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Report No. 19489

PERFORMANCE AUDIT REPORT

INDIA

SECOND NATIONAL DAIRY PROJECT
(CREDIT 1859-IN/LOAN 2893-IN)

June 22, 1999

Sector and Thematic Evaluations Group
Operations Evaluation Department

Currency Equivalents (annual averages Rs./US$)

Currency Unit = Rupees (Rs.)

	Official[a]	**Market**[b]
1987	12.96	14.55
1988	13.92	17.00
1989	16.26	19.00
1990	17.50	19.80
1991	22.74	28.00
1992	25.92	32.30
1993	30.49	31.45
1994	31.37	31.60
1995	34.95	

a. "International Financial Statistics," IMF, vol. XLVIII, 1995.
b. Pick's Currency Yearbook, World Currency Yearbook and Currency Alert, various issues.

Abbreviations and Acronyms

DCS	Dairy Cooperative Society
DEA	Department of Economic Affairs
EC	European Community
ERR	Economic rate of return
ICR	Implementation Completion Report
GOI	Government of India
IDA	International Development Agency
IDC	India Dairy Corporation
IRMA	Institute for Rural Management (Anand)
MMPO	Milk Market Products Order
MPU	Milk Producer's Union
NDDB	National Dairy Development Board
NDP	National Dairy Project
NDPII	Second National Dairy Project
NGO	Nongovernmental organization
OED	Operations Evaluation Department
OFII	Operation Flood II
OFIII	Operation Flood III
PAR	Performance Audit Report
Rs	Rupees
SAR	Staff Appraisal Report
SDR	Special Drawing Rights
SF	State Dairy Coöperative Federation
SMP	Skim Milk Powder

Fiscal Year

Government: April 1–March 31

Director-General, Operations Evaluation	:	Mr. Robert Picciotto
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ROBERT PICCIOTTO
Director-General
Operations Evaluation

June 22, 1999

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**SUBJECT: Performance Audit Report on India
Second National Dairy Project (Cr. 1859-IN/LN. 2893-IN)**

The Second National Dairy Project (NDPII), supported by Cr. 1859-IN for SDR 121.2 million (US$160 million equivalent) and Ln. 2893-IN for US$200 million, was approved in FY88. The Operations Evaluation Department (OED) prepared the attached Performance Audit Report (PAR). The project followed four earlier Bank-supported dairy projects. Three were at the state level: Karnataka, for US$30 million, approved in FY74; and Rajasthan, for US$27.7 million, and Madhya Pradesh, for US$16.4 million, both approved in FY75. The fourth was the first National Dairy Project (NDP, for US$150 million, approved in FY78). When the NDPII closed in April 1996, the credit was fully disbursed, but the loan had cancellations of US$53 million in September 1995 and a further US$29.9 million in June 1996. The European Community (EC) was to provide, on a grant basis, commodity aid equivalent to about US$150 million. In fact, this contribution was limited to Rs 2.10 billion (about US$110 million equivalent), since grant commodity aid terminated when India began exporting skim milk powder to France in 1994.

The NDPII was designed to reinforce the conditionality of the NDP and to consolidate the project's achievements. With hindsight, the project design was unrealistic. It provided for about US$510 million of external assistance, which was to be invested in the cooperative dairy sector. The conditionality attached to the NDPII mandated that states agree to adopt the three-tiered, farmer-controlled Anand cooperative structure. The Anand structure calls for farmer-owned, village-level dairy cooperative societies (DCSs) that own regional milk producers unions (MPUs), which in turn own state dairy cooperative federations. At the head, mediating between the federations and the national government, is the National Dairy Development Board (NDDB), a self-financed parastatal. The Anand principles also call for professional managers serving farmer-controlled boards at the MPU and federation levels. These boards are to have full power to set producer and consumer prices, hire and fire staff, and go bankrupt. While the states were willing to become signatories to the Anand principles, most were reluctant to implement them in full. It is now evident that the amount of money provided could not have been productively invested in those few states willing to implement all the Anand principles. Many states were slow to relinquish their right to set prices and continued overstaffing cooperative organizations and appointing unqualified but politically friendly people and administrators to the boards and management of MPUs and federations.

The Bank and NDDB were thus confronted with a dilemma. They could invest either the full amount in the states that had partially implemented the Anand principles, or a part of it in those few states willing to implement the Anand principles in full. In the event, the Bank and

NDDB decided to proceed with investments in states that had partially implemented the Anand principles.

This decision was probably the right one, as services have been extended to an additional 24,100 villages under the project, and many of the beneficiaries are among the poorest people in India. Nevertheless, the project has only partially resolved the tension between the NDDB, which is genuinely dedicated to farmer control of cooperatives, and most state governments, which still prefer political or bureaucratic control. The Bank's supervision during the project's later years left much to be desired.

OED agrees with the Implementation Completion Report (ICR) in four of the five ratings, namely project outcome (satisfactory), sustainability (likely), institutional development (substantial), and borrower performance (satisfactory). The ICR rated Bank performance as satisfactory. The audit rates Bank performance as unsatisfactory in light of its poor understanding of the client's needs and sensitivities; in particular, the audit revealed shortcomings in the handling of the procurement process and an abrupt and last minute reversal by the Bank of its often repeated assurances that a further extension of the loan would be considered favorably.

The preliminary findings of the audit were incorporated into OED's impact evaluation of the Bank's assistance to the Indian dairy industry (June 30, 1997). Based on OED's work, the South Asia Vice President visited Anand, recognized the value of cooperative dairy marketing promoted by the project, re-established contact with NDDB and initiated an exploration of how India's "white revolution" might be exported to neighboring countries.

Attachment

Contents

Boxes

Principal Ratings

	ICR	PAR
Outcome	Satisfactory[a]	Satisfactory
Sustainability	Likely	Likely
Institutional Development	Substantial	Substantial
Borrower Performance	Satisfactory	Satisfactory
Bank Performance	Satisfactory	Unsatisfactory

a. Changed in the Evaluative Memorandum to Marginally Satisfactory.

Key Staff Responsible

	Department Director	Division Chief	Task Manager
Implementation (1987)	E. Lerdase	O. Lafourcade	K. Oblitas
Mid-term Review (1990)	H. Vergin	J. Wijnand	M. Cackler
Closing (1996)	R. Drysdale	S. Barghouti	H. van Wersch

Preface

This is a Performance Audit Report (PAR) of the India Second National Dairy project (Cr. 1859-IN/Ln. 2893-IN) in the amounts of SDR 121.2 million (US$160 million, equivalent) and US$200 million, respectively. The project was approved on December 15, 1987, and was made effective on April 8, 1988. The primary objective was to support farmer control of Indian dairy cooperatives. The particular form of farmer control sought is known as the Anand principles. This calls for farmer-owned village-level Dairy Cooperative Societies (DCSs) which own regional Milk Producer's Unions (MPUs) which, in turn, own State Dairy Cooperative Federations (SFs). At the head, mediating between SFs and the national government, is the National Dairy Development Board (NDDB), a self-financed parastatal. The Anand principles call for professional managers serving farmer-controlled Boards at the MPU and SF levels. These Boards are to have full power to set producer and consumer prices, hire and fire staff, and go bankrupt. The application of those principles was expected to ensure independence from state interference with prices and staffing. Milk procurement was to be increased by the formation of additional village-level DCSs, and the processing capacity of the associated MPUs was to be expanded. The European Community (EC) was to provide commodity aid of about US$150 million, equivalent, on a grant basis. The credit was closed, fully disbursed, on schedule on December 31, 1994. The loan was closed on April 31, 1996. Loan cancellations of US$53 million occurred in September 1995 and US$29.9 million in June 1996.

The PAR is based on the Implementation Completion Report (ICR),[1] the Staff Appraisal Report,[2] the Development Credit Agreement,[3] the transcript of the Executive Directors' meeting at which the project was considered, the livestock sector review,[4] review of Bank files, and discussions with Bank staff. An Operations Evaluation Department mission visited India in November 1996 to discuss the credit with officials of the NDDB, representatives of MPUs, villagers, and interested academics and nongovernmental organization stakeholders. The cooperation and assistance of the various officials in India who assisted in the preparation of this report are gratefully acknowledged.

The ICR rated project outcome and borrower and Bank performance as satisfactory, sustainability as likely, and institutional development as substantial. The audit confirms these ratings with the exception of Bank performance, which is rated as unsatisfactory.

Following standard OED procedures the draft audit was sent to the Borrower and the EC for comments before being finalized. Borrower comments were received and are included as Annex C.

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[1] World Bank. 1997. "Implementation Completion Report: India, Second National Dairy Project (Credit 1859-IN/Loan 2893-IN), Report No. 16218."

[2] World Bank. 1987. "Staff Appraisal Report: India, Second National Dairy Project (Credit 1859-IN/Loan 2893-IN), Report No. 6897-IN."

[3] World Bank. 1988. "Development Credit Agreement (Second National Dairy), Credit 1859-IN/Loan 2893-IN."

[4] World Bank. 1996. "India: Livestock Sector Review: Enhancing Growth and Development, Report No. 14522-IN."

1. Introduction

1.1 The Second National Dairy Development project (NDPII) is the Bank's fifth dairy project in India. The first three were state projects (Karnataka, Rajasthan, and Madhya Pradesh), which were followed by the National Dairy Development project (NDPI). All four earlier projects adopted the three-tiered Anand approach, with village level DCSs supplying (and owning the equity of) regional MPUs. The MPUs have processing and transport facilities and, in turn, own a State Federation of Cooperatives (SF). The SF is concerned with marketing strategies and milk sales between MPUs. The NDDB, a self-financed parastatal, stands between the SFs and the national government. It is the apex organization for the implementation of Operation Flood (OF). Over the life of the five dairy projects, per capita milk consumption in India rose from 106 grams per capita in 1966 to 193 grams per capita in 1993, even though India's population also rose over this period.

1.2 In the first three (state) projects, each State Dairy Corporation was a parastatal albeit with a Board nominated by the State Government and with no representation on the Board from the MPUs within the state. Though not fully appreciated at the time, this ran directly counter to the Anand principle of a three-tier, farmer-controlled structure, with professional management, and the right to set prices, hire and fire, and to go bankrupt (Box 2.1).

1.3 Following a visit by the Bank President, Mr. McNamara to Anand in 1978, NDPI was designed to support Operation Flood Two[5] (OFII) in conjunction with food aid from the European Community (EC). OFII was to spread Anand-type cooperatives nationwide and to free all dairy cooperatives from state interference with prices, staffing and management. Though OFII was physically very successful (from 1980 to 1985 milk procurement grew at 25.5 percent, cumulative), few states relinquished control of the MPUs and Federations to their farmer members. In the three states that had had their own Bank-supported projects, the SFs added "Cooperative" to their titles, but did not change the membership of the Boards or their managerial structures.

1.4 The industry structure involved little direct competition between the cooperative sector (which was dominant in the provision of pasteurized milk and commodity skim milk, ghee, and butter production) and the slightly larger balance of the formal sector (which concentrated on high value-added products such as malted milk, baby foods, and ice-cream mix) since new dairy plants were subject to licensing. The cooperative sector procures about 6.5 percent of milk production and supplies about 22 percent of urban consumption. The difference is due to the high proportion of milk consumed by producers and on-farm processing, particularly into ghee. There was active competition between the formal sector and small scale milk vendors (*dudhias*) in peri-urban areas.

