8	16
10	PUNJAB	7.3	92.7	82
11	RAJASTHAN	12.0	88.0	108
12	TAMIL NADU	7.9	92.1	63
13	UTTAR PRADESH	14.3	85.7	70
14	WEST BENGAL	23.1	76.9	39
All States		**11.4**	**88.6**	**1165**

Table 138: Satisfaction level with

Sl. No	STATE	Behavior of the appointed person at milk collection center	Milk Testing	Milk Price received	Other subsidised or free service	Any Other	Base
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	93.2	87.5	70.5	37.5	18.5	88
2	BIHAR	97.1	91.2	94.1	40.0	23.1	34
3	GUJARAT	97.7	88.4	70.5	25.4	23.7	129
4	HARYANA	96.1	89.3	73.8	35.2	15.3	103
5	KARNATAKA	95.3	75.0	75.0	29.1	15.9	148
6	KERALA	93.1	74.3	78.2	33.0	18.7	101
7	MADHYA PRADESH	98.8	86.7	72.3	29.5	1.7	83
8	MAHARASHTRA	97.0	93.1	69.3	38.4	19.4	101
9	ODISHA	100.0	93.8	93.8	62.5	10.0	16
10	PUNJAB	97.6	89.0	76.8	27.4	27.7	82
11	RAJASTHAN	95.4	87.0	74.1	32.6	24.7	108
12	TAMIL NADU	93.7	87.3	77.8	37.1	10.4	63
13	UTTAR PRADESH	92.9	77.1	80.0	40.0	25.5	70
14	WEST BENGAL	87.2	92.3	71.8	36.8	10.7	39
All States		**95.5**	**85.2**	**74.8**	**33.4**	**18.4**	**1165**

Table 139: Did you notice increase in animals in your village due to starting of new DCS or transparency in payment system or flexibility in milk pouring timings?

Sl. No	STATE	Yes	No	Can't Say	Base
1	2	3	4	5	6
1	ANDHRA PRADESH	32.4	21.0	46.6	176
2	BIHAR	54.0	18.2	27.8	176
3	GUJARAT	48.3	11.9	39.8	176
4	HARYANA	29.4	23.8	46.9	160
5	KARNATAKA	41.5	21.6	36.9	176
6	KERALA	29.4	18.8	51.9	160
7	MADHYA PRADESH	35.8	19.3	44.9	176
8	MAHARASHTRA	33.0	9.7	57.4	176
9	ODISHA	38.1	23.8	38.1	160
10	PUNJAB	26.7	35.2	38.1	176
11	RAJASTHAN	34.7	17.0	48.3	176
12	TAMIL NADU	29.0	23.9	47.2	176
13	UTTAR PRADESH	44.9	13.6	41.5	176
14	WEST BENGAL	50.0	18.1	31.9	160
All States		**37.7**	**19.7**	**42.7**	**2400**

Table 140: Do you plan to increase animals in your house due to starting of new DCS or transparency in payment system or flexibility in milk pouring timings?

Sl. No	STATE	Yes	No	Not Sure	Base
1	2	3	4	5	6
1	ANDHRA PRADESH	37.5	12.5	50.0	176
2	BIHAR	50.0	18.2	31.8	176
3	GUJARAT	42.6	13.1	44.3	176
4	HARYANA	25.6	20.6	53.8	160
5	KARNATAKA	30.1	5.1	64.8	176
6	KERALA	31.3	17.5	51.3	160
7	MADHYA PRADESH	27.8	26.7	45.5	176
8	MAHARASHTRA	34.7	10.2	55.1	176
9	ODISHA	29.4	22.5	48.1	160
10	PUNJAB	25.0	30.1	44.9	176
11	RAJASTHAN	27.8	18.8	53.4	176
12	TAMIL NADU	27.8	22.7	49.4	176
13	UTTAR PRADESH	36.4	10.2	53.4	176
14	WEST BENGAL	43.1	20.6	36.3	160
All States		**33.5**	**17.7**	**48.8**	**2400**

Table 141: Transparency in the Implementation of Dairy Related Programs

Sl. No	STATE	Yes	No	Don't Know/Can't Say	Base	Total
1	2	3	4	5	6	7
1	ANDHRA PRADESH	52.7	45.3	2.1	528	100.0
2	BIHAR	64.7	17.7	17.7	504	100.0
3	GUJARAT	61.7	35.8	2.5	528	100.0
4	HARYANA	38.8	40.2	21.0	480	100.0
5	KARNATAKA	53.8	44.5	1.7	528	100.0
6	KERALA	25.2	65.0	9.8	480	100.0
7	MADHYA PRADESH	53.6	37.7	8.7	528	100.0
8	MAHARASHTRA	41.5	18.4	40.2	528	100.0
9	ODISHA	68.1	30.6	1.3	480	100.0
10	PUNJAB	59.7	31.0	9.3	504	100.0
11	RAJASTHAN	46.4	22.0	31.5	504	100.0
12	TAMIL NADU	50.2	35.0	14.8	528	100.0
13	UTTAR PRADESH	67.8	19.7	12.5	528	100.0
14	WEST BENGAL	79.4	11.5	9.2	480	100.0
All States		**54.6**	**32.4**	**13.0**	**7128**	**100.0**

Table 142: Awareness about Documents Covering the Roles and Responsibility of DCS level Officials

Sl. No	STATE	Yes	No	Base	Total
1	2	3	4	5	6
1	ANDHRA PRADESH	58.0	42.0	528	100.0
2	BIHAR	44.2	55.8	504	100.0
3	GUJARAT	71.0	29.0	528	100.0
4	HARYANA	17.1	82.9	480	100.0
5	KARNATAKA	68.9	31.1	528	100.0
6	KERALA	35.6	64.4	480	100.0
7	MADHYA PRADESH	58.9	41.1	528	100.0
8	MAHARASHTRA	76.9	23.1	528	100.0
9	ODISHA	59.8	40.2	480	100.0
10	PUNJAB	39.5	60.5	504	100.0
11	RAJASTHAN	18.3	81.7	504	100.0
12	TAMIL NADU	39.8	60.2	528	100.0
13	UTTAR PRADESH	30.1	69.9	528	100.0
14	WEST BENGAL	53.1	46.9	480	100.0
All States		48.3	51.7	7128	100.0

