

19

**STANDING COMMITTEE  
ON AGRICULTURE  
(1998-99)**

**TWELFTH LOK SABHA**

**MINISTRY OF AGRICULTURE**

**(Department of Agricultural Research and Education)**

**DEMANDS FOR GRANTS  
(1999-2000)**

**NINETEENTH REPORT**



सत्यमेव जयते

**AUTHENTICATED**  
*K. Yerranna*  
**K. YERRANNAIDU**  
Chairman  
Standing Committee on Agriculture

**LOK SABHA SECRETARIAT  
NEW DELHI**

**PAPERS LAID ON THE  
OF THE RAJYA SABHA**  
ON 23 APR 1999

April, 1999/Chaitra, 1921 (Saka)

NINETEENTH REPORT

STANDING COMMITTEE  
ON AGRICULTURE  
(1998-99)

(TWELFTH LOK SABHA)

MINISTRY OF AGRICULTURE  
(Department of Agricultural Research and Education)

DEMANDS FOR GRANTS  
(1999-2000)

*Presented to Lok Sabha on 20.4.1999  
Laid in Rajya Sabha on 20.4.1999*



LOK SABHA SECRETARIAT  
NEW DELHI

*April, 1999/Chaitra, 1921 (Saka)*

**C.O.A. No. 75**

*Price : Rs. 52.00*

© 1999 BY LOK SABHA SECRETARIAT

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Ninth Edition) and Printed by the Jainco Art India, New Delhi.

## CONTENTS

	PAGE
COMPOSITION OF THE COMMITTEE .....	(vii)
PREFACE .....	(ix)
CHAPTER I	
Introduction .....	1
Department of Agricultural Research and Education .....	1
Indian Council of Agricultural Research.....	2
Mandate of ICAR .....	3
Activity Spectrum of ICAR .....	3
Agricultural Research.....	4
Agricultural Education .....	5
Agricultural Extension .....	5
ICAR through Successive Five Year Plans .....	6
Strategies and Guidelines formed by ICAR.....	12
IX Five Year Plan (1997-2002) Objectives.....	13
New Approaches to the Outstanding Problems .	14
Resource Generation/Mobilisation.....	17
Monitoring .....	17
Proposal for a Closer Monitoring of ICAR Activities .....	19
Sector-wise Summaries: .....	19
—Schemes proposed in VIII Plan but could not be started.....	20
—Schemes to be merged/integrated/upgraded during IX Plan.....	20
—New Schemes in IX Plan .....	22
Plan Schemes in operation during IX Plan (1997-2002) .....	23

	PAGE
CHAPTER II	
Demands for Grants—1999-2000 (DARE) .....	31
Growth of Financial Outlay of DARE/ICAR .....	32
Plan Outlay of DARE/ICAR as a Percentage of Agricultural GDP .....	33
Allocations made for Agricultural Research & Education in Developing and Developed Countries .....	34
Overall Review of Plan Outlays to Agricultural Research during VIII and IX Plan (1997-98, 1998-99 & 1999-2000) .....	35
Demand Proposed Vs Demand Accepted .....	36
Objective Classification of Total Allocations for DARE/ICAR during 1998-99 and 1999-2000 .....	38
Overall Review of Non-Plan Outlay <i>vis-a-vis</i> Plan Outlay during VIII Plan & in Ist three years of IX Plan .....	40
Overall Review of Plan Expenditure during VIII Plan and Ist three years of IX Plan .....	40
Need for Separate Indication of Capital Requirements under the Head "Capital" .....	45
One Time Catch up Grant to DARE/ICAR .....	46
10% Allocation in Favour of Exclusive Schemes for the North-Eastern States .....	47
Sectoral Allocations according to the IX Plan Working Group Recommendations .....	48
Funds Generation .....	50
Agricultural Scientists Recruitment Board (ASRB) .....	51
Project Based Budgeting (PBB) .....	53
Administration-Pending Disciplinary/Vigilance Cases .....	55
Crop Husbandry	
—Need for separate Budget Heads for Crop Science and Other Programmes under Crop Husbandry .....	57

	PAGE
Crop Science	
—(A) Plant Genetic Resources .....	59
— Foodgrains Production .....	61
—(B) Food Crops .....	63
—(C) Commercial Crops .....	64
—(D) Oilseeds .....	66
—(E) Hybrid Seed .....	67
Horticulture .....	69
Natural Resource Management (NRM).....	76
Agricultural Engineering .....	78
Animal Science (AS) .....	80
Fisheries .....	84
Agricultural Extension—(KVKs/IVLP) .....	86
Agricultural Education .....	88
Management and Information Services (MIS).....	90
World Bank/Externally Aided Projects— (NATP).....	90
<b>CHAPTER III</b> Observations/Recommendations:	
—Sl. No. 1—Inadequate Ninth Plan Allocations .....	93
—Sl. No. 2—Need to Restore the Supremacy of Parliament in Financial Matters .....	94
—Sl. No. 3—Inadequate Allocations for the Year 1999-2000 to DARE/ICAR .....	95
—Sl. No. 4—100% Central Funding of the Programmes meant for the North-East .....	96
—Sl. No. 5—One Time Catch Up Grant .....	97
—Sl. No. 6—Sectoral allocations for the Year 1999-2000 .....	98
—Sl. No. 7—Agricultural Scientists Recruitment Board (ASRB) .....	98
—Sl. No. 8—Pending Disciplinary/Vigilance Cases in the Department .....	99

	PAGE
—Sl. No. 9—Crop Sciences .....	99
—Sl. No. 10—Crop Science: Plant Genetic Resources .....	100
—Sl. No. 11—Plant Genetic Resources: NRC-DNA Fingerprinting .....	100
—Sl. No. 12—Adoption of Seed Village Concept by KVKs and Agricultural Research Institutions and Agricultural Universities .....	101
—Sl. No. 13—Agricultural Engineering .....	101
—Sl. No. 14—Agricultural Extension: Scientists in a KVK .....	102
—Sl. No. 15—Fully Functional KVKs .....	102
—Sl. No. 16—World bank/Foreign Aided Project (NATP) .....	103

#### APPENDIX

Minutes of the 29th Sitting of the Committee....	104
--	-----

#### ANNEXURES

I Details of Vigilance/Disciplinary Cases initiated during 1998-99 .....	106
II Sectoral Summary for the Year 1999-2000 .....	108
III Scheme-wise Break up of Plan Outlay/Expenditure for the year 1999-2000.....	109

COMPOSITION OF THE STANDING COMMITTEE  
ON AGRICULTURE (1998-99)

Shri Kinjarapu Yerrannaidu — *Chairman*

MEMBERS

*Lok Sabha*

2. Shri Ramchandra Baina
3. Shri D.C. Sreekantappa
4. Shri Nandkumar Singh Chauhan
5. Dr. Ramkrishna Kusmaria
6. Shri Baliram Kashyap
7. Smt. Sangeeta Kumari Singh Deo
8. Shri M. Master Mathan
9. Shri Raj Narain Passi
10. Shri Virendra Verma
11. Shri Bhupinder Singh Hooda
12. Shri Sudhakar Rao Naik
13. Shri Ramkrishna Baba Patil
14. Shri Maganti Venkateswara Rao
15. Shri Uttamrao Deorao Patil
16. Kum. Vimla Verma
17. Shri Chhitubhai Devjibhai Gamit
18. Smt. Usha Meena
19. Shri Kantilal Bhuria
20. Shri Mahaboob Zahedi
21. Shri Abul Hasnat Khan
22. Shri Mitrasen Yadav
23. Smt. Usha Verma



24. Shri K.P. Munusamy
25. Shri Anup Lal Yadav
26. Shri Bashist Narayan Singh
27. Shri Sode Ramaiah
28. Shri Ram Shanker
29. Dr. Sushil Kumar Indora
- \*30. Shri Chada Suresh Reddy

*Rajya Sabha*

31. Shri Ghufuran Azam
32. Maulana Habibur Rahman Nomani
33. Shri Ramji Lal
34. Shri Devi Prasad Singh
35. Shri Ramnarayan Goswami
36. Shri Yadlapati Venkat Rao
37. Shri H.K. Javare Gowda
38. Shri T.M. Venkatachalam
39. Shri Sharief-Ud-Din Shariq
40. Shri Sukh Dev Singh Dhindsa
41. Shri Aimaduddin Ahmad Khan (Durru)
42. Dr. Ramendra Kumar Yadav "Ravi"
43. Shri Sangh Priya Gautam
44. Shri Devi Lal
45. Prof. M. Sankaralingam

SECRETARIAT

- |                        |   |                             |
|------------------------|---|-----------------------------|
| 1. Shri G.C. Malhotra  | — | <i>Additional Secretary</i> |
| 2. Shri Joginder Singh | — | <i>Joint Secretary</i>      |
| 3. Shri S. Balshekar   | — | <i>Deputy Secretary</i>     |
| 4. Shri K.L. Arora     | — | <i>Assistant Director</i>   |
| 5. Shri Anil Kumar     | — | <i>Reporting Officer</i>    |

---

\*Nominated as the Member of the Committee *w.e.f.* 18th March, 1999 in place of Lt. Gen. (Retd.) N. Foley who ceased to be the Member of the Committee consequent upon his nomination to DRSC on Defence *w.e.f.* 18th March, 1999.

## PREFACE

I, the Chairman, Standing Committee on Agriculture (1998-99) having been authorised by the Committee to submit the report on their behalf, present this Nineteenth Report on Demands for Grants of the Ministry of Agriculture (Department of Agricultural Research and Education) for the year 1999-2000.

2. The Standing Committee on Agriculture was constituted on 5th June, 1998. One of the functions of the Standing Committee as laid down in Rule 331E of the Rules of Procedure and Conduct of Business in Lok Sabha is to consider the Demands for Grants of the concerned Ministries/Departments and make a report on the same to the Houses. The report shall not suggest anything of the nature of cut motions.

3. The Committee took evidence of the representatives of the Ministry of Agriculture (Department of Agricultural Research and Education) on 31st March, 1999. The Committee wish to express their thanks to the officers of the Ministry of Agriculture (Department of Agricultural Research and Education) for placing before them, the material and information which the Committee desired in connection with the examination of Demands for Grants of the Department of Agricultural Research and Education for the year 1999-2000 and for giving evidence before the Committee.

4. The Committee considered and adopted the Report at their sitting held on 7th April, 1999.

NEW DELHI;  
April 7, 1999  
*Chaitra 17, 1921 (Saka)*

KINJARAPU YERRANNAIDU,  
*Chairman,*  
*Standing Committee on Agriculture.*

## CHAPTER I

### INTRODUCTION

#### **Department of Agricultural Research and Education**

1.1 The Department of Agricultural Research and Education (DARE) was established in the Ministry of Agriculture in December, 1973. It provides the necessary governmental linkages for the Indian Council of Agricultural Research (ICAR). The major functions of the DARE are :-

- (i) To look after all aspects of agricultural research and education (including horticulture, natural resource management, animal science, economics statistics and marketing and fisheries) involving coordination between the Central and State agencies.
- (ii) To attend to all matters relating to the Indian Council of Agricultural Research .
- (iii) To attend to all matters concerning the development of new technology in agriculture, horticulture, natural resource management, engineering, extension, animal husbandry, economic statistics and marketing and fisheries, including such functions as plant and animal introduction and exploration and soil and land use survey and planning.
- (iv) International co-operation in the field of agricultural research and education including relations with foreign and international agricultural research and educational institutions and organisations, including participation in international conferences, associations and other bodies dealing with agricultural research and education and follow up of decisions at such international conferences etc.
- (v) Fundamental, applied and operational research and higher education including coordination of such research and higher education in agriculture including agroforestry, animal husbandry, dairying, fisheries, agricultural statistics, economics and marketing.

## **Indian Council of Agricultural Research**

1.2 The Indian Council of Agricultural Research (ICAR) was established in May 1929 as the Imperial Council of Agricultural Research. It was registered as society under the Societies Registration Act XXI of 1860. Its name was changed to Indian Council of Agricultural Research in June, 1947 and was registered as such in January, 1976. It runs institutes/laboratories and research centres/project directorates located in different parts of the country in field of Agriculture, Animal Sciences and Fisheries. The Council is financed mainly by grants from the Central Government. Within the overall framework of Government policies, the ICAR is vested with full authority to determine basic strategies, formulate operational policies, developing necessary programmes and to ensure their implementation on sound technical and economic principles.

The Union Minister for Agriculture and the Minister of State in the Ministry are respectively President and Vice-President. The Governing body of the Council is headed by the Director General, ICAR who is also the Secretary to the Government of India. The body constitutes of three Members of Parliament, three Vice-Chancellors of Agricultural Universities, three Directors of ICAR Institutes, three Scientists (outside the ICAR), Secretaries to the Government of India in the Departments of Expenditure (Ministry of Finance), Planning Commission and the Department of Agriculture and Cooperation, the Chairman of UGC, the Chairman of Atomic Energy Commission, 3 farmers representatives and the Secretary, ICAR as Member Secretary. This body assists the Council in deciding policies and controls the budget and is assisted by the following Committees/Panels :

- (i) Standing Finance Committee for examination of schemes involving financial implications and also the Annual Budget of the Council before submission to the Governing Body.
- (ii) Accreditation Board for matters relating to accreditation, maintenance of education standards and development of Agricultural Universities.
- (iii) Eight Regional Committees constituted for eight broad agro-ecological regions of the country.
- (iv) Scientific Panels to consider adhoc schemes and projects relating to different disciplines.

- (v) Joint Panels between ICAR and related research organisations like the Indian Council of Medical Research, National Dairy Development Board, Central Water Commission and Indian Institute of Management.

### **Mandate of ICAR**

1.3 The Indian Council of Agricultural Research (ICAR) as an apex scientific organisation of national level, plays a crucial role in promoting and augmenting science and technology programmes relating to agricultural research, education and demonstration of new technologies as first line extension activities. The mandate of ICAR is as follows :

1. To plan, undertake, aid, promote, and coordinate education, research and its application in agriculture, agroforestry, animal science, fisheries, home science, ESM, engineering and allied sciences.
2. To act as a clearing house for research and general information relating to agriculture, animal husbandry, home science, fisheries, ESM, engineering and allied sciences through its publications and information system and instituting and promoting transfer of technology programmes.
3. To provide, undertake and promote consultancy services in the field of research, education, training, and dissemination of information in agriculture, agroforestry, animal science, fisheries, home science, ESM, engineering and other allied sciences.
4. To look into the problems relating to broader areas of rural development concerning agriculture, including post harvest technology by developing co-operative programmes with other organisations such as the Indian Council of Social Science Research, Council of Scientific and Industrial Research, Bhabha Atomic Research Centre, Universities etc.
5. To do other things considered necessary to attain the objectives of the Council.

### **Activity Spectrum of ICAR**

1.4 The Council performs research, education and first line extension service and other identified programmes with specific objectives. During

the 2nd year of IX Plan, *i.e.* 1998-99, the following 189 plan schemes were implemented in addition to Foreign Aided Projects.

- \* 79 Institutes comprising 45 Central Institutes, 4 National Bureaux and 30 National Research Centres.
- \* 89 Projects including 10 Projects Directorates and 79 All India Coordinated Research Projects/Network Programmes.
- \* 12 other Plan Projects, 2 World Bank Aided Projects and 7 Externally Aided Projects.

An abridged account of major activities of the ICAR is presented below.

### **Agricultural Research**

1.5 The Council plays a crucial role in promoting science and technology and its application in Agriculture. Primarily, fundamental and applied research in traditional and frontier areas are undertaken by the Council to offer solutions to problems relating to conservation and management of resources, productivity improvement of crops, animals and fisheries etc. For formulating research policies and programmes, the ICAR has developed a national grid comprising of a chain of 45 Central Institutes, 4 National Bureaux, 10 Project Directorates (PDs), 30 National Research Centres (NRCs) and 79 All India Co-ordinated Research Projects (AICRPs) with their centres located in different parts of the country. The coordinated research activities are not only multi-institutional but are also multi-disciplinary and multi-locational to cover whole spectrum of various situations and conditions. Above all, it is stated that the most important strength of these efforts lie in the national cooperative testing and minimising the rigorous of the screening of varieties and technologies before these are passed on to the farmers.

The ICAR claims at present that it is equipped with a strong agricultural research and educational system and the system has the ability and resilience to transform the agrarian economy through increased productivity, self sufficiency in food, fodder and other essential commodities with excellent export potential.

## **Agricultural Education**

1.6 The Council aids, promotes and coordinates agricultural education programmes at national level. The major thrust in this area was given from early 1960s when the first agricultural university was established in the country. Since then the Council has invested over Rs. 200 crore in developing the agricultural university system. The educational programmes are, by and large, carried out by 28 State Agricultural Universities (SAUs) of the country covering 16 major States. One Central Agricultural University (CAU) for NEH Region has also been established at Imphal to help and support the human resource development needs of the region. In addition to these, 4 National Institutes of the Council *viz.* Indian Agricultural Research Institute (IARI), Indian Veterinary Research Institute (IVRI), National Dairy Research Institute (NDRI) and Central Institute of Fisheries Education (CIFE) have been granted the status of deemed to be university. These institutes offer post graduate degree programmes in addition to undertaking researches in their respective areas.

The World Bank supported Agricultural Human Resource Development Project (AHRDP) was launched on 14th August, 1995 with a total outlay of Rs. 33.70 crores aimed at improvement in quality of agricultural human resource through a series of steps including development of infrastructure, training of scientists and procedural reforms for bringing efficiency and accountability in the system.

## **Agricultural Extension**

1.7 The ICAR discharges the responsibility of technology assessment, refinement and dissemination through frontline demonstrations of latest agricultural technologies to farmers, extension functionaries of State Agricultural Departments and other non-governmental agencies. All the Technology Transfer programmes of the Council have been brought under the canopy of integrated Krishi Vigyan Kendras (KVKs) for better coordination and support. A network of 261 KVKs are established in the country, which are imparting on-farm training in different aspects of agriculture, animal science, fisheries and allied vocations to youths, farm men and women and rural workers. These programmes get a back-up support through 8 Trainers' Training Centres to update knowledge of farm worthy advancements made in research. These programmes are closely monitored by 8 Zonal Coordinators. During VIII Five Year Plan, ICAR has also piloted a

new Institution Village-Linkage Programme (IVLP). The concept is based on participatory mode ensuring greater scientist-farmer linkage in a 'bottom-up' approach. It will ensure access to agricultural technologies generated by the entire institute or for that matter by the entire agricultural research system in the country, to the entire farming community in a village or cluster of villages representing around 1000 farm families.

The Division of Agricultural Extension jointly with the Division of Crops of ICAR has initiated a project on Technology Evaluation and Impact Assessment for testing of various crop production technologies at final stage trials for providing feedback on response of the farmers. This project has been initiated in 60 KVKs of various States. The crops included for the project are cereals like rice, wheat, pearl millet, maize and sorghum; oilseeds like groundnut, mustard, castor, toria, sunflower and niger and pulses like urd bean, pigeon pea, chickpea and cowpea.

The technology generated by Institutions under ICAR and coordinated research projects/programmes, are by and large, oriented to improve the socio-economic status of the farmers irrespective of their caste and creed. Through vocational training, the target group acquires special skill for improvement in the production of traditional and non-traditional crops, agro-forestry, agriculture, sericulture, animal husbandry, poultry, fisheries and post harvest technology.

### **ICAR through Successive Five Year Plans**

1.8 The ICAR came under formal ambit of the Planning system during the IV Five Year Plan. The planning process has been based on four cardinal objectives; growth; self reliance; social justice and modernisation. The R&D scheme in agriculture have a focus on these objectives to achieve increased productivity through better management, technological upgradation and modernisation of agricultural practices. Over the various plan periods, the thrusts and the priorities of ICAR activities have been centred on filling in the major gaps and solving the outstanding national problems. Table shows some of these plan schemes successively implemented during the plan periods. Over the years, the objectives and mandates of the schemes have been modified, resource redeployed and the necessary infrastructural facilities developed periodically, so as to help the various R&D units to develop farmworthy technologies leading to significant advances in production of agricultural products and by-products.



**TABLE****PLAN-WISE IMPLEMENTATION OF NEW SCHEMES IN IDENTIFIED AREAS****IV Five Year Plan 1969-73**

- (i) Pre-release multiplication of new seed
- (ii) AICRPs for Research on Water Management; Use of Saline Water in Agriculture; and Manufacture of Prototypes and Engineering Equipments.
- (iii) Research Information, Planning and Coordination Units at ICAR Headquarters.

**V Five Year Plan 1974-78 & Rolling Plan 1978-79 & 1979-80**

- (i) Central Institute of Agricultural Engineering
- (ii) Central Institute of Cotton Research
- (iii) National Bureau of Soil Survey and Land Use Planning
- (iv) Vivekanand Parvatiya Krishi Anusandhan Shala
- (v) Central Soil & Water Conservation Research & Training Institute
- (vi) National Bureau of Plant Genetic Resources
- (vii) ICAR Research Complex for NEH Region
- (viii) National Academy of Agricultural Research Management
- (ix) Central Agricultural Research Institute
- (x) Central Institute for Research on Goat
- (xi) Central Avian Research Institute
- (xii) National Research Centre on Groundnut
- (xiii) All India Coordinated Research Projects—Seed Borne Diseases; Nematodes; Rodent Control; Biological Control; White Grub;

Honey Bee Research; Biological Nitrogen Fixation; Improvement of Diaraland; Long Term Fertilizer Experiment; Intensive Testing of Power Tillers; Agricultural Drainage; Home Science

(xiv) National Agricultural Research Project

(xv) National Seed Project (IDA/WB)

#### **VI Five Year Plan 1980-85**

(i) Central Institute for Research on Buffaloes

(ii) National Bureau of Animal Genetic Resources

(iii) Central Institute of Animal Genetics

(iv) Central Research Institute for Dryland Agriculture

(v) Central Institute of Horticulture for Northern Plains

(vi) National Research Centre on Mushroom

(vii) National Camel Breeding Centre

(viii) National Equine Breeding Centre

(ix) All India Coordinated Research Project on—Under-Exploited and Under-Utilized Crops; Betelvine Research; Mushroom Research; Pesticides Residues; Renewable Energy Resources; Agro-forestry; Agro-meteorology; PHT-Horticulture and Economic Ornithology

(x) Fellowship/Scholarship; Krishi Vigyan Kendras; and Operational Research Project for improving the Socio-Economic conditions of Scheduled Castes/Other Backward classes.

#### **VII Five Year Plan 1985-90**

(i) ICAR Research Complex, Goa

(ii) Indian Institute of Soil Science

(iii) Central Institute of Post Harvest Engineering & Technology

- (iv) Central Institute of Brackishwater Aquaculture
- (v) Central Institute of Freshwater Aquaculture
- (vi) National Bureau of Fish Genetic Resources
- (vii) National Research Centres on Integrated Pest Management; Sorghum; Soyabean; Agro-forestry; Meat & Meat Product Technology; Animal Health; Animal Production; Yak; Mithun; and Cold Water Fishery; Water Technology Centre and Biotechnology Centre for Crop Sciences.
- (viii) Coordinated Research projects on Agricultural Acarology; Guar; Increased Utilisation of Animal Energy through Enhanced Systems Efficiency; Application of Plastics in Agriculture; Processing, Handling and Storage of Jaggery and Khandsari; Apple Scab; Betelvine Diseases; Weed Control; Immunoprophylactic Control of Intracellular Blood Protista; Monitoring, Surveillance and Forecasting of Animal Diseases.

