

STANDING COMMITTEE ON AGRICULTURE  
**STANDING COMMITTEE ON AGRICULTURE**  
**(1999-2000)**

THIRTEENTH LOK SABHA

MINISTRY OF AGRICULTURE

(Department of Agricultural Research and Education)

DEMANDS FOR GRANTS (2000-2001)

SEVENTH REPORT Presented to Lok Sabha on 19.4.2000

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COMPOSITION OF THE STANDING COMMITTEE  
ON AGRICULTURE (1999-2000)

Shri S.S. Palanimanickam - *Chairman*

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## **PREFACE**

I, the Chairman, Standing Committee on Agriculture having been authorised by the Committee to submit the report on their behalf, present this Seventh Report on Demands for Grants of the Ministry of Agriculture (Department of Agricultural Research and Education) for the year 2000-2001.

2. The Standing Committee on Agriculture was constituted on 31<sup>st</sup> December, 1999. 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 & Education on 28<sup>th</sup> 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 they desired in connection with the examination of Demands for Grants of the Ministry for the year 2000-2001 and for giving evidence before the Committee.

4. The Committee considered and adopted the Report at their sitting held on 10<sup>th</sup> April, 2000.

New Delhi;

**S.S.**

**PALANIMANICKAM,**

10<sup>th</sup> April, 2000 *Chairman,*

21 Chaitra, 1922 (Saka)

*Agriculture*

*Standing Committee on*

## **PART-I**

### **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 reported to be as under :

1. To look after all aspects of agricultural research and education (including horticulture, natural resources management, agricultural engineering, agricultural extension, animal science, economic statistics and marketing and fisheries) involving coordination between the Central and State agencies.
2. To attend to all matters relating to the Indian Council of Agricultural Research.
3. 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.
4. 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.
5. 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 consists 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 Department 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:

1. Standing Finance Committee for examination of schemes involving financial implications and also the Annual Budget of the Council before submission to the Governing Body.
2. Accreditation Board for matters relating to accreditation, maintenance of education standards and development of Agricultural Universities.

3. Eight Regional Committees constituted for eight broad agro-ecological regions of the country.
4. Scientific Panels to consider adhoc schemes and projects relating to different disciplines.
5. 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. To fulfil its mission, the council is reported to have set itself to achieve the following mandate :

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 3<sup>rd</sup> year of IX Plan, i.e. 1999-2000, the following 189 plan schemes were implemented in addition to Foreign Aided Projects.

- 81 Institutes comprising 46 Central Institutes, 4 National Bureaux and 31 National Research Centres.
- 89 Projects including 9 Projects Directorates and 80 All India Coordinated Research Projects/ Network Programmes.
- 12 other Plan Projects, World Bank Aided Projects and 3 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 is 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 46 Central Institutes, 4 National Bureaux, 9 Project Directorates (PDs), 31 National

Research Centres (NRCs) and 81 All India Co-ordinated Research Projects (AICRPs) with their centres located in different agro-ecological regions 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 for achieving desired results.

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 and self reliance in food and fodder crops 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 14<sup>th</sup> August, 1995 with a total outlay of Rs.33.70 crore 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 demonstration 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 Institutions 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. Under IVLP 42 Centres have been taken.

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, oilseed, 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 below 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 farm worthy technologies leading to significant advances in production of agricultural products and by-products.

## **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**

- 28 a. National Research Centre for Women in Agriculture
- 28 b . 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 Agricultural 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-IIGER (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 unawares 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 has been 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 has been 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 has been 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 has been on the following:- Conservation, Planned enhancement and utilization of agro-biodiversity.

- 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 Trainers 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 crore. 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 :

Sector	Percent resource allocation
Crop Science	25
Horticulture	10
Animal Science	14
Fisheries	06
Agricultural Education	15
Agricultural Extension	10
Soils	
Agronomy	
Agril. Engineering	
Agril. Economics & Statistics	20
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 catchup 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 hierarchical 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 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 Headquarters ICAR	Periodicity and Timing	Coordinating Unit at the ICAR
Identification of critical areas and crops along with 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 calendar year	SMDs/PIM Unit
Progress of Annual Action Plan targets	Annual	SMDs/PIM Unit
Technical Progress	Monthly	SMDs/TC
	Quarterly	SMDs/TC
	Annual	SMDs/TC
	Research highlights	SMDs/TC
Routine Financial Progress	Monthly	Financial Wing
Resource review including financial Wing/ and physical aspects	Half Yearly	SMDs/Financial
Mid Term review Wing/	(September October) Middle of Plan Period	PIM Unit SMDs/Financial
Review of Plan Achievement Wing/	At the end of Annual Plan Period	PIM Unit SMDs/Financial
		PIM Unit

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 Headquarters for quite some time, 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 Division 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

### **Scheme proposed in VIII Plan but could not be started**

Sector	Plan Schemes	EAP Schemes
Crop Science	AICRP on Biotechnology on Breeding for Biotic Stress	Indo-UK Collaborative Network Project on Whitefly
Soil, Agronomy & Agroforestry	Network on Acid Soils AICRP on Land Use Planning	
Animal Science	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>Sector</b>	<b>Plan Schemes</b>
Crop Science with NBPGR	Barley Network integrated with Directorate of Wheat Research AICRP Under-Utilised & Under-Exploited to be integrated
Ornithology Management	Sugarbeet Network Project to be integrated with IISR AICRP Tobacco to be integrated with CTRI AICRP Rodent Control and Network Project on Economic to be merged and renamed AICRP on Vertebrate Pest
centre	AICRP White Grubs; mandate to be enlarged and renamed AICRP/ Network on Soil Arthropods Strengthening of Advanced Centre for Biosystematic at IARI Regional Seed Production, Off season Nursery and research
Horticulture	for Maize at Begusarai under the Directorate of Maize Research Strengthening seed technological researchs including Dus testing Establishment of a network on transgenics in crop plants <b>Merged</b> 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.
Soil Agronomy & Agroforestry	<b>Upgraded</b> NRC- Arid Horticulture to Central Institute for Arid Horticulture PD-Vegetable Research to Central Veg. Research Institute
System	<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
continue	Research, Modipuram AICRP-Wells & Pumps to AICRP on Water Management and cooperating centres will continue to function as network AICRP Agroforestry to NRC Agroforestry and its centres to as Network.



**Upgraded**

Project Directorate Cropping System Research to Indian Institute of

Sustainable Production Systems, Modipuram

Complex Project Directorate Water Management to ICAR Research

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.

Agril. Engineering

**Merged**

&Machinery

AICRP Power Tiller integrated with AICRP Farm Implements

**Sector**

**Plan Schemes**

**EAP Plan Schemes**

**Upgraded**

**Phased out**

The All India Coordinated Research Project on Pig to Project Directorate on Pig against

ILTP Production of Sub Unit Syntheticpeptide Vaccine

AICRP on Animal Disease Monitoring & Surveillance to Project Directorate on Animal Disease Monitoring

FMD and Seedpox

ILTP development of Immuno diagnostic against important diseases of animals (FMD, MD, Sheep pox) using hybridoma technique

**Merged**

Network Programme on Farm Production

ILTP development of drug from indigenous medicine plants

against

ectoparasite and bio-availability

of

synthetic drugs Factors

affecting

in-vitro biosynthetic of

immunocolchicines

System to Network Crop Based Animal Production System

**New Schemes in IX Plan**

**Sector**

**Plan Schemes**

Crop Science	National Facility for Plant Virus Research National Centre for Agriculturally important Micro Organism NRC on Millets Network on Transgenics
Horticulture Complex for Eastern Region)	NRC for Litchi, Bihar ( to be integrated with Research  NRC for Seed Spices, Rajasthan AICRP on Vegetable I Solanaceous & Cole Crops, leafy  vegetables  AICRP on Vegetable II- Allium, Legume Vegetable,
Cucurbit, Okra Soil, Agronomy & Agroforestry	ICAR Research Complex for Eastern Region Regional Station of CSSRI, Karnal in Lucknow Network on the Watershed Management Network on Hill Agriculture Production System AICRP on Engineering Measures for Efficient Land & Water
Agricultural Management Engineering Animal Science	AICRP on Gastro-intestinal parasitism AICRP on rumen microbial dynamisms and bio-availability of  micronutrients
Fisheries	Network programme on haemorrhagic septicaemia AICRP freshwater prawn culture at CIFA AICRP shellfish mariculture at CMFRI
Agril. Education	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
Agril. Extension	Establishment of 100 new KVKs Trainers 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 Third year of the IX Plan( 1999-2000)**

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 1999-2000 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 Parvataiya
Krishi Anusandhan Shala		4. Indian Institute of Pulses
Research		5. AICRP-Chick Pea
(MULLARP)		6. AICRP-Pigeon Pea
		7. AICRP-Pulses
Wheat Research		8. AICRP-Arid Legumes
		9. Project Directorate of
		10. N.R.C. Sorghum
		11. AICRP-Sorghum
		12. Project 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-Sugar Crops
		10. Network Scheme
Sugarbeet		
		11. AICRP-Under-utilised & Under-exploited Plant
	E. Oilseeds	1. N.R.C. Groundnut
		2. N.R.C. Soyabean
		3. N.R.C. Rapeseed &
Mustard		
		4. Project Directorate of
Oilseed Research		
		5. AICRP-Groundnut
		6. AICRP Rapeseed &
Mustard		
		7. AICRP Soyabean
	F. Plant Protection	1. N.R.C. Integrated Pest
Management		
		2. P.D. Biological Control
		3. AICRP-Honey Bees
		4. Network- Soil Arthropods
		5. Network-Rodent Control
		6. AICRP- Rodent Control
		7. AICRP-Pesticide
Residue		
		8. AICRP-Nematode
		9. Network-Economic
Ornithology		
	G. Hybrid Seed	1. Project on Promotion of
Research &		Development on Hybrid
Seed in Selected		Crops (Terminated during
1999-2000 now		Funded under NATP)
	H. Biotechnology for Crop	1. N.R.C. Biotechnology
Centre for Crop		Science
	Improvement	
	I. Seed Technology Research	1. National Seed
Project		
	& Breeder Seed Production	

## J. Externally Aided Projects

Phytotom Facility at

project on Plant

Conservation & Utilisation

Demonstration Project (IARI)

II. Horticulture  
Horticultural Research

Subtropical Horticulture

Fruits

Temperate Horticulture

Vegetable Research

Research

Project (National Seed

Institute

Research Institute

### A. Fruits

### B. Vegetables

### C. Potato & Tuber Crops

1. Establishment of IARI (UNDP)
2. Indo-UK collaborative

Germplasm

(NBPGR)

3. Indo Israel

1. Indian Institute of

(50%)

2. Central Institute for

3. N.R.C. Citrus (90%)

4. N.R.C. Grapes

5. AICRP-Tropical Fruits

6. AICRP-Sub-tropical

7. AICRP-Arid Fruits

8. Central Institute of

9. N.R.C. Arid Horticulture

10. N.R.C. Banana

1. N.R.C. Mushroom

- 2.a. Indian Institute of

- 2.b. AICRP-Vegetable

3. Vegetable Seed

Project)

4. AICRP-Mushroom

5. N.R.C. Onion and Garlic

1. Central Potato Research

2. Central Tuber Crops

3. AICRP-Potato

4. AICRP-Tuber Crops

	D. Plantation Crops	1. Central Plantation Crops
Research Institute		
		2. Central Agricultural
Research Institute		
		3. N.R.C. Cashew
		4. N.R.C. Palm
		5. AICRP-Palm
		6. AICRP-Cashew
	E. Spices	1. Indian Instt. of Spices
Research		
		2. N.R.C Seed Spices
		3. AICRP Spices
	F. Floriculture, Medicinal & Aromatic Plants	1. N.R.C. G.and Floriculture
Aromatic Plants		2. N.R.C. Medicinal &
		3. AICRP-Floriculture
		4. AICRP-Medicinal and
Aromatic Plants		
		5. AICRP-Betelvine
	G. Post Harvest Technology	1. AICRP-Post Harvest
Techn. of Hort.		
	Of Horticultural Crops	Crops
III. Natural Resources	A. Resources Inventory	1. National Bureau of Soil
Survey and Land		
Management		Use Planning
	B. Soil Management	1. Central Soil & Water Research & Training
Institute		
		2. AICRP-Tillage
Management of Indian Soils		
	C.Nutrient Management	1. Indian Institute of Soil
Science		
		2. AICRP-Micro Secondary
Nutrients		
		3. AICRP-Biological
Nitrogen Fixation		
		4. AICRP-Micro Biological
Decomposition		
		5. AICRP-Soil Test Crop
Response		
		6. AICRP-Long-term
Fertilizer Experiments		

	D. Water Management	1. Central Soil Salinity
Research Institute		2. Water Technology
Centre for Eastern Region		3a. P.D. Water
Management		3b. AICRP- Water
Management		4 AICRP-Management of
Salt Affected		Soils & Use of Saline
Water		5 AICRP-Optimisation of
Ground Water		Utilisation through Wells
and Pumps		6 AICRP on Management
of Diaraland		Improvement
	E. Cropping System Research	1. Central Research
Institute for Dryland		Agriculture
Research Institute		2. Central Arid Zone
System Research		3.a. P.D. Cropping
System Research		3.b. AICRP-Cropping
		4 N.R.C. Weed Science
		5. AICRP-Weed Control
		6. AICRP-Agro-meteorolgy
		7. AICRP-Dryland
Agriculture		8. N.R.C. Agroforestry
		9. AICRP- Agroforestry
		10. ICAR Research
Complex for Goa		11. ICAR Research
Complex for NEH Region	A. Farm Implements & Machinery	1. Central Institute of
IV .Agricultural		2. AICRP-Power Tiller
Agricultural Engineering		
Engineering		

Implements Machinery		3. AICRP-Farm
Engineering and Safety		4. AICRP-Human
		Studies
Post Harvest Engg. &	B. Post Harvest Technology	1. Central Institute for
		Technology
Research on Cotton		2. Central Institute for
		Technology
Institute		3. Indian Lac Research
& Allied Fibre		4. National Institute of Jute
		Technology
Plastics in Agriculture		5. AICRP-Application of
Khandasari		6. AICRP-Jaggery &
Harvest Technology		7. AICRP-Harvest & Post
Energy Sources	C. Energy Management in	1. AICRP-Renewable
Requirement in Agricultural	Agriculture	2. AICRP-Energy
Animal Energy		Sector
Drainage	D. Drainage Engineering	3. AICRP-Utilisation of
V. Animal Science	E. Externally Aided Projects	1. AICRP- Agricultural
Animal Genetic Resources	A. Animal Genetic Resources	1. .RNAM Phase VI
Animal Genetic		1. National Bureau of
Animal Genetic		2. National Institute of
Institute	B. Livestock Improvement	(NBAGR) Network
		Resources
		1. National Dairy Research
		(including NRC



Biotechnology in Animal

Research Institute

Institute

Research on Goats

Research on Buffaloes

Animal Nutrition &

Part of NDRI)

Research

Product

Animal Production

Products Technology

Upgradation of

for Industrial

Production)

2. Central Sheep and Wool

3. Central Avian Research

4. Central Institute for

5. Central Institute for

6. National Institute of

Physiology

7. N.R.C. on Biotechnology (

8. N.R.C. Camel

9. N.R.C. Yak

10. N.R.C. Mithun

11. N.R.C. Equine

12.a P.D. Poultry Research

12.b AICRP- Poultry

13. P.D. Cattle Research

14. AICRP- Sheep

15. AICRP-Goat

16. AICRP-Buffalo

17. AICRP-Pig

18. AICRP-Agricultural By-

19. Network-Micronutrients

20. Network-Embryo Transfer

21. Network-Crop Based

System

1. N.R.C. Meat & Meat

2. R&D Support for Process

Indigenous Milk Products

application

C. Livestock Product

Technology

Research Institute & Surveillance	D. Animal Health	1. Indian Veterinary 2. AICRP-Disease Monitoring 3. AICRP Blood Protosta 4. AICRP on Foot & Mount
Disease of IVRI)	E. New Initiatives	5. N.R.C. Biotechnology ( Part 1. Network on Rumen 2. Network on Haemorrhagic 3. AICRP on Gastrointestinal
Dynamics Spticae	F. Externally Aided Projects	1. Indo-UK transfer of technologies ( to be 31.3.1999)
Parasite molecular biological terminated w.e.f.	A. Capture Fisheries	1. Central Marine Fisheries 2. Central Inland Capture Institute
VI Fisheries Research Institute	B. Culture Fisheries	1. Central Institute for 2. Central Institute of Aquaculture 3. N.R.C. Cold Water 4. ORP on Processing and
Fisheries Research	C. Fish & Fish Processing	Waste Aquaculture 1. Central Institute of
Freshwater Aquaculture Brackishwater	Technology	1. National Bureau of Fish
Fisheries	D. Fish Genetic Resources	1. Central Institute of
Utilisation of Organic	E. Fisheries Education	
Fisheries Technology		
Genetic Resources		
Fisheries Education		

VII Agril. Statistics & Statistics Research Economics		1. Indian Agricultural Institute
& Policy Research		2. N.R.C. Agril. Economics
VIII Agricultural Extension Kendras	A. Vocational Training with Integrated Function	1. Integrated Krishi Vigyan
Agriculture		2. NRC for Women in
IX. Agricultural Education Agricultural Research	A. Strengthening of Agricultural Education	1. National Academy for Management
Strengthening of State		2. Development & Agril. Universities
Strengthening of Central Universities		3. Development & Agricultural Education of
Education in Deemed to be Universities		4. Strengthening PG
of Advance		5. Establishment of Centres Studies in SAUs & DUs
Agril. Universities for	B. Central Agricultural University	Establishment of Central NEH Regions
Level Books	C. Recognising Professional Excellence	Best Teacher Award
Scheme	D. Professional Resource Utilization	1. Preparation of University
Media Centre		2. Emeritus Scientist
Colleges	E. New Initiatives	1. J & K University
		2. Accreditation
		3. National Talent
		4. Agricultural Education
		5. Support to Agricultural
		6. Rural Awareness Work

Experiences

Grant

University

X. World Bank/Foreign Development Aided Projects Technology Project

Drainage Water

XI Management And Programme with Information Services Countries

Project under

INDO-USA

Hqrs

Science Centre & Museum

Accommodation for ICAR Staff

Space & Facilities

Relations

+Support to Professional

A. World Bank Projects

A. Bilateral Cooperation Projects

B. Publication & Information

C. Strengthening of The infrastructure

D.

