

TENTH ANNUAL REPORT

1971-72

INDIAN INSTITUTE OF MANAGEMENT

AHMEDABAD

10TH ANNUAL REPORT

APRIL 1, 1971  
TO  
MARCH 31, 1972

INDIAN INSTITUTE OF MANAGEMENT  
AHMEDABAD



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PART I  
THE INSTITUTE

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1962-63 1963-64 1964-65 1965-66 1966-67 1967-68 1968-69 1969-70 1970-71 1971-72

Sectoral Programmes	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Multi-Level Dairy Management Programme	-	-	-	-	79+ 18*	22+ 3**	-	-	-	-
New Foods for National Development	-	-	-	-	-	70	-	-	-	-
Modernization in Rice Industry Seminar	-	-	-	-	-	-	66	-	-	-
Agricultural Finance Seminar	-	-	-	-	-	-	51	-	-	-
Agricultural Supply Management Programme	-	-	-	-	-	-	21	28	-	15
Dairy Executives Management Programme	-	-	-	-	-	-	-	17	-	-
Bank Management Development Programme	-	-	-	-	-	-	-	-	63	-
Management of Credit Function	-	-	-	-	-	-	-	-	-	25
Inter-University Programmes										
Programme for University Teachers	-	-	-	36	34	19	21	-	-	-
Inter-University Programme (No. of Faculty)	-	-	-	-	4	4	-	2	-	-
4. Research and Publications										
Cases Collected (Cumulative)	-	100	300	400	500	650	750	850	875	906
Research Projects Completed (Cumulative)	-	-	1	16	16	23	36	47	56	71
5. Consulting										
Consulting Projects Completed (Cumulative)	-	-	-	-	-	-	24	40	57	60
6. Alumni Activities										
Alumni Conference	-	-	53	66	61	95	129	130	-	58
7. Facilities										
Library Books (Cumulative)	2000	9000	13000	22000	27000	34000	40000	46000	49906	55246
Building Area Provided (in thousand sq.m.) (Cumulative)	-	-	-	9.37	13.45	15.64	19.65	22.27	27.88	35.95

\* Attended part of the apex level seminar.

\*\* Attended the apex level seminar.

## PROGRAMMES AND ACTIVITIES

1971-72

Post Graduate Programme	Two Year Post Graduate Programme in Business Administration
	One Year Programme for Management in Agriculture
	F.B.A. Programme
Executive Development Programmes	Management Development Programme for Medium and Small Enterprises
	Analytical Aids for Decision Making
	Changing Patterns of Industrial Relations
	Management of Credit Function
	Programme for Trainers
	Production and Operations Management
	Agricultural Supply Management Programme
	Management Development Programme for Senior Officers in the Tamil Nadu Government
	Programme for Developing an Organization
	Financial Management Programme
	Programme on Principles and Applications of Operations Research
	3-Tier Programme
Research	Fifteen research projects were completed and thirty-two were in progress
Consulting	Eight projects on hand
Facilities	Library
	Land and Buildings
	Computer Centre

## SOCIETY AND DONOR MEMBERS

The 14th meeting of the Indian Institute of Management Ahmedabad Society, held on April 9, 1971, approved the award of certificates to the ~~the~~ sixth batch of 110 students of the two-year Post-Graduate Programme in Business Administration at the Sixth Annual Convocation held on April 10, 1971.

The society, at the same meeting, approved the award of certificates to the first batch of 32 students of the one-year Programme for Management in Agriculture at the Sixth Annual Convocation held on April 10, 1971.

During the year under report, the following organizations gave donations to the Institute:

1. Asian Paints (India) Ltd., Bombay	Rs. 50,000
2. Glaxo Laboratories, Bombay	Rs. 25,000
3. Godavari Sugar Mills Ltd., Bombay	Rs. 25,000
4. Hindustan Lever Ltd., Bombay	Rs. 50,000
5. Mahindra and Mahindra Ltd., Bombay	Rs. 50,000
6. New India Assurance Co. Ltd., Bombay	Rs. 50,000
7. T.V.S. Charities, Madurai	Rs. 50,000
8. Voltas Ltd., Bombay	Rs. 50,000

Godavari Sugar Mills Ltd., Mahindra and Mahindra Ltd., and T.V.S. Charities have donated for the first time, they have been enrolled as members of the Indian Institute of Management Ahmedabad Society.

The membership of the society during the year was 89. (For a list of the members of the Society and a list of Donors as on March 31, 1972 see Appendices A and B.)

## BOARD OF GOVERNORS

Dr. G.R. Dalvi, Executive Director, National Productivity Council, Delhi, was nominated as the Council's representative in place of Mr. B.N. Bhattasali from June 30, 1971.

Mr. S.M. Dudani replaced Mr. V.R. Mehta, Secretary, Education Department, Government of Gujarat, in April 1972.

Mr. Manohar Bandiwdekar, General Secretary, Rashtriya Press Mazdoor Sangh, joined the Board in December 1971 in place of Mr. Shantaram S. Pawde who resigned.

Dr. L.S. Chandrakant, Joint Educational Adviser (T), replaced Mr. G.K. Chandiramani in July 1971.

Mr. Harshavadan Mangaldas, Chairman, Aryodaya Ginning and Manufacturing Co. Ltd., Ahmedabad, replaced Lala Charat Ram who represented the All India Management Association and whose term ended in January 1972.

Dr. Vikram Sarabhai

The Institute recorded with great sorrow the untimely death of Dr. Vikram Sarabhai on December 30, 1971. He was the founder member of the Institute. He also acted initially as its Honorary Director. The following resolution was passed and sent to the bereaved family:

The Society, Board of Governors, Faculty, Staff and students of the Indian Institute of Management, Ahmedabad, mourn the death of Dr. Vikram Sarabhai. He was a great man. He used knowledge in its widest sense and blended the physical and social science for the development of the country. He created institutions to translate his ideas into practice and sustained them by his understanding of the people he inspired. The Indian Institute of Management, Ahmedabad, was one of the educational institutions which he founded and nurtured. This Institute has been built upon the foundations he laid and has grown from the inspiration of his vision. The Institute mourns the death of its founder, and we who knew him mourn the loss of a friend.

The Board decided to name the Institute's library the "Vikram Sarabhai Library."

The Board met on April 9, 1971; August 25, 1971; January 24, 1972 and April 15, 1972.

The Budget Committee of the Board met on August 12, 1971, and October 28, 1971, the Personnel Committee on March 6, 1971, September 3, 1971, and January 20, 1972, and the Buildings Committee on September 3, 1971 and November 23, 1971.

(For the names of the Board of Governors and its various committees, see Appendix C.)

## FACULTY AND RESEARCH STAFF

During the year, the faculty strength was 55. In addition, there were 75 research staff members. (For a list of the faculty and research staff, see Appendix D.)

Sixteen new faculty members and 37 research staff members joined the Institute during the period. (For details, see Appendix E.) Three faculty members and 30 research staff members left the Institute. (For details, see Appendix F.)

Faculty Development

The following members of the faculty, research staff, and PGP students continued to work for their doctoral degree:

<u>Name</u>	<u>Designation</u>	<u>Area</u>	<u>University</u>
M.M. Malya	Professor	Production and Quantitative Methods	Harvard
M.N. Vora	Professor	Marketing	Harvard
Y.P. Aneja	Research Associate	Production and Quantitative Methods	Johns Hopkins
A.K. Banerjee	Res. Asstt.	-do-	Wisconsin
V. Jaikumar	Research Associate	Finance and Accounting	Columbia
M.S. Saiyadain	Research Associate	Organizational Behaviour	Kansas
G.K. Jayaram	PGP 1966-68	OB	UCLA
Ravi Sarathy	PGP 1966-68	Control Systems	Northwestern
Rakesh Khurana	PGP 1968-70	Marketing	Northwestern
A.K. Vora	PGP 1968-70	Finance	Northwestern

The following persons were sponsored during the year for doctoral programmes:

<u>Name</u>	<u>Designation</u>	<u>Area</u>	<u>University</u>
K. Balakrishnan	Professor	Finance and Accounting	Harvard
J.L. Saha	Research Associate	Operations Research	Case Western Reserve

<u>Name</u>	<u>Designation</u>	<u>Area</u>	<u>University</u>
N. Dholakia	PGP 1969-71	Marketing	Northwestern
R.K. Sarin	PGP 1969-71	Production	UCLA

#### Director's Resignation

Professor Ravi J. Matthai, who joined the Institute in August 1965 as Director, resigned from the directorship from June 1, 1972, but agreed to continue as Director until his successor was appointed. He will, however, continue to be a member of the faculty.

#### Administrative Officer's Resignation

Mr. M.K. Subramaniam, who joined the Institute as Administrative Officer on September 30, 1963, resigned from the Institute on June 19, 1971. Later, Mr. R.C. Chib joined the Institute as Administrative Officer on June 28, 1971.

#### Dr. P.L. Sharma Passes Away

Dr. P.L. Sharma joined the faculty of the Institute on December 13, 1971 in the Economics Area. While on a visit to his home town Jaipur, he fell ill. Most unfortunately he did not recover and passed away on January 30, 1972.

#### Faculty Associates

The honorary position of faculty associates was awarded to the following persons:

K.K. Anand Chief Personnel and Organization Manager Larsen and Toubro Ltd. Bombay	R.K. Hazari Deputy Governor Reserve Bank of India Bombay
Prafull Inubhai Managing Director Rustom Jehangir Vakil Mills Limited Ahmedabad	N.K. Jaiswal Institute for Defence Studies and Analyses Delhi
M.V. Arunachalam Managing Director Carborundum Universal Ltd. Madras	Shrenik Kasturbhai Industrialist Ahmedabad

- Subir Chowdhury  
Manager, Management Services  
I.C.I. (India) Ltd.  
Calcutta
- S. Sen Gupta  
Director  
Clarion McCann  
Advertising Services Ltd.  
Bombay
- S.Y. Gupte  
Assistant Commissioner  
Income Tax  
Ahmedabad
- Krishna Mohan  
Consultant  
Bombay
- S.R. Mohandas  
Consultant  
Labour Relations  
Bombay
- T.K. Mukherji  
General Manager  
(Staff and Administration)  
Wolters Ltd.  
Bombay
- T.S. Nagarajan  
Sales and Marketing Director  
Brooke Bond (India) Ltd.  
Calcutta
- I.M. Nanavati  
Advocate, Supreme Court  
Ahmedabad
- Phiroze B. Medhora  
Deputy General Manager  
I.C.I.C.I.  
Bombay
- Freddie A. Mehta  
Economic Adviser  
Tata Industries Pvt. Ltd.  
Bombay
- N.C. Mehta  
Director  
National Institute of  
Bank Management  
Bombay
- A.D. Moddie  
Resident Director  
Hindustan Lever Ltd.  
Delhi
- S.M. Patel  
Director  
Co-operative Executive  
Development Centre  
Ahmedabad
- Vinay Bharat Ram  
Managing Agent  
Delhi Cloth & General  
Mills Co. Ltd.  
Delhi
- J. Sudarsana Rao  
Manager  
Management Services  
Coca-Cola Export Corpn.  
New Delhi
- Tarun Sheth  
Factory Personnel Manager  
Hindustan Lever Ltd.  
Bombay
- M.D. Shah  
Manager, Irwind Mills Ltd.  
Ahmedabad

M. Narasimham  
Secretary  
Reserve Bank of India  
Bombay

S.R. Thakore  
Assistant Director  
Physical Research  
Laboratory  
Ahmedabad

N.N. Pai  
General Manager (Finance)  
Batliboi & Co. Pvt. Ltd.  
Bombay

V.M. Patankar  
Regional Director  
Sarabhai Research Group  
Ahmedabad

Visiting Faculty

Dr. Robert Williams, Professor and Chairman of Industrial Systems Engineering Department, Ohio University, USA, who worked at the Institute as visiting faculty, left the Institute on January 8, 1972.

**REORGANIZATION**

In consultation with the Faculty, the Director constituted a committee termed "The IIMA Reorganization Committee" with the following members:

Prof. Ishwar Dayal (Chairman)  
Prof. S.K. Bhattacharyya  
Prof. A.M. Isaac  
Prof. N.R. Sheth  
Prof. Amarlal Kalro  
Prof. M.S. Krishnaswamy  
Prof. S. Paul

The Committee was to take an overall view of the Institute and could recommend changes at any level and in any aspect of the Institute's functioning. The committee could review the objectives of the Institute, the academic and administrative policies, the decision making process, the academic and administrative structure, the planning and budgeting, the control and evaluative structure, and any other aspect which it might consider relevant to its activities.

The Committee submitted its report in two stages. The reports are being discussed by the faculty.



## FORD FOUNDATION GRANTS

As one of the sponsors of the Institute, the Ford Foundation continued to play an important role in the growth and development of the Institute.

The Ford Foundation has so far made the following grants to the Institute:

\$ 471,000	September 1963-October 1964
\$ 1,070,000	September 1964-October 1965
\$ 660,000	October 1966-October 1969
\$ 300,000	March 1966 (building programme)
\$ 221,000	June 1970 (for purchase of computer equipment)
\$ 47,000	October 1969-September 1971

These grants have helped the Institute to obtain the services of visiting faculty from the Harvard Business School and other leading institutions in USA, to provide fellowships to enable the Institute's faculty to go abroad for study and training, and to award fellowships to business executives who had participated in the Institute's programmes. The grant has also been helpful in building a library of over 60,000 volumes (one of the best management libraries in India) and in providing rupee support to research projects conducted in India. The grant of \$ 221,000 received in June 1970 has enabled the Institute to buy a computer.

The Institute is grateful to the Ford Foundation for its continued support and to the Institute of International Education, New York, for administering the dollar funds on behalf of the IIMA.

#### Proposals for a Further Grant

The fourth Ford Foundation grant of \$ 47,000, released in May 1970 for a two-year period, expired on September 30, 1971. The Institute has submitted a request to the Ford Foundation for further assistance of \$ 1,781,000 for the development activities of the Institute between October 1971 and September 1974. The assistance has been sought for:

1. Development of Indian teachers and researchers
2. Development of international relations

3. Development of research and publications
4. Development of multiplier extension work through practising executives
5. Books, films, and equipment
6. Buildings.

PART II  
POST-GRADUATE PROGRAMME  
IN BUSINESS ADMINISTRATION

## POST-GRADUATE PROGRAMME

## ADMISSION

(1972-74 SESSION)

As in the past, the objective of the admission procedures continued to be to attract the best candidates and to select the most promising among them for the programme. In addition, emphasis was laid this year, on getting a better mix of candidates in terms of age, educational background, and work experience.

Press advertisements inviting applications for admission to the 1972-74 session were published in leading English newspapers. As a departure from the previous years' practice, advertisements were also published in some prominent regional English newspapers to get a broader coverage in mofussil areas.

In addition to the press advertisements, letters were sent to all the colleges, as well as to members of the Institute's Alumni Association.

Selection Procedures

Some changes were introduced in the selection procedures in the year under review.

1. Eligibility to Apply:

In view of the increasing number of good applicants, the eligibility conditions required to apply for admission were made stricter, i.e., a candidate was considered eligible if he secured 50% or more marks in all the examinations (as against 50% in two examinations and no minimum in the third examination, last year). In spite of this change, the number of applications increased from 4,694 to 4,900.

2. Work Experience was rewarded in two ways:

i) A relaxation in the marks obtained in one examination was permitted if the candidate had more than one year's paid relevant work experience after graduation.

ii) The weightage given to work experience during the evaluation of applications was increased.

3. Test Administration:

A change was made in the test administration plan. At each centre,

the test was completed in one session on one day instead of being spread over two to three days as in the past.

4. Reservation for Scheduled Castes/Tribes:

Measures for providing opportunities to scheduled caste/tribe candidates were incorporated.

5. Admission of Foreign Nationals:

Procedures were evolved to admit foreign nationals to the programme.

As against the 4,694 applications received last year, 4900 applications were received this year. As in the past, all eligible applicants were asked to appear for the written tests which were held at Ahmedabad, Bangalore, Bombay, Calcutta, Delhi, Hyderabad, Kanpur, Kharagpur, Madras, and Nagpur.

On the basis of the evaluation of applications and scores in tests, 639 candidates were called for group discussions and personal interviews. The interviews were held at Ahmedabad, Bangalore, Bombay, Delhi, Kanpur, Kharagpur, and Madras. The final selection was made in April 1972 on the basis of the evaluation of application and performance in group discussions and interviews.

Profile of Applicants and Students

The salient features of the applicants and students in the last five years are given below:

1. Educational Background

The Institute admits students with diverse educational backgrounds. Though, as in the past, engineers constituted the largest group among applicants and students, the percentage of non-engineers among students increased from 30 last year to 45 this year.

TABLE 1

## EDUCATIONAL BACKGROUND OF APPLICANTS AND STUDENTS

	Arts %	Commerce %	Science %	Engg. %	Total	No. of Cases
<u>1972-74</u>						
Applicants	11.4	13.1	29.9	45.6	100	4900
Students	12.5	7.5	25.0	55.0	100	120
<u>1971-73</u>						
Applicants	12.4	13.5	32.5	41.6	100	4694
Students	8.3	4.2	17.5	70.0	100	120
<u>1970-72</u>						
Applicants	13.0	14.0	42.6	30.4	100	2899
Students	6.4	3.2	12.8	77.6	100	125
<u>1969-71</u>						
Applicants	16.6	15.5	30.7	37.2	100	3014
Students	9.5	1.7	4.3	84.5	100	116
<u>1968-70</u>						
Applicants	22.9	18.4	35.	23.5	100	2321
Students	11.0	9.3	33.1	46.6	100	118

2. Age

Most of the students and the applicants continued to be in the age group of 21 to 25 years. However, the average age of the applicants as well as the students was slightly higher this year than last year. Further, the percentage of students more than 25 years in age increased from 5.8 last year to 9.1 this year.

