

## WOMEN'S DAIRY STUDY

### Introduction

The key roles the women of India have played in the dairying enterprise of the nation have received wide recognition. While a woman's particular activities vary according to caste and class, as well as geographical location, women's contributions to the dairy industry in all its forms, and particularly to the micro-level enterprise of the individual family farm, have been acknowledged as the milk production of the country has increased to meet the need of the growing population of India.

This report reflects the efforts of many people to identify key issues which impact on the ability of women, particularly those who are disadvantaged by caste or socio-economic conditions, to gain more benefit from their milk production efforts. The benefit would result in greater milk production, and also in greater self-reliance for women from less advantaged groups.

Bringing these issues to the attention of the policy-makers of Central Government, the National Dairy Development Board, as well as officials in those States studied, should enable the concerned authorities to recognize these women's roles as participants in national development, rather than the often expressed view of women as 'beneficiaries' of some welfare programme.

### Objectives

The objectives for this study were established in conference with officials in the National Commission on Rural Labour, who funded the research. The Terms of Reference for the study (Appendix 1), included :

1. To identify the contribution of women to the dairying economy.

2. To determine the extent, quality and components of the present integration of women into the organised sector of different states.
3. To evaluate the impact of existing policies of various organizations which affect the women's dairy activities.
4. To review the role of different agencies programmes in the dairying sector, and assess their impact.
5. To identify successful programme strategies.
6. To suggest measures for removing constraints which affect the integration of women and recommend alternatives.
7. To evaluate the viability of dairying as an income generating activity for poor rural women, and identify relevant methodologies for different socio-economic, geographic areas.

### Methodology

The complexity of the assignment, as well as the complexity of the dairying enterprise suggested a number of methods to be used to gather the data required. A summary questionnaire was developed for the State Dairy Federations; an interview guide was developed for the women in dairy portion of the study to be used by case study writers in selected states; and a guide for collecting benefit/cost data in particular locations was developed. Additionally, information was gathered on particular issues via interviews, case studies and from secondary data.

An attempt was made to include at least 2 states from each of the NDDB Zones, one with high membership participation of women and one with low. These are as follows :

	High Women's Participation	Low Women's Participation
Northern	Himachal Pradesh (17.7%)	Uttar Pradesh (3.6%)
Western	Gujarat (15%)	Madhya Pradesh (2.9%)
Southern	Andhra Pradesh (15.9%) Karnataka (14%) Tamil Nadu (27.1%)	Kerala (10%)
Eastern	Bihar (11.3%)	

Once the States to be included and case study writers were identified, each of the instruments underwent various 'transformations' to adapt to the individual researcher's needs and opportunities in the field. The complete case study for each of the states studied for this report are as follows :

- Andhra Pradesh, case study 5
- Bihar, case study 6
- Himachal Pradesh, case study 7

- Karnataka, case study 8
- Kerala, case study 9
- Tamil Nadu, case study 10
- Uttar Pradesh, case study 11.

Case study 1 outlined, the components for a model programme and compared the micro-economic data in Scheduled Tribal case studies.

Micro-economic data was collected in 3 geographical areas, the Scheduled Tribal Programme of KALWODS in Tamil Nadu (case study 1), the Scheduled Tribal Programme of the Lohardaga Dairy Union of Bihar (case study 2), and the SEWA dairy programme of Gujarat (case study 4).

The women and men who contributed to the various studies are acknowledged in each report. This group of people then met with representatives of NDDDB (Dr. R. K. Nair) and the Rural Labour Commission (Mr. Asvathanarayan) for a full days' seminar on the findings of their various studies. The main issues—either because they were common to the group, or seen as critical to the success of the women's ventures, even if not identified in each study—are the heart of this summary report.

### Limitations

The system of different case study writers working on different states' experiences with women in dairy production results in less uniformity than might be desired. Additionally, relatively few women in a few Districts of each state were interviewed. The interviews included at least 5 ST/SC women in each WDCS sampled, as well as at least 5 landless women. This was a specific purpose sample, not a random one which might represent all the women in India. Given the large total population and the limited time and money resources for the study, these case studies are a practical means of informing policy makers and practitioners of the benefits and problems women in rural India face in increasing milk production and improving their livelihoods.

### Discussion of the Findings

The principal issues identified in the research and discussion can be found in the next section. There are, however, certain over-riding factors which affect the implementation of any policy or practice related to women and dairying.

In the first place, the production of milk is a biological process. The quality of the animal and the inputs to support milk production, that is feed and fodder, veterinary care, breeding and general management of a dairy animal, are critical. The dairy enterprise is carried out in an agro-ecological environment which can be more, or less, supportive to the biological processes.