Societies/ Associations

Programme

7. One Time Catch up

8. Assam Agricultural

1. Agril. Human Resource

2. National Agricultural

3. Indo-Dutch ORP on

Management

1. Bilateral Cooperation

Developing & Developed

(DARE) and long-term

INDO-USSR, INDO-UK &

Programme

1. Publication & Information

1. Civil Works

a. ICAR Bhawan Phase II

b. Guest House for ICAR

c. National Agricultural

d. Residential

2. ICAR Agricultural Library

3. Strengthening of ASRB

4. Modernisation of Office

5. ICAR Headquarters

6. Publicity & Public

Support to National  
Academy  
E. Pipeline ( new schemes)  
F. Celebration of Golden  
Jubilee Intellectual  
Property Rights Cell  
Pipeline Projects  
( New Schemes)

## CHAPTER II

### DEMANDS FOR GRANTS 2000-2001(DARE)

2.1 The Demands for Grants for Department of Agricultural Research & Education (DARE) of Ministry of Agriculture is incorporated as Demand No.2 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 amount to Rs.1404.55 crore for the year 2000-2001. This Demand is divided into three major heads as follows:

Major Head 3451 of DARE under Expenses, Foreign	includes outlay of Plan & Non-Plan expenditure on Secretariat Sub-Head Salaries, Overtime Allowance, Domestic Travel Travel Expenses and Office Expenses.
Major Head 2415 towards Agricultural Conservation, Animal contributions to Common wealth International Agricultural Research Institution (APAARI) (NACA), Regional of CGPRT, International Seed	includes outlay of Plan and Non-Plan payments to ICAR Research and Education on Crop Husbandry, Soil and Water Husbandry, Dairy Development, Fisheries, Forestry and Agricultural Bureau (CAB), Consultative Group on (CGIAR), Asia- Pacific Association of Agricultural Research and Network of Agricultural Centres for Asia and the Pacific Co-ordination Centre for Research & Development Testing Association etc.

Major Head 2552\*  
provision for projects/schemes

includes outlay of plan expenditure towards lump sum

for the benefit of North-Eastern Region and Sikkim.

### 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 Government 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)
Plan Outlay for DARE/ ICAR (Rs. in crore)	85.00	153.56	340.00	425.00	1300.00	2635.22
Total Plan Outlay of Govt. (Rs. in crore)	15902.00	39322.00	97500.00	180000.00	434100.00	492221.00
Per Cent DARE/ ICAR of Total Plan Outlay	0.535	0.391	0.349	0.236	0.2999	0.535

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

2.5 The growth of financial outlay of DARE/ICAR during the first four years of IX Five Year Plan is as under :

	(Rs. in crore)			
	1997-98	1998-99	1999-2000	2000-2001
a. Plan Outlay for DARE/ICAR	331.17	531.17	573.50	629.55

b. Total Plan Outlay of Central Government				
(Total Central Plan Outlay)	91838.71	105187.16	103520.93	
	117333.78			
c. Percentage of Total Plan Outlay of Central Government to				
DARE/ICAR	0.36	0.50	0.55	0.54

Source : Expenditure Budget Vol. I, Ministry of Finance

### 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 2000-2001 is Rs.1404.55 crore. The Department was asked to furnish details of total allocations proposed and actually made/allocated this year and during last 6 years vis-à-vis the percentage these allocations are/were of the Agricultural GDP.

2.7 The information furnished by the Department is as under :

Year	Plan	Non- Plan	Total Allocation	(Rs.in crore)	
				Ag. G.D.P.	As % DARE w.r.t. Ag. G.D.P. at Current Price
1994-95	336.97	275.00	202.00	0.18	
1995-96	383.50	310.00	238.86	0.19	
1996-97	440.34	289.30	244.08	0.15	
1997-98	1000.00	331.17	268.10	0.17	
1998-99	531.17	531.17*	475.02	475.02	1006.19
1999-2000	712.68	573.50	768.47	638.44	1211.94
2000-2001	1082.59	629.55	864.36	775.00	1404.55

\*\*  
\*\*  
\*\*

(Source of Ag.G.D.P. :  
Economic and Statistics), the

Agricultural Statistics at a Glance, 1999; Directorate of

inserted in the above table

Ag. G.D.P. figures are at current prices and they have been

as per revised figures available in the Ag. Statistics at a Glance

1999.

\* During 1998-99 the Planning Commission originally allocated Rs.331.17 crore but due to continuing efforts of DARE, it was enhanced to Rs.531.17 crore.

\*\* Ag.G.D.P. figures for these years are not available in documented form.

2.8 The Committee wanted to know from the Department the percentage of increase/ decrease of Plan and Non-Plan allocation over the year 1999-2000 in real monetary terms. The Department in their written reply stated as under :

The percentage increase in Plan allocation during 2000-2001 over the year 1999-2000 is 9.77 per cent, while there is a decrease of 3.12 per cent under Non-Plan for the same period ( based on Non- Plan RE 1999-2000).

2.9 The Committee while examining the Demands for Grants in respect of DARE for the year 1996-97, 1997-98 and 1998-99 had in their 2nd, 10th and 8th Reports respectively strongly recommended for enhanced allocations to DARE/ICAR for the IXth Plan to a level of 1% of Agricultural Gross Domestic Product (AGDP) with a tendency to increase it gradually to touch 2% of Agricultural GDP. Likewise, in their 19th Report on Demands for Grants 1999-2000, the Committee stated:

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 and the Finance Ministry always apprising them of the level of the utilisation and impressing upon them the need for enhanced outlays so that necessary funds are released to meet the goals of the Department. **Overall Review of Plan Outlays to Agricultural Research during VIII and IX Plan (1997-98, 1998-99, 1999-2000 and 2000-2001)**

2.10 The Summarised statement of Plan Outlays/Expenditure during VIII Plan (1992-97) and first four years of the IX Plan viz ( 1997-98), 1998-99, 1999-2000 and 2000-2001) are as under :

(Rs. In crore)

Particulars	Amount
1. VIII Plan Approved Outlay ( 1992-97)	1300.00
2. VIII Plan Outlay provided on yearly basis ( 1992-97)	1324.30
3. VII 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
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. 1998-99 Actuals	427.73
17. 1999-2000 Proposed Outlay	712.68
18. 1999-2000 Approved Outlay	573.50
19. 1999-2000 Anticipated Expenditure	573.50
20. 2000-2001 Proposed Outlay	1082.59
21. 2000-2001 BE	629.55

\* Rs. 2632.22 crore include IX Plan outlay ( as finalised) ofRs.2100.00 crore plus one time catch up grant of Rs.400.00 crore.

### Demand Proposed Versus Demand Accepted

2.11 The Comparative details of demand proposed( Plan & Non-Plan) by the Department to the Planning Commission and demand accepted by the Planning Commission and demand accepted by the Planning Commission for various sectors of the DARE/ICAR for theyear 2000-2001 are as under :

Name of the Sector	(Rs. in crore)			
	Plan		Non- Plan	
	Proposed	Allocated		
Proposed				
Allocated				
1. Crop Science	165.81	104.00		
176.24			157.06	
2. Horticulture	67.36	49.00		
104.58			93.20	
3. Natural Resource Management	52.00	67.46	47.14	60.12
4. Agricultural Engineering	24.00	62.57	25.65	55.76
5. Animal Science	59.00	52.30	77.70	46.61
6. Fisheries	40.56	29.00		23.91
				21.31
7. Agricultural Eco. & Statistics	3.56	4.00		
11.67			10.40	
8. Agricultural Extension	65.00	60.00		
9. Agricultural Education	70.00	3.50	72.85	3.00
10. Management and Information Services including new Initiatives & Pipeline Projects				

and					
DARE	40.00	25.55	337.13**	322.54**	
11. One Time Catch UP Grant		250.00	---	---	---
12. Mini Mission on Cotton Project		30.00	5.00	---	--
-					
13. World Bank/ Externally Aided Projects		196.94	148.00	---	-
---					
14. A.P. Cess Fund Act, 1940		---	---		
	25.00	5.00			
GRAND					
TOTAL	1082.59	629.55	864.36	775.00	

\* The Planning Commission has not provided separate amount for one time catch up grant during 2000-2001

against the proposal of Rs.250.00 crore.

\*\* This includes pension of ICAR Hqrs. And arrears of SAUs Staff etc.

### Objective Classification Total Allocations for DARE/ICAR during 1999-2000 and 2000-2001. Plan

The Sectoral details of ICAR and DARE, plan programme for BE and RE for 1999-2000 and BE for 2000-2001 are given below:

Name of Division	(Rs. in Crore)		
	Budget Estimate 1999-2000	Revised Estimate 1999-2000	Budget 2000-2001
<b>Research</b>			
Crop Science	97.00	94.00	104.00
Horticulture	47.00	41.00	49.00
Natural Resource Management			
50.00	45.00	52.00	
Agricultural Engineering	25.00	20.00	24.00
Animal Science	54.00	48.00	59.00
Fisheries	28.00	24.00	29.00
Agricultural Economics & Statistics	4.00	3.10	4.00
Agricultural Education	55.00	64.00	70.00
Agricultural Extension	50.00	50.00	60.00
Management and Information Services (including ICAR Hqrs., ASRB and DIPA)	38.00	14.40	24.95

World Bank Aided Projects/ Externally Aided Projects	125.00**	100.00**	153.00**
DARE	0.50	0.50	0.60
New Schemes (Pipeline)	0.00	0.00	0.00
Grand Total	573.50	504.00	629.55**

\* This includes Rs. 63 crore for North-East Region.

\*\* This is pure external aid (reimbursable)

### Non plan

2.13 The objective-wise break-up in respect of ICAR Non-Plan budget are indicated below:

(Rs. in

Creore)

Sub-Heads Estimates	Budget Estimates 1999-2000	Revised Estimates 1999-2000	Budget 2000-2001
Estt. Charges (including OTA and Wages*)	554.53*	702.96*	701.76*
Travelling Allowances	3.99	3.94	3.99
Other Charges	32.84	58.41	38.39
Works	4.80	13.58	5.28
Other Items	12.63	15.49	15.87
<b>Total</b>	<b>608.79</b>	<b>794.38</b>	<b>765.29</b>
A.P. Cess Fund	25.00	1.00	5.00
<b>Grand Total</b>	<b>633.79</b>	<b>795.38</b>	<b>770.29</b>

### Overall Review of Plan Allocation vis-à-vis Non-Plan Allocation during VIIIth Plan and in 1st Four years of 9th Plan

2.14 Details of total budgetary allocations, Plan Allocations, Non-Plan Allocations and their percentage out of the total budget from 1992-2001:

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	1095.95	445.00	44.24	560.94	55.76
10.	1999-2000 (BE)	1211.94	573.50	47.32	638.44	52.66
11.	1999-2000 (RE)	1304.00	504.00	38.66	800.00	61.34
12.	2000-2001 (BE)	1404.55	629.55	44.82	775.00	55.18

### Overall Review of Plan and in 1st four years of IX plan.

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

Sl. No.	Year	BE	(Rs. in Crores)	
			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	427.73	
8.	1999-2000	573.50	**	
9.	2000-2001	629.55	--	

\*\* Figure of Actual Expenditure ( 1999-2000) are not yet available.

2.16 The Budget Estimates ( Plan) 1999-2000 were Rs.573.50 crore while the Revised Estimates( Plan) were brought down to Rs.504.00 crore. Budget Estimates (Plan) for 2000-2001 is Rs.629.55 crore.

2.17 The Committee asked the Department the reasons for reducing the Plan allocations by Rs.69.50 crore at RE stage with details of schemes which were affected owing to these cuts.

The Department in their written reply stated as under :-

The reduction of Annual Plan ( 1999-2000) by Rs.69.50 crore at RE stage was due to imposition of cut by Ministry of Finance. Although, the Department has the capacity to utilise all the funds allocated., the Department had to reprioritize the investment in schemes due to the cut imposed.

2.18 The Committee were also keen to know as to how the Department propose to utilise an additional amount of Rs.125.55 crore ( Plan) in 2000-2001 over Revised Estimates (RE) 1999-2000 (Plan) and whether any new schemes were to be launched in the year 2000-2001. To these points the Department in their reply stated as under :

The fact is that there has been low funding for the Department from Planning Commission for all the first four years of IX Five Year Plan. Against the projected demand of Rs.1000.00 crore, Rs.531.17 crore, Rs.712.68 crore, and Rs.1082.69 crore for the Annual Plans 1997-98, 1998-99; 1999-2000 and 2000-2001, the allocations were only Rs.331.17 crore, Rs.531.17 crore ( which was subsequently reduced to Rs.445.00 crore at RE Stage), and Rs.629.55 crore respectively. The World Bank aided National Agricultural Technology Project and other Externally Aided Projects would also need substantial financial allocation for their meaningful and effective implementation, along with other schemes needing infrastructure development which is very critical for carrying out research work to compete effectively is considered vital. The new schemes contemplated to be

launched with full vigour during 2000-2001 are as follows :

- (i) ICAR Research Complex for Eastern Region.
- (ii) AICRP-Engineering Measures for Efficient on-Farm Water Management.
- (iii) Network-Gastrointestinal Parasitism
- (iv) National Bureau of Agriculturally Important Micro-organism
- (v) Directorate of Millets Research.

2.19 Budget Estimate (Non-Plan) 1999-2000 was Rs.633.79crore while the Revised Estimate ( Non-Plan) was increased to Rs.795.38crore. Budget Estimate (Non-Plan) 2000-2001 is Rs.770.29 crore.

2.20 Thus, the increase in Non-Plan 1999-2000at RE stage comes to Rs.161.59 crore whereas the BE 2000-2001 ( Non-Plan)has decreased over RE 1999-2000 (Non-Plan) by Rs.25.09 crore.

2.21 The Department was asked to explainthe reasons for increasing Non-Plan allocations ( 1999-2000) at RE stage and decreasing BE 2000-2001 ( Non-Plan) overRE 1999-2000 along with details of heads which received the enhanced allocationsand sources from which Rs.161.59 crore would be arranged. To thesepoints, the Department stated as under :

The enhancement (Rs.185.59 crore) under Non-Plan in the RE1999-2000 is mainly due to payment of arrears to the SAUs teaching staffdue to implementation of 5th Pay Commission recommendations as ICAR functionsas UGCs in case of SAUs for the purpose.

The enhancement has been received under the sub-major head Crop Husbandrybelow major head 2415 Grant-in-Aid administration ( Rs.189.59 crore).

The enhancement would be arranged by re-appropriation from savings inPlan and in A.P. Cess mainly to the tune of Rs.93.53 crore and the remainingamount to the tune of Rs.92.06 crore through supplementary grants 1999-2000.

The decrease in BE 2000-2001 in comparison to RE 1999-2000 is due toless requirement of funds for payment of arrears to the teaching staffof SAUs.**Domestic Budgetary Support**

2.22 The Domestic Budgetary Support (DBS) forthe year 1999-2000 was Rs.448.50 crore and DBS for 2000-2001 is Rs.476.55crore, i.e. only Rs.28.55 crore more than 1999-2000. If we take intoaccount the minimum inflationary trend of 10 per cent to 12 per centper annum then at least Rs.45.00 crore to Rs.50.00 crore should havebeen added to Rs.448.50 crore to give more realistic DBS for 2000-2001.