TABLE 2

## AGE OF APPLICANTS AND STUDENTS

	18 to 20 yrs.	21 to 25 yrs.	26 to 30 yrs.	31 to 35 yrs.	36 to 40 yrs.	Total No. of Cases	No. of age	aver- age
<u>1972-74</u>								
Applicants	33.1	60.7	4.7	0.7	0.8	100	4900	21.6.
Students	20.0	70.9	8.3	-	0.8	100	120	22.20
<u>1971-73</u>								
Applicants	38.4	56.0	4.3	1.0	0.3	100	4694	20.50
Students	36.7	57.5	3.3	2.5	-	100	120	22.2
<u>1970-72</u>								
Applicants	38.2	55.7	5.0	0.9	0.2	100	2899	21.41
Students	43.2	55.2	0.8	0.8	-	100	125	20.94
<u>1969-71</u>								
Applicants	30.2	59.8	7.6	2.0	0.4	100	3042	21.17
Students	15.5	70.7	12.0	1.8	-	100	116	21.35
<u>1968-70</u>								
Applicants	26.8	61.1	9.3	2.4	0.4	100	2321	21.10
Students	27.1	61.9	8.5	2.5	-	100	118	20.93

3. Work Experience

In the past, the majority of the applicants as well as students were fresh graduates. However, the percentage of applicants with work experience increased from 13.16 last year to 18.3 this year. More than 50% of the students this year had work experience.

TABLE 3

## APPLICANTS AND STUDENTS WITH AND WITHOUT WORK EXPERIENCE

	With Work Experience %	Without Work Experience %	Total	No. of Cases
<u>1972-74</u>				
Applicants	18.3	81.7	100	4900
Students	50.8	49.2	100	120
<u>1971-73</u>				
Applicants	13.3	86.4	100	4694
Students	20.8	79.2	100	120
<u>1970-72</u>				
Applicants	23.4	76.6	100	2899
Students	7.2	92.8	100	125
<u>1969-71</u>				
Applicants	23.2	76.8	100	3014
Students	33.6	66.4	100	116
<u>1968-70</u>				
Applicants	33.9	66.1	100	2321
Students	35.6	66.4	100	118

4. Scheduled Caste/Tribe Candidates

As a result of the measure taken in the selection process, five Scheduled Caste/tribe candidates were offered admission this year and four joined.

5. Foreign Students

Three students from Tanzania were offered admission.



## EIGHTH SESSION

(1971-73)

The Eighth Session of the Post-Graduate Programme started on June 29, 1971, with 121 students in the first year and 122 in the second year. Altogether, there were 10 drop-outs from the first year leaving the strength of the class at the end of the year at 111. One second year student passed away after brief illness. The Institute made the best arrangements possible in the city for his treatment and bore the entire expenses.

Curriculum

The first year course package remained unchanged except that the two-unit Written Analysis and Communication course was spread over all the three terms. In the second year, 42 elective courses and 33 project courses were taught during the three terms, in addition to the two-term compulsory course in Business Policy. Four outside faculty members, drawn from professional fields, were involved in the second year teaching.

Students from IIM, Calcutta, and the Jamanlal Bajaj Institute of Management Studies, Bombay, Visit IIMA

During the last few years, the students of the two Indian Institutes of Management at Ahmedabad and Calcutta have been exchanging goodwill visits every alternate year. Under this arrangement and on our invitation, a group of 13 students from IIM, Calcutta, visited our Institute between January 24 and 26, 1972 to return the visit that our students had paid them last year. For the first time, a group of five students from the Jamanlal Bajaj Institute of Management Studies, Bombay, visited our Institute along with the IIMC students. The visiting students presented and participated in various cultural programmes, attended classes, and exchanged ideas of mutual interest with our students and faculty.

Integration of the First Year Package of Courses

To prepare a more integrated package of first year courses, a Committee of four faculty members reviewed the entire first year course package and submitted a report at the end of the academic year 1971-72. Further work in this direction will continue to be done during the academic year 1972-73.

Sixth Annual Convocation

One hundred and ten students of the 1969-71 class graduated from the

Institute in April 1971. These students were awarded the Post-Graduate Diploma at the Sixth Annual Convocation held on April 10, 1971. Shri Dharma Vira, Governor of Mysore, delivered the convocation address. The following four students received gold medals for outstanding scholastic performance:

- |                  |                 |
|------------------|-----------------|
| 1. H.K. Agrawal  | 3. A.P. Pande   |
| 2. P.K. Bhargava | 4. A.I. Rebello |

### SCHOLARSHIPS

#### Industry Scholarships

Nine first year students were awarded industry scholarships, eight of the value of Rs.3,000 each and one of Rs.2,500.

For the graduating students in April 1972, nine industry scholarships, (Rs.3,000 each) were awarded on the basis of cumulative performance in the first and second years.

#### First Year

- |  |                      |
|--|----------------------|
| 1. Air India                             | Mr. L. Banerji       |
| 2. Devidayal Cable Industries Ltd.       | Mr. S. Bhattacharya  |
| 3. Godfrey Phillips India Ltd.           | Mr. C.V. Krishnan    |
| 4. Gujarat State Fertilizer Company Ltd. | Mr. Mohan K.         |
| 5. Hindustan Lever Ltd.                  | Mr. V.K. Rajwade     |
| 6. India Pistons Ltd.                    | Mr. N.K. Malhotra    |
| 7. Mandelia Paramarth Kosh               | Mr. V. Sengupta      |
| 8. Pfizer Ltd.                           | Mr. K. Sethuraman    |
| 9. Shree Ram Scholarships (DCM)          | Mr. T.B. Viswanathan |

#### Second Year

- |                             |                     |
|-----------------------------|---------------------|
| 1. Dunlop India Ltd.        | Mr. A.K. Gupta      |
| 2. First National City Bank | Mr. V.S. Krishnan   |
| 3. Godrej Trust Ltd.        | Mr. V.K. Kumar      |
| 4. Hindustan Lever Ltd.     | Mr. A. Parasuraman  |
| 5. Hindustan Steel Ltd.     | Mr. S. Ramakrishnan |
| 6. Mahindra & Mahindra Ltd. | Mr. Vijay Sagar     |

- |   |                        |
|---|------------------------|
| 7. Shree Ram Scholarships (DCM)         | Mr. M. Sivaramakrishna |
| 8. Travancore Rayons Ltd.               | Mr. S. Umapathy        |
| 9. Walchand Industries Charitable Trust | Mr. K. Venkataraman    |

#### Government of India Scholarships

The Government of India scholarships were awarded to 27 students in the first year and 30 in the second year.

#### Loan Scheme

Based on need, 48 students of the first year and 50 students of the second year were awarded a total financial loan assistance of Rs.1,98,000.

#### IIC Loan Fund

India Tobacco Company Ltd. (formerly Imperial Tobacco of India Ltd.) donated Rs.50,000 to institute a loan fund called the "IIC Loan Fund." Interest income that accrued on this amount was utilized for the award of loan assistance.

#### Loan Fellowships (Industry)

The following organizations offered loan fellowships (Rs. 2,500 each per annum):

1. Binny Ltd.
2. Bombay Burmah Trading Corporation Ltd.
3. Brooke Bond India Ltd.
4. Century Spinning and Manufacturing Company Ltd.
5. Chesbrough-Pond's Inc.
6. Coca-Cola Export Corpn.
7. Esso Standard Eastern Inc.
8. Goetz (India) Ltd. (Subsidiary of Escorts Ltd.)
9. IBM World Trade Corpn.
10. Indian Oil Corpn.
11. Industrial Cables Public Charitable Trust
12. International Tractor Co. of India Ltd.
13. Kirloskar Oil Engines Ltd.

14. L. D. Charitable Trust (2 fellowships)
15. Larsen & Toubro Ltd.
16. Madras Rubber Factory Ltd.
17. Seth Purushottambhai Haganbhai Memorial Trust
18. Shardaben Bhagubhai Mafatlal Public Charitable Trust
19. Tara Vati Ram Gopal Mehra Foundation
20. United Commercial Bank
21. Warner Hindustan Ltd.

#### State Bank of India Loan Assistance Scheme

The State Bank of India has agreed to give loan assistance up to Rs. 2 lakhs every year to our students as per the terms and conditions of their loan scheme. Under this scheme, financial assistance of Rs.70,000 was given to 10 first year students and 21 second year students.

#### Bank of Baroda Loan Assistance Scheme

The Bank of Baroda gave loan assistance of Rs. 52,500 to 19 students of the Programme for Management in Agriculture.

The Institute is grateful to the commercial organizations, the Government of India, the State Bank of India, and the Bank of Baroda for their help and support to the Financial Aid Programme of the Institute.

#### PLACEMENT

The graduating class of 1972 which consisted of 121 students was the largest class looking for placement opportunities. Of this number, 116 students were placed as of June 1972. We expect the rest of the graduates to find placement in the next month or so. Students continued to show a high degree of preference for career opportunities in marketing. Not enough students were interested in other areas for which placement opportunities were available.

A total of 247 permanent placement opportunities were offered under our auspices as shown in Table 1 which also gives similar data for the past five years. The jobs offered in the production area declined for a second year in succession, while the number of jobs in the finance and accounting area increased from 24 in 1971 to 33 in 1972. Marketing jobs alone accounted for more than 52 per cent of the total number of jobs accepted by our students. (Table 2). The level of acceptance of production jobs declined to five, the lowest ever over the last five years. Industry-wise placement of our graduates continued to show an overall stable pattern (Table 3).

One hundred and eleven students successfully completed the first year course of our Post-Graduate Programme and were placed on summer jobs with 62 companies located in different parts of the country. Two students enrolled in the doctoral programme in business administration were also placed on summer jobs.

The Placement Office, between the middle of January and April 1972, received 161 executives representing 84 companies on the campus for placement interviews with the graduating and first year students of the PGP. Of these, 65 executives representing 36 companies made more than one visit to the campus. Over 1,800 personal interviews were arranged by the Placement Office.

TABLE 1  
AREAWISE CLASSIFICATION OF JOBS ANNOUNCED TO PGP GRADUATES  
(1968-1972)

Area	1968	1969	1970	1971*	1972
Marketing	85	80	101	104	101
Production	37	67	65	38	30
Finance and Accounting	26	28	33	24	33
Personnel	16	18	15	17	9
Operations Research	6	15	18	11	7
Management Trainee (Unclassified)	36	42	37	42	16
General Administration	-	-	20	22	46
Research/Others	-	-	6	8	5
	206	250	295	266	247

\* From 1971 onwards, the total number of jobs announced is the best estimate of likely jobs that might have been offered to our graduates and not a straight addition of the number of jobs announced as done previously. This is because employers almost always announce the total number of jobs, but keep their minds open to other sources of managerial personnel in the country. In our estimates, beginning with 1971, past experience of actual recruitment with some companies has also been taken into account.

TABLE 2  
AREAWISE PLACEMENT OF FGP GRADUATES  
(1968-1972)

Area	1968	1969	1970	1971	1972
Marketing	35	39	45	46	61
Production	15	17	21	12	5
Finance and Accounting	17	8	14	15	17
Personnel	3	6	3	7	3
Operations Research	2	-	7	6	5
Management Trainee (Unclassified)	8	26	5	11	5
General Administration	-	-	-	1	17
Others/Research	3	5	11	12	3
Total	83	101	106	110	116

TABLE 3  
INDUSTRYWISE CLASSIFICATION OF PLACEMENT OF FGP GRADUATES  
(1968-1972)

Industry	1968	1969	1970	1971	1972
Heavy Engineering	6	4	14	15	17
Light Engineering	21	38	26	24	29
Electrical	1	5	4	11	8
Chemicals and Pharmaceuticals	5	14	17	15	27
Textiles	13	21	12	15	8
Finance and Banking Institutions	14	4	12	13	8
Food and Agriculture	13	5	8	2	1
Teaching/Research	5	2	6	5	7
Others	5	8	7	10 *	11 *
Total	83	101	106	110	116

\* Includes the Hotel Industry.

PART III  
F.B.A. PROGRAMME

## F.B.A. PROGRAMME

About 60 applicants attended the admission interviews for the Fellow in Business Administration Programme (doctoral programme) commencing July 1972. Admission offers were made to 13 candidates, of whom 12 joined. The area of specialization of the 12 candidates are:

Agriculture	3
Economics	1
Finance and Accounting	2
Organizational Behaviour	2
Production & Quantitative Methods	3
Not specified	1

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In all, there are 16 FBA candidates (including four of the previous year) on the campus. Two students in the 1st year of the F.B.A. programme have been placed in summer jobs.

The committee proposed to the Director that two of the alumni who had served in industry for a few years be sent abroad for doctoral work after working with the Institute as faculty members for at least a period of six months. The names recommended were:

Mr. C.K. Prahalad	Business Policy
Mr. L.R. Bhandari	Marketing



PART IV  
EXECUTIVE DEVELOPMENT PROGRAMMES

## EXECUTIVE DEVELOPMENT PROGRAMMES

During the year under review the Institute conducted 13 Executive Development Programmes. Three of these programmes were in the category of general management, seven in functional management, and three in sectoral management.

To the 13 programmes, 342 companies sponsored participants, 131 of them were in the public sector and 208 in the private sector.

The total number of participants in the programmes was 517 (200 from the public sector/government and 317 from the private sector).

## GENERAL MANAGEMENT PROGRAMMES

### 3-Tier Programme for Management Development

January 9 - March 4, 1972

Objectives: To develop the managerial abilities and competence of participating executives.

#### Content:

Tier I: Business Policy, Financial Marketing Management, Managerial Accounting and Control, Organizational Behaviour, and Production and Operations Management.

Tier II: Business Policy, Financial Assessment and Planning, Industrial Relations, Marketing Planning, Managerial Economics, and Management Control Systems.

Tier III: Business Policy, Behavioural Sciences and Organizational Development, Economic Analysis and Public Policy, Financial Analysis and Planning, Quantitative Methods, and Management Control and Planning Systems.

Faculty: Professors R. Balachandra, S.K. Bhattacharyya, Kamla Chowdry, S.C. Kuchhal, G.R. Kulkarni (Co-ordinator), Ravi J. Matthai, Subhash C. Mehta, V.L. Mote, C.N.S. Nambudiri, Samuel Paul, Keshav Prasad, Suresh A. Seshan, Baldev R. Sharma, and N.R. Sheth

Guest Speakers: Mr. A.C. Banerji, Ex-Director, Trade Development Authority; Dr. B.S. Minhas, Member, Planning Commission; Dr. H.K. Paranjape, Member, Monopolies Commission; and Prof. Mathew Seaman, Loughborough University.

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Participation:

	Govt.	Public	Pvt.	Total
Companies	3	14	53	70
Participants	4	28	135	167

Management Development Programme for Medium and Small Enterprises

April 25 - May 9, 1971

Objectives: To familiarize the participants with modern management concepts and tools; impart skills in the application of selected management techniques, and give the participants a basic understanding of the major functional areas of business.

Content: Financial Management, Cost analysis and Control, Marketing Management, Economic Environment, Production Management, and Business Policy.

Faculty: Professors R. Balachandra, K. Balakrishnan, Subrata Sen Gupta, S.C. Kuchhal, Subhash C. Mehta (Co-ordinator), H.N. Pathak, and C.M.S. Nambudiri.

Participation:

	Public	Pvt.	Total
Companies	2	17	19
Participants	3	17	20

Management Development Programme for Senior Officers in Tamil Nadu Govt.

September 19 - October 2, 1971

Objectives: To introduce the participants to basic concepts of management and the skills and attitude for assessing the working of industrial organizations, giving a general direction, and bringing about change in these organizations, and to make them familiar with

modern management techniques used in the key functional areas of business organizations.

Content: Accounting Information for Planning, Decision Making and Control, Business Policy, Materials Management, Marketing Management, Organizational Behaviour, and Management of Change.

Faculty: Professors .K. Balachandra, G.R. Kulkarni, C.N.S. Nambudiri, S.A. Seshan, B.R. Sharma, and Subhash C. Mehta.

Guest Faculty: Mr. S. Venkataraman, Finance Secretary, Tamil Nadu Government; and C.K. Prahlad, India Pistons, Madras.

Guest Speakers: Mr. R.K. Srivatsa, Vice Chairman and President, Southern Petro Chemical Industries Corpn. Madras; and Mr. V. Krishnamurthy, General Manager, B.H.E. Trichirapalli.

Participation:

	Govt.	<u>Public</u>	<u>Pvt.</u>	<u>Total</u>
Companies	2	-	-	2
Participants	29	-	-	29

FUNCTIONAL MANAGEMENT PROGRAMMES

Analytical Aids for Decision Making

April 25 - May 8, 1971

Objectives: To cover econometric techniques in the aid of business forecasting with special reference to demand forecasting; cost analysis for decision making, investment planning, principles and their business applications, and the relevance of national economic plans and policies of the Government for business decision making.

Content: Econometric Techniques, Cost analysis for Decision Making, Investment Planning, Linear Programming, and National Economic plans and Policies.

Faculty: Professors Wandini U. Joshi, C. Rangarajan, Samuel Paul, Suresh A. Seshan, and C.D. Wadhva (Co-ordinator).

Guest Speaker: Dr. Phiroze B. Medhora, Dy. General Manager, ICICI, Bombay.

Participation:

	Govt.	Pub.	Pvt.	Total
Companies	1	8	10	19
Participants	1	11	11	23

Changing Patterns of Industrial Relations

April 25 - May 8, 1971

Objectives: To help the participants to enhance their effectiveness in dealing with industrial relations problems.

Content: Inter-Group conflict and its Resolutions, Dynamics of Labour Management Relations, Government Labour Policy and Industrial Relations, Industrial Relations and the Indian Society, Technology and Industrial Relations, Wage Policy and Wage Determination, Collective Bargaining, Inter-Union Rivalry; and Discipline and Grievance\*

\*Handling, and workers participation in management.

Faculty: Professors Ishwar Dayal, Baldev R. Sharma, N.R. Sheth (Co-ordinator) and Prasad Verma.

Guest Speaker: Mr.G. Sundaram, President, All India Petroleum Workers Federation.

Participation:

	Govt.	Pub.	Pvt.	Total
Companies	1	9	12	22
Participants	1	10	14	25

Programme for Trainers

May 26 - June 15, 1971

Objectives: To acquaint the participants with the dynamics of the learning process, the organizational implications of a training programme, the assessment of training needs and their translation into a training programme, the evaluation of the effectiveness of training, the administrative role of the trainer, and the relevance of various training techniques.

