

REPORT OF THE
NATIONAL COMMISSION ON
AGRICULTURE
1976

PART XIV
PLANNING, STATISTICS
AND
ADMINISTRATION



GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND IRRIGATION
NEW DELHI

P. Agr. 136. XIV
5,000

PRINTED BY THE GENERAL MANAGER, GOVERNMENT OF INDIA PRESS, MINTO ROAD,
NEW DELHI AND PUBLISHED BY THE CONTROLLER OF PUBLICATIONS, CIVIL LINES,
DELHI

PREFACE

The Report of the National Commission on Agriculture comprises 69 chapters in 15 parts. A complete list of chapters and parts is given in pages (iii) to (v). The Terms of Reference of the Commission and its composition are given in Part I—Chapter 1—Introduction.

This volume entitled 'Planning, Statistics and Administration' is Part XIV of the Report and is divided into the following five chapters:

60. Planning
61. Statistics
62. Administration
63. Farmers' Organisation
64. International Cooperation

**REPORT OF THE
NATIONAL COMMISSION ON AGRICULTURE**

PART I—REVIEW AND PROGRESS

1. Introduction
2. Historical Review
3. Progress of Agricultural Development
- ✓ 4. Some Economic Aspects

PART II—POLICY AND STRATEGY

5. Agriculture in Economic Development
6. Growth with Social Justice
7. Policy and Strategy
8. Centre-State Relations in Agricultural Development
9. Nutrition

PART III—DEMAND AND SUPPLY

10. Demand Projections
11. Supply Possibilities
12. Export Possibilities and Import Substitution

PART IV—CLIMATE AND AGRICULTURE

13. Climate and Agriculture
14. Rainfall and Cropping Patterns

PART V—RESOURCE DEVELOPMENT

15. Irrigation
16. Command Area Development
17. Land Reclamation and Development
18. Soil and Moisture Conservation
19. Electricity in Rural Development

**PART VI—CROP PRODUCTION, SERICULTURE
AND APICULTURE**

20. Reorientation of Cropping Systems
21. Foodgrain Crops
22. Commercial Crops
23. Horticultural Crops
24. Plantation Crops
25. Fodder Crops
26. Sericulture
27. Apiculture

PART VII—ANIMAL HUSBANDRY

28. Cattle and Buffaloes
29. Dairy Development
30. Sheep and Goats
31. Poultry
32. Other Livestock
33. Mixed Farming
34. Livestock Feeding
35. Animal Health
36. Meat Production and Animal Byproducts

PART VIII—FISHERIES

37. Inland Fisheries and Aquaculture
38. Marine Fisheries
39. Crustacean Fisheries and their Utilisation
40. Marketing of Fish and Fishery Products

PART IX—FORESTRY

41. Forest Policy
42. Production and Social Forestry
43. Minor Forest Produce
44. Forest Ecology and Wildlife Management
45. Forest Protection and Law
46. Forest Planning, Research and Education

PART X—INPUTS

47. Seeds
48. Fertilisers and Manures
49. Plant Protection Chemicals
50. Farm Power
51. Implements and Machinery

PART XI—RESEARCH, EDUCATION AND EXTENTION

52. Research
53. Education
54. Extension

PART XII—SUPPORTING SERVICES AND INCENTIVES

55. Credit and Incentives
56. Marketing, Transport and Storage
57. Processing and Agro-Industries

PART XIII—RURAL EMPLOYMENT AND SPECIAL AREA PROGRAMMES

58. Rural Employment
59. Special Area Development Programmes

PART XIV—PLANNING, STATISTICS AND ADMINISTRATION

- 60. Planning
- 61. Statistics
- 62. Administration
- 63. Farmers' Organisation
- 64. International Cooperation

PART XV—AGRARIAN REFORMS

- 65. Land Reforms Policy
- 66. Land Reforms Legislation and Implementation
- 67. Agrarian Structure and Perspective
- 68. Consolidation of Holdings
- 69. Agricultural Labour