Table 143: Availability of Complaint Register with DCS

Sl. No	STATE	Yes	No	Don't Know/Can't Say	Base	Total
1	2	3	4	5	6	7
1	ANDHRA PRADESH	46.4	41.9	11.7	528	100.0
2	BIHAR	16.5	45.6	37.9	504	100.0
3	GUJARAT	57.8	23.9	18.4	528	100.0
4	HARYANA	15.2	37.1	47.7	480	100.0
5	KARNATAKA	54.7	39.0	6.3	528	100.0
6	KERALA	34.0	49.2	16.9	480	100.0
7	MADHYA PRADESH	46.8	24.4	28.8	528	100.0
8	MAHARASHTRA	68.0	21.8	10.2	528	100.0
9	ODISHA	39.0	25.4	35.6	480	100.0
10	PUNJAB	20.2	37.3	42.5	504	100.0
11	RAJASTHAN	8.1	41.9	50.0	504	100.0
12	TAMIL NADU	39.0	21.2	39.8	528	100.0
13	UTTAR PRADESH	8.1	47.3	44.5	528	100.0
14	WEST BENGAL	29.6	32.3	38.1	480	100.0
All States		**34.9**	**34.8**	**30.4**	**7128**	**100.0**

Table 144: Registered any complaint for redressal

Sl. No	STATE	Yes	No	Don't Know/Can't Say	Base	Total
1	2	3	4	5	6	7
1	ANDHRA PRADESH	16.1	78.6	5.3	528	100.0
2	BIHAR	14.3	59.1	26.6	504	100.0
3	GUJARAT	10.6	78.4	11.0	528	100.0
4	HARYANA	18.3	57.1	24.6	480	100.0
5	KARNATAKA	2.3	90.9	6.8	528	100.0
6	KERALA	.4	86.0	13.5	480	100.0
7	MADHYA PRADESH	5.7	72.2	22.2	528	100.0
8	MAHARASHTRA	12.9	80.9	6.3	528	100.0
9	ODISHA	3.8	76.0	20.2	480	100.0
10	PUNJAB	22.4	63.7	13.9	504	100.0
11	RAJASTHAN	3.0	69.4	27.6	504	100.0
12	TAMIL NADU	2.3	60.4	37.3	528	100.0
13	UTTAR PRADESH	9.7	61.0	29.4	528	100.0
14	WEST BENGAL	10.8	63.8	25.4	480	100.0
All States		**9.5**	**71.3**	**19.2**	**7128**	**100.0**

Table 145: Average time taken in Complaint Redressal

Sl. No	STATE	LESS THAN A WEEK	One Week	Two weeks	More than two weeks	Others	Base	Total
1	2	3	4	5	6	7	8	9
1	ANDHRA PRADESH	23.5	23.5	3.5	5.9	43.5	85	100.0
2	BIHAR	6.9	13.9	5.6	11.1	62.5	72	100.0
3	GUJARAT	21.4	19.6	3.6	1.8	53.6	56	100.0
4	HARYANA	1.1	11.4	14.8	10.2	62.5	88	100.0
5	KARNATAKA	8.3	83.3	8.3	.0	.0	12	100.0
6	KERALA	.0	50.0	.0	.0	50.0	2	100.0
7	MADHYA PRADESH	6.7	23.3	23.3	6.7	40.0	30	100.0
8	MAHARASHTRA	73.5	11.8	1.5	1.5	11.8	68	100.0
9	ODISHA	22.2	16.7	5.6	.0	55.6	18	100.0
10	PUNJAB	11.5	27.4	6.2	11.5	43.4	113	100.0
11	RAJASTHAN	.0	.0	6.7	.0	93.3	15	100.0
12	TAMIL NADU	16.7	33.3	16.7	16.7	16.7	12	100.0
13	UTTAR PRADESH	2.0	3.9	3.9	5.9	84.3	51	100.0
14	WEST BENGAL	1.9	5.8	21.2	1.9	69.2	52	100.0
All States		**16.6**	**17.8**	**8.2**	**6.7**	**50.7**	**674**	**100.0**

Table 146: Receiving Dairy Farming Related Information

Sl. No	STATE	PROGRAMME			Control		
		Yes	No	Base	Yes	No	Base
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	67	33	528	39	61	528
2	BIHAR	83	17	504	59	41	504
3	GUJARAT	72	28	528	45	55	528
4	HARYANA	47	53	480	40	60	480
5	KARNATAKA	29	71	528	23	77	528
6	KERALA	46	54	480	26	74	480
7	MADHYA PRADESH	56	44	528	31	69	528
8	MAHARASHTRA	49	51	528	34	66	528
9	ODISHA	61	39	480	43	58	480
10	PUNJAB	63	37	504	66	34	504
11	RAJASTHAN	70	30	504	58	42	504
12	TAMIL NADU	82	18	528	76	24	528
13	UTTAR PRADESH	81	19	528	76	24	528
14	WEST BENGAL	59	41	480	45	55	480
All States		**62**	**38**	**7128**	**47**	**53**	**7128**

Table 147: Source of Most Useful Dairy Related Information

Sl. No	STATE	PROGRAMME										CONTROL									
		Radio	TV	Newspaper	Banners	Dcs/Mpi	Pvt Doc. who visits for the treatment	LRP	Internet	Friend	Others	Radio	TV	Newspaper	Banners	DCS/MPI	Pvt Doc. who visits for the treatment	LRP	Internet	Friend	Others
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	ANDHRA PRADESH	55	49	47	13	56	43	65	65	73	9	69	38	57	32	71	56	54	51	71	29
2	BIHAR	77	51	29	38	54	59	61	47	69	38	73	53	28	27	57	61	59	49	72	27
3	GUJARAT	42	37	53	56	62	33	50	71	52	55	52	55	51	45	76	57	62	54	64	45
4	HARYANA	50	48	58	42	64	47	54	61	54	41	59	47	53	38	66	51	64	53	54	36
5	KARNATAKA	45	39	48	26	55	72	51	61	68	26	63	52	56	42	72	58	56	57	58	40
6	KERALA	38	29	82	29	64	81	70	64	71	28	54	51	59	42	75	65	61	59	51	43
7	MADHYA PRADESH	72	22	48	51	68	68	64	55	71	48	56	25	50	31	66	65	63	52	67	29
8	MAHARASHTRA	69	25	36	54	65	67	63	65	72	53	68	29	52	35	60	62	58	53	69	30
9	ODISHA	71	51	39	13	63	57	59	52	66	11	59	56	50	19	68	57	55	50	56	18
10	PUNJAB	73	45	27	55	69	57	63	53	59	55	79	52	25	29	72	59	59	52	55	28
11	RAJASTHAN	70	40	38	38	65	57	62	55	61	38	65	45	45	25	66	59	55	51	59	25
12	TAMIL NADU	67	40	47	18	51	55	62	58	66	18	61	39	45	18	57	58	63	55	65	18
13	UTTAR PRADESH	69	29	53	17	73	55	67	53	58	9	68	28	55	20	67	59	59	46	66	5
14	WEST BENGAL	68	52	53	6	76	45	56	47	49	5	71	50	39	3	72	59	56	50	54	3
All States		**63**	**40**	**46**	**32**	**63**	**55**	**61**	**57**	**63**	**30**	**65**	**44**	**46**	**27**	**67**	**59**	**59**	**52**	**62**	**24**