#### **NEW PROJECTS/PROGRAMMES INITIATED DURING VIII PLAN**

##### **Crop Science**

1. Indian Institute of Pulses Research
2. NRC-Rapeseed & Mustard
3. NRC-DNA Fingerprinting
4. PD-Biological Control
5. PD-Maize
6. AICRP-Chick Pea
7. AICRP-Pigeon Pea
8. AICRP-MULLARP
9. AICRP-Groundnut
10. AICRP-Rapeseed & Mustard

### **Horticulture**

11. Indian Institute of Spices Research
12. NRC-Arid Horticulture
13. NRC-Banana
14. NRC-Grapes
15. NRC-Onion & Garlic
16. NRC-Orchids
17. NRC-Oil Palm
18. NRC-Medicinal & Aromatic Plants

### **Agricultural Engineering**

19. AICRP-Human Engineering & Safety Studies

### **Animal Science**

20. National Institute of Animal Nutrition & Physiology
21. Network-Micronutrients
22. Network-Embryo Transfer in Animal Production
23. Network-Animal Genetic Resources
24. R&D Support for Process Upgradation of Indigenous Milk Products for Industrial Application
25. Network Crop Based Animal Production System
26. Strengthening of Monitoring Mechanism and Training of Scientists and Technicians (approved but not started).

### **Fisheries**

27. Operational Research Project on Use of Organic Waste in Aquaculture

**Agricultural Extension**

- 28a. National Research Centre for Women in Agriculture
- 28b. Establishment of 78 new KVKs

**Agricultural Education**

- 29. Central Agricultural University for NEH Region
- 30. Establishment of Centres of Advance Studies in SAUs & DUs
- 31. Strengthening of Post Graduate Education
- 32. Emeritus Scientists
- 33. Agricultural Human Resource Development

**Management and Information Services**

- 34. Support to Professional Societies/National Academy of Agriculture Sciences
- 35. Guest House for ICAR Headquarters
- 36. ICAR Bhawan Phase II
- 37. National Agril. Science Centre & Museum Complex
- 38. ICAR Agricultural Library

**Foreign Aided Projects**

- 1. Indo-UK Project on Plan Germplasm Conservation-NBPGR
- 2. Japan Grant Project, Department of Quality Seed IARI
- 3. Indo-UK Collaboration between IGFR-IGER (100% UK)
- 4. Indo-UK Project on Field Research into Tolerance of Wheat to Salinity Stress.
- 5. Indo-UK Project on Soil Salinity & Breeding Salt Resistant Crops (100% UK)

6. Indo-Dutch Operational Research Programme on Drainage & Water Management for Salinity Control
7. Indo-UK Project on Development Evaluation and Adoption of Agricultural Groundwater Recharge Techniques in Punjab
8. Indo-UK Project on Transfer of Molecular Biological Technologies
9. Agricultural Human Resource Development

### **Strategies and Guidelines formed by ICAR**

1.9 The ICAR needs to anticipate and adjust to a changing environment increasingly affected by local compulsions and global forces. Forces such as market-led development, commercialization, environmental protection and limited governmental role in sectoral services and resources allocations are emerging. However, food security and household nutrition still remains a major problem but indications are that future agricultural growth will rely increasingly on diversification from traditional food crops towards higher value crops and value added activities. Agricultural sector growth which is an essential input for overall economic growth depends, even more than in the past, on agricultural research, education and extension to increase productivity, profitability and sustainability. To effectively perform this role, the mission of the Council should be to achieve excellency in agricultural research, education and extension, to establish appropriate networks and linkages at national and international level and to develop appropriate technologies for increased production, productivity, conservation, value addition and marketing and trade so as to have increased profitability and sustainability of the agricultural sector.

Based on the above mission, ICAR outlined a set of guiding principles to be followed during the Ninth Five Year Plan to usher in second Green Revolution in India, through a renewal process of National Agricultural Research System.

ICAR has to increase its research to a level where they are in a position to meet our current needs, assess for emerging trends and accordingly structure research agenda so that they are neither caught unaware nor do feel left behind.

They have to reorient their efforts to meet the future challenges which would be more need based and demand driven, and would require a matrix made approach as well as shift from the commodity/project based approach to systems/programme based approach.

The new approach in the IX Five Year Plan will be through Centres of Excellence, Network Programmes etc.

Ordinarily, there will be no regional centres attached to NRCs. Some of the All India Co-ordinated Research Projects will be shifted, merged with others or re-organised as network programmes after critical review by high power Committee constituted for the purpose. Regional research structure of institutes will be critically examined for continuation/redeployment/transfer to other Institutes/SAUs as the case may be.

Emphasis will be on redeployment of scientific staff based on existing cadre strength so as to meet newer challenges and programmes.

A definite change is needed in their governance, functional efficiency, information management system, programme orientation, inter-disciplinary/inter-institutional linkages, HRD and above all effective linkages between technology generation and technology transfer involving scientists, farmers, NGOs and the private sector.

In many of the ICAR institutes and the SAUs, infrastructure and equipments are getting depreciated and obsolete, being 2 to 3 decades old. These need critical support and upgrading. Major thrust will be given to modernization, strengthening laboratory, library, teaching and field facilities for improvement in efficiency and work environment.

#### **IX Five-Year Plan (1997-2002) Objectives**

1.10 The objective of the ICAR in the IX Plan will be to enhance productivity, Profitability, stability and sustainability of the agricultural systems so that the quality of life among every segment of current and future generations could be improved. The IX Plan has to lay a strong foundation for Evergreen Revolution in Indian Agriculture. To achieve this focus of the IX Plan would be on the following:

- Conservation, planned enhancement and utilization of agrobiodiversity.

- Enhancing productivity through evolution of high-yielding hybrids and varieties.
- Research on diversification, quality improvement, post-harvest technology, value addition and export-oriented commodities.
- Sustaining enhanced productivity of irrigated agriculture and judicious development and use of energy, especially renewable sources of energy.
- Characterisation and development of sustainable land-use models for rainfed agriculture in high-rainfall areas.
- Development of the Integrated Pest Management (IPM) and Integrated Nutrient Management System (INMS) approaches and systems for sustainable agriculture.
- Fostering excellence in relevant basic and strategic research.
- Generating research and technologies geared to promote equity among regions, sectors of society and gender.
- Promoting integration of research, technology generation, assessment and refinement and dissemination in area specific and production system mode for combining food security. Poverty alleviation, rural development and conservation of natural resources.
- Strengthening social science, policy planning, agri-business, research monitoring mechanisms, administrations and personnel reforms, publication and information dissemination system, sensitisation and empowerment of women for self-reliance and economic security.

### **New Approaches to the Outstanding Problems**

1.11 The existing and ongoing schemes will be critically evaluated to examine their necessity for continuance. There would be optimization of available resources through proper planning, prioritization and coordination. However, certain programmes have to be further strengthened and new initiatives have to be taken to fill in the critical gaps so that the targets of the IX Plan are achieved. Some of the



important new initiatives that could be of immediate relevance include the following:

### **Research**

- Establishment of National Research Centre on Millets
- Network on Transgenics
- Strengthening of Maize and Seed Technology Programme
- Setting up of National Bureau of agricultural Micro-organisms
- NRC/Regional Station on Seed Spices
- Upgradation of Project Directorate on Vegetables, NRC on Arid Horticulture and NRC on Camel as Institutes
- ICAR Research Complex for Eastern Region
- Setting up a National Centre on Plant Virus Research
- AICRP on Engineering Measures for efficient Land & Water Management

### **Education**

- Strengthening of Central Agricultural University for NEH region
- One time catch up grant for upgrading teaching facilities
- Scholarship scheme for Indian agricultural scientists for study abroad
- Africa Fund/Fellowship Scheme to provide HRD back up to developing African and other countries
- Rural Agricultural Work Experience
- National Talent Search Examination/Scholarships in agriculture science
- AHRD including development programmes in agricultural colleges not affiliated to SAUs
- Vocational training in selected SAUs including rural women entrepreneurship development

No further proliferation of the agricultural universities will be allowed. Instead, they will be further strengthened in frontier areas of science with greater relevance and excellence in their educational programmes.

### **Agricultural Extension**

- Establishment of two Trainer's training Centres one each on "Vegetable Crops" and "Rural System Analysis".
- Opening of 100 new KVKs and which includes 88 New KVKs and support to 12 Zonal Research Stations to function also as KVKs
- Continuation and addition of more centres of Institute Village Linkage Programme

The financial outlay required to strengthen the existing programmes and to take up fresh initiatives in agricultural research and education for the IX Plan will be Rs. 7,800 crores. The percentage resource allocation recommended for different sectors by the Working Group on Agricultural Research and Education for the IX Five Year Plan is given below:

<b>Sector</b>	<b>Percent resource allocation</b>
Crop Science	25
Horticulture	10
Animal Science	14
Fisheries	06
Agricultural Education	15
Agricultural Extension	10
Soils	] 20
Agronomy	
Agril. Engineering	
Agril. Economics & Statistics	
Publication & Information	
Headquarters (ICAR)	

A critical review of the existing schemes and a serious thinking about important new schemes to be launched in the IX plan is proposed to be carried out and all the promising schemes which are critical to maintain the tempo of progress made in the VIII Plan will be retained and further strengthened. Unimportant ones will be reviewed, reoriented or phase out.

### **Resource Generation/Mobilization**

1.12 There will be considerable emphasis on re-deployment of scientific staff based on existing cadre strength so as to meet the newer challenges and programmes.

The recommendations of Johl Committee on resource generation through internal resource management and external funding sources will be implemented. Further, critical gaps in research will be attempted through externally aided projects like NATP, AHRD etc.

Funding support through Cess Fund Grants to ICAR is critical. There should be an indexation of cess rates. The cess fund collected from sugarcane, cotton, spices, cashew etc. like other commodities should also be made available to ICAR for conducting research on these commodities, so that priority problems could be addressed for required solution.

India is having vast infrastructure for agricultural research and education. Unfortunately, we are not able to derive the full benefits from this infrastructure owing to sub-critical funding and inadequate experimental facilities. It is suggested that at least 1% of agricultural GDP (which comes to about Rs. 78,000 million at current price) should be allocated to agricultural research and education in the IX Plan. Further, for modernisation of the National Agricultural Research System, a one-time catch-up grant of Rs. 5000 million is considered as most crucial at this juncture.

### **Monitoring**

1.13 Effective implementation of the Plan resources depends entirely upon the efficiency of the implementing machinery, which generally has bottlenecks in the shape of:—

- Slow decision making through a long heirarchical chain.
- Consequent dilution of accountability.
- Antiquated procedures, over dependence on written records and plethora of paper work.
- Unbusinesslike rules and procedures.

For effective planning there has to be vast improvement in data base, real time information and programme expertise not just in the Planning Unit, but in the Subject Matter Division also. A considerable amount of monitoring of the schemes would be done by appropriate units with sufficient computer back up, to provide autonomy to the monitoring units and allow for a system which operates with quick feed back mechanisms with numerical targets.

The ICAR has an operative monitoring system at different levels covering individual research schemes/projects, sectoral programmes, agro-climatic zones, agricultural universities and regional priorities. The different monitoring activities carried out by the ICAR are as follows:

Report Content Headquarter	Periodicity and Timing	Coordinating Unit at the ICAR
Identification of critical areas and crops alongwith formulation of programmes to cover these gaps in a systematic manner over a 5 year period giving a year-wise programme work, resource needs and financial requirements.	At the commencement of a Plan period	SMDs/PIM Unit
Proposed activity milestone for a particular year for programmes in thrust areas	One month prior to the commencement of a calender year	SMDs/PIM Unit
Progress of Annual Action Plan targets	Annual	SMDs/PIM Unit
Technical Progress	Monthly Quarterly Annual Research highlights	SMDs/TC SMDs/TC SMDs/TC SMDs/TC
Routine Financial Progress	Monthly	Financial Wing
Resource review including financial and physical aspects	Half yearly (September October)	SMDs/financial Wing/ PIM Unit
Mid Term review	Middle of Plan Period	SMDs/financial Wing/ PIM Unit
Review of Plan Achievement	At the end of Annual Plan Period	SMDs/financial Wing/ pm Unit
Planning Commission Working Group	Five Yearly Review	SMDs/financial Wing/ PIM Unit

### **Proposal for a Closer Monitoring of ICAR Activities**

1.14 It is possible to evaluate the research output in terms of the work assigned on periodic basis for which more intensive efforts will be made in future. Although the Subject Matter Division monitor the scientific activities by participating in the Institute level as well as by obtaining reports of their activities, there is no system for compiling the results of monitoring by way of critical appraisal of activities of regular intervals. Although annual plans and action plans are prepared regularly, the task of monitoring and evaluation is very difficult. An attempt is being made to prepare the plans showing activities with specific time frame and more sharply defined objectives/targets.

Although a Plan Implementation and Monitoring (PIM) Unit has been in existence at the ICAR Headquarter for quite sometime, it has not been possible to play effective role in monitoring of various activities. This unit needs strengthening so that it may act as the nodal point for scientific as well as financial monitoring. In order to do so, an Assistant Director General is heading this unit. Additional manpower will be added by redeployment. The endeavour will be that up-to-date position regarding all the scientific activities should be available in the PIM Unit. This Unit will receive reports on the performance indicators in quantified terms from all the Subject matter divisions as well as from the Finance Division at regular intervals. These reports will be compiled and analysed. The results of analysis will be communicated back to various Subject Matter Divisions so that appropriate lessons could be drawn from the analysis and corrective measures, if necessary, could be taken.

### **Sector-wise Summaries**

1.15 A brief note on Plan Schemes is given below for:

- \* Schemes which were proposed in VIII Plan but could not be started
- \* Schemes to be merged/integrated/upgraded in IX Plan
- \* New Schemes in IX Plan

**Schemes proposed in VIII Plan but could not be started**

	<b>Plan Schemes</b>	<b>EAP Schemes</b>
<b>Crop Science</b>	AICRP on Biotechnology on Breeding for Biotic Stress	Indo-UK Collaborative Network Project on Whitefly
<b>Soil, Agronomy &amp; Agroforestry</b>	Network on Acid Soils AICRP on Land Use Planning	
<b>Animal Science</b>	Strengthening, Monitoring and Training of Scientists Vaccine and Diagnostic Technique/Livestock Farming System Meat Technology	

**Schemes to be merged/integrated/upgraded during IX Plan**

	<b>Plan Schemes</b>
<b>Crop Science</b>	<p>Barley Network integrated with Directorate of Wheat Research</p> <p>AICRP Under Utilised &amp; Under Exploited to be integrated with NBPGR</p> <p>Sugarbeet Network project to be integrated with IISR</p> <p>AICRP Tobacco to be integrated with CTRI</p> <p>AICRP Rodent Control and Network Project on Economic Ornithology to be merged and renamed AICRP on Vertebrate Pest Management</p> <p>AICRP White Grubs; mandate to be enlarged and renamed</p> <p>AICRP/Network on Soil Arthropods</p> <p>Strengthening of Advanced Centre for Biosystematics at IARI</p> <p>Regional Seed Production, off season Nursery and research centre for Maize at Begusarai under the Directorate of Maize Research</p> <p>Strengthening seed technological researchs including Dus testing</p> <p>Establishment of a network on transgenics in crop plants</p>
<b>Horticulture</b>	<p><b>Merged</b></p> <p>AICRP Post Harvest Technology for Horticulture crops and project on PHT of fruits and Vegetables will be merged to one project "AICRP (PHT) for Horticulture Crops".</p> <p><b>Upgraded</b></p> <p>NRC-Arid Horticulture to Central Institute for Arid Horticulture</p> <p>PD-Vegetable Research to Central Veg. Research Institute</p>

<b>Soil, Agronomy &amp; Agroforestry</b>	<p><b>Merged</b>  AICRP on Weed Control to NRC Weed Science and Cooperating Centres will continue to function as network.  AICRP on Long-Term Fertilizer and Soil Test Crop Response to AICRP on Integrated Plant Nutrient System  AICRP-BNF as a network with IISS  AICRP-Tillage requirement as a network with P.D. Cropping System Research, Modipuram  AICRP-Wells &amp; Pumps to AICRP on Water Management and cooperating centres will continue to function as network.  AICRP Agroforestry to NRC Agroforestry and its centres to continue as Network.</p>				
	<p><b>Upgraded</b>  Project Directorate Cropping System Research to Indian Institute of Sustainable Production Systems, Modipuram  Project Directorate Water Management to ICAR Research Complex for Eastern Region, Patna  AICRP Agrometeorology to P.D. Agrometeorology  ICAR Research Complex Goa and Regional Research Station Canning of CSSRI to Network on Coastal Production System.</p>				
<b>Agril. Engineering</b>	<p><b>Merged</b>  AICRP Power Tiller integrated with AICRP Farm Implements &amp; Machinery</p>				
<b>Animal Science</b>	<table border="0"> <tbody> <tr> <td data-bbox="365 972 686 1277"> <p><b>Plan Schemes</b>  <b>Upgraded</b>  The All India Coordinated Research project on Pig to Project Directorate on Pig against  AICRP on Animal Disease Monitoring &amp; Surveillance to Project Directorate on Animal Disease Monitoring</p> </td> <td data-bbox="712 972 1011 1639"> <p><b>EAP Plan Schemes</b>  <b>Phased Out</b>  ILTP Production of Sub Unit syntheticpeptide vaccine  FMD and seedpox  ILTP development of Immuno diagnostic against important diseases of animals (FMD, MD, Sheep pox) using hybridroma technique  ILTP development of drug from indigenous medicine plants against ectoparasite and bio-availability of synthetic drugs. Factors affecting in-vitro biosynthetic of immuno colchicines</p> </td> </tr> <tr> <td data-bbox="365 1277 686 1639"> <p><b>Merged</b>  Network Programme on Farm production System to Network Crop Based Animal Production System</p> </td> <td></td> </tr> </tbody> </table>	<p><b>Plan Schemes</b>  <b>Upgraded</b>  The All India Coordinated Research project on Pig to Project Directorate on Pig against  AICRP on Animal Disease Monitoring &amp; Surveillance to Project Directorate on Animal Disease Monitoring</p>	<p><b>EAP Plan Schemes</b>  <b>Phased Out</b>  ILTP Production of Sub Unit syntheticpeptide vaccine  FMD and seedpox  ILTP development of Immuno diagnostic against important diseases of animals (FMD, MD, Sheep pox) using hybridroma technique  ILTP development of drug from indigenous medicine plants against ectoparasite and bio-availability of synthetic drugs. Factors affecting in-vitro biosynthetic of immuno colchicines</p>	<p><b>Merged</b>  Network Programme on Farm production System to Network Crop Based Animal Production System</p>	
<p><b>Plan Schemes</b>  <b>Upgraded</b>  The All India Coordinated Research project on Pig to Project Directorate on Pig against  AICRP on Animal Disease Monitoring &amp; Surveillance to Project Directorate on Animal Disease Monitoring</p>	<p><b>EAP Plan Schemes</b>  <b>Phased Out</b>  ILTP Production of Sub Unit syntheticpeptide vaccine  FMD and seedpox  ILTP development of Immuno diagnostic against important diseases of animals (FMD, MD, Sheep pox) using hybridroma technique  ILTP development of drug from indigenous medicine plants against ectoparasite and bio-availability of synthetic drugs. Factors affecting in-vitro biosynthetic of immuno colchicines</p>				
<p><b>Merged</b>  Network Programme on Farm production System to Network Crop Based Animal Production System</p>					

**New Schemes in IX Plan****Plan Schemes**

<b>Crop Science</b>	National Facility for Plant Virus Research National Centre for Agriculturally important Micro Organism NRC on Millets Network on Trangenics
<b>Horticulture</b>	NRC for Litchi, Bihar (to be integrated with Research Complex for Eastern Region) NRC for Seed Spices, Rajasthan AICRP on Vegetable I—Solanaceous & Cole crops, leafy vegetables AICRP on Vegetable II—Allium. Legume Vegetable, Cucurbit, Okra
<b>Soil, Agronomy &amp; Agroforestry</b>	ICAR Research Complex for Eastern Region Regional Station of CSSRI, Karnal in Lucknow Network on the Watershed Management Network on Hill Agriculture Production System
<b>Agricultural Engineering</b>	AICRP on Engineering Measures for Efficient Land & Water Management
<b>Animal Science</b>	AICRP on Gastro-intestinal parasitism AICRP on rumen microbial dynamisms and bio-availability of micronutrients Network programme on haemorrhagic septicaemia
<b>Fisheries</b>	AICRP freshwater prawn culture at CIFA AICRP shellfish mariculture at CMFRI
<b>Agril. Education</b>	Rural awareness work experience programme National talent scholarship Pre-doctoral fellowship for overseas students from SAARC and other developing countries for Ph.D courses in India Catch up grant for SAUs and DUs Sabbatical leave
<b>Agril. Extension</b>	Establishment of 100 new KVKs Trainer's Training Centre on "Vegetable Production" & "Rural System Analysis" Expansion of Institute Village Linkage Programme (IVLP) Frontline Demonstration on various aspects of Crop Production



### Plan Schemes in operation during the IX Plan (1997-2002)

1.16 The Sector-cum-Programme-wise details of Plan Schemes, viz. Institutes, Bureaux, National Research Centres (NRCs), AICRPs etc. which remained in operation during 1998-99 are as under:

Sectors	Programmes	Plan Schemes
I. Crop Science	A. Plant Genetic Resources	1. National Bureau of Plant Genetic Resources
		2. NRC-DNA Fingerprinting
	B. Food Crops	1. Indian Agricultural Research Institute
		2. Central Rice Research Institute
		3. Vivekanand Parvataya Krishi Anusandhan Sansthan
		4. Institute of Pulses Research
		5. AICRP-Chick Pea
		6. AICRP-Pigeon Pea
		7. AICRP-Pulses (MULLARP)
		8. AICRP-Arid Legumes
		9. Directorate of Wheat Research
		10. N.R.C.-Sorghum
		11. AICRP-Sorghum
		12. Directorate of Rice Research
		13. P.D. Maize
		14. AICRP-Pearl Millets
		15. AICRP-Small Millets
		16. AICRP-Barley
	C. Forage Crops	1. Indian Grassland & Fodder Research Institute
		2. AICRP-Forage Crops
	D. Commercial Crops	1. Central Tobacco Research Institute
		2. Indian Institute of Sugarcane Research
		3. Central Institute of Cotton Research
		4. Central Research Institute for Jute & Allied Fibre
		5. Sugarcane Breeding Institute
		6. AICRP-Cotton
		7. AICRP-Jute
		8. AICRP-Tobacco
		9. AICRP-Sugarcane
		10. Network Scheme-Sugarbeet
		11. AICRP-Under-utilised & Under-exploited Plant

