

TWENTIETH REPORT
STANDING COMMITTEE ON
AGRICULTURE
(1995-96)

(TENTH LOK SABHA)

MINISTRY OF AGRICULTURE
DEPARTMENT OF AGRICULTURAL
RESEARCH & EDUCATION

DEMANDS FOR GRANTS
(1995-96)

Presented to Lok Sabha on 4th May, 1995

Laid in Rajya Sabha on 4th May, 1995



LOK SABHA SECRETARIAT
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COMPOSITION OF THE STANDING COMMITTEE ON
AGRICULTURE

(1995-96)

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(iv)

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3. Shri P.D.T. Achary – *Director*
4. Shri S. Bal Shekar – *Under Secretary*

PREFACE

11, the Chairman, Standing Committee on Agriculture having been authorised by the Committee to submit the Report on their behalf, present this Twentieth Report on Demands for Grants of the Ministry of Agriculture (Department of Agricultural Research and Education) for the year 1995-96 .

2. The Standing Committee on Agriculture was re-constituted on 8th April, 1995. One of the functions of the Standing Committee as laid down in Rule 331E of the Rules of Procedure and Conduct of Business in Lok Sabha is to consider the Demands for Grants of the concerned Ministries/Departments and make a report on the same to the Houses. The report shall not suggest anything of the nature of cut motions.

3. The Committee took evidence of the representatives of the Ministry of Agriculture (Department of Agricultural Research and Education) on 20th April, 1995. 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 1995-96 and for giving evidence before the Committee.

4. The Committee considered and adopted the Report at their sitting held on 25th April, 1995.

NEW DELHI ;
26 April, 1995
6 Vaisakha, 1917 (Saka)

NITISH KUMAR,
Chairman,
Standing Committee on Agriculture.

CHAPTER I

DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

1.1. The Department of Agricultural Research and Education (DARE) of the Ministry of Agriculture provides the necessary governmental linkages for the Indian Council of Agricultural Research (ICAR). The major functions of DARE are :

To look after all aspects of agricultural research and education (including animal science and fisheries) involving coordination between the central and state agencies.

To attend to all matters relating to the Indian Council of Agricultural Research ; and

To attend to all matters concerning the development of new technology in agriculture, animal husbandry and fisheries, including such functions as plant and animal introduction, exploration, soil and land use survey and planning.

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

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

a) Mandate of ICAR

- * To plan, undertake, aid, promote and coordinate education, research and its application in agriculture, agroforestry, animal science, fisheries, home science and allied sciences.
- * To act as a clearing-house for research and general information relating to agriculture, animal husbandry, home science, fisheries and allied sciences through its publications and information system and instituting and promoting transfer of technology programmes.
- * 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 and other allied sciences.
- * 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.
- * To do other things considered necessary to attain the objectives of the Council.

(b) Activity Spectrum

A brief account of major activities of the Indian Council of Agricultural Research is given below. The Council performs various activities through identified programmes with specific objectives under the domains of :

- (i) Agricultural Research
- (ii) Agricultural Education
- (iii) Agricultural Extension

Agricultural Research

Primarily, fundamental and applied research in traditional and frontier areas are undertaken by the Council to offer solutions to problems relating

to conservation and management of resources, productivity improvement of crops, animals and fisheries etc. For formulating research policies and programmes, the ICAR has developed a national grid comprising of a chain of :

45 Central Institutes

4 National Bureaux

30 National Research Centres

9 Project Directorates

79 All India Coordinated Research Projects and Network Programme

Agricultural Education

The Council aids, promotes and coordinates agricultural education programmes at national level. Since 1960 the Council has invested over Rs. 200 crore in developing the agricultural university system. The educational programmes are, by and large, carried out by 27 State Agricultural Universities (SAUs) of the country covering 16 major states. One Central Agricultural University (CAU) for North Eastern Hill (NEH) Region has 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 universities. These institutes offer post graduate degree programmes in addition to undertaking researches in their respective areas. In order to bring uniformity in the standards of Agricultural Education and improving it further an Agricultural Human Resource Development Project (AHRDP) is being launched with the assistance of the World Bank.

Agricultural Extension

The ICAR discharges the latest agricultural technologies to farmers, extension functionaries of States, Agricultural Departments and other non-governmental agencies through Krishi Vigyan Kendras (KVKs). On-farm training in different aspects of agriculture, animal sciences, fisheries and allied vocations to youths, farm men and women and rural workers is imparted through 183 KVKs (78 new KVKs have further been sanctioned). These programmes get a back-up support through Trainers, Training Centres to update knowledge of farm-worthy advancements made in research. These programmes are closely monitored by 8 Zonal Coordinators.

THRUST AREAS OF THE VIII PLAN

1.3. To improve productivity of food, fodder, commercial and horticultural crops, animals and fisheries in a sustainable manner, the following priorities and thrust areas have been identified.

- * Improve production potential of crops by developing varieties with multi-resistance and high productivity under low, medium and high input conditions through the use of biotechnology and conventional technologies.
- * Achieve self sufficiency in oilseed production.
- * Increase productivity of horticulture crops and exploit export potential.
- * Develop integrated farming system for sustainable agriculture.
- * Increase biomass production for fuel fodder and small timber through improved fodder genotypes and agro-forestry systems.
- * Energy management in agriculture and exploitation of non-conventional energy sources.
- * Use of embryo transfer technology for quick genetic improvement of livestock and genetic engineering to fight animal diseases.
- * Improving fish production in brackish water, cold water and fresh water aquaculture systems.

**DETAILS OF SCHEMES/PROGRAMMES UNDER OPERATION
UNDER THE 8TH PLAN DURING THE LAST
THREE YEARS I.E. 1992-93 ONWARDS**

1. ICAR Plan Schemes/Projects

During VIII Five Year Plan, 193 plan schemes are in operation under 44 programmes in 11 sectors as given below :—

- 45 Central Institutes
- 4 National Bureaux
- 30 National Research Centres
- 9 Project Directorates
- 79 All India Coordinated Research Projects (AICRPs) and Network Programmes
- 26 Other Plan schemes/projects

The programme-wise details of plan schemes *viz.* institutes, bureaux, national research centres, AICRPs etc. is as under :

Sector	Programmes	Plan Schemes
CROP SCIENCE	A. PLANT GENETIC RESOURCES	1. National Bureau of Plant Genetic Resources
		2. AICRP—Under-utilised & Under-exploited Plant
		3. AICRP—Arid Legumes
	B. FOOD CROPS	1. Indian Agricultural Research Institute
		2. Central Rice Research Institute
		3. Vivekanand Parvataiya Krishi Anusandhan Shala

Sector	Programmes	Plan Schemes
		4. Institute of Pulses Research
		5. Directorate of Wheat Research
		6. N.R.C.—Sorghum
		7. Project Directorate—Rice
		8. AICRP—Chick Pea
		9. AICRP—Pegion Pea
		10. AICRP—Pulses (MUL/ARP)
		11. PD—Maize
		12. AICRP—Pearl Millets
		13. AICRP—Small Millets
		14. AICRP—Barley
		15. AICRP—Sorghum
	C. FORAGE CROPS	1. Indian Grass land & 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 Fibres
		5. Sugarcane Breeding Instt.
		6. AICRP—Cotton

Sector	Programmes	Plan Schemes
		7. AICRP—Jute
		8. AICRP—Tobacco
		9. AICRP—Sugarcane
		10. Network Scheme—Sugarbeet
	E. OILSEED	1. N.R.C.—Groundnut
		2. N.R.C.—Soyabean
		3. N.R.C.—Rapessed & Mustard
		4. Project Directorate Oilseeds
		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. AICRP—White Grub
		5. AICRP—Agriculture Acarology
		6. AICRP—Rodent Control
		7. AICRP—Pesticide Residue
		8. AICRP—Nematode
		9. Network—Economic Ornithology
	G. HYBRID RESEARCH & SEED DEVELOPMENT	1. Project on Promotion of Research & Development on Hybrid Seed in Selected Crops

Sector	Programmes	Plan Schemes
	H. GENETIC ENGINEERING & BIOTECHNOLOGY FOR CROP IMPROVEMENT	1. N.R.C. Biotechnology Centre for Crop Science
	I. SEED TECHNOLOGY RESEARCH & 1. BREEDER SEED PRODUCTION	National Seed Project including existing AICRP on Seed Borne Diseases
II. HORTICULTURE	A. FRUITS	<ol style="list-style-type: none"> 1. Indian Institute of Horticultural Research (50%) 2. Central Institute of Horticultural for Northern Plain (90%) 3. ICAR Research Complex for Goa (10%) 4. N.R.C.—Citrus(90%) 5. N.R.C.—Grapes 6. AICRP—Tropical Fruits 7. AICRP—Sub-tropical Fruits 8. AICRP—Arid Fruits 9. Central Institute of Temperate Horticulture 10. N.R.C.—Ari Horticulture 11. N.R.C. Banana 12. AICRP—Apple Scab
	B. VEGETABLE	<ol style="list-style-type: none"> 1. Indian Institute of Horticulture Research (30%) 2. N.R.C.—Mushroom 3. P.D.—Vegetable 4. Vegetable Seed Project

Sector	Programmes	Plan Schemes
		5. AICRP—Mushroom
		6. N.R.C.—Onion and Garlic
	C. POTATO & TUBER CROPS	1. Central Potato Research Institute
		2. Central Tuber Crops Research Institute
		3. AICRP—Potato
		4. AICRP—Tuber Crops
	D. PLANTATION CROPS	1. Central Plantation Crops Research Institute
		2. ICAR Research Complex for Goa (90%)
		3. N.R.C.—Cashew
		4. N.R.C.—Oilseed Palm
		5. AICRP—Palms
		6. AICRP—Cashew
	E. SPICES	1. N.R.C.—Spices
		2. AICRP—Spices
	F. Floriculture, Medicinal & Aromatic Plants	1. Indian Institute of Horticulture Research (10%)
		2. N.R.C.—Orchids
		3. N.R.C.—Medicinal & Aromatic Plants
		4. AICRP—Floriculture
		5. AICRP—Medicinal and Aromatic Plants
		6. AICRP—Betelvine

Sector	Programmes	Plan Schemes
	G. POST HARVEST TECHNOLOGY OF HORTICULTURAL CROPS	<ol style="list-style-type: none"> 1. Indian Institute of Horticulture Research (10%) 2. Central Institute of Horticulture for Northern Plains (10%) 3. NRC on Citrus (10%) 4. AICRP—Post Harvest Technology of Horticultural Crops 5. Project on PHT of Fruits and Vegetables
SOIL, AGRONOMY AND AGRO-FORESTRY	A. RESOURCE INVENTORY	National Bureau of Soil Survey & Land Use Planning
	B. Cropping System Research	<ol style="list-style-type: none"> 1. Central Agriculture Research Institute 2. ICAR Research Complex for NEH Region 3. N.R.C.—Agro-forestry 4. N.R.C.—Head Science 5. P.D.—Cropping System Research 6. AICRP—Agri-meteorology 7. AICRP—Diaraland Improvement 8. AICRP—Agro-forestry 9. AICRP—Weed Control.
	C. SOIL MANAGEMENT	<ol style="list-style-type: none"> 1. Central Arid Zone Research Institute 2. Central Soil & Water Conservation Research & Training Institute 3. AICRP—Tillage Management of Indian Soils 4. AICRP—management of Acid Soil