Table 148: Faced any Discrimination in Availing the Services at DCS/MPI

Sl. No	STATE	PROGRAMME			Control		
		Yes	No	Base	Yes	No	Base
1	2	3	4	5	6	7	8
1	ANDHRA PRADESH	3	97	307	4	96	209
2	BIHAR	1	99	297	3	97	64
3	GUJARAT	3	97	382	3	97	382
4	HARYANA	5	95	273	4	96	104
5	KARNATAKA	10	90	156	10	90	216
6	KERALA	15	85	80	17	83	103
7	MADHYA PRADESH	3	97	356	3	97	168
8	MAHARASHTRA	4	96	376	3	97	127
9	ODISHA	0	100	327	2	98	84
10	PUNJAB	3	97	234	6	94	126
11	RAJASTHAN	5	95	240	3	97	121
12	TAMIL NADU	3	97	174	6	94	139
13	UTTAR PRADESH	4	96	224	5	95	19
14	WEST BENGAL	3	97	336	9	91	11
All States		**4**	**96**	**3762**	**5**	**95**	**1873**

Table 149: Coverage

STATE	Household	HH Members					
		Male		Female		Total	
		N	%	N	%	N	%
1	2	3	4	5	6	7	8
BIHAR	180	561	54.2	475	45.8	1036	100.0
GUJARAT	180	419	56.9	317	43.1	736	100.0
KARNATAKA	180	415	55.9	328	44.1	743	100.0
PANJAB	180	290	69.2	129	30.8	419	100.0
All States	**720**	**1685**	**57.4**	**1249**	**42.6**	**2934**	**100.0**

Table 150 Highest Level of Education Completed by HH Members

STATE	illiterate	Literate but no formal education	Up to Class 5th	Up to Class 8th	Up to Class 10th	Up to Class 12th	Graduation	Above Graduation	Professional Course	Other	Base
1	2	3	4	5	6	7	8	9	10	11	12
BIHAR	29.2	3.5	19.8	14.6	19.1	7.5	5.6	.7	.1	.0	1036
GUJARAT	20.1	3.0	18.5	11.3	20.8	16.2	7.2	2.3	.0	.7	736
KARNATAKA	25.0	2.0	15.9	15.7	22.2	9.6	7.8	1.3	.1	.3	743
PANJAB	27.2	1.4	16.9	8.8	18.6	20.0	5.3	1.7	.0	.0	419
All States	**25.6**	**2.7**	**18.1**	**13.2**	**20.2**	**12.0**	**6.5**	**1.4**	**.1**	**.2**	**2934**

Table 151 Primary Occupation of the Member

STATE	Crop Cultivation	Agriculture Wage Labourer	Dairying	Non-Agricultural wage labourer	Self employed/family business	Regular Salaried/wage employee	Not able to work due to disability/old age	Recipient of rent/pension/other income	Housewife	Student	Unemployed/helping in household	Other (Specify)	Base
1	2	3	4	5	6	7	8	9	10	11	12	13	14
BIHAR	16.5	1.2	6.2	6.1	2.6	4.2	1.0	.6	16.2	43.3	2.0	.2	1036
GUJARAT	30.6	2.9	3.8	3.4	4.6	3.1	.5	.1	21.3	22.3	7.1	.3	736
KARNATAKA	22.9	2.3	5.7	6.9	2.7	3.8	.4	.4	21.5	28.7	4.7	.1	743
PANJAB	42.7	1.4	2.1	2.9	4.8	3.1	1.9	.2	20.0	18.6	1.7	.5	419
All States	**25.4**	**1.9**	**4.9**	**5.1**	**3.4**	**3.6**	**.9**	**.4**	**19.4**	**30.8**	**3.9**	**.2**	**2934**

Table 152 Status of Members Staying in the Village throughout the Year

STATE	Yes	No	Base
1	2	3	4
BIHAR	92.6	7.4	1036
GUJARAT	96.9	3.1	736
KARNATAKA	93.1	6.9	743
PANJAB	98.8	1.2	419
All States	94.7	5.3	**2934**

Table 153 Place of Migration

STATE	Average Month of Migration in a Year	Nearby town	Within the state (Other than nearby town)	Outside the state	Other	Base
1	2	3	4	5	6	7
BIHAR	4	27.3	10.4	61.0	1.3	77
GUJARAT	4	17.4	17.4	52.2	13.0	23
KARNATAKA	4	17.6	11.8	68.6	2.0	51
PANJAB	6	20.0	.0	.0	80.0	5
All States	**4**	**22.4**	**11.5**	**60.3**	**5.8**	**156**

Table 154 Most Important Reason for Migration

STATE	Alternative employment	Non-availability of fodder/feed for animals in the village	Non-availability of water for animals in the village	Other	Base
1	2	3	4	5	6
BIHAR	100.0	.0	.0	.0	77
GUJARAT	100.0	.0	.0	.0	23
KARNATAKA	100.0	.0	.0	.0	51
PANJAB	100.0	.0	.0	.0	5
All States	**100.0**	**.0**	**.0**	**.0**	**156**

Table 155 Composition of animal

STATE	N	Indigenous Cow	Crossbreed Cow	Buffalo	Others
1	2	3	4	5	6
BIHAR	229	5	76	17	3
GUJARAT	967	6	13	22	59
KARNATAKA	259	4	83	8	5
PANJAB	814	7	23	7	62
All States	**2269**	**6**	**31**	**15**	**48**

Table No-158 Average Milk Yield one day prior to the survey in Ltr.

STATE	Buffalo		Crossbreed Cow		Indigenous Cow		Total	
	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
1	2	3	4	5	6	7	8	9
BIHAR	10.5	9.8	8.0	8.1	6.5	5.6	8.5	8.5
GUJARAT	8.8	8.8	7.9	6.9	6.5	6.0	13.3	12.5
KARNATAKA	10.1	9.6	10.0	9.0	7.0	5.8	10.1	9.1
PANJAB	9.4	8.5	8.8	8.4	7.0	5.9	14.1	13.0
All States	9.3	8.9	8.7	8.2	6.8	5.9	11.5	10.8

Table 159 Average Daily Sale in Ltr.

STATE	Cow	Buffalo	Mixed
1	2	3	4
BIHAR	10.1	7.6	.
GUJARAT	11.5	7.4	1.6
KARNATAKA	12.4	6.4	1.0
PANJAB	13.4	1.5	1.6
All States	12.0	6.0	1.6

Table 160 Average sale price in Rs./Ltr.

STATE	Cow	Buffalo	Mixed
1	2	3	4
BIHAR	26.3	30.9	
GUJARAT	28.7	30.5	28.2
KARNATAKA	27.4	30.7	26.0
PANJAB	23.8	26.9	25.4
All States	26.3	29.6	26.8

Table 161 Proportion of HH Members Engaged in Dairying.