2.23 The Department was asked to state as tow why even minimum 10 per cent enhancement of budget allocation wasnot made keeping in view the inflationary trends prevailing in the presentcircumstances, while making budgetary allocations for the next financialyear. To this point, the Department replied as under :

The Department had proposed Rs.605.65 crore as DBS during2000-2001 against which the allocated amount is Rs.476.55 crore ( afteradjusting the Externally Aided Projects and Mini Mission on Cotton Projectout of the total allocated amount of Rs.629.55 crore during 2000-2001).Though the Department had which the allocated amount is Rs.476.55 crore( after adjusting the Externally proposed higher amount for DBS butdue to financial constraints, the Planning Commission allocated only Rs.629.55crore, out of which DBS could be made at Rs.476.55 crore only. TheDepartment can only allocate the amount for DBS from the total allocationreceived from the Planning Commission. The matter of taking intoaccount minimum inflationary trend of 10 to 12 percent while allocatingfunds to the Department has been regularly pleading with the

Planning Commission for adequate funding. **Need for separate indication of Capital requirements under the Head Capital**

2.24 While scrutinizing the Demands for Grants (1999-2000) in respect of DARE, the Committee found that the outlay proposed for the Plan activities of 1999-2000 was Rs.712.68 crore which included capital component of Rs.167.23 crore as the same was separately shown in one of the columns of the financial statement in the Annual Plan 1999-2000 document. But in the Annual Plan 2000-2001 document containing financial statement, there has been no mention of capital component requirement for the year 2000-2001.

2.25 When asked as to why the capital component requirement has not been separately shown in the financial statement in the Annual Plan 2000-2001 this time, the Department clarified as under: The Department could not provide capital component for each scheme in the Annual Plan 2000-2001 document as the exact requirement of various infrastructure development for various schemes was in the process of finalisation seeking information from various institutions/projects/schemes spread all over the country. Now the scheme-wise Annual Plan 2000-2001 allocation has been finalised and the concerned quarters have been asked to submit the full details of their heads of expenditures including capital component. This process may take some more time for finalisation of the information.

2.26 The detailed Demand No.2 pertains to DARE and the entire Demands are divided under two major sections namely Revenue and Capital. It has been observed that other Ministries/Departments indicate their Capital requirements separately in their respective Demands in the Government of India Expenditure Budget Document under the Section Capital. But DARE never does so.

2.27 When asked about the components of Revenue and Capital sections separately, the Department categorically and ironically replied: The DARE do not have their specific requirement under Capital. **One Time Catch up Grant to DARE/ICAR**

2.28 Against the recommendation of the 9th Plan Working Group as well as Recommendation No.5 in 19th Report on Demands for Grants 1999-2000 of the Parliamentary Standing Committee on Agriculture towards a one time catch up grant of Rs.500 crore to modernise the decades old National Agricultural Research System, the Planning Commission has already approved Rs.400 crore for the 9th Plan.

2.29 The Department was asked to state the amount of grant that has been utilised so far, with names of the Institutes/Programmes that have been benefited from the grant. The Department in a written reply stated as under: The Planning Commission had initially allocated Rs.400 crore as IX Plan outlay towards one time catch up grant but despite the Department requests, it has not provided any amount towards one time catch up grant through Annual Plan budgets. During the 2000-2001, the Department had proposed an amount of Rs.250 crore but no separate allocation has been provided by the Planning Commission. However, the Department felt that the old institutions badly needed some funding for renovation of old infrastructure and replacement of obsolete equipments as well as other vital general utilities. To meet with this burning requirement, the Department had taken an administrative decision and asked the concerned old institutions to utilise 20% of the current year's plan budget and 30% for the 2000-2001 towards approved items of one time catch up grant. In case the Department receives separate funds for one time catch up grant from the Planning Commission, the budgetary amount would be provided on priority.

Since the provision of One Time Catch Up Grant from the Annual Plan budget has been made from the current financial year, the fund utilisation figures will be known at the end of year.

Forty nine ICAR institutions and 30 State Agricultural Universities and old Krishi Vigyan Kendras have been identified for One Time Catch Up Grant during the IX Five Year Plan on the funding outlay stated above. **10% Allocation in Favour of Exclusive Schemes for the North-**

### **Eastern States**

2.30 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 BE 2000-2001 for the schemes for the benefit of North-Eastern Region & Sikkim has been kept at Rs.63.00 crore ( Plan).

2.31 The Committee wanted to know the percentage of Plan allocation made and actually spent for schemes meant exclusively for the North-East during the 1st three years of the IX th Plan. The Department in their reply has stated as under : The percentage allocation made and actually spent for schemes meant exclusively for the North-East during the first three years of IX Plan and BE 2000-2001 is given as under : (Rs. in crore)

Year	Allocation	10% of Allocation	Amount Allocated	% age of Plan	Actual amount spent
		as per directive	to NE States & Sikkim	allocation made to NE State and Sikkim w.r.t. Outlay	
1997-98	331.17	33.11	23.80	7.19	23.80
1998-99	445.00 (RE)				
44.50	36.68	8.24	36.95		
1999-2000	504.00 (RE)	50.40	44.73	8.88	44.73 (Anticipated)
2000-2001	629.55	62.96	63.00	10.01	-

From the above facts and figures it is indicative that the Departments annual plan allocation towards the activities of NE States and Sikkim is consistently tending to 10 per cent funding criterion and during the year 2000-2001 this amount has been pegged at 10 percent and is expected to be totally utilised. **Sectoral Allocations According to IX Plan Working Group**

### **Recommendations**

2.32 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 :

S.No.	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  
 Publication & Information  
 Headquarter (ICAR) 20

2.33 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 during the last four years of the IXth Plan along with reasons, if any, for inadequate allocations for any of the sectors. The Department in their reply has stated as under :

Because of the pressing needs of Agricultural Extension and non-availability of funds from the Ministry of Finance/Planning Commission there was increase in the percentage allocation to Agricultural Extension. Similar was the situation with regard to Natural Resource Management, Agricultural Engineering etc. Once, adequate funds are made available every effort will be made to compensate for the shortfalls for priority programmes in other areas in the coming years. The sector-wise details of allocations along with percentages for all the four years of IX Plan are as per following table.

Sector	Proportion of Allocation as Recommended by Working Group IX Plan	(Rs. in crore)				
		1997-98	1998-99	1999-2000	2000-2001	
Allocation %age	Allocation %age	Allocation %age	Allocation %age	Allocation %age	Allocation %age	
1. Agril Education	15.00	30.30	10.27	55.00	12.24	55.00
12.26	70	14.69				
2. Agril Extension	10.00	40.00	13.56	50.00	11.13	50.00
11.15	60	12.59				
3. Fisheries	6.00	19.00	6.44	28.00	6.23	
28.00	6.24	29	6.09			
4. Animal Science	14.00	33.32	11.29	55.00	12.24	
54.00	12.04	59	12.38			
5. Horticulture	10.00	29.85	10.72	47.30	10.53	
47.00	10.48	49	10.28			
6. Crop Science	25.00	67.05	22.73	97.00	21.59	
97.00	21.63	104	21.82			
7. NRM		35.09	11.89	49.70	11.06	
50.00	11.15	52	10.91			
Agri. Engg	20.00	13.94	4.73	25.00	5.57	
25.00	5.57	24	5.04			



Agri. Eco. & Stat		1.50	0.51	4.00	0.89	4.00	
0.89	4	0.84					
ICAR Hqrs Stat.		24.95	8.46	38.18	8.50	38.50	8.58
25.55	5.36						
<b>Total (DBS)</b>	<b>100.00</b>	<b>295.00</b>	<b>100.00</b>	<b>449.18</b>	<b>100.00</b>	<b>448.50</b>	<b>100.00</b>
<b>476.55</b>	<b>100.00</b>						
World Bank and EAPs		36.17		81.99		125.00	148.00
Mini-Mission on Cotton Project							5.00
Grand Total							
331.17	531.17	573.50		629.55			

Note(i) The 1x Plan Working Group recommended theseparate proportion of allocation of IX Plan for DBS only; hence WorldBank/Externally Aided Projects allocation has been shown separately.

(ii) For Sl.No.7 (NRM + Agril. Engg. + Agri.Eco &Stat. + ICAR Hqrs. & P&I) the total percentage allocation for 4years i.e. 1997-98, 1998-99 1999-2000, 2000-2001 is 25.59% 36.02% 26.19%and 22.15% respectively.

#### **Administrative-Pending Vigilance/Disciplinary Cases**

2.34 The Committee enquired about the Vigilance/Disciplinarycases pending in the DARE/ICAR for the last ten years with details of presentstatus of each such case. The Department in their reply has informedabout 25 pending vigilance cases against 37 scientists/ personnels and37 pending disciplinary cases coming to the notice of the Departmentsduring the last 10 years.

2.35 The Committee also enquired about the present status in getting the post of Director (Vigilance) sanctioned as per therecommendations of the Committee in their Eighth and Nineteenth Reports( 1998-99) in this regard. The Department replied : In pursuance of the recommendation of the Parliamentary StandingCommittee on agriculture the issue was taken up by the cadre Review Committee. The Committee had recommended the creation of post of Director (Vig.). On the basis of the Report of the Committee, a proposal has been sent tothe Ministry of Finance for their clearance.

#### **Agricultural Produce Cess**

2.36 Under Major Head 2415, Minor Head 150-05of Demands for Grants Payments of net proceeds of Cess under AgriculturalProduce Cess Act, 1940, BE 1999-2000 is Rs.25.00 crore under Non-Plancolumn; RE 1999-2000 is Rs.1.00 crore and BE 2000-2001 is Rs.5.00 crore.

2.37 The Committee was surprised to see sucha huge variation between BE/RE 1999-2000 and in BE 2000-2001 with regardto Agricultural Produce Cess and asked the Department to state the reasonsfor the same. The Department in their reply stated that :

The variation between BE and RE 1999-2000 is due to reductionin allocation of funds by the Ministry of Finance. We had proposedRs.25.00 crore under RE 1999-2000 and Rs.25.00 crore in BE 2000-2001. The amount was reduced to Rs.1.00 crore in RE 1999-2000 and Rs.5.00 crorein BE 2000-2001 by the Ministry of Finance.

## Revenue Generation

2.38 The Department apart from the Government grant, has been generating funds from various internal sources such as (1) Revenue Receipts (2) Interest earned on Short-term deposits of the idle funds; and (3) recovery of loans and advances.

2.39 The Committee were keen to know whether any target for generation of income has been fixed by the Department every year in advance and if so the details of targets fixed and achieved along with reasons for shortfall, if any. To these points, the Department replied as under : Yes from the years 1996-97 the target of Revenue Generation is fixed. The target fixed and achievement are given as under :

Year	Target Fixed	(Rs. in crore)	
		Target Achieved	
1996-97	22.50	16.76	
1997-98	29.00	18.59	
1998-99	17.00	20.11	
1999-2000	21.21		Yet to be known

Yes, there was shortfall in the years 1996-97 and 1997-98 due to fixation of higher target. During 1998-99 the targets were exceeded to on the issue of resource generation, it is worth pointing out that the ICAR works primarily for farmers where techniques, technologies etc. are supplied to enhance productivity and production and income for rural masses. 2.40 When asked about the utilisation of the income generated so far, year-wise during the last five years, the Department replied :- The Revenue Generation during these years have been allowed to be utilised under Non- Plan by all the constituent units as per their requirements. **Agricultural Scientists Recruitment Board (ASRB)**

2.41 The Agricultural Scientists are the life-line of agricultural research and development activities. And the Board responsible for their recruitment acquires greater significance for its activities have direct impact on the quality of agricultural research and development in the country.

2.42 The Committee asked the Department to give details of ASRBs historical background, organisational set up, mandate/functions, achievements made and problems/ constraints encountered by it. The Department in their written reply stated :

### *Historical Background and organisational set-up of ASRB*

Since selection of the scientists in the ICAR, which is a Council outside the Government, could not be entrusted to the UPSC, an independent recruitment agency named Agricultural Scientists Recruitment Board was created with the approval of the Cabinet on 1.11.73. The Agricultural Scientists Recruitment Board (ASRB) is headed by an eminent Agricultural Scientist. Apart from the Chairman, there are two Members. For rendering support to the Chairman and Members of the Board, the Secretariat of ASRB is headed by Secretary, ASRB.

### *Mandate and functions of ASRB*

(a) The Recruitment Board shall function as an independent recruiting agency and shall be responsible for recruitment to posts in the Agricultural Research Service and to such other posts and services as may be specified by the President from time to time.

- (b) The Recruitment Board shall render such other assistance to the Council in personnel matters including promotion as may be required by the President.
- (c) The Recruitment Board shall advise the Council in disciplinary matters relating to personnel recruited/appointed either by the Council itself or in consultation with the Recruitment Board.
- (d) The Recruitment Board shall submit annually by the second week of May of the year following the financial year a report on its activities for each financial year to the President.
- (e) Recruitment of grade S-I (Rs.700-1300) of the ARS through All India Competitive Examination;
- (f) Induction of existing scientists of ICAR to the ARS under initial constitution of ARS.

#### *Achievements made by the Board*

Recruitment of Scientists at the entry level (S-1) is done through All India Competitive Examination and through open advertisement and personal discussion, every year. Combined with the above examination National Eligibility Test for recruitment of Lecturers and Asstt. Professors by the SAUs and for award of ICAR Research Fellowship are also conducted by the Board annually. Recruitment to the posts of Senior Scientists, Principal Scientists, Project Coordinator, Zonal Coordinators, Heads of Division/ Regional Stations of ICAR Institutes and RMPs, for vacancies as indicated by the ICAR from time to time is made by ASRB on the basis of interview/ personal discussion. In addition to the scientific posts, the ASRB has also recruited technical personnel, administrative and accounts personnel. Both on limited and open competition basis. The direct recruitment to the post of Finance and Accounts Officers and Administrative Officers in the combined cadre of F&AO were also carried out by the Board. With the adoption of UGC pay package w.e.f. 1.1.86 and formulation of a comprehensive scheme of career advancement for ARS Scientists under the ICAR, the career advancement of scientists in the pay scale of Rs.2200-4000 (pre-revised) to Scientists (Senior Scale) in the pay scale Rs.3000-5000 (pre-revised) and Scientists (Senior Scale) to Scientists (Selection Grade/ Senior Scientists) were carried out by the Board regularly. Assessment Committees for grant of Merit Promotion/ Advance increment for the technical personnel have also been undertaken by the Board.

#### *Problem/ constraints encountered by the Board*

Except that the post of Chairman, ASRB which has fallen vacant since 18th February, 2000, the Board has no material problems/constraints to be specified at this stage.

2.43 The Department was also asked whether the ASRB has been fulfilling its objective up to the satisfaction of the Department and the nation as a whole. The Department stated that: The ASRB has been handling the entire recruitment process of the Agricultural Scientists of ICAR to cater the needs of the Research Institutes of the Council located in different parts of the country. The Board has always endeavoured to perform its mandate and functions to the satisfaction of the Department and for the promotion of Agricultural Research at the national level. 2.44 When asked about the reasons as to why so many posts of scientists lying vacant in the ICAR institutions and about their urgent filling, the Department stated :

Recruitment is a continuous process. Vacancies falling in the various grades of scientists due to retirement, resignation etc. are filled through the Board on continuous basis. For filling up the post of Scientists at entry level, the ASRB conducts a competitive examination on All India basis every

year. During the last three examinations, 606 Scientists have been recruited by the Board. Apart from this vacancies in other grades of Scientists such as Sr. Scientists, Principal Scientists have also been filled on direct recruitment basis. During the last three years, 541 Scientists in these grade have been recruited. However there are still about 500 vacancies for which requisitions have been sent/ being sent to ASRB for filling them up through advertisement and interview. However, it is worth pointing vacancies are less than 10 per cent of the Scientific Cadre Strength. Nevertheless it is expected that in the next 2 years, there will not be any back log of vacancies.

**Project-based Budgeting (PBB)**

2.45 The Committee noted that in view of the national fiscal deficits as well as donor fatigue for agricultural sector, better financial management is called for, to get better values of the investments. It is in this context, project-based budgeting (PBB) becomes highly relevant to meet resource allocation for high priority projects around available expertise only and also to make scientists involved, responsible as well as accountable for utilising funds judiciously and for meeting research targets successfully through required decentralisation down the line. The system of PBB has been introduced in the ICAR w.e.f. April, 1998.

2.46 The Committee wanted to know about the impact of PBB system introduced two years back on the financial and functional activities of the Department. The Department in their reply stated: The Project Based Budgeting (PBB) in a complex system needs far more reorientation, readjustment and change in working. All the Institutes, Directorates, Bureaux and National Research Centres are sensitized. Documents are prepared, discussed and widely circulated. Now in programmes like NATP, the concept of project based budgeting is implemented. The initial indications are : increase in efficiency, effectiveness, relevance and accountability.

#### **CROP HUSBANDRY HEAD 2415**

##### **Separate Budget heads for Crop Science and other Programmes under Crop Husbandry**

2.47 The Parliamentary Standing Committee on Agriculture in their Tenth Report (1996-97), vide Recommendation Sl.No.2 had recommended that the Budget Head for Crop Husbandry should be suitably modified so that the allocation to other sectors such as Crop Science, Horticulture etc. are properly reflected in the Demands for Grants.

2.48 The Department in their Action Taken Reply had stated that the recommendation of the Committee was being implemented to provide different budgetary heads to reflect their allocations appropriately.