Content: The learning environment and the training process; training in relation to organizational processes and problems; and practicing the learning.

Faculty: Professors. Ishwar Dayal, Pulin K. Garg, G.R. Kulkarni, Sasi Misra, Baldev R. Sharma, (Co-ordinator) and N.R. Sheth.

Guest Faculty: Dr. K.K. Anand, I&T, Bombay.

Participation:

	Public	Pvt.	Total
Companies	9	4	13
Participants	10	4	14

Production and Operations Management

May 30 - June 19, 1971.

Objectives: To acquaint the participants with a systems approach to complex production problems, to impart skills in the application of relevant methods of analysis to specific production problems and, to familiarize the participants with tools and techniques for analysis of operational problems.

Content: Operations Efficiency, Costs for Decision Making and Control, Operations Research and Analysis, Operations Planning and Control, Human and Industrial Relations, Manufacturing Policy, and Corporate Strategy.

Faculty: Professors R. Balachandra (Co-ordinator), B.K. Hegde, A.H. Kalro, C.N.S. Nambudiri, Suresh A. Seshan, N.R. Sheth, and Robert Williams.

Guest Speaker: Dr. Subir Chowdhury, ICI, Calcutta.

Participation:

	Govt.	Pub.	Pvt.	Total
Companies	1	4	20	25
Participants	1	8	21	30

Programme for Developing an Organization

September 19-25, 1971

Objectives: To concentrate on how to improve the effectiveness of an organization, its discreet parts, and the totality.

Faculty: Professors Kamla Chowdhry, Ishwar Dayal (Co-ordinator), and Pulin K. Garg.

Guest Speakers: Dr. S.M. Patil, Chairman, HMT; Mr. M.S.S. Varadan, Chief Organization Development, HMT, and Mr. A.B. Majumdar, Secy. and Treasurer, SBI, Ahmedabad.

Participation:

	Pub.	Pvt.	Total
Companies	13	16	29
Participants	25	20	45

Financial Management Programme

September 19 - 30, 1971.

Objectives: To provide new approaches and strategies for financial planning and an inter-action of ideas on modern concepts and techniques of financial management.

Contents: Tools of Decision Making, Management of Working Capital, Corporate Financial Policy, Decisions Relating to Pricing and Valuation of Shares, Current Problems in Corporate Reporting and Financial Decisions, and Finance Function.

Faculty: Professors. S.K. Bhattacharyya, S.C. Kuchhal (Co-ordinator), G.R. Kulkarni, B.G. Shah, and K.L. Varshneya.

Guest Faculty: P.N. Bhalla, Finance Director, STC; and Mr. N.N. Pai, General Manager (Finance) Batliboi & Co. P. Ltd., Bombay.

Participation:

	Public	Pvt.	Total
Companies	9	31	40
Participants	10	36	46

Programme on Principles and Applications of Operations Research

September 19 - October 2, 1971.

Objectives: To acquaint the participants with the fundamental principles of and recent advances in OR, to demonstrate the applicability of these techniques to a variety of real-life complex problems, and to familiarize the participants with the methods of solution by the above techniques with the use of computers.

Contents: Simplex and Revised Simplex Methods, Sensitivity and Duality, Large Scale IP- and Decomposition Principle, Integer Programming, Network Flows and Transportation Problems, Dynamic Programming, Quadratic and Fractional Programming, Unconstrained Optimization, Optimization through Auxiliary Functions, and Stochastic Models.



Faculty: Professors R. Balachandra, A. Ghose, B.K. Hegde, A.M. Isaac, A.H. Kairo (Co-ordinator), Mohan Kaul, V.L. Nete, M. Raghavachari, S. Sikdar and Kanti Swarup.

Guest Faculty: Dr. S. Chowdhry, Manager, ICI, Calcutta, Dr. N.K. Jaiswal, Institute for Defence Studies and Analyses; Dr. J.S. Rao, Manager, Coca Cola Export Corpn., Mr. P. Sadanandan, TIER, Bombay; and Dr. R.L. Williams, Ohio University, USA

Participation:

	Public	Pvt.	Total
Companies	5	10	15
Participants	6	13	19

SECTORAL PROGRAMMES

Agricultural Supply Management

September 13-28, 1971

Objectives: To help the participants acquire greater depth in the management skills required for dealing with agricultural inputs, to familiarize the participants with the agricultural environment in which the managers dealing with agricultural inputs have to work, to make the participants aware of the process of consumer behaviour and the specific problems which farmers face in obtaining and using these inputs, to familiarize the participants with the rural social structure as a new and distinct market with increasing income and with the use of communication skills in designing rural sales promotion programmes; and to make the participants aware of the interdependence between each input to plan an integrated system of supplies.

Content: Marketing, Economics and Quantitative Methods, Agricultural Finance and Organizational Problems.

Faculty: Professors D.K. Desai, Gunvant M. Desai, V.R. Gaikwad, P.S. George, V.K. Gupta (Co-ordinator) and M.S. Krishnaswamy.

Participation:

	Govt.	Public	Pvt.	Total
Companies	1	6	8	15
Participants	1	6	8	15

Alumni Conference on New Opportunities in Changing Agriculture

March 17 - 18, 1971

Objectives: To discuss the nature and potential of the emerging rural market.

Content: Indicators of Change, Expanding Market for Agricultural Inputs, Opportunities in Food Processing, Changing Agriculture, the consumer Industry and the emerging rural consumer.

Faculty: Professors D.K. Desai, G.M. Desai, V.R. Gaikwad, P.S. George, and V.K. Gupta.

Guest Speakers: Mr. Y. Curmally, Manager, Sandoz, Dr. C.L. Dhawan; Manager (Agricultural Products Divn.), Union Carbide; Mr. H.W. Doshi, General Manager, Estrela Batteries Ltd; Dr. S.C. Dube, Professor of Anthropology, University of Saugar; Mr. F.J. Heredia, Managing Director, GSFC; Mr. B.K. S. Jain, Manager (Market & Product Development) Voltas Ltd; Mr. M. Mathias, Director, Hindustan Lever Ltd.; Mr. T.S. Nagarajan, Sales & Mktg. Director, Brooke Bond India Ltd.; Mr. S. Pandit, Mktg. Director, Philips India Ltd.; Dr. K.L. Rathod, Marketing Economist, Jawaharlal Nehru Krishi Vishwa Vidyalaya; Dr. Lalit K. Sen, Director (Sociology), National Institute of Community Development; Dr. M.S. Swaminathan, Director-General, Indian Council of Agricultural Research; Dr. S.W. Williams, Adviser in Agricultural Marketing, Jawaharlal Nehru Krishi Vishwa Vidyalaya; and Dr. J.S. Yadava, Professor of Research, Indian Institute of Mass Communication.

Participation:

	Govt.	Public	Pvt.	Total
Companies	1	6	8	15
Participants	1	6	8	15

Management of Credit Function

May 16 - 22, 1971

Objectives: To facilitate the exchange of experience of commercial and development banks on organizational, methodological, and operational problems in preparing credit plans and to evolve an analytical framework and allocation criteria which would ensure the flow of credit along the lines of planned priorities and its productive use.

Content: Credit Planning, Project Evaluation, Management of Working Capital, Followup, and Central Systems.

Faculty: Professors B.G. Shah, (Co-ordinator), V.L. Mote, and G.S. Gupta.

Guest Speakers: Dr. P.B. Modhora ICICI; Mr. M. Narasimham, RBI; Prof. V.H. Patil, Bajaj Institute of Management Studies.

Participation:

	Govt.	Public	Private	Total
Companies	-	18	-	18
Participation	-	26	-	26

PART V  
SECTORAL ACTIVITIES

## CENTRE FOR MANAGEMENT IN AGRICULTURE

During the year under review, the activities of the Centre for Management in Agriculture (formerly known as the Agco Group) expanded a great deal. The major responsibility at present is to conduct the research project on Farm Mechanization sponsored by the World Bank. This was the second year of the one-year Programme for Management in Agriculture and many changes were made in the course contents based on the experience of the first year of the programme. Ten research projects have been completed in the two years and 13 projects are in progress. The Centre conducted three executive development programmes.

### ONE-YEAR PROGRAMME FOR MANAGEMENT IN AGRICULTURE

One of the major activities of the Centre for Management in Agriculture is the one-year Programme for Management in Agriculture which was organized from the academic year 1970-71 with the financial assistance of USAID and the Department of Food and Agriculture, Government of India.

#### The 1971-72 Batch

The second batch of students successfully completed the programme in April 1971-72.

#### Admissions

To ensure that candidates with different academic backgrounds had an equal opportunity to take the written test and appear for the interview for admission, the PMA admissions policy was suitably modified. Applicants were divided into four broad categories according to their backgrounds: 1) Agricultural and allied biological sciences, 2) Humanities and social sciences, 3) Agricultural and allied engineering subjects, and 4) Statistics. Separate merit lists were prepared for each of these categories, and an equal percentage of candidates, in each category, was called for a written examination and interview. At the final stage of selection, however, no distinction was made in the subjects of the different candidates.

Over 500 applications were received in response to the advertisement inviting applications for the programme. Eventually, 150 candidates were called for interviews and written tests in Ahmedabad, Bombay, Delhi, Madras, Varanasi, and Udaipur. Forty candidates were selected for the programme and 34 joined. Of these, one was a lecturer sponsored by an agricultural college.

Fourteen participants had some work experience. Of these six had teaching experience. As in the previous year, nearly three-fourths of the participants had a family income of less than Rs. 10,000 per annum. The selected participants were from 10 states of the country.

One of the participants left the programme at the end of the second term as he was selected for advanced studies in the United States.

#### Academic Content:

On the basis of the experience gained in the first year of the programme, certain changes were made in the second year. Against 16 courses in the 1970-71 session the number of courses in the 1971-72 session was increased to 18. The two new courses were 1) Agricultural Technology, and 2) Research Methodology. Also, the course on Accounting was offered as a two-term course and the courses on Rural Marketing, and Marketing of Agricultural Inputs (offered during 1970-71) were combined into one course titled Rural Marketing. To ensure the availability of sufficient time for a meaningful Research project during 1971-72, about five weeks towards the end of the third term were exclusively reserved for the research project.

#### Placement

Altogether, there were 33 participants in the one-year Programme for Management in Agriculture in 1971-72. All except one participant (who was not interested in placement) have been placed.

A total of 33 organizations conducted placement interviews on the campus and outside it between December 30, 1971 and April 15, 1972, and 14 of these organizations finally made job offers from one to ten per organization.

The total number of permanent jobs offered to the PMA participants was 33, of which 30 offers were accepted. The number of jobs offered would have been many more but for the fact that a norm was evolved to the effect that the participants would not be allowed to have more than one firm written offer from the organizations participating in the placement activities so as to avoid a skewed distribution of offers among the participants.

The breakup of the participants placed according to industries, is as follows:

<u>Industries</u>	<u>No. of participants</u>
Agricultural Inputs	13*
Rural Financial Institutions	14
Rural Development Institutions	1
Agricultural Management Education	2*
Agricultural Processing	2
Total	<u>32</u>

The area-wise distribution of the placement is as follows:-

<u>Area</u>	<u>No. of participants</u>
Finance	14
Marketing	12
Management Research and Education	2
Production and Processing	4
Total	<u>32</u>

#### Other details

During the academic year, the construction of dormitories for the PMA participants was completed. Each participant has been provided with a room in one of the dormitories. The Agricultural Management Association brought out a journal during the year. As in the previous year, needy students were given financial loans up to Rs.3,000 each. The loans were provided by the Bank of Baroda.

#### The 1972-75 Batch

##### Admission

Work on admission for the third batch was initiated in October 1971.

\*One of them went back to the job which he held prior to his joining the programme.

Over 400 applications were received from various parts of the country. Written tests and interviews were conducted for 130 candidates in Ahmedabad, Bombay, Calcutta, Delhi, Madras, Varanasi, and Udaipur at the end of February and in early March. The selection of candidates for the third batch has been finalized and 35 students have been admitted.

#### Academic Content

On the basis of the experience gained during the second session of the programme, the PMA faculty decided not to offer the courses on Agricultural Technology and Research Methodology for the 1972-73 batch. As most of the students have a broad background in agricultural technology it was felt that there was no need to offer a formal course on the subject. Instead, a reference manual on agricultural technology will be prepared and given to the students, and seminars in collaboration with the Agricultural Management Association will be organized to acquaint the students with various aspects of agricultural technology. It has been decided to drop the course on Research Methodology because no need to offer a formal course on the subject was felt. A few seminars and the research project course will serve the purpose.

The PMA faculty has also decided to introduce the two following courses for the third session of the programme: 1) Communication and 2) Marketing Research. The course on Communication will cover the general theory of communication. The emphasis, however, will be on communication for marketing. The course on Marketing Research will emphasize the research on various aspects of marketing and the quantitative tools available in decision making for marketing. These two courses will be introduced because a large number of PMA participants is being employed in marketing jobs.

The PMA faculty has decided that during the third session of the programme each course will have at least one assignment which will be examined for style and presentation of material. It is expected that this will serve the purpose of a course on Written Analysis and Communication.

#### EXECUTIVE DEVELOPMENT PROGRAMMES

Besides the Agricultural Supply Management Programme and the alumni conference on "New Opportunities in Changing Agriculture" the GMA conducted the following programmes in collaboration with other organizations:



### Dairy Executive Management Programme (DEMP)

This programme was organized at Karnal in collaboration with the National Dairy Research Institute, Karnal, during June-July 1971. Two faculty members from the Centre participated in the programme.

### Rice Mill Management Programme

Following our studies on the paddy-rice system and the national seminar on modernization in the rice industry, the CMA tried to develop a Rice Mill Management Programme.

Prof. A.C. Pandya, Head, Rice Processing Engineering Centre, IIT, Kharagpur, and Dr. R.E. Parker, Project Specialist, Ford Foundation, visited the Institute in April 1971 and had discussions with the CMA faculty and the Director on the desirability of developing long-term collaboration between the two institutes in respect of research and training in the field of the paddy-rice system.

### PERSPECTIVE PLAN

The CMA faculty decided to prepare a Perspective Plan for the activities of the centre for 1975-80. The highlights of this plan are 1) Preparation of the basic framework of research work, 2) Co-ordination of research work and executive development programmes, and 3) integration of the Programme for Management in Agriculture (PMA) with the two year Post Graduate Programme (PGP).

### RESEARCH PROJECTS

During the academic year 1971-72, the CMA completed 12 research projects and had 12 projects in progress. (For details, see Appendix G.)

### BANKING STUDIES GROUP

The Banking Studies Group organized a programme on Management of Credit Function from May 16 to 22, 1971.

It has revised and edited about 50 cases in Personnel Management and Industrial Relations in banks for publishing as a book. It is also working on a monogram on "Commercial Banks in the Rural Community- A Study in Interaction?".

The BSP has decided to organize research projects on the Lead Bank Role Performance. The project team will consist of:

Dr. Pulin Garg

Dr. V.S. Mote

Dr. (Miss) Venku Tai Patil, Jamanlal Bajaj

Institute of Management Studies, Bombay

Dr. N.R. Sheth

Prof. B.G. Shah

The project is designed to yield concrete inputs for the formulation of policies in the critical areas of Lead Bank experiments.

The group has started preliminary work for offering an executive development programme for the branch level executives in the academic year 1972-73.

PART VI  
RESEARCH, PUBLICATIONS, AND CONSULTING

## RESEARCH PROJECTS

Case Research

The case method of teaching continues to remain the fundamental fabric of the Institute's programmes. There has been a substantial increase in the demand for the use of the Institute's cases and technical notes from other educational institutions and companies for their training programmes. So far 906 cases and technical notes have been prepared at the Institute.

Project Research

During the academic year 1971-72, 15 research projects were completed and 32 projects were in progress. Of these, the Centre for Management in Agriculture completed 12 projects and had 12 projects in progress.

(For details of the projects completed and those in progress, see Appendix G.)

## PUBLICATIONS

The number of books, articles, research reports, and papers presented at the professional conference so far is as follows:

	Books	Articles	Research reports	Papers Presented at Pro- fessional Conference	Total
1966-67	4	50	-	77	131
1967-68	3	63	-	22	88
1968-69	5	94	6	31	136
1969-70	13	59	4	27	103
1970-71	16	84	1	29	130
1971-72	9	120	2	45	176
<b>Total</b>	<b>50</b>	<b>470</b>	<b>13</b>	<b>231</b>	<b>764</b>

Obviously the publishing activity of the Institute's faculty has been increasing over the years. The number of books published has increased from four in 1966-67 to nine in 1971-72 and the number of articles from 50 in 1966-67 to 120 in 1971-72. Similarly, the faculty's

contribution in professional conferences has increased from seven papers in 1966-67 to 45 papers in 1971-72. In future, the faculty's publishing activity and participation in professional conferences are expected to grow more rapidly as the number of faculty and research activity at the Institute increase.

#### CONSULTING

The objective behind encouraging the faculty to undertake consulting work is to enable them to keep in touch with the world of practising management. By working on specific problems for a client in their field of specialization, the faculty members enrich their understanding of management processes and problems and provide useful advice to the practitioners of management on specific problems faced by their organizations. Consultation is a profitable experience for both the faculty and the industry.

The following 31 members of the faculty undertook consulting work during 1971-72:

R. Balachandra	J.G. Krishnayya	B.G. Shah
S.K. Bhattacharyya	S.C. Kuchhal	B.R. Sharma
Kamla Chowdhry	G.R. Kulkarni	Dwijendra Tripathi
Ishwar Dayal	Ravi J. Matthai	K.L. Varshneya
D.K. Desai	S.C. Mehta	C.D. Wadhva
G.M. Desai	S.B. Misra	
V.R. Gaikwad	V.L. Mote	
Pulin K. Garg	S.K. Mukherjee	
P.S. George	C.N.S. Nambudiri	
V.K. Gupta	Samuel Paul	
B.A. Hegde	Keshav Prasad	
Nandini U. Joshi	C. Rangarajan	
Sudhir Kakar	S.A. Seshan	

During the year under report, three consulting projects were completed and eight were on hand.