STATE	Male	Female	Total
1	2	3	4
BIHAR	46	45	46
GUJARAT	60	63	61
KARNATAKA	55	65	59
PANJAB	68	61	66
All States I	**55**	**57**	**56**

Table 162 Gender wise HH Members Engaged in different Dairying Activities

STATE	Feeding of animals		Milking of animals		Washing of animals		Selling/Po uring Milk		Fodder Collection		Chaffing of fodder		Open grazing of animals		Cleaning of Shed		Dung Collection / Dung Cake preparatio		Other	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
BIHAR	53.3	46.7	75.0	25.0	60.0	40.0	73.3	26.7	67.2	32.8	68.3	31.7	17.8	82.2	16.1	83.9	7.2	92.8	3.9	96.1
GUJARAT	46.1	53.9	61.7	38.3	70.6	29.4	56.7	43.3	56.1	43.9	51.7	48.3	21.7	78.3	36.1	63.9	13.3	86.7	11.7	88.3
KARNATAKA	37.2	62.8	57.2	42.8	72.2	27.8	50.0	50.0	49.4	50.6	45.0	55.0	15.6	84.4	34.4	65.6	8.9	91.1	6.1	93.9
PANJAB	69.4	30.6	73.9	26.1	97.2	2.8	69.4	30.6	71.7	28.3	67.2	32.8	67.8	32.2	90.0	10.0	69.4	30.6	70.0	30.0
All States	**51.5**	48.5	66.9	33.1	75.0	25.0	62.4	37.6	61.1	38.9	58.1	41.9	30.7	69.3	44.2	55.8	24.7	75.3	22.9	77.1

Table 163 Membership of DCS

STATE	Yes	No	Total
1	2	3	4
BIHAR	57.2	42.8	100.0
GUJARAT	40.6	59.4	100.0
KARNATAKA	35.0	65.0	100.0
PANJAB	40.0	60.0	100.0
All States	**43.2**	**56.8**	**100.0**

Table 164 Gender -wise Members of DCS

STATE	Male	Female	Total
1	2	3	4
BIHAR	70.9	29.1	100.0
GUJARAT	64.4	35.6	100.0
KARNATAKA	66.7	33.3	100.0
PANJAB	66.7	33.3	100.0
All States	67.5	32.5	100.0

Table 165 Participation in DCS Meetings by Members

STATE	Yes	No	Total
1	2	3	4
BIHAR	98	2	100.0
GUJARAT	99	1	100.0
KARNATAKA	97	3	100.0
PANJAB	99	1	100.0
All States	98	2	100.0

Table 166 Active participation in decision making of DCS

STATE	Yes	No	Total
1	2	3	4
BIHAR	96	4	100.0
GUJARAT	97	3	100.0
KARNATAKA	94	6	100.0
PANJAB	97	3	100.0
All States	96	4	**100.0**

Table 167 Involvement in fodder seed production

STATE	Yes	No	Total
1	2	3	4
BIHAR	37	63	100.0
GUJARAT	41	59	100.0
KARNATAKA	33	67	100.0
PANJAB	38	62	100.0
All States	**37**	**63**	**100.0**

Table 168 Use of pesticides in cultivation of fodder crops

STATE	Yes	No	Total
1	2	3	4
BIHAR	7.8	92.2	100.0
GUJARAT	7.8	92.2	100.0
KARNATAKA	4.4	95.6	100.0
PANJAB	3.3	96.7	100.0
All States	**5.8**	**94.2**	**100.0**

Table 169 Use pesticides in cultivation of other crops

STATE	Yes	No	Total
1	2	3	4
BIHAR	85.6	14.4	100.0
GUJARAT	92.8	7.2	100.0
KARNATAKA	85.6	14.4	100.0
PANJAB	87.8	12.2	100.0
All States	**87.9**	**12.1**	**100.0**

Table 170 Received directions on using pesticides

STATE	Yes	No	Total
1	2	3	4
BIHAR	80.0	20.0	100.0
GUJARAT	82.8	17.2	100.0
KARNATAKA	87.2	12.8	100.0
PANJAB	85.6	14.4	100.0
All States	**83.9**	**16.1**	**100.0**

Table 171 Source of information related to use of Pesticides

STATE	Label on container	From shopkeeper	Television	KVK	Extension worker	Training/meeting under NDP I	From other farmer	Other	Base
1	2	3	4	5	6	7	8	9	10
BIHAR	10	63	97	100	12	1	61	1	144
GUJARAT	46	42	97	100	7	3	48	1	149
KARNATAKA	46	46	96	100	17	3	29	0	157
PANJAB	38	36	97	100	12	3	38	1	154
All States	**35**	**47**	**97**	**100**	**12**	**2**	**44**	**0**	**604**

Table 172 Place of keeping Pesticide in HH

STATE	In a Separate Room with lock	In cattle shed	Other place	Base
1	2	3	4	5
BIHAR	66.5	15.5	18.1	155
GUJARAT	75.6	12.5	11.9	168
KARNATAKA	31.0	42.6	26.5	155
PANJAB	42.4	43.7	13.9	158
All States	54.2	28.3	17.5	636

Table 173 Type of Protection used while applying pesticides

STATE	Cover face & eyes	Gloves	Wear clothes covering whole body	Other	Total
1	2	3	4	5	6
BIHAR	91	25	37	1	155
GUJARAT	70	39	28	8	168
KARNATAKA	67	33	49	9	155
PANJAB	74	41	38	9	158
All States	75	34	38	7	636

Table 174 Action taken Immediately after applying pesticides

STATE	Wash hands with soap	Have a bath and wear same clothes	Have bath & change clothes	Directly eat or drink without washing hands	Continue with other work	Total
1	2	3	4	5	6	7
BIHAR	94	5	87	1	1	155
GUJARAT	69	16	59	2	1	168
KARNATAKA	68	15	59	1	0	155
PANJAB	63	17	51	4	1	158
All States	**73**	**13**	**64**	**2**	**0**	**636**

Table 175 Ways to dispose the Pesticide Container

STATE	Sell	Puncture	Throw anywhere	Bury the empty container in soil	Reuse for other purpose	Base
1	2	3	4	5	4	5
BIHAR	9	9	32	52	1	155
GUJARAT	29	7	33	48	3	168
KARNATAKA	39	8	36	37	3	155
PANJAB	35	8	35	40	3	158
All States	**28**	**8**	**34**	**44**	**2**	**636**

Table 176 Effects of Pesticides on Human Being

STATE	No effect	Pollute water	Poisoning	Fever	Vomiting	Breathing problem	Cancer	Other	Base
1	2	3	4	5	6	7	8	9	10
BIHAR	8	23	63	3	17	39	2	4	155
GUJARAT	18	21	54	6	36	43	4	5	168
KARNATAKA	19	37	61	6	46	37	2	2	155
PANJAB	21	30	65	4	33	37	4	4	158
All States	**16**	**28**	**61**	**5**	**33**	**39**	**3**	**4**	**636**