1.5 Initially the expansion of the formal sector (cooperative and corporate alike) was subject to the Industries Development and Regulation Act. When this was abolished in July 1991 as part of the New Economic Policy, there were no effective controls on entry into the dairy industry. Two undesirable results followed: the construction of excessive processing capacity—some of it with substandard equipment—and inadequate hygienic standards. In June 1992 the government promulgated the Milk Markets Products Order (MMPO), which reintroduced licensing for plants

[5] Operation Flood, which has been implemented in three phases, is the program reflecting the government's policy of relying on an independent cooperative structure to develop the dairy sector. The first phase of Operation Flood (OFI) had been supported by the World Food Program. The Bank-supported state projects ran in parallel with OFI.

with capacity of over 10,000 liters per day[6]. New processors were meant to develop their own milksheds and plants were subject to inspection for compliance with hygienic standards. Since NDDB has important responsibilities for the implementation of the MPPO, it finds itself, to some extent, both player and referee.[7]

1.6 As OFII (supported by NDPI) was drawing to a close, it was evident that state interference, through the appointment of key managerial staff, setting dairy prices, and mandating continued overstaffing of dairy plants, was the major problem preventing the cooperative dairy sector competing on an equal footing with the rest of the private sector.

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[6] The Region in its comments notes that the GOI introduced the Order in June 1992 requiring all dairy processing firms to obtain a license. The Order was relaxed in March 1993 to require only firms processing greater than 10,000 liters per day to obtain a license. The Government of India notes "It is clarified that the MMPO is a Regulatory Order which requires registration of units handling more than 10,000 liters per day. A license is not required. All dairy processing firms handling more than 10,000 liters per day would require registration." On the observation that the MMPO was relaxed to require only firms processing greater than 10,000 liters per day to obtain a license the NDDB notes "that this provision was further relaxed and the power to register capacities up to 75000 liters per day were given to the respective State Governments as opposed to the Central Government."

[7] Comments received from the Government of India (GOI) are as follows: "The Milk and Milk Product Order 1992 (MMPO) is a mechanism that seeks to maintain and increase supply of good quality liquid milk and attempts to enforce hygiene and safety standards for the Dairy Industry. After de-licensing of the Dairy Industry in June 1991, the Govt. considered the need for some kind of regulation to sustain the orderly growth of the industry, to protect the interests of millions of small milk producers and consumers and also to ensure that the de-licensing of the Dairy Sector would not result in chaotic conditions in the market for this essential commodity. With this background and the need for maintaining and increasing the supply of liquid milk of the desired quality in the interest of the general public and to provide for regulating production, supply and distribution of milk and milk products, the MMPO was promulgated in June 1992, under section 3 of the Essential Commodities Act. GOI does not agree that NDDB is a player and referee for MMPO."

The NDDB clarifies "It may be noted that it is the GOI, and specifically the Registering Authority appointed under the MMPO, who is the implementing authority. The Registering Authority, in case he deems it necessary, calls for NDDB's expertise in verifying the physical infrastructure proposed by the applicant. NDDB plays, therefore, merely an inspecting and a recommendatory role and not a role of a referee."

2. Objectives and Design

2.1 The basic objective was to promote the establishment of viable cooperative businesses owned and managed by producers for collecting, processing and marketing of milk products. The project was to build on the implementation experience of three state level dairy projects (Karnataka, Madhya Pradesh and Rajasthan) and one national level project (National Dairy Project).

2.2 Project objectives were to be achieved by (i) financing new and rehabilitated dairy processing plants and supporting infrastructure in those states that had taken action to comply with the full Anand principles (see Box 2.1), (ii) assisting NDDB to improve the industry's financial viability, (iii) enhancing NDDB's managerial skills, and (iv) improving animal productivity. Adoption of the Anand principles was the key item of project conditionality; this would allow cooperatives to set prices and cut costs, steps which were seen as essential to improved profitability. NDDB was to be helped in assessing the financial soundness of subprojects to be financed under NDPII and to adopt "user pays" principles throughout the cooperative dairy industry.

Box 2.1: Project Conditionality Supported the Anand Principles

Key Features of the Operation Flood
Dairy Cooperative Model

(i) The boards of directors of DCSs, MPUs and Federations are duly elected by the members from their member constituents;

(ii) The cooperatives operate under by-laws ensuring the democratic process with regular meetings of the boards, regular and independent auditing, accountability of the boards to members, and annual general body meetings at which audited accounts are reviewed, future plans discussed and elections held;

(iii) MPUs and State Federations employ professional managers answerable to their boards;

(iv) Facilities are owned and managed by the cooperatives (generally vested at the MPU level unless, in exceptional cases, the central purpose of the asset justifies management and ownership at the State Federation level); and

(v) The cooperatives enjoy autonomy in pricing, marketing, appointment of key personnel, and employment of labor.

Source: Project Agreement, January 13, 1988, Schedule 2, page 14.

2.3 It was realized that many states would be reluctant to implement the above changes since they would have to relinquish control of the cooperative dairy sector. The US$510 million (including the EC contribution) available under the project was expected to provide the leverage needed to ensure that the states would agree to implement the Anand model.

2.4 Implementation was through the support of the third phase of Operation Flood (OFIII). Bank funds were to be on-lent by the government to NDDB at 7.5 percent interest. These funds were to be further on-lent by NDDB to SFs and MPUs for processing plants and infrastructure at 10 percent interest. This spread and the profits made on concessional imports from the EC would allow NDDB to offer a 30 percent grant element on the subprojects, even though no subsidy *per se* was to be received from the government.[8] NDDB would appraise the subprojects.

2.5 The project aimed to add milk processing capacity of 7 million liters per day, which would permit another 23,000 villages to be brought into the cooperative system.

[8] The Region in its comments notes that NDDB received an interest rate subsidy from the Government of India. Had NDDB borrowed from commercial lenders, the interest rates would have been much higher. The terms of on-lending (7.5%) were below the prevailing market interest rates.

3. Implementation

3.1 Implementation proved difficult. Negotiations to get states to adopt the Anand principles led to an 18-month disbursement lag. When agreement had been reached, only Gujarat was willing to fully implement the Anand principles. Tamil Nadu declined to adopt the Anand principles and received no assistance under the project. Subproject appraisal, approval, and disbursement were carried out routinely in the other states, even where agreed changes had not yet been made.

Supervision

3.2 At project commencement, in late 1988, the Bank reviewed appraisal reports for the first three sub loans under the project and found the standards acceptable. After that, the Bank did not plan to do in-depth reviews, ex ante or ex post, but relied on NDDB appraisal. However, in 1993, in view of the reported poor performance of the cooperatives, it was decided to do an ex-post review of NDDB's appraisals of some of the larger subprojects. This supervision of subproject appraisals was justified in a letter from the Bank to the Department of Economic Affairs:

> *"...However, in 1993, in view of the poor performance of the cooperatives, we decided to do an ex-post review of NDDB's appraisals of some of the larger sub-projects and found the procedure wanting and that the assumptions were optimistic.*
>
> *We found the following examples of unacceptable situations: assistance had been provided to a Company (and not a Milk Producer's Union or a Federation) which did not qualify for participation in the project; a Rs 13 crore project appraised in 1990 was subsequently expanded to cost some Rs100 crores*[9] *and this was approved in 1993 on the basis of an addendum to the original appraisal report. A fresh indepth and stand alone appraisal report was not prepared for the expanded project; and in the case of another Rs 94 crore*[10] *project, approval was done on the basis of a technical report (which was not an appraisal report) and a formal appraisal was done only after award of a procurement contract.*
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> *" Arising out of our reviews, the Bank suggested in September 1993 that NDDB could avail itself of technical assistance from a development bank such as ICICI or IDBI to review and strengthen its appraisal procedures. NDDB, however, rejected this suggestion." Letter From the Bank to the Department of Economic Affairs 11/23/94*

Comments were provided on the first three projects. However, the files show no evidence of *any* review of these appraisals from late 1988 until the review in 1993.

3.3 In April 1989, the Bank had approved a short-cut appraisal procedure. This procedure simply required (i) acceptance of the Anand principles, (ii) an assessment of the availability of milk and a market for it, and (iii) that NDDB's experience with similar subprojects had been profitable. With hindsight, it would have been even better to replace condition (i) by a requirement that the Anand principles be *implemented* as well as accepted.

3.4 Disconcerted by its 1993 review of four NDDB appraisals, which raised concerns about the rigor of NDDB appraisal procedures, the Bank required its *ex ante* clearance of subprojects

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[9] Rs100 crores is equivalent to about US$32 million in 1993.

[10] Rs 94 crores is equivalent to about US$30 million.

with cost in excess of Rs. 90 million. It required the appraisal to use the Financial Rate of Return (FRR) rather than the Return on Investment (ROI) methodology and to provide market appraisals and financial projections. The *ex ante* clearance prolonged the appraisal process, albeit with a fuller analysis of the proposed projects. In fact, only one subproject was held up very significantly because of these new requirements. This was a large project, and NDDB continues to argue that the Bank-induced delay was unreasonable.[11] Ironically, this particular project was in Gujarat, the one state in full compliance with the Anand principles, so that financial misjudgment could have resulted in bankruptcy for the MPU.

3.5 It is clear that the Bank and NDDB staffs have very different recollections of the introduction of the above changes. Speaking to the two groups, one would not know that the same actions were being described.

3.6 One factor which was identified by this more intensive Bank supervision was the poor profitability and arrears of debt repayments by MPUs and SFs to NDDB. This traced in part to the unexpectedly high levels of milk procurement in 1992-93, which necessitated MPUs holding stocks of skim milk powder (SMP) and ghee in 1993-94. This eroded the working capital of the MPUs. However, more important was the continuing interference by state governments in price setting, senior staffing, and resistance to the laying-off of surplus employees. In short, the failure of state governments to follow through on the implementation of the Anand principles to which they had signed their agreement.

3.7 Once the states had signed the Anand principles, subproject proposals could be submitted to NDDB, and physical implementation proceeded satisfactorily. Thus, for three years the introductory paragraphs of successive supervision letters read like carbon copies. After some congratulatory words on the physical progress being made, the Bank expresses its disappointment at learning that the Anand principles are not being adopted in some states (Box 3.1). Despite the Bank's repeated "learning" of the lack of implementation of the Anand principles, subprojects continued to be approved by the Bank (though it later criticized NDDB for having advanced the projects that the Bank approved).

3.8 The Bank's simultaneous satisfaction with physical progress and disappointment with the slow adoption of the Anand principles suggests that it did not fully understand the problem of project implementation. Satisfactory physical progress was being bought at the expense of insisting on implementation of the agreed principles. *Ex ante* insistence on such implementation would have severely disrupted the project's investment program. It was not an easy choice. Disruption of the investment program would have necessitated stopping the formation of DCSs in the affected milk sheds. This, in turn, would have removed the expected project benefits from large numbers of small farmers. What is missing from the record is any attempt, until mid-1995 (see Box 3.1), by the Bank to analyze, let alone grapple with, this problem or indeed to provide NDDB with useful advice or help in resolving it. The ICR (para. 85(a)) faults the Bank for not taking a tougher line. This is an explicit recognition that the Bank could have been more assertive. As discussed above, the Audit feels this was a difficult call, since the softer approach at least resulted in the physical targets being largely met, many new DCSs being formed, and progress was made towards implementation of the Anand principles. A tougher stance might have held up physical implementation without speeding up the desired policy changes, or perhaps it could have achieved both the needed policy changes with little, if any, delay in implementation.

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[11] The Region attributes much of this to delay in receiving information from NDDB and reluctance to receiving outside assistance.

Box 3.1. : "...We are disappointed to learn..."

"...we are disappointed to learn of the lack of progress in adoption of OFIII principles in some states..." (April 9, 1992).

"...we are disappointed to learn that progress in adoption of OF principles in some states has been inadequate..." (December 4, 1993).

"...we are disappointed to learn that progress in adoption of OF principles in many states is unsatisfactory..." (January 7, 1994 and December 8, 1994).