PART VII  
ALUMNI ACTIVITIES

## ALUMNI ASSOCIATION

The IIMA Alumni Association has registered a Charitable Trust to collect and manage donations received for the purpose of furthering management education in the country.

The third issue of the IIMA Alumnus has been published. This issue focusses on the Post-Graduate Programme Alumni Reunion held in April 1970.

The biennial elections for Executive Committee of the Alumni Association were held in June 1971, and 10 members were elected representing all the four zones.

A chapter of the association was formally opened in Poona. The first meeting of the Poona Alumni Chapter was held jointly with the participants in the Management Development Programme on May 7, 1971. The meeting was addressed by Prof. J.G. Krishnayya, who delivered a talk on the use of the computer in management. The Poona Chapter held a one-day seminar on Information Systems which was led by Prof. J.G. Krishnayya and attended by Prof. G.R. Mulkarni.

Alumni Conference

The 7th Annual Alumni Conference on "New Opportunities in Changing Agriculture" was held at New Delhi on March 17 and 18, 1972.

Fifty-eight alumni participated in the conference.

The conference was inaugurated by Mr. C. Subramaniam, Union Minister of Planning, Science, and Technology. Besides the Institute faculty, guest speakers included top officials from the government and public sector and executives from private enterprises.

Alumni Placement

During the year, we received many requests for placement assistance from our alumni, but only four qualified according to our rules. To discourage job hopping we insisted that the alumnus resign his existing position to qualify for our formal placement assistance. Two of the four alumni have been placed. The placement of the other two alumni is in process.

PART VIII  
FACILITIES



### LIBRARY

The growth and expansion of the library continued during the year, and 5,340 new books (bringing the total collection to 55,246) were added. Subscriptions to 71 new periodicals were entered, raising the total number of periodicals subscribed to 626. In addition, 75 periodicals were received as complimentaries. A large number of back-files of periodicals were obtained, and many corporations contacted for acquiring their Annual Reports for filling up the gaps in the Institute's collection.

Rs.2.52 lakhs were spent on books and periodicals during the year. The Institute is still substantially dependent on the Ford Foundation for the purchase of books and periodicals.

### LAND AND BUILDINGS

Construction on the main complex has been going on. The main complex design consists of five units, 1) the library, 2) the administrative offices, 3) class rooms, 4) kitchen and dining halls and 5) an amphitheatre and stage. In the first phase, work was in progress only on the first three units. The library and the hall of the administration wing are expected to be ready for occupation by June 1972.

The Government of Gujarat has agreed to bear the cost of acquiring 20 acres of land. The Institute has requested the Government of Gujarat to bear the cost of acquiring an additional 15 acres of land.

### COMPUTER CENTRE

#### Computer Committee

The Computer Committee, consisting of the following members, continued to decide upon the policies for the Computer Centre and to provide direction.

1. Prof. J.G. Krishnayya (Chairman)
2. Prof. R. Balachandra
3. Prof. G.R. Kulkarni
4. Prof. C. Rangarajan (On leave from January 1972)

### Computer Faculty and Research Staff

The following additions to the Computer Centre faculty were made.

1. Dr. Mohan Kaul, Ph.D.(Paris) a research associate with the French Nuclear Research Centre at Saclay, France, joined the Institute in July 1971.
2. Dr. A.C. Shanihoko, Ph.D.(Delhi), incharge of the Computer Centre at CEMERI, Durgapur. He joined the Institute in May 1971.

In addition to the two new faculty, Prof. J.G. Krishnayya, Dr. S. Sikdar, and Dr. A. Ghose were members of the Computer Group during the year.

The following research staff was affiliated to the Computer Centre:

1. Mr. S.C. Bhatnagar, PGDBA (Left in January, 1972)
2. Mr. P.C. Gupta, M.Tech. (IIT, Kanpur)
3. Mr. J.K. Hakin, M.Tech. (IIT, Kanpur)
4. Mr. N.R.N. Murthy, M.Tech. (IIT, Kanpur)
5. Mr. Rama Rao, M.Tech. (IIT, Kanpur) (Joined in April 1972)
6. Mr. Rishi Kumar, M.E. (Roorkee)
7. Mr. G.J. Singh, M.Tech. (IIT, Kanpur)
8. Mr. S. Sharma, M.Tech. (IIT, Kanpur) (Joined in December 1971 and left in April 1972).
9. Mr. S. Ramani, M.Sc. (Kerala) (Joined in December 1971)

### Activities of the Computer Centre

#### 1. Teaching

Professors Ghose, Kaul, and Sikdar taught a non-credit 12 session course, Introduction to BASIC.

#### 2. Software Development

##### a) Large Scale Sponsored Software Projects

- i) A simulator for the TDC-12 Computer of ECIL has been completed (Professor Mohan Kaul, Mr. N.R.N. Murthy, and Mr. Rama Rao).
- ii) A BASIC Interpreter for TDC-12 is underway (Professor Mohan Kaul, Mr. N.R.N. Murthy, and Mr. T.P. Rama Rao).

b) Computer Centre Projects

- i) A visual display sub-system providing real time display capability on the CR tube for Fortran programmes was developed. Professors J.G. Krishnayya and Mr. J.K. Hakin).
- ii) A programme for chaining programmes on the TSB is being developed (Professor Mohan Kaul and Mr. M.R.N. Murthy).
- iii) Housekeeping routines including a Mag-tape retrieval package are being written (Professor A.C. Shamihoke).

c) Application Packages

The following packages have been developed:

- i) A network flow package to handle networks with up to 600 arcs (Professors S. Mukharjee and Mr. G.J. Singh).
- ii) A programme to handle large (sparse) matrices of up to 300 x 300, (Professor J.G. Krishnayya and Mr. P.C. Gupta).
- iii) Computer Programmes and cases in the course Managerial Accounting-I to aid teaching (Professor A. Ghose and Mr. A. Mittal).

3. Research and Consulting

The HIL Logistics project was successfully completed during the year. (Professor J.G. Krishnayya, Professor R. Balachandra, Mr. S.C. Bhatnagar, Mr. G.J. Singh, and Mr. P.C. Gupta)

The following projects are under negotiation with the Government of India.

- i) Five-year information/research/experimental project on population centres sponsored by the World Bank, (Professor J.G. Krishnayya, Co-ordinator).
- ii) Management simulation studies of the District Level Family Planning Programme sponsored by the Ministry of Health and Family Planning, (Professor J.G. Krishnayya).

The ECIL Project will be completed in October 1972; it involved developing a simulator for the TDC-12 computer and a BASIC interpreter. Dr. A. Ghose was associated with some consulting projects of Dr. V.L. Mote and Professor B.G. Shah during the year. Professor Mohan Kaul,

Mr. N.R.N. Murthy and Dr. A.H. Kaul commenced work on a research project on the scheduling of time shared computers.

### Deputation

1. Professor J.G. Krishnayya attended during August 15-30, 1971 the UN sponsored Jerusalem Conference on Computers in Developing Countries and the Triennial WIP - 71 at LJUBLJANA. He also visited Grenoble University, Milan Polytechnic and CERN, Geneva.
2. Rishi Kumar was deputed to Hewlett-Packard, then to Teletype Corporation, and finally to MIT, Harvard, Dartmouth, and Manchester (UK) for training between August and December 1971.

### 3. Papers by the Computer Centre Faculty

- |  |  |
|--|--|
| 1. Visual Display Subsystem  | J.G. Krishnayya<br>J.K. Hakin                                      |
| 2. Information Services in Administrative Agencies   | J.G. Krishnayya  |
| 3. A User-Oriented On-Line Computer System to Assist Decisions and Analysis in "Area" Development Planning | J.G. Krishnayya  |
| 4. Technological Choices in Developing Country: The Case of Airline Reservations                           | J.G. Krishnayya  |
| 5. Visual Display System   | J.G. Krishnayya<br>J.K. Hakin                                      |
| 6. TDC-12 Simulator on HP 2116B  | Mohan Kaul<br>N.R.N. Murthy  |
| 7. BASIC-I An approach Towards Optimal Internal Representation of Basic Statements on TDC-12 Computers     | Mohan Kaul<br>N.R.N. Murthy<br>T.P. Rana Rao<br>Ranga Rao (ECIL)   |
| 8. New Trends in Computer Usage  | J.G. Krishnayya,<br><u>Hindu Annual Review</u> ,<br>March 12, 1972 |
| 9. The Role of Computers in Control Applications   | J.G. Krishnayya,<br><u>Financial Express</u> ,<br>March 13, 1972   |

10. Information Service in  
Administrative AgencyJ.G. Krishnayya,  
The Economic Times,  
April 9, 1972.Computer Usage

During the last year the computer was used extensively by the students and the faculty. However, due to unavoidable breakdowns, it was not used as much as it could have been. (8 hours a day 7 days a week for 9 months total 2264 hours).

<u>Teaching:</u> Student-use, for case preparation, class work, games, etc., and faculty use for RGP purposes.	2806 hr
<u>Research:</u> General	972 hr
Projects of the Centre for Management in Agriculture	328 hr
<u>Overheads:</u> Computer Centre and Miscellaneous usage	986 hr

PART IX  
FINANCE AND ACCOUNTS

SORAB S. ENGINEER & CO.  
CHARTERED ACCOUNTANTS

Ismail Building  
381, D. Naoroji Road  
Fort, Bombay-1.

AUDITORS' REPORT TO THE DEPUTY CHARITY COMMISSIONER, AHMEDABAD  
REGARDING AUDIT OF ACCOUNTS OF THE INDIAN INSTITUTE OF MANAGEMENT FOR  
THE YEAR ENDING 31ST MARCH 1972

Registered No.F/174 Ahmedabad

- (a) The accounts are maintained regularly and in accordance with the provision of the Act and rules.
- (b) Receipts and disbursements are properly and correctly shown in the accounts.
- (c) The cash balance and vouchers in the custody of the Accountant on the date of the audit were in agreement with the Accounts.
- (d) All books, Deeds, Accounts, Vouchers, or other documents or records required by us were produced before us.
- (e) Inventories certified by the Administrative Officer of the movables (except Library books) of the Public Trust and Certificate of Librarian in respect of books were produced before us.
- (f) The Accountant appeared before us and furnished the necessary information required by us.
- (g) No property or funds of the Trust were applied for any object or purpose other than the object or purpose of the Trust.
- (h) An amount of Rs. 12,263.97 is outstanding from students etc. for a period of more than one year. Rs. 693.62 towards loss on sale of scooter is written off during the year.
- (i) The net capital expenditure of Rs. 1,18,24,435.00 on building during the year represents (a) advances to contractors against their running bills and (b) Miscellaneous expenses on building.
- (j) No money of the public trust has been invested contrary to the provisions of Section 35.
- (k) No alienations of the immovable property contrary to the provisions of Section 36 have come to our notice.
- (l) We think necessary to bring to the notice of the Deputy Charity Commissioner the following special matters:-
- (i) The Indian Institute of Management has been receiving grants from the Ford Foundation. A part of the grant received in India (including books and equipments) has been brought in the books of accounts of the Institute. The other part of the grant received direct by Institute of International Education, New York, would not be recorded in the books of Account of the Institute in India.
- (ii) Provision in respect of depreciation on assets for the period 1st January, 1962 to 31st March 1972 has not been made in the books of account.
- (iii) Net capital expenditure on building under construction amounting to Rs. 1,18,24,435.00 is arrived at as under:
- |  |                          |
|--|--------------------------|
| (a) Expenses   | Rs. 73,68,924.78         |
| (b) Amount advanced against running bills subject to adjustment of final bills | Rs. 44,55,510.22         |
|  | <u>Rs. 118,24,435.00</u> |
- (iv) On 28-3-1966 additional computer equipment was received by Physical Research Laboratory from the Fund from Ford Foundation Grant belonging to Indian Institute of Management. The value of computer amounting to Rs. 1,19,808.00 was treated as Loan free of interest given by the Indian Institute of Management to Physical Research Laboratory, which is shown under the head in Balance sheet on Asset side; "Loan to Physical Research Laboratory, Ahmedabad for IBM Computer". The same is reduced to Rs. 32,600.35 on 31st March 1972 (by the value of computer time used for Indian Institute of Management upto 31-3-1972).





INDIAN INSTITUTE OF MANAGEMENT, AHMEDABAD  
SCHEDULES FORMING PART OF INCOME AND EXPENDITURE ACCOUNT  
FOR THE YEAR ENDING 31-3-1972

SCHEDULE 1 Previous Year 1970-71	Rs.	Rs.	Rs.	Rs.	Rs.
TO ESTABLISHMENT EXPENSES					
(i) Salaries:-					
(a) Faculty & Staff	11,48,356.77	13,07,478.71			
(b) Agri. Coop. (CMA) Programme	1,33,281.28	1,39,675.45			
(c) Consultancy and Sponsored Research Projects	2,38,333.14	2,88,913.00			
(d) Programme for Management in Agriculture	26,729.20	1,14,345.80			
	<u>15,46,720.39</u>	<u>18,50,412.96</u>			
(ii) Allowances	7,53,686.54	7,77,434.56			
(iii) Travelling Expenses	50,426.13	57,628.25			
(iv) Supplies, Services and Contingencies	4,60,746.70	4,88,335.96			
(v) Maintenance of Estate	49,778.53	43,017.64			
TOTAL	<u>28,61,358.34</u>	<u>32,16,829.37</u>			
SCHEDULE 2					
(i) Agri. Co-op. (CMA) Programme	1,05,877.13	1,00,324.55			
(ii) Other expenses of Consultancy and sponsored Research Projects	3,15,009.65	4,14,219.09			
(iii) Chair for Management Practices	36,000.00	18,000.00			
(iv) Staff Welfare	3,448.34	4,186.01			
(v) Expenses on Research Projects met from Ford Foundation Grant for Agriculture and other expenses met from CMA fund for CMA	1,85,587.17	95,202.01			
(vi) Programme for Management in Agriculture	63,997.79	1,30,617.87			
TOTAL	<u>7,10,100.08</u>	<u>7,71,947.02</u>			
BY INCOME FROM OTHER SOURCES					
(i) Receipt from various courses arranged during the year:-					
(a) Post-Graduate courses	9,59,321.84				
(b) Short-term Programmes	<u>10,42,375.00</u>				
(ii) Grant from Govt. of India, Ministry of Food & Agri. for Agri. Co-op. (CMA) Programme:					
(a) Balance as on 1-4-71	2,40,000.00				
(b) Received during the year	<u>2,40,000.00</u>				
Less:					
(c) Amount transferred to balance sheet (representing expenditure on non-recurring items)	<u>2,40,000.00</u>				
					2,40,000.00
(iii) Sponsored Research Projects					
(iv) Income from land					
(v) Consultancy Projects					
(vi) Miscellaneous Receipts					
(vii) Chair from Hindustan lever					
(viii) Scholarship from Industries					
(ix) Grant from USAID for Programme for Management in Agriculture					
Less:					
Amount transferred to Balance Sheet representing non-recurring items	<u>2,80,738.31</u>				
(x) Contribution from Research Projects					
TOTAL					
					<u>2,44,303.67</u>
					<u>33,259.50</u>
					<u>34,68,136.95</u>

Dated : 29 June, 1972

TRUSTEE

Ravi J. Mattheai  
DIRECTORR.C. Chib  
ADMINISTRATIVE OFFICERC. Ramdoss  
ACCOUNTS OFFICERSorab S. Engineer & Co.  
CHARTERED ACCOUNTANTS

## SCHEDULE - VIII

Vide Rule 17(i)

NAME OF THE PUBLIC TRUST: INDIAN INSTITUTE OF MANAGEMENT, AHMEDABAD  
BALANCE SHEET AS AT 31ST MARCH 1972

Particulars	Previous year 31-3-1971 Rs. P.	Rs. P.	A S S E T S	Rs. P.
<b>FUNDS AND LIABILITIES</b>				
<b>GRANT FROM GOVT. OF GUJARAT</b>			<b>IMMOVABLE PROPERTIES</b>	
As per Schedule 'A'		1,98,65,432.90	As per Schedule 'C'	1,47,29,34.82
<b>GRANT FROM FORD FOUNDATION</b>			<b>MOVABLE PROPERTIES:</b>	64,93,771.05
As per Schedule 'A'		40,45,606.87	As per Schedule 'D'	7,05,52
<b>LIABILITIES:</b>			Stores at cost	511.33
1. For expenses		3,71,537.04	<b>INVESTMENTS</b>	
2. For advances			Fifty shares of Borosil Glass Works Ltd. received as donation (Market value Rs. 248) (Previous year Rs. 336)	
(a) Short-term Programmes (Fees received for Programmes to be held in 1972-73)		42,000.00	1. Loan Scholarships (Good)	
(b) Post Graduate Courses:			(a) One year old	2,69,724.92
(i) Due to students		33,336.35	(b) Current	1,88,986.63
(ii) Expenditure to be incurred against application fees received for admission for Post Graduate Courses		65,536.26	2. Loan to Physical Research Laboratory, Ahmedabad for IBM Computer	1,19,808.00
(iii) Expenditure to be incurred against application fees received for admission for Post Graduate Courses		6,679.37	Less: Charges adjusted against loan upto 31-3-1972	37,207.65
(iv) Due to FBA students		973.77		32,600.35
3. For rent and other Deposits		1,48,525.85	<b>ADVANCES:</b>	
(a) Security Deposits		9,925.00	To employees (including one year Rs. 27,423/- for purchase old of conveyance)	
(b) Surplus Credit		7,61,302.00	(Previous year Rs. 35,378/-)	4,91,311.90
(c) Retention amount for students		1,23,143.00	To others	2,18,565.15
<b>INCOME AND EXPENDITURE ACCOUNT</b>				
Balance as per Last Balance Sheet		50,931.33		
Add: Surplus as per Income and Expenditure accounts		50,931.33		
Less: Amount appropriated: 1. and from Increased Earnings on Revenue account		50,931.33		
<b>TOTAL</b>		2,53,24,713.46		2,53,24,713.46

Note: Appropriation on assets is not provided from 1-1-1962 to 31-3-1972.

In case the accounts are maintained on cash basis, state the income outstanding below: NIL  
Balance Sheet to the best of our belief contains a true account of the Funds and Liabilities and of the property and assets of the trust.