Table 177 Awareness about Communicable disease in animals

STATE	Yes	No	Base
1	2	3	4
BIHAR	25.0	75.0	180
GUJARAT	36.1	63.9	180
KARNATAKA	38.9	61.1	180
PANJAB	32.8	67.2	180
All States	**33.2**	**66.8**	**720**

Table 178 Names of Communicable Diseases in Animals

STATE	Malaria	Brucellosis	Bovine tuberculosis	Bird flu	Swine flu	Rabies	Plague	Base
1	2	3	4	5	6	7	8	9
BIHAR	0	51	2	4	7	31	9	45
GUJARAT	0	40	2	8	9	34	11	65
KARNATAKA	0	49	3	7	9	30	7	70
PANJAB	0	37	0	8	8	42	8	59
All States	**0**	**44**	**2**	**7**	**8**	**34**	**9**	**239**

Table 179 Precautions to Prevent Humans from Infected Animals

STATE	Do not know	Timely vaccination of animals	Disposal of dead animal/ foetus in covered pit	Washing hands with soap before eating	Not eating uncooked meat	Not consuming milk without boiling	Other	Base
1	2	3	4	5	6	7	8	9
BIHAR	51	2	1	3	3	3	0	180
GUJARAT	59	31	29	2	2	2	7	180
KARNATAKA	64	34	33	2	3	2	9	180
PANJAB	64	35	33	2	4	3	9	180
All States	**59**	**25**	**24**	**2**	**3**	**3**	**6**	**720**

Table 180 MAH having their Animal Vaccinated

STATE	Yes	No	Base
1	2	3	4
BIHAR	96.1	3.9	180
GUJARAT	91.7	8.3	180
KARNATAKA	88.9	11.1	180
PANJAB	92.2	7.8	180
All States	**92.2**	**7.8**	**720**

Table 181 Place of Vaccination

STATE	At home/animal shed	At AI Centre/ vet. Centre	Vaccination camp	Total
1	2	3	4	5
BIHAR	93.6	6.4	0	173
GUJARAT	70.9	29.1	0	165
KARNATAKA	70.6	29.4	0	160
PANJAB	68.7	31.3	0	166
All States	**76.2**	**23.8**	**0**	**664**

Table 182 Wastes of Vaccination Process

STATE	Vaccination vials	Glove	Needle & syringe	Cotton	Base
1	2	3	4	5	6
BIHAR	62	13	86	5	173
GUJARAT	62	36	75	10	165
KARNATAKA	67	21	84	5	160
PANJAB	53	15	86	2	166
All States	**61**	**21**	**83**	**5**	**664**

Table 183 Process done with the vaccination wastes

STATE	Thrown at vaccination site	Collected and taken away	Do not know	Total
1	2	3	4	5
BIHAR	4.6	75.7	19.7	173
GUJARAT	4.8	73.9	21.2	165
KARNATAKA	3.1	78.8	18.1	160
PANJAB	3.0	84.3	12.7	166
All States	**3.9**	**78.2**	**17.9**	**664**

Table 184 What is the source of water used for milch animal

Options	Winter	Summer	Rainy
1	2	3	4
Piped water supply	8.8	8.8	8.8
Bore well	8.1	8.1	8.1
Hand pump	67.8	78.6	67.8
Canal	5.0	5.0	5.0

Base: All HH(720)

Table 185 Per Animal Average Requirement of Water (In ltr.)

STATE	Indigenous Cow	Crossbreed Cow	Buffalo
1	2	3	4
BIHAR	78.5	77.7	78.9
GUJARAT	79.5	76.4	95.2
KARNATAKA	80.4	79.0	73.1
PANJAB	79.5	77.9	93.8
All States	**79.4**	**77.8**	**88.0**

Table 186 Availability of Adequate Water

STATE	Yes	Scarce during some periods	Scarce throughout year	Base
1	2	3	4	5
BIHAR	96.7	3.3	0	180
GUJARAT	96.7	3.3	0	180
KARNATAKA	97.8	2.2	0	180
PANJAB	98.9	1.1	0	180
All States	**97.5**	**2.5**	**0**	**720**

Table 187 Knowledge about methods for increasing water

STATE	Tube-well/well, well deepening	Collecting rainwater in tank (Roof/ground)	Farm bunding, watershed	Pond	Micro-irrigation	Planting more trees	Others	Base
1	2	3	4	5	6	7	8	9
BIHAR	100.0	45.5	81.8	45.5	9.1	18.2	9.1	11
GUJARAT	39.1	68.8	25.0	71.9	23.4	10.9	10.9	64
KARNATAKA	35.8	67.2	26.9	59.7	32.8	7.5	13.4	67
PANJAB	28.3	65.0	21.7	63.3	41.7	10.0	5.0	60
All States	38.1	65.8	27.7	63.9	31.2	9.9	9.9	**202**

Table 188 Source of Information about Increasing Water Availability

STATE	TV	Radio	Newspaper	Awareness by govt. deptt.	Awareness by NGO	Awareness under NDP I	From other farmers	Base
1	2	3	4	5	6	7	8	9
BIHAR	18.2	18.2	9.1	27.3	9.1	18.2	90.9	11
GUJARAT	84.4	84.4	82.8	4.7	6.3	23.4	15.6	64
KARNATAKA	88.1	88.1	86.6	1.5	10.4	9.0	13.4	67
PANJAB	96.7	96.7	96.7	3.3	15.0	16.7	1.7	60
All States	**85.6**	**85.6**	**84.2**	**4.5**	**10.4**	16.3	**14.9**	**202**

Table 189 Knowledge About Fodder Conservation Technologies

STATE	Silage making	Chaff cutting	Mowers to reduce waste	Storage of dry fodder	Other	Base
1	2	3	4	5	6	7
BIHAR	36.1	73.9	1.7	54.4	0.6	180
GUJARAT	31.7	78.3	1.7	52.8	0.0	180
KARNATAKA	46.1	78.3	0.0	57.2	0.6	180
PANJAB	51.7	73.3	1.7	65.0	0.6	180
All States	**41.4**	**76.0**	**1.3**	**57.4**	**0.4**	**720**

Table 190 Measures Undertaken During Fodder Scarcity

STATE	Buy fodder	Obtain free from relief camp	Use alternative fodder resource	Buy Fodder in advance	Sell Animal	Migrate with animal	Base
1	2	3	4	5		6	7
BIHAR	62.8	1.1	31.1	70.0	.0	.0	180
GUJARAT	47.8	1.1	29.4	76.7	.0	.0	180
KARNATAKA	33.3	0.0	11.7	78.3	.0	.0	180
PANJAB	47.8	1.1	23.9	83.3	.0	.0	180
All States	**47.9**	**0.8**	**24.0**	**77.1**	**.0**	**.0**	**720**