Additionally, dairying occurs in a social, economic, political and administrative milieu, at the micro-level as well as the macro-level, which can give more or less, support to the dairy effort. The combination of these factors results in a highly complex, and differentiated enterprise. Generalisations for any one category of factors are difficult when the tremendous variations in each of these in all of India are taken into account.

Therefore, it is not surprising that one over-riding finding is that there is a great deal of variation among the States. Even among the Dairy Federations, there seem to have been 'adjustments' in practices, if not in by-laws, to allow for adaptation to the needs or wishes

of that State organization. Very little commonality of programme or support effort is noticed between States.

This is particularly true for the effort of involving assetless women in Women's Dairy Cooperative Societies. One gets a sense of pockets of commitment to this, but no generalisable programme thrusts. Bits and pieces from various States might be usefully combined to describe a holistic approach to the problem, but to date the efforts of the national programmes or projects are not reflected as a holistic effort in any particular segment of the nation.

While the problems are similar, the solutions seem to be very different. One effort of this report is to direct attention to the need for agreement on a number of potential solutions to common problems. Seven main issues have been identified and are discussed below. Additional (myriads/hazards) issues are addressed in the case studies which follow the recommendations.

### Principal Issues

#### A. Economic Viability

Economic viability for each woman who owns a milch animal is perhaps the over-riding issue. All the issues addressed in the segments below impact on that viability. But two key factors are loans and subsidies. Either of these needs to be in large enough amounts to enable the woman to acquire a reasonably productive animal. Many of the studies indicate that the woman has to find a secondary source of money to have enough to purchase the animal.

**Loans**—Many women have received their animals because there were loan funds available. In many programmes, considerable pressure is put on the women to repay these loans. It is hard to justify that when the National government is recommending loan forgiveness. However, two factors are important: (1) women should know how much they owe, and how it is being repaid; and (2) self-reliance and empowerment are nurtured through the woman's ability to acquire her own assets and control over the benefits of her productive efforts. The review of credit costs suggests a number of ways one particular programme might improve that loan situation.

**Insurance**—While insurance is a requirement in cases of loans for milch animals, the data suggests that women do not extend insurance once their loans are repaid, nor get insurance if they have not taken a loan. This leaves them vulnerable to total loss of their investment. More education on the value of insurance would seem to be needed.

**Subsidies**—The micro-economic studies (case study 2, 3, 4) make it clear that a considerable subsidy is required for most Scheduled Caste/Scheduled Tribe and other assetless women to benefit from a milch animal.

The exact amount varies with the location and woman's particular situation. Here there are also 2 important factors: (1) the subsidy should not be

100 per cent, or it defeats the efforts to build self-reliance, and (2) the subsidies need to be planned to meet the needs of the women; that is year-round and over the productive life of the animal if necessary. Ideally, one would like to look ahead to a time when subsidies could be reduced. Considerable improvements in production but also in management of dairy cooperatives is required for this to be a reality.

At the end of the 1980s there was a growing fear that dairying was not a viable activity for landless and marginal farm women. It is encouraging that the 3 micro-studies suggest that given appropriate loans and/or subsidies and back-up support, this can be a viable option.

### B. Technical Issues of Milk Production

Probably because technical issues are easier to address (and solve) than more complex social/political issues, a large number of them have been addressed in the case studies. These range from the difficulty of acquiring a good quality milch animal, and the trade-offs between buffaloes and cows as milk producers, to the many issues of feeding, breeding and care of the animal. While there are clearly some geographical areas where buffaloes are more common than cows, the crossbred cow is widely identified as the better milk producer, easier to breed and with a longer milking period and a shorter inter-calving interval. In areas where buffalo can be successfully reared and managed, they bring a better income per litre of milk, due to the higher fat content of buffalo milk.

In many areas, breeding is still being done through natural service. This is a reflection on inadequate/unsatisfactory AI (artificial insemination) services. Multiple visits by the AI technician in an effort to cause an individual cow to conceive result in very high costs for the service, as well as an unsatisfactory lag in the milch animal's production. Unless progeny records are carefully kept, there is really no way to increase the succeeding generations of milch animals' production through natural service. Since such record keeping is not practised in small herds of 1 or 2 cows, it must be assumed that it is only luck if a second generation cow produces more milk than the first generation. This is a statement of the problem—the solution will depend on improved understanding by the woman who owns the cow or buffalo, as well as improved services from the AI technicians.

The quality and amount of milk coming out of the animal is highly dependent on the quality and amount of nutrition going into her. Every case study has identified fodder and concentrates as a major area of concern. In many states, the shift from traditional crops to cash crops has had a negative trade-off in fodder availability in areas of relatively high agricultural production.