Sector	Programmes	Plan Schemes
	D. WATER MANAGEMENT	<ol style="list-style-type: none"> 1. Central Soil Salinity Research Institute 2. Water Technology Centre for Eastern Region 3. P.D. Water Management 4. AICRP—Management of Salt Affected Soils 5. AICRP—Optimisation of Groundwater Utilization althrough Wells Pumps
	E. NUTRIENT MANAGEMENT	<ol style="list-style-type: none"> 1. Indian Institute of Soil Science 2. Central Research Institute for Dryland Agriculture 3. AICRP—Dryland Agriculture 4. AICRP—Micro Nutrients 5. AICRP-Biological Nitrogen Fixation 6. AICRP—Micro Biological Decomposition 7. AICRP—Soil Test Crop Response 8. AICRP—Long-term Fertilizer Experiments
IV. AGRICULTURAL ENGINEERING	A. FARM IMPLEMENTS & MACHINERY	<ol style="list-style-type: none"> 1. Central Institute of Agricultural Engineering 2. AICRP—Power Tiller 3. AICRP—Farm Implements Machinery 4. AICRP—Human Engineering and safety studies

Sector	Programmes	Plan Schemes
	B. POST HARVEST TECHNOLOGY	<ol style="list-style-type: none"> 1. Central Institute for Post Harvest Engg. & Technology 2. Central Institute for Research on Cotton Technology 3. Indian Lac Research Instt. 4. Jute Technological Research Laboratory 5. AICRP—Application of Plastics in Agriculture 6. AICRP Jaggery & Khandsari 7. AICRP—Harvest & Post Harvest Technology
	C. ENERGY MANAGEMENT IN AGRICULTURAL ENGINEERING	<ol style="list-style-type: none"> 1. AICRP—Renewable Energy Sources 2. AICRP—Energy Requirement in Agricultural Sector 3. AICRP—Animal Energy
	D. DRAINAGE ENGINEERING	AICRP Agricultural Drainage
V. ANIMAL SCIENCE	A. ANIMAL GENETIC RESOURCES	<ol style="list-style-type: none"> 1. National Institute of Animal Genetics 2. National Bureau of Animal Genetic Resources 3. Network-Animal Genetic Resources
	B. LIVESTOCK IMPROVEMENT	<ol style="list-style-type: none"> 1. National Dairy Research Institute 2. Central Sheep and Wool Research Institute

Sector	Programmes	Plan Schemes
		4. Central Institute for Research for Goats
		5. Central Institute for Research on Buffaloes
		6. National Institute of Animal Nutrition & Physiology
		7. N.R.C. on Biotechnology (Part of NDRI)
		8. N.R.C.—Camel
		9. N.R.C.—Yak
		10. N.R.C.—Mithun
		11. N.R.C.—Equine
		12. P.D.—Poultry
		13. P.D.—Cattle
		14. AICRP—Sheep
		15. AICRP—Goat
		16. AICRP—Buffalo
		17. AICRP—Pig
		18. AICRP—Agricultural By-Product
		19. Network—Micronutrients
		20. Network—Embryo Transfer
		21. Network—Crop Based Animal Production System
	C. LIVESTOCK PRODUCT TECHNOLOGY	1. Dairy Processing (National Dairy Research Institute)

Sector	Programmes	Plan Schemes
		2. N.R.C.—Meat & Meat Product Technology 3. Central Sheep & Wool Research Institute 4. R & D Support for Process Upgradation of Indigenous Milk Products for Industrial Applications
	D. ANIMAL HEALTH	1. Indian Veterinary Research Institute 2. AICRP—Disease Monitoring & Surveillance 3. AICRP—Blood Protosta 4. AICRP on Foot & Mouth Disease 5. Strengthening of Monitoring Mechanism and Training of Scientists & Technicians 6. N.R.C.—Biotechnology (Part of IVRI)
FISHERIES	A. CAPTURE FISHERIES	1. Central Marine fisheries Research Institute 2. Central Inland Capture Fisheries Research Institute
	B. CULTURE FISHERIES	1. Central Institute for Freshwater Aquaculture 2. Central Institute of Brackish water Aquaculture 3. N.R.C.-Cold Water Fisheries 4. DRP on Processing and Utilisation of Organic Waste for Aquaculture
	C. FISH & FISH PROCESSING TECHNOLOGY	1. Central Institute of Fisheries Technology
	D. FISH GENETIC RESOURCES	National Bureau of Fish Genetic Resources

Sector	Programmes	Plan Schemes
	E. FISHERIES EDUCATION	<i>Central Institute of Fisheries Education</i>
VII. AGRICULTURAL STATISTICS & ECONOMICS		<ol style="list-style-type: none"> 1. <i>Indian Agricultural Statistics Research Institute</i> 2. <i>N.R.C.—Agricultural Economics & Policy Research</i>
AGRICULTURAL EXTENSION	A. VOCATIONAL TRAINING WITH INTEGRATED FUNCTION	<ol style="list-style-type: none"> 1. <i>Integrated Krishi Vigyan Kendra/ Trainees Training Centres</i> 2. <i>NRC for Women in Agri.</i>
AGRICULTURAL EDUCATION	A. STRENGTHENING OF AGRICULTURAL EDUCATION	<ol style="list-style-type: none"> 1. <i>National Academy for Agricultural Research Management</i> 2. <i>Development & Strengthening of State Agricultural Universities</i> 3. <i>Development & Strengthening of Agricultural Educationh of Central Universities</i> 4. <i>Strengthening PG Education in Deemed to be Universities</i> 5. <i>Establishment of Central Agricultural University NEH Region</i> 6. <i>Establishment of Centres of Advance Studies in SAUs and DUs.</i> 7. <i>AICRP on Home Science</i>

Sector	Programmes	Plan Schemes
	B. RECOGNISING OF PROFESSIONAL EXCELLENCE	1. Best Teacher Award
	C. PROFESSIONAL RESOURCES UTILIZATION	1. Utilization of Internal Competence 2. Preparation of University Level books 3. Emeritus scientist Scheme !
WORLD BANK AIDED PROJECTS/FOREIGN AIDED PROJECTS	A. WORLD BANK PROJECT B. OTHER FOREIGN AIDED PROJECT	1. National Agricultural Research Project II 2. National Seed Project
MANAGEMENT AND INFORMATION SERVICES	A. BILATERAL AND AIDED PROJECTS	1. Bilateral Cooperation Programme with Developing & Developed Countries 2. Long-term Project under INDO-USSR, INDO-UK & INDO USA Programme
	B. PUBLICATION & INFORMATION	
	C. STRENGTHENING OFF THE INFRASTRUCTURE	1. Civil Works a. ICAR Bhawan Phase II b. Guest House for ICAR Hqrs. c. National Agricultural Science Centre & Museum d. Residential Accommodation for ICAR Staff 2. ICAR Agricultural Library 3. Strengthening of ASRB 4. Modernization of Office Space & Facilities 5. ICAR Headquarters 6. Publicity & Public Relations
	D. SUPPORT TO PROFESSIONAL SOCIETIES/ASSOCIATIONS/ SUPPORT TO NATIONAL ACADEMY OF AGRICULTURAL SCIENCE	

SECTORAL BREAKUP OF FINANCIAL OUTLAY/EXPENDITURE

1.5. The VIII Plan allocation, the Sector wise Breakup of the allocation actual Expenditure during 92-93, 93-94 the approved & Revised outlay for 94-95 and the Approved outlay for 95-96 is as under :

(Rs. in Crore)

Sector	Number of		VIII Five		1994-95		1995-96	
	Programme	Schemes	Sanctioned	Actual	Actual	Approved	Revised	Approved
			Outlay	Expendi- ture	Expendi- ture	Outlay	Estimate	Outlay
1	2	3	4	5	6	7	8	9
1. Crop Science	9	50	280.00	38.36	51.59	60.00	63.83	73.00
2. Horticulture	7	33	104.20	12.31	21.26	25.00	23.94	26.95
3. Soil, Agronomy & Agroforestry	5	27	149.21	21.57	28.91	35.00	34.61	36.47
4. Agricultural Engineering	4	15	48.75	5.55	7.63	10.00	11.32	11.51
5. Animal Science	4	32	138.70	14.61	17.93	29.56	27.43	30.28
6. Fisheries	5	9	64.96	6.44	12.59	16.00	14.20	17.10
7. Agricultural Economics & Statistics	2	2	9.00	0.29	0.57	1.44	1.18	1.50
8. Agricultural Extension	2	2	200.32	19.25	36.15	26.00	30.98	40.00
9. Agricultural Education	3	11	147.88	13.71	12.60	30.00	27.54	50.34
10. Foreign Aided Projects Including Narp & Pipeline Projects	2	2	*157.04	43.08	43.01	38.00	38.00	*
11. Management & Information Service Including Dare	1	10	19.94	0.85	1.07	4.00	1.97	22.55
Total	44	193	1300.00	176.02	233.31	275.00	275.00	310.00

* This includes Rs. 2.74 crore for pipeline projects

** The foreign aided component is included in the respective subject matter divisions.

The allocation to the individual plan scheme during the three years of the VIIIth Plan is given in Annexure-I.

CHAPTER II

DEMANDS FOR GRANTS 1995-96 (DARE)

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

2.2 The entire demand of DARE comes under Revenue Section amounting to Rs. 548.86 (crores) for the year 1995-96. This Demand is divided into two major heads as follows:

- Major Head "3451" includes outlay of Plan & Non-plan expenditure on Secretariat of DARE under sub-Head-Salaries, overtime Allowance, Domestic Travel Expenses, Foreign Travel Expenses and office Expenses.
- Major Head "2415" includes outlay of Plan & Non-plan payments to ICAR towards Agricultural Research and Education on Crop Husbandry, Soil & Water Conservation, Animal Husbandry, Dairy Development, Fisheries, Forestry and contributions to Commonwealth Agricultural Bureau (CAB), Consultative Group on International Agricultural Research (CGIAR), Asia-Pacific Association of Agricultural Research Institution (APAARI) and Network of Agriculture Centres for Asia and the Pacific (NACA).

OVERALL VIEW OF THE BUDGETARY PROVISIONS 1995-96 FOR DARE

2.3 The total allocation for the Department of Agricultural Research & Education for the year 1994-95 was Rs. 4,77,00,00 (thousands) and the Revised Estimate (RE) stands at Rs. 4,95,63,00 (thousands). The Budgetary Provision for 1995-96 has been set at Rs. 5,48,86,00 (thousands). The increase in Budget Estimates (BE) for 1995-96 over R.E. (1994-95) is Rs. 53,23,00 (thousands).