Table 191 Source of Information About Fodder Conservation

STATE	Traditional method, done in family	Training	Outside experts/extension workers	DCS/Union	From other farmers	Other	Base
1	2	3	4	5	6	7	8
BIHAR	85.0	5.6	11.7	5.0	31.7	1.7	180
GUJARAT	64.4	7.2	12.8	34.4	31.1	0.6	180
KARNATAKA	58.9	4.4	11.7	36.1	19.4	1.1	180
PANJAB	65.0	8.3	11.1	36.1	13.3	1.7	180
All States	**68.3**	6.4	**11.8**	**27.9**	**23.9**	**1.3**	**720**

Table 192 BMC installed at DCS Collection Centre

STATE	Yes	No	Total
1	2	3	4
BIHAR	46.7	53.3	100.0
GUJARAT	40.0	60.0	100.0
KARNATAKA	20.0	80.0	100.0
PANJAB	53.3	46.7	100.0
All States	**40.0**	**60.0**	**100.0**

Table 193 Capacity of the Installed BMC

STATE	1 KL	2 KL	5 KL	Total
1	2	3	4	5
BIHAR	14.3	71.4	14.3	100.0
GUJARAT	33.3	66.7	.0	100.0
KARNATAKA	.0	66.7	33.3	100.0
PANJAB	.0	100.0	.0	100.0
All States	**66.7**	**33.3**	**.0**	**100.0**

Table 194 Main Source of Water for BMC Cleaning

Source	Seasons		
	Summer	Winter	Rainy
1	2	3	4
Piped water/village supply system	50.0	50.0	50.0
Hand pump/Bore well	56.7	56.7	56.7
Well	8.3	8.3	8.3

Table 195 Ways to Dispose the Waste Water from BMC, Can and Floor Cleaning

STATE	Not enough waste water to dispose	Let out into street near DCS	Let out into nearby land	Through kaccha drain to far off place	Connected to pacca drain	Soak pit	Other	Total
1	2	3	4	5	6	7	8	9
BIHAR	6.7	13.3	46.7	6.7	6.7	13.3	6.7	100.0
GUJARAT	.0	.0	.0	.0	66.7	33.3	.0	100.0
KARNATAKA	.0	6.7	13.3	.0	66.7	13.3	.0	100.0
PANJAB	26.7	20.0	13.3	6.7	33.3	.0	.0	100.0
All States	**8.3**	**10.0**	**18.3**	**3.3**	**43.3**	**15.0**	**1.7**	**100.0**

Table 196 Interviewer Observation on the Waste Water

STATE	Water is Not Stagnant Near DCS	Water is stagnant at disposal point (soak pit, drain, open land)	Smell near wastewater disposal site	mosquito/flies near disposal site
1	2	3	4	5
BIHAR	53.3	26.7	33.3	0.0
GUJARAT	73.3	26.7	0.0	0.0
KARNATAKA	100.0	6.7	0.0	0.0
PANJAB	26.7	53.3	6.7	20.0
All States	**63.3**	**26.7**	**10.0**	**5.0**

Table 197 Sources of Energy at DCS/collection centre

STATE	Electricity	Diesel	Other
1	2	3	4
BIHAR	100.0	33.3	6.7
GUJARAT	100.0	0.0	0.0
KARNATAKA	100.0	6.7	0.0
PANJAB	100.0	6.7	0.0
All States	**100.0**	**11.7**	**1.7**

Table: 1A: Incidence of Milch Animal Ownership (%)

Sl No	STATE	PROGRAMME		CONTROL	
		Base#	Milch Animal Owning HHs	Base#	Milch Animal Owning HHs
			Percent		Percent
1	2	3	4	5	6
1	CHHATTISGARH	2169	34	2341	25
2	JHARKHAND	1784	48	1617	37
3	UTTARAKHAND	1018	55	1186	48
All states		**4971**	**43**	**5144**	**34**

Base: Total No. of HH Listed

Table 2A: Composition of Bovine Animals (Male + Female)

Sl. No.	Animal Category	Programme	Control
1	2	3	4
1	INDIGENOUS COWS (IC)	22	23
2	CROSSBRED COWS (CB)	75	66
3	BUFFALO	3	11
4	**All Categories**	**100**	**100**

Table 3A: Composition of Bovine Animal Holding (%)

Sl No.	STATE	Base	PROGRAMME				Base	CONTROL			
			IC	CB	Buffalo	Total		IC	CB	Buffalo	Total
1	2	3	4	5	6	7	8	9	10	11	12
1	CHHATTISGARH	417	3	96	1	100	360	2	97	1	100
2	JHARKHAND	370	21	73	5	100	497	22	57	22	100
3	UTTARAKHAND	214	60	39	1	100	244	58	38	5	100
All States		**1001**	**22**	**75**	**3**	**100**	**1101**	**23**	**66**	**11**	**100**

 # Base: Total Bovine animals

Table 4A: Composition of Milch Animals

Values as percent of base

Sl. No	STATE	PROGRAMME				CONTROL			
		Animal Category				Animal Category			
		IC	CB	Buff	Total	IC	CB	Buff	Total
1	2	3	4	5	6	7	8	9	10
1	CHHATTISGARH	3	96	1	100	1	97	2	100
2	JHARKHAND	15	82	4	100	19	61	20	100
3	UTTARAKHAND	55	43	2	100	56	40	5	100
All States		**15**	**83**	**2**	**100**	**18**	**72**	**10**	**100**

Table 5A: Composition of Milk Production

Values as percent of total milk production

Sl. No	STATE	PROGRAMME				CONTROL			
		Animal Category				Animal Category			
		IC	CB	Buff	All	IC	CB	Buff	All
1	2	3	4	5	6	7	8	9	10
1	CHHATTISGARH	3	95	2	100	1	96	3	100
2	JHARKHAND	12	83	5	100	14	68	18	100
3	UTTARAKHAND	60	39	1	100	57	37	6	100
All States		**17**	**80**	**3**	**100**	**19**	**71**	**10**	**100**

Table 6A: Distribution of MAH by Land Holding Class(%)

		PROGRAMME								CONTROL							
Sl No	STATE	Base*	landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers> 10 HA	All	Base*	landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers> 10 HA	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	CHHATTISGARH	144	20	20	21	24	10	6	100	144	26	28	23	14	8	1	100
2	JHARKHAND	144	24	74	1	1	0	0	100	144	26	60	6	6	2	0	100
3	UTTRAKHAND	72	38	35	8	14	4	1	100	72	43	11	10	18	15	3	100
All States		**360**	**25**	44	11	13	5	3	**100**	**360**	29	38	13	12	7	1	**100**

Table 7A: MILCH ANIMAL BY LAND HOLDING (%)