Late in the project, a Task Manager (TM) finally sought quantification of the lack of compliance, leading to a quite different perspective:

> Another key project development objective is adoption of Operation Flood (OF) principles, which aims at establishing independent cooperatives and is at the heart of cooperative development. Progress in this regard has improved with 75 percent federations and 87 percent unions having farmer elected Boards of Management, 93 percent federations and 76 percent unions having complete autonomy in staff recruitment, 87 percent entities enjoying producer price freedom and 80 percent entities enjoying consumer pricing freedom, and facilities have been transferred to the majority of unions (November 28, 1995).[a]

Source: Quoted from Supervision Letters.

A Procurement Problem

3.9 Among literally hundreds of procurement decisions, one was hotly debated. It involved a joint bid from two companies to provide US$7.5 million of milk processing and effluent control equipment. NDDB judged the bid to be non-responsive, since the bid said:

> That we shall be severally liable (each for his own part) technically....

and thus did not provide for joint and several responsibility as required by the bidding document.

3.10 The Bank's Delhi Office agreed with NDDB. However, headquarter staff subsequently did not find the bid to be non responsive on legal or technical grounds.

3.11 There were two issues at stake. The first concerned the bid as submitted, and the second whether NDDB should seek additional information from the bidders. The latter point was complicated by a reference in the bid to an enclosure (n1), which was not in fact enclosed.

3.12 The Bank's guidelines on procurement say "...no bidder should be requested or permitted to alter his bid after the first bid has been opened. The borrower should ask any bidder for clarification needed to evaluate the bid but should not ask or permit any bidder to change the substance or price after bid opening" (Guidelines: Procurement under IBRD Loans and IDA Credits (1985 edition, para. 2.46)).[12]

3.13 On the bid as submitted, NDDB obtained legal opinions from a retired High Court Judge and the Solicitor General of India. These experts concurred that the bid was nonresponsive, one of them saying: "If NDDB accepts the declaration, they cannot proceed against both in the event

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[12] The Region in its comments notes that paras 3.12 to 3.25 of the audit present an incomplete picture as they rely on selective internal communications regarding the 'new paradigm of the dairy industry'. They point out that what matters is the reflection of the final Bank position in the official letter to the government.

of a breach...." It thus appears that more than clarification would have been involved if the bidders had been allowed to submit additional documents which would have permitted NDDB to proceed against both of them.

3.14 The Bank took the position (i) that the bid indeed provided for joint and several responsibility, and (ii) that NDDB was not inhibited from seeking clarification that this was the case.

3.15 There was, in fact, no chance of agreement between NDDB and the Bank on the issue. NDDB felt themselves bound by Indian law and the Bank's procurement guidelines; but for the Bank the key issue was how the Bank interpreted the bidding documents. The decision process from the first recommendation to Washington that the Bank raise "no objection" to the final rejection of this advice took ten months.

3.16 This was just one example of egregious delays in the procurement process: starting in December 1994, the Bank began micromanaging the approval and procurement process with frequent requests for the details of background analysis, according to NDDB, often asking for documents which had already been supplied. As a consequence appraisal and procurement decisions by the Bank slowed noticeably. Nevertheless, taking the whole project period, a substantial share of procurement did pass through the Bank's clearance system expeditiously, and was certainly aided by the presence of a Procurement Unit in the New Delhi Office.

Extension of the Closing Date

3.17 As already remarked (para. 3.1), NDDB's policy of requiring states to adopt (if not implement) the Anand principles, as required by project conditionality, resulted in an eighteen month delay in implementation. As early as December, 1991 an engineering consultant involved in Bank supervision recommended a two-year extension of the project (Box 3.2). In fact the mission expressed support for a 15-month extension, saying this was likely to be formally considered in 1993.

3.18 This early recognition of the need to extend the closing date, reflected (i) the danger of overloading NDDB and the MPUs (as it turned the Bank) in trying to implement too many subprojects simultaneously, and (ii) the long lead time from subproject identification, through appraisal and Bank approval of recommended procurement, to physical implementation.

3.19 There then followed a long period when references were made to the need for this extension and the expectation that it would be granted, often in the context of NDDB's increasing concern for written assurance of the extension. In June 1993, the government wrote officially to the Bank requesting an extension until March 31, 1996 (i.e. an extension for 33 months from the date of the Government's letter). This request would have provided adequate time for NDDB both to get proper Bank clearance of its subproject proposals, to let contracts, and ensure the completion of construction. There followed a series of memos within the Bank which raised questions as to whether this request would be acceded to. However, though the Bank asked for additional justification from NDDB there is no written evidence that NDDB was ever given to understand that the outcome was in serious doubt.

3.20 With a few exceptions, the Bank's internal debate seemed oblivious to NDDB's need to know what the Bank would finance, before it could contract for work to be done. Implicit in the Bank's discussions are two views. First, "NDDB can certainly go ahead with its contracting, since we have already agreed in principle to an extension the only issue is when we will process their request officially." However, "if there is no extension then, of course, NDDB will be solely responsible for any expenditures contracted for after the closing date." Either view conveyed to NDDB with the Bank's full authority would have provided the basis for action. Conveyed simultaneously, they sent mixed signals.

3.21 Some doubts within the Bank were serious. Thus the Director was briefed "a request for closing date extension has been made....We could only agree to this if the objective of establishing financially viable cooperative businesses is likely to be achieved. This will require major changes in the environment in which the cooperatives operate" (February 17, 1994). And, "It looks as if we have a difficult case of non-compliance with a number of covenants[13].....[A]s a general rule, the Bank does not extend the Closing date 8 or 9 months prior to the expiration date, (because of the resultant loss of leverage), there are exceptional circumstances in which we could recommend such early action. In this particular case, with (i) non compliance with a number of covenants, (ii) initial difficulties in agreeing on action plans for addressing such non-compliance, and (iii) the fact that NDDB is not really facing cash crisis, (as I understand it), it is certainly difficult to place the request for extension of closing date for this Project within the exception." (Note from Legal April 18, 1994), which led to the Delhi office being informed "...When it comes to extension, we are in the driver's seat in assessing the degree of compliance.... [W]e will **not** process a formal request for extension before Sept/Oct. upon the advice of LEGAL" (April 18, 1994 emphasis in the original). Closer to NDDB's implementation problem, the TM warned Washington that "...our formal approval in September/October could delay start-up of these activities and possibly lead to spill-over beyond the proposed extension date..." (April 18, 1994). This is only one of several instances where the TM supported NDDB's request, but was overridden by Washington.

3.22 Finally, on May 5, 1994, the Bank replied to the government's letter of June, 1993, saying that the request would not be processed until September or October. In fact, the Bank notified the Government in mid-August that a one-year extension had been granted (i.e., the original request for an extension to give 33 months lead-time to project completion was responded to with a grant of 16 months lead time, albeit with the undertaking to consider a further three months "favorably").

3.23 This was not the extension that had been requested.[14] Fortunately, a Bank mission had (incorrectly) assured NDDB in November 1993 that "disbursements will be honored up to four months after that date (December 31, 1995) for commitments made before the Closing Date." In fact, NDDB explored the possibility of an extension beyond March 31, 1996, culminating in a request in July 1995 for an extension to March 31, 1997 (21 months lead-time to project closing), with provision for a further extension to June 30, 1997. Washington opinion was basically negative to an extension beyond March 31, 1996, but even as late as August 22nd, a memo from Washington to Delhi was able to say: "**Closing Date**. Nobody has suggested that the Loan/Credit be closed in December 1995. My EM (e-mail) of yesterday clearly indicated a March 31, 1996, date."

3.24 In anticipation of the official request, the Delhi office sent a draft supporting memo to Washington, recommending a 12 month extension. Delhi was immediately (September 8, 1995) asked to redraft this to recommend only a three month extension. On October 4th, a further

[13] This was before non-compliance with the Anand principles had been examined in detail, so that non-compliance was thought to be as high as 72 percent (memo, April 18, 1994).

[14] According to one account, it was, however, the longest extension which could be granted at the Director's discretion.

redraft was sent to the Director recommending against any extension beyond December 31, 1995. This memo said in part: "we have carefully reviewed three options (a) no extension, (b) a three-month extension, in line with our written assurance that we would favorably consider it at the time of the present closing data, and (c) a 12-18 month extension as requested by NDDB....However, the key argument (for no extension beyond December 1995) is the project design is not consistent with the present GOI (Government of India) and Bank strategy of leveling the playing field for agro industrial development between cooperative and private entrepreneurs, thus putting the project at odds with the recommendations of our macroeconomic work as well as the recent livestock sector review." (See para. 3.27 for comment on the substance of this memo). The Director accepted the recommendation, and the Government was informed on November 14, 1995, that the Bank would not extend the closing date. With only six weeks to project closing this amounted to little short of an ambush. NDDB, assured that there would be no problem in an extension to the end of March, had numerous, and large, payments due in first quarter of 1996.

3.25 A flurry of activity followed, with the Senior Treasury official writing on December 1, 1995, supporting the full extension to March 31, 1997. A further rejection letter setting out the Bank's rationale was sent from the Bank on December 27th, (see Box 3.2). On several occasions NDDB was assured verbally by Bank staff that it was *impossible* to extend a project once it had been closed. This was viewed as expedient by the staff involved, since any other response would only have encouraged further agitation from NDDB. By this stage, NDDB does not seem to have been particularly surprised at being misled by Bank staff.

Box 3.2: December 27, 1995 Letter to Government of India

"I thank you for your letter dated December 1, 1995 requesting a further extension for the above project [National Dairy II Project], by another 15 months to March 31, 1997.

As you know, the matter of over-aged (more than seven years old) projects has been a matter of discussion between the Bank and GOI for some time. The concern that such old projects often also are projects which have lost their developmental relevance was raised by Mr. Wolfenson during the annual meetings. The Dairy II project, after a one year extension granted in August 1994, was prepared in 1986 and appraised in 1987 and is now completing its eighth year of implementation. Bank policy, quite correctly, now requires strong reasons for extensions of projects of this age and even more so in cases of second extension. I feel that, in this context, a sufficiently strong case cannot be made for this project to be extended. Specifically, our recent review of the project's physical achievements confirms that we have fully met our obligations as lender set out in the Loan/Credit Agreement. Protracted extensions of closing dates to achieve fullest utilization of all loan proceeds can no longer be a portfolio management consideration. . This point we had both reviewed and accepted in past portfolio reviews. While I must therefore regret that I cannot provide the requested extension, I would like to express our sincere interest in a continued, up-dated, supportive relationship with your cooperative sector. In this spirit, it would in our view be highly desirable for the beneficiary, the Government and the Bank to revisit the rationale, development objectives and the design of Bank support with a view to further support, if warranted in the context of a new IBRD loan.

Let me try to be more specific: In view of NDDB's importance to India's national economy and its role in rural programs of poverty alleviation, we would be prepared to consider further assistance to the dairy sector, provided key issues faced by the sector are adequately addressed by NDDB, GOI and State Governments. The implementation completion report (ICR) for the National Dairy II Project, which will have to be prepared shortly, will in any case provide an opportunity to identify several issues, which would have to be further analyzed and addressed in the preparation of a meaningful follow-up loan. As we see it, these issues fit in three categories, i.e. the sectoral framework, NDDB and the dairy cooperatives. At the sectoral level, it would be timely to re-examine the respective roles of the public, cooperative and private sectors, the constraints to entry of private operators, as well as Government and NDDB policies in respect of pricing and subsidies. As regards NDDB, the institution's basic role in the cooperative sector as well as its multi-faceted operations (e.g. development bank, procurement agency, financial intermedairy, owner-operator and/or manager of dairies, as well as market-maker in vegetable oil) could benefit from an up-to-date assessment of business strategies and mission focus. At the level of the dairy cooperative, their overall and financial viability would have to assessed against the background of the objectives of Operation Flood.