2.49 Further, during the Scrutiny of Demands for Grants 1999-2000, the Department was again asked as to why the Department has not so far implemented the recommendation of the Committee in spite of its assurance to the Committee that the needful was being done at their end.

2.50 In their reply the Department stated that Ministry of Finance was approached during April, 1997 but has not cleared/approved the proposal giving the remarks to seek CGAs approval to change the standard nomenclature of heads prescribed by him before approaching Ministry of Finance for issuing corrections of the Detailed Demand. Consequently, the CGA was approached in November, 1997 but no response was received by the Department till April, 1999. The Department assured the Committee that the matter would be pursued with CGA/Ministry of Finance till the issue was finalised.

2.51 Even in the latest Demands for Grants 2000-2001, the Budget Heads have not been suitably modified as per the recommendation of the Committee.

2.52 The Department was asked why it has not been able to achieve the desired results in this regard by convincing CGA/Ministry of Finance for more realistic and unambiguous presentation of the Demands for Grants of the Department in the light of the recommendation of the Committee. The Department replied as under :

For separate Budget Heads for Crop Science and other programmes under Crop Husbandry, the Ministry of Finance has not cleared the proposal. It will be further pursued with the Ministry of Finance.

**Crop Science**  
2.53 The financial data given below relate to Crop Science Sector which is directly responsible to cater to the R&D needs of food grains for the nation.

Sector	(Rs. in crore)				
	BE 1999-2000	RE 1999-2000	Anticipated		
Expenditure	Shortfall	BE 2000-2001			
Crop					
Science	97.00	94.00	94.00	3.00	104.00

2.54 On the Points of under-utilisation of funds upto Rs.3.00 crore during 1999-2000 by this Sector and reasons for fixing BE- 2000-2001 for RS.104.00 crore whereas even Rs.97.00 crore could not be fully utilized in 1999-2000, the Department replied: The Crop Division continued to be in position to utilise its full allocation of 97 crores. However due to overall cut of allocation to ICAR by Ministry of Finance, the total allocation of Crops Division was reduced to Rs.94 crores from Rs.97 crores at RE level hence there was no shortfall.

As explained above Crop Science is in position for effective utilisation of resources if made available during 1999-2000. The actual allocation during 2000-01 is indeed short of its actual requirement as already almost all of its 9th Plan Schemes/ Programmes have been cleared and need additional resources for their timely implementation.

### Foodgrains Production

Crop	(Million Tonnes)				
	1995-96	1996-97	1997-98	1998-99	1999-2000 (Estimated)
Rice	77.0	81.7	82.5	86.0	87.5
Wheat	62.1	69.4	66.3	70.8	68.7
Coarse					
Cereals	29.0	34.1	30.4	31.5	29.2
Pulses	12.3	14.2	13.0	14.8	13.5
Foodgrains	180.4	199.4	192.3	203.0	199.1

2.55 Increasing foodgrains production over and above the population growth of the country per annum has been a matter of concern for all the nation but there are limits to increasing production through area expansion as country has almost reached a plateau in so far as cultivable land is concerned. The area under foodgrains has more or less remained constant at around 125

million hectares since 1970-71. However, due to aberrant weather conditions during the current year, the area is likely to go down to 123.3 million hectares. Hence the emphasis has to be on increasing productivity levels. Overall growth rate of foodgrains production decelerated to 1.80 per cent per annum during the decade of nineties which is just about equal to annual population growth and therefore, is a matter of concern.

2.56 The estimated production of rice is reported to be 87.5 m.t. in 1999-2000 which is 1.5 m.t. higher than 1998-99 production of 86 m.t. i.e., an increase of 1.7 per cent in production. The estimated production of Coarse Cereals is reported to be 29.2 m.t. as against 31.5 m.t. produced last year, a decline by about 2.2 m.t. or about 7% compared to 1998-99. The production of pulses this year is expected to be 13.6 m.t. as against 14.8 m.t. produced last year. Whereas decline in coarse cereals output is reported to be due to substitution effect, failure in improving growth in pulses is quite a setback. The decrease in pulses production of 1.2 m.t. is about 8.2 % lower than produced last year. Higher output of rice is unlikely to offset fully the decline in production of coarse cereals and wheat. Hence estimated foodgrains output of 199.1 m.t. in 1999-2000 would be lower by about 4m.t. representing a decrease of 1.9% over the preceding year.

2.57 Overall, the growth in 1999-2000 of agriculture and allied sectors is likely to be only 0.8% compared to growth of 7.2 % last year.

### Food Crops

2.58 The details of approved outlays, Expenditure etc. for 1999-2000 and BE 2000-2001 of the following schemes under the food crops programme are as under :

Sl.No.	Scheme	BE 1999-2000	(Rs. in lakh)			Shortfall	BE 2000-2001
			RE	Anticipated	Expenditure		
1.	Indian Agricultural Research Institute	950.00	925.00	925.00	25.00	940.00	
2	Central Rice Research Institute	335.00	300.00	300.00	35.00	500.00	
3	Indian Institute of Pulses Research	350.00	150.00	150.00	200.00	320.00	
4	AICRP Pulses (MULLARP)	240.00	220.00	220.00	20.00	275.34	
5.	AICRP Pearl Millet	140.00	125.00	125.00	15.00	140.00	
6.	AICRP Small Millet	135.00	85.00	85.00	50.00	100.00	

2.59 The Department was asked to give reasons for under-utilisation of funds in each of the above mentioned schemes. The Department replied as under :

Due to overall cut of allocation to ICAR by Ministry of Finance at RE 1999-2000 the total allocation of Crops Division was reduced to Rs.94 crores from Rs.97 crores and due to which allocation to institutes namely IARI, and CRRI and three AICRPs namely Pulses ( Mullarp), Pearl Millet and Small Millets were reduced based on their expenditure trends with the objective to

judicious and fuller utilisation of the scarce resources made available for crop science research during the year. In case of IIPR, research laboratories were to be constructed. Now SFC has cleared the 9th Plan proposals. Estimates from CPWD are also available. Hence the shortfall would be compensated rather early. 2.60 Crore of Rupees are spent every year on Pulses Research activities without any major breakthrough to increase productivity and production of pulses in India. Each year new varieties are released. In 1999-2000, eight new varieties were released and notified still pulses production went down by 8.2 % as compared to pulses produced in 1998-99.

2.61 The Department was asked whether any long term strategy was being contemplated to give a new direction to pulses research in India. The Department in a written reply stated : Pulses production has shown upward trend in the last few years. The production of pulses was 14.83 million tones during 1998-99 compared to 13.07 million tonnes in the previous year i.e. 1997-98. This amounts to 13.31 per cent increase in production of pulses during 1998-99 compared to the previous year. It is emphasized that pulses are grown in rain-fed situations, which are highly influenced by year to year fluctuation in the rainfall pattern and infestation of various diseases and pests. Application of input such as improved seed, fertiliser and life saving irrigation are also sub-optimal.

Although, the major breakthrough in pulses production is yet to be realised, the improved production technologies have been developed by ICAR for different pulse crops. If these technologies are adopted substantially by the farmers, the production of pulses will certainly further increase. The data of the frontline demonstration conducted in farmers field clearly indicate that the yields of pulses to the extent of 20-40 per cent can easily be increased through adoption of improved technologies developed by ICAR.

After SWOT analysis, the ICAR has initiated plans for technological development and backstopping on a long term sustainable basis for increasing the production of pulses in the country. A VISION document on pulses for 2020 has been prepared by effectively utilizing the vast national scientific expertise and experience in 1997. In this visionary document, appropriate strategy has been outlined for improving the yield potential of pulses through acceleration of efforts, in basic, strategic and applied research. Accordingly, the crop oriented and time targeted specific research programs are delineated and are being implemented in the IXth Plan. **Forage Crops**

2.62 The BE, RE, Anticipated expenditure 1999-2000 and BE 2000-2001 for two schemes under Forage Crops are as under :

(Rs. in Lakh)					
Sl.No.	Scheme	BE 1999-2000	RE	Anticipated Expenditure	BE
<u>2000-2001</u>					
1.	Indian Grassland and Fodder Research Institute	120.00	150.00	150.00	155.00
2.	AICRP Forage Crops	160.00	255.00	255.00	213.14

2.63 When asked about the exact sources and reasons for additional funding of both the schemes mentioned above at RE stage during 1999-2000, the Department replied : Additional funds of Rs.30 lakhs were allotted to Indian Grassland & Fodder Research Institute for purchasing some important equipment and for renovation of old buildings. Similarly, additional funds of Rs.95 lakhs were allotted to AICRP Forage Crops for clearing their long pending arrears payment, which could not be paid during previous years due to shortage of funds. Additional funds were allotted from the overall allocation to the Crops Division giving priority to the arrears payment, purchase of most essential equipments and renovation.

2.64 The Committee also enquired about the forage crop that has highest yielding capacity per hectare/ lowest yielding capacity and the regions where these were grown. The Department stated as under : Napier-bajra hybrid and paragrass are two highest yielding forage crops with a yield potential of about 180 tonnes of green fodder per ha. Napier-bajra hybrid is cultivated throughout the country, except temperate and sub-temperate areas of Himalayas. Paragrass is grown in marshy and waterlogged areas. Rice bean and cluster bean have the lowest yielding capacity among cultivated forage crops. Rice bean is mostly cultivated in Bihar, Orissa, Andhra Pradesh, West Bengal and NE region. Cluster bean is generally cultivated in arid region in northwest India. The yielding capacity of rice bean and cluster bean is about 20-30 t/ha.

#### **Commercial Crops**

2.65 The BE, RE, Anticipated Expenditure etc. 1999-2000 and BE 2000-2001 for some of the schemes under commercial crops are as under :

(Rs. in Lakh)				
Sl.No.	Scheme	BE 1999-2000	RE	Anticipated
Expenditure	BE 2000-2001			
1.	Central Institute of Cotton Research	130.00	120.00	130.00
2.	Central Research Institute for Jute and Allied Fibres	175.00	100.00	170.76
3.	Sugarcane Breeding Institute	220.00	200.00	210.00

2.66 The Department was asked to give reasons for shortfall in expenditure in each of the three schemes mentioned above. Due to overall cut of allocation to ICAR by Ministry of Finance, the total allocation of Crop Division was reduced to Rs.94 crores from Rs.97 crores and due to which allocation to three institutes namely CICR, CRIJAF and SBI were reduced based on their expenditure trends with the objectives to judicious and fuller utilisation of the scarce resources made available for crop science research.

2.67 The Committee while scrutinising the Demands for Grants 2000-2001 in respect of DARE noted that a Mini Mission on Cotton Project with an approved outlay of Rs.5.00 crore for 2000-2001 against a proposed outlay of Rs.30.00 crore is to be started during 2000-2001.

2.68 The Committee were keen to know the details and objectives of the Mini Mission and whether its objectives would be fulfilled with an outlay of Rs.5.00 crore against a proposed outlay of Rs.30.00 crore. To these points, the Department replied as under :



The Mini- Mission- I has been started for stepping up timetargeted specific research efforts to fill up critical gaps in developing farm worthy production and protection technologies with potential of enhancing cotton productivity on a sustainable basis.

During the last 3-4 years, the cotton crop was suffering from increased incidence of pests and diseases and bad weather and as a result, the yield and production were adversely affected. Consequently, availability of raw material to the vast growing industry was becoming a problem. Hence, concentrated R&D efforts to achieve higher production on the sustainable basis, the MMI was envisaged.

The Technology Mission on Cotton has been approved by the Government of India vide Cabinet Secretariats letter No. I/CM/2000(i) of 17th January 2000 and the Mission was launched by the Honble Prime Minister on 21st February 2000.

The approved outlay of Rs.5.00 crores for 2000-2001 as against the proposed outlay of 15.00 crores is not sufficient to carry out different activities under MMI. It is hoped that an additional committed amount of Rs.10.00 crores by Department of Agriculture and Cooperation, GOI for the year 1999-2000 would be made available in early 2000-2001. Hence, the total amount available for 2000-2001 would be Rs.15.00 crores. The remaining amount, if made available, can be effectively utilised during the subsequent year or IXth Plan. 2.69 The Department was also asked whether the Central Institute of Cotton Research and AICRP-Cotton have failed to give the desired positive research for overall growth of cotton production, if not, then why a special Mini Mission on Cotton envisaged with such a huge funding. The Department in their reply stated : The Central Institute for Cotton Research (CICR) and the All India Coordinated Cotton Improvement Project (AICCIP) have made significant achievements and as a result area, production and productivity have increased in the country. India has the distinction in the world to produce and commercialise the first cotton hybrid in 1970. Thereafter several varieties/ hybrids, production and protection technologies have been developed. As a result area and production increased to 9.12 m ha with production of nearly 14.2 m bales in 1997-98 as compared to 8.0 m ha with production of 5.78 m bales of cotton in 1967-68. But because of development of insecticide resistance in American Bollworm (Heliocoverpa) and recent occurrence of Leaf Curl Virus disease in North India, and the fact that cotton is grown on marginal soils and under rainfed conditions in large areas of the country and for the improvement of fibre quality to compete globally, it was felt that the R & D efforts need to be accelerated in a time bound manner to achieve results. Therefore, Mini-Mission-I was envisaged. Hence, the added thrust would augment, complement and scale up priority efforts in making India competitive in terms of cost and quality of cotton to attain and sustain advantages regionally and globally. 2.70 India is one of the most efficient producers of sugar. There is surplus in stock. Imports are cheaper than domestic sugar. Farmers are not paid their dues by factory owners. Sugarcane grows in surplus. ICAR has : (i) Indian Institute of Sugarcane Research with Rs.9.15 crore 9th Plan outlay

(ii) Sugarcane Breeding Institute with Rs.7.65 crore 9th plan outlay

(iii) AICRP-Sugar crops with Rs.8.98 crore 9th plan outlay                      Total Rs. 25.78 crore is earmarked for sugar research.

2.71 The Department was asked to justify the necessity of such a heavy expenditure on sugarcane research while the vital resources could be better utilised for R&D of other crops which

suffer from lack of funds availability. The Department in their reply stated : Sugarcane occupies nearly 4.0 m ha in our country. India is the second largest producer of sugarcane and sugar in the world after Brazil. About 40 million sugarcane growers and their families are dependent on sugarcane cultivation. Unlike other industries, almost all sugar factories are located in rural India and the industry also plays an important role in the socio-economic upliftment of rural people.

With the ever-increasing population in the country, it is important that there is sufficient production of sugarcane and sugar to meet the domestic as well as export needs. Therefore, strong R & D institutions are needed to develop improved varieties, production and protection technologies on a sustainable basis. If this is not done, then there can be a shortage of sugar and a lot of precious foreign exchange will be required to import sugar.

The IISR, Lucknow; SBI, Coimbatore; and All India Coordinated Research Projects on Sugarcane were established with specific objectives and mandates. IISR, Lucknow has the mandate i) to conduct basic and applied research on all aspects of production and protection technologies of sugarcane and sugar crops at national level. ii) to develop varieties of sugarcane for subtropical India. SBI, Coimbatore has i) to conduct basic and strategic studies on crop improvement including development of superior varieties and genotypes, and supply of Fluffs to the State Agricultural Universities as crosses can only be made in this type of environment, and ii) collection, maintenance, evaluation, documentation and conservation of sugarcane/Saccharum species genetic resources etc. The Coordinated Project is entrusted with the responsibility of conducting multi-locational testing of varieties in the country to develop region/location specific varieties/ technologies.

In the fast changing environment and to manage the change rather effectively, continuous research efforts are imperative. Hence it will not be in the national interest to reduce expenditure on sugarcane research.

### Oilseed

2.72 There are nine major oilseeds namely groundnut, castor seed, sesam, niger seed, soyabean, sunflower, rapeseed/mustard, linseed and safflower. Of these groundnut, rapeseed and mustard and soyabean occupy commanding position in terms of total production. During 1999-2000 the oilseed production is expected to be 21.6 million tonnes compared to 25.2 m.t. produced last year. This is ascribed mainly to a large decline in groundnut production in Gujarat.

2.73 The BE, RE and Anticipated Expenditure during 1999-2000 and BE 2000-2001 for NRC Groundnut and NRC Rapeseed and Mustard are as follows :-

(Rs. in lakh)				
Scheme	BE 1999-2000	RE	Anticipated	
Expenditure	BE 2000-2001			
NRC				
Groundnut	145.00	105.00	105.00	1
25.00				
NRC Rapeseed and				
Mustard	350.00	300.00	300.00	

2.74 When asked about the reasons for under-utilisation of funds in both of the schemes mentioned above, the Department replied :Due to overall cut of allocation to ICAR by Ministry of Finance, the total allocation of Crops Division was reduced to Rs.94 crores from Rs.97 crores and due to which allocation to two institutes namely NRC Groundnut & NRC Rapeseed Mustard were reduced proportionately based on their expenditure trends with the objective to judicious and fuller utilization of the scarce resources made available for crop science research.