2.4 The annual inflation rate being at 11% the Budgetary provision for 1995-96 at 11% over RE 1994-95 should have been Rs. 5,50,14,93 (thousands) instead of Rs. 5,48,86,00 (thousands). This indicates that the B.E. for 1995-96 is less by Rs. 1,28,93 (thousands).

2.5 The Budget Estimate, Revised Estimate actuals for Plan & Non-Plan for the years 1993-94, 94-95 and 95-96 is as under:—

	Plan			Non-Plan		
	B.E.	R.E.	Actual	B.E.	R.E.	Actual
1993-94	2,50,00,00	2,50,00,00	2,27,90,63	1,80,00,00	2,09,80,00	2,01,55,94
1994-95	2,75,00,00	2,74,95,00	—	2,02,00,00	2,20,64,00	—
1995-96	3,10,00,00	—	—	2,38,86,00	—	—

2.6 Keeping the above statistics in mind two conclusions are clearly drawn:

- (i) the Department was being allocated a lesser amount for its business for the year 1995-96 to which it had no objection corresponding to the overall nearly static situation of growth in production/productivity/availability of quality seeds/extension/education/soil agronomy/implements because of lack of adequate research;
- (ii) the Department was actually unable to spend the allocated revenue in Plan & Non-plan activities.

2.7 The Committee had made the following recommendation in their Second Report:—

The Committee during the evidence have also noted that ICAR proposed an allocation of Rs. 2008.78 crores under the VIII Plan as suggested by the working Group. But Planning Commission has cut it down by 35 per cent and allocated only Rs. 1300 crores under the some plan. The Committee, in this context, is of the opinion that this allocation of Rs. 1300 crores under the VIII Plan will not serve the twin purposes: firstly, to enhance the foodgrains production upto 210 million tonnes by the end of this century and secondly, to produce more and more surpluses for export. The Committee have also been informed by ICAR that if this reduction in Plan allocation continues there can be little or no chance of enhancing the targeted food production to 210 million tonnes by the turn of the century. The Committee, therefore, recommend that the outlay for agriculture research should be targeted to reach a graded level of 1% of the total agricultural G.D.P., if there is to be any meaningful achievement in the country's research.

2.8 The Department in their reply stated:

"The initial proposal of the Indian Council of Agricultural Research/Department of Agricultural Research & Education for the VIII Plan was of Rs. 2008.78 crores. Against this the Planning Commission allocated Rs. 1300 crores. Despite less funding, the Council managed to accommodate most of its important research programmes/schemes and also initiated new programmes during the VIII Plan. Thirty-four new schemes were approved and adequate funding was provided for these.

The present allocation to agricultural research is 0.32% of the agricultural GDP which has been suggested to be upgraded to 1% at a grade level."

2.9 Responding to the reply the Committee noted that the Department of Agricultural Research and Education in its reply has only recounted the steps taken by it to get sufficient funds allocated under the Eighth Five Year Plan from the Planning Commission prior to the receipt of the recommendation of the Committee. They, however, note that the reply does not indicate any specific step taken by the Department to bring the recommendation of the Committee to the pointed notice of the Planning Commission for getting an outlay of one percent of the total agricultural GDP in favour of agricultural research.

2.10. The Committee found the reply of the Government incomplete and inadequate in this respect and expected sufficient explanation from

the Government on the matter. The Committee was also surprised to note the reply of the Department that the ICAR could manage to accommodate most of its important research programmes/schemes and even initiated 34 new programmes with adequate funding during the Eighth Plan, despite the fact, that the Planning Commission slashed down by 35% the original proposed allocation of Rs. 2008.78 crores and made an allocation of Rs. 1300 crores only to the Department of Agricultural Research & Education. From such statements in the reply, the Committee could only come to the conclusion that either the original projections were unduly inflated and unrealistic or the statements of the Department in the reply are self-contradictory and required reconciliation. The Committee, therefore, desired that the Department of Agricultural Research and Education should bring to the notice of the Planning Commission the earlier recommendation of the Committee and pursue the matter of additional funding in right earnest to take it to its logical conclusion.

2.11 The above stated figures, the recommendation of the Committee, the allocation to the Department and the department not being able to spend even the petty amount allocated to it gives a clear picture of the dismal state of research in the country. The Department was, therefore, asked to explain these factors.

2.12 In their reply the department stated :—

“Increases under Non-Plan funds for quite some time have been stringent not even commensurate to meet inflation at times. Plan funds are used to meet shortfalls in the operational grants. All out efforts are made to meet the scientific targets, by efficient human resource mobilisation and financial management, close monitoring of expenditures and prioritisation process. It may be stated that inspite of financial crunch of Govt. of India, Planning Commission and Ministry of Finance have given higher total allocation for 1995-96 both under Plan and Non-Plan. In Plan an increase of 12.73% over R.E. 1994-95 and in Non-plan an increase of 8.25% over RE 1994-95.”

2.13. The reply of the Government corroborates the fact that it has not even been able to get an increase of 11% due to budgetary inflation over the RE of the previous year and is happy with the little increase. This seems obvious that the department has not been able to spend its plan allocation during 1993-94 clearly shows that it does not have the required capacity and capability. The Department should make special efforts to enhance its capacity to utilise more funds so that the Committee's recommendation regarding increased allocation should be meaningful.

2.14 The Committee therefore, recommends that the Department keeping in mind the priorities should make all out efforts to meaningfully utilise the approved outlay for Sectors/Schemes so that it does not have to surrender any amount due to non-utilisation/under utilisation.

2.15 The Committee once again reiterate their earlier recommendation that the outlay for agriculture research should be targeted to reach a graded level of 1% of the agricultural G.D.P. and that the Department of Agricultural Research & Education should bring to the notice of Planning Commission the matter of additional funding in right earnest. The Planning Commission should be requested to increase the budgetary allocation by actually visualizing agricultural research & education as the only gateway to development, enhanced productivity, increased per capita availability and not only restricting it to the annual budgetary inflation.

A. MAJOR HEAD—3451—SECRETARIAT ECONOMIC SERVICES

2.16 The allocation towards Budget Estimate, Revise Estimate and Actual expenditure for the years 1992-93, 1993-94, 1994-95 and 1995-96 is as under:

(in thousands)				
	BE	RE	Actual	Remarks
1992-93	45,00	50,00	41,77	The RE is higher than BE but actual expenditure is less than RE by 17%
1993-94	55,00	55,00	35,98	The RE is higher than BE but actual expenditure is less than RE by 35%
1994-95	75,00	63,00	—	The RE is 16% less than BE. Actual is expected to be even less.
1995-96	79,00	—	—	BE is 25% more than RE of 1994-95,

Sub Head A. 1 (1) (1)—Salaries

2.17 The allocation towards BE, RE and actual expenditure for the years 1992-93, 1993-94, 1994-95 and 1995-96 under this sub Head is as under:

(in thousands)

	BE	RE	Actual	Remarks
1992-93	28,00	31,00	27,39	The RE is higher than BE but actual is less than RE by 12%
1993-94	32,00	32,00	24,48	The actual is less than RE/BE by 24%
1994-95	40,00	36,00	—	The RE is lower than BE by 10% Actual is expected to be lesser.
1995-96	43,00	—	—	The BE is higher than RE 1994-95 by 16%.

Sub Heads A1 (1) (3) , A1 (1) (4) & A1 (1) (5)

2.18 The Plan allocation for 1995-96 under these Sub Heads has doubled over the BE of 1994-95.

The Non Plan allocation for 1995-96 under the Sub Heads on domestic travel A1 (1) (3) and Foreign Travel A1 (1) (4) has also doubled over RE 1994-95.

Whereas the actual utilization in the years 1992-93 & 1993-94 is much less.

2.19 In the VIII Report of the Committee on Demands for Grants 1994-95 the Committee had recommended in paras 3.1 and 3.2 on Major Head "3451" that the estimates in this head are overpitched. It had also recommended that measures should be taken to exercise control.

2.20 In its action taken to this recommendation the Department had stated that:

"A review of the estimates and expenditure will be undertaken and maximum economy measures will be adopted."

2.21 When the Department was categorically asked to give the reflection of the recommendation in the Demands for Grants 1995-96 the Department has stated as under:

"As a result of the review the provision under RE 1994-95 has been reduced from 37,00 lakhs to 34,00 lakhs."

2.22 From the Budgetary provision and the allocations and actual expenditure of previous years it is seen that the BE for 1995-96 is again overpitched.

2.23 The Department was asked to explain why the recommendation of the Committee were not taken cognizance of while making Budgetary Provision for 1995-96 under this Head and related sub Heads. The Department explained:

- (i) As has been rightly pointed out by the Committee the actual of 1992-93 were Rs. 42 lakhs (Rs. 41.77). This included an expenditure of Rs. 11 lakhs for 10 months relating to the establishment and personal staff of MOS (DARE). In 1993-94 a provision of Rs. 55 lakh was made having regard to the general increase in staff cost and inflationary expenditure on other items of office expenses. However, since no MOS exclusively for DARE was available in the year 1993-94 an amount of Rs. 13 lakhs had to be surrendered, since there had been a saving on the establishment cost and the expenditure on personal staff meant for MOS.
- (ii) At the time at arriving on budgetary provision for 1993-94 the same amount of Rs. 55 lakhs was provided on the assumption that there will be expenditure on establishment of MOS. During 1993-94 also there was no expenditure on this account since there was no exclusive MOS (DARE). Hence, there was surrender of about Rs. 19 lakh in 1993-94.

- (iii) During 1994-95 a provision of Rs. 70 lakh under Non-Plan and Rs. 5 lakh under Plan was made on the assumption that there will be expenditure on MOS staff as also increased expenditure on account of filling up on vacancies which had remained unfilled for quite sometime. Parliamentary Committee in its 8th Report on Budgetary Demands for Grants for 1994-95 recommended that there should be strict control on office expenses and salaries vide paras 3.1 and 3.2. In compliance with this directive, rigid control over these expenses was made by adopting economy measures and during RE 1994-95 the provision was reduced from Rs. 70 lakh in Non-Plan to Rs. 59 lakh and from Rs. 5 lakh under Plan to Rs. 4 lakh thus making a total cost of Rs. 63 lakh as against original BE 75 lakh. The actuals against this, are about Rs. 53 lakhs *i.e.* there has been surrender of about Rs. 10 lakh mainly on account of non operation of posts in the set up meant for MOS.

2.24 The Committee observes that the Department in the first stage has been indulging in excessive budgeting by making provision for the office of the MOS on the assumption that there will be expenditure on the establishment of MOS. This assumption was in 1992-93, 1993-94, 1994-95 and probably in 1995-96 also. The practice of assumption budgeting is not healthy as this involves worthy money lying unutilised for the whole year which can easily be utilised in other priority sectors.