If you and NDDB were to agree with this approach, the chances are good that we could move quickly beyond the preparation of a high quality project completion report to a renewed relationship between NDDB and the Bank on the basis of a new project that fits into the policy framework which you have created since 1991. In the meantime, you may be aware that the National Women's Development Project that you have asked IFAD and IDA to co-finance will extend support to women's dairy cooperatives. In a specially focused way, this will renew our working relationships with the programs sponsored by NDDB. " (Bank letter to Government, 12/27/95)

3.26 Meanwhile, in Washington the significance of NDDB's fax referring to the assurances it had received had (i) generated a search for a later written reversal of this position followed, when it was not found, by (ii) the recognition that "we cannot make the Borrower pay for our mistakes." The result was a partial extension of the project, by agreeing to disburse against commitments entered into before December 31st and paid by April 31st. The Bank offer to prepare a follow-on project, even with smooth sailing, was clearly never going to pick up quickly enough to substitute for an extension and, given the Bank's doubts on policy, was arguably unrealistic. This history involving (i) the dissarray between Washington and the field office on the closing/extension issue;(ii) Washington's lack of realism about the need for clear and early messages on extension of a project with large sub-project components; and (iii) the shifting of the goal posts largely explains the Audit's rating of Bank performance as unsatisfactory.

3.27 The cited grounds for project termination (para. 3.24) do not stand up to careful scrutiny. Given the long written record of the Bank's commitment to "consider favorably" an extension to March 31, 1996, the option of "no further extension" should not have been considered. The argument that the Bank and Government were agreed on the policy toward the dairy industry was immediately contradicted when the Government wrote supporting an extension into 1997. The Bank's policy of "a level playing field" for cooperatives and private entrepreneurs had no chance of being implemented in the absence of full implementation of the Anand principles for cooperatives, which was the primary policy thrust of the project to be canceled. Added to overall policy concerns, and the concern about financial sustainability, was a changed Bank policy on extensions generally. This last may have had wider portfolio justification but this was a case where, with very large investments being planned, that shift either should have been formally conveyed several years in advance and then adhered to, or have been "grandfathered." As the memo (para. 3.24) indicates , the key reason for abrupt termination of the project was that the Bank had moved the goal posts.[15]

A Level Playing Field

3.28 The concept of a level playing field for the private sector, and the perception that the project was contributing to tilting the "playing field" in favor of the cooperative sector, clearly played an important part in the decision to close the project. The Bank's perception of a "level playing field," is summarized in Box 3.3.

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[15] There is a difference of judgement on the issue of 'Changing Goal Posts' between OED and the Region. The region notes that it is inconsistent for the audit to criticize the Bank on the basis of policy reforms that "change the goal posts" which the audit itself recommends the Bank should adopt as conditionalities in its projects. OED's position is that the concern about changing the goal posts is at least as much about timing as policy content, although the policy difference is not insignificant. The goal posts were shifted while the game was in its final stages. For the Region's viewpoint on policy see *India Livestock Sector Review: Enhancing Growth and Development, 1996.* For OED see *India: The Dairy Revolution, 1998.*

Box 3.3: A Level Playing Field

The Bank's view of differences between cooperatives and the private companies was described in a briefing prepared shortly before project closing:

12. While the private sector complains that the MMPO (Milk and Milk Products Order) duplicates the Food Adulteration Act and that the NDDB has a prominent place in the administration of MMPO, NDDB complains that the private sector follows unethical practices including adding preservatives to milk and milk products.

Level Playing Field

13. Areas of difference between the cooperatives and the private sector include:

Cooperatives	*Private Sector*
(a) Perform a developmental role and hence do not operate on commercial lines. This includes milk procurement in less 'economic' areas and provision of inputs and services at less than cost at times.	(a) and (b) Are only commercially oriented. Do not provide the developmental services that co-ops provide. The private sector benefits from the efforts put in by NDDB and the cooperatives.
(b) Are used as a vehicle to fulfill several social responsibilities by states, and hence they lack autonomy in pricing.	
(c) Are given loans at less than market rates and with better grace periods.	(c)and (d) Borrow at commercial rates. No grants are given.
(d) Are given 30 percent of project costs as grants to meet the equity contributions of farmer owners. Also provided land free of cost by state governments for the processing sites.	
(e)Claim to use more hygienic equipment and have acceptable effluent standards.	(e) NDDB claims that private sector standards are wanting.
(f) Have benevolent support of NDDB and of state governments. Latter gives periodic grants to offset losses.	(f) Stands on its own.

Source: Bank briefing, January 19, 1995, for official visit to NDDB.

Key concepts cited in the brief (Box 3.3) were:

(a) The significant distinction is that while both enterprises attempt to maximize the return to the owners, a commercial enterprise measures the return per unit of capital supplied, while the cooperative measures it by per unit of input (milk) supplied. Pan-territorial pricing has major welfare advantages, since remote villages are usually the poorest, often with no alternative commercial market for milk. Closer in, the cooperative provides a floor price, while allowing farmers to sell at a higher price where it is available. Commercial principles do not preclude cross-subsidization (indeed, tied credit is characteristic of procurement in the non-cooperative sectors), as in the provision of credit or extension advice; provided the benefits (to the commercial or cooperative owners) of the cross-subsidized package are higher than in the absence of cross-subsidy. For an organization such as the Bank, concerned to reduce poverty, cooperative principles are *prima facie* more attractive than commercial. (Of course, if the argument is that cooperatives are inherently less efficient, then this inefficiency might well overcome any equity advantages. This is an empirical issue on which Box 3.3 is silent).

(b) "Used by the states." To the extent that this continues, it represents the failure of the project to get the Anand principles implemented. Rectification of this would certainly be necessary before there is a "level-playing field." The summary is simply wrong to imply that this is an inherent difference: What was the project all about?

(c) and (d) Under the project, NDDB got concessional credit *(7.5* percent interest), and grants were provided to MPUs and SFs for dairy factory construction. There is nothing inherent in the cooperative sector getting such advantages. They were designed into the Bank project. If they provide the cooperatives with an "unfair" advantage, it is the Bank which provided it. The Bank is wrong in saying that the private sector does not get grants. In industrially backward areas of India, state governments frequently provide *50* percent of needed equity, tax holidays, and tax exemption on milk processed from outside the state, etc.[16] Yes, the playing field is tilted in this dimension, but not only by the Bank and not only in favor of cooperatives.[17]

(e) After twenty years support for the cooperative sector, it would be reasonable to expect the Bank to be able to say whether it regards the hygiene standards used by the cooperatives as satisfactory. To simply rely on an NDDB "claim" would seem to imply that supervision has broken down. Further, it is hardly credible that the authors of this Bank briefing did not know for themselves that *caustic soda* (blandly described in the memo as "preservative") is routinely added by private contractors to milk to counteract the acidity of soured milk destined for processing by the private sector,[18] and that some private plants do not have effluent treatment equipment.[19]

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[16] "Fears about over-capitalization were further reinforced because many state governments were reckless in announcing all manner of concessions and subsidies in order to attract private capital to their state. In Haryana, for example, some 40 new plants were proposed to raise processing capacity to a total of 40 lakh liters per day from the existing 15 plants which had a capacity of 10 lakh liters per day. This looked ridiculous because a majority of the existing plants were hardly viable; the Haryana Cooperative Federation which has been operating for nearly two decades, had never been able to collect more than 2 lld (lakh liters per day) in flush and 50,000 liters in lean seasons. There seemed no way the new plant could become viable. Vij has suggested that the private businessmen were interested more in the tax breaks and subsidies which they could claim under the present regime. In his estimate, the 11 new plants proposed would earn, by way of tax exemptions alone, nearly Rs. 100 crores by making disproportionate investment in land and machinery expressly for claiming these concessions; there would be additional subsidies and concessions from both the state as well as the central governments, most of which were not available to co-operatives" (Shar, Tushaar and others, IRMA. Undated. "Institutional Structures for Dairy Development: India's Post-Independence Experience." Draft, p. 47).

[17] In the case of OFIII, NDDB is insistent that *no government subsidy was involved.* Of the Rs. 11.5 billion spent on OFIII, NDDB reports that the Bank provided 7.6 billion, the EC 2.2 billion, and NDDB 1.7 billion. The Bank funds(including the IDA component) were on-lent by the government at 7.5 percent interest.

[18] Normally thought of as a core governmental activity, food safety gets a similarly short shrift in the Bank's "Dairy Development in Sub-Saharan Africa: A Study of Issues and Options," World Bank Technical Paper No. 135, dated March 1, 1991, which says "...Human health and hygiene standards are clearly of major importance, but they are better addressed through education than regulation.. ..The effect of such controls is often counter productive since they apply in effect only to the formal sector where they impose costs, thus giving a price advantage to the relatively uncontrolled informal sector" (para. 7.24).

3.29 The Bank briefing failed to recognize that both companies and cooperatives come in two forms: privately- (or farmer-) owned and state-controlled. State-controlled companies are known as parastatals. The project was designed to move (and in large part was successful in moving) OF cooperatives from state control to farmer control. The briefing note compared state controlled cooperatives with private companies; the valid comparison would have been to compare farmer controlled cooperatives with private companies. That this analysis could have been used as a significant factor in determining not to extend the project helps explain the Audit's unsatisfactory rating of Bank performance.

[19] "During nearly a year after delicensing was announced but before the MMPO was promulgated, numerous new dairy processing plants got built....Many of these were small plants; most were designed for product manufacture, and were run in filthy and unhygienic conditions, as inspection reports submitted to the Ministry of Agriculture seem to suggest," (Shar, Tushaar and others, IRMA. Undated. "Institutional Structures for Dairy Development: India's PostIndependence Experience." Draft.)

4. Outcome

4.1 In terms of expanded processing capacity and numbers of small farmers served, the project was very successful, meeting essentially all its goals in terms of processing capacity, and 103 percent of its targets for formation of new DCSs. Project cost was approximately 25 percent less than projected in the SAR (see Table 4.1). In terms of institution building above the village-level DCSs and in achieving a self-financed organization, the project results were mixed. At least some of the shortfall in milk procurement can be attributed to the Bank-endorsed removal of dairy licensing: It reflects the Bank's success in having the goal posts moved. Project appraisal failed to forsee private milk processors being heavily subsidized to construct processing plants in major cooperative milk-sheds. The Bank endorsed liberalization policy thus made appraisal procurement estimates moot.

Table 4.1: Physical Targets and Achievements of NDPII

	Absolute			*Increment*		
	Appraisal	*Actual*	*Percentage*	*Appraisal*	*Actual*	*Percentage*
Milk Procurement (M/l/day)						
Average	13.7	11.0	80	5.2	2.5	48
Peak	18.3	13.4	73	7.1	2.2	31
Milk Processing (M/l/day)						
Processing	20.0	19.2	96	7.0	6.2	89
Drying	1.1	1.0	90			
Chilling	7.2	8.7	121	2.8	4.3	154
Liquid Milk Marketing (M/l/day)						
Metro	4.8	7.2	150			
Other	8.4	7.6	90			
Total	13.2	14.8	112	5.7	7.3	128
National Milk Grid (Metric Tons)						
Milk Powder Storage	47,300	35,975	76			
Butter Storage	13,200	8,926	68			
Transport (Number)						
Road Tankers	996	1,133	114			
Rail Tankers	183	169	92			
Milk Sheds (Number)						
MPUs	190	170	89			
DCSs	70,000	71,800	103			
Cost (US$ Million)						
Bank Loan/Credit				360	277	77
EC Food Aid				150	110	73

Source: ICR, Table 5.

Financial Sustainability

4.2 Financial sustainability is an extremely complex topic in the context of OF. Just as the Bank insists that the Central Government guarantee funds made available to NDDB, so NDDB requires that state governments guarantee loans to the SFs and its MPUs. Thus, nominally at least, NDDB's security depends on the creditworthiness of the state governments, rather than on individual projects. This reliance on the states' creditworthiness is particularly important, where states continue to interfere with pricing and staffing decisions of the cooperative sector. This was the usual relationship before NDPII and is still true in some cases (Table 4.2). What has changed significantly is the increased amount of money now guaranteed by the states. NDPII had aimed to free the cooperative sector from state interference, in which case direct lending without a state guarantee would have made sense. As we have seen, in several cases the project was unable to eliminate state interference.