Sectors	Programmes	Plan Schemes
	E. Oilseeds	<ol style="list-style-type: none"> <li>1. N.R.C.-Groundnut</li> <li>2. N.R.C.-Soyabean</li> <li>3. N.R.C.-Rapeseed &amp; Mustard</li> <li>4. Directorate of Oilseed Research</li> <li>5. AICRP-Groundnut</li> <li>6. AICRP-Rapeseed &amp; Mustard</li> <li>7. AICRP-Soyabean</li> </ol>
	F. Plant Protection	<ol style="list-style-type: none"> <li>1. N.R.C.-Integrated Post Management</li> <li>2. P.D.-Biological Control</li> <li>3. AICRP-Honey Bees</li> <li>4. AICRP-(White Grub)</li> <li>5. AICRP-Agriculture, Acarology</li> <li>6. AICRP-(Rodent Control)</li> <li>7. AICRP-Pesticide Residue</li> <li>8. AICRP-Nematode</li> <li>9. Network-Economic Ornithology</li> </ol>
	G. Hybrid Seed	<ol style="list-style-type: none"> <li>1. Project on Promotion of Research &amp; Development on Hybrid Seed in Selected Crops</li> </ol>
	H. Biotechnology for Crop Improvement	<ol style="list-style-type: none"> <li>1. N.R.C.-Biotechnology Centre for Crop Science</li> </ol>
	I. Seed Technology Research & Breeder Seed Production	<ol style="list-style-type: none"> <li>1. National Seed Project</li> </ol>
	K. Externally Aided Projects	<ol style="list-style-type: none"> <li>1. Establishment of Phytotom facility at IARI(UNDP)</li> <li>2. Indo-UK collaborative project on Plant germplasm Conservation &amp; Utilisation of NBPGR</li> <li>3. Indo Israel Demonstration (IARI)</li> </ol>
II. Horticulture	A. Fruits	<ol style="list-style-type: none"> <li>1. Indian Institute of Horticultural Research (50%)</li> <li>2. Central Institute for Subtropical Horticulture</li> <li>3. N.R.C.-Citrus (90%)</li> <li>4. N.R.C.-Grapes</li> <li>5. AICRP-Tropical Fruits</li> <li>6. AICRP-Sub-tropical Fruits</li> <li>7. AICRP-Arid Fruits</li> <li>8. Central Institute of Temperate Horticulture</li> <li>9. N.R.C.-Arid Horticulture</li> <li>10. N.R.C.-Banana</li> <li>11. AICRP-Apple Scab (Terminated w.e.f. 1.4.1998)</li> </ol>

Sectors	Programmes	Plan Schemes
	B. Vegetables	1. N.R.C.-Mushroom 2. P.D.-Vegetable 3. Vegetable Seed Project 4. AICRP-Mushroom 5. N.R.C.-Onion and Garlic
	C. Potato & Tuber Crops	1. Central Potato Research Institute 2. Central Tuber Crops Research Institute 3. AICRP-Potato 4. AICRP-Tuber Crops
	D. Plantation Crops	1. Central Plantation Crops Research Institute 2. ICAR Research Complex for [Shifted to NRM-Goa(90%) Agroforestry w.e.f. 1-1-1999] 3. N.R.C.-Cashew 4. N.R.C.-Palm 5. AICRP-Palm 6. AICRP-Cashew
	F. Spices	1. Indian Instt. of Spices Res. 2. AICRP-Spices
	F. Floriculture, Medicinal & Aromatic Plants	1. N.R.C.-Orchids and Floriculture 2. N.R.C.-Medicinal & Aromatic Plants 3. AICRP-Floriculture 4. AICRP-Medicinal and Aromatic Plants 5. AICRP-Betelvine
	G. Post Harvest Technology of Horticultural Crops	1. AICRP-Post Harvest Techn. of Hort. Crops 2. Project on PHT of Fruits & Vegetables (Merged with AICRP-PHT of & Hort. Crops in 1997-98)
III. Natural Resources	A. Resource Inventory & Soil Management	1. National Bureau of Soil Survey land Use Planning 2. Central Soil & Water Conservation Research & Training Institute
	B. Nutrient Management	1. Indian Institute of Soil Science 2. AICRP-Micro Secondary Nutrients 3. AICRP-Biological Nitrogen Fixation

Sectors	Programmes	Plan Schemes
		<ul style="list-style-type: none"> <li>4. AICRP-Micro Biological Decomposition</li> <li>5. AICRP-Soil Test Crop Response</li> <li>6. AICRP-Long-term Fertilizer Experiments</li> </ul>
	C. Water Management	<ul style="list-style-type: none"> <li>1. Central Soil Salinity Research Institute</li> <li>2. Water Technology Centre for Eastern Region</li> <li>3. P.D. Water Management</li> <li>4. AICRP-Management of Salt Affected Soils &amp; Use of Saline Water</li> <li>5. AICRP-Optimisation of Groundwater Utilisation through Wells and Pumps</li> <li>6. AICRP on Management of Diaraland Improvement</li> <li>7. AICRP on Water Management [Component of PD-WM]</li> </ul>
	D. Cropping System Research	<ul style="list-style-type: none"> <li>1. Central Research Institute for Dryland Agriculture</li> <li>2. Central Arid Zone Research Institute</li> <li>3. P.D.-Cropping System Research</li> <li>4. N.R.C.-Weed Science</li> <li>5. AICRP-Weed Control</li> <li>6. AICRP-Agro-meteorology</li> <li>7. AICRP-Dryland Agriculture</li> <li>8. AICRP-Tillage Management of Indian Soils</li> </ul>
	E. Agro-Forestry	<ul style="list-style-type: none"> <li>1. N.R.C.-Agroforestry</li> <li>2. AICRP-Agroforestry</li> <li>3. Central Agricultural Research Institute [Shifted to Hort. Plantation Crops w.e.f. 1-1-1999]</li> <li>4. ICAR Research Complex for NEH Region</li> </ul>
IV. Agricultural Engineering	A. Farm Implements & Machinery	<ul style="list-style-type: none"> <li>1. Central Institute of Agricultural Engineering</li> <li>2. AICRP-Power Tiller</li> <li>3. AICRP-Farm Implements Machinery</li> <li>4. AICRP-Human Engineering and Safety Studies</li> </ul>

Sectors	Programmes	Plan Schemes
	B. Post Harvest Technology	<ol style="list-style-type: none"> <li>1. Central Institute for Post Harvest Engg. &amp; Technology</li> <li>2. Central Institute for Research on Cotton Technology</li> <li>3. Indian Lac Research Institute</li> <li>4. National Institute of Jute &amp; Allied Fibre Technology</li> <li>5. AICRP-Application of Plastics in Agriculture</li> <li>6. AICRP-Jaggery &amp; Khandasari</li> <li>7. AICRP-Harvest &amp; Post Harvest Technology</li> </ol>
	C. Energy Management in Agriculture	<ol style="list-style-type: none"> <li>1. AICRP-Renewable Energy Sources</li> <li>2. AICRP-Energy Requirement in Agricultural Sector</li> <li>3. AICRP-Utilisation of Animal Energy</li> </ol>
	D. Drainage Engineering	<ol style="list-style-type: none"> <li>1. AICRP-Agricultural Drainage</li> </ol>
	E. Externally Aided Projects	<ol style="list-style-type: none"> <li>1. RNAM Phase V</li> </ol>
V. Animal Science	A. Animal Genetic Resources	<ol style="list-style-type: none"> <li>1. National Bureau of Animal Genetic Resources National Institute of Animal Genetic (merged with NBAGR)</li> <li>2. Network-Animal Genetic Resources</li> </ol>
	B. Livestock Improvement	<ol style="list-style-type: none"> <li>1. National Dairy Research Institute (including NRC Biotechnology)</li> <li>2. Central Sheep and Wool Research Institute</li> <li>3. Central Avian Research Institute</li> <li>4. Central Institute for Research on Goats</li> <li>5. Central Institute for Research on Buffaloes</li> <li>6. National Institute of Animal Nutrition &amp; Physiology</li> <li>7. N.R.C. on Biotechnology (part of NDRI)</li> <li>8. N.R.C.-Camel</li> <li>9. N.R.C.-Yak</li> <li>10. N.R.C.-Mithun</li> <li>11. N.R.C.-Equine</li> <li>12. P.D.-Poultry</li> <li>13. P.D.-Cattle</li> </ol>

Sectors	Programmes	Plan Schemes
		14. AICRP-Sheep
		15. AICRP-Goat
		16. AICRP-Buffalo
		17. AICRP-Pig
		18. AICRP-Agricultural By-product
		19. Network-Micronutrients
		20. Network-Embryo Transfer
		21. Network-Crop Based Animal Production System
	C. Livestock Product Technology	1. N.R.C.-Meat & Meat Product Technology
		2. R&D Support for Process Upgradation of Indigenous Milk Products for Industrial Application
	D. Animal Health	1. Indian Veterinary Research Institute
		2. AICRP-Disease Monitoring & Surveillance
		3. AICRP-Blood Proteas
		4. AICRP on Foot & Mouth Disease
		5. N.R.C.-Biotechnology (Part of IVRI)
	E. Externally Aided Projects	1. Indo-UK transfer of molecular biological technologies [to be terminated w.e.f. 31.3.1999]
VI. Fisheries	A. Capture Fisheries	1. Central Marine Fisheries Research Institute
		2. Central Inland Capture Fisheries Research Institute
	B. Culture Fisheries	1. Central Institute for Freshwater Aquaculture
		2. Central Institute of Brackishwater Aquaculture
		3. N.R.C.-Cold Water Fisheries
		4. ORP on Processing and Utilisation of Organic Waste for Aquaculture
	C. Fish & Fish Processing Technology	1. Central Institute of Fisheries Technology
	D. Fish Genetic Resources	1. National Bureau of Fish Genetic Resources
	E. Fisheries Education	1. Central Institute of Fisheries Education

Sectors	Programmes	Plan Schemes
VII. Agril. Statistics & Economics		<ol style="list-style-type: none"> <li>1. Indian Agricultural Statistics Research Institute</li> <li>2. N.R.C.-Agril. Economics &amp; Policy Research</li> </ol>
	Externally Aided Projects	<ol style="list-style-type: none"> <li>1. Sustainable Rainfed Agriculture in R&amp;D [Terminated w.e.f. 31.12.1998]</li> </ol>
VIII. Agricultural Extension	A. Vocational Training with Integrated Function	<ol style="list-style-type: none"> <li>1. Integrated Krishi Vigyan Kendras</li> <li>2. NRC for Women in Agriculture</li> </ol>
IX. Agricultural Education	A. Strengthening of Agricultural Education	<ol style="list-style-type: none"> <li>1. National Academy for Agricultural Research Management</li> <li>2. Development &amp; Strengthening of State Agril. Universities</li> <li>3. Development &amp; Strengthening of Agricultural Education of Central Universities</li> <li>4. Strengthening PG Education in Deemed to be Universities</li> <li>5. Establishment of Central Agril. University for NEH Region</li> <li>6. Establishment of Centres of Advance Studies in SAUs &amp; DUs</li> <li>7. AICRP on Home Science</li> <li>8. Jammu &amp; Kashmir University [Proposed] New Initiative</li> </ol>
	B. Recognising Professional Excellence	<ol style="list-style-type: none"> <li>1. Best Teacher Award</li> </ol>
	C. Professional Resources Utilization	<ol style="list-style-type: none"> <li>1. Preparation of University Level Books</li> <li>2. Emeritus Scientist Scheme</li> <li>3. Rural Awareness Work Experience [Proposed]—New Initiative</li> </ol>
X. World Bank/Foreign Aided Projects	A. World Bank Projects	<ol style="list-style-type: none"> <li>1. Agril. Human Resource Development National Agricultural Technology Project Indo-Dutch ORP on Drainage Water Management</li> </ol>
XI. Management and Information Services	A. Bilateral Cooperation Projects	<ol style="list-style-type: none"> <li>1. Bilateral Corporation Programme with Developing &amp; Developed Countries (DARE) and Long-term Project under INDO-USSR, INDO-UK &amp; INDO-USA Programme</li> </ol>

Sectors	Programmes	Plan Schemes
	B. Publication & Information	1. Publication & Information
	C. Strengthening of the Infrastructure	1. Civil Works a. ICAR Bhawan Phase II b. Guest House for ICAR Hqrs. c. National Agricultural Science Centre & Museum d. Residential Accommodation for ICAR Staff 2. ICAR Agricultural Library 3. Strengthening of ASRB 4. Modernization of Office Space & Facilities 5. ICAR Headquarters 6. Publicity & Public Relations
	D. Support to Professional Societies/Associations Support to National Academy	
	E. Pipeline (new schemes) Projects	
	F. Celebration of Golden Jubilee Intellectual Property Rights Cell Pipeline Projects (New Schemes).	



## CHAPTER II

### DEMANDS FOR GRANTS 1999-2000 (DARE)

2.1 The Demands for Grants for Department of Agricultural Research & Education (DARE) of Ministry of Agriculture is incorporated as Demand No. 3 in the Expenditure Budget. The Demand includes besides Secretariat expenditure of the Department, contribution to international bodies, payments of grants-in-aid to the Indian Council of Agricultural Research to enable it to meet the expenditure on the various research institutes controlled by it and for its several research projects, schemes and activities. Payment of net proceeds of cess under the Agricultural Produce Cess Act, 1940, is also provided for in the Demand.

2.2 The entire demand of DARE comes under Revenue Section amounting to Rs. 1211.94 crores for the year 1999-2000. This Demand is divided into two major heads as follows:

Major Head "3451" includes outlay of Plan & Non-Plan expenditure on Secretariat of DARE under Sub-Head--Salaries, Overtime Allowance, Domestic Travel Expenses, Foreign Travel Expenses and Office Expenses.

Major Head "2415" includes outlay of Plan and Non-Plan payments to ICAR towards Agricultural Research and Education on Crop Husbandry, Soil and Water Conservation, Animal Husbandry, Dairy Development, Fisheries, Forestry and contributions to Commonwealth Agricultural Bureau (CAB), Consultative Group on International Agricultural Research (CGIAR), Asia-Pacific Association of Agricultural Research Institution (APAARI) and Network of Agricultural Centres for Asia and the Pacific (NACA), Regional Co-ordination Centre for Research & Development of CGPRT, International Seed Testing Association etc.

### Growth of Financial Outlay of DARE/ICAR

2.3 The Department of Agricultural Research and Education (DARE) started from IV Five Year Plan. Budgetary allocations (Plan Outlays) made in respect of the Department covering the period from IV Plan to IX Five Year Plan are given against column (A) in the table below.

The total Plan Outlay of the Central Govt. for all these plan periods are given against column (B).

The outlay of the DARE compared with the total Central Plan Outlay of the Government and percentage of DARE/ICAR of total are given below against column (C),

*Growth of Financial Outlay of DARE from IV Plan to IX Five Year Plan.*

	IV Plan (1969-74)	V Plan (1974-78)	VI Plan (1980-85)	VII Plan (1985-90)	VIII Plan (1992-97)	IX Plan (1997-2002)
(A) Plan Outlay for DARE/ICAR (Rs.crore)	85.00	153.56	340.00	425.00	1300.00	2635.22
(B) Total Plan Outlay of Govt. (Rs.crore)	15902.00	39322.00	97500.00	180000.00	434100.00	49222.00
(C) Per Cent DARE/ ICAR of Total Plan Outlay	0.535	0.391	0.349	0.236	0.299	0.535

2.4 Rs. 2635.22 crores include Rs.2100 crores as IX Plan Outlay + Rs.400 crores as one time catch up grant and Rs.135.22 crores as External Aid Component. The percentage of DARE/ICAR of Total Central Plan Outlay for the IXth Plan will actually be Rs.2100 crores of Rs.492221.00 crores =0.43% approx.

2.5 The growth of Financial Outlay of DARE/ICAR during Ist three years of IX Plan is as under :

*Growth of Financial Outlay of DARE during Ist three Years of IX Plan.*

	1997-98(RE)	1998-99(RE)	1999-2000(BE)
(A) Plan Outlay for DARE/ICAR (Rs.in crore)	329.56	445.00	573.50
(B) Total Plan Outlay of Central Govt (Rs.in crore)	81033.90	88481.75	103520.93
(C) Percentage of Total Plan Outlay of the Central Govt. to DARE/ICAR	0.406	0.502	0.553

#### Plan Outlay of DARE/ICAR as a Percentage of Agricultural GDP

2.6 The total allocation to the Department of Agricultural Research and Education for the year 1999-2000 is Rs.1211.94 crore. The Department was asked to furnish details of total allocations proposed and actually made/allocated this year and during last 5 years *vis-a-vis* the percentage these allocations are/were of the Agricultural GDP.

2.7 The information furnished by the Department is as under :

“The Agriculture G.D.P figures for the year 1999-2000 are not yet documented.

(Rs. in Crore)

Year	Plan		Non-Plan		Total Allocation	Agriculture GDP	As %age of DARE allocation w.r.t. Ag. GDP at Current Prices
	Amt. Proposed	Amt. Allocated	Amt. Proposed	Amt. Allocated			
1994-95	336.67	275.00	202.00	202.00	477.00	237491	0.20

1	2	3	4	5	6	7	8
1995-96	383.50	310.00	238.86	238.86	548.86	255613	0.21
1996-97	440.34	289.30	244.08	244.08	533.38	287132	0.19
1997-98	1000.0	331.17	268.10	268.10	599.27	**	
1998-99	531.17	531.17*	475.02	475.02	1006.19	**	
1999-2000	712.68	573.50	633.79	633.79	1207.29	**	

### **Allocations made for Agricultural Research and Education in Developing and Developed Countries**

2.8 The Department was asked to furnish details of allocations made for agricultural research and education *vis-a-vis* its percentage to total agricultural GDP in some of the major advanced and developing countries including India during the last five years.

2.9 The Department in their reply stated :

"On the basis of total outlay made for Agricultural Research and Education by the developing and developed countries for the recent years, for which the data are available, the percentage allocation of Agricultural Gross Domestic Product for Agricultural Research and Education are computed by the developing and developed countries as a group during the last five years and they are found to be 0.5% and 2.39% respectively. In case of India, it is around 0.46%."

2.10 While doing the Scrutiny of Demands for Grants for the year 1997-98 and 1998-99 in respect of DARE, the Committee had asked as to what percentage of Agricultural GDP the total allocations were during 1997-98 and 1998-99 respectively.

2.11 The Department had furnished the figure of 0.28% and 0.128% for the years 1997-98 and 1998-99 respectively.

2.12 The Committee had earlier in their 2nd and 10th Reports on Demands for Grants. 1996-97 and 1997-98 respectively expressed their strong views in favour of enhanced allocations to DARE/ICAR for the IXth Plan to a level of 1% of Agricultural GDP with a tendency to increase gradually to touch 2% of Agricultural GDP. Similarly, in their

8th Report on Demands for Grants 1998-99 the Committee said :

"Committed to protect the interest of the Nation at large, the Committee, once again strongly recommend for the enhancement of the Plan outlay for DARE/ICAR in the IXth Plan to the level of 1% of agricultural GDP and recommend to the Planning Commission and the Ministry of Finance to positively consider the request for enhanced allocation to the Department...".

2.13 The efforts of the Department are visible through the allocations for BE Plan 1998-99 when it was raised from Rs. 331.17 crores to Rs. 531.17 crores, which later was reduced at RE 1998-99 to Rs. 400.00 crores and again raised at Final RE 1998-99 to Rs. 445.00 crores and also through the allocation for BE 1999-2000 which is Rs. 573.50 crores.

#### **Overall Review of Plan Outlays to Agricultural Research during VIII and IX Plan (1997-98, 1998-99 and 1999-2000)**

2.14 The summarised version of Plan Outlays during VIII Plan (1992-97) and 1st three years of the IX Plan (1997-98, 1998-99 and 1999-2000) are as under :

		(Rs. in crores)
Particulars	Amount	
1	2	
1. VIII Plan Approved Outlay (1992-97)	1300.00	
2. VIII Plan Outlay provided on yearly basis (1992-97)	1324.30	
3. VIII Plan Expenditure (1992-97)	1270.86	
4. IX Plan Outlay Proposed (1997-2002)	7800.01	
5. IX Plan Outlay (1997-2002)	*2635.22	
6. 1997-98 Proposed Outlay	1000.00	
7. 1997-98 BE	331.17	
8. 1997-98 RE	329.56	

1	2
9. 1997-98 Final Allocations	329.38
10. 1997-98 Actuals	323.30
11. 1998-99 Proposed Outlay	700.00
12. 1998-99 Approved Outlay(BE)	531.17
13. 1998-99 RE	400.00
14. 1998-99 RE(final)	445.00
15. 1998-99 Anticipated Expenditure	477.00
16. 1999-2000 Proposed Outlay	712.68
17. 1999-2000 Approved Outlay	573.50

\* Rs. 2635.22 crores include IX Plan outlay (as finalised) of Rs. 2100.00 crores plus one time catch up grant of Rs. 400.00 crores plus World Bank/Externally Aided Projects of Rs. 135.22 crore (now Planning Commission has agreed to provide allocation under WB/EAPs on year to year basis).

### Demand Proposed Versus Demand Accepted

2.15 The comparative details of demand placed by the Department to the Planning Commission and demand accepted by the Planning Commission for various Sectors is as under:

(Rs. in crore)

Sector	Amount Proposed		Amount allocated	
	Plan	Non-Plan (1999-2000)	Plan	Non-Plan (1999-2000)
1	2	3	4	5
Crop Science	107.45	152.76	97.00	152.76
Horticulture	55.49	51.90	47.00	51.90
Natural	58.66	61.02	50.00	61.02
Res. Management				
Agri. Engg.	18.65	19.64	25.00	19.64

1	2	3	4	5
Animal Science	59.10	84.07	54.00	84.07
Fisheries	40.20	40.29	28.00	40.29
Agril. Stat. & Economics	4.31	9.41	4.00	9.41
Agril. Extension	50.00	—	50.00	—
Agril. Education	65.41	3.32	55.00	3.32
Management Information Services	38.50	211.38	38.50	211.38
World Bank/ Externally aided Projects	214.91	—	125.00	—
<b>Total</b>	<b>712.68</b>	<b>633.79</b>	<b>573.50</b>	<b>633.79</b>

2.16 The approved outlay for 1999-2000 of Rs. 573.50 crores includes approved allocation of Rs. 125.00 crores as BE 1999-2000 for World Bank/Externally Aided Projects (EAPs) by the Planning Commission. Thus leaving only Rs. 448.50 crores as Domestic Budgetary Support (DBS) which is still lower than the last year, i.e., 1998-99 DBS of Rs. 449.18 crores.