Perhaps water intake is not also recognized as a key factor in production, but since water is necessary for milk production, it may be as great a limitation as fodder in the drought-prone areas.

The need for improved health care of the animals was also identified in every case study. Efforts to address this need at the village level through training paravet women has had limited success. A further study of the factors limiting this effort might lead to a set of guidelines of what might work. Clearly, the health services in most areas are inadequate; they are too distant, often too costly, and too ill-equipped to serve emergency health care needs. In some states, women veterinarians have completed their training but have not been assigned to posts where they could give substantial support to women farmers. Several of the case studies identified high livestock mortality rates among the poorer women producers.

The basic need for improved dairy animal management skills have not been adequately addressed. Housing for livestock is particularly difficult when assetless women really have inadequate housing themselves.

### C. Technical issues in Marketing

This area is the bridge between the individual woman producer, and the Women's Dairy Cooperative Society (WDCS). The problems here are based on the need to move the milk as quickly as possible from the milk pail to the chilling center, to maintain the quality, and to get the highest possible payment for the producer. Many of the case studies reported that in practice this is a much more inexact process than it could be. While cleanliness and lack of adulteration are the producer's problems, reliable testing and repayment are the Society's problems. When these problems occur, women are attracted to sell to commercial vendors, who pay promptly and perhaps a higher price, thereby weakening the Cooperative. While in the long run, the Cooperative may be more dependable, and give greater benefit to its members through bonus payments, etc. there are times when women can't afford the long run benefit compared to their immediate need.

The case studies in a number of states raise questions about the marketing of indigenous milk products manufactured in the villages. The economics of these have been addressed and can be found in Appendix 6.

### D. Training

Training is the heart of any women's dairy programme which is going to provide livelihood and encourage self reliance. Every case study identifies areas where training has been inadequate or non-existent.

In cases where there has been training offered, such as in the Bihar State Cooperative Milk Producers Federation Women's Dairy Project, it is reported that "training has created increasing concern amongst the members for better cattle care and increasing yield of milk". However, it has been difficult to reach the economically active and most disadvantaged women through traditional training programmes, since they are involved in daily survival activities.

In programmes where women dairy extensionists are active, such as the Women's Dairy project in Andhra Pradesh, the regular supportive training they give women in their own villages has demonstrated the value of this service through the volume of milk being produced in those districts and the growth of the women's ability to organize and manage their own activities.

The SEWA programmes in dairy in Gujarat have given strong training support for women's self-reliance in management of their dairy enterprise, but the case study of that programme identifies the need for such training to be coupled with technical training for women's economic benefit.

Every aspect of milk production and dairy cooperative society management calls for increasing the training quality, quantity and time frame for women. But equally important is the need to train men on the potential women have for production activities and management responsibilities.

Training is an aspect of the whole enterprise which can be shared by many groups of people: the government agencies which are responsible for certain technical aspects; the NGOs which are skilled in developing group cohesion and confidence in women being able to manage their own affairs; the technical personnel at the local level who have knowledge and skills women need; and the women themselves who can use their own knowledge and skills to strengthen other women through training.

Every case study identifies areas where training is needed.

#### E. Membership

In 1989 the NDDDB made a number of policy recommendations to increase the number of women members in DCS. Despite this policy support, all the case studies have identified the inadequate representation of women in dairy organizations in comparison to their productive involvement in dairy production. This uneven representation is evident even in Women's Societies, where the Secretaries are often men, and certainly becomes more marked as the membership of mixed societies, Union and Federation Boards are analysed.

In the States where the women's membership is more pronounced, a number of factors account for this increase. In Gujarat, the NDDDB has made a special effort to bring women into the mixed societies. In Andhra Pradesh, Bihar and Karnataka there has been a Special Project Approach to promote Women's Dairy Cooperative Societies (donor supported). The increase in Tamil Nadu seems to be a result of the State Government's policy to include 30 per cent women in all their programmes.

While the criteria for membership seem to vary from state to state, there is an obvious gender bias in the organization and bylaws which needs to be addressed to increase women's active membership. Some of the studies have pointed out the ability of women to revitalize dormant cooperative societies because they

are less likely to be involved in local political wranglings. While social class differentiations exist even in women's groups, a number of them, with adequate leadership and support, have strengthened the membership of assetless and SC/ST women.

The consensus of the people participating in the case study research was that while women could benefit economically from belonging to any DCS, as compared to non-membership, they would not be likely to increase their self-reliance unless they were members of a WDCS.