Table 4.2: Compliance with Anand Principles

	Compliance			
	1991[a] States		1995[b] SFs	MPUs
	No.	%	%	%
Free to set consumer prices	8	36	80	80
Free to set producer prices	7	32	87	87
Elected boards	14	64	75	87
Autonomy in Staff Recruitment	n.a.	n.a.	93	76

a. By State, from NDDB, April-September 1991, "Progress Report on Operation Flood."
b. MPUs and SFs, data from Supervision Letter, November 28, 1995.
n.a. = not available.

4.3 There is an element of "chicken and egg" in the above relationships. Many states take the position that so long as they are guaranteeing loans to their SFs and MPUs, they have the right to appoint directors and managers and to have a say in pricing and staffing decisions.

4.4 Even though NDDB's loans may be adequately secured, the issue of MPU solvency is important. No organization can be expected to operate effectively if starved of working capital and under threat of bankruptcy.

4.5 The overall financial health of the dairy cooperative sector is summarized in Table 4.3 for the three years prior to closing. A number of observations are relevant. Firstly, loss making institutions have been reduced from 73 to 46 (13 of them in Karnataka and Andhra Pradesh) over two years. Accompanying this, the increase in profits and reduction in losses has been nothing short of spectacular. Overall losses of Rs. 584 million in 1992-93 have been converted into profits of Rs. 285 million in 1994-95.[20]

[20] The Region is concerned that the audit does not bring out the marked difference in inter-state financial performance. They note that merely stating that the overall losses of Rs. 584 million in 1992-93 have been converted into profits of Rs 285 million in 1994-95 creates a misleading picture because it is not the case that cooperative unions/federations in "profit-making States" will cross state lines and cross-subsidize those in "loss-making States" to wipe out losses in the cooperative sector overall.

Table 4.3: Profitability of the Cooperative Sector (132 State Federations and MPUs)

132 State Unions and Federations	*1992-93*			*1993-94*			*1994-95*		
	No. making		*Profit or loss after tax (Rs. M)*	*No. making*		*Profit or loss after tax (Rs. M)*	*No. making*		*Profit or loss after tax (Rs. M)*
	Net profit	*Net loss*		*Net profit*	*Net loss*		*Net profit*	*Net loss*	
Gujarat	15	--	57	13	2	28	12	3	36
Uttar Pradesh	9	14	(33)	11	12	(49)	12	11	(26)
Karnataka	2	11	(131)	3	10	(125)	10	3	115
Tamil Nadu	5	6	(171)	6	4	53	6	5	(3)
Maharashtra	9	2	(7)	10	1	28	10	1	112
Andhra Pradesh	2	9	(168)	2	9	(121)	6	4	(58)
Madhya Pradesh	1	4	(62)	2	3	(58)	2	3	(56)
Punjab	5	5	(31)	6	4	(39)	6	4	(11)
Haryana	3	3	(2)	2	4	(24)	3	3	(1)
Rajasthan	1	6	(25)	2	5	(50)	2	5	(16)
Pondicherry	0	1	(0.2)	0	1	(0.3)	1	0	(0.2)
Bihar	1	4	(24)	1	4	(4)	3	2	4
Kerala	1	2	(4)	3	0	12	2	1	2
Orissa	0	4	(13)	4	0	3	4	0	2
West Bengal	4	1	33	4	1	38	4	1	113
Delhi	1	0	2	1	0	60	1	0	41
Goa	1	0	0.4	1	0	0.3	1	0	0.8
All-India	59	73	(584)	71[a]	60	(328)	85[a]	46	285

a. Totals to 131.
Source: ICR and mission data.

Table 4.3a: Number of State Federations and MPUs Making Profits and Losses and Percentage Share of Loss-Making Entities

	1992/93			1993/94			1994/95		
State	Number Making		**% Losing/**	Number Making		**% Losing/**	Number Making		**% Losing/**
	Profit	Losses	Total	Profit	Losses	Total	Profit	Losses	Total
Gujarat	15	--		13	2	13%	12	3	20%
Uttar Pradesh	9	14	61%	11	12	52%	12	11	48%
Karnataka	2	11	85%	3	10	77%	10	3	23%
Tamil Nadu	5	6	55%	6	4	40%	6	5	45%
Maharashtra	9	2	18%	10	1	9%	10	1	9%
Andhra Pradesh	2	9	82%	2	9	82%	6	4	40%
Madhya Pradesh	1	4	80%	2	3	60%	2	3	60%
Punjab	5	5	50%	6	4	40%	6	4	40%
Haryana	3	3	50%	2	4	67%	3	3	50%
Rajasthan	1	6	86%	2	5	71%	2	5	71%
Pondicherry	0	1	100%	0	1	100%	1	0	0%
Bihar	1	4	80%	1	4	80%	3	2	40%
Kerala	1	2	67%	3	0	0%	2	1	33%
Orissa	0	4	100%	4	0	0%	4	0	0%
West Bengal	4	1	20%	4	1	20%	4	1	20%
Delhi	1	0	0%	1	0	0%	1	0	0%
Goa	1	0	0%	1	0	0%	1	0	0%
All-India	59	73	55%	71	60	46%	85	46	35%

Source: Table 4.3 above.

4.6 The data reported in Table 4.3 cover only 132 SFs and MPUs out of about 190 (170 MPUs and 20 SFs). Table 4.3a expresses loss making MPUs in percentage terms. The missing data for 58 organizations reflect (i) lack of audited accounts (in several states these are required to be done by the State (or cooperative) Auditor, and delays of several years may be involved); and (ii) in a few cases amalgamation of units. The All-India data include unaudited accounts and give net losses of Rs. 581 and 254 million in FY 1993 and FY 1994, respectively, converting to an after tax profit of Rs. 285 million in FY 1995. Total overdue loan installments increased 27.5 percent (from Rs. 796 million to 1,020 million) from March 1995, to March 1996. Arrears represented about one-third of repayments due at the end of March, 1996.[21] From 1990-91 to 1994-95, these arrears had an annual growth rate of 180 percent (from a very modest base of Rs. 82 million), so the rate of growth of arrears has been slowed.

4.7 To put these numbers in perspective, NDDB's "surplus" (excess of income over expenditure) was Rs. 466 million in FY95, its total assets were Rs. 27,771 million, and its equity was Rs. 14,116 million. Meaning that total overdues were equal to about three years surplus, and total loans outstanding (Rs. 10,725[22] million) could in extreme circumstances be written off, and still leave NDDB with about 30 percent of its equity.

[21] The ICR, para. 50, puts arrears at 1 percent of NDDB's loan portfolio, but this is presumably a misprint.

[22] Rs. 7,310 million committed to subborrowers and 2,810 of accrued interest as of March 1995, plus 564 million of capital and interest outstanding under the Working Capital facility at March 1996.

4.8 In short, the profitability of Federations and Unions improved markedly over the three years. Arrears are still being accumulated in payments due to NDDB, steps are being taken to bring these into line, and the rate of increase of arrears has been brought down substantially. In any case, the arrears problem though real is not currently a threat to the survival of the dairy cooperative system as a whole.[23] [24]

Veterinary Services

4.9 Under OFII, veterinary services were made available to DCS members free or on concessional terms, as part of a bundle of services provided by the MPU and DCSs. (Indeed vaccinations were often provided free even to non-members). Details varied between MPUs. The Bank saw this as "subsidization" of veterinary services, competing "unfairly" with potential private providers. Accordingly, in the name of the Bank's "user pays" principle, project conditionality called for the unbundling of these services.[25] As agreed OFIII discontinued the provision of free regular (preventative) veterinary services and significantly reduced the subsidy on emergency services. Table 4.4 reports survey results from twelve villages in Madhya Pradesh.[26]

Table 4.4: Survey Results: Need for Veterinary Services

	DCS Village						*Non-DCS Village*	
	Members		*Non-Members*		*All*			
	1983	*1996*	*1983*	*1996*	*1983*	*1996*	*1983*	*1996*
Need for Veterinary Services	15	55	27	31	20	46	13	44
Need was Satisfied	96	44	88	71	93	51	55	56

Source: Singh, Katar and B.N. Hiremath. 1997. "Operation Flood: A Re-Survey of 12 Villages in Madhya Pradesh." IRMA. Chapter 6, Table 6.5.1.

4.10 For these twelve villages there was a dramatic rise in the perceived need for veterinary services and decline (except for non-DCS villages) in the satisfaction with the service obtained. The increased need is not surprising since "an ounce of prevention is worth a pound of cure." Withdrawal of the (MPU-funded) Animal Health Camps could be expected to result in delays in identification and treatment of veterinary problems. That satisfaction with the quality of service in

[23] The Region feels this section pays insufficient attention to serious and continuing financial difficulties faced by some states, such as Madhya Pradesh, Rajasthan, Punjab, Haryana and UP, which amongst them account for 40 percent of cooperative unions and federations evaluated and about 57 percent of loss making ones.

[24] The Region in its comments notes that the poor financial performance of cooperatives in half the states has implications on the financial sustainability of the cooperative unions/federations. The Region is concerned that the large majority of cooperatives are supposed to be already operating under the Anand principles but are still incurring financial losses, and that this is a risk to financial sustainability of cooperatives.

[25] SAR, para. 3.10.

[26] The NDDB in its comments notes "The (audit) report quotes the results of a survey to conclude in a lesson that the OF should explore the benefits of reintroducing free, regular health camps and rebundling the supply of veterinary services. While we do believe that there is a need to improve the quality of veterinary services being provided to the farmers, one of the lessons we have learnt and one that we are trying to get the State Governments to agree to, is that in the long run, farmers should pay for the services being provided to them. We, therefore, do not recommend provision of free services."

DCS villages also declined suggests that salaried veterinarians employed by the MPU were felt to provide a better service than could be obtained from private veterinarians or public clinics.[27] [28]

Table 4.5: Survey Results: Sources of Veterinary Services

	DCS Village						*Non-DCS Village*	
	Members		*Non-Members*		*All*			
	1983	*1996*	*1983*	*1996*	*1983*	*1996*	*1983*	*1996*
DCS	64	6	45	0	60	4	n.a.	n.a.
Private Veterinary Doctors	7	11	10	4	6	8	25	7
Government Veterinary Hospital	29	38	45	26	34	34	75	33
Indigenous Treatment	--	0	--	0	--	0	--	4

Source: Singh, Katar and B.N. Hiremath. 1997. "Operation Flood: A Re-Survey of 12 Villages in Madhya Pradesh." IRMA. Chapter 6, Table 6.5.1.

4.11 Comparison of the results for DCS and non-DCS villages (both increased their need for veterinary services) poses a question as to whether removal of health camps also reflected on non-DCS villages or whether some other overriding change affected all villages (leaving a minor role for the withdrawal of the health camps). Sources of veterinary services are given in Table 4.5. Demand for private services rose very substantially under the new policy, but primarily due to the rise in total demand for services, rather than the decline in provision by the cooperative system (which continued to provide emergency service). In either case, the decline in satisfaction with the service provided suggests that project beneficiaries were better off in the preproject situation.

[27] A reviewer reports: "Vets in Anand interviewed during a visit said that increased cost recovery reduced emergency calls from farmers for nonemergency matters. Since the visits were practically free, farmers tended to seek more help than necessary since the cost of vet visits was undervalued." The reviewer also criticized the survey reported in Table 4.4 as not adequately answering the question of whether farmers are better or worse off. Perhaps a question that should have been asked was: "Do you prefer the present system where you pay for veterinary services directly or the old system where these services were 'subsidized,' but at the cost of receiving less money for every liter of milk?" Unfortunately we cannot go back and rerun the survey. In fact both questions are needed. The indications from the questions in Table 4.4 are that farmers would probably be willing to pay *something* to revert to the old system. The reviewer is right to question whether they would be willing to have their milk money docked enough to pay the full cost.