PART XIV
PLANNING, STATISTICS AND ADMINISTRATION
CONTENTS

CHAPTER 60—PLANNING

SECTION	PAGE
1 INTRODUCTION	1
2 HISTORICAL BACKGROUND	2
Planning Commission	2
Agricultural Production Policies	3
3 APPROACH TO AGRICULTURAL PLANNING	6
Current Approach	6
Decentralisation of Planning.	7
Approach to Special Areas	10
4 PLANNING PROCESS	11
Formulation of the National Plan	11
Agricultural Sector Plan	12
Annual Plans	13
State Plans	14
Central Assistance	15
5 PLAN IMPLEMENTATION	17
Problems of Implementation.	17
Progressing and Evaluation	18
Need for Coordination	19
6 PLANNING MACHINERY	21
Apex Organisation	21
Machinery in Ministry of Agriculture and Irrigation	21
Set-up in States	23
Improvements to Planning Process	24
State-Centre Consultation Process	24
People's Participation	
Information and Control Systems	
Reorganisation at State Level	
7 METHODOLOGICAL PROBLEMS	28
Target Setting	28
Demand Projections	
Production Potential	
Yardstick Approach	
Aggregate Output as Plan Target	
Livestock and Fish Production	
Resource Allocation	32
Regional Imbalances	33
Farmers' Participation in Programmes	34
Improvement of Data Base	35

SECTION	PAGE
8 REGIONAL PLANNING FOR BALANCED DEVELOPMENT	36
Regional Disparities in Growth	36
Regional Approach to Planning	39
Infrastructure Development Needs	
Tailor-made Plans for Areas	
Perspective Plans for Agro-climatic Regions	
Infrastructural Planning	42
Socio-political Factors in Regional Development	43
9 LESSONS OF PLANNING	44
Yardsticks Approach	44
Progress Reporting	45
Planning Methods and Procedures	45
Restructuring Planning Machinery	45
District Level Organisation	46
10 SUMMARY OF RECOMMENDATIONS	47

CHAPTER 61—STATISTICS

SECTION	PAGE
1 INTRODUCTION	53
2 LAND UTILISATION AND AREA UNDER CROPS	54
Non-Reporting Areas	54
Methods of Collection of Area Statistics	55
Agency for Area Statistics	56
Training of Primary and Supervisory Agencies	58
Adoption of Standard Forms	59
Land-Use Classification	59
3 STATISTICS OF CROP PRODUCTION	60
Crop Estimates	60
Methods of Estimation of Crop Yields	61
Independent Estimates of Crop Production	63
4 RELIABILITY OF ESTIMATES OF FOODGRAINS PRODUCTION	63
Foodgrains Production Estimates—1967-68 to 1969-70	63
Production Estimates based on Consumption Requirements	64
Need for Improvement in Methods of Collection	65
5 IMPROVEMENT OF CROP STATISTICS	66
Timely Reporting Scheme	67
Scheme for Improvement of Crop Statistics	68
Recording of Area under Mixed Crops	70
Recording of Area under Summer Crops	71
Reconciliation of Different Sets of Estimates	71
Advance Estimates of Crop Production	72
Remote Sensing Techniques	73
Situation and Outlook Reports	74
6 FRUITS AND VEGETABLES STATISTICS	74
Recording of Area under Fruits and Vegetables	75
Census of Fruit Trees	76
Estimation of Yield Rates	76
Market Intelligence	77
Methodological Investigations	77
Organisational Arrangements	77
Statistics of Processed Fruits and Vegetables	78