INDIAN INSTITUTES OF MANAGEMENT, AMALNAGAR  
SCHEDULE FORMING PART OF THE BALANCE SHEET AS AT 31ST MARCH 1972

## OTHER BARRACKED FUNDS

	Balance as on		Amount credited during the year	Amount debited during the year	Balance as on 31st March 1972
	1st April 1971	Rs. Rs.			
<b>A. LAND AND BUILDINGS</b>					
1. Donation (value of Land donated by the Govt. of Gujarat)	25,43,919.76				25,43,919.76
2. Donation from Industries	35,92,548.41		3,38,000.00		39,30,548.41
3. Donation from Industries - interest	3,05,401.32		1,53,515.20		4,58,916.52
4. Grant from Ministry of Education for Building expenses (Govt. of India)	59,95,000.00		10,00,000.00		69,95,000.00
5. Grant from USAID for Building			9,13,000.00		9,13,000.00
5. Fund from increased earnings on Revenue account			3,72,930.88		3,72,930.88
<b>B. ACADEMIC ACTIVITIES</b>					
1. Reserve Fund (For special programmes) (To meet deficit in any programme)	25,000.00			3,350.46	21,649.54
2. Library Fund (Sale proceeds for some of the books from Ford Foundation and other teaching materials)					
Books					
Teaching Materials					
3. Donation from British Information Service for Equipment (as per contra)	4,78,051.29		79,883.33		5,57,934.62
4. Fund for QMA Programmes	3,08,572.59		89,108.43		3,97,681.02
5. Research and Publication Fund	13,118.10				13,118.10
6. Fund for Banking Studies Project Research	2,02,846.43		1,54,447.54	9,997.49 (a)1	2,78,458.23
	2,31,172.96		3,626.65	68,838.30 (a)11	2,34,799.61
	1,31,316.49		8,144.00		1,39,460.49
<b>C. STUDENTS AID</b>					
1. Special Donation to Fund For Assistance to Students	26,664.48		424.78		27,089.26
2. Fund for Loan Scholarships to Students	5,06,207.05		87,462.74		5,93,669.79
3. India Tobacco Co. Ltd. Students Loan Fund (Interest only to be used)	50,000.00				50,000.00
4. Loan Fellowships from Industries	1,00,000.00		52,500.00		1,52,500.00
5. Fund for Award of Medals	1,000.00				1,000.00
6. S.K. Seth Memorial Award Fund (Interest only to be used)	3,000.00				3,000.00
7. Fund from Interest on Financial Aid Loan	4,738.55		5,037.20		9,775.75
<b>D. FURNITURE AND EQUIPMENTS</b>					
1. Grant in aid from Ministry of Education & Govt. of Gujarat (Representing expenditure on non-recurring items) (as per contra)	13,47,627.59		1,19,040.78	4,008.89	18,62,659.48
2. Grant from Ministry of Food and Agriculture for Agri. Co-op. Programme for Equipment (Representing expenditure on non-recurring items (As per contra)	44,207.99				44,207.99
3. Fund for Contingencies for Equipments to be imported	42,192.65		1,175.50		42,192.65
4. Amount to be adjusted to the Ministry of Education on Sale of Assets	18,342.39				18,342.39
5. Non-recurring expenses met from Grant from IIM (As per contra)	15,500.90				15,500.90
6. Sale and/or written off amount from assets purchased from the Govt. of India and Govt. of Gujarat	20,211.35		693.62		20,905.47
7. Fund for expenses on Computer	17,040.94		1,47,317.17 (b)	13,028.69 (c)	1,51,329.42
8. Grant from USAID for non-recurring items for RMA (as per contra)	88,451.65		36,374.64		1,24,826.29
9. Non-recurring expenses for Equipment from QMA Fund (As per contra)	3,332.96				3,332.96
10. Non-recurring expenses met from other sources	22,827.99		43,659.00		66,486.99
11. Amount to be adjusted to the Govt. of Gujarat on Sales of assets	2,826.89		1,175.50		4,002.39
<b>E. MISCELLANEOUS</b>					
1. Donation of Shaper of Limited Company	500.00				500.00
2. Fund for Conveyance Advance to Faculty and Staff (Details for use of funds as per Balance Sheet)	1,76,000.00				1,76,000.00
3. Faculty and Staff Development Fund					
Total Schedule A*	1,53,17,712.23		36,46,994.45	99,223.83	1,93,65,432.85

(a)1 Amount transferred to Income and Expenditure a/c for meeting expenses on Agco.

(b) Per expenses met from Fund

(c) Rs. 58,931.38 - Transferred from Balance of Income & Expend. a/c as on 1-4-71

1st Ed: 29 June 1972

Prof. J. Bhatnagar  
Vice-Chancellor

R.C. Chidambaram  
ADMINISTRATIVE OFFICER

Sorab S. Engineer & Co.  
CHARTERED ACCOUNTANTS

INSTITUTE OF MANAGEMENT, AHMEDABAD  
 CLOSING PART OF THE BALANCE SHEET AS AT 31ST MARCH 1972

SCHEDULE 'B'

	Balance as on		Amount credited		Amount debited		Closing balance as on	
	1st April 1971	Rs. Rs.	during the year	Rs. Rs.	during the year	Rs. Rs.	31st March 1972	Rs. Rs.
<b>GRANT TRUST FOUNDATION</b>								
For Building Expenditure	14,44,291.00						14,44,291.00	
Value of books received (as per contra)	11,48,048.60		1,76,751.75		79,883.33 (a)		12,44,917.02	
Value of Equipment received (as per contra)	38,055.15				1,934.50 (b)		36,220.65	
Value of equipment purchased from Grant (as per contra)	27,567.70						37,567.70	
Value of equipment purchased from Grant - CMA (as per contra)	5,469.71		52,985.24		95,202.01 (c)		5,469.71	
Grant for Rupee Budget expenses	77,061.99		14,904.24				34,845.22	
Grant for Rupee Expenses on computer	89,425.44						1,04,329.68	
Value of computer received (with IIM)	36,043.85		44,367.00		3,443.50 (d)		32,600.35	
Value of computer (installed in IIM) (As per contra)	10,59,820.50						11,04,187.50	
Write off account for the books received from the Grant	1,268.04						1,268.04	
Total Schedule B	39,37,051.98		2,89,008.23		1,80,363.34		40,45,696.87	

SCHEDULE 'C'

	Balance as on		Amount debited		Amount credited		Closing balance as on	
	1st April 1971	Rs. Rs.	during the year	Rs. Rs.	during the year	Rs. Rs.	31st March 1972	Rs. Rs.
<b>IMMOVABLE PROPERTIES</b>								
Land at cost (Received as donation from Government of Gujarat)	25,43,919.76						25,43,919.76	
Land at cost (Purchased)			4,60,679.67				4,60,679.67	
Capital Expenditure on Building and Advances to Contractors for work under construction	99,76,374.04		18,48,060.96		1,18,24,435.00		1,18,24,435.00	
Total Schedule C	1,25,20,293.80		23,08,740.63		1,48,29,034.43		1,48,29,034.43	

(a) Transferred to Library Fund (Sale proceeds of sale of books)

(b) Value of Tape recorder lost

(c) Transferred to Income and Expenditure account for meeting expenses on research projects

(d) Computer Time used for the year

Dated : 29 Jun 1972

Ravi J. Matthal  
DIRECTOR

R.C. Chib  
ADMINISTRATIVE OFFICER

C. Ramdoss  
ACCOUNTS OFFICER

As per our report of even date  
Sorab S. Engineer & Co.  
CHARTERED ACCOUNTANTS

INDIAN INSTITUTE OF MANAGEMENT, AMERASABAD  
SCHEDULES FORMING PART OF THE BALANCE SHEET AS AT 31ST MARCH 1972

	Rs. Rs.	Rs. Rs.	Rs. Rs.	Rs. Rs.
	Balance as on 1st April 1971	Debit during the year	Credit during the year	Balance as on 31st March, 1972
<b>MOVABLE PROPERTIES (AT COST)</b>				
Assets purchased out of grants-in-aid from the Government of India and Government of Gujarat (as per contra)	3,63,627.46	22,366.69		3,85,994.15
Office equipment (including Typewriters and Staff Recreation Club Equipment and Library Equipment)	2,52,292.51	3,590.75		2,55,883.26
Office Furniture (including Library Furniture)	76,102.84		3,044.62 (a)	73,058.22
Staff Vehicles	3,19,099.71	50,000.00		3,69,099.71
Books purchased from Grant	1,31,587.56	761.25		1,32,348.81
Hostel Equipment (including students recreation club)	1,48,655.06	41,445.66		1,90,100.72
Hostel Furniture	8,124.95			8,124.95
Class room Equipment (including production equipment)	24,336.55	876.43		25,212.98
Class room Furniture	23,800.95		964.27 (b)	22,836.68
Customs duty on imported Equipment	13,47,627.59	1,19,040.78	4,008.89	14,62,659.40
Books received from Ford Foundation (as per contra)	11,48,048.60	1,76,751.75		12,44,917.02
Equipment received from Ford Foundation (as per contra)	38,055.15		79,883.33 (c)	36,220.65
Computer received from Ford Foundation (as per contra)	10,59,820.50	44,367.00		11,04,187.50
Equipment received from British Information Service (as per contra)	13,118.10			13,118.10
Equipment purchased from Ford Foundation grant (as per contra)	37,567.70			37,567.70
Equipment purchased from Ford Foundation grant for CMA (as per contra)	5,469.71			5,469.71
Equipment purchased for computer in IIM	99,292.50	10,805.28		1,10,097.78
Equipment etc. purchased from Ministry of Food and Agri. grant (as per contra)	44,200.99			44,200.99
Equipment purchased from CMA Fund (as per contra)	3,332.96			3,332.96
Equipment etc. purchased for PMA met from USAID grant (as per contra)	88,451.65	36,374.64		1,24,826.29
Equipment purchased from NIM grant (as per contra)	15,598.90			15,598.90
Equipment purchased from other sources	20,968.99	43,659.00		64,627.99
Books purchased out of Library Fund	2,08,085.42	24,860.76		2,32,946.18
	41,29,638.76	4,55,059.21	65,726.72	44,99,771.25
Total Schedule 'D'				

(a) Cost of scooter sold  
(b) Amount of customs duty adjusted on account of imported tape-recorder lost  
(c) Transferred to Library Fund  
(d) Cost of Tape recorder lost

Dated : 29 June 1972

TRU BANE

Ravi J. Matthal  
DIRECTORR.C. Chib  
ADMINISTRATIVE OFFICERC. Ramdoss  
ACCOUNTS OFFICERSorab S. Engineer & Co.  
CHARTERED ACCOUNTANTS

INDIAN INSTITUTE OF MANAGEMENT, AHMEDABAD  
SCHEDULE FORMING PART OF THE BALANCE SHEET AS AT 31ST MARCH 1972

## SCHEDULE 'E'

As on 31st March 1971	Rs	Ps
2,69,927.43		
27,22,000.00		1,61,717.87
9,000.00		44,35,000.00
50,000.00		12,000.00
45,000.00		50,000.00
28,26,000.00		35,000.00
		45,32,000.00
2,675.75		35,549.58
2,000.00		
100.00		
467.50		4,541.75
5,243.25		668.25
31,01,170.68		471.52
		5,681.52
		47,34,948.97

## CASH AND BANK BALANCES:

In current account with the State Bank of India

In short-term/fixd deposit with State Bank of India

In fixed-term deposits (others) with the State Bank of India

In fixed-term deposits: 1. India Tobacco Company Ltd. Loan Fund

2. Students Loan Fellowships from Industries

Cash and cheques on hand

Postage stamps on hand (including balance in Franking Machine)

Cash on hand with Cashier (Imprest)

Cash with Students' Recreation Club

Cash with Hostel Mess

Total Schedule 'E'

Dated: 29 June 1972

TRUSTEE

Ravi J. Matchai  
DIRECTORR.C. Chib  
ADMINISTRATIVE OFFICERC. Ramdoss  
ACCOUNTS OFFICERSorab S. Engineer & Co.  
CHARTERED ACCOUNTANTS

INDIAN INSTITUTE OF MANAGEMENT, AHMEDABAD  
CONTRIBUTORY PROVI-DENT FUND  
BALANCE SHEET AS AT 31ST MARCH 1972

LIABILITIES		ASSETS	
Rs.	Rs.	Rs.	Rs.
<b>MEMBERS ACCOUNT</b>		<b>INVESTMENT</b>	
Opening balance as on 1st April 1971	6,12,665	12 Year National Defence Certificate at face value	6,99,400
Received during the year:		7 Year National Savings Certificate (II Issue)	4,91,000
Subscriptions	1,76,391	6% Gujarat Industrial Development Bond 1981 (face value Rs. 20,000)	19,600
Interest	36,153		
	2,12,544		
Less:		<b>INTEREST ACCRUED ON INVESTMENT</b>	17,10,000
Payment to employees leaving the Institute during the year	48,920		2,27,060
		<b>LOANS TO SUBSCRIBERS</b>	31,287
		INDIAN INSTITUTE OF MANAGEMENT, AHMEDABAD	359
<b>CONTRIBUTION OF INSTITUTE</b>		<b>BANK BALANCE</b>	
Opening balance as on 1st April 1971	5,13,593	(In current account with the State Bank of India, Ahmedabad)	501
Additions during the year:			
Contribution	1,28,088		
Interest	27,736		
	1,55,824		
Less: Paid during the year:			
Amount transferred to Reserve Fund	17,740		
Payments to employees leaving the Institute	25,942		
	43,682		
<b>RESERVE FUND</b>			
Balance as on 1st April 1971	25,353		
Additions during the year	17,740		
	43,093		
<b>INCOME AND EXPENDITURE ACCOUNT</b>			
Balance as on 1st April 1971	29,935		
Add: Surplus for the year	155		
	24,090		
	14,69,207		
<b>TOTAL</b>		<b>TOTAL</b>	14,69,207

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31ST MARCH 1972	
I N C O M E	
By interest on investment	64,044
Less: Interest paid	63,889
	155
	155

E X P E N D I T U R E	
To surplus transferred to Balance Sheet	155
	155

Examined and found correct as per books of accounts, vouchers etc. produced before us and as per information and explanations given to us.

Dated : 29 June 1972

TRUSTEES  
Sorab S. Engineer & Co.  
CHARTERED ACCOUNTANTS

G. Ramdoss  
ACCOUNTS OFFICER

R.C. Chib  
ADMINISTRATIVE OFFICER

Ravi J. Matthal  
DIRECTOR

APPENDICES



## APPENDIX A

## SOCIETY MEMBERS

Chairman

Mr. S.L. Kirloskar  
Chairman  
Kirloskar Oil Engines Ltd.  
Poona

Members

Mr. Manohar Bandiwdekar  
General Secretary  
Rashtriya Press Mazdoor Sangh  
Bombay

Mr. J.J. Bhabha  
The Tata Iron & Steel Co. Ltd.  
Bombay

Mr. R.M. Bhandari  
adviser (Finance)  
Bureau of Public Enterprises  
Government of India  
New Delhi

Dr. L.S. Chandrakant  
Joint Education Adviser  
Ministry of Education  
Government of India  
New Delhi

Mr. L.R. Dalal  
Chief Secretary  
Government of Gujarat  
Gandhinagar

Dr. C.R. Dalvi  
Executive Director  
National Productivity Council  
New Delhi

Mr. Kasturbhai Lalbhai  
Industrialist  
Ahmedabad

Mr. A.N. Mafatlal  
Mafatlal Gagalbhai & Co.(P) Ltd.  
Bombay

Mr. Harshavadan Mangaldas  
Chairman  
Aryodaya Ginning & Mfg. Co. Ltd.  
Ahmedabad

Prof. Ravi J. Matthai  
Director  
IIMA

Mr. Rohit C. Mehta  
Rajesh Textile Mills Ltd.  
Ahmedabad

Mr. S.D. Nargolwala  
PI (EA & E) and Additional  
Secretary  
Ministry of Finance  
Government of India  
New Delhi

Mr. Arvind Narotam  
Asoka Mills Ltd.  
Ahmedabad

Mr. V.R. Mehta  
Secretary, Education and Labour Dept.  
Government of Gujarat  
Gandhinagar

Mr. V. Isvaran  
Bombay

Mr. N.J. Kamath  
Joint Secretary  
Ministry of Industrial Development  
and Internal Trade  
Government of India, New Delhi

Dr. Vikram A. Sarabhai  
Chairman  
Atomic Energy Commission  
(Passed away on December 30, 1971)

Dr. M.S. Swaminathan  
Director General  
Indian Council of Agricultural  
Research  
New Delhi

Ahmedabad Jupiter Spg. Wvg. & Mfg.  
Co. Ltd., Ahmedabad

Mr. Mahendralal Kanaiyalal  
Ahmedabad Kaiser-I-Hind  
Mills Co.Ltd.  
Ahmedabad

Mr. Ramesh Chandulal  
Mr. Bipin Chandulal  
Mr. D.R. Desai  
Ahmedabad New Cotton Mills Co.Ltd.  
Ahmedabad

Mr. Jaykrishna Harivallabhdas  
Mr. Balkrishna Harivallabhdas  
Ambica Mills Ltd.  
Ahmedabad

Mr. Chinubhai Manibhai  
Mr. Shrenik Kasturbhai  
Anil Starch Products Ltd.  
Ahmedabad

Mr. V.G. Rajadhyaksha  
Hindustan Lever Ltd,  
Bombay

Mr. M.K. Raju  
India Pistons Ltd,  
Madras

Mr. Ajay Chimanbhai  
Mr. Arvind Narottam  
Asoka Mills Ltd.  
Ahmedabad

Mr. C.H. Choksy  
Director  
Asian Paints (India) P.Ltd.  
Bombay

Mr. K.R. Coorlawala  
Associated Cement Cos. Ltd.  
Bombay

Dr. N.S. Johary  
General Manager  
Atic Industries Ltd.  
Mumbai

Mr. R.P. Shah  
Mr. P.N. Shah  
Bakubhai Ambalal Pvt.Ltd.  
Ahmedabad

Mr. H.R. Batliwala  
Mr. J.W. Guzdar  
Bombay Dyeing & Mfg. Co.Ltd.  
Bombay

Mr. P.R. Teelakantan  
Dy. Chairman & Managing Director  
Brooke Bond India Ltd.  
Calcutta

Mr. Suhrid Sarabhai  
Mr. S.R. Bastikar  
Financial Controller  
Calco Mills Ltd.  
Ahmedabad

Mr. Surottam P. Hutheesing  
Mr. Deepak S. Hutheesing  
Aruna Mills Ltd.  
Ahmedabad

Mr. Niranjan Narottam Lalbhai  
Mr. Sidharth Kasturbhai  
Arvind Mills Ltd.  
Ahmedabad

Mr. Harshavadan Mangaldas  
Mr. Madanmohan Mangaldas  
Aryodaya Spg. & Wvg. Co. Ltd.  
Ahmedabad

Mr. Harshavdan Mangaldas  
Mr. Madanmohan Mangaldas  
The Aryodaya Ginning & Mfg. Co. Ltd.  
Ahmedabad.