[28] NDDB notes "In the initial years of Operation Flood, the veterinarians from the unions carried out both routine as well as emergency services. With the passage of time and with a number of villages having a trained first aid worker, it was found not necessary for veterinarians to attend to minor ailments. But the subsidized rates charged by the unions for veterinary services led to farmers calling for the union veterinarian even for minor problems that could easily have been dealt with by the first aid worker. It was as a result of this misuse that the services of the veterinarians employed by a number of unions are presently limited only to emergency visits.

It is also the NDDB's view that while the milk unions should engage themselves in activities which could be classified as public good and for which private entrepreneurs would not be ready to come forward, for example vaccination, services such as curative aspects of animal health and artificial insemination, are best left to private entrepreneurs. For one, this would generally lead to an improved quality of service and there is the incentive to earn more as the earnings would be based on the number of cases treated and AIs performed, at the same time, it would also result in less subsidies."

Internal Economic Rate of Return (ERR)

4.12 Using the prices ruling in 1996, the ICR estimates the ERR to be 21 percent, on the basis of crediting to the project with all milk procurement in excess of a 2 percent cumulative growth rate. This contrasts with an SAR estimate of 27 percent. The difference is due to lower than expected incremental milk procurement. These lower procurements swamped the effects of higher world prices and lower than projected project costs.

4.13 The audit cannot improve on this estimate. The market liberalization introduced in 1991 meant that changes in procurement can no longer be used as an index of changes in induced changes in production. It is changes in production (regardless of the marketing channel used) which is the real index of the project's economic impact. Crediting the project with this milk "diverted" to the private sector would drive the ERR estimate back up towards the SAR estimate.

Borrower Relations

4.14 A worrying outcome of this project was an apparent progressive breakdown in confidence and communication as between the Bank and NDDB. There seem to have been three strands to this break-down:

(i) The first involved the decision to change the Bank's appraisal requirements, (para. 3.4). While this "tightening" was well within the Bank's prerogative and was motivated by a valid concern that some of the subloans being approved by NDDB might not be financial viable, the handling of the change left much to be desired (para. 3.5).

(ii) The Bank's support of OF was overtaken by a shift in the Bank's paradigm for development (para. 3.24). Despite the Anand model and despite devotion of NDDB's management to the goal of farmer control,[29] Bank staff seem to have regarded OF and all its associated institutions as a public sector rather than a private sector/NGO operation. This perception then got in the way of an unbiased view of what OF was achieving. This misreading by the Bank included an apparent misreading of Central Government expenditures. For some inexplicable reason, the *loans* being on-lent to OF by the Central Government were misread by

[29] Described as: "A deliberate strategy adopted by NDDB was to obtain state governments' commitment to adopt the Operation Flood conditionalities before commencing implementation of subprojects already approved by the Bank. While in principle it was a laudable strategy to insist on policy reform before agreeing to new investment, and in line with the Bank's policy objectives, we feel that NDDB should have refrained from seeking the Bank's approval for these sub-projects until the respective state governments had adopted the required reforms" (10/4/95). Note that there is no hint of a suggestion in this memo that the Bank itself should have held up approval if conditionality was not yet fully satisfied. The Bank was well aware of the lack of progress in implementation (Box 3.1). As the ICR (para. 85(a)) rightly observed: "...the Bank might have taken a tougher line during project supervision in scrutinizing sub-project appraisals rejecting those of states which did not meet an acceptable level of compliance with the institutional requirements of the project."

Bank staff as *spending.*[30] The result was to confirm the staff's view of OF as a (very expensive) government program, rather than a private sector operation which was borrowing from the Central Government rather than a private bank—Borrowing, one might add, from the Central Government, since that is the only way in which the Bank's by-laws would allow the Bank to sponsor this developmental activity. When OF was asked by government to expand its activities to include oil-seeds,[31] rural-electrification and social forestry, this was interpreted by the Bank staff as "failure to stick to their core competence," rather than an indication of the high regard in which the management of NDDB is held by government. The files show a progressive change in attitude by most of the Washington-based Bank staff from regarding NDDB as a key developmental agency to an obstacle to development. How, after twenty years working with a developmental agency and the investment of almost US$2 billion (present value, 1996 dollars), the Bank managed to reach this perspective is hard to understand.

(iii) Finally, there was the protracted delay in approving the extension of the closing date and precipitous refusal to provide a second extension (paras. 3.17 to 3.27). When subsequently the Chairman of NDDB wrote to the Bank President (February 29, 1996), thanking him for the help which had been provided and inviting him to see what had been accomplished, his letter went unacknowledged.

4.15 An ironic aspect of the above described "second thoughts" which evidently came to color the Bank's relations with NDDB is *the way in which NDDB is criticized for implementing the project in accordance with the SAR.* The SAR provided for 30 percent of investment cost to be financed by NDDB from profits on the sale of concessionally priced food aid and for the loan to be passed on to NDDB at 7.5 percent interest and on-lent by NDDB at 10 percent. The complaint of "high cost" of the dairy processing capacity provided by the project is made in the face of 26 percent lower borrowing from the Bank than was provided for in the SAR and a significant shortfall in the provision of food aid by the EC.[32]

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[30] The Bank's "India Livestock Sector Review: Enhancing Growth and Development," Report No. 14522-IN, May 1996, Table 6.2, lists Operation Flood as having actual central Government expenditures of 805 million rupees or 51 percent of total spending on Animal Husbandry and Dairying in 1992-93. It goes on to say that "Activities that could be taken over by the private sector, such as poultry development, cattle breeding, and dairying (especially Operation Flood), receive about 60 percent of total agricultural funds." (para 6.10).

[31] With liberalization of the importation of cooking oil, NDDB has withdrawn from this involvement. Oil imports have risen from 0.15 million tons in 1993-94 to 1.2 million tons in 1995-96 and are likely to expand further.

[32] Despite an agreed commitment of 75,000 MT of SMP and 25,000 tons of butter oil, the EC refused a request for further deliveries after 60,000 MT of SMP and 13,500 MT of butter oil had been delivered. The proximate basis for this refusal was "exhaustion of the 1995 budget allocation for SMP and butter oil," but this came after noting that "India has been a successful net exporter of milk during the course of last year..." (Letter from EC to Indian Ambassador, March 17, 1995).

5. Ratings

Project Outcome (Satisfactory)

5.1 The project design turned out to be internally inconsistent. If the investments were really intended to be limited to states that complied fully with the Anand principles, at most half the funding would have been ample. But if the Bank really intended its funds to be spent, then the agreed conditionality could be no more than a target. This finding has the benefit of hindsight. The audit would not go so far as to say that it should have been evident *ex ante*, and certainly it appears that NDDB shared the Bank's optimism.

5.2 Faced with the "fork in the road" whereby the project could either be implemented to meet its physical or policy target, the audit does not quarrel with the decision to proceed, albeit without the improved institutional setting. Not to have done this would have deprived about 24,800 villages of the opportunity to form DCSs, and the policy battle would have been fought on the backs of the poor. What one might have hoped for would have been a clear agreement between the Bank and the borrower that the conditionality could not expect to be fully achieved and even an informational note to the Board explaining that the project would now be judged on progress towards the Anand principles, rather than their achievement. The charade of the Bank missions being "disappointed to learn" of the lack of implementation of the Anand principles (Box 3.1) reflected an unwillingness of the Bank to engage in a serious debate on the appropriate response to the project's design weakness, once identified. The *ex post* view of the ICR was that the Bank should have taken a tougher stand.

5.3 Despite the failure of the project to achieve the full implementation of the Anand principles and despite the decline in the Bank's commitment to the project, project achievements were nevertheless significant. They included:

(i) *Increase in DCSs*. The already noted increase by 50 percent in the number of DCSs.

(ii) *Increased Milk Handling Capacity*, as listed in Table 4.1, processing, drying, and chilling increase within +/- 25 percent of SAR estimates.

(iii) *The Cooperative Development Program*. This program involved almost 300,000 people in a wide range of training courses designed to strengthen their understanding of the Anand model of cooperation and as a prophylactic against possible later efforts by state politicians to "recapture" the cooperative sector. It aimed to instill in participants an understanding of their rights and responsibilities as OF suppliers and of "good cooperative behavior."

(iv) *Introduction of Women's Cooperatives*. Some 6,000 women's DCSs were formed, and more are expected to emerge. Though this development was not projected in the SAR, it has resulted in empowerment and a more "open" role for women in affected villages.

(v) *Higher Milk Incomes* (or "poverty reduction"). Higher incomes have improved nutrition and allowed more children to stay in school longer. For the very poor, the extra income has meant the possibility of completing primary school; for the slightly wealthier, it has meant the opportunity to attend secondary school; and for the even better off, the possibility of attending university.

5.4 As already mentioned (para. 4.1), the project borrowed 26 percent less from the Bank than projected in the SAR. The ICR rated project outcome as satisfactory. OED's review of the ICR resulted in an OED rating of marginally satisfactory, largely due to the reported lack of progress towards the Anand cooperative structure and the shortfall in milk procurement. The Audit endorses the original ICR rating of **Project Outcome** as **Satisfactory**.

Sustainability (Likely)

5.5 As discussed in paras. 4.2 to 4.8 , substantial doubts about project financial sustainability have been expressed, but there has also been significant progress. The four-tiered framework (including NDDB) provides a strong and appropriate structure of decentralized decision making. It has shown itself able to adapt to new competitive and technical pressures. Sustainability depends on the continued ability to adapt. Private companies have hired away some key staff (at salaries up to five times those offered in the cooperative sector). Sustainability will be threatened if salaries are not adjusted to retain a core of key staff. This need not involve matching private sector salaries, but is likely to require some upward adjustment of salaries. In like manner, there continue to be problems with some secretaries of DCSs. Embezzlement and political ambitions are the two key problems.[33] OF needs to monitor these occurrences closely and to encourage MPUs to support civil prosecution in cases of fraud. (Though costs may exceed direct benefits, the message that this is "simply not acceptable in the OF system," can be expected to prevent other potential occurrences). Strict enforcement of ethical standards may need to be accompanied by some reexamination of the adequacy of rewards to DCS secretaries. Farmer support for the cooperative system could also be enhanced by reintroduction of free preventative animal health camps (para. 4.11).

5.6 Finally, in some areas project sustainability could be threatened by the emergence of new and more rewarding employment opportunities.[34] In a developmental context such changes are to be welcomed, since they increase income. They are not yet, unfortunately, so widespread as to threaten project sustainability.

5.7 A seldom discussed possibility is that after the full Anand principles have been established in a state, there may yet be a political grab aimed at recapturing the cooperative sector. Current concern is to free the cooperatives of political and bureaucratic pressures. Once achieved, continual vigilance (and training as provided by the Cooperative Development Program) is likely

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[33] These problems were found to be serious in three of four villages studied in Kheda district (Rajaram, N. 1996). "The Impact of Liberalization on Village Milk Cooperatives: A Sociological Study of Kheda District," in R. Rajagopalan (ed.), Rediscovering Co-operation, Vol. III. pp 158-175).

[34] Katar Singh and others have reported that from 1983 to 1996 the rapid expansion of soybean production has led to the closure of five out of nine DCSs studied in Madhya Pradesh (Singh, Katar et al, 1996).

to be needed to keep them out. Recent events in Gujarat, where in April 1995 cooking oil was seized by the Government from NDDB go-downs, serves to emphasize this point. Nevertheless, **Sustainability** is judged **Likely**.