SECTION	PAGE
7 IRRIGATION STATISTICS	78
Concepts and Definitions	78
Sources of Irrigation Statistics	79
Methods of Collection	79
Defects in the Statistics	80
Suggestions for Revised Classification	82
Other Improvements in Statistics	83
Drainage Statistics	86
Organisational Set-up	86
8 LIVESTOCK STATISTICS	86
Current Status	86
Improvement in Livestock Census	88
Improvement in Livestock Products Statistics	89
Integrated Surveys	90
Improvement in Other Data	91
Monitoring and evaluation of development programmes	
Collection of data from dairy and other plants	
Collection of data through development staff	
Quarterly district reports on livestock situation	
Types of Data and Periodicity	93
Organisational Set-up	94
9 FISHERIES STATISTICS	96
Current Status	96
Marine Fish Catches	97
Inland Fish Production	97
Integrated Programme	98
Census of Fishing Crafts, Tackles and Nets	99
Fisheries Resources	99
Mechanisation of Boats	100
Seed Fish Statistics	100
Prices, Market Arrivals and other Statistics	101
Trade Statistics	101
Other Data	102
Organisational Set-up	102
10 FORESTRY STATISTICS	102
Scope	102
Defects	103
Reconciliation of Discrepancy	103
Classification	104
Outturn of Major and Minor Forest Produce	105
Prices and Costs	106
Employment in Forestry	107
Forest Inventory Surveys	107
Organisational Set-up	107
11 INPUT STATISTICS	108
12 MARKET INTELLIGENCE	110
13 AGRICULTURAL CENSUS	112
14 INTEGRATED SYSTEM OF AGRICULTURAL SURVEYS	114
15 RESEARCH STATISTICS	117
16 DERIVED STATISTICS AND INDICATORS OF AGRICULTURAL ECONOMY	119
17 TABULATION, PUBLICATION AND DISSEMINATION	121
Computerisation	121
Publication and Dissemination	122

SECTION	PAGE
18 ORGANISATIONAL SET-UP FOR STATISTICS	123
Tahsil Level Staff	124
District Level Staff	124
Set-up at State Headquarters	125
Set-up at Central Level	126
Training in Agricultural Statistics	127
19 AGRO-ECONOMIC RESEARCH	127
Studies Sponsored by the Ministry of Agriculture and Irrigation	128
Projects Sponsored by ICAR	130
Studies Sponsored by Planning Commission and ICSSR	130
Agricultural and Other Universities	131
Other Institutions	131
Research Coordination	136
20 SUMMARY OF RECOMMENDATIONS	138

APPENDICES

61·1 Definitions of Land Use Classification	149
61·2 List of Forecast Crops and Year of Initiation of Regular Estimates.	151
61·3 Size and Shape of Plot employed in Crop Estimation Surveys	153
61·4 Percentage of Area Covered by Crop-Cutting Surveys on Different Crops, 1973-74	155
61·5 Method of Working out Estimated Foodgrains Production for 1966-67 to 1972-73 on the basis of Estimated Consumption requirements	157
61·6 Concepts and Definitions for Surveys on Fruits and Vegetables	159
61·7 Concepts and Definitions of Terms used in Irrigation Statistics	163
61·8 Model Tables for Collection of Statistical Data in respect of Major and Medium Irrigation Projects for Preparation of the Annual Administrative Reports of the State Irrigation Departments	166
61·9 Classification of Fishing Craft and Tackle adopted in the Livestock Census, 1972	175
61·10 Forest Area according to Land Utilisation Statistics and Indian Forest Statistics during 1970-71	176

CHAPTER 62—ADMINISTRATION

SECTION

1 INTRODUCTION	177
2 ROLE OF STATE	179
Administrative Structure	181
3 FIELD LEVEL ADMINISTRATION	183
Village Level Worker	184
Division between Scientific and Administrative staff	185
Role of Panchayati Raj Institutions	186
Growth of Institutional Support	188
Coordination at the District Level	188
Role of District Collector	190
Planning, Coordination and Progress Analysis Unit at the District Level	193
Chief Agricultural Development Officer	194
Operational Freedom to Specialists	195
Administrative Relationships of Chief Agricultural Development Officer	195
District Agricultural Coordination Council	196
Administrative Set-up at the Block Level	196