As the data from the various case studies was compared, it suggested that there is a great variation in the number of women members who are actually 'pouring milk' in any particular WDCS. The reasons for this are unclear, and further study is needed.

#### F. Increasing the Number of Women in Positions of Responsibility

The Women's Decade (1975-85) was a time of increasing concern over programmes for women in India, and also for increasing numbers of women to become actively involved in a wide range of economic as well as social programmes for women within India. However, data collected for this report reflects very little awareness within the bureaucracies, either Government or Federation, of the potential for building of women's skill and resources to benefit individual women producers and the total dairy enterprise of the country.

Women are unlikely to achieve positions of responsibility in the Dairy Federations and related government agencies until men become more aware of women's skills, abilities and contributions to dairy production and cooperative activities. This is evident in the case studies, at the state level when a Director does not know that there are over 100 women's dairy cooperatives in one district of his state; when another state Federation has not regularised women extensionists' appointments even after 5 years of service in which there has been a significant increase in the number of WDCS in their districts (one to over 100 Societies);

When a Federation will not appoint a woman official even when, as Project Director, she is carrying out official duties; when the first woman graduate in agriculture from the State University is unable to find a job; when women veterinarians are not placed because the men say they won't work in villages.

No doubt there are some women who are reluctant to take posts in remote areas. But all women are not alike. The demonstration in Andhra Pradesh of over 20 women posted as dairy extensionists who have stayed in the village areas for several years contradicts the male mythology of women not being able willing to take on assignments in dairy programmes.

Clearly, the evidence shows a need for women professionals at all levels. It is especially important for a Woman's Project Coordinator to be part of the mainstream dairy programme of a state, if the number of WDCS are to increase appreciably.

There is an additional need for women to be given positions of responsibility within their cooperative societies as well. One study reported that women had more knowledge about the Cooperatives and there should be more women Secretaries of the WDCS. Programme emphasis on literacy training would be a key support to this.

#### G. Union, Federation and State Policy

The case studies identify various short-comings in Union, Federation and State policy which impact on women's active participation in WDCS. The roots of some of these are reflected in the lack of awareness of the present administration in each of these organizations of the value of strengthening women's activity within the organizations.

Politically motivated changes in management personnel undermine the cooperative spirit of elected officials and weaken the cooperative structure.

Some of the studies identified problems which had developed despite the stated goals and objectives of the organizations, such as when the Cooperative Union does not function as expected.

The benefits of membership in cooperatives are recognized in the case studies. Sometimes the local women farmers are not aware of the policies and activities of the organizations which support women's productive efforts.

#### Recommendations

A relatively large number of specific recommendations have been drafted based on the case studies and can be found in Appendix 8. These are based on two main objectives :

- (1) To increase awareness and support for women's present and future potential dairy activities by the government, Federation and Union officials involved at the National, State and District levels.
- (2) To strengthen women's own abilities to organize and manage their dairy enterprise, especially assetless women.

The two objectives are two sides of the same coin; it is essential to address both for either to be effective. Therefore, implementation of the recommendations is needed for both categories, the dairy professionals and the women producers. A summary of the recommendations follows :

#### A. Economic Viability

Subsidies and loans are essential for the viability of the dairy programmes but can lead to dependence. Women dairy farmers must become more self reliant through training and empowerment of individuals and societies. Empowerment can be achieved through implementation of the recommendations in this report. The economics of dairying for particular groups of women in particular agro-ecological areas needs further study. This information should be shared with banks and other organizations which have financial support responsibilities for women's dairy programme.

#### B. Milk Production

The technical issues of access to quality livestock, reliable AI, adequate health care and fodder resources need to be addressed by all organizations responsible for women's dairy programmes. Specific plans should be developed in each of these technical areas to focus on improving the resources available to women, especially those with a limited resource base of their own.

Dairy Unions should promote green fodder production through information dissemination and supply of inputs.

#### C. Milk Marketing

Technical equipment for fat-testing should be provided in every Cooperative. The Secretary should be expected to use it. Education and special incentives should be provided for quality control. Frequency of milk payments should be increased and the Government should take steps to get the WDCS audited in time so bonuses can be regularly distributed.

#### D. Training

Regular and frequent training is needed in every aspect of dairy production including animal nutrition, livestock selection, cattle and calf management, breeding and health care. Training should be specific in guidelines and content. Training should be carried out at the village level whenever possible.

Gender sensitivity workshops are needed at every level within the Federation and for IAS officers so they will be able to strengthen women's cooperative activities by appreciating their potential for growth and their contributions to development.