2.25 The Committee further observes that the surrender of funds on account of the assumption budgeting in 1992-93 was 13 lakhs, in 1993-94 it was 19 lakhs and in 1994-95 it was 10 lakhs. The surrender of a varying amount does not show consistency of provision of budgetary expenses for the office of MOS which implies that the provisions on account of MOS's office are utilised for other purposes. Further, since the surrender as stated by the Department is only on account of the inflated expenditure on MOS's office the Committee does not see any cost effective economy measures adopted by the Department to exercise control of expenditure on this Head. The BE for 1995-96 at 37 lakhs is a clear indication to this reading of the Committee.

2.26 As against the actual expenditure of only Rs. 57 thousand in Foreign Travel in 1993-94, the proposal in 1995-96 is Rs. 6 lakh.

2.27 The Committee is therefore, pained to record that its recommendations have not been given due regard and the Department continues to follow its strategy of budgeting by adding percentages on previous budget figures rather than making an effective evaluation & then projecting their Demand. Economic control on expenditure is a result

of evaluation and not surplus presumptive budgeting and its surrender. The Committee recommends that an exercise is carried out by the department to plug in loopholes of excessive budgeting and give results of actual exercise of control on expenditure on this head. It further recommends that there is no justifications for abnormal increase under Foreign Travel specially because there is no justification for such abnormal increase under this Act specially because in most of the cases provision for foreign travel is under the relevant scheme. This allocation may, therefore, be reduced and the entire allocation should be under non-plan.

B. MAJOR HEAD 2415

Sub Head B. 1—Crop Husbandry

2.28. Crop Science has 9 programmes and 50 schemes for which the Department has allocated Rs. 260 crores for the VIII Plan period 1992-97.

2.29. Crop Division is the largest division in terms of size and responsibility addressing the various aspects of production of about 20 major crop plants which broadly include cereals, pulses, oilseed, commercial crops and forages. Its functions are to provide better varieties/hybrids for varied ecologies and farming situations, more than required quantity of breeder/nucleus seed, cost-effective crop production and protection packages collection and conservation of fast eroding India's wealth of plant genetic resources.

2.30. The department was asked to give the tenure of each of these schemes and how many have extended their term periods. It was also desired to know the impact of budgetary provisions of these extended schemes on other schemes for the period 1992-93 till date.

2.31. The department replied that schemes are plan schemes of long duration nature which have to provide continued research and development support to the associated commodities in order to cope up with new emerging issues, have new crop varieties that are resistant to emerging pests and disease, efficient nutrient and disease and pest management with yield and economic advantages etc. In the Division of Crop Sciences there are 49 such schemes:

Institutes	11
National Research Centres	06
Project Directorates	04
All India Coordinated Research Projects	28

49

In the VIII Plan, following Schemes were approved for implementation to strengthen research in certain key priority areas:

Pulses:

1. IIPR (upgradation of PD Pulses) AICRP on Pulses was broken up in 3 projects to give an impetus to pulses research.
2. AICRP - Chick pea
3. AICRP- Pigeonpea

Oilseeds:

- | | |
|-----------------------------------|---|
| 1. AICRP - Groundnut | Separated from Directorate of Oilseeds Research to give an impetus to Oilseed research. |
| 2. AICRP -Rapeseed & Mustard | |
| 3. NRC - Rapeseed & Mustard (New) | |

Biological Control:

- | | |
|----------------------------|--|
| 1. PD - Biological Control | Upgradation of AICRP on Biological Control to give an impetus to Integrated Pest Management Programme. |
|----------------------------|--|

2.32. The Committee observes that the department has evaded the main thrust of the question by giving a vague reply. Long term schemes of endless duration are unknown. These may be parasites on the development of other schemes introduced/to be introduced.

2.33. The department further strengthening their point clarified:

As for the crop improvement with ICAR identifying 'hybrid' technology as the thrust area for the VIII Plan, impressive progress has been made in developing the technology for new crops like rice, rapeseed, mustard and pigeon pea and extending the hybrid technology of traditional crops like maize, sorghum pearl millet and sunflower to new varieties as briefly given below:

Rice: Four hybrids have been released (APRH-1 & APRH-2 for Andhra Pradesh, KRJ-1 for Karnataka and TNRH-1 for Tamil Nadu).

Maize: Release of India's first single cross hybrid "Paras" and several identified for rabi season.

Sorghum: Release of India's first Rabi hybrid CSH-13 R and several like SPH 641, SPH-632 etc. have been identified.

Pearl Millet: Eight hybrid maturing in 60-80 day duration such as HHB 68, Pusa 322 etc.

Sunflower: Large scale seed production of KBSH-1 and APSH-1 after purification of their parental lines and release of PSFH-67 and PKVSH-27.

Rapeseed: Release of India's first hybrid PGHS-1 of Gobi Sarson.

Mustard: Several in the pipeline.

Castor: After GCH-4 two new hybrids DCH-15 and DCH-30 have been released.

Pigeonpea: Release of two hybrids viz. PPH-4 and COH-1.

Cotton: Release of three medium staple cotton hybrids for the first time for N.W. India. They are Fateh, Dhanilaxmi and Rajhans.

2.34. In respect of varietal development a large number of varieties have been developed during the last three years with emphasis on rainfed ecologies (list enclosed). Among them development of excellent varieties like UP 2338, PBW 343, WH 542 etc. to replace ruling but brown rust susceptible variety HD 2329, export quality durum wheat, varieties, PDW 233, PDW 215 and WH 896, and rice varieties Aidehi/Lunishree for lowlands/saline conditions replacement to ruling sugarcane variety COJ 64 in the north (such as Co Pant 84211 (OS 8436, COS 8823 etc.) early maturing sorgum CSV 14 with some yield as CSH 9 and early maize hybrids are important. In pulses new and more productive varieties like Pusa 372, DPL-15 in Lentil. Pusa-33, ICPL-87119 in Pigeonpea have been released for general cultivation.

2.35. Easily adoptable and economically viable Integrated Pest Management Strategies have been developed for control of pests and diseases of all major crops such as Cotton, Sugarcane, Pulses and Oilseeds. The emphasis of research is to reduce our dependence on chemical pesticides. This includes development of resistant varieties, manipulation of cultural practices, use of biological control agents and bio pesticides and judicious use of safe and selective chemicals.

2.36. Over all progress made in the crop improvement has started making its impact. Due to one reason or the other, largely on account of natural limitations, food production remained around 178 million tonnes. Compared to the production level of 182 million tonnes 1993-94, the estimated production for 1994-95 is 185 million tonnes. With spread of high yielding multiple resistant varieties and hybrids the production growth is expected to improve further in coming years. Production level of coarse cereals and pulses is estimated to be lower than the targets due to excess and incessant rains during August-September. With better varieties/hybrids now available, it is hoped to strive for wide adoption of the same through massive technology transfer programmes and thereby step up production/productivity levels of pulses.

2.37. Not being convinced with the academic reply of the department, the Committee wanted to know specific details of when the research in these fields was taken up and in which agri-zones, when was it completed, what is the impact on the total production if any and what is the acceptability of the results of research in these fields so that it could effectively evaluate in terms of finance the extent of budgetary provision on these heads.

2.38. The Committee pointed out that research was limited to agri-zones of the North and the rainfed of the South had been neglected.

2.39. The Committee recommends that plan schemes should be targetted and should not be overlapped with other schemes. The success of the schemes should be monitored by evaluating the number of varieties released to the farmers and the area in which they are used and production thereof.

2.40 The Plan Allocation for Crop Husbandry is 252,80,000 (thousands) out of a total allocation of 310,00,000 (thousands) under the various sectors *i.e.* 82%. In the year 1994-95 the Plan allocation for Crop Husbandry was 218,00,000 (thousands) out of a total of 275,00,000 (thousands) *i.e.* 79%.

2.41. The largest chunk of money for research goes to crops. However, there is no substantial impact of the research on the increase in the output. The figures of production for 1992-93, 1993-94 and 1994-95 as per Economic Survey 1994-95 are as under :

	(million tonnes)					
	1992—93		1993—94		1994—95	
	Final	Target	Final	Target	Likely	Likely as on 5.4.95*
Rice	72.9	78.0	79.0	78.5	80.0	81.02
Wheat	57.2	58.5	59.1	58.5	58.5	60.18
Coarse Cereals	36.6	36.0	30.9	36.5	32.0	30.82
Pulses	12.8	15.5	13.1	15.5	14.5	14.33
Oilseeds	20.1	21.0	21.5	22.0	21.5	22.35
Sugarcane	228.0	250.0	227.1	250.0	246.6	250.20
Cotton	11.4	12.5	10.7	12.5	11.6	11.60
Jute & Mesta	8.6	9.3	8.5	9.3	8.5	9.23

Source : Economic Survey 1994-95
*Directorate off Economics and Statistics
(Ministry of Agriculture) estimates

2.42. Production is fluctuating in a narrow margin in the three years of the VIII Plan, whereas the allocation for research has been constantly rising.

2.43. The Department was asked to justify the increase in allocation and also to state whether the narrow margin in the almost stagnant fluctuating production reducing the per capita availability of foograins justified 82% of Plan allocation to crop science research.

2.44. The Department clarified that the Budget Head. 'Crop Husbandry' includes almost entire ICAR leaving Animal Husbandry, Fishery, Agro-forestry, namely, cereals, pulses, oilseeds, commercial crops and horticultural crops evolving entire Crop Science Division and major components of Soils, Agricultural Engineering, Agricultural Education and Extension Education Divisions of ICAR. This is due to the fact that present classification of heads as approved by Ministry of Finance, contains only one head crop has to include there. Therefore, Plan allocation of 82% under this head is not excessive. This is more so, if it is acknowledged that through crops that the country acquired self sufficiency in foods. Improved agricultural technologies evolved through research like new crop varieties, cultural practices, inputs, agricultural mechanisation etc. have helped in increasing the productivity of different crops. Targets in respect of major cereal like rice and wheat have been met specially in rice where it has exceeded the targets. In oilseed, pulses, cotton and sugarcane all time high level has been achieved /maintained which are not ordinary achievements. India is second country after China to develop and practice hybrid rice technology in the world. Our research results are noteworthy in several other areas.

2.45. The Eighth Plan allocation of Division of Crop Science is Rs. 260.00 crore out of ICAR allocation of Rs. 1300 crore *i.e.* 20% and for the Annual Plan 1995-96 is Rs. 73.30 crores out of Rs. 310 crores *i.e.* 23.5%.

2.46. Self-sufficiency in rice and wheat does not satisfy the decreasing per capita availability of foodgrains. Claiming an all time high level in oil seeds, pulses, cotton & sugarcane on the one hand and importing these commodities on the other hand do not justify the high allocation on this head.

2.47. When production does not increase/is static/is fluctuating in a narrow margin means that research has not contributed. In such a circumstance the Plan allocation even if remains the same as the previous year or increases over the previous years allocation is an excess expenditure. We do not require funds for research to sustain already achieved targets of production.