2.75 The Committee wanted to know the reasons for large decline in groundnut production in Gujarat and remedial measures that have been taken or proposed to be taken to improve the situation by the Department. The Department in their reply stated as under :The main reason for large-scale decline in groundnut production in Gujarat in the current year has been due to failure of rains in the major groundnut growing areas. In order to make up the losses in the kharif season, farmers are encouraged to take up groundnut in Rabi-summer season, which have higher yield potential compared to kharif season groundnut. Improved production technology for rabi summer and groundnut cultivation is being popularized to realise high productivity and profits.

### **New Initiatives under Crop Science Sector**

2.76 The financial statement of the Department shows a provision of Rs.250.00 lakh for Directorate of Millets and a provision of Rs.378.33 lakh for National Bureau of Agricultural Important Microbes and Insects as IX plan outlay.

2.77 The Committee asked the Department to state as to why no outlay/ expenditure has been made so far in last four years of the IXth Plan under these two new initiatives. The Department replied as under : A Committee has already been constituted to select the site of the Directorate of Millets. SFC Memo will be submitted immediately after the receipt of recommendation of the Committee. Therefore, no outlay has been proposed for the Directorate of Millets during 1999-00. Similarly, the SFC Memo of National Bureau of Agricultural Important Microbes is not yet cleared due to which no outlay has been proposed for the year 1999-00.

2.78 When asked about as to how the funds allocated for both of the schemes proposed to be utilised, the Department replied : Funds will be utilised during remaining period of the 9th Plan after the clearance of 9th Plan proposals of Directorate of Millets & National Bureau of Agricultural Important Micro-organisms.

## **SEED TECHNOLOGY RESEARCH AND BREEDER SEED PRODUCTION**

### **National Seeds Project**

2.79 IX Plan outlay is Rs.2749.84 lakh. The details are as follows :

Year	Approved Outlay	(Rs. in lakhs)
		Expenditure
1997-98	290.00	329.93 ( actual)
1998-99	350.00	382.17 (actual)
1999-2000	340.00	340.00 (RE)
2000-2001	392.08	-
<b>Total</b>	<b>1372.08</b>	<b>-</b>

2.80 The approved outlay in the 1st four years of IX Plan is 49.89% of IXth Plan outlay. Under the sector Horticulture- Vegetables Vegetable Seed Project has been allocated an amount of Rs.423 lakh for IXth Plan. The 1st four year allocation is Rs.360.00 lakhs. The utilisation is only Rs.320.00 lakhs

2.81 The Department was asked to state whether it would be possible to utilise more than 50% funds in the final and 5th year of the IXth Plan under National Seed Project. The Department stated: Seed is the basic input to agriculture. Hence it is considered most vital for enhancing productivity and production of different crops. Accordingly, the programme is strengthened in IX Plan for which EFC is cleared in 1999. As such, there is committed liability of Rs.1315.69 lakhs in the rest of the period of IX plan. Thus, the balance of about 50% funds will be fully utilized in the remaining period of IX Plan.

2.82 As seeds ( breeder/certified) are usually a scarce commodity amongst farmers, the Committee wanted to know the efforts made by the Department to see that adequate quantity of certified seeds are available to farmers in village/ block level. The Department in their reply stated as under: A one time provision of revolving fund to the tune of Rs.402.5 lakhs has been made in various ICAR institutes and SAUs to avoid the problem of recurring contingencies for the production of breeder seed. The provision has proved most effective in meeting the requirement of breeder seed. The breeder seed is further multiplied to produce foundation seed and subsequently certified seed. To further upgrade the system, the institutes have been allowed to plough back the profit for strengthening the breeder seed production capabilities.

Off- season nursery facilities have been developed in the country so that in case of emergency the breeder seed multiplication programme can be taken up.

Every year the whole situation of breeder seed is reviewed meticulously. All aspects of seed including production of breeder seed and its effective utilisation are reviewed. Consequently, the certified/quality seed availability has increased from 5.6 lakh quintals during 1970-71 to 70 lakh quintals during 1996-97, and 84.97 lakh quintals ( tentative) during 1998-99.

**Horticulture**  
2.83 The Horticulture sector which includes a wide variety of crops such as fruits, vegetables, spices, plantation crops, floriculture, medicinal and aromatic plants, cashew etc. is recognised as an important sector for potential diversification in agriculture. India is the largest producer of fruits crops and accounts for 10% of world production of fruits crops and is largest producer of vegetables next only to China with an annual estimated production of 85 million tonnes in 1998-99, including potato production of 23.5 m.t.

2.84 The BE, RE, Anticipated Exp. 1999-2000 and BE 2000-2001 for some of the schemes under the Horticulture sector are as under :-

Scheme	(Rs. in lakhs)			
	BE 1999-2000	RE	Anticipated	
Expenditure	Shortfall	BE 2000-2001		
Indian Institute of Horticultural Research	330.00	240.00	240.00	90.00
				250.00

Central Instt. For Subtropical Horticulture 00	180.00	90.00	90.00	90.00	160.
NRC- Grapes 170.00	180.00	120.00	120.00	60.00	
Central Institute of Temperate Horticulture 00	150.00	90.00	90.00	60.00	175.
NRC- Banana 180.00	160.00	120.00	120.00	40.00	
NRC- Mushroom 100.00	120.00	80.00	80.00	40.00	
AICRP Veg. Research 0	190.00	120.00	120.00	70.00	170.0
Central Plantation Crops Research Institute .00	260.00	180.00	180.00	80.00	190
Central Agricultural Research Institute 00	150.00	120.00	120.00	30.00	200.
NRC- Oilpalm 00.00	150.00	65.00	65.00	85.00	1
NRC-Seed Spices 90.00		- 5.00	5.00	-	

2.85 The Committee asked the Department to give reasons for considerable shortfall in utilisation of funds in each of the above mentioned schemes. The Department replied : The reasons for shortfall are as follows :

1. The vacant positions could not be filled up due to ban imposed by Government
2. No expenditure could be incurred due to ban imposed by Government on purchase of vehicles.
3. The administrative approval for items of civil works got considerably delayed on account of procedural formalities. Most of the major works items have since been sanctioned.

2.86 The Committee noted that Central Agricultural Research Institute and Central Institute of Sub-tropical Horticulture has been allocated Rs.200.00 Lakh and Rs.160.00 Lakh respectively for 2000-2001

while each of them could utilise Rs.120.00 Lakh and Rs.90.00 respectively during 1999-2000.

2.87 The Department was asked to justify the enhanced allocations in favour of these two schemes. The Department replied : Higher provision has been made for Central Agricultural Research Institute (CARI), Port Blair, in order to undertake approved items of civil works urgently; for which administrative sanction has recently been issued.

A new regional research center has been approved during IX Plan for Central Institute of Sub-tropical Horticulture (CISH), for which sanction has been issued recently. Higher provision has been made to complete ongoing civil works at CISH Headqrs, Lucknow and new items approved in 9th Plan including the new regional research centre.

2.88 When asked to state whether all these institutes had full sanctioned number of scientists on their strength, the Department replied : At CISH, Lucknow, 41 scientists as against sanctioned cadre strength of 42 and at CARI, Port Blair 35 scientists against 59 sanctioned posts are in position.

2.89 The Committee also noted that NRC Seed spices spent Rs.5.00 lakh without any allocation in BE for 1999-2000 and Rs.90.00 lakh have been allocated to it in BE 2000-2001. The Department was asked to give justification for the same and they clarified as under :

NRC Seed Spices has not incurred any expenditure so far. It is a new National Research Centre sanctioned recently. In order to initiate work, a token provision of Rs.5 lakhs has been kept under RE 1999-2000 under other charges. During BE 2000-2001 a sum of Rs.90 lakhs has been provided for utilisation for the approved IX Plan items, including civil works.

2.90 The Committee noted that on page 323, just above the Total ( Horticulture) line in the financial statement of the Deptt. two entries have been made namely :

	( Rs.			
in lakh)				
BE ( 1999-2000)	RE	A. Expenditure	BE (2000-2001)	
Payment of Past arrears	0.00	160.00	160.00	0
Additional grant to Bhubaneshwar due to cyclone	----	---	---	

2.91 The Committee wanted to know as to how these past arrears have accrued and details of Institutes which have received these arrears. To these points, the Department replied : The past arrears are for committed expenditure under the head Salary accrued due to pay revision enhancement of DA rates for different AICRP Centres operational at different State Agricultural Universities (SAUs).

Details of Institutions which have received these arrears areas follows :

I. AICRP on Vegetables	= Rs.124.00 Lakhs
II. AICRP NSP ( Vegetables)	= Rs. 25.00 Lakhs
III AICRP PHT for Hort.Crops	= Rs. 10.00 Lakhs
IV. Network Project on Applied Scab	
(Phased out w.e.f. 1.4.98	= Rs. 01.00 Lakh

Rs 160.00 Lakhs

2.92 When asked about the sources from where Rs.160.00 lakh had been provided as there was no BE 1999-2000 for payment of Past Arrears, the Department clarified: Provision of Rs.160 lakhs has been reflected at page 31 in the ICAR Budget Book 1999-2000; which has not been reflected in the statement inadvertently.

2.93 The Committee also enquired about the institutes/ schemes which were to get the Additional grant in Bhubaneswar due to cyclone and reasons for not making any BE/RE in 1999-2000. To these points, the Department stated :

Two Institutes, namely, IIHR, Bangalore and CTRI, Trivandrum have their Regional Centres at Bhubaneswar. An additional grant @ Rs.10 lakh each has been approved for these institutes for their Regional Centres. Approval of Competent Authority to incur expenditure from within the Plan Allocation of the Horticulture Division has been obtained.

**Natural Resource Management (NRM)**

2.94 The BE, RE, Anticipated Expenditure and shortfall for 1999-2000 and BE for 2000-2001 under some of the schemes of NRM sector is as under :

		(Rs. in lakhs)				
Sl.No.	Scheme	BE 1999-2000	RE	Anticipated		
Expenditure	Shortfall	BE 2000-2001				
1.	Water Technology Centre for Eastern Region	174.00	130.00	130.00	44.00*	220.00
2.	AICRP Optimisation of Ground Water utilisation through wells	60.00	35.00	25.00*	75.00	35.00
3.	AICRP on Management of Diaraland Improvement	40.00	20.00	20.00	20.00*	42.00
4.	Project Directorate Cropping System	268.00	90.00	90.00	178.00*	148.00
5.	NRC Agroforestry	206.00	165.00	165.00	41.00*	178.00
6.	ICAR Research Complex for NEH	400.00	300.00	300.00	100.00*	445.00
Region		400.00	300.00	300.00	100.00*	445.00

\* Anticipated.

2.95 The Committee noted that all the six schemes mentioned above have under-utilised the funds allocated to them and BE 2000-2001 have been fixed much higher than the Anticipated Expenditure for 1999-2000.

2.96 The Department was asked to give reasons for under-utilisation of funds as well as justification for higher allocations for 2000-2001. To these points, the Department stated as under: In case of Water Technology Centre for Eastern Region, Bhubaneswar, Project Directorate Cropping System Research, NRC Agroforestry, ICAR Research Complex for NEH Region, the shortfall in the expenditure is on account of recent approval of the IX Plan EFC memos. Therefore, in the year 1999-2000 need based allocation of only approved/ vetted civil works and procurement of essential equipments is made.

As far as two Coordinated Research Projects on Groundwater Utilisation and Diaraland Improvement are concerned, the shortfall in the expenditure is due to vacant position in the State Agricultural Universities on account of ban on recruitment.

Now IX plan sanctions have been issued and it is expected that in the next financial year (2000-2001), the essential civil works and procurement of equipments will be undertaken. Hence, the enhanced budget allocation.

2.97 The Committee also enquired about the optimal functioning of ICAR Research Complex for NEH Region, and to this point the Department replied: The ICAR Research Complex for NEH Region is functional and research programmes are being taken up as per its approved mandate. However, at the Regional Stations, scientific positions are vacant because of location-specific constraints. The Council is taking necessary steps to fill up these posts on priority basis. As a matter of fact at one stage a special recruitment for NEH region was also taken up by the Council.

**New Initiatives Under NRM**

2.98 Two programmes have been mentioned under the New Initiatives sub-heading of the Natural Resource Management Sector in the Financial Statement of DARE as under:

Sl.No. Plan	New Initiatives Annual Plan 2000-2001	9th Plan Outlay 1997-2000		Annual 1999-2000		
			BE	RE	Anticipated. Expenditure	
1.	ICAR Research Complex for Eastern Region	376.00	100.00			
0.00	0.00	110.00				
2.	Regional Research Station CSSRI at Lucknow	80.00	0.00	--		---
	--					

2.99 The Committee noted from the financial statement of DARE that no allocation was made for ICAR Research Complex for Eastern Region during 1997-98 & 1998-99 whereas in 1999-2000 in spite of Rs.100.00 Lakh (BE) no expenditure has been incurred, however, BE 2000-2001 has been kept at Rs.110.00 Lakh.

2.100 When asked about these seemingly irrational budgeting pattern, the Department stated as under: The new initiative on ICAR Research Complex for Eastern Region was to be established at Patna on a piece of land to be made available by the Government of Bihar. The State



Government took along time to agree in principle and thus no budget allocation was made during 1997-98 and 1998-99.

Rs.100.00 lakhs were made as token provision in anticipation of physical possession of land from Government of Bihar but it is yet to be finalised. Therefore, proposed expenditure could not be incurred.

It is expected that Government of Bihar may provide physical possession of land shortly.

The IX plan EFC memo has been finalised and expected to be approved shortly.

Therefore, in 2000-2001 a token provision of Rs.110.00 lakhs has been made. 2.101 The Committee also enquired from the Department as to why no annual allocation has been made so far in any of the four years of IXth Plan for Regional Research Station CSSRI at Lucknow. And the Department in their reply stated : Allocations for the Regional Station of CSSRI, Lucknow have been included in the budget proposals for the main institute, i.e., Central Soil Salinity Research Institute, Karnal and hence no separate allocations have been shown for regional station ( Lucknow). 2.102 Performance Budget 2000-2001 of DARE at page 46 under the heading Water Management reveals that Reclamation of waterlogged area through construction of pond and raising of surrounding fields was tried in Puri district which resulted in higher productivity of Kharif and Rabi Crops and fish in the pond.

2.103 The Department was asked to provide self-explanatory statistics claiming higher productivity of crop and fish in the pond after the successful completion of the project along with the names of the institutions involved, tenure of the project and details of funds spent on it. The Department furnished the information as under : The project area in Orissa has a rice-rice rotation. Average yield levels at the farmers fields before the project were 14.52 q/ha which rose to 18.80 q/ha. after the programme implementation showing about 29% productivity gain in rice yields. Exact figures on increase in fish productivity are not available but there was an improvement in fish catch as reported by the Institute.

Water Technology Centre for Eastern Region, Bhubaneswar with the active collaboration of the State line departments undertook this study. Project based budgeting is yet to be introduced and as such expenditure figures are not available for specific projects. Tenure of the Project was for a period of three years. 2.104 When asked about the economic viability of this project and whether the successful outcome of this project at Puri be passed on to other States having similar problems, e.g. Haryana, the Department replied as under : The interventions on land shaping etc. were made either by the farmers themselves or through the schemes of the Soil Conservation Department of the State Government. Studies have shown that these interventions were economically viable in humid and sub humid regions of eastern India (Orissa, Bihar, West Bengal and eastern Andhra Pradesh). Its viability under semi-arid conditions of Haryana shall require further investigations. **Agricultural Engineering**

2.105 Under this sector following schemes have been found to have under utilization/no utilisation of funds during 1999-2000

(Rs. in

lakhs)

Scheme	9th Plan Outlay	BE 1999-2000	RE	Anti.
Expend.	Shortfall	% age of Utilisation		

or first three years

1. Central Institute  
of Agricultural

Engineering	1275.20	345.00	260.00
260.00	85.00	85.95	

2. AICRP Power

Tiller	277.00	75.00	62.00	62.00	13.00
	95.49				

3. AICRP Farm  
Implements and

Machinery	1200.00	310.00	284.00
284.00	26.00	102.97	

4. Central Institute  
for Post Harvest

Engineering Technology	1163.10	340.00	217.00
217.00	123.00	69.97	

5. Indian Lac  
Research

Institute	456.00	120.00	80.00	80.00	40.00	9
	2.65					

6. National Institute  
of Research on Jute  
and Allied Fibre

Technology	541.75	143.00	115.00
115.00	28.00	78.75	

7. AICRP Application

of Plastic in Agriculture	190.00	50.00	40.00
40.00	10.00	101.20	

8. AICRP Jaggery  
and Khandsari

	185.00	45.00	28.00
28.00	17.00	87.87	

9. AICRP Harvest  
and Post Harvest

Technology	1150.30	310.00	232.00
232.00	78.00	99.13	

10. Engineering Measures  
for Efficient Land and

Water Management**	130.00	10.00	0.00
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0.00	10.00	Nil	
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\*\* This scheme has been proposed based on suggestions of PeerNumbers of H.K. Jains Committee.

2.106 The Committee noted the under-utilisation of funds in each of the above mentioned schemes from Sl.No.1 to 9 and asked the Department to give reasons for the same.