#### E. Membership

Women's participation in all dairy cooperatives should be increased until there is at least 50 per cent women's membership and the WDCS are at least 30 per cent of the DCS. Women's representation in the Managing Committees at all levels—primary DCS, District Union and State Federation—should be increased to at least 50 per cent women. Emphasis should be on enabling assetless women to get assets and join the cooperative. Bylaws should be modified to say 'he|she'.

#### F. Increasing the Number of Women in Positions of Responsibility

The number of women in responsible positions needs to be increased at all levels—in the village as paravets, AI technicians, and officers in the cooperative societies; in the district as women extensionists, as members of Union Boards and as technical staff such as veterinarians; at the State level as officers in Federations as well as on Federation Boards. Qualified women are available or can be trained for all these positions.

### *G. Union, Federation and State Policy*

Professional women need to be appointed for implementing women's cells in each Federation and District Union. The Cooperative Union of each State should use their education funds to conduct cooperative education programmes and study tours for the Unions and Primary Societies. Elected representatives of government organizations should not seek election to Cooperative posts at any level.

Additional specific recommendations can be found within each case study and in separate listing of miscellaneous recommendations (Appendix 8).

### **CONCLUSIONS**

While the focus of this report has been on the problem areas identified in the case studies, one should not lose sight of the over-all positive findings. Women's Dairy Cooperative Societies are a positive force in bringing women economic benefits, and also in demonstrating women's abilities to organize and manage their own Cooperative Societies. Each case study includes women's statements of how they have benefited. They are increasingly seen as important

contributors to the family welfare, to the village economy and to national development. Professional women in the dairy industries have demonstrated their willingness to work in difficult and isolated assignments. Their professionalism, despite chauvinistic discrimination, reflects on the potential wealth of resources which will be available to India as more women receive appropriate training and appointments to participate in these kinds of programmes. Increasing numbers of men are aware of this potential and their active support is vitally needed.

### **GUIDE TO TABLES (in the next two pages)**

A. This table gives the total membership in Dairy Cooperative Societies in all the States, women's membership and the percentage of women members, all as on December 1989. The source of this table is the NDDDB.

B. This table compares the growth in women's membership during 1988-89 and 1989-90 in all States, up to December 1989. The source of this table is the NDDDB.

TABLE A  
DETAILS OF WOMEN'S PARTICIPATION IN DAIRY COOPERATIVES

As on December, 1989

Sr. No.	Name of the State	Total membership	Women members	% of Women members
<b>NORTHERN REGION</b>				
1.	Haryana	188189	4155	2.2
2.	Himachal Pradesh	16462	2918	17.7
3.	J & K	4098	11	0.3
4.	Punjab	285415	19181	6.7
5.	Rajasthan	324620	27192	8.4
6.	U.P.	368802	13339	3.6
		1187586	66796	5.6
<b>EASTERN REGION</b>				
1.	Assam	1579	25	1.6
2.	Bihar	81413	9175	11.3
3.	Orissa	39037	2138	5.5
4.	Sikkim	4330	450	10.4
5.	Tripura/Agartala	5266	312	5.9
6.	West Bengal	66814	2777	4.1
7.	Nagaland/Kohima	626	52	8.3
		199065	14929	7.5
<b>SOUTHERN REGION</b>				
1.	Andhra Pradesh	513587	81534	15.9
2.	Karnataka	898365	126050	14.0
3.	Kerala	183526	18391	10.0
4.	Tamilnadu	1467793	398393	27.1
5.	Pondicherry	15971	4967	31.1
		3079242	629335	20.4
<b>WESTERN REGION</b>				
1.	Gujarat	1502774	225178	15.0
2.	Madhya Pradesh	153828	4477	2.9
3.	Maharashtra	751914	47498	6.3
4.	Goa	10563	1070	10.1
		2419079	278223	11.5
	<b>Grand Total</b>	6884972	989283	14.4