2.48. The production figures for wheat and paddy for the years 1993—94 in respect of Indian in comparison to the world are as under :

	<i>Wheat</i>	<i>Paddy</i>
World average Kg./ha.	2456	3575
Highest yield in the world Kg./ha	10067	8062
Yield in India Kg./ha.	2373	2818

India is much below in comparison to the world average production leave alone competing with the highest yielding country in the world.

2.49. Keeping all the above facts in view whereas the Committee is happy over the high funding to Crop Husbandry within the financial constraints, it feels that the allocation is on the higher side because the allocation is not justified by the quality/outcome/results of productivity achievements. Research should be linked with results and not self sufficiency with decreasing per capita availability.

2.50. The Committee, therefore, feels that some sort of mechanism should be evolved so that research may be linked with acceptability/increased productivity and this should determine the allocation of funds. If however, results are not achieved it recommends a reduction of allocation to cater to other priority areas.

2.51. The Committee further stress that the ICAR should evaluate the research done *vis-a-vis* the money spent and analyse what part of the research has been actually effective in elevating production, per Capital availability, foreign currency earnings, etc. and submit a report in the context.

2.52. Out of 193 schemes in 44 programmes the VIII Plan outlay, the approved outlay and actual expenditure for the years 1992-93 & 1993-94 and the approved outlay & Revised Estimate for 1994-95 for 50 of the schemes are as under :

(Rs. in Lakh)

Name of the Programme/ Plan Scheme	VIII Five Year Plan	1992-93		1993-94		1994-95	
	SANCTIONED OUTLAY (1992-97)	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	REVISED ESTIMATES
1	2	3	4	5	6	7	8
*I. AICRP-Chickpea	442.00	0.00	0.00	90.00	0.00	100.00	100.00
AICRP-pegon pea	388.00	0.00	0.00	77.00	0.00	90.00	90.00
*III. AICRP-Groundnut	258.00	—	0.00	60.00	7.46	75.00	75.00
AICRP Rapeseed & Mustard	324.99	—	0.00	70.00	0.00	85.00	85.00
*III. NRC-Integrated Pest Management	450.00	54.00	44.45	90.00	23.02	100.00	80.00
*IV. NRC-Grapes	120.00	9.00	0.00	10.00	0.00	22.00	0.00
Central Inst. of Temperat Hall	20.00	9.00	9.98	10.00	0.00	23.00	14.00
NRC Aird Vodl.	250.00	27.00	9.78	40.00	17.48	134.00	45.00
NRC Banana	230.00	9.00	0.00	10.00	0.00	45.00	34.00
*V. Vegetable Seed Project	300.00	0.00	0.00	0.00	0.00	6750	67.50
NRC-Onion & Garlic	160.00	9.00	0.00	10.00	0.00	23.00	5.50
NRC Oilseed Palm	275.00	9.00	0.00	10.00	0.00	22.00	8.00
*VI. NRC-Orchards	120.00	9.00	0.00	10.00	0.00	11.00	0.00
NRC Medical & Aromakulants	200.00	9.00	0.00	10.00	5.00	44.00	8.00
Project on Art off Fruit & Vegetable	120.00	0.00	20.01	40.00	5.89	0.00	0.00
*VII. AICRP-Mangarm of Acid Soil	90.00	27.00	0.00	15.00	0.00	20.00	0.00
*VII. LD Water Management	1400.00	354.00	173.18	500.00	233.39	550.00	361.00
*VIII. AICRP-Human Engg. and Safety Stoves	76.42	0.00	0.00	25.00	0.00	30.00	10.00
AICRP-Application of Plants in Agri.	80.08	18.00	10.70	25.00	8.01	18.00	15.00
*IX. National Bureau of Animal Factor Resources	200.00	68.00	6.06	60.00	32.16	60.00	46.00
Network-Animal Genetic Resources	400.00	0.00	0.00	80.00	0.00	30.00	0.00

* Page number in Annexure-I

(Rs. in Lakh)

Name of the Programme/ Plan Scheme	VIII Five Year Plan	1992-93		1993-94		1994-95	
	SANCTIONED OUTLAY (1992-97)	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	REVISED ESTIMATES
1	2	3	4	5	6	7	8
*X. National Instt. of Animal Nutrition & Physiology	875.00	92.00	0.07	180.00	0.00	95.00	0.00
NRC-Milkhun	119.00	23.00	15.58	30.00	11.45	40.00	10.00
AICRP-Sheep	140.00	45.00	31.97	40.00	21.54	40.00	15.00
AICRP-Goat	200.00	45.00	22.03	30.00	6.05		
AICRP-Buffalo	276.00	91.00	88.85	70.00	46.88	75.00	20.00
*XI Network Micronutrients	158.00	68.00	0.00	50.00	0.00	20.00	26.00
Network-Crop Based	91.44	0.00	0.00	0.00	0.00	8.00	26.00
Final Prod. System							
NRC-Meat & Meat Product Technology	300.00	45.00	16.55	45.00	4.51	25.00	0.50
RD Support	255.00	46.00	0.00	80.00	0.00	20.00	10.00
AICRP—Disease Monitory & Surveillance	220.00	136.00	17.73	130.00	79.36	70.00	40.00
Strengthening of Monitory	1161.15	0.00	0.00	0.00	0.00	10.00	0.00
*XII Central Institute of Brackish water Agriculture	900.00	136.00	98.50	175.00	80.34	187.00	120.00
GRP on Processing & Utili- zation of Organic Waste	145.85	0.00	0.00	0.00	0.00	30.00	5.00
Indian Agricultural Statistics Research Instt.	700.00	130.00	18.89	155.00	36.06	100.00	82.00
*XIII NRC-Agricultural Eco & Policy Research	200.00	30.00	9.82	40.00	20.98	44.00	36.20
NRC for Women in Agri.	218.00	0.00	0.00	0.40	0.00	30.00	9.00
Dev. & Strengthening of State Agri. Univ.	7500.00	1636.00	1095.94	1400.00	668.56	1350.00	1240.00
Dev. & Strengthening of Agri. Edn. & Central Univ.	390.00	136.00	80.00	90.00	33.70	105.00	50.00
Estt. of Central Agri. Univ. NEH Region	4100.00	0.00	0.00	1000.00	300.00	787.00	279.00
Estt. of Centres of Advance Studies in SAOS & DCI	1474.00	364.00	0.00	300.00	16.11	368.00	363.90
*XIV Utilization of Internal Competence	25.00	5.00	0.00	6.00	0.00	8.50	1.00

(Rs. in Lakh)

Name of the Programme/ Plan Scheme	VIII Five Year Plan	1992-93		1993-94		1994-95	
	SANCTIONED OUTLAY (1992-97)	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	REVISED ESTIMATES
1	2	3	4	5	6	7	8
Preparation of Univ. Level books	32.00	5.00	0.00	6.00	0.54	7.00	1.00
*XIV Long term Project under Indo-UISR, UK & USP Programme	50.00	2.00	0.00	0.00	0.00	0.00	0.00
*XV ICAR Bhawan Phase II	450.00	110.00	0.00	0.00	0.00	55.00	31.00
Guest House for Deal Hons	130.00	—	0.00	0.00	0.00	33.00	0.00
National Agricultural & Centre Museum	70.00	—	0.00	0.00	0.00	55.00	0.00
Residential Ato. for ICAR Staff	200.00	—	0.00	0.00			
ICAR Agr. Library	50.00	—	0.00	1.00	5.00	7.00	7.00
Strengthening of ASRB	50.00	1.00	0.00	1.00	1.00	2.00	4.00
(A) Grand Total	2564.91	3757.00	1751.82	5051.40	1664.49	5161.00	3459.70

B Total 3 + 5 + 7 = 13969.40 is 54.64% of (2)

C Total 4 + 6 + 8 = 6876.01 is 49% of 'B' i.e. approved outlay

'C' is 26.89% of 'A'. In other words 26.89% has been utilised in these Schemes in Ist III Years of the VIIIth Plan.

2.53. It is firstly observed that 26.89% of the Eighth Plan Budgetary provision under these schemes has been utilised in 3 years.

2.54. Secondly in almost all the cases invariably either the money has not been utilised or has been utilised to a very little extent.

2.55. The Department was asked to explain the object of continuing such programmes/schemes and if it felt that there was no use why was it not re-appropriating the amount to other priority sectors. The Department was also asked the reasons why these sectors/programms were not picking up despite the fact that funds were made available.

2.56. The Department gave reasons varying chiefly in these areas : (i) that a separate Directorate has been set up, (ii) that the land is yet to be transferred, (iii) that the programme has been started in 1994-95 and significant progress has been made, (iv) that the project has been started in right earnest and the funds will be utilised, (v) there is delay in creation of posts, (vi) that the site selection process is going on, (vii) that the Research Centre is located in areas where it is difficult to execute civil works (viii) newly started (ix) inability of some of the Universities to put proposals or meet the digitability requirements, etc. The department also stated that the savings under such projects were re-appropriated to other priority areas.

2.57. Seeing to the underutilisation of funds and the casual reply of the Deptt. the Committee was concerned about the future of these programmes. Secretary (DARE) clarifying the position pointed out that this year 99.5% of Plan funds have been utilised and in the case of Non-Plan Funds there is 100% utilisation.

2.58. The Committee expressed its dissatisfaction at the slow progress made during the Ist three years of the VIIth Plan. However, they were pleased with the actual utilization of funds this year and observed that a close watch may be kept on the successful implementation of the schemes during the balance two years of the VIIth Plan.

2.59. The figures for Plan allocation & Non-Plan allocation for 1995-96 under the various sectors is as under :

(in thousands of Rs.)

		Plan	Non-Plan	Excess over Plan
1	2	3	4	5
B.1 (1) (2) (1)	Grants in bid Research Institu- tes Crop Hus- bandry	85,00,00	1,30,15.00	(+) 53%
B.2 (1) (1)	Grants in Aid Central Soil & Water Conservation Research & Training Institute	3,57,00	4,10,00	(+) 15%

1	2	3	4	5
B.3 (1) (2) (1)	Grants in Aid Research Institute Animal Husbandry	19,78,00	26,25,00	(+) 33%
B.4 (1) (1) (1)	Grants-in-Aid Research Institute Dairy Development	4,00,00	13,17,00	(+) 229%
B.5 (1) (1) (1)	Grants-in-Aid Research Institute Fisheries	17,10,00	19,75,00	(+) 16%
B.6 (1) (1) (2) (1)	Research Forestry	3,60,00	8,15,00	(+) 126%

2.60 In all the above grants for 1995-96 the non Plan allocation is more than the Plan outlay for the year. Particularly, in Crop Husbandry, Dairy & Forestry Sectors. The Department is incurring more of the budgetary provision for upkeep of the manpower than on research.