		PROGRAMME						CONTROL					
Sl. No	STATE	LANDLESS	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA	LANDLESS	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers>10 HA
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	CHHATTISGARH	23	17	22	24	8	5	26	23	25	15	9	2
2	JHARKHAND	24	72	2	1	0	0	26	59	5	7	3	0
3	UTTRAKHAND	38	35	8	13	4	1	47	9	8	15	16	6
All States		**26**	**40**	**13**	**14**	**4**	**2**	**29**	**36**	**14**	**12**	**7**	**2**

TABLE 8A: Milk Yield by Land Holding Class

Sl No	STATE	PROGRAMME							CONROL						
		Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All	Landless	Marginal Farmers (<1 Ha)	Small Farmers (1-2 Ha)	Semi-Medium Farmers (2-4 Ha)	Medium Farmers (4-10 Ha)	Large Farmers (>10 Ha)	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	CHHATTISGARH	8.4	8.8	8.0	8.2	7.9	11.5	8.4	9.6	8.3	8.8	9.1	8.9	10.7	9.0
2	JHARKHAND	7.0	8.2	8.0	8.7	0.0	0.0	7.9	6.8	6.6	4.0	9.0	4.6	0.0	6.6
3	UTTARAKHAND	3.0	4.7	5.6	3.0	5.0	9.0	4.1	3.8	2.8	4.0	3.2	2.5	3.0	3.4
All States		**6.7**	**7.7**	**7.6**	**7.4**	**7.4**	**11.2**	**7.4**	**6.6**	**6.8**	**7.2**	**7.3**	**5.5**	**6.8**	**6.7**

Table 9A: Distribution of MAH by Number of Adult Female Bovine Animals (%)

Sl No	STATE	PROGRAMME						CONTROL					
		No. of Adult Females						No. of Adult Females					
		Base#	1 animal	2 animal	3 animal	4 and more animals	All	Base#	1 animal	2 animal	3 animal	4 and more animals	All
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	CHHATTISGARH	144	16	47	18	19	100	144	26	49	18	8	100
2	JHARKHAND	144	26	59	10	4	100	144	22	50	15	13	100
3	UTTARAKHAND	72	50	38	10	3	100	72	57	24	13	7	100
All States		**360**	**27**	**50**	**13**	**10**	**100**	**360**	**31**	**44**	**16**	**9**	**100**

Base: Total No. of HH

Table 10A: Only AI Coverage (% of Animals in the Category)

STATE	Programme			Control		
	IC	CB	Buffalo	IC	CB	Buffalo
CHHATTISGARH	50	59	40	75	64	60
JHARKHAND	76	69	40	49	63	26
UTTARAKHAND	79	76	100	83	65	83
All States	**75**	**64**	**44**	**67**	**64**	**33**

Table 11A: Only NS Coverage (% of Animals in the Category)

STATE	Programme			Control		
	IC	CB	Buffalo	IC	CB	Buffalo
CHHATTISGARH	50	35	60	25	32	40
JHARKHAND	24	27	40	48	33	51
UTTRAKHAND	2	4	0	0	0	0
All States	**14**	**30**	**44**	**23**	**29**	**46**

Table 12A: Services Resulted in Conception (% of Services Category)

STATE	Programme				Control			
	AI	NS	Open	DK	AI	NS	Open	DK
CHHATTISGARH	60	37	2	1	66	33	1	0
JHARKHAND	57	29	14	0	49	42	8	1
UTTRAKHAND	63	9	25	3	60	6	24	9
All States	**60**	**30**	**10**	**1**	**58**	**33**	**8**	**2**

Table 13A: AI Services Received by Provider Type

STATE	Programme							Control						
	Base	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others / don't KNOW	Total	Base	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others / don't KNOW	Total
CHHATTISGARH	232	3	1	88	4	4	100	209	0	0	94	3	2	100
JHARKHAND	204	0	0	76	22	1	100	200	2	0	79	19	1	100
UTTRAKHAND	115	1	35	30	34	0	100	124	0	39	5	56	0	100
All States	**551**	**1**	**8**	**72**	**17**	**2**	**100**	**533**	**1**	**9**	**68**	**21**	**1**	**100**

Table 14A: NS Services Received by Provider Type

STATE	Control							Programme						
	Base	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others / don't KNOW	Total	Base	Milk Coop	MAITS	NGO / Pvt.	Govt.	Others / don't KNOW	Total
CHHATTISGARH	130	4	6	77	12	1	100	98	9	8	64	16	2	100
JHARKHAND	77	0	3	96	1	0	100	129	0	0	78	20	2	100
UTTRAKHAND	3	100	0	0	0	0	100	0	0	0	0	0	0	0
All States	**210**	**4**	**5**	**83**	**8**	**0**	**100**	**227**	**4**	**4**	**72**	**19**	**2**	**100**

Table 15A: Insured Animal (% of Animals in the Category)

STATE	Control			Programme		
	IC	CB	Buffalo	IC	CB	Buffalo
CHHATTISGARH	0	5	20	0	7	0
JHARKHAND	0	8	0	7	6	10
UTTRAKHAND	5	6	0	5	4	9
All States	**3**	**6**	**4**	**6**	**6**	**10**

Table 16A: Animal sent for Grazing (% of Animals in the Category)

All States	Control			Programme		
	IC	CB	Buffalo	IC	CB	Buffalo
CHHATTISGARH	0	8	0	0	17	0
JHARKHAND	18	15	0	10	16	6
UTTRAKHAND	2	0	0	1	7	0
All States	**8**	**10**	**0**	**5**	**15**	**6**

Table 17A: Animal sick during last one Year (% of Animals in the Category)

STATE	Control			Programme		
	IC	CB	Buffalo	IC	CB	Buffalo
CHHATTISGARH	9	12	0	0	9	0
JHARKHAND	1	13	15	2	8	1
UTTRAKHAND	9	5	0	5	2	0
All States	**6**	**11**	**11**	**4**	**8**	**1**

Table 18A: Main source of drinking water for bovine animal in winter

STATE	Control						Programme					
	Piped water	Bore well	Hand Pump	Well	Pond/river	Canal	Piped water	Bore well	Hand Pump	Well	Pond/river	Canal
CHHATTISGARH	36	47	17	0	1	8	42	50	1	1	0	14
JHARKHAND	35	54	10	3	1	5	46	53	3	1	0	3
UTTRAKHAND	29	57	4	0	0	19	36	64	0	0	0	18
All States	**34**	**52**	**11**	**1**	**1**	**9**	**43**	**54**	**2**	**1**	**0**	**10**

Table 19A: Main source of drinking water for bovine animal in Summer

STATE	Control						Programme					
	Piped water	Bore well	Hand Pump	Well	Pond/river	Canal	Piped water	Bore well	Hand Pump	Well	Pond/river	Canal
CHHATTISGARH	15	63	19	0	1	10	32	60	1	1	0	14
JHARKHAND	16	68	11	3	2	8	18	80	3	1	0	4
UTTRAKHAND	22	64	4	0	0	19	24	74	0	0	1	19
All States	**17**	**65**	**13**	**1**	**1**	**11**	**25**	**71**	**2**	**1**	**0**	**11**