**TABLE B**  
**GROWTH IN WOMEN MEMBERSHIP DURING 1988-89 AND 1989-90**

Sr. No.	State/UT	Total Members		Women Members		Women as % of members		Increase in women members during year	
		1988-89	1989-90*	1988-89	1989-90*	1988-89	1989-90*	1988-89	1989-90*
<b>NORTHERN</b>									
1.	Haryana . . . . .	184288	188189	4033	4155	2.19	2.21	120	122(0.07)
2.	Himachal Pradesh . . . . .	14999	16462	2829	2918	18.86	17.73	260	89(0.05)
3.	Jammu & Kashmir . . . . .	4231	4098	11	11	0.26	0.27	0	0(0.00)
4.	Punjab . . . . .	279989	285415	18091	19181	6.46	6.72	892	1090(0.59)
5.	Rajasthan . . . . .	311471	324620	23320	27192	7.49	8.38	6922	3872(2.08)
6.	Uttar Pradesh . . . . .	363443	368802	10558	13339	2.90	3.62	1091	2781(1.49)
	<b>SUB TOTAL . . . . .</b>	<b>1158421</b>	<b>1187586</b>	<b>58842</b>	<b>66796</b>	<b>5.08</b>	<b>5.62</b>	<b>9285</b>	<b>7954(4.27)</b>
<b>EASTERN</b>									
1.	Assam . . . . .	1526	1579	25	25	1.64	1.58	3	00.00
2.	Bihar . . . . .	83490	81413	8200	9175	9.82	11.27	2726	975(0.52)
3.	Orissa . . . . .	32171	39037	1130	2138	3.51	5.48	502	1008(0.54)
4.	Sikkim . . . . .	4160	4330	437	450	10.50	10.39	17	13(0.01)
5.	Tripura . . . . .	5213	5266	312	312	5.99	5.92	2	0(0.00)
6.	West Bengal . . . . .	65700	66814	2701	2777	4.11	4.16	268	76(0.04)
7.	Andaman & Nicobar . . . . .	0	0					0	0(0.00)
8.	Nagaland . . . . .	626	626	44	52	7.03	8.31	29	8(0.00)
	<b>SUB TOTAL . . . . .</b>	<b>192886</b>	<b>199065</b>	<b>12849</b>	<b>14929</b>	<b>6.66</b>	<b>7.50</b>	<b>3547</b>	<b>2080(1.12)</b>
<b>WESTERN</b>									
1.	Gujarat . . . . .	1437144	1502774	202556	225178	14.09	14.98	12032	22622(12.14)
2.	Madhya Pradesh . . . . .	144571	153824	3209	4477	2.22	2.91	426	1268(0.68)
3.	Maharashtra . . . . .	748058	751914	44426	47498	5.94	6.32	9951	3072(1.65)
4.	Goa . . . . .	10021	10563	922	1070	9.20	10.13	200	148(0.08)
	<b>SUB TOTAL . . . . .</b>	<b>2339794</b>	<b>2419075</b>	<b>251113</b>	<b>278223</b>	<b>10.73</b>	<b>11.50</b>	<b>22609</b>	<b>27110(14.55)</b>
<b>SOUTHERN</b>									
1.	Andhra Pradesh . . . . .	490763	513587	78303	81534	15.96	15.88	11822	3231(1.73)
2.	Karnataka . . . . .	829265	898365	114642	126050	13.82	14.03	16969	11408(6.12)
3.	Kerala . . . . .	168776	183526	16172	18391	9.58	10.02	2766	2219(1.15)
4.	Tamil Nadu . . . . .	1055178	1467793	266321	398393	25.24	27.14	56130	132072(70.89)
5.	Pondicherry . . . . .	15264	15971	4728	4967	30.97	31.10	1067	239(0.13)
	<b>SUB TOTAL . . . . .</b>	<b>2559246</b>	<b>3079242</b>	<b>480166</b>	<b>629335</b>	<b>18.76</b>	<b>20.44</b>	<b>88754</b>	<b>149169(80.06)</b>
	<b>TOTAL . . . . .</b>	<b>6250347</b>	<b>6884968</b>	<b>802970</b>	<b>989283</b>	<b>12.85</b>	<b>14.37</b>	<b>124195</b>	<b>186313</b>

\*Upto December 1989  
% of total increase



## APPENDIX I

### Terms of Reference of the Study Group on Dairying for rural women's employment generation, National Commission on Rural Labour

1. To study the trends in employment and income patterns of rural women in the dairying sector and bring out the contribution of women to the dairying economy, thereby providing a logic for dairying as a mass employment generating opportunity for rural women.

2. To study the extent of integration of the organised sector of dairying into the sector in totality and to determine the extent, quality and components of the present integration of women into the organised sector (The Federations, Dairy Development or Animal Husbandry Departments etc.) in different States including the development of alternative structures if necessary or the upgradation of traditional systems etc.

3. To do an appraisal of implementation, effects and impact of existing animal husbandry and other related policies\* on women, including policies pre-Operation Flood.

4. To review the role of different agencies|programmes in the dairying sector and to assess their impact on women,\*\* including the policy framework, the legal framework,\*\*\* the implementation or operational framework.

5. To identify and examine successful methodologies and programme strategies for women and to assess their impact.

6. To identify and suggest measures for removing the constraints and lacunas which affect the integration of women at present, and to recommend alternative and/or additional strategies including financial and non-financial inputs.