2.61. Clarifying the excess on Non Plan allocation the Department state that these sectors under reference have some established research institute like IARI and NBPGR, IVRO and NDRI; CSWRI, CSSRI and NBSSLUP, CIFRI, CMERI and CIFT, CRIDA etc. whose non-plan budgets are large. These are leading most institutions of the country which have made contribution in the past and continue to play a lead role at the national level and enjoy international reputation. For excellence in science and technology human resource has to be nurtured and provided with modern facilities to facilitate creativity which are of a reaching consequences. If funds permit we should make them still better. All that is spent in research institute makes the working of Scientists better directly and indirectly.

2.62 The Committee accepting these facts was concerned at the plight of Indian Scientists for being paid very little vis-a-vis their counterparts and scientists in other countries. The Committee was also concerned about posting of scientists to remote localities for a longer number of years thereby frustrating them beyond tolerable limits.

2.63 Secretary (DARE) explained that the scientists of the ICAR are being given the UGC scales and almost all discrepancies have been re-

solved. As regards the posting of scientists in remote areas Secretary (DARE) agreed and stated that a fresh look was being given by the Department on the transfer policy and things will improve. He further clarified that it was decided to recruit scientists from the remote areas exclusively for posting and later on transfer them to other preferred areas after having served for more than 5 years in the remote area. As a measure of human resource development, the Institute was being geared to not only provide training to new recruits but also provide refresher courses for Scientists, administrative staff and clerks.

2.64 The Committee being convinced with the clarification expressed their desire to be kept abreast of the progress made in these fields in the years to come.

AGRICULTURAL EXTENSION

2.65 Agricultural extension & education is the second largest sector for allocation of Plan outlay in the VIIIth Plan and accounts for 27% of the total allocation. It also is a highly prioritised sector in the plan document.

The details of financial outlay/expenditure for the year of VIIIth Plan are as under :

(Rs. in crores)

Sector	VIII five year Plan	1992-93		1993-94		1994-95		1995-96	
	Sanctioned outlay	Approved outlay	Actual Expen- diture	Approved outlay	Actual Expen- diture	Approved outlay	Revised outlay	Actual Expen- diture	Approved outlay
Agricultural Extn.	200.32	13.00	19.25	17.95	36.15	26.00	30.98	36.00	40.00
Agricultural Education	147.88	24.05	13.71	31.62	12.60	30.00	27.54	27.54 (say)	50.34

2.66 The approved outlay 1992-93 + 1993-94 + 1994-95 is Rs. 142.62 crores whereas the actual expenditure is Rs. 145.25 crores.

Thereby leaving $348.20 - 145.25 = 202.95$ crores for 1995-96 & 1996-97.

2.67 In an evidence session on 24th Octobr, 1994 Secretary (DARE) informed that 20% of KVKs are fully operational 40% are semi-operational and the rest 40% are in initial stages of operation.

2.68 The schemes of KVKs started in 1974 in the 5th Five Year Plan with the opening of 19 KVKs.

2.69 The Committee is surprised that over three Plan periods and three years gone in the 8th Plan with as heavy an outlay as 27% of the total budget only 20% of KVKs are fully operational.

2.70 The major emphasis of ICAR during the 8th Plan is on consolidation and modernisation rather than an expansion. New critical gaps exist and that too by redeploying the existing manpower and infrastructure.

2.71 However, while replying to the recommendation of the Committee on opening of one KVK in each District of the Nation the Department desired an additional fund of Rs. 140.32 crores for opening 197 new KVKs but were satisfied with Rs. 60.25 crores only as sanctioned to it.

2.72 The Committee is surprised how the Deptt. is shifting its priority. Whereas on the one hand only 20% of the sanctioned KVKs are fully

operational with as high a plan allocation of 27% of the total budget the Department is opening up 197 new KVKs with as low a budget of Rs. 60.25 crores of additional funding having a priority to consolidate and modernise rather than expand.

2.73 The Committee seeing into achievements of the Department in the No. of fully operational KVKs, the scarce resources available with the Department and the petty amount accepted by it for the opening of new KVKs, the new funding pattern, and keeping in mind the objective of the Department to open up one KVK in each district in pursuit of the recommendation of the Committee, the Committee can only express its concern over the future of KVKs in the country. The Committee is in doubt that the new KVKs will only be parts of land without infrastructural facilities for the next many years to come. The Committee, therefore, strongly recommends that the Department take up the course of additional funding to the tune of achieving the twin goals of making all existing sanctioned KVKs & the establishment of new KVKs to their full operational capacity by the end of VIIIth Plan period in right earnest with the Planning Commission.

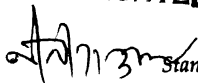
2.74 The Committee in their 8th Report had recommended that a separate sub-head under Major-Head '2415' may be created for funding of KVKs. The department in their action taken replies on the recommendation stated that all SAUs have been requested not to divert KVK funds for any purpose and open a separate head of account of KVK funds.

2.75. The Committee observed that such a large amount of the budget was being utilised for extension & education and this should really benefit the farmers. In order to keep a check and properly monitor the expenditure under this head a separate head was suggested to be opened. The Committee wanted to know how many SAUs had actually opened a separate head and if they had not been monitored was the ICAR thinking to release funds on the compliance of this factor as the pre-condition.

2.76 The Committee has observed that now that ICAR has Institutes Research Centres/ICRPs to cover all the conceivable commodities, there is no justification for giving it grants in aid under the Agricultural Produce Cess Act, 1990. The grant-in-aid for research in commodities covered by this Act amounts to Rs. 21 crores (Rs. 7 crores in plan and Rs. 14 crores in non plan). It should be adjusted against the total allocation made under plan and non plan budgets.

AUTHENTICATED

NEW DELHI ;
26 April, 1995
6 Vaisakha, 1917 (Saka)



NITISH KUMAR
Chairman,
Standing Committee on Agriculture.

NITISH KUMAR

Programme Wise/Scheme Wise Breakup of Outlay/Expenditure For Different Sectors

(Rs. in Lakh)

Name of the Programme/ Plan Scheme	VIII Five Year Plan	1992-93		1993-94		1994-95	
	SANCTIONED OUTLAY (1992-97)	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	ACTUAL EXPEN- DITURE	APPROVED OUTLAY	REVISED ESTIMATES
1	2	3	4	5	6	7	8

I. CROP SCIENCE**A. PLANT GENETIC RESOURCES**

1.	National Bureau of Plant Genetic Resources	729.05	109.00	109.52	120.00	132.00	145.00	131.00
2.	AICRP-Under-utilised & Under-exploited Plant	114.00	14.00	13.96	20.00	16.20	25.00	25.50
3.	AICRP—Arid Legumes	145.94	14.00	14.00	25.00	12.18	30.00	32.00
Total (A)		988.99	137.00	137.48	165.00	160.38	200.00	188.50

B. FOOD CROPS

1.	Indian Agricultural Research Institute	3500.00	409.00	534.20	500.00	892.71	610.00	850.00
2.	Central Rice Research Institute	690.00	91.00	85.00	105.00	120.81	130.00	141.00
3.	Vivekanand Parvatiya Kishi Anusandhan Shala	440.00	59.00	30.70	90.00	57.70	105.00	67.00
4.	Institute of Pulses Research	603.00	91.00	322.58	100.00	349.27	125.00	112.00
5.	Directorate of Wheat Research	1050.00	236.00	232.70	250.00	409.84	315.00	350.00
6.	N.R.C.-Sorghum	320.00	32.00	106.11	40.00	120.08	50.00	65.00
7.	Project Directorate-Rice	1350.00	2203.00	210.41	270.00	311.58	350.00	350.00
8.	AICRP-Chick Pea	442.00	0.00	0.00	90.00	0.00	100.00	100.00
9.	AICRP-Pigeon Pea	388.00	0.00	0.00	77.00	0.00	90.00	90.00
10.	AICRP-Pulses (MULLARP)	591.00	273.00	8.10	115.00	3.46	135.00	135.00
11.	PD-Maize	714.45	127.00	138.41	140.00	191.28	165.00	200.00

1	2	3	4	5	6	7	8
12. AICRP-Pearl Millets	424.74	55.00	47.28	80.00	80.94	95.00	95.00
13. AICRP-Small Millets	349.94	55.00	54.59	72.00	58.26	80.00	90.00
14. AICRP-Bailey	100.00	23.00	0.10	25.00	28.98	35.00	55.00
15. AICRP-Sorghum	450.00	77.00	0.00	85.00	2.93	100.00	103.50
Total (B)	11413.13	1731.00	1770.18	2039.00	2605.84	2485.00	2803.50

C. FORAGE CROPS

1. Indian Grassland & Fodder Research Institute	525.00	73.00	70.00	110.00	159.83	135.00	145.00
2. AICRP-Forage Crops	390.00	63.00	60.01	80.00	80.00	95.00	113.00
Total (C)	915.00	136.00	130.01	190.00	239.83	230.00	258.00

D. COMMERCIAL CROPS

1. Central Tobacco Research Institute	425.00	73.00	89.99	85.00	107.00	110.00	125.00
2. Indian Institute of Sugarcane Research	425.00	54.00	78.55	80.00	84.59	100.00	122.00
3. Central Institute of Cotton Research	500.00	82.00	88.24	100.00	136.18	125.00	175.00
4. Central Research Institute for Jute & Allied Fibres	250.00	27.00	26.87	40.00	40.00	45.00	44.00
5. Sugarcane Breeding Inst.	425.00	55.00	65.00	80.00	78.00	100.00	110.00
6. AICRP-Cotton	717.97	105.00	104.13	140.00	150.21	175.00	205.00
7. AICRP-Jute	200.00	36.00	36.32	40.00	42.72	50.00	50.00
8. AICRP-Tobacco	240.15	32.00	31.00	48.00	31.89	65.00	66.00
9. AICRP-Sugarcane	340.00	45.00	43.58	80.00	70.48	70.00	65.00
10. Network Scheme-Sugarbeet	57.00	9.00	4.93	11.00	5.25	15.00	15.00
TOTAL (D)	3580.12	518.00	548.61	684.00	746.12	855.00	977.00

E. OILSEED

1. N.R.C.-Groundnut	600.00	55.00	50.04	110.00	110.56	135.00	115.00
2. N.R.C.-Soybean	400.00	118.00	57.00	80.00	56.34	80.00	105.00

1	2	3	4	5	6	7	8	
3.	N.R.C.-Rapeseed & Mustard	350.00	45.00	0.00	70.00	31.72	120.00	70.00
4.	Project Directorate -Oilseed	1491.00	386.00	375.00	300.00	345.94	340.00	360.00
5.	AICRP-Groundnut	258.00	—	0.00	60.00	7.46	75.00	75.00
6.	AICRP-Rapeseed & Mustard	324.99	—	0.00	70.00	0.00	85.00	85.00
7.	AICRP-Soyabean	200.00	33.00	36.83	40.00	34.90	55.00	55.00
Total (E)		3623.99	637.00	518.87	730.00	586.92	890.00	865.00