The Department in their reply stated as under : There has been no shortfall in expenditure in respect of Institutes and AICRPs under the Subject Matter Division (SMD) of Agricultural Engineering. At BE 1999-2000 stage, the allocation for Agricultural Engineering Division was Rs.25 crores which at RE stage was reduced to Rs.20.53 crores due to less allocation to the Council as a whole. Accordingly the allocation to all the Institutes and AICRPs under the Agricultural Engineering Division was reduced. The allocation provided under RE will be fully utilised.

2.107 The Committee also noted that the scheme Engineering Measures for Efficient Land and Water Management has been funded with an outlay of Rs.10.00 Lakh during 1998-99 and 1999-2000, but no expenditure was incurred under this scheme.

2.108 The Department was asked to give reasons for nil utilisation and they replied : Under new initiatives a provision of Rs.10 lakhs was made for the Division for starting new projects / Programmes. This provision was not specifically for the new AICRP on Engineering Measures for Efficient Land and Water Management because the SFC Memo of this Project was not cleared. The EFC meeting in respect of this project was held recently on 9th March, 2000 and the project was approved and is likely to start from April, 2000. At RE stage since no funds were required for new start, the amount of Rs.10 lakhs allocated at BE stage was readjusted and no provision has been made under RE 1999-2000 for new start.

2.109 The Committee found that Central Institute for Post Harvest Engineering & Technology could only utilise 69.97% of funds during the first three years of IX Plan.

2.110 When asked as to how CIPHET would fulfil its objectives in its time frame with lower funds utilisation with reasons for the shortfall, the Department stated as under: The Central Institute of Post Harvest Engineering & Technology (CIPHET), Ludhiana is a new Institute where efforts have been made to build up infrastructure, recruit Scientists/staff to carry out the work proposed. Many of the posts in this Institute could not be filled and by the end of 1999, 36 posts of Scientists out of 63 sanctioned posts could only be filled. Proportionately the situation for other posts ( Technical, Supporting and Administrative) were kept matching. Efforts have been made to fill up the vacant posts and some new staff have been recruited now. Administrative-cum-Training Hostel have been completed and sanctioned for Lab-cum-Office building at Abhor is being issued.

In recent past, several scientists have joined and reasonable infrastructure has been established at both the Campuses ( Abhor and Ludhiana). The Labs are being equipped and the programmes developed. Research efforts are now intensified in the thrust areas of CIPHET to fulfil its objectives in time frame.

2.111 The Committee enquired about the details of the constitution and terms of reference etc. of the H.K. Jain Committee and whether it has since submitted its report. The Department in their reply informed the Committee as under : "For making a critical review of the relevance and continuance and for improving effectiveness and efficiency of All India Coordinated Research Projects, the ICAR through its Office Order No.2-1/96-Plng. Dated 14th August, 1996 constituted a Review Committee of an Eminent Scientist Dr H.K. Jain. The Committee comprised of following 9 Eminent Scientists :

1. Dr. H.K. Jain - Chairman
2. Dr. M.V. Rao - Member
3. Dr. S.S. Johl - Member
4. Dr. J.C. Bakshi - Member
5. Dr. D.R. Bhumbla - Member
6. Dr. S.K. Ranjhan - Member
7. Dr. A.K. Mukhopadhyay - Member
8. Dr. B.S. Pathak - Member
9. Dr. Mangla Rai - Member-Secretary

The Terms of Reference of the Committee was as under :

- (i) to review and consider projects that have outlived their utility and need to be phased out;
- (ii) to scrutinise the projects that are not suited to the concept of the coordinated projects and are more relevant to be implemented as network programme;
- (iii) to examine the projects that should be combined or split for effective co-ordination and management;
- (iv) to check the co-ordination work in respect of the crops for which National Centres have been established, for handing over such projects to the Director;
- (v) to clearly indicate the mandate and responsibilities of the Co-ordinator; and
- (vi) to pinpoint specific steps that should be taken to make the projects more effective, dynamic and responsive to the changing needs.

The Committee submitted its report in November, 1997. The Report of the Committee has been adopted by the Governing Body of ICAR and action on all the recommendations has been initiated by different Subject Matter Divisions.

### **Animal Science**

2.112 Under this sector BE, RE, Anticipated Expenditure for 1999-2000 and percentage of utilisation of funds for last three years of 9th Plan for some schemes are as under :

Sl.No.	Scheme	9th Plan	BE 1999-2000	RE	Anticipated
Shortfall	% age of	Outlay			Expenditure
	utilization				
	for last three				
	years of 9th				
	Plan				
1.	National Bureau of Animal Genetic Resources				
1267.00	220.00	170.00	170.00	50.00	95.09

2.	National Dairy Research Institute	3035.00				
580.00	500.00	500.00	80.00	84.48		
3	National Institution of Animal Nutrition & Physiology	1810.00				
370.00	250.00	250.00	120.00	84.60		
4.	Network Micro Nutrient	300.00				
90.00	55.00	55.00	35.00	63.67		
5.	Network Embryo Transfer	635.00				
130.00	100.00	100.00	30.00	60.65		
6.	NRC Meat Product Technology	810.00				
100.00	15.00	15.00	85.00	12.62		
7.	Indian Veterinary Research Institute	3577.00				
680.00	600.00	600.00	80.00	86.69		

2.113 The Committee asked the Department to state reasons for huge shortfall in utilisation of funds in respect of schemes mentioned above. The Department replied :The shortfall in expenditure for 1999-2000 has been due to recent clearance of the Expenditure Finance memos of the Institutes/Bureau/National Research Centres/ Networks listed from SI.No. 1 to 7 . No new centres of some schemes proposed during IX Plan could be started and expenditure to be incurred for the new posts during IX plan could also not be taken up. 2.114 When asked about the action plan if any, for optimal utilisation of funds for those schemes which have very poor percentage of funds utilisation during 1st three year of IXth Plan, the Department stated as under : The EFC/SFC of the above schemes have been cleared recently. The site for the National Research Centre on Meat has recently been finalized. The allocation proposed in the IX Plan for these schemes will be utilized during the remaining period of IX plan.

#### **Fisheries**

2.115 Under Fisheries sector following schemes have been identified for under utilization of funds during 1999-2000:

Sl.No.	Scheme	BE 1999-2000	RE	Actual Expenditure	Shortfall	Excess
1.	Central Marine Fisheries Research Institute	400.00	460.00	460.00	---	60.00
2.	Central Institute for Freshwater Aquaculture	215.00	355.00	355.00	---	140.00
3.	Central Institute for Brackish Water Aqua-Culture	350.00	300.00	300.00	50.00	--

4.	Central Institute for Fisheries Technology	550.00	290.00	290.00	260.00	--
5.	National Bureau of Fish Genetic Resources	325.00	225.00	225.00	100.00	--
6.	Central Institute of Fisheries Education	550.00	370.00	370.00	180.00	--

2.116 The Committee asked the Department to give reasons for over-utilisation of funds by CMFRI and CIFA and reasons for under-utilisation of funds by CIBWA, CIFT, NBFGR & CIFE. To these points, the Department in their reply stated : Due to the shortfall in allocation of plan funds, the initial allocation given to CMFRI was not sufficient under heads other charges of the institute. Subsequently this had to be enhanced for meeting vital contingencies.

The CIFA suffered heavy damages due to super cyclone which did have in Orissa. The extent of damages suffered to institute buildings, facilities, farm lands etc are estimated above Rs.5 crore. Extra allocation was given to this institute by adjusting within the funds allocated to the Division.

This was due to reduction of the allocation to fisheries division from the initial budget of Rs.28 crore to Rs.23 crore on account of the overall reduction in ICAR Plan allocation.

#### **Agricultural Extension**

2.117 Under Agricultural Extension sector the BE, RE, Anticipated Expenditure for 1999-2000, BE 2000-2001 other details in respect of five schemes under it are as under:-

Sl.No	Scheme	9th Plan outlay	(Rs. in lakh)			
			BE	RE	Anticipated	Shorfall
BE	%age		1999-2000		Expenditure	2000-
2001	Utilisation of					
	funds during 1st 3					
	years					
1.	Integrated Krishi Vigyan Kendras	20000.00	4825.00	4457.90	4457.90	
367.10	5260.00	103.57				
2.	NRC for Women in Agriculture	700.00	175.00	137.00	137.00	
38.00	302.00	38.76				
3.	ZC Unit 8	--	---	270.00	270.00	---
242.00	--					
4.	TTC 8	--	---	130.10	130.10	---
146.00	---					

5. Special Project	--	---	5.00	5.00	---
50.00	----				

2.118 The Department was asked to give justification for a shortfall of Rs.367.10 Lakh in 1999-2000 under KVK scheme for which the Department has always been demanding additional funds. The Department in their reply stated : The total amount indicated for B.E. is Rs.5000.00 lakhs including Rs.4825.00 lakhs for Krishi Vigyan Kendras (KVK) and Rs.175.00 lakhs for NRC for Women in Agriculture (NRCWA).

The R.E. for NRCWA is Rs.137.00 lakhs and the remaining amount of Rs.4863.00 lakh is for KVK which include Rs.4457.90 lakh for continuation of the existing KVKs Rs.270.00 lakh for its monitoring through eight Zonal Coordinating Units (ZC Units), Rs.130.10 lakhs for training of KVK trainers through eight Trainers Training Centres (TTC) and Rs.5.00 lakhs for special project. There is, therefore, no shortfall in anticipated expenditure for KVK scheme considering all its related components.

2.119 The KVK being the life-line of Agricultural Extension sector, therefore, the Committee were keen to know the latest position regarding total number of KVKs in the country; the number of KVKs fully functional, partly functional and non-functional.

To these points, the Department replied as under : The total number of KVKs in the country is 261 and with the establishment of 53 KVKs by strengthening the existing ZARS, the total number will be 314.

Considering the essential requirement of land for development of instructional farm, administrative-cum-training building, multi-disciplinary team of scientific/technical personnel, facilities for training on location-specific basis, on-farm testing and frontline demonstrations; 78% of the KVKs are fully functional. Efforts are being made to make the remaining KVKs (17% partial and 5% non-functional) fully functional by expediting the legal transfer of land, appointment of trained staff and development of infrastructure.

2.120 When asked about the targets fixed and achieved with regard to opening of new KVKs during the IXth plan and reasons for shortfall, if any, the Department stated in their reply as under : In spite of best efforts made by the Council, additional financial resources could not be made available by the Planning Commission for establishment of new KVKs. The Council has taken up an alternative proposal for establishment of KVK in 53 districts of the country by strengthening the existing Zonal Agricultural Research Stations (ZARS) to take up the additional functions of KVK during the IX Plan period under National Agricultural Technology Project (NATP).

The Council has earlier submitted a comprehensive proposal to the Planning Commission for establishment of the KVK in the remaining districts of the country, and establishment of 100 KVKs with the focus on eastern and north-eastern part of the country, and such other districts elsewhere which are backward. The Council further identified 35 districts for establishment of a KVK on priority basis during the Plan period with the availability of additional financial resources for the purpose for which SFC documents have been submitted. A note also been submitted to the Planning Commission for availability of funds from the unutilized amount of 10% funds earmarked to various Ministries.

2.121 The Committee noted that instead of opening new KVKs district-wise as envisaged earlier, now the Department has been stressing on strengthening the Zonal Agricultural Research Station (ZARS) by remandating their responsibility to play additional role of KVKs. The Committee wanted to know whether there has been a proposal to strengthen zonal

Coordination Unit (ZCU)/ Trainers Training Centres(TTC) as well to do the additional work of KVK and the advantages in giving the task of a KVK to ZARS/ZCU/TTC where a KVK is not existing. To these points, the Department stated : In view of the constraints of fund and huge financial implication for establishment of a new KVKs, the Council have taken up an alternative proposal for strengthening the existing Zonal Agricultural Research Station ((ZARS) in 53 districts to take up the additional functions of KVK. There is no proposal to strengthen the Zonal Coordinating Unit and Trainers Training Centre to take up the additional functions of KVK since the Zonal Coordinating Units have been created to coordinate and monitor the activities of the KVK in their respective zone. The Trainers Training Centres have been established in the frontline areas of technologies including Dryland Agriculture, Horticulture, Home Science, Freshwater Aquaculture, Marine fisheries, Hill agriculture, Agricultural Engineering and Dairying; to impart training in the frontier areas of technologies to the KVK trainers, state developmental officials and other such organisations.

However, the Council have taken up a proposal for strengthening the existing Zonal Research Stations (ZARSs) in 53 districts to perform additional functions of KVK. These ZARSs were established with the financial support from the Council under National Agricultural Research Project (NARP) for developing location-specific technologies on farming system perspectives. Over the years, these ZARSs have developed considerable farm-worthy technologies and the critical support to be provided by the Council under National Agricultural Technology Project (NATP) will create an institutional mechanism for strong linkage between technology generation, assessment, refinement and dissemination. 2.122 Considering the fact that still about 17% KVKs are partly functional and 5% KVKs are non-functional out of a total of 261 existing KVKs in the country, the Committee asked the Department about the reviewing the mandatory responsibility and accountability aspects of all the KVKs established so far. The Department in their written reply stated : As far as the reviewing of the responsibility and accountability of the KVKs are concerned for effective planning and management, each KVK has a Scientific Advisory Committee (SAC) consisting of the Head of the host institution as the Chairman, Training Organizer as the Member-Secretary and representatives from farmers, farm women, Head of the district development departments and the representatives of the ICAR Headquarters as the Members. One SAC meeting is held every six months for reviewing the progress as well as approving the future action-plan.

The Project is monitored through 8 Zonal Coordinating Units. The Zone-I located at Ludhiana comprises of the States of Delhi, Haryana, Punjab, Himachal Pradesh and Jammu and Kashmir. The Zone-II located at Calcutta comprises Bihar, West Bengal and Andaman and Nicobar Islands. The Zone III which is located at Barapani comprises Assam and North Eastern Hill States including Sikkim. The Zone-IV comprises of Uttar Pradesh and is located at Kanpur. The Zone-V & VI located at Hyderabad and Jodhpur include Andhra Pradesh and Maharashtra; and Rajasthan and Gujarat States respectively. The States of Madhya Pradesh and Orissa are included in Zone-VII which is located at Jabalpur, whereas, Kerala, Karnataka, Tamil Nadu, Goa and Pondicherry are in Zone-VIII which is located at Bangalore.

The Zonal Units monitor the frontline extension programmes by organising Zonal and State level workshop, Scientific Advisory Committee Meeting and visits. During 1999-2000, 8 Zonal



Workshops were organized with the participation of the Incharges of all the KVKs to review the works done during the year and formulation of plan of action for the next year. Similarly 16 State level Workshops were organized in order to review the frontline demonstrations in oilseed and pulses and other administrative and financial issues.

A national workshop of the KVKs was organized during January, 1999 at KVK, Badgaon, Udaipur. In this workshop Vice-Chancellors of SAUs, Directors of Extension Education of SAUs, Director of ICAR Institutes, Zonal Coordinators and Presidents/Secretaries of NGO KVKs participated. During the workshop an exhibition depicting various projects programmes was also organized. This workshop is organized after every two years.

Besides regular monitoring and supervision by the Zonal Coordinating Units and Headquarters of the Council, the project has been evaluated by a Committee during the sixth plan constituted by ICAR and during the Seventh Plan by a Joint FAO-ICAR Team. The recommendations of these two Evaluation Reports were examined in the Council and most of them were implemented for improvement of the Project.

In 1993, nine Quinquennial Review Teams (QRTS) evaluated and reviewed the functioning of all KVKs in the country. The recommendations of the QRTs were implemented for improving the efficiency of KVKs.

In 1995, the Parliamentary Standing Committee on Agriculture was constituted by the Government of India to critically examine the functioning of KVKs in transfer of agricultural technology under the Chairmanship of Shri Nitish Kumar, the then Union Minister of State for Agriculture. The Committee consisted of 44 Honble Members of Parliament, 29 from Lok Sabha and 15 from Rajya Sabha. The Committee also undertook, on the spot study visits to various KVKs in the country. The Committee made a number of suggestions for the growth, establishment, funding pattern, linkages, staffing structure, internal resource generation and overall for the smooth functioning of the KVKs. The recommendations of the Committee were followed up for implementation.

During the discussions in the VIIth National Workshop of KVKs held at Tirupati in September 1995, a number of issues, concerns and constraints were brought to the notice of the Council. As a followup, two Committees were constituted to accelerate the efficiency and effectiveness of performance of the KVKs. The first Committee was constituted under the Chairmanship of Dr. M.V. Rao, Vice-Chancellor, Andhra Pradesh Agricultural University to go into the matters related to financial and administrative management, financial support and funding pattern and, other functional and organisational aspects of KVKs. The other Committee was constituted to study the role of KVKs and TTCs in human resource development and self-employment oriented vocational training programmes. The recommendations of Dr. M.V. Rao Committee were implemented in the light of long term perspective in view.

A Committee on Human Resource Development through KVKs and TTCs was also constituted under the Chairmanship of Dr. S.C. Mudgal, Vice-Chancellor, GB Pant University of Agriculture & Technology, Pantnagar. The major recommendations made by the Committee included special emphasis for designing vocational training courses for development of tribal women, rural youths and farmers after identification of training needs. The Committee further recommended on development of proper linkage with the relevant Institutions. The recommendations were also

implemented.