Institutional Development (Substantial)

5.8 Since NDDB was a strong institution even at project commencement, there is a limit to what can be claimed under institutional development. However, the establishment of 24,800 DCS including 6,000 Women's DCS, together with the major investment in the Cooperative Development Program, justify rating **Institutional Development** as **Substantial.**

Borrower Performance (Satisfactory)

5.9 NDDB scrupulously followed Bank procedures, and patiently provided very substantial documentation, as requested. This was done courteously and correctly. NDDB alerted the Bank with large lead times to their perception of the need for project extensions and observed Bank conditionalities even when this necessitated a delay in project implementation. This clearly justifies a rating for **Borrower Performance** of **Satisfactory**.

Bank Performance (Unsatisfactory)

5.10 As summarized in paras. 3.26 and 3.29, **Bank Performance** is rated as **Unsatisfactory**. On balance we rate Bank performance unsatisfactory on the following grounds: (i) there was a serious dissaray in the decision not to extend and a lack of understanding of the problems of managing a project to closure with large sub loans;(ii) there were a number of areas where, even accepting the need in some cases for a firm position by the Bank, the handling of the relationship aspect was unfortunate; (iii) there was a confusing and abrupt change in the attitude of the Bank to the borrower which went beyond what was justified simply by the changing sectoral policy scenario and was exacerbated by a misunderstanding by the Bank of the nature of the NDDB institution which damaged what could have been more of a partnership, including government, seeking the policy solutions; (iv) in the later years there was a confused relationship between the field office and HQ, which, in the audits view could have been largely avoided by leaving more responsibility with the field office; (v) and there were some procurement problems.

6. Findings and Lessons

Findings

6.1 There are no plans for a follow-on project, and, , there is some doubt whether NDDB would wish to borrow from the Bank again under similar conditions. If the Bank is to have a positive role in the development of the Indian Dairy Industry, it is thus likely to be through encouraging the right policy environment for the dairy industry.

6.2 The recently completed livestock sector study advocates promotion of "market competition" to be fostered by the "creation of a level playing-field for all market participants," which is taken to involve four key actions:

(i) Eliminate all state intervention in cooperatives;

(ii) Lift the MMPO;

(iii) Establish a mechanism to monitor milk markets to ensure fair competition; and

(iv) Strengthen public monitoring and enforcement of hygienic standards.[35]

6.3 Given the very significant incentives currently offered to private companies (para. 3.28, (c) and (d)), it is not clear why the livestock sector study wanted only the interventions in the cooperative sector eliminated. The first action would be better stated as:

(i) Eliminate all state intervention, or, to at least "level the playing field":

(i) Investment incentives, tax holidays, and exemptions to be eliminated but where retained to be available on the same basis for new commercial plants and for new cooperative plants

6.4 The key issue absent from this prescription is sequencing. The Bank should promote conditions (i), (iii), and (iv) in order to establish a "level playing field," which would then allow the lifting of the MMPO.[36] [37]

6.5 Operationally, this might well be reflected in requiring these rules as part of the conditionality of any state agricultural projects.

[35] World Bank. 1996. "India: Livestock Sector Review: Enhancing Growth and Development." Report No. 14522-IN, para. 4.52.

[36] GOI notes in its comments: "GOI does not consider significant changes, amendments necessary under MMPO at this stage. The Order appears to be functioning properly. There are adequate provisions for appeal, if the application for registration, expansion and renewal is rejected by the Competent Authority. A firm may file an appeal before the Controller against the order of the Registering Authority and again to the GOI against the order of the Controller.

[37] GOI notes "With the completion of National Dairy II, no more subsidies are being provided to cooperatives by NDDB or GOI and therefore the playing field between cooperatives and private sector appears to be quite level in financial terms."

6.6 Pending the implementation of the other conditions, the Bank could have a constructive role in helping amend the MMPO so as to make its application more rigorous and to provide for its administration by an independent authority. The spirit of the MMPO is exactly analogous to the subproject appraisals required of NDDB within NDPII. Equally with MPUs, private entrepreneurs should be required to realistically appraise the supply and demand for milk and milk products and ensure that they have good prospects of operating profitably and that their equipment and procurement plans will ensure hygienic operations and proper effluent disposal. This would lead to a "no objection" mode of operating the MMPO. There should probably be provision for some form of appeal, if project rejection was felt to be unreasonable.

Lessons

6.7 From a project where Bank Performance has been rated Unsatisfactory, there must be some lessons for the Bank. The sad experience with the , dithering over the extension, the loss of rapport with the Borrower and problems with procurment all involved Washington second-guessing and/or ignoring the project TM. (In the case of the procurement and closing date decisions, Washington overruled the TM and Delhi Unit Head and, in the case of procurement, also the Division Chief). The first lesson is:

- **Lesson 1.** This project would have benefited from more devolution of responsibility to the field.

6.8 A second lesson for Operations is that, along with trusting the TM, the Bank needs to adequately support him/her with sufficient amounts of his/her time and other resources for him/her to be able to do the job effectively. Lest this appear to be a "motherhood" statement, it should be noted that NDDB felt that some Bank staff did not put in enough time to properly understand the project.

- **Lesson 2.** Raising Bank performance should take precedence over cost cutting.

6.9 All of which has been nicely articulated by NDDB in its brief to the FAO-led ICR mission:

> It is recommended that once institutions like the World Bank and the European Community have entered into agreements on the basis of a clearly articulated set of project goals and objectives, these institutions should avoid creating situations which hinder project implementation. They should recognize and appreciate that the borrower had to face many domestic administrative, legal, procedural and operational problems while implementing the project. A sympathetic, supportive and flexible attitude towards implementation issues would help create a congenial atmosphere in which both the lender and borrower become effective partners to the project. When problems do arise, there should be a clear and transparent review process by which the borrower can present its point of view to a higher authority within the financing organization (Undated).

6.10 As discussed in paras. 4.9 to 4.11, there is a simple lesson for OF:

- **Lesson 3.** OF should explore the benefits of reintroducing free, regular health camps and rebundling the supply of veterinary services.

Annex A

Basic Data Sheet

SECOND NATIONAL DAIRY PROJECT (CR. 1859-IN/LN. 2893-IN)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	678	503	74
Loan/Credit amount (Total)	360	282	78
Cofinancing	—	—	—
Cancellation	—	83	—
Economic rate of return	27	21	78

Cumulative Estimated and Actual Disbursements

	FY88	*FY89*	*FY90*	*FY91*	*FY92*	*FY93*	*FY94*	*FY95*	*FY96*
IBRD Loan (US$M)									
Appraisal estimate	—	—	—	30.0	90.0	150.0	200.0	200.0	200.0
Actual	—	—	—	—	—	—	53.3	89.0	117.1
IDA Credit (SDR M)									
Appraisal estimate	34.8	68.2	98.5	121.2	121.2	121.2	121.2	121.2	121.2
Actual	12.7	40.4	48.0	73.1	93.9	120.7	121.2	121.2	121.2
Total Loans and Credit (US$M)									
Appraisal estimate	46.0	90.0	130.0	190.0	250.0	310.0	360.0	360.0	360.0
Actual	17.7	53.5	63.4	97.9	126.4	163.7	217.9	253.4	281.5
Actual as % of Appraised									
Loan	0.0	0.0	0.0	0.0	0.0	0.0	27.0	44.5	59.0
Credit	36.0	59.0	49.0	60.0	77.0	99.0	100.0	100.0	100.0
Loan and Credit	38.0	59.0	49.0	52.0	51.0	53.0	61.0	70.0	78.0

Note: Loan of US$53M was cancelled in September 1995 and a further amount of US$29.9 million cancelled in June 1996.

Staff Inputs (staff weeks)

	Total
Preparation to Appraisal	73.2
Appraisal	64.5
Negotiations through Board Approval	—
Supervision	238.5
Completion	19.3
Total	395.5

a. Completion includes only time used by FAO/CP.
b. Staff inputs not broken down by year in the ICR.

Project Dates

	Original	Actual
Initiating memorandum		July 25, 1986
Preparation		Nov./Dec. 1986
Appraisal	February 1987	March/April 1987
Negotiations	September 10, 1987	November 2-6, 1987
Letters of Development Policy	—	—
Board presentation	June 9, 1987	December 15, 1987
Signing	—	January 13, 1988
Effectiveness	—	April 8, 1988
Midterm Review	—	December 1991
Project Completion	June 30, 1994	April 30, 1996
Loan closing date	December 31, 1994	April 30, 1996

Mission Data

					Performance Rating		
	Date (month/year)	No. of persons	Staff days in field	Specialized staff skills represented[a]	Implementation status	Development status	Types of Problems[b]
Preappraisal 1	11-12/86	4	26	EC,DS,AS,LP	—	—	—
Preappraisal 2	1-2/87	1	28	FA	—	—	—
Appraisal	3-4/87	5+2 EEC	21	FA,EC,DS,AS, L + EEC	—	—	—
Supervision 1	3/88	2	15	FA,DS	2	2	M
Supervision 2	9-10/88	6+3 EEC	21	FA,PS,LP,M&E, TS + EEC	1	1	M
Supervision 3	3-4/89	2+1 EEC	17	FA,EC + EEC	1	1	M
Supervision 4	12/89	5+4 EEC	25	FA,EC(2),PS, DS + EEC	1	1	M
Supervision 5	9/90	2+1 EEC	8	EC(2), + EEC	1	1	M
Supervision 6	11-12/90	5+3 EEC	24	EC(2),FA(2), LP + EEC	1	1	F,M
Supervision 7	7/91	2	8	EC,FA	1	1	F,M
Supervision 8	11-12/91	4	21	EC,FA,LP,AG	1	1	F
Supervision 9	8/92	2	3	AG,FA	1	1	F,M
Supervision 10	2-3/93	1	31	FA	2	2	F,M
Supervision 11	11-12/93	4	22	FA(2),OP,AG	2	2	F,M
Supervision 12	10-11/94	2	23	FA,OP	S	S	F,M
Supervision 13	10/95	1	19	FA	S	S	M
Completion	5-6/96	3+4 EEC	26	FA,CS,LP	—	—	—

a. AG=Agriculturalist; AS=Agroindustry Specialist; CS=Cooperative Specialist; DS=Dairy Specialist; EC=Economist; EEC=European Economic Community Staff; FA=Financial Analyst; LP=Livestock Processing Specialist; M&E=Monitoring and Evaluation Specialist; OP=Operations Officer (Senior)
b. F=Financial; M=Management

Other Project Data

FOLLOW-ON OPERATIONS	Credit no.	Amount (US$ million)	Board date
Karnataka Dairy Development Project	Cr. 482-IN	$30.0	June 1974
Rajasthan Dairy Development Project	Cr. 321-IN	$27.7	December 1974
Madhya Pradesh Dairy Development Project	Cr. 522-IN	$16.4	December 1974
National Dairy Project	Cr. 824-IN	$150.0	June 1978

Annex B

Estimation of Economic Impact

As shown in Table B1, the nominal value of Bank assistance to Operation Flood under the five projects was $500 million. When this is compounded at 10 percent, it becomes equivalent to $1.9 billion in 1996 U.S. dollars.

The increased milk production due to the faster growth of the Indian dairy industry from 1975 to 1996 is shown in Table B. This table also shows the total compounded to 1996 at a 10 percent rate of interest.

A million metric tons of milk requires about 85,000 tons of skim milk powder and 50,000 tons of butter oil (or 60,000 tons of butter). In 1995 world prices were about $2,269 metric ton for skim milk powder and about the same for butter oil—say 135,000 tons of ingredients at $2,200 per ton, or $275 million per million tons of milk for raw materials alone. For 948 million tons of milk, raw materials would cost $260.7 billion, indicating that the Bank's assistance to Operation Flood would only have had to account for 0.48 percent of the observed increase in production to break even at a 10 percent rate of interest. (And this takes no account of benefits to be experienced after 1995.)