2.17 The Committee wanted to know from the Department whether these cuts/reductions effected/imposed by the Planning Commission are due to non-performance of Schemes/projects or under-utilisation of funds by some schemes during the previous years.

2.18 The Department in their written reply stated as under :—

"The Planning Commission did not impose any cuts on account of non-performance or under-utilisation of funds in any of the scheme/project. Instead, due to the concerted efforts of the DARE

Rs. 21.50 crores were enhanced at RE stage during 1996-97. Also, during 1998-99 the original allocation of Rs. 331.17 crores was communicated by the Planning Commission but as a result of continuing efforts it was further raised to a level of Rs. 531.17 crores".

### Objective Classification of Total Allocations for DARE/ICAR during 1998-99 and 1999-2000

#### Plan

2.19 The sectoral details of ICAR and DARE, plan programme for BE and RE for 1998-99 and BE for 1999-2000 are given below:

(Rs. in crore)

Name of Division	Budget Estimates 1998-99	Revised Estimates 1998-99	Budget Estimates 1999-2000
1	2	3	4
<b>RESEARCH</b>			
Crop Science	97.00	73.00	97.00
Horticulture	47.00	35.50	47.00
Natural Resource Management	50.00	38.00	50.00
Agricultural Engineering	25.00	19.00	25.00
Animal Science	55.00	42.00	54.00
Fisheries	28.00	21.00	28.00
Agril. Economics & Stat.	4.00	3.00	4.00
Foreign Aided Projects/ World Bank Aided Projects	81.99*	60.00*	125.00**



1	2	3	4
Agricultural Education	55.00	42.00	55.00
Agricultural Extension	50.00	38.00	50.00
Management and Information Services (including ICAR Hqrs. DIPA and ASRB)	35.50	28.00	38.00
DARE	0.50	0.50	0.50
New Scheme (Pipeline)	2.18	—	—
<b>Grand Total</b>	<b>531.17</b>	<b>400.00</b>	<b>573.50</b>

\*This is pure external aid (reimbursable).

\*\*The Planning Commission has approved the allocation of Rs. 81.99 crores as BE 1998-99, Rs. 60.00 crores as RE 1998-99 and Rs. 125.00 crore as BE 1999-2000 for EAPs.

### Non-Plan

2.20 The objective-wise break-up in respect of ICAR budget are indicated below:

(Rs. in crores)

Sub Heads	Budget Estimates 1998-99	Revised Estimates 1998-99	Budget Estimates 1999-2000
(a) Estt. Charge (including OTA and Wages*)	327.74**	463.21	554.53
(b) Grand-in-aid for implementation of pay revision	80.00	0.00	0.0
Travelling Allowance	3.21	3.81	3.99
Other Charges	26.29	46.98#	32.84
Works	3.58	7.01	4.80
Other Items	9.95	11.15	12.63
Total	450.77	532.16	608.79
A.P. Cess Fund	20.00	25.00	25.00
<b>Grand Total</b>	<b>470.77</b>	<b>557.16</b>	<b>633.79</b>

#Including Rs. 4.69 crores for Matching Grant approved by MOF.

### Overall Review of Non-plan Outlay *vis-a-vis* outlay during VIII Plan and in Ist three years of IX Plan

2.21 Details of total allocations and Non-allocations and their percentage out of the total budget from 1992-93 onwards are as under :-

(Rs. in crores)

Sl. No.	Year	Total Budgetary Allocation	Plan Allocation		Non-plan Allocation	
			Amount	%age out of total	Amount	%age out of total
1.	1992-93(BE)	375.65	200.00	53.24	175.65	46.76
2.	1993-94(BE)	430.00	250.00	58.14	180.00	41.86
3.	1994-95(BE)	477.00	275.00	57.65	202.00	42.35
4.	1995-96(BE)	548.86	310.00	56.48	238.86	43.52
5.	1996-97(BE)	533.38	289.30	54.24	244.08	45.76
6.	1997-98(BE)	599.27	331.17	55.26	268.10	44.74
7.	1997-98(RE)	683.70	329.38	48.18	354.32	51.82
8.	1998-99(BE)	1006.19	531.17	52.79	475.02	47.21
9.	1998-99(RE) (final)	1095.94	445.00	44.24	560.94	55.76
10.	1999-2000(BE)	1211.94	573.50	47.32	638.44	52.66

### Overall Review of Plan Expenditure during VIII Plan and in 1st three years of IX Plan

2.22 Details of Budget Estimates (BE)—Plan and Actual Expenditure (Plan) from 1992-93 onwards are as under :—

(Rs. in crores)

Sl. No.	Year	BE	Actual Expenditure
1.	1992-93	200.00	176.04
2.	1993-94	250.00	233.06
3.	1994-95	275.00	276.24
4.	1995-96	310.00	274.89
5.	1996-97	289.30	312.13
6.	1997-98	329.38	331.14
7.	1998-99	531.17	445.00
8.	1999-2000	573.50	

2.23 Budget Estimates (Plan) 1998-99 were Rs.531.17 crore while the Revised Estimates(Plan) were brought down to Rs.400.00 crore. Whereas Budget Estimates (Non-Plan) 1998-99 were Rs.475.02 crore while the Revised Estimates were enhanced to Rs.560.94 crore for the same period.

2.24 The Department was asked to give reasons for reducing the Plan Allocations drastically and for steep increase in Non-Plan expenditure.

2.25 In their reply the Department has stated :

- "(a). The Ministry of Finance had earlier reduced the Plan allocation of Rs.531.17 crore during 1998-99 to a level of Rs.400 crore as RE but due to concerted efforts of this Department at the level of Secretary, DARE & DG, ICAR and MOS(A) it was increased to a level of Rs.445 crore as Final RE as per communication of MoF dated 10th March, 1999. The cut was imposed by the MoF on account of resource crunch and the Department though needed enhanced money for almost all of its institutes but has to manage the activities by postponing the accomplishment of some programmes to the next year, *i.e.*, by a couple of months. Besides, the freshly approved World Bank Project of NATP would start its programme of implementation with full vigour during the next financial year but it had less utilisation of funds during 1998-99.
- (b) Out of Rs.560.94 crores, ICAR share is Rs.557.16 crores and Rs.3.78 crores pertains to DARE. So far as the steep increase under Non-Plan in RE 1998-99 is concerned it is mentioned that it is due to the implementation of Revised Pay Scales in respect of Scientific Staff and payment of arrears of revised pensions and pensionary benefits to pensioners from 1996 onwards and prior to 1996 and 1986 to the extent of Rs.156.70 crore. Rs.5.00 crores have been increased under A.P. Cess and Rs.4.69 crores is the Matching Grant. The details of

enhanced funds approved by the Ministry of Finance is given as under :—

(Rs. in crores)

Heads	B.E. 1998-99	R.E. 1998-99	Difference Excess (+)
1. Payment of net proceeds of Cess Agril. Produce Cess Act, 1940.	20.00	25.00	+ 5.00
2. Other Programmes of Crop Husbandry	289.00	430.16	+ 140.29
Total Crop Husbandry	309.87	455.16	+ 145.29
3. Soil & Water Conser.	4.90	6.00	+ 1.10
4. Animal Husbandry	29.60	40.00	+ 10.40
5. Dairy Development	15.00	19.00	+ 4.00
6. Fisheries	22.00	26.00	+ 3.70
7. Forestry	9.10	11.00	+ 1.90
8. Grant-in-aid for implementation of Pay Revision	80.00	**	- 80.00**
Total (1 to 8)	470.77	557.16	+ 86.39

\*\*Rs.80 crores provided in the B.E. 1998-99 for implementation of Pay Revision has been merged in R.E. 1998-99 under above heads.

2.26 Revised Estimates (Plan) 1998-99 were Rs.400 crore while Anticipated Expenditure 1998-99 is Rs.477 crore.

2.27 The Committee wanted to know as to how the Department could appropriate additional Rs.77.00 crore over RE 1998-99.

2.28 The Department in their reply stated :

"The BE (1998-99) allocated to the Department was Rs.531.17 crore which was reduced to Rs.400 crore by the Ministry of

Finance at RE stage. Since the Plan schemes were allocated funds as per BE, they maintained normal momentum of expenditure. The AICRP, KVKs located in SAUs etc. had also to be given revised pay scales. Thus by the time the cut was announced, the committed expenditure had gone upto Rs.477 crore due to efforts of the Department, the Ministry of Finance finally agreed to increase the Final RE to Rs.445 crore. Although the Department is finding it difficult to make adjustment of the various requirements, the expenditure is being met in the order of priority due to limited availability of funds".

2.29 Budgetary allocation for 1999-2000 under Plan component are Rs.573.50 crore and Rs.638.44 under Non-Plan component which happens to be Rs.173.50 crore more than the Plan RE 1998-99 (Rs.400 crore) and Rs.77.50 crore more than the Non-Plan(RE 1998-99) Rs.560.94 crore.

2.30 When asked as to how the Department propose to utilise an additional amount of Rs.173.50 crore (Plan) and Rs.77.50 crore (Non-Plan) over RE 1998-99 especially in view of the fact that about 61 schemes out of 190 schemes under 11 sectors did not achieve their financial targets during 1998-99, the Department replied as under :

"The final RE (Plan) of the department was decided by the Ministry of Finance as Rs.445 crore, the figure being much below the requirement of its schemes. The requirement of funds for BE 1999-2000 (Rs.573.50 crore) given by the Planning Commission is even less than our requirement. The Department is fully geared to spend even the amount Rs.712.68 crore if given by Planning Commission. The Planning Commission has been requested to increase BE 1999-2000 of the Department to Rs.712.68 crore.

Out of Rs.77.50 crores provided under BE 1999-2000, an amount of Rs.76.63 crores pertains to ICAR and 0.87 crores pertains to DARE. The details of head-wise appropriation under

RE 1998-99 and BE 1999-2000 as well as additional appropriation of Rs.76.63 crores is as under :- —

(Rs. in crores)

Sub-Head	RE 98-99	BE 99-2000	Difference
1. A.P. Cess	25.00	25.00	Nil
2. Crop Husbandry (Other Programmes)	430.16	500.60	70.44
3. Soil Conservation	6.00	6.20	0.20
4. Animal Husbandry	40.00	41.90	1.90
5. Dairy Development	19.00	20.50	1.50
6. Fisheries	26.00	28.00	2.00
7. Forestry	11.00	11.59	0.59
<b>Total</b>	<b>557.16</b>	<b>633.79</b>	<b>76.63</b>

The increase under non-plan in the BE 1999-2000 over RE 1998-99 is due to implementation of Revised Pay Scales in respect of Scientific Staff including pensionary benefits. On the basis of revised scale, the increase is actually under annual increments, instalments of two D.A. and 80% share from ICAR to the scientific staff working in all Agricultural Universities and increase in pensionary liabilities during B.E. 1999-2000 due to implementation of revised Pay-Scales both in ICAR and Universities."

2.31 Total Domestic Budgetary Support (DBS) for the year 1998-99 was Rs.449.18 crore which has been further reduced to Rs.448.50 crore for the year 1999-2000.

2.32 The Committee wanted to know as to how the Department propose to carry out all its activities with reduced DBS which happens to be in sharp contradiction to the Budget Speech of Finance Minister wherein he has stated that Agricultural Sector has been given 34% increased funding this year.

**2.33 The Department in their reply stated :**

"During 1998-99 this department was originally allocated Rs.531.17 crore out of which the EAP component was Rs.81.99 crore and DBS was for Rs.441.18 crore. The Planning Commission allocated Rs.573.50 crore during 1999-2000 out of which the EAP component is to the tune of Rs.125 crore thus leaving DBS as Rs.448.50 crore. This Department had to restrict DBS to a level of Rs.448.50 crore as it had to accommodate the requirement of World Bank Projects of NATP and AHRD etc. by earmarking just Rs.125 crore against their projected requirement of Rs.214.91 crore. The Department submitted proposals for 1999-2000 to the Planning Commission to the tune of Rs.712.68 crore but only Rs.573.50 crore have been allocated against such low funding during 1999-2000. This Department has been persuing with the Planning Commission for enhancing the allocation 1999-2000 to the proposed level of Rs.712.68 crore."

**Need for Separate indication of Capital Requirements under the Head "Capital"**

2.34 The outlay proposed for the plan activities of Annual Plan 1999-2000 in respect of DARE is Rs.712.68 crore which includes capital component of Rs.167.23 crore. Other Ministries/Departments indicate their capital requirements separately in their respective Demands in the Government of India expenditure budget document under the Head "CAPITAL".

2.35 The Committee wanted to know the reasons as to why the DARE does not separately indicate its capital requirement under "Capital" head and why capital requirements are always included under the "Revenue" part, though the provision to mention these two components separately is there.

**2.36 Clarifying these points, the Department stated as under :**

"The allocation approved for the different DARE Institutions is much below their basic requirement. Hence the tentative requirement of capital component of Rs.167.23 crore of DARE was included in the total requirement of Rs.712.68 crore for Annual Plan 1999-2000. Since only Rs.573.50 crore has been allocated against the projected requirement of Rs.712.68 crore, some of the activities will have to be taken in a phased manner

so that the sanctions are issued quickly within the approved budget. The fresh realistic requirement is being worked out in respect of each institution based on reduced outlay approved for them."

### **One Time Catch up Grant to DARE/ICAR**

2.37 After going through the Budgetary Allocations for 1999-2000, the Committee felt that the Budgetary Allocations do not reflect any allocation towards one time catch up grant of Rs.500 crore which is necessary for modernisation of National Agricultural Research System and critically required for improving the efficiency of the age-old working system. The Parliamentary Committee have already been recommending for it year after year.

2.38 The Department was asked to give the present status of the matter.

2.39 In their reply the Department stated :

"The IX Plan Working Group of DARE had recommended Rs.500 crores as the bare minimum requirement of One Time Catch up Grant for the modernisation and renovation of the old institutions coming under the National Agriculture Research System in order to improve the overall efficiency in the system. The Planning Commission had communicated an allocation of Rs.400 crores as one time Catch up Grant during IXth Plan Period alongwith Rs.2100 crores as the IXth Plan outlay in respect of DARE. The Department had requested for an amount of Rs.100 crores during 1998-99 but the Planning Commission provided no funds during this year. During the year 1999-2000 the Planning Commission has intimated an allocation of Rs.573.50 crores but for this year too no amount for one time Catch up Grant has been provided on this account. The Department has already earmarked the sector-wise and scheme-wise Catch up Grant of the IX Plan approved amount of Rs.400 crores. The Department has again requested Planning Commission to provide atleast Rs.200 crores as one time Catch up Grant during 1999-2000. An intimation in this regard is still awaited from the Planning Commission."



### **10% Allocation in Favour of Exclusive Schemes for the North-Eastern States**

2.40 As per the Government policy 10% of Central Budget will be provided to implement specific schemes/objectives in the North-Eastern States and all the Ministries/Departments are to ensure strict implementation of these programmes/schemes. The Committee wanted to know the percentage of plan allocation for schemes meant exclusively for the North-Eastern States out of the total plan budget of the Department.

2.41 The Department in their reply has stated :

"During 1999-2000 a total plan allocation of Rs.573.50 crores has been provided out of which the Department has earmarked Rs.125 crores as allocation for World Bank/Externally Aided Projects (which includes Rs.113 crores allocation for NATP alone), thus leaving Rs.448.5 crores for other plan schemes as Domestic Budgetary Support. During 1998-99 the Department had allocated about Rs.36 crores for various activities in the North-East States which included various research institutions. Central Agricultural University, Krishi Vigyan Kendras and the Development Grants to Assam Agricultural University, a number of Centres operating in North-East States (*i.e.* Centres of Institutes. All India Coordinated Research Projects etc.). For the year 1999-2000 the requirement of various centres is being assessed and have yet to be finalised; however, it may be presumed that during 1999-2000 the Plan allocation would be more than Rs.36 crores as increased priority is being accorded to the strengthening of various activities of North-East States. The percentage allocation to North-East States during 1999-2000 would be more than 8 per cent taking Domestic Budgetary Support of Rs.448.50 crores as the total available funds (*i.e.* excluding the funds earmarked for World Bank/ Externally Aided Projects). However, the Department is exploring the possibility of providing enhanced allocation to the activities of North-East States though the Department has been provided lower Domestic Budgetary Support during 1999-2000 in comparison to 1998-99."

### Sectoral Allocations According to IX Plan Working Group Recommendations

2.42 The percentage resource allocation recommended for different sectors by the working Group on Agricultural Research and Education for the IX Five Year Plan is as under :

Sector	Percent resource allocation
1. Crop Science	25
2. Horticulture	10
3. Animal Science	14
4. Fisheries	06
5. Agricultural Education	15
6. Agricultural Extension	10
7. Soils Agronomy Agril. Engineering Agril. Economics & Statistics Publication & Information Headquarters (ICAR)	20

2.43 The Department was asked to indicate whether the budgetary allocations in favour of various sectoral activities are in conformity with the proportion of allocation recommended by the Working Group for the IX Plan.

2.44 The Department in their reply stated as under :

"The Department had proposed Rs.712.68 crores for plan budget during 1999-2000 including Rs.214.91 crore for World Bank/ Externally Aided Projects, *i.e.*, Rs.497.77 crores as Domestic Budgetary Support required for other Plan Schemes; however the Planning Commission has provided only 573.50 crores out of which the Department has provided Rs.125 crores for World Bank/Externally Aided Projects (which too is far less against the requirement of Rs.214.91 crores) and thus, leaving Domestic

Budgetary Support of Rs.448.5 crores only against the requirement of Rs.497.77 crores as DBS during 1999-2000. The low funding during 1999-2000 forced the Department to allocate the sectoral funds keeping in view the various kinds of commitments such as revision of pay scales etc. and other priority areas, that is why the proportion of sector-wise allocation as recommended by the IX Plan working group could not be adhered to. As desired the tabular details are as under :

*Sector-wise Plan Outlay Recommended by IX Plan Working Group Vs. 1999-2000 Allocation*

(Rs. in crore)

Sectors	IX Plan Projection (Recommendation of Working Group)		BE 1999-2000	
	Amount	%Share of each Sector	Amount	%Share of each Sector
1. Agril. Education	1170	15	55	9.59
2. Agril. Extention	780	10	50	8.72
3. Fisheries	468	6	28	4.88
4. Animal Science	1092	14	54	9.42
5. Horticulture	780	10	47	8.19
6. Crop Science	1950	25	97	16.91
7. Natural Resource Management Agril. Engg. Agril. Eco. & Stat. ICAR Hqrs. including P&I, etc.	1560	20	50 25 4 38.5	8.72 4.36 0.7 6.71
8. World Bank & Externally Aided Projects	*	*	125	21.80
<b>Total</b>	<b>7800</b>	<b>100</b>	<b>573.50</b>	<b>100</b>

\*IX Plan projections for World Bank and Externally Aided Projects are included in respective sectors."

## **Funds Generation**

2.45 Under the present scenario of financial constraints and resource crunch, money generation from all the available sources prudently becomes very much essential. Keeping this in view, the Department was asked to give details of various tools/sources available with them to generate income and whether all these tools/sources have been exploited at the optimum level to generate income.

2.46 To these points, the Department stated as under :

"The various sources apart from Govt. grant with the deptt.(ICAR) to generate the money are (1) Revenue Receipts (2) Interest earned on short term deposits of the idle funds (3) recovery of loans and advances. The revenue targets and actual realisation are revised at the level of Secretary, DARE. All the constituent Units of the Council try their level best to generate money, keeping in view the very fact that 70% of the money generated by them are pooled back for their expenditure at the time of RE. The remaining 30% is allocated to the very needy institutes."

2.47 The Committee further asked about the Matching Grant and the way it has been calculated in favour of the Department and since when the Department has been receiving it.

2.48 The Department in their reply stated :

"The matching grant scheme was introduced by the Government of India to match every commercial rupee earned by the ICAR which is to be utilised for modernization of Laboratories and Institutes. It is calculated w.r.t. the year 1995-96 as the base year and the computation of "commercial rupee" will be with reference to the gross commercial earning from all sources. For example deptt. earned Rs.15 crore during 1995-96 and during 1996-97 earns Rs.16.00 crores then they will get Rs.1 crore as matching grant. The Matching Grant is being provided from the financial year 1997-98 (RE)."

2.49 On a point of Matching Grant received and details of its utilisation, the Deptt. clarified :

"The ICAR has received the Matching Grant during the financial year 1997-98 at RE stage Rs.12.49 crores (including Rs.5.00 crores advance to be adjusted in 1998-99 RE) and Rs.4.69 crores has

1	2	3	4	5	6
NRC Soyabean	100.00	46.00	49.54	122.00	70.00
NRC R&M	125.00	92.00	92.00	338.00	230.00
P.D. Oilseed Research	310.00	570.05	570.05	531.00	584.00

From the above it can be seen that once compared with RE 1997-98 there are no underutilization of funds in any of the scheme. Moreover additional funds of Rs. 3.54 lakhs were allotted to NRC Soyabean over and above of their RE. In the year 1997-98 additional amount of Rs. 260.05 lakhs were allotted to PD Oilseed Research for payment of accumulated pay arrears to AICRP staff. Similarly in RE 1998-99 the approved outlay of PD Oilseeds has been increased from Rs. 531.00 lakhs to Rs. 584.00 lakhs (it contains the increase component of the AICRP from Rs. 280 lakhs to Rs. 400 lakhs on account of increase in working contingency of the scientist from 20,000 to 40,000 and some accumulated pay arrears of the AICRP staff). The allocation for 1999-2000 Rs. 550 lakhs and not Rs. 250 lakhs as indicated in the para."

## CROP SCIENCE

### (E) Hybrid Seed

2.100 In the opinion of the Committee, if seeds be the life-line of agriculture, the hybrid seeds must be the life-line of second Green Revolution. And a project like "Project on Promotion of Research and Development on Hybrid Seed in Selected Crops" sounds like the most happening thing in agricultural R&D. This Project was having an

independent identity and outlays given below till sometime in 1998-99 :

(Rs. in lakhs)

Scheme	IX Plan Proposed Outlay 1997-2002	IX Plan App. Outlay 1997-2002	1997-98		Shortfall/ Excess	1998-99 Approved Outlay	1998-99 Anticipated Expenditure
			App. Outlay	Actual Exp.			
Project on R&D on Hybrid Seeds in selected crops	6000.00	256.67	230	228.67	1.33	28	To be merged with NATP

2.101 The Committee was keen to know the when and what necessitated the merger of Project on R&D on Hybrid Seed in Selected Crops with NATP.