Is dairying a viable income-generating activity for poor rural women?

If it is, how are we to delineate an indicative methodology of relevance to different socio-economic, geographic areas?

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\*With special reference to rural energy systems.

\*\*for example, how to develop women leaders.

\*\*\*for example the legality of all women's dairy cooperative societies.

## APPENDIX II

### Policy recommendations from NDDB

Extract from letter No. RC 37963 to all NDDB Senior Resident Representatives, dated February 6, 1989, from Ms. Amrita Patel.

#### Enrolling women in Dairy Cooperative Societies

- (i) Atleast 20 per cent of existing male membership should be transferred to female membership at DCS level.
- (ii) Atleast 50 per cent of new membership should be of women.

- (iii) Atleast 3 women should be inducted in Managing Committee.
- (iv) Defunct societies should be revived with women membership.
- (v) Efforts should be made to induct women secretaries and other women employees in all DCS.
- (vi) Non-member pourers should be enrolled as nominal members from day one of their induction in the society.

APPENDIX III  
SPECIFIC  
RECOMMENDATIONS

The relatively large number of specific recommendations which follow in this report are based on two main objectives :

- (1) To increase awareness of and support for women's present and future potential dairy activities by the government, Federation and Union and non-Union officials involved at National, State and District level.
- (2) To strengthen women's own abilities to organize and manage their dairy enterprise, especially assetless women.

The two objectives are two sides of the same coin ; it is essential to address both for either to be effective. Therefore, implementation of the recommendations is needed for both categories, the dairy professionals and the women producers.

#### A. Economic Viability

—NDDB|NDRIs|Agricultural Universities and other appropriate agencies will work out the economics of dairying for different categories of women producers with differing resource bases, differing sources of finance and different types of milch animals, and share with the EDCs. The WDCs, in turn, need to share this with members and potential members. Federations|Unions should liaise with the banks and be responsible to see that the studies are completed as early as possible to form the basis for future loaning programmes.

—A strong loaning programme should be developed for assetless women.

—Subsidies and loans are essential for the viability of the dairy programme, but can lead to dependence. Subsidies should not be based only on caste or tribe but also on levels of assets. Assetless women must receive loans and should receive the highest subsidies. However subsidies of 100 per cent should not be given. Subsidies for milch animal loans should not exceed 75 per cent. Women dairy farmers must become more self reliant through training and empowerment of individuals and societies. Empowerment can be achieved through implementation of the recommendations contained in this report.

#### B. Milk Production

—Since there is difficulty in getting good animals, every State Government should set up a good breeding farm. If the Government cannot do it, NGOs should be given technical and financial support to do this.

—Calf rearing schemes on the lines of the Tamil Nadu model should be recommended by the DCS to the BDO and should be given bank loans and IRDP|ITDP subsidy without the Purchasing Committee.

—An official representative of District level Milk Unions should be on the Purchasing Committee for buying milch animals under the IRDP|ITDP and other Government poverty-alleviation programmes.

—Loose sale of cattle feed, concentrate, should be actively encouraged ; women's groups can prepare concentrates at the local level. Molasses should be supplied by Government to NGOs so WDCs can make concentrates and use of urea-molasses bricks should be encouraged.

—Women's access to and management of wastelands to produce fodder (and fuel) should be permitted. Under the IRDP there should be a corollary clause which makes sure that groups of IRDP beneficiaries will be helped to lease common and waste lands for fodder development.

—Alternative fuel energy systems (bio-gas, smokeless stoves) should be introduced to reduce competition between fuel and fodder needs for scarce crop by-products.

—Homestead and roadside plantations of subabul and other fodder plants should be encouraged.

—Dairy Unions should promote green fodder production through information dissemination and supply of inputs. Women should be encouraged to grow fodder on bunds, around farm perimeters and on marginal land. Agro-forestry holds much promise for increasing the availability of fodder. Existing extension services, agricultural universities and other appropriate organizations such as social forestry programmes should be involved in identifying species and techniques.

—Continual efforts should be made to improve the AI services. While Government services should be used wherever they are available in many places they are not satisfactory. In those situations, training should be given to a Society member, and semen stored in liquid nitrogen provided for the technician to use in as many villages as possible as in Bihar and Karnataka. Payment for insemination would provide income and incentive to the technician.

—The person responsible for AI should be given adequate health training and incentive for providing health care to society members. If this person is

chosen by the society members so they are committed to use this women's services this may be a more satisfactory arrangement for paravets.

—Cattlesheds of assetless women should be provided.