Support for Operation Flood was also provided by the World Food Program, the European Community, and the government of India. Allowing for the Bank's contribution being at least 20 percent of the total, all contributions would need to account for say 2.5 percent of the observed increase in milk production to have an economic rate of return (ERR) of 10 percent; or capitalizing the current annual increment of 40 million metric tons (i.e., assuming growth reverted to the pre-Operation Flood rate) would add 43 percent to benefits, or allow only 1.8 percent of these augmented benefits, for the investment to yield an ERR of 10 percent.

Table B1: Disbursement Flows and Present Value Calculations for the Five Dairy Projects in India

With 1996 as 0	Trans. Period	Disbursed (US$) Major Dairy Project C0824	Dairy Madhya Pradesh C0522	Dairy Rajasthan C0521	Agriculture Credit Dairy I C0482	National Dairy II C1859	National Dairy II L2893	Total	MUV 1990=100	1996=100	Total Disbursement Adjusted	Values
20	1976		5,467.92	175,129.13				180,597.05	45.84	0.387	466936.35	3141314.28
19	1977		825,565.59	439,341.10	452,053.66			1,716,960.35	50.35	0.425	4041591.67	24718007.06
18	1978		2,473,112.06	2,249,043.31	5,908,422.18			10,630,577.55	57.94	0.489	21745530.74	120903352.90
17	1979	3,982,098.27	5,740,036.58	7,924,522.18	2,086,499.47			19,733,156.50	65.62	0.554	35641172.03	180147244.90
16	1980	9,179,626.67	1,183,037.74	2,553,381.99	1,988,522.59			14,904,568.99	71.98	0.607	24541393.67	112767041.00
15	1981	8,329,055.19	1,753,338.86	2,086,986.80	3,801,315.43			15,970,696.28	72.27	0.610	26191323.14	109407656.60
14	1982	26,437,505.28	3,303,663.52	2,487,810.48	2,404,187.29			34,633,166.57	71.16	0.600	57683008.74	219051129.70
13	1983	33,210,676.14	1,115,777.73	4,687,084.19	1,794,778.11			40,808,316.17	69.54	0.587	69551360.84	240110160.90
12	1984	32,554,624.48	0.00	711,717.77	3,412,302.39			36,678,644.64	68.05	0.574	63881748.17	200488291.20
11	1985	30,033,151.40	0.00	0.00	7,364,757.78			37,397,909.18	68.61	0.579	64602830.43	184319414.80
10	1986	6,273,262.57	0.00	0.00	119,050.82			6,392,313.39	80.89	0.683	9366015.37	24293031.74
9	1987	0.00	0.00	0.00	0.00			0.00	88.84	0.750	0.00	0.00
8	1988	0.00	0.00	0.00	0.00	46,943,174.83		46,943,174.83	95.31	0.804	58374830.35	125131633.10
7	1989	0.00	0.00	0.00	0.00	6,570,546.91		6,570,546.91	94.66	0.799	8226718.99	16031547.98
6	1990	0.00	0.00	0.00	0.00	18,079,191.00	0.00	18,079,191.00	100.00	0.844	21427457.17	37960047.46
5	1991	0.00	0.00	0.00	0.00	34,331,465.00	0.00	34,331,465.00	102.23	0.863	39802066.24	64101625.70
4	1992	0.00	0.00	0.00	0.00	38,289,047.00	0.00	38,289,047.00	106.64	0.900	42554555.99	62304125.42
3	1993	0.00	0.00	0.00	0.00	20,144,029.00	26,855,062.00	46,999,091.00	106.33	0.897	52387212.13	69727379.34
2	1994	0.00	0.00	0.00	0.00	0.00	40,879,844.00	40,879,844.00	110.21	0.930	43962245.81	53194317.43
1	1995	0.00	0.00	(0.05)	(0.28)	0.02	21,887,180.00	21,887,179.69	115.18	0.972	22521866.10	24774052.70
0	1996	0.00	0.00	0.00	0.00	0.00	27,500,515.00	27,500,515.00	118.52	1.000	27500515.00	27500515.00
		150,000,000.00	16,400,000.00	23,315,016.90	29,331,889.44	164,357,453.76	117,122,601.00	500,526,961.10				1900071889.00

Note: Values are in 1996 U.S. dollars.
Source: Disbursement data from OIS.

Table B2: Calculated Milk Production Increase Due to Faster Growth of the Indian Dairy Industry between 1975 and 1996

Year	*Number of Years*	*Differences in Million Metric Tons of Milk*	*Compounded*
1975	21	1.58	11.71
1976	20	3.55	23.90
1977	19	5.52	33.78
1978	18	7.49	41.66
1979	17	9.46	47.83
1980	16	11.43	52.53
1981	15	13.40	55.98
1982	14	15.37	58.37
1983	13	17.34	59.87
1984	12	19.31	60.61
1985	11	21.28	60.72
1986	10	23.25	60.31
1987	9	25.22	59.47
1988	8	27.19	58.29
1989	7	29.16	56.82
1990	6	31.13	55.15
1991	5	33.10	53.31
1992	4	35.07	51.35
1993	3	37.04	49.30
1994	2	39.01	47.20
1995	1	40.98	45.08
1996	0	42.95	42.95
		489.85	1,086.17[a]

a. Total compounded amount.

Annex C

Borrower Comments – Government of India

D.S.Negi
Joint Secretary(DD)
Tel.No.3387804

भारत सरकार
कृषि मंत्रालय
पशुपालन एवं डेयरी विभाग
कृषि भवन, नई दिल्ली-110001
GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
(Department of Animal Husbandry & Dairying)
Krishi Bhawan, New Delhi - 110001

D.O.No.20-4/99-DP

17th June, 1999.

Dear Mr.Ingram,

This is with reference to your letter dated May, 26, 1999 addressed to Shri N.K.Sinha, Secretary(AH&D) regarding India - Second National Dairy Project(Cr.1859-IN/Ln.2893-IN) Draft Performance Audit Report for our comments.

Our comments on the Performance Audit Report are enclosed.

With warm regards

Yours sincerely,

(D.S.Negi) 17/6/99

Mr.Gregory K.Ingram
Manager
Sector and Thematic Evaluations
Group,
The World Bank,
1818 H Street N.W.
Washington, D.C.20433,
USA.
Fax No.(202)522-3123.

Comments of Government of India on performance Audit Report on Second National Dairy Project (Cr.1859-IN/Ln.2893IN) of World Bank**

Para 1.5 of page 1 and 2

Incorporated as footnote in para. 1.5 of the audit

The Milk and Milk Product Order 1992 (MMPO) is a mechanism that seeks to maintain and increase supply of good quality liquid milk and attempts to enforce hygiene and safety standards for the Dairy Industry. After delicensing of the Dairy Industry in June 1991, the Govt. considered the need for some kind of regulation to sustain the orderly growth of the Industry, to protect the interests of millions of small milk producers and consumers and also to ensure that the delicensing of the Dairy Sector would not result in chaotic conditions in the market for this essential commodity. With this back ground and the need for maintaining and increasing the supply of liquid milk of the desired quality in the interest of the general public and to provide for regulating production, supply and distribution of milk and milk products, the MMPO was promulgated in June, 1992, under section 3 of the Essential Commodities Act. Govt.of India does not agree that NDDB is a player and referee for MMPO.

Foot Note 2 on page 2

Incorporated as GOI comments in relevant footnote in audit

It is clarified that the MMPO is a regulatory Order which requires registration of units handing more than 10,000 ltrs. per day. A license is not required. All dairy processing firms handling more than 10,000 litres per day would require registration.

Para 6.4 and 6.6

Incorporated as GOI comments in footnotes to para. 6.4

Govt.of India does not consider significant changes amendments necessary under MMPO at this stage. The order appears to be functioning properly. There are adequate provisions for appeal , if the application for registration ,expansion and renewal is rejected by the Competent Authority. A firm may file an appeal before the Controller

OED Comments

against the order of Registering Authority and again to the Government of India against the order of the Controller.

With the completion of National Dairy Project-II, no more subsidies are being provided to cooperatives by NDDB or Government of India and therefore the playing field between cooperatives and private sector appears to be quite level in financial terms.

Borrower Comments - National Dairy Development Board

राष्ट्रीय डेरी विकास बोर्ड
National Dairy Development Board

CHAIRMAN'S OFFICE

Ref: CDB-542/6/30 17th June, 1999

Mr. Gregory K Ingram
Manager
Sector and Thematic Evaluations Group
Operations Evaluation Department
The World Bank
1818, H Street N.W.
Washington, D.C. 20433
U.S.A.

Dear Mr. Ingram,

Thank you for your letter dated 25th May, 1999 enclosing the draft Performance Audit Report. While we broadly agree with the contents of the report, we enclose some comments, which you may wish to incorporate while finalising the report.

With kind regards,

Yours sincerely,

(Amrita Patel)

Encl: as above

COMMENTS ON THE DRAFT AUDIT REPORT OF THE OPERATIONS EVALUATION DEPARTMENT OF THE WORLD BANK

Chapter 1, Paragraph 1.2

The first sentence states that "In the first three (state) projects, each State Dairy Federation was a parastatal albeit with representation on the Board from the MPUs within the state.

This may be replaced by the following:

"In the first three (state) projects, each State Dairy Corporation was a parastatal albeit with a Board nominated by the State Government and with no representation on the Board from the MPUs within the state."

**Replaced sentence as suggested by NDDB

Chapter 1, Paragraph 1.5

**Incorporated as footnote in para 1.3 of the audit

The report mentions that the Milk and Milk Products Order (MMPO) was relaxed to require only firms processing greater than 10000 litres per day to obtain a licence. It may be noted that this provision was further relaxed and the power to register capacities upto 75000 litres per day were given to the respective State Governments as opposed to the Central Government.

The report also states that "Since NDDB has important responsibilities for the implementation of the MMPO, it finds itself, to some extent, both player and referee". It may be noted that it is the Government of India, and specifically the Registering Authority appointed under the MMPO, who is the implementing authority. The Registering Authority, in case he deems it necessary, calls for NDDB's expertise in verifying the physical infrastructure proposed by the applicant. NDDB plays, therefore, merely an inspecting and a recommendatory role and not a role of a referee.

**Incorporated as footnote in para. 1.5 of the audit

Chapter 4, Paragraphs 4.9 and 4.10 and Chapter 6, Paragraph 6.10

**Incorporated as footnote in para. 4.9 of the audit

The report quotes the results of a survey to conclude in a lesson that the OF should explore the benefits of reintroducing free, regular health camps and rebundling the supply of veterinary services. While we do believe that there is a need to improve the quality of veterinary services being provided to the farmers, one of the lessons we have learnt and one that we are trying to get the State Governments to agree to, is that in the long run, farmers should pay for the services being provided to them. We, therefore, do not recommend provision of free services

**Incorporated as footnote to para. 4.10 of the audit

Paragraph 4.10 also mentions that the quality of services provided by the private veterinarian or public clinics were considered by the farmers to be inferior to those provided by the veterinarians

**OED Comments

employed by the unions. It needs to be noted that in the initial years of Operation Flood, the veterinarians from the unions carried out both routine as well as emergency services. With the passage of time and with a number of villages having a trained first aid worker, it was found not necessary for veterinarians to attend to minor ailments. But the subsidised rates charged by the unions for veterinary services led to farmers calling for the union veterinarian even for minor problems that could easily have been dealt with by the first aid worker. It was as a result of this misuse that the services of the veterinarians employed by a number of unions are presently limited only to emergency visits.

It is also the NDDB's view that while the milk unions should engage themselves in activities which could be classified as public good and for which private entrepreneurs would not be ready to come forward, for example vaccination, services such as curative aspects of animal health and artificial insemination, are best left to private entrepreneurs. For one, this would generally lead to an improved quality of service and there is the incentive to earn more as the earnings would be based on the number of cases treated and AIs performed, at the same time, it would also result in less subsidies.