2.102 The Department stated as under :

"The research gains and hybrid development carried out under the project, 'Promotion of Research and Development of Hybrids in selected Crops led to building up a base in terms of research products as well as the capabilities including infrastructure development which necessitated extending the fruits of research results in a mission mode manner. Owing to this felt need, the project was revamped. The number of centres was reduced to 63 only considering the potential for performance of each centre and new research paradigms in each crop for pointed emphasis so that expected research results in future are brought to a reality. The revamped project was renamed as 'Development of Hybrid-Crops' and releasing the background of this project it was brought under retroactive financing from Oct. 1, 1997 as an NATP Mission Mode programme. The redundant centres of the earlier prestigious project of Crop Division of ICAR. It seeks to further strengthen research only in critical gaps identified in hybrid research in each proposed crop. The pointed emphasis in each crop is as follows : development and used of hybrid rice technology, early maturing single cross hybrid for kharif (rainy

season) and single cross hybrids for rabi (winter season) in maize, rabi sorghum hybrids, pearl millet hybrids with early maturity drought tolerance and downy mildew resistance; male sterility based short duration cotton hybrids with resistance to important pests and disease sunflower hybrids with increased oil content and resistance to downy mildew, hybrids in castor, with resistance to wilt complex and development of male-sterility based hybrids in rapeseed-mustard and pigeonpea. The revamped project i.e. Development of Hybrids-Crops has been cleared/ approved by the PMC of the NATP with an outlay of Rs. 1850.25 lakhs for five years from April 1, 1999. Moreover it has been agreed that the project will be funded from October 1, 1997 to March 31, 1999 under the retroactive financing as an NATP Mission Mode programme."

## HORTICULTURE

2.103 BE 1998-99 for Horticulture and Natural Resource Management sectors in Performance Budget 1999-2000 and in Financial Statements of Scrutiny of Demands for Grants 1999-2000 are as under :

(Rs. in crore)

Sector	BE 1998-99 Performance Budget (1999-2000) Page 36	BE 1998-99 Scrutiny of Demands for Grants (1999-2000) Chapter V (FS)
Horticulture	47.00	47.30
Natural Resource Management	50.00	49.70

2.104 The Committee asked the Department to clarify the position with regard to difference in figures as shown above.

2.105 The Department clarified as under :

"Keeping in view the administrative and research requirement this Department with the approval of competent authority

interchanged the following institutions as mentioned below :—

- (a) Central Agricultural Research Institute, Port Blair transferred from Natural Resource Management Division to Horticulture Division.
- (b) ICAR Research Complex, Goa transferred from Horticulture Division to Natural Resource Management Division.

As this kind of interchanging of the above mentioned institutions from one sector to another sector took place just recently that is why the document of Scrutiny of Demands for Grants 1999-2000 was prepared accordingly and this change could not be reflected in the Performance Budget 1999-2000 as it was prepared well before the document of Scrutiny of Demands for Grants 1999-2000. The fact that B.E. 1998-99 of CARI, Port Blair being Rs. 130 lakh and ICAR Research Complex Rs.100 lakhs their interchange from one division to another caused the variations in the allocations of respective division."

## HORTICULTURE

2.106 The BE, RE, Anticipated Expenditure (1998-99) and BE 1999-2000 for the Horticulture Sector are as under :

(Rs. in crore)					
Sector	BE 98-99	RE 98-99	Anticipated Exp.	Excess	BE 1999-2000
Horticulture	47.30	35.50	51.23	4.23	47.00

2.107 The Committee enquired about the reasons for reducing RE to Rs. 35.50 crore from BE of Rs. 47.30 crore for 1998-99.

2.108 The Department in their reply stated as under :

"The allocation under RE (1998-99) has been reduced to Rs. 35.50 crores from BE (1998-99) of Rs. 47.00 crores due to the over all cut imposed by the Ministry of Finance under Plan Budget."

2.109 The Committee further wanted to know as to why even 10 to 12% of inflationary cost per annum has not been added in BE 1998-99 to arrive at BE 1999-2000.



2.110 To this point, the Department replied :

"While preparing the requirements for 1999-2000 10 to 12% of inflationary cost per annum were taken into consideration. However the provision of Rs. 53.47 crores proposed for 1999-2000 which is less as against Rs. 56.35 crores (*viz* 51.23 plus 10% inflationary cost i.e. 5.12 crores) due to the following reasons.

A substantial provision of the Budget amounting to Rs. 464.00 lakhs was made for completion of ongoing major civil works at PDVR, Varanasi, CISH, Lucknow and NRC for Arid Horticulture, Bikaner during current financial year 1998-99. In addition to this an amount of Rs. 450.00 lakhs was also made for payment of past arrears of Pay & Allowances of VIII Plan to different Centres of AICRPs during current financial year 1998-99."

2.111 Under Horticulture Sector following schemes have been found to have an under-utilisation of funds during 1998-99 :

Scheme	(Rs. in lakhs)		
	1998-99		
	Approved Outlay	Anticipated Expenditure	Shortfall
1. AICRP Arid Fruits	75.00	65.00	10.00
2. Central Institute of Temperate Horticulture	133.00	89.15	43.85
3. AICRP Apple Scab	30.00	20.00	10.00
4. AICRP Vegetable Research	200.00	140.00	60.00
5. NRC-Cashew	122.00	76.73	45.27
6. NRC-Medicinal & Aromatic Plants	127.00	79.44	47.56
7. AICRP-PHT of Hort. Crops	65.00	53.00	12.00

2.112 The Committee asked the Department to state the reasons for under-utilisation of funds by each of the above mentioned schemes.



- |  |  |
|--|--|
| 6. NRC-Medicinal & Aromatic Plants             | Due to non filling up of scientific and other categories of posts and also non execution of construction work. |
| 7. AICRP-Post Harvest Tech. Horticulture Crops | Due to non receipt of demand for payment of past arrears under Pay and allowances from the concerned Centres." |

2.114 The Committee noted that AICRP-Apple Scab has been terminated during 1998-99. The Committee asked the Department to state the reasons for its termination.

2.115 The Department in their reply stated :

"The AICRP on Apple Scab has been continued as a Project during VII Plan (1985—90) The Project had been recasted as a Network Project in the VIII Plan (1992—97). Under AICRP on Apple Scab, the programme was focussed to develop an efficient monitoring system weather based forewarning against the appearance of the disease, evaluating and recommending a spray schedule by cycling the chemicals, possible side effects of the fungicide on the resurgence of other diseases was taken up in greater detail. Resistance to the disease which could be exploited by the varietal improvement programme was done in the plastic houses proposed under VIII Plan. After completing this work, the Network Project was further continued in the 1st year of IX Plan (1997-98) for carrying out the spill over items particularly in the area of biological control and other innovative. Improved/ modified horticultural practices to minimise the use of fungicides. The Network project has finally been terminated on 1.4.98 after completing the objectives."

2.116 The Committee further wanted to know about the significant breakthroughs achieved so far under AICRP-Post Harvest Technology of Horticultural Crops (PHTHC) and the contribution of the Department being made to popularise the technology developed by them.

2.117 To these points, the Department replied as under :

"The Post Harvest management research in fruits and vegetables have resulted in generation of valuable information of maturity standards, grading, pretreatments, packaging, transportation and loss assessment of fruits and vegetables. Post Harvest treatments to control storage diseases, processing of fruits and vegetables are certain other areas where research has been pursued. The low cost environment friendly cool chamber commonly called Zero energy cool chamber developed on the principle of evaporative cooling has been found to be very useful for on farm storage of fruits and vegetables. The Pre-cooling of mango to 12-15°C with 500 ppm Bavistin increased the shelf life considerably. Development of package line for Nagpur Mandarin ventilated CFB Box packaging for mango, citrus and apple, long distance road transportation practices for banana and sea transportation of mango fruit kernel as cocoa substitute essential oil from citrus, papain from raw papaya fruits improved dehydrated products from grapes, pomegranate mango and apricot have gone commercial.

The technology developed has been made available to the extension Agencies of the Department State Agricultural Universities for further dissemination to farmers. Fruit canning centres small home scale processing units, storage and packing agencies."

2.118 When asked whether the allocations made to the AICRP-PHTHC is enough to meet the goal of R&D to generate technologies so that the annual loss of about 37% of fruits and vegetables produced in India worth over Rs. 3000 crore can be saved. The Department replied in affirmation.

## Fruits and Vegetables

2.119 The Committee found that Under Fruits and Vegetables following schemes have an over utilisation of funds during 1998-99 :

(Rs. in lakhs)

Scheme	1998-99		Excess
	Approved Outlay	Anticipated Expenditure	
NRC-Citrus	127.00	227.00	100.00
NRC-Grapes	168.00	325.72	157.42
AICRP-Tropical Fruits	130.00	272.00	142.00
AICRP-Sub-tropical fruits	90.00	150.00	60.00
NRC-Arid Horticulture	152.00	182.80	30.80

2.120 The Committee asked the Department to state the source of additional funds to these schemes.

2.121 The Department replied :

"The final allocation of R.E. 98-99 in respect of the schemes under reference is as per details given below :

(Rs. in lakhs)

Scheme	1998-99		
	Approved outlay	Anticipated Expenditure	Final R.E. 98-99
1. NRC-Citrus	127.00	227.00	130.00
2. NRC-Grapes	168.00	325.72	160.00
3. AICRP-Tropical Fruits	130.00	272.00	271.07
4. AICRP-Sub-tropical fruits	90.00	150.00	148.68
5. NRC-Arid Horticulture	152.00	182.80	125.00

From the above facts of Final R.E. 1998-99 in comparison to its B.E it is relevant to note here that the allocations in respect of Sl. Nos. 1, 2 and 5 have almost been equal or less than the B.E. As regard Sl. Nos. 3 and 4 is concerned it was mainly due to steep rise in pay & allowances due to revision of pay scales. As the payment of revised salary and its arrears is committed liability so this Department has to manage the funds in order to priority and liabilities. The funds have been provided to above schemes within the overall sanctioned allocation of the Horticulture Division."

### NATURAL RESOURCE MANAGEMENT (NRM)

2.122 The Committee found that under NRM following schemes have under-utilisation/over utilisation of funds during 1997-98 and 1998-99:—

(Rs. in lakhs)

Scheme	Shortfall/Excess (1997-98)	BE 1998-99	1998-99 Anticipated Exp.	Shortfall/ Excess 1998-99
National Bureau of Soil Survey & Land Use Planning (NBSS&LUP)	27.99 (Excess)	202.00	375.00	173.00 (Excess)
Indian Institute of Soil Sciences (IISS)	111.19 (Shortfall)	200.00	143.00	57.00 (Shortfall)
Central Soil Salinity Research Institute (CSSRI)	22.87 (Excess)	190.00	132.00	58.00 (Shortfall)
Water Technology Centre for Eastern Region (WTCER)	103.85 (Shortfall)	210.00	150.00	60.00 (Shortfall)
PD-Cropping System Research (PD-CSR)	—	268.00	180.00	88.00 (Shortfall)

2.123 The Committee asked the Department to give reasons for under-utilisation/ over-utilisation of funds by each of the scheme shown above.

## 2.124 The Department in their reply stated :—

“As far as the following five institutes of Natural Resource Management Division are concerned the details of BE/RE for the year 1998-99 (as per ICAR Budget Book (1998-99) are as under:—

S.N.	Name of the Institute	1997-98		(Rs. in lakhs)	
		BE	RE	Exp.	Excess/ Shortfall
1.	NBSS&LUP, Nagpur	130	158	164.5	(+)34.50
2.	IISS, Bhopal	280	153	153.00	(-)127.00
3.	CSSRI, Karnal	80	103	113.00	(+)33.00
4.	WTCER, Bhubaneswar	187	115	83.50	(-)103.50
5.	PDCSR, Modipuram	150	199	196.90	(+)46.90

Because of delay in approval of IX Five Year Plan EFC memo., the proposed expenditure on works could not be taken up as per schedule and thus, there was shortfall of expenditure in case of IISS, Bhopal and WTC, Bhubaneswar.

In case of NBSS&LUP, Nagpur and CSSRI, Karnal the excess expenditure was on account of purchase of VIII Plan approved equipments and petty works taken at both the institutes.

In case of PDCSR, Modipuram works expenditure (+54.24) was excess as Office-cum-lab. new building was under construction. However, in case of procurement of new equipments expenditure was less (-10.08) because of non-clearance of IX Plan EFC memo. Thus major part of excess expenditure was on works which being committed expenditure.”

## AGRICULTURAL ENGINEERING

2.125 Under this sector following schemes have been found to have under-utilisation of funds during 1997-98 and 1998-99 :—

(Rs. in lakh)

Scheme	1997-98			1998-99		
	BE	Actual Expenditure	Shortfall	BE	Anticipated Expenditure	Short-fall
1. Central Institute of Agricultural Engineering (CIAE)	235.00	237.02	2.02 (Excess)	345.00	298.50	46.50
2. AICRP Human Engineering and Safety Studies (AICRP-HESS)	34.00	16.97	17.03	70.00	60.00	10.00
3. Central Institute for Post Harvest Engg. & Technology (CIPHET)	200.00	158.88	41.12	340.00	210.50	129.50

2.126 The Committee wanted to know the reasons for under-utilisation of funds by the schemes as shown above.

2.127 The Department in their reply stated :—

“The reasons for under-utilisation of funds in respect of two Institutes, and one AICRP are as under:—

- (i) Under BE 1998-99, the CIAE, Bhopal was allocated Rs. 345 lakhs under the Plan. This allocation was made out of a total allocation of Rs. 25 crores to the Agricultural Engineering Subject Matter Division. At a later date, the allocation to the Engineering Division was reduced from Rs. 25 crores to Rs. 23 crores and accordingly the budget of the CIAE, Bhopal had to be reduced to Rs. 298.5 lakhs. The allocation to the Agricultural Engineering Subject Matter Division has further been reduced to Rs. 20 crores under RE 1998-99 due to overall reduction of the ICAR budget by Planning Commission. Accordingly, the Revised Estimate of CIAE, Bhopal for 1998-99 has further been reduced to Rs. 218.50 lakhs. These reductions have been made under works items and purchase of equipment.



- (ii) AICRP on Human Engineering & Safety in Agriculture (HESA) is a new scheme, which was sanctioned during 1996-97 and became operational only during the later part of 1997-98. This scheme is having four cooperating centres and a coordinating cell. A Cooperating Centre and the Coordinating Cell are located at CIAE, Bhopal, for which 13 positions were sanctioned but none of them were created and the Institute was asked to run this scheme by deployment. Since, CIAE, Bhopal, does not have extra manpower to deploy for this activity and the Scientist required for this work need to be trained in ergonomics, which is a specialised field, only 2-3 persons could be deployed for this activity as an additional work to their already assigned work. At other centres also the appointment of staff to the scheme was quite late and hence, the budget utilisation of the scheme was low.
- (iii) During 1998-99, Rs. 70 lakhs were allocated for this scheme under BE which was reduced to Rs. 60 lakhs due to reduction of the allocation to the Subject Matter Division from Rs. 25 crores to Rs. 23 crores. Considering the requirement of this newly started project the allocation for this project under RE 1998-99 has been again restored to BE level *i.e.* Rs. 70 lakhs.
- (iv) The CIPHET, Ludhiana was allocated Rs. 200 lakhs under BE 1997-98. Although, this Institute is about 9 years old but majority of the scientific, technical and administrative positions and even of regular Director are still lying vacant, due to which the expenditure on P&A has been low. The Institute is in the process of constructing functional building and setting of laboratories. Since, progress of the construction of building is time taking, release of funds could not be made earlier. Similarly, since the senior scientists and HOD's are not in position yet; requests has been made to ASRB to recruit on priority. The purchase of equipment and setting up of laboratories will pick up after scientific positions are filled.
- (v) During 1998-99, fund allocation to this Institute under BE was made as Rs. 340 lakhs. The Senior Scientific positions of the Institute are still vacant and construction of building is still in progress. The budget provision of this Institute was reduced to Rs. 210.5 lakhs when the allocation of funds for SMD was reduced from Rs. 25 to 23 crores. It has further been reduced to Rs. 155.5 lakhs during RE stage due to reduction of the allocation of the SMD to Rs. 20 crores."

2.128 The Committee noted that there is an annual national loss of 13 to 15% of the foodgrains produced in the country owing to inadequate post harvest technology available in the country. The Committee felt concerned over the issue and enquired as to how the Department propose to save this annual national loss with under-utilisation of funds upto 38% by CIPHET .

2.129 The Department in their reply stated :—

“Research work on assessment and development of technology for reducing losses in foodgrains and other commodities is being done under AICRP on Post-harvest Technology, Central Institute of Post-harvest Engineering and Technology (CIPHET), Ludhiana, *ad hoc* schemes and in the Department of Agricultural Engineering of State Agricultural Universities and information on suitable technologies are passed on to the extension agencies for adoption by the farmer and end users. Technologies for minimising on-farm post-harvest losses are already developed. Extension agencies need to execute them.

All efforts are being made to fill up the scientific positions of CIPHET, Ludhiana and establish laboratories, so that the research programme are given real thrust, which will help in developing appropriate technologies to reduce losses and add value to the products for better returns and increasing shelf life of the products.”

#### ANIMAL SCIENCE (AS)

2.130 Under this sector, BE, RE and Anticipated expenditure for 1998-99 alongwith BE 1999-2000 are as under :—

(Rs. in crore)

Sector	BE 1998-99	RE 1998-99	Ant. Exp.	BE 1999-2000
Animal Science	55.00	42.00	55.00	54.00

2.131 The Committee asked the Department to explain as to why the BE 1999-2000 has been reduced by Rs.one crore in comparison with BE 1998-99 as well as Anticipated Expenditure for the same year and the details of schemes/Projects likely to suffer owing to this lower budgetary allocation during 1999-2000 were also asked.

2.132 To these points, the Department replied :—

- (a) Plan BE 1998-99 in respect of Animal Science Division was fixed as Rs. 55.00 crores with the presumption that the new starts as well as strengthening of the ongoing Plan Schemes will be undertaken during the year. However, due to overall reduction in the Plan allocation to the ICAR under Plan RE 1998-99, the allocation under Plan RE 1998-99 for Animal Science Division was fixed as Rs. 42.00 crores. Accordingly, the new research programmes were prioritised for the year 199-2000 for which the allocation of BE has been kept as Rs. 54.00 crores against the RE of Rs. 42.00 crores in 1998-99. The EFC/PIC Memo. of only two Plan Schemes have been cleared during 1998-99 and it is presumed that the new starts/strengthening of ongoing Projects would be accommodated in Rs. 54.00 crores allocated to the Animal Science Division as a part of overall allocation of the Council. However, if requirement exceeds Rs. 54.00 crores, the RE 1999-2000 would accordingly be revised keeping in view the overall financial allocation to the ICAR at that time.
- (b) None of the Plan Schemes/Projects will be affected owing to this budgetary allocation proposed for Plan BE 1999-2000.

2.133 Under Animal Science the following schemes are found with Over-Utilisation/Under-Utilisation of funds in 1998-99 :

(Rs. in lakh)

Schemes	1998-99		Shortfall	Excess
	Approved Outlay	Anticipated Expenditure		
1	2	3	4	5
1. Network-Animal Genetic Resources (NAGR)	100.00	Nil	100.00 (100%)	—
2. National Dairy Research Institute (NDRI)	580.00	896.00	—	316

1	2	3	4	5
3. Central Sheep and Wool Research Institute (CSWRI)	265.00	130.00	135.00	—
4. Central Institute of Research on Goats (CIRG)	233.00	118.00	115.00	—
5. National Institute of Animal Nutrition and Physiology (NIANP)	480.00	351.00	129.00	—
6. NRC-Mithun	155.00	285.30	—	130.30
7. NRC-Poultry Research	170.00	385.00	—	215.00 (about 125%)
8. AICRP-Pig	250.00	175.00	75.00	—
9. Network-Embryo Transfer	140.00	98.00	42.00	—
10. Indian Veterinary Research Institute (IVRI)	513.00	738.00	—	225.00

2.134 On the under-utilisation of funds of schemes at No.1,3,4,5,8 and 9, the Department stated :

“The details of the allocations and anticipated expenditure in respect of following schemes are given below:

S.No.	Schemes	Approved outlay	Anticipated Expenditure	Final RE 1998-99	Anticipated expenditure during the c.f.y.
1	2	3	4	5	6
1.	Network-Animal Genetic Resources (N-AGR)	100.00	Nil	90.00	90.00

1	2	3	4	5	6
2.	National Dairy Research Institute (NDRI)	580.00	896.00	309.00	309.00
*3.	Central Sheep & Wool Research Institute (CSWRI)	265.00	130.00	190.00	190.00
*4.	Central Institute of Research on Goats (CIRG)	233.00	118.00	210.00	210.00
*5.	National Institute of Animal Nutrition & Physiology (NIANP)	480.00	351.00	398.00	398.00
6.	NRC-Mithun	155.00	285.00	75.00	75.00
7.	PD-Poultry Research	170.00	385.00	140.00	140.00
*8.	AICRP-Pig	250.00	175.00	100.00	100.00
*9.	Network-Embryo Transfer	140.00	98.00	75.00	75.00
10.	Indian Veterinary Research Institute (IVRI)	513.00	738.00	500.00	500.00

\*In view of details given in column 5 and 6, it may be seen that there is no under utilization of funds in respect of schemes mentioned at S.No. 1, 3, 4, 5, 8, and 9 because allocation finalized on 15.3.99, which is reflected in column no. 5, was based on the final allocation made by the Council to the Animal Science Division for the year 1998-99."

## FISHERIES

2.135 The Committee noted that Under Fisheries Sector in the following Schemes there have been over-utilisation/under-utilisation of funds during 1998-99 :

(Rs. in lakh)

Scheme	1998-99			
	Approved Outlay	Anticipated Expenditure	Shortfall	Excess
1. Central Marine Fisheries Research Institute (CMFRI)	500.00	590.00	—	90.00
2. Central Institute for Freshwater Aquaculture (CIFA)	212.00	243.00	—	31.00
3. Central Institute of Brackishwater Aquaculture (CIBA)	354.00	312.00	42.00	—
4. Central Institute of Fisheries Technology (CIFT)	539.00	503.00	36.00	—
5. Central Institute of Fisheries Education (CIFE)	500.00	814.00	—	314.00

2.136 The Committee asked the Department to elucidate the reasons for over-utilisation and under-utilisation by the schemes as shown above.

2.137 In their reply, the Department stated :

*“(i) Over Utilisation of Funds*

The Plan BE for 1998-99 in respect of the Central Marine Fisheries Research Institute (CMFRI) though was fixed at Rs. 500 lakh but due to overall cut in the plan allocation for the ICCAR as a whole, the revised allocation for the current financial year for CMFRI has been fixed at Rs. 425 lakh. Thus, the expenditure by CMFRI will be limited to Rs. 425 lakh under plan during the current financial year.

The Plan BE for 1998-99 in respect of the Central Institute of Freshwater Aquaculture (CIFA) though was fixed at Rs. 212 lakhs but due to overall cut in the Plan allocation for the ICAR as a whole, the revised allocation for the current

financial year for CIFA has been fixed at Rs. 210 lakhs. Thus, the expenditure by CIFA will be limited to Rs. 210 lakhs under Plan during the current financial year.

The Plan BE for 1998-99 in respect of the Central Institute of Fisheries Education (CIFE) though was fixed at Rs. 500 lakhs but due to overall cut in the Plan allocation for the ICAR as a whole, the revised allocation for the current financial year for CIFE has been fixed at Rs. 415 lakhs. Thus, the expenditure by CIFE will be limited to Rs. 415 lakhs under Plan during the current financial year.