Mr. Manubhai Bhikhabhai  
Mr. Jayantilal Bhikhabhai  
Commercial Ahmedabad Mills Co. Ltd.  
Ahmedabad

Lala Charat Ram  
Dr. J.N. Thadani  
Delhi Cloth & General Mills Co. Ltd.  
Delhi

Mr. C.K. Hazari  
Vice President  
Escorts Ltd.  
New Delhi

Mr. D.J.R. Farrant  
Managing Director  
Glaxo Laboratories  
Bombay

Mr. Shantilal K. Somaiya  
The Godavari Sugar Mills Ltd.  
Bombay

Mr. M.V. Arunachalam  
Carborundum Universal Ltd.  
Madras

Mr. S. Chaudhuri  
Commercial Manager  
Chemicals & Fibres of India Ltd.  
Bombay

Mr. L.D. Vasa  
Mafatlal Gagalbhai & Co. Pvt. Ltd.  
Bombay

Mr. J.S. Karkal  
Mahindra & Mahindra Ltd.  
Bombay

Mr. Ramanlal C. Parikh  
Mihir Textiles Ltd.  
Ahmedabad

Mr. Rasikhlal C. Nagri  
Mr. Bansidhar R. Nagri  
Nagri Mills Co. Ltd.  
Ahmedabad

Mr. Raj Kochar  
National Machinery Mfrs. Ltd.  
Bombay

Mr. N.K. Wadia  
Mr. T.P. Bapat  
Mr. J.N. Cuzdar  
National Peroxide Ltd.  
Bombay

Mr. R.J. Chinai  
Managing Director  
National Rayon Corpn. Ltd.  
Bombay

Mr. V.G. Rajadyaksha  
Hindustan Lever Ltd.  
Bombay

Mr. S. Chaudhuri  
Indian Explosives Ltd.  
Calcutta

Mr. B. Majumdar  
Indian Tube Co. Ltd.  
Bombay

Mr. A.N. Mafatlal  
Mr. Y.N. Mafatlal  
Mr. R.N. Mafatlal  
Mr. P.K. Shah  
Mafatlal Fine Spg. & Mfg.Co.  
Ltd.,  
Bombay

Mr. Gautam Shantilal Nanavaty  
Mr. Gautambhai J. Nanavaty  
Nutan Mills Ltd.  
Ahmedabad

Mrs. Dilavati Salbhai  
Mr. Vijaysinh Chimanbhai  
Raipur Mfg.Co. Ltd.  
Ahmedabad

Mr. B.V. Bhatt  
Rajendra Dyeing & Printing  
Mills Ltd.  
Ahmedabad

Mr. Rohit C. Mehta  
Mr. S.G. Dakwala  
Rajesh Textile Mills Ltd.  
Ahmedabad

Mr. Ravindrabhai Chinubhai  
Mr. Arvindbhai Chinubhai  
Rohit Mills Ltd.  
Ahmedabad

Mr. V.C. Vaidya  
New India Assurance Co. Ltd.  
Bombay

Mr. Lakshmanprasad D. Vasa  
New Shorrock Spg. & Wvg. Mfg.  
Co. Ltd.  
Ahmedabad

Mr. S.K. Agarwal  
New Swadeshi Mills of  
Ahmedabad Ltd.  
Ahmedabad

Mr. Pratap Bhogilal  
Shree Ram Mills Charitable Trust  
Bombay

Mr. S.R. Bastikar  
Kalol Mills Ltd., Ahmedabad

Mr. Wandkishore Sakarlal  
Mr. Sarabhkumar Navnithal  
Silver Cotton Mills Co. Ltd.  
Ahmedabad

Mr. Suhrid Sarabhai  
Suhrid Geigy Ltd.  
Baroda.

Mr. A.N. Mafatlal  
Mr. Y.N. Mafatlal  
Mr. R.N. Mafatlal  
Mr. Harshad H. Vasa  
Surat Cotton Spg. & Wvg. Mills  
Bombay

Dr. M.D. Daver  
Swadeshi Mills Co. Ltd.  
Bombay

Mr. R. Ratnam  
T.V. Sundran Iyengar & Sons (P)  
Ltd.  
Madras

Mr. Sakarlal Balabhai Sakarlal Balabhai & Co. Ltd. Ahmedabad	T.V.S. Charities Madurai
Mr. B.R. Doolalikar Sarabhai Management Corpn. Ahmedabad	Mr. P.V.S. Manyam Mr. H.P. Shroff Tata Chemicals Ltd. Bombay
Mr. Navnitlal Shodhan Sarangpur Cotton Mfg.Co. Ltd. Ahmedabad	Mr. M.N. Maira Mr. R.D. Kulkarni Tata Engineering & Locomotive Co. Ltd. Bombay
Mr. Chinubhai Chimanbhai Sheth Mr. Ashok Chimanbhai Saraspur Mills Ltd. Ahmedabad	The Secretary Tata Hydro-Electric Power Supply Co. Ltd. Bombay
Mr. Vadilal Lallubhai Sayaji Mills Ltd. Ahmedabad	Mr. J.J. Bhabha Tata Iron & Steel Co. Ltd. Bombay
Mr. B.N. Balasaria Mr. S.K. Mundra Shree Digvijay Woolen Mills Ltd. Jannagar	Mr. M.A. Jadud Mr. N.K. Bhada Tata Oil Mills Co. Ltd. Bombay
Assistant Secretary Travancore Rayons Ltd. Thayonpuram (Kerala)	Sheth Natvarlal Ramanlal Sheth Chandravadan Ramanlal Vikram Mills Ltd. Ahmedabad
Col. P.K. Mukerji (Retd) General Manager, Staff & Organization Voltas Ltd. Bombay	Mr. Surinder Singh, Personnel Manager Warner Hindustan Ltd. Hyderabad

## APPENDIX B

## DONOR MEMBERS

Ahmedabad Cotton Mfg. Co. Ltd.	Hindustan Lever Ltd.
Ahmedabad Jupiter Spg. & Mfg. Co. Ltd.	Indian Dyestuff Industries Ltd.
Ahmedabad Kaiser-I-Hind Mills Co. Ltd.	Indian Explosives Ltd.
Ahmedabad New Cotton Mills Co. Ltd.	Indian Tube Co. Ltd.
Amalika Mills Ltd. Nos. I & II	Kalol Mills Ltd.
Amil Starch Products Ltd.	Mafatlal Wine Spg. & Mfg. Co. Ltd.
Aruna Mills Ltd.	Mafatlal Gaganbhai & Co. Pvt. Ltd.
Arvind Mills Ltd.	Mahindra & Mahindra Ltd.
Aryodaya Spinning & Mfg. Co. Ltd.	Mihir Textile Ltd.
Aryodaya Spg. & Mfg. Co. Ltd.	Magri Mills Co. Ltd.
Ashoka Mills Ltd.	National Machinery Mfrs. Ltd.
Asian Paints (India) (P) Ltd.	National Peroxide Ltd.
Associated Cement Cos. Ltd.	National Rayons Corpn. Ltd.
Atic Industries Ltd.	New India Assurance Co. Ltd.
Bakubhai Lalbhai Pvt. Ltd.	New Shorrock Spg. & Mfg. Co. Ltd.
Bharat Suryodaya Mills Co. Ltd.	New Swadeshi Mills of Ahmedabad
Bombay Dyeing & Mfg. Co. Ltd.	Nutan Mills Ltd.
Brooke Bond India Ltd.	Jaipur Mfg. Co. Ltd.
Calico Mills Ltd.	Rajendra Dyeing & Printing Mills Ltd.
Carborundum Universal Ltd.	Rajesh Textile Mills Ltd.
Chemicals & Fibres of India Ltd.	Rohit Mills Ltd.
Commercial Ahmedabad Mills Co. Ltd.	

Delhi Cloth & General Mills Co. Ltd.	Sakarlal Balabhai & Co. Ltd.
Escorts Ltd.	Sarabhai Management Corpn.
Glaxo Laboratories	Sarangpur Cotton Mfg. Co. Ltd.
Codavari Sugar Mills Ltd.	Saraspur Mills Ltd.
Sayaji Mills Ltd.	Sassoon Spg. & Wvg. Mills Co. Ltd.
Shree Digvijay Woolen Mills Ltd.	Saurashtra Cement & Chemical Industries Ltd.
Shri Ram Mills Charitable Trust	Silver Cotton Mills Co. Ltd.
Standard Mills Ltd.	Suhrid Geigy Ltd.
Surat Cotton Spg. & Wvg. Mills (P) Lti.	Swadeshi Mills Co. Ltd.
T.V.S. Charities	T.V. Sundaram Iyengar & Sons Pvt. Ltd.
Tata Chemicals Ltd.	Tata Engineering & Locomotive Co. Ltd.
Tata Iron & Steel Co. Ltd.	Tata Hydro-Electric & Power Supply Co. Ltd.
Travancore Rayons Ltd.	Tata Oil Mills Co. Ltd.
Voltas Ltd.	Vikram Mills Co. Ltd.
	Warner Hindustan Ltd.

APPENDIX C  
BOARD OF GOVERNORS  
AND ITS COMMITTEES

Chairman

Mr. S.L. Kirloskar  
Chairman  
Kirloskar Oil Engines Ltd.  
Poona

Mr. Kasturbhai Dalbhai  
Industrialist  
Ahmedabad

Mr. L.N. Mafatlal  
Mafatlal Gopalbhai & Co. (P) Ltd.  
Bombay

Members

Mr. Manohar Bandiwadkar  
General Secretary  
Rashtriya Press Mazdoor Sangh  
Bombay

Prof. Ravi J. Matthai  
Director  
I.I.I.

Mr. Rohit C. Mehta  
Rajesh Textile Mills Ltd.  
Ahmedabad

Mr. J.J. Shabha  
The Tata Iron & Steel Co. Ltd.  
Bombay

Mr. V.D. Mehta  
Secretary  
Education and Labour Dept.  
Govt. of Gujarat, Gandhinagar

Mr. R.M. Bhandari  
Adviser (Finance)  
Bureau of Public Enterprises  
Government of India, Delhi

Mr. S.D. Margolwala  
P.A. (E.I. & E) and Additional  
Secretary  
Ministry of Finance  
Govt. of India, Delhi

Dr. L.S. Chandrakant  
Joint Educational Adviser  
Ministry of Education  
Government of India, Delhi

Mr. Arvind Harottan  
Asoka Mills Ltd.  
Ahmedabad

Mr. L.R. Dalal  
Chief Secretary  
Government of Gujarat,  
Gandhinagar

Mr. V.G. Rajadhyaksha  
Hindustan Lever Ltd.  
Bombay

Dr. G.R. Dalvi  
Executive Director  
National Productivity Council  
Delhi

Mr. M.K. Raju  
India Pistons Ltd.  
Madras

Mr. V. Isvaran  
Bombay

Mr. Harshavadan Mangaldas  
Chairman  
Aryodaya Ginning & Mfg. Co. Ltd.  
Ahmedabad

Mr. N.J. Kamath  
Joint Secretary  
Ministry of Industrial  
Development and Internal Trade  
Government of India, Delhi



Dr. Vikram A. Sarabhai  
 Chairman  
 Atomic Energy Commission  
 (Passed away in Dec. 1971)

Dr. M.S. Swaminathan  
 Director General  
 Indian Council of Agricultural  
 Research,  
 New Delhi

Secretary  
 Mr. R.C. Chib  
 Administrative Officer  
 IIMA

Buildings Committee

Mr. Kasturbhai Lalbhai  
 (Chairman)  
 Mr. V. Isvaran  
 Prof. Ravi J. Matthai  
 Mr. R.C. Chib (Secretary)

Budget Committee

Mr. S.D. Kirloskar (Chairman)  
 Dr. L.S. Chandrakant  
 Mr. Kasturbhai Lalbhai  
 Prof. Ravi J. Matthai  
 Mr. S.D. Nargolwala  
 Mr. R.C. Chib (Secretary)

Personnel Committee

Mr. S.D. Kirloskar (Chairman)  
 Mr. V. Isvaran  
 Mr. Kasturbhai Lalbhai  
 Prof. Ravi J. Matthai  
 Mr. R.C. Chib (Secretary)

## APPENDIX D

FACULTY AND ADMINISTRATION  
(As on March 31, 1972)Director

Ravi J. Matthai  
B.A. (Hons) (Oxon.)

Faculty

V.N. Asopa  
Ph.D. (Illinois)

R. Balachandra  
M.S. (I.I.Sc., Bangalore)

K. Balakrishnan  
B.Sc. (Kerala)  
M.A. (W.I.)  
(at Harvard DBA Programme)

G.R. Bhandari  
Dip. Bus. Adm. (IIMI)

S.K. Bhattacharyya  
F.C.I.

J.C. Camillus  
D.B.A. (Harvard)

K.K.S. Chauhan  
Ph.D. (Ohio)

Kanla Chowdhry  
Ph.D. (Michigan)

Ishwar Dayal  
M.S. (New York)

D.K. Desai  
Ph.D. (Illinois)

G.M. Desai  
Ph.D. (Cornell)

V.R. Garkwad  
Ph.D. (Augar)

Palin K. Garg  
Ph.D. (Berkeley)

P.S. Geor  
Ph.D. (C... ..)

A. Ghose  
Ph.D. (Muenster, Germany)

C. Gopinath  
Ph.D. (I.I.T., Kharagpur)

G.S. Gupta  
Ph.D. (Johns Hopkins)

V.K. Gupta  
M.Com. (Lucknow)  
M.S.S. (The Hague)

B.K. Hegde  
M.Tech (I.I.T., Kharagpur)

A.M. Issac  
Ph.D. (Lehigh)

- Nandini U. Joshi  
Ph.D. (Harvard)
- Sudhir Kakar  
Ph.D. (Vienna)  
(on leave)
- Amarlal H. Kalro  
Ph.D. (Minnesota)
- Mohan Kaul  
Ph.D. (Paris)
- M.S. Krishnaswamy  
Ph.D. (Kansas)
- J.G. Krishnayya  
E.E. (M.I.T.)
- Suresh C. Kuchhal  
M.Com. (Allahabad)
- G.R. Kulkarni  
M.Com. (Bombay)  
LL.B. (Bombay)
- M. Meenakshi Malya  
M.Sc. (Aberdeen)  
(At Harvard, DBA Programme)
- Subhash C. Mehta  
M.A. (Punjab)  
M.D.P.A. (I.I.P.A.)  
Cert. I.C.A.M.E. (Stanford)
- P.N. Misra  
Ph.D. (Delhi)
- Sasi B. Misra  
Ph.D. (UCIA)
- Arun Monappa  
M.A. (Madras)  
M.Sc. (London)
- V.L. Mote  
Ph.D. (N. Carolina)
- H.N. Pathak  
M.Sc. Econ. (London)
- Samuel Paul  
Ph.D. (Syracuse)
- C.K. Prahalad  
Dip. Bus. Adm. (IIMA)
- Keshav Prasad  
M.A. (Patna)  
M.B.A. (Harvard)
- M. Raghavachari  
Ph.D. (Berkeley)
- C. Rangarajan  
Ph.D. (Pennsylvania)  
(on leave)
- S. Sambrani  
Ph.D. (Cornell)
- Suresh A. Seshan  
A.I.C.W.A.  
M.B.A. (Harvard)
- B.G. Shah  
M.Com. (Bombay)
- A.C. Shamihoke  
Ph.D. (Delhi)
- Girja Sharan  
Ph.D. (Cornell)
- Baldev R. Sharma  
Ph.D. (Michigan State)
- N.R. Sheth  
Ph.D. (Baroda)
- P.M. Shingi  
Ph.D. (Illinois)
- S. Sikdar  
Ph.D. (IIT, Kharagpur)
- Kanti Swarup  
Ph.D. (Delhi)

S.K. Mukherjee  
Ph.D. (Berkeley)

C.N.S. Nambudiri  
MBA (De Paul)

K.L. Varshneya  
M.B.A. (Delhi)  
Cert. Ed.M.E. (Stanford)

Pramod Verma  
Ph.D. (Manchester)

Dwijendra Tripathi  
Ph.D. (Wisconsin)

M.N. Vora  
M.A. (Pennsylvania)  
(At Harvard, D.B.A. Programme)

C.D. Wadhva  
Ph.D. (Yale)

PERSONS BEING TRAINED FOR FACULTY

Y.P. Ineja  
M. Stat. (I.S.I.)  
Dip. Comp. Sc. (I.S.I.)  
(At Johns Hopkins, Ph.D. Programme)

A.K. Banerjee  
M. Stat. (I.S.I.)  
Dip. S.Q.C. (I.S.I.)  
(At Wisconsin, Ph.D. Programme)

B.M. Desai  
M.A. (S.P. University)  
(At Cornell, Ph.D. Programme)

N. Dholakia  
Dip. Bus. Adm. (I.I.M.A.)  
(At Northwestern, Ph.D. Programme)

V. Jaikumar  
M.Sc. (Delhi)  
A.I.C.W.M.  
(At Columbia, Ph.D. Programme)

C.K. Jayaram  
Dip. Bus. Adm. (I.I.M.A.)  
(At U.C.L.A., Ph.D. Programme)