SECTION	PAGE
4 STATE LEVEL ORGANISATION	200
Coordination at Secretariat Level	200
Coordinating Arrangements at Minister's Level	202
Technical Directorates	203
Planning Unit	205
Planning Cells in the Technical Directorates	206
Budget Control Unit	207
Inputs, Credit and other Units	207
Coordination between Research and Development	208
Supply Functions	209
Regulatory Functions	209
Absence of a Rational Staffing Pattern	210
Divisional Level of Administration	210
Concentration of Posts at the Headquarters	211
Grant of Secretariat Status to Technical Officers	211
Generalists in Technical Posts	214
Improvement of Pay Scales	214
All India Agricultural Service	215
Agricultural and Rural Development Council	217
Farmers' Organisations	218
5 CENTRAL AGRICULTURAL SET-UP	218
Expansion of the Central Agricultural Set-up	218
Overall Organisational Set-up	220
Functions of the Central Agricultural Organisation	223
Reorganisation of the Department of Agriculture	224
Coordination between Research and Development	228
Planning Division	229
Extension Set-up	232
Programme for Women	235
Guidance to States	236
Coordination in respect of Export-oriented Commodities	238
Internal Organisation and Management	238
6 TRAINING IN AGRICULTURAL ADMINISTRATION AND MANAGEMENT	243
Training Programme	244
7 SUMMARY OF RECOMMENDATIONS	246

CHAPTER 63—FARMERS' ORGANISATIONS

SECTION	PAGE
1 NEED FOR SETTING UP AN ALL INDIA FARMERS' ORGANISATION	256
2 EXISTING FARMERS' ORGANISATIONS IN INDIA	257
Community Development and Panchayati Raj institutions	257
Voluntary Organisations under the Patronage of Government	258
Bharat Krishak Samaj	
Kisan Sabhas	
National Tonnage Club of Farmers	
Bharatiya Grameen Mahila Sangh	
Farmers Federation of India	
Young Farmers Association	
Other Voluntary Organisations	
3 FARMERS' ORGANISATIONS IN OTHER COUNTRY	263
United States of America	263
Denmark	265
Canada	265
Morocco	266

SECTION	PAGE
Philippines	266
Malagasy	266
Republic of Vietnam	267
Taiwan	267
Japan	268
4 FARMERS' ORGANISATION—A SUGGESTED PATTERN FOR INDIA	270
Farmers' Union or Krishak Sabha	273
District Farmers' Union or Zila Krishak Sabha	275
State Farmers' Union or Rajya Krishak Sabha	279
National Farmers' Union or Rashtriya Krishak Sabha	280
5 REPRESENTATION	280
6 SUMMARY OF RECOMMENDATIONS	281

CHAPTER 64—INTERNATIONAL COOPERATION

SECTION	PAGE
1 INTRODUCTION	284
2 REVIEW	285
Multilateral Programmes	286
Food and Agriculture Organisation	
World Food Programme	
United Nations Development Programme	
United Nations International Children's Emergency Fund	
World Bank Group	
Bilateral Programmes	289
Australia	
Canada	
Denmark	
Finland	
France	
Federal Republic of Germany	
German Democratic Republic (GDR)	
Hungary	
Japan	
Netherlands	
New Zealand	
Norway .	
Romania.	
Sweden	
Switzerland	
United Kingdom (UK)	
United States of America (USA)	
Union of Soviet Socialist Republic (USSR)	
Non-official Agencies	297
People's Action for Development (India)	
Ford Foundation	
Rockefeller Foundations	
Programme-wise Analysis	298
Crop production	
Fertilisers and pesticides	
Irrigation	
Animal husbandry and dairy development	
Fisheries	
Forestry	
Research, education and training	
Assistance Rendered by India	302
ITEC Programme	302
Crop production	
Irrigation	

SECTION	PAGE
Animal husbandry	
Fisheries	
Forestry	
Agro-Industries	
The Colombo Plan	306
3 SCOPE AND PROSPECTS OF FURTHER ASSISTANCE IN	
AGRICULTURE	307
Crop production	
Fertilisers and pesticides	
Animal husbandry and dairy development	
Fisheries	
Forestry	
Sophisticated Techniques and Processes	311
Technical Assistance	312
Prospects of Indian Assistance	312
International Collaboration in Research	313
World Bank—Third Window Aid	314
World Food Council	314
Regional Cooperation	315
4 SUMMARY OF RECOMMENDATIONS	317
 APPENDIX	
64·1 Assignment of Agricultural Experts to India, 1951—73	320
64·2 Fellowships Granted to Indian Personnel for Training Abroad, 1951—73	321