*(ii) Under Utilisation of Funds*

**CIBA** : The Plan BE for 1998-99 in respect of the Central Institute of Brackishwater Aquaculture (CIBA) though was fixed at Rs. 354 lakhs but due to overall cut in the Plan allocation for the ICAR as a whole, the revised allocation for the current financial year for CIBA has been fixed at Rs. 190 lakhs. Thus, the expenditure by CIBA will be limited to Rs. 190 lakhs under Plan during the current financial year. The reason for reduction in the overall allocation to CIBA are:

- (i) Of the overall budget for CIBA, major component was earmarked for works. There has been a delay on the part of CPWD to initiate the construction activities and hence there has been a saving under the head "Works". Therefore, the Plan allocation of CIBA for current financial year was reduced.

However, CIBA would be in a position to utilise the 100% of the revised allocation during the current financial year.

**CIFT** : The Plan BE for 1998-99 in respect of the Central Institute of Fisheries Technology (CIFT) though was fixed at Rs. 539 lakhs but due to overall cut in the Plan allocation for the ICAR as a whole, the revised allocation for the current financial year for CIFT has been fixed at Rs. 215 lakhs. Thus, the expenditure by CIFT will be limited to Rs. 215 lakhs under Plan during the current financial year. The reasons for the drastic reduction in the revised allocation are:

- (i) Of the total Plan allocation, an amount of Rs. 250 lakh was earmarked for payment of an instalment towards import of a research vessel. Due to delay in pre-procurement formalities, the activity could not be initiated during the current financial year and hence, the overall allocation for CIFT was reduced.

However, the Institute would be in a position to utilise the 100% of the revised allocation during the current financial year."

## AGRICULTURAL EXTENSION

2.138 Under Agricultural Extension sector following schemes have been observed :

(Rs. in lakhs)

Scheme	IX plan App. Outlay 1997-2002	1998-99 Approved Outlay	1998-99 Anticipated Exp.	Shortfall	Proposed BE 1999-2000
1. Integrated Krishi Vigyan Kendras (KVK)	20000.00	4898.00	4598.00	300.00	4745.00
2. Institution Village Linkage Programme (IVLP)	500.00	NIL	NIL	N/A	150.00

2.139. The Committee asked the Department to give reasons for under-utilisation of funds upto Rs.300.00 lakh under Integrated KVK scheme:-

2.140 In their reply the Department stated :

"The approved outlay for 1998-99 was Rs. 48.98 crore of which Rs. 47.22 crore were allocated in view of overall reduction in allocation to the Council, which has been incurred as expenditure."

2.141 The Committee enquired about the reasons for not making any allocations under IVLP during 1997-98 and 1998-99 although Rs.500.00 lakh have been earmarked as approved outlay under the scheme for IX Plan.

2.142 The Department in their reply stated :

"During the period of 1997-98 and 1998-99, an amount of Rs. 336.50 lakh have been released out of AP cess funds, the project from 1999-2000 will be implemented with funds provided under NATP".



2.143. The Committee in their Eighth Report on Demands for Grants (1998-99) Recommendation Sl.No.(Para No.3.61) had strongly recommended that all the partially functional and non-functional KVKs (27% of the total KVKs) should be made fully functional within an year on priority basis by expediting the pending recruitment of technical staff and by efficient management of organisational problems. Since the Action Taken Reply of the Government in this regard happens to be interim in nature, the Department was asked to state the latest position in this regard and to explain as to how it can achieve the desired goals with under-utilisation of funds to the tune of Rs.300 lakhs under Integrated KVK.

2.144. The Department stated :

" The budget for the Division of Agricultural Extension has been increased to Rs.43.86 crore during 1997-98 against the earlier budget of Rs.40.78 crore during 1996-97. During 1998-99 the budget of the Extension Division has further been enhanced to Rs.47.22 crore. This has helped in taking up the development of critical infrastructure for the KVKs."

2.145 During the Study Visit of the Committee to Rewari in Haryana, the Committee were given to understand that several posts in the KVKs in general have been abolished and the services of a large number of technical and scientific personnel have been terminated dislocating the work of the KVKs.

2.146 The Department has explained as under :

"In consultation with the Planning Commission and with the approval of Hon'ble Minister for Agriculture, considering the essential requirement of staff for taking up the activities of the Krishi Vigyan Kendra(KVK) the staff strength of the KVKs was revised to 16 the details of which are indicated below. It was also indicated in the Council's Order No. (1)/96-AE.1 dated 2.9.97 that the revised staff strength of 16 will be applicable for the KVKs when the existing staff are adjusted /redeployed within the overall institutes system or they are transferred or promoted or retired. Till such time, the hosts institute make adjustment through redeployment or promotion or retirement the existing staff shall continue to work in the KVK.

*Details of staff strength at KVK*

Post	Pay Scale (pre-revised)	No.
1. Training Organiser	Rs. 2700-5700	One
2. Training Associate in selected six disciplines which are most relevant for the district	Rs. 2200-4000	Six
3. Farm Manager, Computer Programmer & Training Assistant in one most important thrust area of the District	Rs. 1640-2900	Three
4. Office Supdt.-cum-Accountant	Rs. 1640-2900	One
5. Jr. Steno-cum-Computer Operator	Rs. 1200-2040	One
6. Driver-cum-Mechanic	Rs. 950-1500	Two
7. Supporting Staff	Rs. 750-940	Two
<b>Total</b>		<b>Sixteen"</b>

**AGRICULTURAL EDUCATION**

2.147 Under Agricultural Education sector following schemes have been observed for under utilisation/over utilisation of funds during 1998-99:—

(Rs. in lakhs)

Scheme	1998-99		Shortfall	Excess
	Approved Outlay	Anticipated Exp.		
1	2	3	4	5
Develop. & Strengthening of SAUs (DSSAU)	2710.00	383.00	2327.00	—
Develop. & Strengthening of Central Universities (DSAECU)	100.00	25.00	75.00 (75%)	—

1	2	3	4	5
Strengthening PG Education in DUs (SPGEDU)	210.00	31.50	168.50 (84% approx.)	—
AICRP-Home Sci.	210.00	2.00	208.00 (99% approx.)	—
CAU	1400.00	1517.00	—	117.00
Emeritus Scientists Scheme (ESS)	60.00	166.00	—	106.00

2.148 The Committee asked the Department to give reasons for terrible under-utilisation of funds by schemes shown above.

2.149 The Department in their reply stated :—

“The correct approved outlay and actual expenditure during 1998-99 is as under:

Name of Plan Scheme	1998-99		Shortfall
	Approved Outlay	Actual Expenditure	
Develop. & Strengthening of SAUs(DSSAU)	2685	2685	Nil
Develop & Strengthening of Agricultural Education of Central Universities (DSAEEU)	75	72.90	Allocation reduced to make minor Adjustment of total allocation and expenditure incurred.
Strengthening PG Education in Deemed Universities (SPGEDU)	160	200	+40. Increase was necessitated because of support for construction and renovation of student hostel.
AICRP-Home Science	210	220	+10
Central Agricultural University for NEH Region	1200	1200	Nil
Professional Resources Utilisation Emeritus Scientists Scheme (ESS)	10	4	-6.00. This because the scheme has been kept in abeyance and hence expenditure could not be incurred.”

**MANAGEMENT AND INFORMATION SERVICES (MIS)**

2.150 Under MIS following are the budgetary figures:

(Rs. in lakhs)

Sector	BE 98-99	98-99 Ant. Exp.	Shortfall
MIS	3818.00	2850.00	968.00

2.151 The Committee enquired about the reasons for shortfall, physical targets set and achievements made under MIS during 1998-99.

2.152 In their reply, the Department stated :—

“(a) Under MIS, the budgetary figures for the Annual Plan (1998-99) were as under:

- (i) BE Rs. 38.18 crore
- (ii) Anticipated Expenditure Rs. 28.50 crore
- (iii) Final RE Rs. 24.00 crore

Since funds allocated to DARE has been substantially reduced from Rs. 531.17 crore to Rs. 445 crore, there was no alternative but to impose cut on outlay of different plan schemes at final RE stage. The reduction of funds at final RE stage was done keeping in view the priority and liabilities of the DARE. The funds for MIS programme including civil works was reduced to only Rs. 24.00 crore at final RE against the anticipated expenditure of Rs. 28.50 crore, hence, there has been no under utilisation under MIS programme and the different activities of the programme are being taken up as targetted.

(b) Wherever the physical targets were set for the Annual Plan (1998-99) under MIS, they have been duly achieved.”

**WORLD BANK/EXTERNALLY AIDED PROJECTS**

2.153 Research grants under National Agricultural Technology Project (NATP) will be managed by Project Management Committee

(PMC) assisted by Research Programme Committee (RPC) and the Scientific Advisory Panel (SAP).

(Rs. in lakhs)

Scheme	BE 98-99	98-99 Ant. Exp.	Shortfall
NATP	6875.00	5200.00	1675.00

2.154 During 1998-99 the following grants have been given :—

Components	No. of Grants	Amount in Lakhs
O&M	133	1514.15
Research Technology	78	195.51
Dissemination	20	336.50
		2046.16

2.155 The Committee asked the Department to state the status of fresh recruitments of scientists and staff along with the reasons for under-utilisation of funds upto Rs. 1675.00 lakh under NATP during 1998-99.

2.156 The Department replied as under :—

“A total of 82 posts (under ICAR component) were agreed to by the Department of Expenditure for deployment under NATP. This covered 64 posts by redeployment from within existing resources and 18 new posts by fresh creation. Out of 18 new posts, posting of staff against one post each of Under Secretary, Finance and Accounts Officer, PS to National Director and Junior Accounts Officer has been made. Recruitment Process for the remaining 14 posts is presently under process.

BE and RE for NATP

The shortfall in the anticipated expenditure in relation to the budget allotment for 1998-99 was primarily due to late approval of the total project by the Govt. of India. The approval of the CCEA to the project for the period of five years was received

on 12th November, 1998 after about seven and a half months from the commencement of the financial year. Consequently, no major activity could be approved and the funds released till November, 1998. Whatever activities were approved and funds released against each in 1998-99 have been initiated after November, 1998 within three and half months left in the current financial year after the date of approval. As a result of this delay, implementation of quite a number of programmes particularly in the research component, had to be rescheduled.

Since, the delay and the consequent impact of it on the date of implementation of individual activities was due to late approval, the situation cannot be improved any further in the current financial year. Efforts will, however, be made to make up the lost time in the next financial year."

## CHAPTER III

### OBSERVATIONS/RECOMMENDATIONS

#### Recommendation No. 1

##### *Inadequate Ninth Plan Allocations*

3.1 The Committee note that the Department of Agricultural Research & Education has been provided an allocation of Rs. 2100.00 crores out of a proposed outlay of Rs. 7800.01 crores for the IXth Plan which is only 26.92%. Under the National Agenda the country has to achieve the very difficult goal of doubling the foodgrains production in the next 10 years in order to meet the challenge of ever-increasing food requirements of the burgeoning population of the Nation.

3.2 In the Committee's opinion, the required real breakthrough for increasing the agricultural production and productivity over and above the population growth rate can only be achieved by actual research work and by the quickest possible dissemination of relevant information to the people engaged in agriculture and allied activities. For achieving all this, the Plan outlay for DARE/ICAR should be directly proportionate to the proposed targets set for achievements in Agriculture. Keeping this in view, the Committee feel that the IXth Plan outlay of Rs. 2100.00 crores is too small to undertake the gigantic task of doubling the foodgrains production in the next ten years.

3.3 The Committee, therefore, reiterate their earlier recommendation for enhancement of the Plan outlay for DARE/ICAR to the level of at least 1% of agricultural GDP for the IXth Plan. The Committee desire that the Department should keep approaching the Planning Commission & the Finance Ministry always apprising them of the level of utilisation and impressing upon them the need for enhanced outlays so that necessary funds are released to meet the goals of the Department.

## Recommendation No. 2

### *Need to Restore the Supremacy of Parliament in Financial Matters*

3.4 The Committee note that there is a growing tendency on the part of the Executive to cut down altogether all the allocations for the Plan schemes and also to reduce allocations drastically to the Plan schemes at the revised estimates stage, although the Parliament has made available these funds to all those schemes in exercise of the constitutional powers granted to them in the Constitution of India for sanctioning expenditure and its appropriation. The Committee have come across several instances where the entire allocations for various new plan schemes of the Ninth Plan have been reduced to zero at the revised estimates stage by the Planning Commission and the Ministry of Finance and these schemes have become chronic non-starters, although we are in the third year of the Ninth Five Year Plan. The fact of these reductions come to the notice of the Parliament only through the Detailed Demands for Grants laid before the Parliament at the fag end of a financial year, a stage at which the Parliament has to helplessly acquiesce itself into a state of acceptance of this matter; as no restoration of the originally sanctioned amounts at this stage can help due to the sheer lapse of time of almost eleven months of a financial year already during which these should have been utilised. The Committee feel that such reductions by the Planning Commission, which is only an adjunct of the main Executive without any constitutional sanction for its existence, amounts to exercise of powers, that can only be exercised by the passing of several Cut Motions for which the Parliament alone is empowered under the existing constitutional scheme of things. The Committee are aware that the expenditure budget is only an 'Estimate' and as such it has an inherent flexibility in it for 'reasonable' reductions or increases due to various factors. But such variations can be done only by the Parliament and by no other body under the existing provisions of the Constitution. The Committee feel that, ideally, once the Parliament passes a budget estimate for a purpose, sincere attempts should be made by the Executive to spend the funds for that purpose and procedural formalities to be adopted for issuing administrative sanctions for those schemes should not be abused to stall the very implementation of the schemes. But the Committee find that the present system of accord of approval consisting of the various stages of sanctions by Expenditure Finance Committee, Standing Finance Committee,



**Cabinet Committee on Economic Affairs etc. has only led to strangulating delays in the process of implementation of schemes which have the seal of approval of popular will for them from the Parliament. The Committee cannot accept a position whereby the unending rigmaroles of procedural drills prescribed by the bureaucracy for accord of mere administrative approvals are sought to be used to put a spoke on the wheels of progress that should turn on the path delineated by the Parliament. The Committee are of the strong view that such practices are a negation of the basic principles of Parliamentary democracy whereby extra-constitutional bodies, procedural devices and practices seek to undermine the supremacy of the Parliament over the Executive. They, therefore, recommend that the whole procedure prescribed for according post-budget approval for plan schemes should be thoroughly overhauled in the light of the observations of the Committee made above so that the supremacy of the Parliament is re-established and the will of the people prevails. It must be remembered that every estimate in a budget raises a hope in the minds of the people for their legitimate development and, therefore, any disadvantageous variation in it would only lead to misleading the public, particularly the poorer sections of the society and as such would amount to committing a fraud on those innocent people.**

### **Recommendation No. 3**

#### *Inadequate Allocations for the Year 1999-2000 to DARE/ICAR*

**3.5 The Committee observe that the Department of Agricultural Research & Education has proposed an outlay of Rs. 712.68 crores for 1999-2000 (Plan) and has been allocated only Rs. 573.50 crores which includes an external component of Rs. 125.00 crores, thereby placing the Domestic Budgetary Support at the level of Rs. 448.50 crores. In the year 1998-99, the Department had proposed an outlay of Rs. 700.00 crores. But the Planning Commission due to General Elections and change of Government in the country had frozen the Plan Outlay of DARE to the level of 1997-98, i.e. Rs. 331.17 crore which was later raised by the Planning Commission due to the persistent efforts of the Department for getting higher allocations in their favour. But the approved outlay of Rs. 531.17 crore was drastically reduced to Rs. 400.00 crore for 1998-99 at the RE stage due to resource crunch. But again due to concerted efforts of the Department it was raised to the level of Rs. 445.00 crore as Final RE,**

although the Department had committed liabilities to the tune of Rs. 477.00 crores and could have achieved all its financial targets, if Rs. 531.17 crores would have been given as originally proposed.

3.6 The Committee do not approve of the manner in which the Planning Commission and the Ministry of Finance have been imposing drastic financial cuts arbitrarily on the Department in the name of resource crunch. It is ironical on the part of Government and its allied agencies to hopefully look upon DARE/ICAR to work wonders and double the foodgrains production within the next 10 years by achieving major breakthroughs in research and also to usher in the second Green Revolution in the country and when it comes to the question of providing funds for the Department no consideration is shown for any Special Action Plan and the scientific community is pushed to suffer the humiliation of always coming with a begging bowl crying for more funds for carrying out their agricultural research and development activities entrusted upon them by the Government itself. The Committee strongly condemn this attitude of the Planning Commission and the Ministry of Finance and further recommend that they should consider favourably the request of the Department and enhance the allocation for the year 1999-2000 to at least Rs. 712.68 crores.

#### Recommendation No. 4

##### *100% Central Funding of the Programmes Meant for the North East*

3.7 The Committee have been informed that the Department had allocated Rs. 36.00 crores for various activities in the North-Eastern States which included various research institutions, Central Agricultural University, Krishi Vigyan Kendras and Development Grants to Assam Agricultural University, a number of Centres operating in North-East States, All India Coordinated Research Projects etc. This amount is 8% of the Domestic Budgetary Support of Rs. 448.50 crores out of the total available funds.

3.8 The Committee would once again like to bring to the notice of the Department the contents of a para of Hon'ble Finance Minister's Budget speech 1998-99 wherein he had mentioned about the creation of a non-lapsable Central Reserve Pool for deposit of funds from all Ministries where the plan expenditure on the North-Eastern Region is less than 10% of the total Plan allocation of the

Ministry. The difference between 10% of the Plan allocation and the actual expenditure incurred on the North-Eastern Region will be transferred to the Central Resource Pool which will be used for funding specific programmes for economic upliftment of the North-Eastern States.

3.9 The Committee recommend that the Department should make 10% allocation of the total Plan outlay for the year 1999-2000 for the North-Eastern States. Further, all schemes that are planned for these States should be 100% funded by the Union Government.

#### Recommendation No. 5

##### *One Time Catch up Grant*

3.10 The Committee have been recommending the release of a one -time catch-up grant of Rs. 500 crores during IXth Plan so that the process of technology development in agricultural research could be made globally competitive and relevant. In pursuance of the recommendation the Planning Commission had communicated an allocation of only Rs. 400.00 crores for the entire Ninth Plan. The Department had requested for an allocation of Rs. 100.00 crores in 1998-99 and has asked for Rs. 200.00 crores in 1999-2000 for modernising the age-old National Agricultural Research System. But the Planning Commission has not allocated even a single paise till date for this purpose.

3.11 The Committee wish to point out that two years of the Ninth Plan are already over and even in the third year of the Plan, nothing has been done to revitalise the institutions. The Committee, therefore, recommend that substantially high allocations should be made at the Revised Estimate stage in 1999-2000 and also in the next two years of the IXth Plan so that the entire committed funds of Rs. 400.00 crores are made available to the Department in a planned manner. The Committee further feel that the allocation of Rs. 400.00 crores will not be sufficient to meet the desired goal of the ICAR and, therefore, as per the estimation of the Working Group allocation of Rs. 500.00 crores should be made as originally recommended by the Committee.

### Recommendation No. 6

#### *Sectoral Allocations for the Year 1999-2000*

3.12 The Committee have been informed that the entire Plan outlay has been distributed among 8 sectors of activity and each sector has to be allotted a percentage share of the Plan outlay ideally on the basis of the proportion recommended by the Working Group. The Agricultural Education should get 15% while the Agricultural Extension should get 10%. It envisages a share of 6% for the Fisheries, and a 14% share for Animal Science. Horticulture should get 10% while Crop Science has a major share of 25%. The Natural Resource Management, the Agricultural Engineering, the Agricultural Economics and Statistics sectors alongwith ICAR Headquarters put together are to get 20% share. The working group had not taken into account any provision for External Aided Projects (EAP) while suggesting this apportionment.

3.13 But the Committee observe that the percentage share to these sectors for the year 1999-2000 is 9.59%, 8.72%, 4.88%, 9.42%, 8.19%, 16.91%, 20.49% respectively and 21.80% share of Plan allocations have gone to EAPs although no such provision has been recommended by the Working Group.

3.14 The Committee recommend that all efforts should be made to apportion funds as per the recommendation of the Working Group so that all the sectors get their optimal and ideal requirement of funds to carry out the mandate assigned to them properly.

### Recommendation No. 7

#### *Agricultural Scientists Recruitment Board (ASRB)*

3.15 The Committee have been informed that the Agricultural Scientists Recruitment Board (ASRB) comprises of a whole time Chairman and two other members who are appointed by the President, ICAR with the approval of Government of India. The Board presently has only the acting Chairman and no Member is in position.

3.16 The Committee have been informed that quite a big number of senior and junior scientific posts are lying vacant in various institutes of ICAR, eg. Central Institute of Temperate Horticulture, NRC-Medicinal and Aromatic Plants, Central Institute of Agricultural

**Engineering Bhopal, Central Institute of Post Harvest Engineering and Technology, Ludhiana, National Bureau of Plant Genetic Resources (NBPGR), NATP etc. because of which the institutes are neither doing justice to Research nor are the funds being utilized.**

**3.17 The Committee recommend that the vacant posts in the ASRB should be filled up on an urgent basis so that the recruitment process is set in motion at the desired pace which would in turn facilitate conduct of research work.**

#### **Recommendation No. 8**

##### *Pending Disciplinary/Vigilance Cases in the Department*

**3.18 The Committee have recommended last year for taking immediate action to get sanction for the proposal for a separate vigilance cell headed by a Director (Vigilance). The Committee have also recommended the speedy finalisation of pending disciplinary cases within a reasonable time frame.**

**3.19 The Committee have been informed that the proposal for strengthening of vigilance cell of ICAR with a full time Director (Vigilance) has been formulated in the 9th Plan and action to create additional posts for vigilance cell would be taken after approval of the proposal.**

**3.20 The Committee are not satisfied with the progress in the matter of appointment of the Director (Vigilance) and the creation of a separate Vigilance Cell. The Committee recommend that the Department should pursue the matter with the authorities concerned and get the proposal sanctioned within three months of presentation of this Report.**

#### **Recommendation No. 9**

##### *Crop Sciences*

**3.21 The Committee observe that the working group had suggested an allocation of 25% of total DBS for the Plan outlay to Crop Sciences. The percentage share given in the year 1999-2000 for this sector is only 16.91% whereas a target has been set in the National Agenda to double the production of foodgrains in the next ten years.**

3.22 The Committee strongly recommend that each sector should be given its due share of allocation, so that justice appears to have been done. The Committee further recommend that higher allocation should be given to this sector at the RE stage.

#### Recommendation No. 10

*Crop Science : Plant Genetic Resources*

3.23 In the changing global scenario towards Patent laws, there is an urgent need to protect the Rights of the plant Breeders and Farmers also the right of the Nation in particular over the biological resources in general. The following two pieces of Legislation in this regard should be taken into consideration urgently :—

- (i) Plant Variety and Farmers' Right Protection Act.
- (ii) National Biological Diversity Act.