R. Khurana  
Dip. Bus. Adm. (IIMA)  
(At North Western, Ph.D. Programme)

J.L. Saha  
M. Stat. (I.S.I.)  
(At Case Western Reserve, Ph.D. Programme)

M.S. Saiyadain  
M.A. (Hawaii)  
(At Kansas, Ph.D. Programme)

Ravi V. Sarathy  
Dip. Bus. Adm. (I.I.M.A.)  
(At Northwestern, Ph.D. Programme)

R.K. Sarin  
Dip. Bus. Adm. (I.I.M.A.)  
(At UCLA, Ph.D. Programme)

A.K. Vora  
Dip. Bus. Adm. (I.I.M.A.)  
(At Northwestern, Ph.D. Programme)

## RESEARCH STAFF

R.K. Anand Dip. Bus. Adm. (I.I.M.A.)	P. Narayana Chary B.Sc., B.Ed., (Osmania)
V.S.P.V. Anjaneyulu M.Sc. (Andhra)	R.S. Chaudhan M.Com. (Agra) M.A. (Jabalpur)
S.C. Bandopadhyay M.A. (Jalavpur)	S.N. Chokshi B.Sc.(Gujarat)
S.K. Basu B.Sc. (Banaras)	V.V. Chokidar Ph.D. (I.I.M.I.)
B.A. Bhatt Dip. Bus. Adm. (IIMA)	Vabiz Dhanjibhoy M.A. (Wardhan)
M.B. Dave M. Stat. (I.S.I.)	M.R. Gopalan B.Sc. (Annamalai)
V.A. Dave M.L.W. (Gujarat)	N.R.N. Murty M. Tech. (I.I.T. Kanpur)
P.S. Gupta M. Tech. (I.I.T. Kanpur)	M. Naganna M.A. (Andhra) M.A. (Delhi)
J.K. Hakim M.Tech. (Kanpur)	A.V.S. Narayanan M.Sc. Agri. (Banaras) (on leave)
S.M.S. Haque Ph.D. (Udaipur)	R.S. Pal Ph.D. (I.I.T., Delhi)
D.R.G. Jadav M.A. (Karnatak)	B.C. Patel M.Sc. (Baroda)
A.K. Jain Dip. Bus. Admn. (I.I.M.A.) (on leave)	Indira J. Parikh M.Ed. (Unt. Rochester)
Anju Jerome M.Sc. (Gujarat)	B.V. Patel M.Sc. (Gujarat) (on leave)
P. Joshi M.A. (Gujarat)	I.T. Patel M.Sc. Gujarat
B. Kanala M.Sc. (Madras)	

Geeta Kantawala M.A. (Gujarat)	J.J. Patel M.A. (H.S. Univ. Baroda)
Rashi Kumar M.E. (Roorkee)	K.V. Patel M.A. (Baroda)
D.P. Mathur M.A. (Rajasthan)	M.S. Patel B.Sc. (S.P. Uni.)
J.B. Mathew Dip. in P.M.A. (I.I.M.A.)	M.S. Patel
B.D. Mehta M.S. (I.I.T., Chicago) M.B.A. (Loyola Un., Chicago)	N.T. Patel B.A. (Baroda)
N. Mohanan M.Cop. (N.C.R.I.S., Delhi)	B.S. Pathak M.Sc. (Maharashtra Krishi Vidyapeeth)
S. Mookherjee M.A. (Calcutta)	Aruna Pradhan Dip. in P.M.A. (I.I.M.A.)
V. Ramachandran M.Sc. (I.I.I.S.)	Hari Prakash M.A. (Panjab)
K.S. Raman M.Com. (Gujarat)	G.J. Singh M.Tech. (I.I.T., Kanpur)
M.R. Rane M.A. (Karnatak)	Curdev Singh M.Sc. (Panjab)
K.V. Ramani M.Sc. (Kerala)	O.P. Srivastava B.Sc. (Hons) B.A. and B.H. (U.P.A.S.)
K.P. Ravi Dip. Bus. Adm. (IIMA)	T.R. Sukunari M.Sc. (Kerala)
Minal Rindani M.A. (Gujarat)	S.S. Suri M.A. (Panjab)
Banani Roy	Philip S. Thomas Dip. Bus. Adm. (I.I.M.A.)
	B.L. Tripathi M.A. (Rajasthan)

Shanti Seth  
Ph.D. (Lucknow)

R. Seethalakshmi  
M.A. (Delhi)

M.K. Shah  
M.Sc. (Baroda)

S.C. Sharma  
M.Tech. (IIT, Kanpur)

Y.S. Shrimali  
B.E. (Udaipur)

H.C. Shukla  
M.S.W. (Baroda)

S.S. Tripathi

S.P. Valavade  
Ph.D. (Poona)

S.K. Warriar  
M.A. (Gujarat)

M. Yusha  
Dip. Bus. Adm. (I.I.M.A.)

## ADMINISTRATIVE STAFF

R.C. Chib  
 M.Sc. (Tech.) Punjab  
 Administrative Officer and Member  
 Secretary of the Faculty

S. Sreenivas Rao  
 M.A. (Osmania)  
 M.A. (Syracuse)  
 Programmes and Publications  
 Co-ordinator and Member of the  
 Faculty

P.K. Varkey  
 Assistant Administrative Officer

C. Ramdoss  
 B.Sc. Hons. (Bombay)  
 S.S.S.  
 Accounts Officer

S.V. Ramamurthy  
 B.Sc. (Madras)  
 LL.B. (Delhi)  
 Admissions Officer

S.K. Narayanan  
 M.A. (Punjab)  
 Assistant Warden

## LIBRARY

Anand S. Dhawle  
 M.L.S. (Pittsburgh)  
 Librarian and Member  
 of the Faculty

Jayendra E. Pandya  
 B.A. (Gujarat)  
 Dip. Lib. Sc. (Bombay)  
 Reference Librarian

R.M. Mehta  
 B.A., LL.B. (Baroda)  
 Dip. Lib. Sc. (Baroda)  
 Head, Catalogue Dept.



## APPENDIX E

FACULTY AND RESEARCH STAFF APPOINTMENTS

<u>Faculty</u>	<u>Area/Project</u>	<u>Date of joining</u>
Prof. C. Gopinath ✓	CMA	10.5.1971
Prof. A.C. Shaniloke	Computer	25.5.1971
Prof. Mohan Kaul	Production & Q M	1.7.1971
Prof. V.N. Asopa ✓	CMA	14.7.1971
Prof. Kanti Swarup	Production &QM	2.8.1971
Prof. S. Sambrani ✓	CMA	2.8.1971
Prof. M. Raghavachari	Production & QM	4.8.1971
Prof. P.N. Misra	Economics	26.8.1971
Prof. S.K. Matherjee	Production & QM	6.9.1971
Prof. John Camillus	Finance & accounting	3.11.1971
Prof. P.M. Shingi ✓	CMA	1.12.1971
Prof. P.L. Sharma	Economics	13.12.1971
Prof. L.R. Bhandari	Marketing	3.1.1972
Prof. C.K. Prahalad	Business Policy	6.1.1972
Prof. Arun Monappa	O.B. Area	1.2.1972
Mr. R.C. Chib	Administrative Officer	28.6.1971
<u>Research Staff</u>	<u>Area/Project</u>	<u>Date of joining</u>
Mr. D.S. Thakur ✓	CMA	29.5.1971
Mr. P.L. Sankhyan	CMA	29.3.1971
Mr. C.N. Dhar	Computer	12.4.1971

<u>Research Staff</u>	<u>Area/Project</u>	<u>Date of Joining</u>
Mr. V.S. Tyagi	Business Policy	1.5.1971
Mr. K. Ambarish Kumar	Marketing	1.6.1971
Mr. M. Yusha	Business Policy	17.6.1971
Mr. S.K. Basu	CMA	1.7.1971
Miss J.J. Patel	Publications	1.7.1971
Mr. Philip S. Thomas	Accounting	1.7.1971
Mr. Nirmal Mehta	CMA	8.7.1971
Mr. S.S. Marathe	WAC	15.7.1971
Miss Aruna Pradhan	NCA Project	31.8.1971
Miss B. Kamala	Production & Quantitative Methods	1.9.1971
Mr. J.B. Mathew	NIBM Project	1.9.1971
Miss Kirtida Pandya	STEF Project	1.9.1971
Mr. H.C. Shukla	O.B.	4.9.1971
Mr. K.P. Ravi	Salt Project	16.9.1971
Miss T.R. Sukumari	Production & Quantitative Methods	16.9.1971
Mr. N.R. Rane	WAC	1.10.1971
Mrs. Indira J. Parekh	O.B.	1.11.1971
Miss Anju Jerome	ICSSR	12.11.1971
Miss C.S. Lakshmi	ICSSR	1.11.1971
Mr. S. Mookherjee	ICSSR	15.11.1971
Mr. S.K. Warriar	O.B.	16.11.1971

<u>Research Staff</u>	<u>Area/Project</u>	<u>Date of joining</u>
Mr. B.S. Pathak ✓	Farm Mech. Project	25.11.1971
Mr. S.C. Sharma	Computer	1.12.1971
Miss Indira Thawani	Marketing	1.12.1971
Mr. R.K. Anand	WAC/Marketing	9.12.1971
Mr. K.V. Ramani	ICSSR Project	15.12.1971
Mr. R.S. Chauhan ✓	Farm Mech. Project	17.12.1971
Mr. S.C. Suri ✓	Farm Mech. Project	21.12.1971
Mrs. Banani Roy	ICSSR Project	17.12.1971
Mr. S.K. Sangani ✓	Farm Mech. Project	1.12-1971
Mr. I.T. Patel ✓	Farm Mech. Project	1.1.1972
Mr. M.S. Patel ✓	Farm Mech. Project	1.1.1972
Mr. M.S. Patel ✓	CMA	10.1.1972
Mr. Y.S. Shrimali ✓	CMA	18.1.1972

## APPENDIX F

Faculty and Research Staff Resignations

<u>Faculty</u>	<u>Area/Project</u>	<u>Date of resigning</u>
Mr. H.K. Subramaniam	Administrative Officer	19.6.1971
Prof. Ved. P. Gandhi	Economics	31.8.1971
Prof P.L. Sharma	Economics	Passed away on January 30, 1972.
<u>Research Staff</u>		
Mr. T.S. Ananthanarayanan	STEF	29.3.1971
Mr. T.P. Gopalaswamy	CMA	12.4.1971
Mr. A.G.K. Murthy	CMA	12.4.1971
Mr. D.A. Patel	CMA	12.4.1971
Mr. B.S. Bhatia	Marketing	28.4.1971
Mr. M.R.G. Appa Rao	Computer	7.5.1971
Mr. J.S. Gandhi	BSP	16.6.1971
Mr. A. Jagannathan	STEF	30.6.1971
Mr. V.S. Tyagi	BP	30.6.1971
Mr. P. Andiappan	Economics	8.7.1971
Mr. N.G. Varadan	STEF	17.7.1971
Mr. P.L. Sankayan	CMA	31.7.1971
Mrs. Minal Singh	OB	25.8.1971
Mr. Subhash Rao	OB	31.8.1971
Mr. Nirmal Mehta	CMA	11.9.1971

Mr. S.S. Marathe	WAC	28.9.1971
Miss Gargi Munshi	Marketing	30.9.1971
Mr. R.J. Makhija	ICSSR	1.10.1971
Mr. Someshwar Rao	Economics	12.10.1971
Mr. Gopalakrishna	BS P	14.10.1971
Mr. M.J. Mohan Rao	CMA	30.11.1971
Mr. C.N. Dhar	Computer	13.12.1971
Mr. L.C. Gupta	CMA	14.1.1972
Miss C.S. Lakshmi	ICSSR	15.12.1971
Mr. S.C. Bhatnagar	Computer	10.1.1972
Miss Kirtida Pandya	STEF	15.1.1972
Mr. D.S. Thakur	CMA	31.1.1972
Mr. S.K. Sangani	CMA	31.1.1972
Miss Indira Thawani	Marketing	31.1.1972
Mr. D.C. Shah	CMA	29.2.1972

## APPENDIX G

## REPORT ON RESEARCH

JULY 1971 TO JUNE 1972

## I. RESEARCH COMPLETED

1. Assessment of Requirements of New Seeds and the Developing Seed Industry

Prof. D.K. Desai and V.N. Asopa, and Mr. B.C. Patel

Sponsor: National Commission on Agriculture.

Objectives: 1) To assess the requirements of new seeds in view of the targeted agricultural production for 1985; 2) To the problems of the developing seed industry; and 3) To suggest policy measures to facilitate the growth of the seed industry.

The first draft of the report is being prepared.

2. Consumer preference and Consumption Pattern of Rice in Andhra Pradesh

Prof. P.S. George, Dr. V.V. Choukidar, and Messrs. S.N. Chokshi and M.B. Dave.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: 1) To study the food habits and consumption pattern of rice consumers; 2) To analyse the sources of market information available to rice consumers and to assess their mass media habits; 3) To study the attitude towards the consumption of HYV paddy and to understand the consumers' perception of varietal characteristics; 4) To analyse the correspondence between consumers' preferences and use pattern of different varieties of rice; and 5) To analyse the procurement pattern in terms of the nature of the purchase and the frequency of purchases.

The final report will be ready by the end of July 1972.

3. Factors Affecting Demand of Fertilizer in India

Prof. G.M. Desai and Messrs. S.C. Bandopadhyay, P.N. Chary, and Gurdev Singh.

Sponsor: National Commission on Agriculture.

Objective: Identifying factors behind the growth in demand for fertilizers in India.

The report will be ready by September 1972.

4. Financing an Area Development Programme

Prof. D.K. Desai and Messrs. D.A. Patel and Hari Prakash.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: 1) To understand the process of planning and implementation of the area development programmes and 2) To identify the problems at each level of decision-making and examine the alternative strategies.

The report will be ready by September 1972.

5. Growth in Demand for Fertilizer in the Guntur District

Prof. G.M. Desai and Messrs. P.N. Chary, A.G.K. Murty, and M.K. Shah.

Sponsor: Ministry of Food and Agriculture, Government of India

Objective: To develop a methodology to examine the demand for fertilizer using continuous cross-section data.

The report will be ready by September 1972.

6. Identification of Potentially Viable Small Farmers and Possibilities of Their Development

Prof. K.K.S. Chauhan and Messrs. Dilip Jadhav, N. Mohanan, and D.S. Thakur.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: 1) To identify the small farmers who can be developed into viable units; 2) To investigate and identify their major problems in the adoption of improved agricultural practices; 3) To examine the possibilities of making these farmers viable through changes in production practices and cropping pattern; 4) To examine the possibilities of introducing allied activities which can be adopted by the farmers to become viable; 5) To find out the investment in terms of cash and institutional development required to make the farmer potentially viable; and 6) To examine the role of the "Integrated Area Development Scheme" in the development of small farmers.

The report will be ready by September 1972.

7. Management of Technological Change in Dry Farming Areas

Prof. M.S. Krishnaswamy, and Messrs. L.C. Gupta, K.V. Patel, and O.P. Srivastava.

Sponsor: Ministry of Food and Agriculture, Government of India and National Institute of Bank Management.

Objectives: 1) To ascertain the present state of agricultural technology and agricultural economics in selected dry farming areas; 2) To ascertain the efforts presently made to propagate improved dry farming techniques and the present level of their adoption by the farmers; 3) To studying the economic viability of the presently recommended improved practices; 4) To studying the nature and relative importance of the factors facilitating or inhibiting technological change; and 5) To study the economics of adoption of the package of improved practices for dry farming induced by the participating bank under this research project and evolve guidelines for financing the adoption of new technology by the farmers.

The report will be ready by September 1972.

8. Organizational Set-Up of ICAR

Profs. Kanla Chowdhry and V.R. Gaikwad.

Sponsor: National Commission on Agriculture.

Objectives: 1) To examine the organizational structure of ICAR and 2) To examine the organizational relationship of ICAR with different constituting and other institutions associated with agricultural research for helping the Commission in defining ICAR's role in the promotion of and in facilitating agricultural research and education.

The report will be ready by September 1972.



9. Patterns of Interaction and  
Communication in a Village Community

Prof. V.R. Gaikwad, Dr. S.M.S. Haque, and Mr. B.L. Tripathi.

Sponsor: Centre for Management in Agriculture account.

Objective: To get a deeper understanding of the pattern of interaction and communication among farmers in their daily life activities.

The final draft of the report is ready.

10. Problem of Delay in Agricultural  
Administration in Gujarat State

Prof. M.S. Krishnaswamy

Sponsor: Government of Gujarat (Financed by IIM, Ahmedabad).

Objective: To identify bottlenecks in administration at the secretariat and agricultural directorate levels contributing to delay in agricultural administration with a view to making recommendations for streamlining agricultural administration at these levels.

The final report was discussed at a meeting of the concerned Secretaries and Directors of Departments of the Government of Gujarat in December 1971 and a number of recommendations made in the report were accepted in principle for implementation by the government.

11. Production and Marketing Pattern of Paddy  
in West Godavari District

Prof. P.S. George, Dr. V.V. Choukidar, and Messrs. S.N. Chokshi, and M.B. Dave.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: 1) To analyse the production aspects of paddy in relation to the use of farm inputs for local and high yielding varieties; 2) To study the shifts in the varieties of paddy grown by the farmers; 3) To analyse the marketing behaviour of farmers in terms of the pattern of disposal, period of disposal, and the nature of price realization during different seasons; and 4) To study behavioural aspects like knowledge, attitude, and adoption of HYV paddy.

The final report is available.

12. Role of Opinion Leaders in Accelerating Change in Agriculture in the Raipur District (Phase II)

Prof. V.R. Gaikwad, Dr. S.M.S. Hague, and Mr. B.L. Tripathi.

Sponsors: Ministry of Food and Agriculture, Government of India, and Ford Foundation.

Objectives: 1) To assess whether the pre-identified pattern of communication is repeatable when information about a new product is introduced; and 2) To investigate into the nature of influence flow and decision making processes associated with the acceptance of the new product in a village community.

The report will be ready by September 1972.

13. Short-Term Economic Forecasting

Prof. G.R. Kulkarni, Samuel Paul, and C. Rangarajan, Miss Gopa Basu, Miss Swati Desai, Miss Vabiz Dhanjiboy, Messrs. A. Jagannathan and N. Naganna, Mrs. Ranjana Pendharkar, and Messrs. Bipin Rajendraprasad and N.G. Varadan.