Table 20A: Main source of drinking water for bovine animal in Rainy

STATE	Control						Programme					
	Piped water	Bore well	Hand Pump	Well	Pond/river	Canal	Piped water	Bore well	Hand Pump	Well	Pond/river	Canal
CHHATTISGARH	24	53	18	0	3	9	29	51	1	1	5	20
JHARKHAND	24	60	10	4	2	8	22	74	4	1	2	5
UTTRAKHAND	14	60	4	0	7	25	29	71	0	0	0	18
All States	**22**	**58**	**12**	**2**	**4**	**12**	**26**	**64**	**2**	**1**	**3**	**14**

Table 21A: Dung storage

STATE	Control					Programme				
	Manure	Open storage	Biogas pit	Slurry Pit	Others	Manure	Open storage	Biogas pit	Slurry Pit	Others
CHHATTISGARH	21	88	0	0	0	30	80	1	3	1
JHARKHAND	31	75	0	0	0	42	63	1	1	0
UTTRAKHAND	54	88	1	10	0	51	78	0	0	0
All States	**32**	**83**	**0**	**2**	**0**	**39**	**73**	**1**	**2**	**0**

Table 22A: Type of Drainage in animal shed

STATE	Programme				Control			
	Pucca	Brick lined	Kuchha	No drainage	Pucca	Brick lined	Kuchha	No drainage
CHHATTISGARH	1	25	38	35	8	17	32	43
JHARKHAND	10	19	24	47	6	9	20	65
UTTRAKHAND	15	11	53	21	19	11	39	31
All States	**8**	**20**	**36**	**37**	**9**	**13**	**29**	**49**

Table 23A: Knows about some diseases can be transmitted from animal to human being

STATE	Programme	Control
CHHATTISGARH	29	22
JHARKHAND	23	4
UTTRAKHAND	19	0
All States	**25**	**11**

Table 24A: Female Family member participation in Different Activities

STATE	Control							Programme						
	Feeding	Milking	Washing	Selling/Pouring milk	Fodder collection	Chaffing of fodder	Cleaning of shed	Feeding	Milking	Washing	Selling/ Pouring milk	Fodder collection	Chaffing of fodder	Cleaning of shed
CHHATTISGARH	72	37	53	3	44	40	66	74	51	47	10	33	35	83
JHARKHAND	73	44	66	4	38	37	81	83	54	66	1	58	51	88
UTTRAKHAND	92	50	19	1	8	4	72	81	11	15	0	4	13	78
All States	**76**	**43**	**52**	**3**	**34**	**32**	**73**	**79**	**44**	**48**	**5**	**37**	**37**	**84**

Table 25A: Contribution of women in dairying is recognised by society

STATE	Programme		Control	
	Yes	No	Yes	No
CHHATTISGARH	98	2	94	6
JHARKHAND	80	20	88	12
UTTRAKHAND	69	31	60	40
All States	**85**	**15**	**85**	**15**

Table 26A: Dairying resulted in increased status of women in household

STATE	Programme		Control	
	Yes	No	Yes	No
CHHATTISGARH	98	2	92	8
JHARKHAND	90	10	90	10
UTTRAKHAND	65	35	64	36
All States	**88**	**12**	**85**	**15**

Table 27A: Participation in Training & Demonstration

STATE	Control		Programme	
	Training	Demonstration	Training	Demonstration
CHHATTISGARH	2.4	2.1	3.4	3.0
JHARKHAND	2.4	2.4	10.2	10.2
UTTRAKHAND	0.9	0.4	6.4	6.4
All States	**2.1**	**1.9**	**6.6**	**6.4**

Table 28A: Felt Need for Training & Demonstration

STATE	Control		Programme	
	Training	Demonstration	Training	Demonstration
CHHATTISGARH	38	55	56	19
JHARKHAND	42	42	32	32
UTTRAKHAND	50	100	56	50
All States	**41**	**50**	**42**	**33**

Table 29A: Dairying as an Important Source of Income

STATE	Control		Programme	
	Most Important	Second most important	Most Important	Second most important
CHHATTISGARH	1	5	4	13
JHARKHAND	1	57	2	45
UTTRAKHAND	3	21	0	32
All States	**1**	**29**	**3**	**30**

Table 30A: Dairying as a Source of Income

STATE	Control	Programme
CHHATTISGARH	98	100
JHARKHAND	99	100
UTTRAKHAND	99	100
All States	**99**	**100**

Table 31A: Get dairy farming related information

STATE	Control		Programme	
	Yes	No	Yes	No
CHHATTISGARH	65	35	56	44
JHARKHAND	53	47	56	44
UTTRAKHAND	94	6	75	25
All States	**66**	**34**	**60**	**40**

Table 32A: Female Family member participation in Different Activities

STATE	Control									Programme								
	Radio	TV	Newspaper	Banner	DCS/MPI	Private doctor	LRP	Internet	Friends/relatives	Radio	TV	Newspaper	Banner	DCS/MPI	Private doctor	LRP	Internet	Friends/relatives
CHHATTISGARH	75	56	17	37	73	66	61	44	51	69	56	15	24	81	53	61	49	41
JHARKHAND	84	49	29	5	58	55	57	43	66	72	53	30	9	75	65	53	46	57
UTTRAKHAND	81	34	21	69	75	54	60	50	51	81	54	20	43	80	63	63	56	56
All States	**80**	**47**	**22**	**36**	**69**	**59**	**59**	**46**	**56**	**73**	**54**	**22**	**23**	**79**	**60**	**59**	**49**	**51**

Table 33A: Approached to feed animal as per RBP

STATE	Yes	No
CHHATTISGARH	100	0
JHARKHAND	100	0
UTTRAKHAND	90	10
All States	**96**	**4**

Table 34A: Animal covered under RBP

STATE	Yes	No
CHHATTISGARH	69	31
JHARKHAND	78	22
UTTRAKHAND	79	21
All States	**74**	**26**

Table 35A: Selling milk before opening DCS/MPI

STATE	Individual HH	Dudhia	Private Dairy	Outside village	Others
CHHATTISGARH	25	69	0	0	6
JHARKHAND	31	38	13	6	13
All States	**28**	**53**	**6**	**3**	**9**

Table 36A: Average Price get from DCS/MPI

STATE	Before	After
CHHATTISGARH	24	29
JHARKHAND	25	29
All States	**24**	**29**

Table 37A: Benefitted in these Manners

STATE	Better Price of milk	No wastage of milk	Advantage of getting longer time	Subsidised Cattle feed	Time saved in marketing milk
CHHATTISGARH	76	76	35	6	18
JHARKHAND	75	92	75	8	17
All States	**76**	**83**	**52**	**7**	**17**

Submitted by

Development and Research Services Pvt. Ltd.
A1/19, Safdarjung Enclave
New Delhi - 110029
India