3.24 The Committee recommend that in order to protect the rights of the farmers the above pieces of legislation should be given utmost priority and got enacted in the current Budget Session itself.

#### Recommendation No. 11

*Plant Genetic Resources : NRC DNA Fingerprinting*

3.25 The Committee note that DNA fingerprinting, a technique now routinely used in solving forensic cases in humans, is a powerful method to distinguish a particular variety from all other varieties. Developing the DNA fingerprints of the released varieties and valuable genetic stocks has become important due to the changed international scenario which has led to the debates on the ownership of the varieties. This method is potentially useful in the protection of rights of the breeders and farmers' who are the rightful owners of the material and, in turn, protecting the precious national wealth against its unauthorised use.

3.26 The Committee desire that there should be no shortfall in utilisation of Plan funds earmarked for the NRC on DNA Fingerprinting and there should be no diversion of funds using the allocations saved on this account to meet items of Non-Plan expenditure, as has been brought to the notice of the Committee. The Committee recommend that it should be ensured that the required letter of credit is opened for the procurement of necessary equipments without any further delay during this financial year positively.

**Recommendation No. 12***Adoption of Seed Village Concept by KVKs and Agricultural Research Institutions and Agricultural Universities*

3.27 The Committee feel that ICAR institutions should not stop only with the production of foundation seeds and they should further go ahead to exploit this technology for the mutual benefit of the farmers and the Institutions. The Committee find that there is a lot of scope for generation of internal resources by the KVKs, Agricultural Research Institutions and Agricultural Universities, if they take over a few plots of land in some selected villages nearby wherein they can grow location specific varieties of important crops for sale as certified seeds. This component can be a part of the extension activities of these institutions. In the backdrop of supply of spurious seeds by unscrupulous private seed dealers, this step will go a long way in helping the farmers in the vicinity of the institutions to get certified seeds with guaranteed germination and also to learn the processing of raising seeds for their own consumption and for sale to others apart from having demonstration value. The seeds thus made available will be certainly loss costly, as there is no overhead expenditure on transport also. The Committee, therefore recommend that ICAR should consider taking up this activity on a large scale as it helps generating resources for the institutions while helping the farmers simultaneously to get quality seeds at cheaper rates and in the process technology dissemination takes place.

**Recommendation No. 13***Agricultural Engineering*

3.28 The Committee observe that All India Co-ordinated Research Project on Human Engineering & Safety in Agriculture (AICRP-HESS) was sanctioned in 1997-98 and has a coordinating cell at the Central Institute for Agricultural Engineering (CIAE) at Bhopal. The allocation for this project was under-utilized because of shortage of scientific personnel. The Committee, therefore, recommend that urgent steps should be taken to recruit the technical personnel immediately. Although the Central Institute for Post Harvest Engineering & Technology (CIPHET), Ludhiana is about 9 years old, majority of Scientific & Technical positions and even the post of Director are still vacant. The Institute is in the process of constructing functional buildings and is still setting up laboratories. The Committee recommend that immediate steps should be taken by the Institute to get the construction work completed at the earliest so that laboratories and research facilities are provided within a targeted framework. Necessary action should be taken to get all the technical and scientific personnel in position.

### Recommendation No. 14

#### *Agricultural Extension : Scientists in a KVK*

3.29 The Committee has been informed in February 1999 by the Chaudhary Charan Singh Haryana Agriculture University in a written reply that a KVK consisted of one Chief Scientist with 9 Training Associates, 6 Technical Assistants and six other staff (Total 22). Later the staff strength was reduced to one Chief Scientist/ Training Organiser, 6 Training Associates, 3 Technical Assistants and 6 other staff, taking the total down to 16 according to the recommendations of the high powered Committee of ICAR.

3.30 However, in reply to a question on reduction of staff the ICAR has informed the Committee that through Councils Order No 1(i)/96-AE.1 dated 2.9.97 the revised staff strength of 16 (1 Chief Scientist/TO, 6 TAJs, 3 TAs, & 6 other staff) will be applicable for the KVKs when the existing staff are adjusted/redeployed within the overall institutes system or they are transferred or promoted or retired. Till such time, the host institute will make adjustment through redeployment or promotion or retirement and the existing staff shall continue to work in the KVK.

3.31 The Committee fail to understand the logic behind reducing the number of scientists at a KVK. As it is more than 50% of the KVK are not fully functional and do not have the required deployment of scientists. Even where they are functional, vacancies exist because of non-availability of agricultural scientists. The Committee feel that by reducing the number of scientists in a number of disciplines the functioning of the KVK is further crippled. The Committee recommend that the ICAR should reconsider this matter and revive the strength of the KVK back to the original position. It is further pointed out here that this measure has adversely affected the persons appointed in the NGO-run KVKs, as a number of persons have been suddenly rendered surplus and have become jobless. Therefore, the matter should also be considered from the humanitarian angle in respect of those KVKs.

### Recommendation No. 15

#### *Fully Functional KVKs*

3.32 The Committee during their visit to CCS(HAU) in Feb, 1999 were informed that the KVKs under their University have been sanctioned many years ago. These KVKs still do not have buildings, trainees' hostel, staff quarters, administration units, conference hall, farm stores and laboratory equipments.

3.33 The Committee have in their earlier Reports also recommended that KVKs should be made fully functional as practically the percentage of fully functional KVKs out of the total sanctioned KVKs is extremely low. The Committee are aware that KVKs particularly in Bihar are only vast tracts of barren land which are not even fit for grazing purposes.



3.34 KVKs are important in process of extension of agricultural knowhow and the overall development of agriculture depends much on their performance. The Committee are, therefore, very concerned over the alarming situation that prevails now. Therefore, the Committee recommend that all out efforts should be made to make all the existing KVKs fully functional within a definite time-frame.

**Recommendation No. 16**

*World Bank/Foreign Aided Project (NATP)*

3.35 The Committee note that under NATP, a total of 82 posts (under ICAR component) were agreed to by the Department of Expenditure (DoE) with a break up of 64 posts by redeployment from within existing resources and 18 new posts will be created afresh. Out of these 18 new posts, 4 posts have been filled up and recruitment process for the remaining 14 posts is on. The Committee further note that there is under-utilisation of funds to the tune of Rs.1675.00 lakhs out of Rs.6875.00 lakhs earmarked for 1998-99. The shortfall was primarily due to late approval of the total project by the Government of India. The approval of CCEA for the project was received only on 12th November, 1998, after a lapse of about seven months after the commencement of the financial year. Consequently, the implementation of quite a number of programmes particularly in the research component, had to be rescheduled.

3.36 The Committee are pained to observe that a lot of complicated procedural and administrative formalities come in the way of giving timely clearance/approvals choking the pace of agricultural research and development in the country.

3.37 The Committee feel that a time for introspection about the observation of these time-consuming procedural formalities has come, as these procedures have acted only as stumbling blocks instead of being enabling tools to get a work done in a systematic manner in conformity with financial discipline. The Committee, therefore, recommend that the matter of procedural reforms should receive top priority and a Committee of experts should be immediately assigned the task of suggesting a way out of the age-old meaningless bureaucratic rigmaroles.

NEW DELHI;

April 7, 1999

Chaitra 17, 1921

KINJARAPU YERRANNAIDU,

Chairman,

Standing Committee on Agriculture.

**AUTHENTICATED**

(Signature)

## APPENDIX

### MINUTES OF THE TWENTYNINTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON WEDNESDAY THE 7TH APRIL 1999 FROM 1100 HRS TO 1350 HRS IN COMMITTEE ROOM 'D' PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1100 hrs. to 1350 hrs.

#### PRESENT

Shri Kinjarapu Yerrannaidu — *Chairman*

#### MEMBERS

##### *Lok Sabha*

2. Shri Ramchandra Binda
3. Dr. Ramkrishna Kusmaria
4. Shri Baliram Kashyap
5. Shri M. Master Mathan
6. Shri Virendra Verma
7. Shri Ramkrishna Baba Patil
8. Shri Maganti Venkateswara Rao
9. Shri Uttamrao Deorao Patil
10. Kum. Vimla Verma
11. Shri Chitubhai Devjibhai Gamit
12. Smt. Usha Meena
13. Shri Mahaboob Zahedi
14. Shri Mitrasen Yadav
15. Shri Anup Lal Yadav
16. Shri Chada Suresh Reddy

##### *Rajya Sabha*

17. Maulana Habibur Rahman Nomani
18. Shri Ramji Lal

19. Shri Devi Prasad Singh
20. Shri Ramnarayan Goswami
21. Shri Aimaddudin Ahmad Khan
22. Dr. Ramnendra Kumar Yadav (Ravi)
23. Shri Sangh Priya Gautam

SECRETARY

- |                        |   |                           |
|------------------------|---|---------------------------|
| 1. Shri Joginder Singh | — | <i>Joint Secretary</i>    |
| 2. Shri S. Bal Shekar  | — | <i>Deputy Secretary</i>   |
| 3. Smt. Anita Jain     | — | <i>Under Secretary</i>    |
| 4. Shri K.L. Arora     | — | <i>Assistant Director</i> |

At the Outset, Chairman (AC) welcomed the Members. Thereafter, the Committee took up for consideration the draft reports on Demands for Grants (1999-2000) of the following Ministries/Departments one by one for consideration :

- (i) Ministry of Food Processing Industries 22nd Report.
- (ii) Ministry of Agriculture,  
(Department of Agricultural Research and Education) 19th Report.
- (iii) Ministry of Agriculture  
(Department of Agriculture and Cooperation) 18th Report.

2. The Committee considered the draft reports and adopted the 22nd, 19th and 18th Reports with minor additions and modifications.

3. The Committee, then authorised the Chairman to Present the above mentioned three reports on Demands for Grants (1999-2000) to the House on a date and time convenient to him.

*The Committee then adjourned to meet again on  
8th April, 1999 at 1100 hrs.*

## DETAILS OF VIGILANCE CASES INITIATED DURING 1998-99

(vide Para No. 2.66 of Chapter II of this Report)

S.N.	Name of Officer	Charge	Present status
1	2	3	4
1(a)	Dr. M.S. Rama Mohan Rao, OIC Bellary Centre, CSWCR & TI.	Financial irregularity	Charge-sheet issued
(b)	Sh. M.L. Raina, Sr. Administrative Officer (Retd.), CSWCR&TI.	-do-	-do-
2(a)	Dr. L.N. Sharma, Principal Scientist, IVRI, Izzatnagar.	Irregularity in purchase of foreign journals	Charge-sheet issued
(b)	Sh. J.N. Sharma, T-6, IVRI.	-do-	-do-
(c)	Sh. A.K. Saxena, Sr. Library Assistant, IVRI.	-do-	-do-
(d)	Sh. R.S. Tewari, Superintendent, IVRI.	-do-	-do-
3.	Dr. M.L. Punj, Principal Scientist, CIRG, Makhdoom.	Financial administrative irregularity	Charge-sheet is being issued
4.	Dr. D.S. Chawla, Officer-in-Charge, Nabha Campus of CIRB, Hisar.	Financial administrative irregularity	Charge-sheet is being issued
5.	Dr. T.S. Nair, Sr. Scientist, IVRI, Mukteshwar.	Opening a joint account with a private contractor with whom he had official dealings	Charge-sheet is being issued.

S.N.	Name of Officer	Charge	Present status
6. (a)	Sh. M.R. Vadhwa, CAO.	Irregularity in regularisation of Daily Paid labourers at IARI New Delhi	Charge-sheet under process
(b)	Sh. Sanjay Gupta, SAO.	-do-	-do-

#### Detail of Disciplinary Cases Initiated During 1998-99

1.	Dr. Sarveshwar Dayal, Scientist, NRCM, Solan.	Mis-conduct and Abusive behaviour with senior officers	Charge-sheet issued
2.	Dr. (Mrs.) Yash Gupta, Scientist(SS), NRCM, Solan.	Dis-obedience of the orders of the Competent Authority	Charge-sheet issued
3.	Dr. P.C. Reddy, Sr. Scientist, DRR, Hyderabad.	Un-authorized absence	Charge-sheet issued
4.	Dr. Sudhish Mishra, Scientist, IVRI, Izzatnagar.	Un-authorized absence	Charge-sheet issued
5.	Shri Lokesh Kapoor, LDC, ICAR Headquarters.	Un-authorized absence	Charge-sheet issued. I.O./P.O. appointed
6.	Dr. P. Basuchaudhary, Sr. Scientist(PP), ICAR, Research Complex for NEH Region.	Un-authorized absence	Charge-sheet issued
7.	Shri Balbir Singh-II, Peon, ICAR Headquarters.	Un-authorized absence	Charge-sheet issued
8.	Ms. Seema Burman, T-4, Sr. Publicity Assistant, ICAR Headquarters.	Un-authorized absence	Charge-sheet issued
9.	Shri Purushotam, UDC, ICAR Headquarters.	Un-authorized absence.	Penalty imposed.

## DEPARTMENT OF AGRICULTURAL RESEARCH AND EDUCATION

## SECTORAL SUMMARY OF PLAN OUTLAY/EXPENDITURE FOR THE YEAR 1999-2000

NAME OF THE PROGRAMME	EX PLAN OUTLAY 1997-2002	ANNUAL PLAN 1997-98			ANNUAL PLAN 1998-99			(Rs in Crore) ANNUAL PLAN 1999-2000			REMARKS
		OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY PROPOSED	OUTLAY APPROVED				
1	2	3	4	5	6	7	8	9			
1. CROP SCIENCE	535.00	67.05	71.51	97.00	94.17	107.45	97.00				
2. HORTICULTURE	213.06	29.85	31.30	47.30	51.23	55.49	47.00				
3. NATURAL RESOURCE MANAGEMENT	208.94	35.09	36.18	49.70	51.42	58.66	50.00				
4. AGRICULTURAL ENGINEERING	95.00	13.94	14.44	25.00	23.00	18.65	25.00				
5. ANIMAL SCIENCE	275.00	33.32	32.22	55.00	55.00	59.10	54.00				
6. FISHERIES	125.00	19.00	16.28	28.00	31.70	40.20	28.00				
7. AGRICULTURAL ECONOMICS & STATISTICS	16.50	1.50	1.98	4.00	3.01	4.31	4.00				
8. AGRICULTURAL EXTENSION	212.00	48.00	44.51	50.00	47.00	50.00	50.00				
9. AGRICULTURAL EDUCATION	290.00	30.30	36.45	55.00	27.04	65.41	55.00				
10. MANAGEMENT AND INFORMATION SERVICES	139.50	24.95	11.79	36.18	28.50	38.50	38.50				
TOTAL (DOMESTIC BUDGETARY SUPPORT)	2100.00	295.00	296.66	449.18	412.07	497.77	448.50				
11. ONE TIME CATCH UP GRANT	400.00										
12. WORLD BANK/EXTERNALLY AIDED PROJECTS	135.22	36.17	26.64	81.99	64.93	214.91	125.00				
GRAND TOTAL (DBS + WB/EAP)	2635.22	331.17	323.30	531.17	477.00	712.68	573.50				

© The Planning Commission has agreed to provide allocation under World Bank and Externally Aided Projects on year to year basis

## ANNEXURE III

## DEPARTMENT OF AGRICULTURAL RESEARCH AND EDUCATION

## SCHEME-WISE BREAK UP OF PLAN OUTLAY/EXPENDITURE FOR THE YEAR 1999-2000

NAME OF THE SCHEME	ANNUAL PLAN 1997-98		ANNUAL PLAN 1998-99		ANNUAL PLAN 1999-2000		REMARKS
	IN PLAN OUTLAY 1997-2000	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY PROPOSED	OUTLAY APPROVED	
	2	3	4	5	6	7	8
<b>I. CROP SCIENCE</b>							
<b>A. PLANT GENETIC RESOURCES</b>							
1. National Bureau of Plant Genetic Resources	1700.00	165.00	230.07	606.50	615.00	650.00	600.00
2. NRC - DNA Fingerprinting	710.00	250.00	220.13	220.00	220.00	200.00	150.00
TOTAL (A)	2410.00	415.00	450.20	826.50	835.00	850.00	750.00
<b>B. FOOD CROPS</b>							
1. Indian Agricultural Research Institute	4650.00	800.00	1056.37	1047.00	1100.00	1300.00	950.00
2. Central Rice Research Institute	1475.00	170.00	170.53	344.50	375.00	400.00	335.00
3. Vivekanand Parvatsaiya Krishi Anusandhan Shala	900.00	115.00	113.25	183.10	190.00	190.00	200.00
4. Indian Institute of Pulses Research	1600.00	150.00	164.37	306.50	300.00	300.00	350.00
5. AICRP - Chick Pea	1238.00	90.00	121.95	150.00	180.00	150.00	180.00
6. AICRP - Pigeon Pea	1034.18	85.00	95.69	160.00	170.00	185.00	185.00
7. AICRP - Pulses(MULLARP)	1710.22	130.00	146.33	185.00	195.00	185.00	240.00
8. AICRP - Arid Legumes	526.00	35.00	22.11	50.00	55.00	60.00	50.00
9a. Project Directorate - Wheat Research	2689.00	390.00	352.62	153.50	155.00	195.00	400.00
9b. AICRP - Wheat Research	*	*	*	185.00	200.00	250.00	*
10. N.R.C. - Sorghum	620.00	75.00	71.82	113.50	120.00	150.00	125.00
11. AICRP - Sorghum	991.30	110.00	109.68	220.00	225.00	250.00	200.00
12a. Project Directorate - Rice Research	3072.00	410.00	512.00	357.00	390.00	390.00	650.00
12b. AICRP - Rice Research	*	*	*	300.00	315.00	325.00	*
13a. Project Directorate - Maize Research	2197.30	350.00	299.22	178.55	175.00	185.00	350.00
13b. AICRP - Maize Research	*	*	*	180.00	*	*	*
14. AICRP - Pearl Millets	723.70	100.00	96.67	140.00	150.00	175.00	140.00
15. AICRP - Small Millets	703.36	90.00	72.12	135.00	145.00	150.00	135.00
16. AICRP - Barley	2057.04	20.00	19.71	35.00	35.00	35.00	35.00
TOTAL (B)	24130.06	3100.00	3417.59	4423.65	4430.00	4865.00	4525.00
<b>C. FORAGE CROPS</b>							
1. Indian Grassland & Fodder Research Institute	1191.00	125.00	111.50	116.00	130.00	150.00	120.00
2. AICRP - Forage Crops	866.04	95.00	90.25	160.00	175.00	190.00	160.00
TOTAL (C)	2057.04	220.00	201.75	276.00	305.00	340.00	280.00

\* Referenced under Project On.

\* Referenced under Project On.

\* Referenced under Project On.

\* Included in Project On. Wheat





	1	2	3	4	5	6	7	8	9
<b>G. HYBRID SEED</b>									
1. Project on Promotion of Research & Development on Hybrid Seed in Selected Crops	256.67	230.00	228.67	28.00	to be merged with NATP				
<b>H. BIOTECHNOLOGY FOR CROP IMPROVEMENT</b>									
1. N.R.C. - Biotechnology Centre for Crop Science	763.27	135.00	116.58	101.50	130.00	130.00	125.00		
<b>I. SEED TECHNOLOGY RESEARCH &amp; BREEDER SEED PRODUCTION</b>									
1. National Seed Project	2749.84	290.00	329.93	350.00	400.00	340.00			
<b>J. NEW INITIATIVES</b>									
1. N.R.C. - Millets	250.00	-	-	-	10.00	15.00			
2. N.R.C. - Plant Micro-organisms	378.33	-	-	-	10.00	15.00			
TOTAL (G)+(H)+(I)+(J)	4398.11	655.00	675.18	479.50	590.00	560.00	465.00		
<b>K. EXTERNALLY AIDED PROJECTS</b>									
1. Establishment of Phytotom Facility (IARI)	-	195.00	259.86	25.00	to be taken up as a normal activity of IARI				
2. Indo UK collaborative Project on Plant Germplasm Conservation and Utilisation (NBPGRI)	-	65.00	64.98	75.00	15.00	to be terminated			
3. Indo-US Plant Genetic Resources	-	390.00	546.14	Terminated					
4. Quality Seed at IARI (Japan)	-	84.00	-	0.00	50.00	110.00	115.00		
5. Indo-Israel Demonstration Project (IARI)	230.00	-	-	50.00	65.00	110.00	115.00		
<b>TOTAL (EAPs)</b>	230.00	734.00	870.98	150.00	110.00	110.00	115.00		
<b>TOTAL (C.S)</b>	52500.00	6705.00	7150.84	9700.00	9417.00	10745.00	9700.00		
# The amount has been reflected in total of other EAPs under XI. World Bank/Externally Aided Projects									



	1	2	3	4	5	6	7	8	9
<b>D. PLANTATION CROPS</b>									
1. Central Plantation Crops Research Institute	1037.00		130.00	169.98	255.00	255.00	280.00	280.00	
2. Central Agricultural Research Institute	853.00	85.00	85.00	95.12	130.00	130.00	183.01	150.00	
3. N.R.C. - Cashew	539.00	70.00	70.00	69.94	122.00	76.73	126.49	125.00	
4. N.R.C. - Oil Palm	783.00	100.00	100.00	116.00	126.00	137.77	179.50	150.00	
5. AICRP - Palms	365.00	60.00	60.00	59.90	100.00	103.00	100.00	100.00	
6. AICRP - Cashew	205.00	30.00	30.00	29.69	50.00	52.00	60.00	60.00	
<b>TOTAL (D)</b>	<b>3782.00</b>	<b>475.00</b>	<b>475.00</b>	<b>540.63</b>	<b>783.00</b>	<b>751.50</b>	<b>929.00</b>	<b>835.00</b>	
<b>E. SPICES</b>									
1. Indian Institute of Spices Research	620.00		90.00	90.00	148.00	148.00	164.00	155.00	
2. AICRP - Spices	395.00	60.00	60.00	60.00	100.00	90.00	100.00	100.00	
<b>TOTAL (E)</b>	<b>1015.00</b>	<b>150.00</b>	<b>150.00</b>	<b>150.00</b>	<b>248.00</b>	<b>238.00</b>	<b>264.00</b>	<b>255.00</b>	
<b>F. FLORICULTURE, MEDICINAL &amp; AROMATIC PLANTS</b>									
1. N.R.C. - Orchids	581.00	80.00	80.00	65.71	92.00	92.00	165.00	150.00	
2. N.R.C. - Medicinal & Aromatic Plants	618.00	85.00	85.00	21.51	127.00	79.44	153.85	150.00	
3. AICRP - Floriculture	350.00	55.00	55.00	55.14	96.00	100.00	80.00	80.00	
4. AICRP - Medicinal and Aromatic Plants	445.00	65.00	65.00	73.03	95.00	90.00	110.00	80.00	
5. AICRP - Betelvine	265.00	40.00	40.00	40.00	65.00	75.00	70.00	80.00	
<b>TOTAL (F)</b>	<b>2259.00</b>	<b>325.00</b>	<b>325.00</b>	<b>255.39</b>	<b>469.00</b>	<b>436.44</b>	<b>576.85</b>	<b>526.00</b>	
<b>G. POST HARVEST TECHNOLOGY OF HORTICULTURAL CROPS</b>									
1. AICRP Post Harvest Techn. of Horticultural Crops	340.00	40.00	40.00	44.35	65.00	63.00	80.00	80.00	
<b>TOTAL (G)</b>	<b>340.00</b>	<b>40.00</b>	<b>40.00</b>	<b>44.35</b>	<b>65.00</b>	<b>63.00</b>	<b>80.00</b>	<b>60.00</b>	
<b>H. NEW INITIATIVES</b>									
1. N.R.C. - Seed Spices	122.00						22.00		
<b>TOTAL (HORTICULTURE)</b>	<b>21306.00</b>	<b>2985.00</b>	<b>2985.00</b>	<b>3139.77</b>	<b>4730.00</b>	<b>5123.46</b>	<b>5548.86</b>	<b>4700.00</b>	