### C. Milk Marketing

—To counteract lack of supervision from the Union and Secretaries not doing regular fat-testing, the extension and cooperative education programmes should ensure that all members get to know about the sanctity and importance of fat-testing. Complaints from members should be entertained with seriousness by Union officials. Education and special incentives for quality control should be provided.

—WDCS should be provided with Milk 'O' Testers (electronic testers) at subsidised rates through the Women's Development Corporations of States or any other State or Central Government Departments even if milk collection is less than the prescribed norms. The efficiency of the Milk 'O' Testers should be checked after one year of use.

—To maintain milk quality, experiments with immersion coolers (as used in KALWODS or Madhya Pradesh) should be studied and replicated.

—Research should be conducted to establish whether khoa, ghee or cheese produced locally can be acquired by WDCS and marketed through the Federation.

—Innovative marketing (such as the UP lottery scheme with milk sachets) should be developed.

—Frequency of milk payments should be increased, especially in WDCS. Thrift societies should be encouraged in WDCS to take care of consumption loans; separate queues should be maintained for women.

—The Government should take proper steps to get the WDCS audited in time so that bonuses can be regularly distributed.

### D Training

—Regular and frequent training should be planned, especially for assetless women.

—Women should be included in all Farmers Induction Programmes at NDDB Anand.

—NGOs should be associated with dairy training to strengthen their technical knowledge and build on their skills with women's groups and empowerment to strengthen the WDCS.

—Existing paravet programmes should be evaluated and new models developed.

—Publicity campaigns showing long-term gains of the cooperative should be encouraged; more slides and videos should be produced on WDCS and shown widely.

—Training should be very specific in guidelines and content; dairy management issues should be highlighted; women should be trained at the village level whenever possible; training for 2 to 3 days three or four times each year is desirable.

—Separate training at regular intervals must be provided on physiology, animal nutrition, birth and aftercare, cattle and calf management, disease recognition and simple medication.

—Training should include simple changes in feeding habits which bring good results, methods of selecting good animals for purchase, the need for AI of non-descript animals, fertility injections to induce coming into heat, and conception after 3 months of lactation, correct time for AI.

—There should be demonstration facilities in training programmes.

—Women's fodder farm cooperatives, panchayat land, tree pattas, etc. Training facilities should include electronic milk testers.

—Producers have to be trained further in their rights and duties, the cooperative structure and by-laws, to strengthen the process of accountability.

—Men of DCS should be trained to work with Women's Dairy Cooperatives and incentives for WDCS should be provided.

—Special provisions for study tours should be made.

—All Federation Managing Directors and Union General Managers should be involved in gender sensitivity workshops focussing on women in dairying.

—All IAS officers at Joint Secretary level and above should be involved in gender sensitivity workshops.

### E Membership

—Ultimately, every Federation/Union should have 30 per cent of DCS as WDCS.

—Women's participation in existing and future mixed societies should be increased, so that there is at least 50 per cent women's membership.

—Women's Representation in the Managing Committees at all levels—primary DCS, District Union and State Federation.

—Should be increased to have at least 50 per cent women.

—Defunct societies should be revived with women's membership.

—Efforts should be made to induct women Secretaries and other women employees in all DCS.

—Every DCS should make every effort to enable assetless women of the village to get assets and join the cooperative; they should be supported to get all inputs, including training. Training should start at the time of application for the assetless.

—Migrating women should be appraised of their rights—if they “pour” milk for 90 days per year then migrate and return do remain as members.

—‘He’ in the byelaws should be modified to ‘he|she’.

#### F. *Increasing the Number of Women in positions of Responsibility*

—All Federations should hire women extensionists wherever they are already available or hire and train new ones.

—Secretaries of WDCS need to be women.

—The number of women serving WDCS as AIs and paravets should be substantially increased. These services should have a small cost attached, so the women have an incentive for doing conscientious work and so the members respect and use their skills.

—The number of women on Union and Federation Boards and women Dairy Officials should be increased

to better represent the production and interests to the WDCS.

—Women trained in Agriculture (BSc or MSc) and Veterinary Science should be hired and posted to areas where they can provide services to WDCS.

#### G. *Union, Federation and State Policy*

—Elected representatives of Parliament, Rajya Sabha, Assembly—Zilla Panchayat, Taluk|Panchayat should not seek election to the DCS, Union or Federation.

—Each Federation and District Union should have a Women’s Cell which will implement women’s programmes (with 5 women professionals).

—All States have a Cooperative Union. Their function is to educate cooperative members, for which 3 per cent of funds of all cooperatives are given. This fund should be given to the Milk Union|Primary Societies to conduct Cooperative Education Programmes including study tours.