F. PLANT PROTECTION

1.	N.R.C.-Integrated Pest Management	450.00	54.00	44.45	90.00	23.02	100.00	80.00
2.	P.D.-Biological Control	400.00	45.00	24.00	80.00	70.88	120.00	100.00
3.	AICRP-Honey Bees	150.00	24.00	22.71	30.00	26.69	40.00	38.00
4.	AICRP-White Grub	150.00	18.00	16.10	30.00	44.68	38.00	31.00
5.	AICRP-Agriculture Acarology	125.00	14.00	14.87	25.00	13.72	38.00	37.50
6.	AICRP-Rodent Control	143.83	18.00	16.62	30.00	23.99	38.00	38.00
7.	AICRP-Pesticide Residue	350.00	50.00	48.39	75.00	65.02	100.00	100.00
8.	AICRP-Nematode	210.00	27.00	30.18	43.00	58.82	57.50	55.50
9.	Netrok-Economic Ornithology	100.00	14.00	13.43	23.00	20.01	28.50	25.00
TOTAL (F)		2078.83	264.00	232.75	428.00	346.83	580.00	505.00

G. HYBRID RESEARCH & SEED DEVELOPMENT

1.	Project on Promotion of Re- search & Development of Hy- brid Seed in Selected Crops	1300.00	227.00	214.02	235.00	171.36	270.00	2270.00
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H. GENETIC ENGINEERING & BIOTECHNOLOGY FOR CROP IMPROVEMENT

1.	N.R.C.-Biotechnology Centre for Crop Science	400.00	73.00	54.32	80.00	43.33	110.00	116.00
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1	2	3	4	5	6	7	8
I. SEED TECHNOLOGY RESEARCH & BREEDER SEED PRODUCTION							
1. National Seed Project including existing AICRP on Seed Borne Diseases	1699.43	182.00	230.27	330.00	258.44	400.00	400.00
TOTAL (C.S.)	25999.49	3905.00	3836.51	4879.00	5158.85	9000.00	6383.00

II. HORTICULTURE**A. FRUITS**

1. Indian Institute of Horticultural Research (50%)	850.00	73.00	84.55	80.00	134.31	136.00	177.50
2. Central Institute of Horticultural for Northern Plain (90%)	630.00	73.00	51.97	72.00	206.97	190.00	184.50
3. ICAR Research Complex for Goa (10%)	35.00	5.00	4.60	5.50	5.26	8.50	6.00
4. N.R.C.—Citrus (90%)	360.00	57.80	47.29	63.00	67.24	98.00	79.20
5. N.R.C.—Grapes	120.00	9.00	0.00	10.00	0.00	22.00	0.00
6. AICRP—Tropical Fruits	325.00	59.00	65.31	72.00	119.19	88.50	88.50
7. AICP—Sub-tropical Fruits	224.88	50.00	32.32	72.00	47.38	61.00	61.00
8. AICRP—Arid Fruits	225.00	41.00	39.77	48.00	54.28	47.50	47.50
9. Central Institute of Temperate Horticulture	200.00	9.00	9.98	10.00	0.00	23.00	14.00
10. N.R.C.—Arid Horticulture	250.00	27.00	9.78	40.00	17.48	134.00	45.00
11. N.R.C. Banana	230.00	9.00	0.00	10.00	0.00	45.00	34.00
12. AICRP—Apple Scab	70.00	12.00	10.30	15.00	12.59	22.00	22.00
TOTAL (A)	3319.88	424.60	357.84	497.50	664.70	876.50	759.20

B. VEGETABLE

1. Indian Institute of Horticulture Research (30%)	390.00	44.00	50.73	48.00	80.58	81.00	106.50
2. N.R.C.—Mushroom	200.00	18.00	14.96	20.00	24.97	79.00	60.00
3. P.D. Vegetable	550.00	81.00	94.65	120.00	157.59	170.00	165.00

1	2	3	4	5	6	7	8
4. Vegetable Seed Project	300.00	0.00	0.00	0.00	0.00	67.50	67.50
5. AICRP—Mushroom	100.00	14.00	11.96	18.00	27.45	25.00	25.00
6. N.R.C.—Onion and Garlic	160.00	9.00	0.00	10.00	0.00	23.00	5.50
TOTAL (B)	1700.00	166.00	172.30	216.00	280.59	446.10	429.50

C. POTATO & TUBER CROPS

1. Central Potato Research Institute	750.00	82.00	133.01	85.00	150.20	145.00	200.00
2. Central Tuber Crops Research Institute	350.00	36.00	29.35	40.00	60.00	66.00	80.00
3. AICRP—Potato	205.00	37.00	37.32	43.00	52.48	45.30	45.30
4. AICRP—Tuber Crops	90.00	18.00	18.76	20.00	15.59	20.00	20.00
TOTAL (C)	1395.00	173.00	218.44	188.00	278.27	276.30	345.30

D. PLANTATION CROPS

1. Central Plantation Crops Research Institute	660.00	100.00	68.02	100.00	164.13	189.00	180.00
2. ICAR Research Complex for Goa (90%)	315.00	41.00	41.39	48.50	47.31	76.50	54.00
3. N.R.C.—Cashew	360.00	73.00	72.98	75.00	99.94	88.00	85.00
4. N.R.C.—Oilseed Palm	275.00	9.00	0.00	10.00	0.00	22.00	8.00
5. AICRP—Palms	200.00	23.00	19.53	20.00	57.82	38.50	38.50
6. AICRP—Cashew	115.00	18.00	14.57	35.00	16.28	37.00	37.00
Total (D)	1945.00	264.00	216.49	289.50	385.48	431.00	402.50

* Capital component projected under the Institute in Plantation Crops Programme

E. SPICES

1. N.R.C.—Spices	400.00	63.00	62.99	75.00	115.89	121.00	140.00
2. AICRP—Spices	225.00	32.00	33.12	44.00	61.17	44.00	44.00
TOTAL (E)	625.00	95.00	96.11	119.00	177.06	165.00	184.00

1	2	3	4	5	6	7	8	
F. FLORICULTURE, MEDICINAL & AROMATIC PLANTS								
1.	Indian Institute of Horticulture Research (10%)	130.00	15.00	16.91	16.00	26.86	27.20	35.50
2.	N.R.C.—Orchids	120.00	9.00	0.00	10.00	0.00	11.00	0.00
3.	N.R.C.—Medicinal & Aromatic Plants	200.00	9.00	0.00	10.00	5.00	44.00	8.00
4.	AICRP—Floriculture	135.00	23.00	21.48	25.00	33.00	29.50	29.50
5.	AICRP—Medicinal and Aromatic Plants	250.00	36.00	38.10	65.00	56.71	73.50	73.50
6.	AICRP—Betelvine	125.00	22.00	118.04	25.00	36.07	29.70	29.70
TOTAL (F)		960.00	114.00	94.54	151.00	157.73	214.90	176.20
G. POST HARVEST TECHNOLOGY OF HORTICULTURAL CROPS								
1.	Indian Institute of Horticulture Research (10%)	130.00	15.00	16.91	16.00	26.86	27.20	35.50
2.	Central Institute of Horticulture for Northern Plains (10%)	70.00	8.00	5.44	8.00	23.00	19.00	20.50
3.	NRC on Citrus (10%)	40.00	6.40	5.74	7.00	7.47	11.00	8.80
4.	AICRP-Post Harvest Technology of Horticultural Crops	115.00	18.00	26.97	20.00	109.03	33.00	33.00
5.	Project on PHT of Fruits and Vegetables	120.00	0.00	20.01	40.00	5.89	0.00	0.00
Total (G)		475.00	47.40	75.07	91.00	172.25	90.20	97.80
Total (Hort)		10419.88	1284.00	1230.80	1552.00	2126.08	2500.00	2394.50

III SOIL AGRONOMY AND AGRO—FORESTRY

A. RESOURCE INVENTORY

11.	National Bureau of Soil Survey & Land Use Planning	750.00	175.00	158.98	250.00	195.04	275.00	230.00
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1	2	3	4	5	6	7	8	
B. CROPPING SYSTEM RESEARCH								
1.	Central Agriculture Research Institute	615.00	118.00	159.90	140.00	235.00	165.00	225.00
2.	ICAR Research Complex for NEH Region	1300.00	184.00	185.47	240.00	235.92	285.00	250.00
3.	N.R.C.-Agro-forestry	400.55	522.00	35.00	70.00	73.97	80.00	48.70
4.	N.R.C.-Weed Science	520.00	82.00	66.89	80.00	76.89	90.00	120.00
5.	P.D.-Cropping System Research	2051.73	324.00	340.52	400.00	338.81	440.00	517.00
6.	AICRP-Agro-meteorology	255.00	29.00	40.16	30.00	55.70	35.00	38.00
7.	AICRP-Diarraland Improve.	106.56	57.00	19.30	25.00	25.02	30.00	11.00
8.	AICRP-Agro-forestry	480.00	78.00	74.58	80.00	80.18	90.00	91.00
9.	AICRP-Weed Control	284.00	52.00	51.40	65.00	87.63	75.00	100.00
TOTAL (B)		8012.84	956.00	953.02	1130.00	1209.12	1270.00	1398.70
C. SOIL MANAGEMENT								
1.	Central Arid Zone Research Institute	550.00	73.00	80.18	80.00	102.02	90.00	95.00
2.	Central Soil & Water Conservation Research & Training Institute	900.00	133.00	119.74	190.00	240.83	220.00	200.00
3.	AICRP-Tillage Management of Indian Soils	180.00	33.00	33.01	35.00	30.30	40.00	35.00
4.	AICRP-Management of Acid Soil	90.00	27.00	0.00	15.00	0.00	20.00	0.00
TOTAL (C)		1720.00	286.00	212.91	320.00	373.25	370.00	330.00
D. WATER MANAGEMENT								
1.	Central Soil Salinity Research Institute	475.00	104.00	62.97	85.00	87.74	95.00	100.00
2.	Water Technology Centre for Eastern Region	550.00	100.00	58.88	95.00	78.95	110.00	115.00
3.	P.D. Water Management	1400.00	354.00	173.18	500.00	2233.28	550.00	381.00

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4. AICRP-Management of Salt Affected Soils	320.00	54.00	53.05	60.00	45.63	67.00	61.00
5. AICRP-Optimisation of Groundwater Utilization through Wells Pumps	200.00	23.00	13.74	40.00	28.53	46.00	47.00
TOTAL (D)	2945.50	635.00	359.63	780.00	474.24	868.00	694.00