The Governing Body of the Indian Council of Agricultural Research in its 166th meeting held in 1995 resolved to constitute a Committee under the Chairmanship of Shri S.S. Surjewala, Honble Member of Parliament & Member Governing Body. The terms of reference of the Committee included to review the existing mechanism of technology assessment and refinement in the ICAR system and suggest suitable measures for its streamlining. The Committee made a number of suggestions in relation to the mandate, funding pattern, activities and linkages with other Institutions and organisations. The recommendations were further studied along with the recommendations of other committees for taking a comprehensive view and implemented accordingly.

A ICAR Committee for Streamlining Financial Management and Accounting Procedures of KVKs was set-up as a follow-up to the recommendation No.18 of 36th Standing Committee of Parliament on Agriculture (1995-96). The Committee was chaired by Shri N. Parthasarthy, Joint Secretary and Financial Advisor (DARE), and ICAR; Shri N.C. Agarwal, Principal Chief Controller of Accounts, Central Board of Excise and Customs, Ministry of Finance as Member representing the Controller General of Accounts, Government of India; and Dr. A.N. Shukla, Assistant Director General (KVK) as the Member Secretary. The Committee has given very useful recommendations to streamline the financial management and accounting procedures for providing more openness and flexibility to the KVKs staff in carrying out the mandate given by the Council efficiently and effectively. Based on recommendations of the committee the financial management of the KVK has been streamlined. 2.123 With regard to NRC for Women in Agriculture the Committee asked about the reasons for very dismal performance in achieving financial targets as it had achieved only 38.76 % of the allocated funds in first three years of IXth plan and justification in fixing higher allocation as BE 2000-2001. The Department extended the reasons and justification as under : The Department of Agriculture of Government of Orissa and Orissa University of Agriculture and Technology took almost three years for making available the suitable land for establishment of National Research Centre for Women in Agriculture.

Keeping in view the mandate of NRCWA to develop technologies appropriate to farm women for different production systems and to develop sensitivity and capability of research and development specialists for addressing the issues pertaining to gender implications in agriculture and allied activities the Council decided to have the post of Director filled with a woman scientist which took substantial time for recruitment of a woman Director of the Institute.

Since the essential posts of scientific and technical personnel including all the Heads of the Sections have been filled-up the expenditure for the centre will certainly pick up during the remaining period of Ninth Plan. 2.124 The Committee also enquired about the objective of special project started at RE 1999-2000 stage with an allocation of Rs.5.00 lakh and BE 2000-2001 fixed at Rs.50.00 lakh. And the Department informed the Committee as under : During BE 2000-2001 an amount of Rs.50.00 lakh has been kept for Technology Evaluation and Impact Assessment Project, which was initially taken out of AP Cess Fund through a collaborative effort between the Division of Extension and Division of Crop Science. This will provide a strong feedback mechanism from the farmers at the final stage of trial and also will provide more test sites for

finding the adaptability of technology.

S.No.	Scheme	IX Plan	BE	RE/AExp.	Shortfall	(Rs. in lakh) % age
Utilisation	BE 2000-2001	Outlay	1999-2000			in 3 years of Plan
IX						
1.	National Academy for Agril. Res. Mgmt	1700.00	200.00			
160.00	40.00	62.27%	160.00			
2.	Devp. And Strengthening of State Agril. Univ.	13130.00	2710.00	2395.00		
315.00	107.04%	2000.00				
3.	Devp. And Strengthening of Agril. Edu. Of Central Universities	500.00	100.00	75.00		
25.00	93.33%	75.00				
4.	Establishment of Centres of Adv. Studies in SAUs & Dus	1500.00	300.00			
250.00	50.00	82.49%	300.00			
5.	Emeritus Scientist Scheme	400.00	40.00			
10.00	30.00	33.79%	40.00			
6.	Agricultural Edu. Media Centre	700.00	100.00	50.00	50.00	-
	100.00					
7.	Support to Agril. Colleges	1000.00	50.00			
0.00	50.00	Nil	0.00			
8.	Rural Awareness Work Experience Programme	800.00	110.10			
0.00	0.00	Nil	100.00			
9.	One Time catch up grant	-	-			
0.00	0.00	Nil	1500.00			
10.	Assam Agril. Univ.	-	-	1500.00	-	-
	350.00					

2.126 The Committee noted the under-utilisation of funds for each of the schemes mentioned above at Sl.No. 1 to 5 and asked the Department to give reasons for the same. The Department in their reply stated as under : The sanction for the IX Plan scheme of the NAARM, Hyderabad has been issued during February 2000 and the academy is already processed with all the proposals in respect of the approved items. The allocated budgetary provision will be utilised during the current financial year.

The total amount allocated has been fully utilized in respect of scheme at Sl.No.2 above.

The total amount allocated has been fully utilized in respect of scheme at Sl.No.3 above.

The IX Plan outlay was of Rs.1500 lakh and the total budget utilisation in the first 3 years of the Plan has been 82.49 per cent. There are 35 centres operating all over the country. EFC meeting for Centres of Advanced Studies had agreed to the establishments of the 5 new Centres after recommendations for Quinquennial Review Team for Centres of Advanced Studies. During 1999-2000 these 5 new centres were to be given Rs.40.00 lakh @ Rs.8.00 lakh per centres per year.

The Quinquennial Review Team for Centres of Advanced Studies was constituted in August, 1999 has visited all the 35 Centres and is shortly submitting its report. Therefore, Rs.40.00 lakh meant for these five new centres which were to be established during 1999-2000 could not be utilised which was one of the reasons of shortfall in the budget allocation. Another reason for the under utilisation of budget was delay of request for revalidation by some centres for unutilised budget of previous years. (Sl.No.4 above).

The scheme of Emeritus Scientists was held in abeyance and hence the allocated expenditure could not be utilised. The scheme has not been revived with the approval of the competent authority. (Sl.No.5 above).2.127

The Committee also sought details about Agricultural Education Media Centre and reasons for not utilising Rs.50.00 lakh out of an outlay of Rs.100.00 lakh by it during 1999-2000. The Department in their reply stated : The SFC documents for Agricultural Media Centre is yet to be approved . The Media Centre will be created only after the SFC is approved.

Five Agricultural Media Centres will be created at IARI, IVRI, CIFE, IHR and NDRI and for infrastructure support would be provided through this scheme.2.128 When asked about the reasons for non-utilisation of funds by the Schemes- Support to Agricultural Colleges and Rural Awareness Work Experience Programme as can be seen at Sl.No.7 & 8 above, the Department replied as under : Support to Agricultural Colleges, SFC document has been prepared and is pending approval. The scheme will be implemented once the allocation is approved. (Sl.No.7 above).

The SFC document have been approved for a total outlay of Rs.4.20 crore to be made operational w.e.f. 2001-2002 ( Sl.No.8 above).2.129

The Committee sought clarification from the Department regarding the One Time Catch up Grant mentioned at Sl.No.9 above and the difference between this one and the other one with same nomenclature towards which Rs.400.00 crore outlay has been approved for the IX plan by the Centre. The Department clarified : It is a part of same One Time Catch Up Grant for which Rs.400 crore outlay has been approved for 9th plan by the centre.2.130 With regard to Assam Agricultural University(AAU) the Committee asked the Department the reasons for not making any allocations in BE 1999-2000 and as to how Rs.1500.00 Lakh were provided at RE stage. The Department in their reply stated: Rs. 1500 lakh may be read as Rs.100 lakh which was provided to AAU out of the Development grants during 1999-2000. This university has been shown separately so as to make it a part of the North East region.**Management and Information Services (MIS)**

2.131 Under MIS, it has been categorically observed that there has been no mention of any scheme or project being run under this sector. The Department has been giving only broad

sectoral allocations made to this Sector and name of the schemes and their respective allocations/expenditure details are altogether missing from the Financial Statements of the Department which hampers the critical examination of Demands for Grants of the Department.

2.132 However broad sectoral allocation/ expenditure details for 1999-2000 and BE 2000-2001 are as under :

(Rs. in lakh)						
S.No.	Sector	IX Plan Outlay	BE 1999-2000	BE	Shortfall	
%Utilisation	BE 2000-2001			Actual Expenditure		for 3 years of IX Plan.
1.	Management & Information Services	12300.00	3235.00	1356.00	1879.00	
63.34%	2555.00					
2.	Pipeline Projects	1650.00	615.00	134.00	481.00	--
	--					

2.133 The Committee noted the shortfall upto Rs.1879.00 lakh under MIS and Rs.481.00 lakh under its Pipeline Projects and asked the Department to give reasons for the same. The Department in their written reply stated : Due to reduction in Annual Plan allocation of the Department at RE level, the allocation made for Management and Information Services (MIS) was reduced from Rs.3235.00 lakhs to Rs.1276.00 lakh and for the pipeline projects from Rs.1650.00 lakhs to NIL. Thus, there has been not any shortfall in expenditure under these two schemes under MIS including pipeline projects for the year 1999-2000.

2.134 The Committee also asked the Department to furnish financial details of all the schemes/ projects run under MIS and Pipeline Projects. And the Department gave the following information: The names of the schemes/ projects under MIS along with the financial details of each scheme for the years 1999-2000 (BE) and 2000-2001 (BE) are given below :

		Budget Estimate 1999-2000	Budget Estimate (2000-2001)
		(Rs. in lakhs)	(Rs. in lakhs)
1.	Publication and Information	150.00	150.00
2.	Civil Works	2700.00	500.00
3.	ICAR Agricultural Library	30.00	30.00
4.	Modernisation of Office Space & Facility	60.00	80.00
5.	ICAR Headquarters	50.00	60.00
6.	Publicity and Public Relations	30.00	30.00
7.	Support to Professional Societies including NAAS	100.00	185.00
8.	Agricultural Scientists Recruitment Board	50.00	50.00
9.	Intellectual Property Rights	15.00	15.00

10.	DARE	50.00	60.00
11.	Pipeline Schemes	615.00	1405.00
	Total MIS including pipeline schemes	3850.00	2555.00
	And DARE		

### World Bank Aided Project (WBAP)

#### National Agriculture Technology Project (NATP)

2.135 The Project is reported to have made major strides during the year 1998-99 heading steadily towards full implementation of the diverse activities of the project. The project agreement and other legal documents were signed by the GOI and the World Bank on June 22, 1998 following approval of the Project by the Board of Directors of World Bank in March, 1998. The Cabinet Committee of Economic Affairs accorded its approval on the 12th November, 1998 and the loan became effective from November 19, 1998. The Launch Workshop for the project was organised for the project on October 6, 1998 to sensitize the participating institutions about the NATP plans and programmes. On this occasion NATP Main Document was released and placed in public domain. The project has been approved for a total cost of US \$ 239.7 million (equivalent to Rs.861.3 crores as per current exchange rate of August 1997 and now equivalent to almost Rs.1013 crores as per current exchange rate). The World Bank will contribute 82 per cent of the total cost (\$ 196.8 million) while the GOI's share will be 18% (\$ 42.9 million). The total Bank assistance will comprise SDR \$ 73.8 million equivalent to 96.8 million dollars as IBRD loan at the usual rate of interest, and US\$ 100 million as IDA credit. The project will operate for 5 years from 1998-99 to 2002-03. The NATP has three major components and the allocations approved by EFC for them are given below :

- |   |                          |
|---|--------------------------|
| (i) Agro-ecosystem Research<br>(Rs.440.00 crores) | 56.4%                    |
| (ii) Innovation in Technology Dissemination       | 18.9% (Rs.148.14 crores) |
| (iii) ICAR Organisation and Management System     | 24.7% (Rs.192.64 crores) |
- The break-up of total plan allocation of Rs.861.30 crores, plan allocation for 1998-99, IX & X Plan for the ICAR and the Department of Agriculture and Cooperation (DAC) is given below :

Five Year Plan Period Component	DAC	ICAR		
		Total (Rs. in crores)	(Rs. in crores)	
BE 1998-99		68.75	13.98	-
IX Plan		571.82	92.76	664.58
X Plan		165.11	31.61	196.7
2 Total		736.93	124.37	86

1.30

2.136 Under WBAPs, National Agricultural Technology Project (NATP) has been observed to have under-utilisation of funds as under :

(Rs. in lakh)					
Sl.No.	Scheme	IX Plan	BE	RE/	
Shortfall	%age	BE	Outlay	1999-2000	
Actual		utilisation	2000-2001		
					Expenditure
					for 1st 3
					years of
					IX Plan

1. National Agricultural

Tech. Project		57182.00	11300.00	8900.00
2400.00	75.32%	13400.00		

2.137 The Department was asked to give reasons for under-utilisation of funds by NATP upto Rs.2400.00 lakh during 1999-2000. The Department in their reply stated as under : The annual outlay (BE) approved for the year 1999-2000 in respect of National Agricultural Technology Project (NATP) was Rs.113 crores. Out of this there was a provision of Rs.33 crores for the Information Systems Development (ISD). Out of this, only a sum of Rs.7.57 crore could be utilised. For the purchase of computers, peripherals, etc. an International Competitive Bidding process has already been initiated. Hence, the saving under this can be utilised only during next financial year. Taking this shortfall into account, the RE has been finally fixed at Rs.89 crores which will be fully utilised.

The approval of the project by the Cabinet Committee on Economic Affairs was accorded in November 1998. Hence, the actual project implementation started only in November 1998. Further, formulation of the research proposals and their scrutiny with the help of experts and their clearance through various committees like Scientific Advisory Panels (SAP), Research Programme Committee (RPC), Project Management Committee (PMC) etc. and issue of sanctions involved considerable amount of time. Quite often research proposals considered by the appropriate committees were to be returned for modification/revision in the best interest of work. However, this work has now progressed extremely well and commensurate funds released for each of the research projects. Further, the release of funds will increase considerably during the succeeding years.

**PART- II**

**OBSERVATIONS/RECOMMENDATIONS**

**Recommendation No.1**

*Insufficient Ninth Plan Approved Outlay to DARE/ICAR*

The Committee observe that the Department of Agricultural Research and Education has been given an approved IX Plan outlay of Rs.2635.22 crores which includes Rs.400 crores as a one time catch up grant for modernisation of Universities and Institutes of the ICAR and also for replacing outdated equipment with latest state-of-the-art equipment for carrying out its mandatory task of agricultural research. Further, the IXth Plan outlay of Rs.2635.22 crores also includes Rs.135.33 crores towards externally aided projects, thus, leaving only Rs.2100.00 crores as net Domestic Budgetary Support (DBS) for research and education activities of DARE/ICAR.

The Committee furthermore observe that scientists, economists and persons engaged in planning for the country have found that there are limits to increasing agricultural

production through area expansion as the country has almost reached a plateau insofar cultivable land is concerned. For example, the area under foodgrains has more or less remained constant at around 125 million hectares since 1970-71 which further gets reduced by 2 to 3 million hectares in some years due to aberrant weather conditions, and abiotic/biotic stresses. The Government has announced the National Agenda in 1997-98 and has targeted doubling the foodgrains production in the next ten years. But instead of rapid growth in production and productivity, the country is witnessing an estimated foodgrains output of 199.1 million tonnes in 1999-2000 which would be about 4 million tonnes lower than the preceding year output. Thus 3 years of the 10 years time has already elapsed and the country's foodgrains production is fluctuating in a narrow margin every year.

In the opinion of the Committee, the only solution to achieve targeted rapid and desired foodgrains production comes with genuine and timely research work by increasing productivity levels.

Keeping this in view, the Committee firmly believes that the only way of achieving and maintaining self-reliance in food and fodder for this and future generations of human and fauna of the nation is by making sufficient and timely investment in R&D activities of the Agricultural Sector.

The Committee also has been recommending year after year for raising the plan outlay for DARE/ICAR to the level of at least 1% of Agricultural Gross Domestic Product (AGDP) for the IXth Plan and gradually increasing up to 2% of AGDP in future five year plans as has been happening in the agriculturally and economically developed countries of the world. However, to the utter dismay of the Committee the percentage share of Research is on the declining trend as a percentage of AGDP.

The Committee, therefore, once again strongly recommends for increasing the plan outlay for DARE/ICAR to the level of 1% of AGDP, to attain the objective of catching up with the productivity levels of the agriculturally and economically developed countries of the world as well as to double the foodgrain production of the country in 10 years.

## **Recommendation No :2**

### *Insufficient plan outlay for the year 1999-2000 to DARE/ICAR*

The Committee observes that the Department of Agricultural Research and Education proposed an outlay of Rs.1082.59 crores for the Annual Plan 2000-2001 and against this proposed projection it has been allocated only Rs.629.55 crores which includes Rs.148.00 crores for World Bank and Externally Aided Projects (EAPs) and Rs.5.00 crores towards Mini Mission-I on Cotton Project, thus, leaving only Rs.476.55 crores for Domestic Budgetary Support (DBS). In 1999-2000, the Department had proposed an outlay of Rs.712.68 crores while it was granted only Rs.573.50 crores which was further reduced to Rs.504.00 crores at Revised Estimate Stage. And this arbitrary financial cut of Rs.69.50 crores at RE stage has adversely affected almost all the major plan-schemes as reported by the Department during 1999-2000.