NAME OF THE SCHEME	IN PLAN OUTLAY 1997-2002	ANNUAL PLAN 1997-98		ANNUAL PLAN 1998-99		ANNUAL PLAN 1999-2000		REMARKS	
		OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE		
1	2	3	4	5	6	7	8	9	
<b>III NATURAL RESOURCE MANAGEMENT</b>									
<b>A. RESOURCE INVENTORY &amp; SOIL MANAGEMENT</b>									
1. National Bureau of Soil Survey & Land Use Planning	1020.00	130.00	157.99	202.00	375.00	375.00	300.00		
2. Central Soil & Water Conservation Research & Training Institute	1000.00	120.00	134.84	216.00	216.00	250.00	216.00		
TOTAL (A)	2020.00	250.00	292.83	418.00	591.00	625.00	516.00		
<b>B. NUTRIENT MANAGEMENT</b>									
1. Indian Institute of Soil Science	818.00	280.00	168.81	200.00	143.00	250.00	163.00		
2. AICRP - Micro Secondary Nutrients	505.00	88.00	112.10	120.00	130.00	125.00	120.00		
3. AICRP - Biological Nitrogen Fixation	288.00	45.00	44.67	70.00	70.00	75.00	70.00		
4. AICRP - Micro Biological Decomposition	252.00	38.00	38.89	60.00	60.00	65.00	60.00		
5. AICRP - Soil Test Crop Response	525.00	85.00	95.45	130.00	130.00	135.00	135.00		
6. AICRP - Long term Fertilizer Experiments	240.00	33.00	34.88	60.00	60.00	65.00	60.00		
TOTAL (B)	2628.00	569.00	494.70	640.00	593.00	715.00	608.00		
<b>C. WATER MANAGEMENT</b>									
1. Central Soil Salinity Research Institute	545.00	80.00	102.87	190.00	132.00	200.00	111.00		
2. Water Technology Centre for Eastern Region	725.00	187.00	83.15	210.00	150.00	220.00	174.00		
3a. Project Directorate - Water Management Research	815.00	155.00	295.34	213.00	213.00	175.00	147.00		
3b. AICRP - Water Management Research	1250.00	228.00		300.00	300.00	316.00	300.00		
4. AICRP - Management of Salt Affected Soils & Use of Saline Water	470.00	65.00	99.97	120.00	135.00	125.00	120.00		
5. AICRP - Optimisation of Groundwater Utilisation through Wells Pump	245.00	45.00	44.76	60.00	67.00	75.00	60.00		
6. AICRP on Management of Driedland Improvement	166.00	25.00	25.00	40.00	33.00	42.00	40.00		
TOTAL (C)	4216.00	777.00	651.09	1133.00	1030.00	1153.00	952.00		

\*Revised under Project On

	1	2	3	4	5	6	7	8	9
<b>D. CROPPING SYSTEM RESEARCH</b>									
1. Central Research Institute for Dryland Agriculture									
2. Central Arid Zone Research Institute									
3a. Project Directorate - Cropping System Research									
3b. AICRP - Cropping System Research									
4. N.R.C. - Weed Science									
5. AICRP - Weed Control									
6. AICRP - Agro-meteorology									
7. AICRP - Dryland Agriculture									
8. AICRP Tillage Management of Indian Soils									
TOTAL (D)		7899.00	1403.00	1512.16	1963.00	1944.00	2143.00	1838.00	
<b>E. AGRO-FORESTRY</b>									
1. N.R.C. - Agroforestry		763.00	120.00	119.99	206.00	206.00	250.00	206.00	
2. AICRP - Agroforestry		935.00	120.00	175.50	230.00	190.00	225.00	230.00	
3. ICAR Research Complex for Soa		547.00	50.00	151.93	100.00	100.00	180.00	100.00	
4. ICAR Research Complex for NEH Region		1430.00	220.00	220.68	280.00	488.00	450.00	400.00	
TOTAL (E)		3675.00	510.00	668.10	816.00	984.00	1105.00	936.00	
<b>F. NEW INITIATIVES</b>									
1. ICAR Research Complex for Eastern Region		376.00					125.00	100.00	
2. Regional Research Station CSSRI at Lucknow		80.00							
TOTAL (F)		456.00							
TOTAL (N.R.M.)		20894.00	3509.00	3618.38	4970.00	5142.00	5866.00	5000.00	

\*Revised under Project Dis.

NAME OF THE SCHEME	IX PLAN OUTLAY 1997-2002	ANNUAL PLAN 1997-98		ANNUAL PLAN 1998-99		ANNUAL PLAN 1999-2000		REMARKS
		OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY	OUTLAY APPROVED	
1	2	3	4	5	6	7	8	9
<b>IV. AGRICULTURAL ENGINEERING</b>								
<b>A. FARM IMPLEMENTS &amp; MACHINERY</b>								
1. Central Institute of Agricultural Engineering	1275.20	235.00	237.02	345.00	298.50	276.50	345.00	
2. AICRP - Power Tiller	277.00	40.00	39.01	75.00	70.00	47.00	75.00	
3. AICRP - Farm Implements Machinery	1200.00	150.00	173.36	310.00	335.00	220.00	310.00	
4. AICRP - Human Engineering and Safety Studies	294.00	34.00	16.97	70.00	60.00	50.00	70.00	
TOTAL (A)	3046.20	459.00	466.36	800.00	763.50	593.50	800.00	
<b>B. POST HARVEST TECHNOLOGY</b>								
1. Central Institute for Post Harvest Engg. & Technology	1163.10	200.00	158.88	340.00	210.50	328.00	340.00	
2. Central Institute for Research on Cotton Technology	753.65	125.00	161.64	210.00	234.25	116.00	210.00	
3. Indian Lac Research Institute	456.00	70.00	83.43	120.00	99.00	95.00	120.00	
4. Jute Technological Research Laboratory	541.75	90.00	97.74	143.00	115.75	120.25	143.00	
5. AICRP - Application of Plastics in Agriculture	190.00	25.00	31.67	50.00	40.00	30.00	50.00	
6. AICRP Jaggery & Khandasari	185.00	25.00	22.66	45.00	40.00	30.00	45.00	
7. AICRP - Harvest & Post Harvest Technology	1150.30	150.00	160.00	310.00	335.00	210.30	310.00	
TOTAL (B)	4439.80	685.00	716.02	1218.00	1074.50	929.55	1218.00	
<b>C. ENERGY MANAGEMENT IN AGRICULTURE</b>								
1. AICRP - Renewable Energy Sources	655.00	85.00	96.00	170.00	170.00	115.00	170.00	
2. AICRP - Energy Requirement in Agricultural Sector	523.00	65.00	73.00	135.00	135.00	90.00	135.00	
3. AICRP - Utilisation of Animal Energy	1513.00	200.00	215.00	385.00	375.00	265.00	385.00	
TOTAL (C)								
<b>D. DRAINAGE ENGINEERING</b>								
1. AICRP Agricultural Drainage	335.00	50.00	46.63	80.00	70.00	60.00	80.00	
TOTAL (D)								
<b>E. OTHER PIPELINE SCHEMES AT HQRS.</b>								
	335.00	50.00	46.63	80.00	70.00	60.00	80.00	
	130.00	0.00	0.00	10.00	10.00	10.00	10.00	
<b>F. EXTERNALLY AIDED PROJECTS</b>								
1. RNAM Phase VI	36.00	4.00	0.07	7.00	7.00	7.00	7.00	
2. Indo-SAREC Stand Alone Fuel Cell		3.00	0.86					
TOTAL (E)	36.00	7.00	0.93	7.00	7.00	7.00	7.00	
<b>TOTAL (AG.ENG)</b>	9500.00	1394.00	1444.01	2500.00	2300.00	1865.05	2500.00	

# The amount has been reflected in total of other EAPs under XI. World Bank/Externally Aided Projects

NAME OF THE SCHEME	ANNUAL PLAN 1997-98		ANNUAL PLAN 1998-99		ANNUAL PLAN 1999-2000		REMARKS	
	IN PLAN OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY PROPOSED	OUTLAY APPROVED		
1	2	3	4	5	6	7	8	9
<b>V. ANIMAL SCIENCE</b>								
<b>A. ANIMAL GENETIC RESOURCES</b>								
1. National Bureau of Animal Genetic Resources	1267.00	150.00	220.55	283.00	283.00	249.00	220.00	
2. Network-Animal Genetic Resources	638.00	76.00	49.84	100.00	-	140.00	90.00	
TOTAL (A)	1895.00	226.00	270.39	383.00	283.00	389.00	310.00	
<b>B. LIVESTOCK IMPROVEMENT</b>								
1. National Dairy Research Institute (including NRC Biotechnology in Animal Production)	3035.00	400.00	444.98	580.00	896.00	660.00	560.00	
2. Central Sheep and Wool Research Institute	1220.00	200.00	200.00	265.00	130.00	253.00	264.00	
3. Central Avian Research Institute	1130.00	120.00	130.00	260.00	293.00	240.00	255.00	
4. Central Institute for Research on Goats	1123.00	170.00	159.96	233.00	118.00	230.00	240.00	
5. Central Institute for Research on Buffaloes	1090.00	150.00	171.09	220.00	240.00	240.00	230.00	
6. National Institute of Animal Nutrition & Physiology	1810.00	130.00	86.64	480.00	351.00	450.00	370.00	
7. N.R.C. on Biotechnology (part of NDRI)								⊕ Reflected in NDRI
8. N.R.C. - Camel	652.00	90.00	99.73	121.00	142.00	140.00	135.00	
9. N.R.C. - Yak	776.56	40.00	105.84	170.00	175.00	175.00	170.00	
10. N.R.C. - Mithun	775.00	35.00	106.57	185.00	285.30	160.14	165.00	
11. N.R.C. - Equine	810.00	90.00	119.35	160.00	204.00	165.50	155.00	
12a. Project Directorate - Poultry Research	751.00	160.00	254.65	170.00	385.00	138.36	200.00	
12b. AICRP - Poultry Research	737.00	90.00		125.00	*	150.00	130.00	⊕ Reflected in Project One
13a. Project Directorate - Cattle Research	1248.00	170.00	189.76	258.00	258.00	280.24	250.00	
13b. AICRP - Cattle Research								⊕ Reflected in Project One
14. AICRP - Sheep	348.00	40.00	36.32	55.00	38.50	80.00	58.00	
15. AICRP - Goat	311.00	40.00	20.31	50.00	35.00	60.00	55.00	
16. AICRP - Buffalo	453.44	100.00	53.44	70.00	49.00	100.00	67.00	
17. AICRP - Pig	1030.00	68.00	59.11	250.00	175.00	280.00	150.00	
18. AICRP - Agricultural By-product	327.00	50.00	35.44	60.00	42.00	70.00	64.00	
19. Network - Micronutrients	300.00	65.00	33.77	85.00	60.00	50.00	90.00	
20. Network - Embryo Transfer	635.00	80.00	51.31	140.00	96.00	140.00	130.00	
21. Network - Crop Based Animal Production System	223.00	45.00	50.53	35.00	25.00	45.00	35.00	
TOTAL (B)	18775.00	2333.00	2468.80	3941.00	3999.80	4107.24	3793.00	

	2	3	4	5	6	7	8	9
<b>C. LIVESTOCK PRODUCT TECHNOLOGY</b>								
1. N.R.C. - Meat & Meat Product Technology	810.00	10.00	6.77	100.00	70.00	210.00	100.00	
2. R&D Support for Process Upgradation of Indigenous milk Products for Industrial Application	257.00	40.00	29.18	70.00	49.00	45.00	70.00	
<b>TOTAL (C)</b>	1067.00	50.00	29.95	170.00	119.00	255.00	170.00	
<b>D. ANIMAL HEALTH</b>								
1. Indian Veterinary Research Institute	3577.00	600.00	385.61	513.00	738.00	734.00	680.00	
2. AICRP - Disease Monitoring & Surveillance	715.00	38.00	43.67	110.00	110.00	155.00	110.00	
3. AICRP - Blood Protocols	250.00	20.00	15.92	50.00	50.00	70.00	52.00	
4. AICRP on Foot & Mouth Disease	623.00	65.00	67.44	130.00	130.00	200.00	135.00	
5. N.R.C. - Biotechnology (Part of IVRI)	-	-	-	75.00	-	-	-	
<b>TOTAL (D)</b>	5165.00	723.00	512.64	878.00	1028.00	1159.00	977.00	
<b>E. NEW INITIATIVES</b>								
1. Network on Rumens Dynamics	110.00	-	-	-	-	-	40.00	
2. Network on Haemorrhagic Septicaemia	114.00	-	-	-	-	-	50.00	
3. AICRP on Gastrointestinal Parasitism	120.00	-	-	-	-	-	60.00	
<b>TOTAL (E)</b>	344.00	-	-	-	-	-	150.00	
<b>F. EXTERNALLY AIDED PROJECTS</b>								
1. Indo U.K. transfer of Molecular Biological Technologies	254.00	127.00	59.89	127.00	70.00	-	-	
<b>TOTAL (E.A.Ps)</b>	254.00	127.00	59.89	127.00	70.00	-	-	
<b>TOTAL (A.S.)</b>	27500.00	3332.00	3221.78	5500.00	5499.80	5910.24	5400.00	

# The amount has been reflected in total of other E.A.Ps under XI. World Bank/Externally Aided Projects



NAME OF THE SCHEME	IX PLAN OU TLAY 1997-2002	ANNUAL PLAN 1997-98			ANNUAL PLAN 1998-99			ANNUAL PLAN 1999-2000		REMARKS
		OU TLAY	ACTUAL EXPENDITURE	OU TLAY	ANTICIPATE EXPENDITURE	OU TLAY	PROPOSED	OU TLAY	APPROVED	
1	2	3	4	5	6	7	8	9		
<b>VI. FISHERIES</b>										
<b>A. CAPTURE FISHERIES</b>										
1. Central Marine Fisheries Research Institute	1825.00	200.00	281.97	500.00	590.00	545.00	400.00			
2. Central Inland Capture Fisheries Research Institute	1125.00	175.00	155.01	240.00	234.00	201.50	250.00			
TOTAL (A)	2950.00	375.00	436.98	740.00	824.00	746.50	650.00			
<b>B. CULTURE FISHERIES</b>										
1. Central Institute for Freshwater Aquaculture	1095.00	165.00	160.52	212.00	243.00	243.00	215.00			
2. Central Institute of Brackishwater Aquaculture	1350.00	400.00	240.12	354.00	312.00	286.00	350.00			
3. N.R.C.- Cold Water Fisheries	645.00	65.00	14.60	105.00	104.50	160.00	140.00			
4. ORP on Processing & Utilisation of Organic Waste for Aquaculture	90.00	25.00	26.39	25.00	25.00	25.00	20.00			
TOTAL (B)	3180.00	655.00	441.63	696.00	684.50	714.00	725.00			
<b>C. FISH &amp; FISH PROCESSING TECHNOLOGY</b>										
1. Central Institute of Fisheries Technology	2115.00	170.00	188.56	539.00	503.00	982.00	550.00			
<b>D. FISH GENETIC RESOURCES</b>										
1. National Bureau of Fish Genetic Resources	1155.00	300.00	292.36	325.00	344.00	208.00	325.00			
<b>E. FISHERIES EDUCATION</b>										
1. Central Institute of Fisheries Education	2925.00	400.00	268.03	500.00	814.00	1369.00	550.00			
<b>F. EXTERNALLY AIDED PROJECTS</b>										
1. Indo-French proposal Seabass Breeding and Culture	175.00									
TOTAL (FISHERIES)	12500.00	1900.00	1627.56	2800.00	3169.50	4019.50	2800.00			

\* Rs. 50 lakhs of Indo-French collaborative project on Seabass Breeding and Culture reflected in CIBA, Chennai.

NAME OF THE SCHEME	IX PLAN OUTLAY 1997-2002	ANNUAL PLAN 1997-98		ANNUAL PLAN 1998-99		ANNUAL PLAN 1999-2000		REMARKS	
		OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY PROPOSED	OUTLAY APPROVED		
	1	2	3	4	5	6	7	8	9
<b>VII. AGRIL. STATISTICS &amp; ECONOMICS</b>									
1. Indian Agricultural Statistics Research Institute	650.00		110.00	146.94	140.00	140.00	141.50	141.00	
2. N.R.C. - Agricultural Economics & Policy Research	900.00		40.00	51.25	160.00	160.00	289.70	259.00	
<b>EXTERNALLY AIDED PROJECT</b>									
1. Sustainable Rainfed Agril. in R&D	100.00		38.00	38.02	100.00	1.27	Project Terminated		
<b>TOTAL (A.S.&amp; E)</b>	1650.00		150.00	198.19	400.00	301.27	431.20	400.00	
# The amount has been reflected in total of other EAPs under XI. World Bank/Externally Aided Projects									
<b>VIII. AGRICULTURAL EXTENSION</b>									
<b>A. VOCATIONAL TRAINING WITH INTEGRATED FUNCTION</b>									
1. Integrated Krishi Vigyan Kendras	20000.00		3700.00	4407.90	4898.00	4598.00	4745.00	4825.00	
2. NRC for Women in Agriculture	700.00		300.00	42.81	102.00	102.00	105.00	175.00	
3. Institution Village Linkage Programme	500.00						150.00		
<b>TOTAL (AG. EXT.)</b>	21200.00		4000.00	4450.71	5000.00	4700.00	5000.00	5000.00	

NAME OF THE SCHEME	IV PLAN OUTLAY 1997-2002	ANNUAL PLAN 1997-98		ANNUAL PLAN 1998-99		ANNUAL PLAN 1999-2000		REMARKS
		OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY PROPOSED	OUTLAY APPROVED	
	2	3	4	5	6	7	8	9
<b>IX. AGRICULTURAL EDUCATION</b>								
<b>A. STRENGTHENING OF AGRICULTURAL EDUCATION</b>								
1. National Academy for Agril. Res. Management	1700.00	200.00	148.30	250.00	259.83	466.87	200.00	
2. Development & Strengthening of State Agril. Univ.	13126.99	1755.00	2315.00	2710.00	383.00	3000.00	2710.00	
3. Development & Strengthening of Agricultural Education of Central Universities	500.00	50.00	60.00	100.00	25.00	150.00	100.00	
4. Strengthening PG Education in Deemed to be Universities	1025.00	110.00	164.22	200.00	31.50	225.00	160.00	
5. Estab. of Centres of Advance Studies in SAs & DCs	1500.00	300.00	235.46	300.00	300.00	315.00	300.00	
6. AICRP on Home Science	1000.00	150.00	195.30	210.00	2.00	250.00	210.00	
<b>B. CENTRAL AGRICULTURAL UNIVERSITY</b>	5200.00	400.00	500.00	1000.00	1517.00	1200.00	1200.00	
<b>C. RECOGNISING PROFESSIONAL EXCELLENCE</b>	100.00	10.00	2.02	10.00	10.00	24.00	10.00	
1. Best Teacher Award								
<b>D. PROFESSIONAL RESOURCES UTILIZATION</b>								
1. Preparation of University Level Books	45.00	5.00	0.71	10.00	10.00	10.00	10.00	
2. Emeritus scientist Scheme	400.00	50.00	23.76	60.00	166.00	500.00	40.00	
3. Rural Awareness Work experience Programme (New Scheme)	800.00	-	-	150.00	-	-	110.00	
<b>E. NEW INITIATIVES</b>								
1. J & K University	1600.00	-	-	500.00	-	400.00	300.00	
2. Accreditation	100.00	-	-	-	-	-	-	
3. National Talent	200.00	-	-	-	-	-	-	
4. Agricultural Education Media Centre	700.00	-	-	-	-	-	100.00	
5. Support Private Agricultural Colleges	1000.00	-	-	-	-	-	50.00	
<b>TOTAL (AG. EDN.)</b>	29000.00	3030.00	3644.77	5500.00	2704.33	6540.87	5500.00	

NAME OF THE SCHEME	IN PLAN OUTLAY 1997-2002	ANNUAL PLAN 1997-98			ANNUAL PLAN 1998-99					ANNUAL PLAN 1999-2000		REMARKS
		OUTLAY	ACTUAL EXPENDITURE	OUTLAY	ANTICIPATE EXPENDITURE	OUTLAY	OUTLAY	OUTLAY	OUTLAY	OUTLAY	APPROVED	
1	2	3	4	5	6	7	8	9				
X. MANAGEMENT AND INFORMATION SERVICES	12300.00	2495.00	1179.41	3818.00	2850.00	3850.00	3850.00					
Pipeline projects	1650.00	-	-	-	-	-	-	-	-	-	-	-
* This includes DARE												
TOTAL (MIS)	13950.00	2495.00	1179.41	3818.00	2850.00	3850.00	3850.00					
TOTAL (DOMESTIC BUDGETARY SUPPORT)	210000.00	295000.00	29665.42	44918.00	41207.36	49776.72	48850.00					
XI. ONE TIME CATCH-UP GRANT	40000.00											
XII. WORLD BANK AND OTHER FOREIGN AIDED PROJECTS												
1. National Agricultural Technology Project (NATP) (*)		1866.00	1064.01	6875.00	5200.00	19320.00	11300.00					
2. National Agricultural Research Project (NARP-II) (*)	Terminated	780.00	136.18	1040.00	1040.00	1943.26	1000.00					
3. Agril.Human Resource Development (W.B.)		65.00	207.05	284.00	252.90	228.00	200.00					
4. Indo-Dutch ORP on Drainage Water Management		906.00	288.23									
5. Other Externally Aided Projects *			969.02									
TOTAL (W.B. & F.A.P.)	13522.00	3617.00	2664.49	8199.00	6492.90	21491.26	12500.00					
* Details of Projects given in respective sectors												
② The Planning Commission has agreed to provide allocation under World Bank and Externally Aided Projects on year to year basis												
GRAND TOTAL (DBS +Catch-up Grant+ W.B./FAP)	263522.00	33117.00	33329.91	53117.00	47700.26	71267.98	57350.00					