Sponsor: USAID, New Delhi.

Objectives: To identify and develop economic time series which are useful for short-term forecasting with special reference to the industrial sector of the economy. The areas investigated were: orders for plant and equipment, data pertaining to financial institutions, budget forecasts, and data on construction activities. A major effort in this project was to test hypotheses concerning the relevance of these data through extensive field investigations.

The final report will be published shortly.

14. Premier Automobiles Ltd.

Prof. Baldev R. Sharma.

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: To analyse in depth the data already collected during the research at Premier Automobiles in 1965 for writing a series of articles.

At least seven articles based on this research project have already been published. A manuscript entitled The Indian Industrial Worker : A Study in Industrial Sociology has been sent for publication.

15. Trend Report on Production and Operations Management

Prof. B.K. Hegde and Mr. M.R. Gopalan

Sponsor: ICSSR.

Objective: To write a trend report based on an annotated bibliography of all research and publications by Indian authors. The report covers over 800 papers, articles, and books published up to the end of 1970.

The report has been submitted.

## II. RESEARCH IN PROGRESS

1. Comparative Effectiveness of Different Communication Channels in the Rural System

Prof. P.M. Singhi.

Sponsor: Centre for Management in Agriculture, IIMA.

Objectives: 1) To apply two persuasive messages (one old and one new) and test the learning responses of villagers to these messages, 2) To test and compare the efficiency of normal communication channels, personal as well as impersonal, in a realistic non-laboratory learning situation, 3) To test the non-reactive behavioural measure of effect (adoption behaviour in response to a persuasive message); 4) To assess the validity of previous laboratory as well as field research findings; 5) To assess the intermediary role played by various social correlates like education, age, and socio-economic status.

2. Cultivators' Experience with HYV of Cotton

Prof. G.M. Desai

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: 1) To examine the yield of local and HYV of cotton at the farm level; 2) To examine the structure of inputs used on local

and HYV of cotton; 3) To compare the yield of HYV under experiment station conditions with that under farm conditions and identify the major factors responsible for the difference in yields under the two conditions; 4) To determine the preconditions necessary for the successful adoption of HYV of cotton; and 5) To examine the implications of the HYV cotton for input requirements.

3. Employment Potential for the Unskilled and the Marginally Skilled in the Rural Sector

Prof. S. Sambrani and Messrs. V.S.T.V. Anjaneyalu and B.S. Pathak.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: The study is a supply and demand analysis of specific activities for providing employment in para-agricultural and non-agricultural sectors in the rural areas, with a study of cet. par. factors affecting such a static analysis. This latter will provide guidelines for formulating a dynamic policy.

The project will be completed by April 1973.

4. Farm Power - Past Trend and Demand Study

Prof. Girja Sharan.

Sponsor: World Bank.

Objectives: No long-range estimate of farm power demand is available for Indian farms. The existing estimates are short range valid only until the end of the Fourth Five-Year Plan and are in wide disagreement. The two major methodological approaches to estimation widely differ in relation to the factors which are considered relevant for estimation. It is, therefore, necessary to identify the relevant factors affecting farm power demand, develop a consistent methodology, define a long range goal for farm power on Indian farms and predict the demand for tractors. The objective of this project is to ascertain the existing level of farm power on farms of various sizes growing various crops in Gujarat. The factors affecting the demand for tractors will be identified and suitable demand estimates will be worked out which can form the basis of a consistent manufacture and import policy in the country.

5. Ground Water Resources Project

Prof. C. Gopinath

Sponsor: Centre for Management in Agriculture, IIMA.

Objectives: 1) To make a quantitative assessment of the capacity and recharge conditions of aquifers; and 2) To the control on and regulation of pumping from them to avoid over-exploitation.

The project visualizes taking up studies in a "ground water watershed area" 1) To assess the capacity and recharge condition of aquifers in the watershed; 2) To examine the present patterns of ground water utilization from the watershed; and 3) To prepare in an integrated manner plans for the optimum development of water resources from the watershed.

The above project, which is expected to illustrate area planning of ground water resources, will help to arrive at better management decisions with reference to ground water utilization.

6. Impact of Farm Mechanisation  
on Employment and Productivity in Gujarat

Prof. C. Gopinath, Girja Sharan, D.K. Desai, and G.M. Desai.

Sponsor: World Bank

Objectives: 1) To investigate into the profitability of tractor farming in relation to the investment on tractors; 2) To find out the impact of tractor utilization on the employment of hired labour on farms; and 3) To find out the impact of tractorization on agricultural labour employment in the village or the area of operation of the tractors.

The analytical design, sampling techniques, and preparation and pretesting of schedules for the study have been completed.

7. Management of Technological  
Change in Dry Farming Areas

Dr. M.S. Krishnaswamy

Sponsor: Ministry of Food and Agriculture, Government of India, and National Institute of Bank Management.

Objectives: 1) To ascertain the present state of agricultural technology and agricultural economics in selected dry farming areas; 2) To ascertain the efforts presently made to propagate improved dry farming techniques and the present level of their adoption by the farmers; 3) To study the economic viability of the presently recommended improved practices; 4) To study the nature and relative importance of factors facilitating or inhibiting technological change; 5) To study the economics of the package of improved practices for dry farming induced by the participating bank under this research project and to evolve guidelines for financing the adoption of new technology by the farmers.

The first draft of the benchmark report (Phase I) is ready.

8. Modernizing the Wheat Industry System

Prof. K.K.S. Chauhan

Sponsor: Centre for Management in Agriculture, IIMA.

Objectives: 1) To study the different types of wheat flour mills and flour milling firms and their role in wheat processing; 2) To examine critically the various integrated/integrable marketing functions performed by various flour milling firms such as procurement, assembly, transport, storage, processing, and distribution; and 3) To examine the new technological developments in the wheat flour milling industry affecting marketing functions, scale economics of different sized plants, and business strategies of the firms.

9. Planning and Implementation of the Modernization Programme in the Rice Processing Industry.

Prof. V.K. Gupta

Sponsor: Centre for Management in Agriculture, IIMA.

Objectives: 1) To identify socio-economic problems in the process of modernization; 2) To assess the viability of different stages of modernization; 3) To assess the economic performance of the modern units; and 4) To identify typical management problems in the selected modernized units.

10. Potential for Custom Hiring of Agricultural Machinery in Gujarat State

Prof. Girja Sharan.

Sponsor: Centre for Management in Agriculture, IIMA.

Objectives: The demand estimate for tractors worked out by agricultural engineers in the country is based on the assumption that every farm in the country will be tractorized. On the other hand, the demand estimates worked out by economists is based on the assumption that only large size farms will be tractorized. The former seems to over estimate the demand for tractors and the latter grossly under estimate it. With the given range of sizes of holdings in India, it seems possible that a sizable number of farms in the middle level will not own a tractor but hire tractor services during critical periods. It is, therefore, necessary to find out the extent of custom hiring prevalent in a region and the extent to which it is likely to increase in future. The objective of this research project, therefore, is to determine the extent of custom hiring possible and the characteristics of those farmers who will in future hire tractor services. This will be useful in strengthening the basis of the demand estimate as well as in formulating a consistent policy in relation to the development of agro-industries service.

11. Problems of Identification of Potentially Viable Small Farmers and Possibilities of Their Development

Dr. K.K.S. Chauhan and Messrs. Dilip Jadhav and N. Mohanan.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: 1) To study the existing resource pattern of the small farmers and to investigate their major problems in the adoption of improved agricultural practices; 2) To examine the possibility of making small farmers viable through the optimum utilization of their farm resources; 3) To identify potentially viable small farmers and to study their important characteristics; 4) To examine the role of the IAD scheme in the development of potentially viable small farmers into viable small farmers into viable units.

The report is being written at present.

12. Rice Economy of India

Prof. P.S. George, Dr. V.V. Choukidar, and Messrs. S.N. Chokshi and M.B. Dave.

Sponsor: Ministry of Food and Agriculture, Government of India.

Objective: To develop a commodity system for rice at the macro level. The system will attempt to synthesize the available information on the inputs going into production, procurement, and processing of paddy, and distribution of rice. The role of different agencies involved in the system and the share of consumers' price retained at each level will also be analysed.

The project will be completed by September 1973.

13. Systems Analysis of Irrigation Agriculture in the Command Area of the Jahi-Kadana Dam Project

Prof. V.N. Asopa

Sponsor: Ministry of Food and Agriculture, Government of India.

Objectives: To determine 1) The optimal timing and amount of water for field crops; 2) The optimal distribution of a given volume of water to be provided, the timing of the availability of water, and the assurance of supply; 3) The effect on output of departing from the optimal policies constructed under 1 and 2; 4) The optimal cropping patterns that are consistent with the soil, climate, and water availability conditions of the region; and 5) The input requirements for optimal cropping patterns under 4; 6) To study the adjustment of rural people and their institutions to changes in agricultural technology; and 7) To examine the development of institutions for water management and their role in the fuller utilization of irrigation potentials.

14. Corporate Boards in India: A Study of Top Management Decision-Making Process in the Corporation

Profs. C.N.S. Nambudiri, and C.K. Prahalad, and Mr. K.S. Raman.

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: 1) To study the existing corporate boards' practices, composition, strengths, and weaknesses; 2) To study the implications of the changes being discussed by the public policy makers for the boards; and 3) To study the desirable changes in the boards from the point of view of a) board members, b) investors, c) government, d) minority interest groups, and e) operating management.

Questionnaires have been mailed to 750 corporate directors in India and replies are being received.



15. Economics of the Indian Cement Industry

Dr. G.S. Gupta

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: The study purports to encompass the following aspects of the cement industry: 1) Causes of regional imbalances in demand and supply, including the impact of controls on location; 2) Production function, return to scale, elasticity of factor substitution, and factor productivities; 3) Cost function, production, economies of scale, optimum plant (firm) size and concentration ratio, size-cost relationship, and cost-price relationship; 4) Demand function and demand forecasting; 5) Efficiency in the Indian cement industry versus efficiency in some foreign (Pakistan, if permitted by data availability) cement industry. The overall objective is to assess the economic efficiency of the Indian cement industry and of the factors governing it in the light of the problems facing this industry.

A preliminary version of the paper on "Production Function and Factor Productivity in Indian Cement Industry" is ready.

16. Optimal Size and Use of Factors in Selected Indian Industries

Prof. P.N. Misra

Sponsor: Indian Institute of Management, Ahmedabad.

Objective: The project aims at analysing empirically the structure of firms/industries under the most general situation when imperfections prevail simultaneously in product and factor markets. The measured structure will then be used to work out the optimum size of profit maximizing firms. Optimum levels of labour, capital, and product price will be obtained at the same time.

17. Implementation Problems of Management Control Systems

Prof. S.K. Bhattacharyya, and J.C. Camillus, and Mr.P.S.Thomas.

Sponsor: Indian Institute of Management, Ahmedabad.

Objective: The study attempts an analysis of the implementation problems of management control systems and their relationship to situational and corporate characteristics, and the design of the management control system. A computer based statistical analysis

of the experience of selected Indian companies obtained by means of a questionnaire will be carried out. In addition, in-depth interviews of executives in a selected sample of these companies will be conducted. Recommendations for minimizing or avoiding the problems will be developed.

The findings will be presented at an Executive Development Programme in December 1972. A monograph based on the study will also be published.

18. Development of Committed Workforce in India

Dr. Baldev R. Sharma

Sponsor: ICSSR.

Objective: To study, among other things, the impact of work technology upon commitment of the industrial workforce. The sample of firms included eight factories, four in the Western region and four in the North.

Data was collected primarily through personal interviews with 1,971 blue-collar workers. The report is being written.

19. Industrial Relations in Metal-Based Industries

Prof. Pramod Verma, Miss Gita Kantawala, and Miss Minal J. Rindani

Sponsor: Indian Institute of Management, Ahmedabad.

Objective: To understand the strategic factors which affect industrial relations in a specific industry. To develop some primary data on the attitudinal aspects of industrial relations.

A survey was conducted in five medium sized firms. The report is now being prepared.

20. Management of Industrial Conflict

Prof. N.R. Sheth

Sponsor: Indian Institute of Management, Ahmedabad.

Objective: To understand the nature of labour-management conflict in two industrial units in relation to their internal and external situations. The immediate objective of the study is to understand the ways in which conflict is managed in Indian industry. This study is planned towards a larger study of industrial conflict and its resolution in the Indian setting.

21. People and Productivity

Prof. Baldev R. Sharma and Mr. P.K. Joshi

Sponsor: Indian Institute of Management, Ahmedabad.

Objective: To analyse the data already collected from a large public sector corporation regarding the failure of their incentive bonus scheme. The objective is to prepare a monograph or a series of papers for publication.

22. Survey of Personnel Practices in Industrial Organizations

Prof. Arun Monappa

Sponsor: Indian Institute of Management, Ahmedabad.

Objective: The project aims at studying the personnel practices prevalent in organizations.

The final report is to be submitted.

23. Trade Union System of Organization

Prof. Ishwar Dayal and Baldev R. Sharma, and Mr. S. Mukherjee

Sponsor: ICSSR.

Objective: To gain a deep insight into the functioning of trade unions as social systems. The study will be conducted through interviews of trade union leaders and of rank-and-file members in and around Bombay and Bangalore.

24. Bus Scheduling Problem

Prof. V.L. Mote and Mr. J.L. Saha

Sponsor: Indian Institute of Management, Ahmedabad

Objective: Research work was done earlier on bus scheduling in connection with the GSRTC project to get a schedule which would assure the use of a minimum number of buses. The objective of the present project is to aim at finding out a schedule which will not only ensure the use of a minimum number of buses but also a minimum number of crew.

A method to arrive at the minimum number of buses required to run a given set of trips ensuring that buses touch a depot once in two days was developed. The generalization of this method and crew scheduling is in progress.

25. RGP Effectiveness

Prof. B.K. Hegde and Mr. M.R. Gopalan

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: The study will attempt to answer the following questions: 1) How well have the IIMA graduates done in their first few years or months, of employment, both as viewed by themselves and their employers? 2) What are the main problems these graduates face in typical work situations? 3) What is the experience of the companies which have employed IIMA students? 4) What improvements can be made in terms of the programme content and/or the methods at the IIMA?

One part of the report based on the response from employers has been completed and circulated to the faculty.

26. On line Information System

Prof. J.G. Krishnayya, and Messers. J.K. Hakim, and Rishi Kumar

Sponsor: Planning Commission, Government of India.

Objective: On-line information retrieval and analysis system are a major way in which computers can serve development planning and administration. The low capital cost of such a system makes them feasible for widespread use.

The detailed design is being prepared. WP-3 accepted for ICC-IBI Informatics in Government Conference, Florence, October, 1972.

27. Durable Goods - An Exploratory Study of Consumer Behaviour

Prof. Subhash C. Mehta

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: 1) To Study the ownership pattern of consumer durables in different economic and social segments of the population; 2) To identify consumer priorities in the purchase of household durables

and examine their immediate intentions for the acquisition of other durables; 3) To delineate the market segments which offer ready potential for different types of consumer durables; 4) To study the replacement pattern of consumer durables as to product life expected and attitude towards obsolescence; 5) To examine the brand switching behaviour of the consumer in regard to replacement demand; 6) To investigate the product lines where consumers are upgrading their purchases and going in for higher priced models; and 7) To study the consumer attitude towards hire-purchase and other credit schemes.

A major part of the field work has been completed. The report is expected to be completed by the end of the academic year.

28. Business Houses in Western India: A Study in Entrepreneurial Response, 1850 - 1956.

Prof. D. Tripathi

Sponsor: Indian Council of Social and Scientific Research,  
New Delhi.

Objectives: The purpose of the study is to examine the entrepreneurial initiative and entrepreneurial continuum on the part of the business houses in Western India in the context of the changing social, economic, and political environment. In other words, the study intends to unfold the factors which encouraged a positive response towards business opportunities on the part of these houses, and those which impeded it.

The work is in progress.

29. Development of Computer Model of Water Pollution for Rivers Estuaries

Prof. S.K. Mukherjee and Mr. S.C. Sharma

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: 1) To develop a one-dimensional mathematical model for predicting the concentration profile of a pollutant in a flowing stream or estuary, resulting from a number of pollutant discharge sources; 2) To develop a numerical analysis scheme and a computer programme for the solution of the mathematical model; 3) To study the reliability of the model and the computer programme based on reported data on physical parameters, pollution load, and concentration profile in a given estuary; and 4) To compare the accuracy and stability of alternative schemes of numerical analysis employed in the development of the computer model.

The report will be ready by October 1972.

30. Development of a Network Computer Model for Urban Water Supply System (including Waste Water renovation and reuse)

Prof. S.K. Mukherjee

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: 1) To develop a computerized network model for urban water supply system alternatives consisting of various surface and groundwater sources for domestic, industrial, and agricultural consumption and the reuse of treated domestic waste water for agricultural and industrial consumption; 2) To develop a methodology using operations research techniques to determine a least-cost water supply system; 3) To study the nature of realistic non-linear cost functions for the processes included in the water supply system and develop a network computer programme to optimize a system with non-linear cost functions; and 4) To demonstrate the methodology by applying it to a particular urban area to design a least-cost water supply system for a future target year.

The first phase of the research project comprising the first three objectives will be completed by December 1972.

31. Electric Power Generation and Transmission System Planning.

Prof. S.K. Mukherjee

Sponsor: Indian Institute of Management, Ahmedabad.

Objectives: 1) To study the problem of electric power generation and transmission system planning to meet the increasing future demand. Specific problems include the choice of type, capacity, and location of generation equipment, and the selection of additional capacity to the transmission network; 2) To develop a methodology for optimum power systems planning based on operations research techniques such as linear and mixed integer programming and network flow theory; 3) To demonstrate the applicability of the methodology using operations research techniques to realistic power system planning for the northern zone of India using the data provided by the National Fuel Policy Committee.

The first phase of the research project will be completed by December 1972.

## APPENDIX H

## FACULTY AND STAFF PUBLICATIONS

July 1971 to June 1972

BOOKS

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