The Committee deplores this attitude of Planning Commission and Ministry of Finance for imposing arbitrary financial cuts at Revised Estimate stage year after year which drastically curbs the planned research activities of the Department which indirectly affects the agricultural output of the whole nation.



The Committee, therefore, are of the strong opinion that the Government is proving to be a hurdle in the concerted efforts for good research by the Department by including the external aid component in the DBS and reflecting this figure as the Budgetary Support for the Department. The Committee therefore recommend that the Department should be provided at least Rs.1082.69 crores as requested by them for the year 2000-2001 and no cut should be imposed at RE stage. The Committee are also of the strong opinion that the Budgetary Support to the Department should not include the component of Externally Aided Projects and should be a pure Domestic Budgetary Support as a percentage of Gross Agricultural Product.

### **Recommendation No : 3**

#### *Need For Proper Planning by Centre in regard to Budgetary Allocation to the Ministries*

The Committee observe that a budgetary allocation called the Budget Estimate for the year is promised to be given to each Ministry/Department. The Department after working out with the Planning Commission detailing their schemes propose to spend the BE during the year on these schemes which have been agreed to principally. The Committee note with concern that whereas, the Ministries/Departments get fully geared up for implementing various schemes but in October suddenly they receive a rude shock when abruptly hefty cuts are made and they are advised to spend less in the BE. At the

Revised Estimate stage allocations are cut and all the schemes which were in the process of picking up momentum get fizzled out. The cuts are imposed by the Ministry of Finance without taking either the Ministry or the Planning Commission or the Parliament into confidence.

The Committee observe that the Planning Commission, initially agreed principally to some of the new schemes of the Department and the Ministry/Department make provisions for them from its meagre budgetary allocations. Ultimately these new schemes, do not take off ab initio because they do not get the approval by the Planning Commission itself or thus some other authorities like EFC, SFC, CCEA etc. Thus the allocations to the schemes go unutilized in anticipation.

The Committee are greatly perturbed over such a sorry state of affairs in respect of scheme approval process by various concerned authorities. They desire that the projected Budgetary Allocations at the Budget Estimate stage should be made more realistic, so that the Ministry can accordingly fix physical as well as financial targets in a more practical manner. The Committee, therefore, recommend that due care should be taken by the Planning Commission, Ministry of Finance and other concerned authorities before making any cuts in the Budgetary Allocation at the RE stage of the Department, which in the opinion of the Committee puts spokes in the wheels of progress of the nation. They also desire that the whole procedure prescribed for according post-budget approval for plan schemes should be thoroughly overhauled and simplified.

### **Recommendation No.4**

#### *One time Catch up Grant*

The Committee note with disappointment that in spite of recommendations made by the Parliamentary Standing Committee on Agriculture repeatedly year after year in their Reports for the release of a one time catch up Grant of Rs.500 crores during IXth plan, the Planning Commission has not been releasing any money against its own committed allocation of Rs.400 crores towards this head for the IXth Plan.

The Committee also note that the Department had proposed an allocation of Rs.100.00 crores, Rs.200.00 crores and Rs.250.00 crores for the year 1998-99, 1999-2000 and 2000-2001 respectively, but no money was provided.

The Committee has been informed that some institutes and universities of the Department are 30 to 40 years old and some of them are even 70 to 80 years old now. These institutes/universities badly need some funding for renovation of old infrastructure and replacement of obsolete equipments, and vital general utilities. The Committee are also informed that 49 ICAR institutes and 30 State Agricultural Universities and old Krishi Vigyan Kendras have been identified by the Department for such renovation during IX plan. The one time catch up grant is meant for these purposes.

The Committee are unhappy to point out that three vital years have already passed during the IXth plan but the Planning Commission and the Ministry of Finance have not provided even Rs.400.00 crores, which they had committed earlier towards this head during the IX Plan. Scientists cannot do justice to their research work with the decades old and obsolete research equipments and infrastructure. A conducive environment will lead to better results and less brain drain. The Committee feel, refusal of funds amounts to gross injustice and casual approach shown towards the present and future agricultural scientists of the nation, who are struggling hard against all odds to find out ways and means to increase production and productivity of agricultural produces to feed billions of human beings at present and also for generations to come.

The Committee are also informed that due to lack of funds in some cases, and to meet this burning requirement, the Department had taken an administrative decision and asked the concerned old universities to utilise 20% and 30% of plan budget for the year 1999-2000 and 2000-2001 respectively, towards approved items of one time catch up grant.

The Committee, appreciate the decision taken by the Department in this regard and hope that such action will set an example for other Departments to emulate. The Committee strongly recommend that at least Rs.250.00 crores should be provided to the Department for the year 2000-2001 immediately; and remaining amount of Rs.250.00 crores should be given during 2001-2002, so that these renovation activities and replacement of obsolete equipments with latest state-of-the-art equipments could be completed at the earliest.

#### **Recommendation No.5**

##### *10% Allocations for the Development of North-East.*

The Committee noted that for the year 1997-98, 1998-99 and 1999-2000 the Department failed to allocate minimum 10% of total plan allocations of the Department in favour of plan schemes/projects meant exclusively for the North-Eastern region as per the directive of the Government of India. The actual allocations were 7.19%, 8.24% and 8.88% of the total allocations for the last three years of the IXth Plan respectively.

The Committee are happy to note that for the year 2000-2001, Rs.63.00 crores which happens to be 10.01% of the total plan allocations of Rs.629.55 crores for the Department, have been provided for the schemes meant for North-East and Sikkim. However, the Committee would like to be apprised of the decision of the Government of allocating 10% of allocation to North East States based on Domestic Budgeting Support only and not on DBS + EAP basis.

The Committee are hopeful that Department would make all out efforts to spend this 10% amount earmarked for the actual development of much neglected North-Eastern States and Sikkim. They also hope that there would be no shortfall in achieving financial and physical targets fixed for the year 2000-2001, in this regard.

Furthermore, the Committee reiterate their earlier recommendation that all the schemes planned for North-Eastern States should be 100% funded by the Union Government

### **Recommendation No.6**

#### *Need to indicate capital requirement separately under the Capital Segment*

The Committee while scrutinising the detailed Demand No.2 in respect of the Department of Agricultural Research and Education observe that entire Demands for Grants are divided under two major segments namely Revenue and Capital. Although, the Department has been giving its Capital Component requirement for each scheme separately in their Annual Plan Document out of the total proposed plan outlay for the relevant year, yet it never shows its capital component requirement separately in the Detailed Demands for Grants as Capital Head, the entire demands are projected under Revenue Head. However, this year's (2000-2001) Annual Plan is also void of the Capital Expenditure. In this connection the Department explained that the exact capital component requirement for various schemes was in the process of finalisation and the same details would be available after some time.

In the opinion of the Committee in this fast communication world with Internet, E-Mail, Fax facilities available with the institutes of the Department the plea of the Department that their institutes are spread all over the country and it takes more time in assessing and collecting capital requirement for each institute is not tenable. Further, the Committee are not satisfied with the vague and misleading information that the DARE do not have specific requirements under Capital segment.

The Committee, therefore, recommend that the Department should regularly indicate their capital requirements separately for each Sector/Scheme in their Demand No.2 and in detailed Demands for Grants pertaining to the Department. The Committee further recommend that in order to enable the Committee to examine the Demands for Grants effectively the Annual Plan document should also contain the capital expenditure in the relevant column.

### **Recommendation No.7**

#### *Sectoral Allocations for the year 2000-2001*

The Committee observe that the IXth Plan Working Group for DARE had recommended a certain percentage of allocation to be made out of the total plan allocations available with the Department for year to year basis.

The Committee further observe that the percentage share of major 7 sectors as proposed by the Working Group stands at (i) 15% for Agril. Education (ii) 10% for Agril. Extension, (iii) 6% for Fisheries, (iv) 14% for Animal Science (v) 10% for Horticulture, (vi) 25% for Crop Science, and (viii) 20% for Natural Resource Management, Agricultural Engineering, Agricultural Economics & Statistics, ICAR Headquarters and P&I (Clubbed together). The percentage of sectoral allocations actually made by the Department for 2000-2001 stands at (i) 14.69%; (ii) 12.59%; (iii) 6.09%; (iv) 12.38%; (v) 10.28%; (vi) 21.82%; (vii) 10.91% + 5.04 + 0.84 + 5.36 respectively i.e.; if clubbed together, it comes to 22.15%.

The Committee wish to point out that there happens to be a variation in sectoral allocations. The Committee, therefore, advise the Department to adhere to the percentage of sectoral allocations as recommended by the IX Plan Working Group for DARE so that all the sectors get their ideal proportion of funds.

### **Recommendation No.8**

#### *Pending Vigilance/Disciplinary cases*

The Committee were informed that the Department is not having any independent vigilance cell or inquiry officers/ vigilance officers. Only one part time CVO; part-time Director with additional charges with some staff and that too from out of the regular staff has been looking after the Vigilance/Disciplinary cases with no separate setup meant for this purpose.

The Committee observe that at present 19 vigilance cases and 29 disciplinary cases are pending with the Department. Though, some cases might get disposed of during the year, yet some new cases get added to the list of pending cases every year. So, it happens to be continuous process of handling vigilance/disciplinary cases in the Department with a vast set up across the country.

The Committee further observe that the Department pursued the matter of getting a post of a Director (Vigilance) sanctioned as per the earlier recommendation of the Parliamentary Committee but due to ban on creation of new posts, the Ministry of Finance has not acceded to the proposal. The Department has moved the case for upgradation of one of their lower posts.

The Committee are of the view that the Department is in need of specialists in the field of Vigilance/Disciplinary proceedings. This is a technical subject and requires just like a scientist on genetics cannot function as a scientist in agricultural engineering. The Committee therefore, recommend that an independent cell constituting of law graduates headed by a Director (Vigilance) should be created in the Department for speedy finalisation of pending vigilance/ disciplinary cases within a reasonable time frame of 2 to 3 years.

### **Recommendation No : 9**

#### *Separate Budget Heads for Crop Science and other programmes under Crop Husbandry*

The Committee had recommended in their 10th Report (1996-97) that the Budget Head for Crop Husbandry should be suitably modified so that the allocations to other sectors such as Crop Science, Horticulture etc. are properly reflected in the detailed Demands for Grants so that there remains no ambiguity in the actual allocations made to each sector.

The Committee were informed that the Department approached the Ministry of Finance during April 1997 which in turn has not cleared the proposal giving the remarks to seek CGAs approval to change the standard nomenclature of heads prescribed by him before approaching Ministry of Finance for issuing corrections in the Detailed Demand of the Department. Consequently, the CGA was approached in November, 1997, but till date the matter is pending with him.

The Committee, therefore, strongly recommend that the Department should vigorously follow up the case with CGA and convince him about the need for separate and clear budget heads with desirable clarity, to be brought in the Demands for Grants of the Department in the light of the recommendation of the Committee and apprise the Committee of the positive outcome in the matter within three months from the date of presentation of this Report to the House.

## **Recommendation No : 10**

### *World Bank Aided National Agricultural Technology Project (NATP)*

The Committee are informed that The National Agricultural Technology Project (NATP) costing Rs.861.30 crores (US \$ 239.2 million) is a World Bank Aided Project for five years starting from April/ June 1998. 18 percent is the share to be borne by the Indian Government whereas 82% will be reimbursed. 100 Million Dollars is World Bank credit with a grace period of 10 years. There is no interest on it.

On a recommendation of the Committee on Demands for Grants 1998-99 requesting the Department to speed up the pace of the project, the Department had stated that the process of inviting competitive bids had already been initiated in consultation with the World Bank. Further action for appointing procurement agent and training agent is in progress. In the process of examination of Demands for Grants for (2000-2001) the Department has informed that an International Competitive Bidding process has already been initiated for the purchase of computers, peripherals etc.

The Committee are further informed that the Department has made an allocation of Rs.148 crores for 2000-2001 from its Budgetary Support of Rs.629.15 crores.

The Committee are very much concerned about the timely completion of the prestigious project as two years have already passed and important systems are not in place. The project has a term of 5 years. The Committee are afraid that if the project is not completed within 5 years, the World Bank which is giving 82% interest free finance, may not give any extension of time. The project, then will have to face the fate similar to other uncompleted projects. The Committee, therefore, urge upon the Department to implement the project with greater earnestness and sincerity. They should fix targets and stick to them by the strength of strict monitoring and supervision. Penal action may be considered for erring partners. The Committee also request the Government to reconsider their decision to make the EAP component a part of DBS and give the Department Rs.167.00 crores as an additional allocation for 2000-2001.

## **Recommendation No : 11**

### *Krishi Vigyan Kendras for North-Eastern States*

The Committee have been informed that the Department has prepared a proposal for setting up of 25 KVKs for the North-Eastern Region, by utilizing the funds available in the non-lapsable Central Pool which could not be spent for North Eastern Region. A KVK requires at least sixteen (16) officials at various stages, a sizeable measure of land and equipment i.e. a lot of funds. KVKs are 100% funded by ICAR.

Looking into the difficult geographical and political situation in the North East the Committee feel that it will be a tough task for individuals to run a KVK.

The Committee therefore, recommend that the ICAR should preferably sanction KVKs to potential NGOs of the region after having fully satisfied itself that the money will be used for the development of the KVK. The Committee are of the opinion that a lot of insurgency in the region is because of unemployment of youths. KVKs is a good method of keeping them busy and simultaneously bring development in the region. However, individuals may not be a good choice for running KVKs. The Committee also feel that the proposal of the Department to utilize funds available in the non-lapsable Central Pool is a very good proposal and urge upon the

Government to make these funds available even then to the Department. However, the Committee stress that if such funds are not available the setting up of KVKs should not be stopped.

### **Recommendation No . 12**

#### *Upgrading the Paddy Processing Centre Thanjavur*

The paddy processing centre at Thanjavur is the only centre which is directly under the control of the Department. This Centre is mandated to concentrate on paddy processing and research. The Committee are informed that seed technology and research and seed technology and processing form a part of mandate of the Indian Council of Agricultural Research rather than Department of food processing. Thus the Committee feel that this centre can perform the dual function of being a research centre for the region and also disseminate the research information to the farmers by performing the functions of a Krishi Vigyan Kendra also.

The Committee, therefore, recommend that the Department should consider upgrading the Institute into a Research cum Educational Institute for the region.

### **Recommendation No : 13**

#### *Sugarcane Cess for ICAR*

The Committee have been informed that under the Sugar Cess Act, 1982, a cess of Rs.14/- per quintal is being collected on all sugar produced by the sugar factories in India. As provided under the Sugar Development Fund Act, 1982, the cess fund is allocated to Ministry of Food, Government of India which is being utilised for rehabilitation and modernisation of sugar factories; development scheme of sugarcane; research projects aimed at development of sugar industry and building up and maintenance of buffer stock. Indian Council of Agricultural Research does not get any share in Sugar Cess fund though researches of the ICAR in raising sugarcane production are reflected in overall increase in the national sugar production.

The Committee feel that the nation today is able to attain self-sufficiency in sugar only because of the tremendous work being done in the field of research on sugarcane. Since the sugar industry is benefited from the research back up for improving productivity, production and stability, it should get a major share of sugar cess funds.

The Committee recommend that the Sugar Development Fund Act, 1982, should be amended and a provision made for allocating at least 75% of the cess fund at the disposal of ICAR for strengthening research on sugarcane.

### **RECOMMENDATION NO:14**

#### *Funds for Central Agricultural University Imphal ( Manipur)*

The Committee have been informed that the Central Agricultural University (CAU) Imphal has been established by an Act of Parliament in 1993 for developing human resources in agriculture and allied sciences for North-Eastern Region. This university is 100% funded by ICAR. An allocation of Rs.52.00 crores has been provided for the IXth plan.

The Committee are of the opinion that any university, be it an Agricultural or non-Agricultural is an asset to the Nation and the State. This university which provides B.Sc(Agri), B.V.Sc and Animal Husbandry from Mizoram and B.I.Sc from Tirpura caters to the need of the seven sister States of North East. The burden of the functioning of the University should not be entirely borne by the ICAR from its budgetary allocations but a share of it should also be borne from the non-lapsable funds lying idle with the States. The Committee also feel that the University Grants Commission

should also be addressed to render necessary help for smooth functioning of the University.

### **Recommendation No.15**

#### AICRP for Bamboos

The Committee are informed that there is a certain variety of bamboo whose shoot is a delicacy in the North-East and is available in its vast areas and in large quantities. However, there are certain varieties of bamboos available in China which are fully edible bamboos. The local shoots are used by inhabitants for making soups, pickles and so on.

The Committee are of the opinion that, if research is done in this field and the China variety of bamboo is developed in India, it will be a good source of employment for the tribals, besides being a source of food. The Committee also feel that processed bamboo will be a good export product.

The Committee, therefore, recommend that an All India Coordinated Research Project may be initiated by the Department in the North Eastern States which may carry out a detailed research programme in that direction.

\* The Major Head 2552 has been incorporated in Demand No.2 of the Expenditure Budget Vol. I, M/o. Finance from BE(2000-2001).