E. NUTRIENT MANAGEMENT

1. Indian Institute of Soil Science	900.00	133.00	105.01	140.00	159.25	155.00	246.00
2. Central Research Institute for Dryland Agriculture	510.00	69.00	78.04	85.00	71.75	97.00	88.00
3. AICRP-Dryland Agriculture	960.00	164.00	150.37	185.00	232.85	205.00	210.00
4. AICRP-Micro Nutrients	260.00	44.00	30.48	63.00	26.83	70.00	65.00
5. AICRP-Biological Nitrogen Fixation	133.42	52.00	19.94	30.00	34.02	35.00	35.00
6. AICRP-Micro Biological Decomposition	150.00	19.00	19.50	31.00	30.91	35.00	50.00
7. AICRP-Soil Test Crop Response	380.00	73.00	55.87	90.00	66.80	100.00	90.00
8. AICRP-Long-term Fertilizer Experiments	200.00	14.00	13.48	19.00	14.41	20.00	24.00
TOTAL (E)	3493.42	568.00	472.69	643.00	638.82	717.00	808.00
TOTAL (S.A. & AF)	14921.26	2600.00	2157.23	3123.00	2890.47	3500.00	3460.70

IV. AGRICULTURAL ENGINEERING**A. FARM IMPLEMENTS & MACHINERY**

1. Central Institute of Agricultural Engineering	700.00	136.00	18.70	117.00	103.68	128.00	150.00
2. AICRP-Power Tiller	140.00	23.00	22.26	30.00	25.36	35.00	30.00
3. AICRP-Farm Implements Machinery	450.00	68.00	62.27	85.00	72.48	81.00	90.00
4. AICRP-Human Engineering and safety studies	78.42	0.00	0.00	25.00	0.00	30.00	10.00
Total (A)	1368.42	227.00	1103.63	257.00	201.52	274.00	280.00

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B. POST HARVEST TECHNOLOGY								
1.	Central Institute for Post Harvest Engg. & Technology	883.50	157.00	116.97	156.00	160.51	179.00	212.00
2.	Central Institute for Research on Cotton Technology	400.00	60.00	55.00	82.00	83.40	65.00	97.00
3.	Indian Lac Research Instt.	300.00	46.00	26.82	44.00	30.12	53.00	60.00
4.	Jute Technological Research Laboratory	400.00	60.00	19.98	82.00	87.51	65.00	150.00
5.	AICRP-Application of Plastics in Agriculture	80.06	18.00	10.70	25.00	8.01	18.00	15.00
6.	AICRP Jaggery & Khandasaal	70.00	13.00	5.81	20.00	12.32	15.00	14.00
7.	AICRP-Harvest & Post Harvest Technology	475.00	73.00	73.54	94.00	22.85	110.00	93.00
TOTAL (B)		2606.56	427.00	308.62	483.00	404.72	505.00	641.00
C. ENERGY MANAGEMENT IN AGRICULTURAL ENGINEERING								
1.	AICRP-Renewable Energy Sources	340.00	56.00	58.65	65.00	60.79	63.00	65.00
2.	AICRP-Energy Requirement in Agricultural Sector	250.00	45.00	39.18	55.00	45.96	53.00	59.00
3.	AICRP-Animal Energy	180.00	28.00	24.39	35.00	24.35	32.00	32.00
TOTAL (C)		750.00	127.00	122.22	155.00	131.10	168.00	176.00
D. DRAINAGE ENGINEERING								
1.	AICRP Agricultural Drainage	150.00	25.00	20.00	35.00	25.21	34.00	35.00
TOTAL (AG. ENGG.)		4874.98	806.00	554.47	930.00	762.55	981.00	1132.00
V. ANIMAL SCIENCE								
A. ANIMAL GENETIC RESOURCES								
1.	National Institute of Animal Genetics	600.00	113.00	30.38	80.00	55.12	75.00	92.00
2.	National Bureau of Animal Genetic Resources	200.00	68.00	6.06	80.00	32.16	60.00	46.00
3.	Network—Animal Genetic Resources	400.00	0.00	0.00	80.00	0.00	30.00	0.00
TOTAL (A)		1200.00	181.00	36.44	200.00	87.28	165.00	138.00

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B. LIVESTOCK IMPROVEMENT								
1.	National Dairy Research Institute	1300.00	114.00	193.56	160.00	225.27	390.00	425.00
2.	Central Sheep and Wool Research Institute	641.00	45.00	85.49	90.00	138.00	190.00	200.00
3.	Central Avian Research Institute	410.00	46.00	59.33	50.00	50.77	70.00	80.00
4.	Central Institute for Research for Goats	300.00	45.00	115.22	50.00	39.83	120.00	150.00
5.	Central Institute for Research on Buffaloes	588.00	45.00	89.53	50.00	138.16	130.00	148.00
6.	National Institute of Animal Nutrition & Physiology	875.00	92.00	0.00	180.00	0.00	95.00	0.00
7.	N.R.C. on Biotechnology (Part of NDRI)	300.00	Functioning under NDRI					
8.	N.R.C.—Camel	250.00	68.00	40.00	60.00	80.60	90.00	90.00
9.	N.R.C.—Yak	150.00	23.00	19.29	30.00	31.04	35.00	40.00
10.	N.R.C.—Mithun	118.00	23.00	15.58	30.00	11.45	40.00	10.00
11.	N.R.C.—Equine	350.00	68.00	69.27	77.00	64.76	85.00	90.00
12.	P.D.—Poultry	830.00	91.00	136.10	160.00	148.68	175.00	154.00
13.	P.D.—Cattle	650.00	68.00	72.54	130.00	83.99	190.00	159.50
14.	AICRP—Sheep	140.00	45.00	31.97	40.00	21.54	40.00	15.00
15.	AICRP—Goat	200.00	45.00	22.03	30.00	6.05	40.00	40.00
16.	AICRP—Buffalo	278.00	91.00	88.85	70.00	46.88	75.00	20.00
17.	AICRP—Pig	205.57	45.00	25.57	30.00	39.13	35.00	35.00
18.	AICRP—Agricultural By-product	240.00	45.00	52.10	50.00	62.74	65.00	51.00
19.	Network—Micronutrients	158.00	68.00	0.00	50.00	0.00	20.00	26.00
20.	Network—Embryo Transfer	240.00	68.00	0.00	80.00	0.00	30.00	36.00
21.	Network—Crop Based Animal Production System	91.44	0.00	0.00	0.00	0.00	8.00	26.00
TOTAL (B)		8324.01	1135.00	1116.43	1417.00	1188.89	1823.00	1795.50

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C. LIVESTOCK PRODUCT TECHNOLOGY

1.	Dairy Processing (National Dairy Research Institute)		136.00		details as in NDRI			
2.	N.R.C.—Meat & Meat Product Technology	300.00	45.00	16.55	45.00	4.51	25.00	0.50
3.	Central Sheep & Wool Research Institute				details as included in CSWRI			
4.	R & D Support for Process Upgr adation of Indigenous Milk Products for Industrial Applications	255.00	46.00	0.00	80.00	0.00	20.00	10.00
TOTAL (C)		555.00	227.00	16.55	105.00	4.51	45.00	10.50

D. ANIMAL HEALTH

1.	Indian Veterinary Research Institute	3050.00	455.00	237.34	490.00	357.23	650.00	680.00
2.	AICRP—Disease Monitoring & Surveillance	220.00	136.00	17.73	130.00	79.36	70.00	40.00
3.	AICRP—Blood Proteota	160.00	—	19.03	40.00	20.99	35.00	21.00
4.	AICRP on Foot & Mouth Disease	200.00	—	17.73	40.00	54.93	58.00	58.00
5.	Strengthening of Monitoring Mechanism and Training of Scientists & Technicians	161.15	0.00	0.00	0.00	0.00	10.00	0.00
6.	N.R.C.—Biotechnology (Part of IVRI)				40.00		Incl. in IVRI	
TOTAL (D)		3791.15	591.00	291.83	740.00	512.51	823.00	799.00
TOTAL (A.S.)		13870.16	2134.00	1481.25	2482.00	1793.19	2966.00	2743.00

VI. FISHERIES**A. CAPTURE FISHERIES**

1.	Central Marine Fisheries Research Institute	900.00	110.00	99.97	175.00	215.00	250.00	240.00
2.	Central Inland Capture Fish- eries Research Institute	600.00	55.00	66.43	100.00	92.00	170.00	100.00
TOTAL (A)		1500.00	165.00	166.40	275.00	307.00	420.00	340.00

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B. CULTURE FISHERIES								
1.	Central Institute for Freshwater Aquaculture	900.00	164.00	145.81	192.00	195.00	205.00	205.00
2.	Central Institute of Brack- ish water Aquaculture	900.00	138.00	98.50	175.00	80.34	187.00	120.00
3.	N.R.C.—Cold Water Fisheries	400.00	54.00	32.24	75.00	27.67	78.00	40.00
4.	ORP on Processing and Utilisation of Organic Waste for Aquaculture	145.85	0.00	0.00	0.00	0.00	30.00	5.00
TOTAL (B)		2345.85	354.00	276.55	442.00	303.01	500.00	370.00
C. FISH & FISH PROCESSING TECHNOLOGY								
1.	Central Institute of Fisheries Technology	650.00	91.00	71.01	125.00	172.00	195.00	150.00
D. FISH GENETIC RESOURCES								
1.	National Bureau of Fish Genetic Resources	900.00	118.00	50.44	150.00	22.52	195.00	195.00
E. FISHERIES EDUCATION								
1.	Central Institute of Fisheries Education	1100.00	352.00	79.98	325.00	454.10	290.00	365.00
TOTAL (FY.)		6495.85	1080.00	644.38	1317.00	1258.63	1600.00	1420.00
VII. AGRICULTURAL STATISTICS & ECONOMICS								
1.	Indian Agricultural Statis- tics Research Institute	700.00	130.00	18.89	155.00	36.06	100.00	82.00
2.	N.R.C.-Agricultural Econo- mics & Policy Research	200.00	30.00	9.82	40.00	20.98	44.00	36.20
TOTAL (A.S. & E)		900.00	160.00	28.71	195.00	57.04	144.00	118.20

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**ON GOING
AGRICULTURAL EXTENSION**

**A. VOCATIONAL TRAINING WITH
INTEGRATED FUNCTION**

1.	Integrated Kishi Vigyan Kendra/Trainees Training Centres	19814.00	1300.00	1925.00	1795.00	3615.00	2570.00	3088.30
2.	NRC for Women in Agri.	218.00	0.00	0.00	0.40	0.00	30.00	8.00
TOTAL (AG. EXT.)		20032.00	1300.00	1925.00	1795.40	3615.00	2600.00	3098.30

X. AGRICULTURAL EDUCATION

**A. STRENGTHENING OF AGRI-
CULTURAL EDUCATION**

1.	National Academy for Agric- ultural Research Management	315.00	82.00	87.94	80.00	141.89	136.00	155.00
2.	Development & Strengthening of State Agri. Universities	7500.00	1636.00	1095.94	1400.00	668.56	1350.00	1240.00
3.	Development & Strengthening of Agricultural Education of Central Universities	360.00	136.00	80.00	80.00	33.70	105.00	50.00
4.	Strengthening PG Education in Deemed to be Universities	400.00	100.00	80.00	100.00	53.58	110.00	571.00
5.	Establishment of Central Agricultural University NEH Region	4100.00	0.00	0.00	1000.00	300.00	787.00	279.00
6.	Establishment of Centres of Advance Studies in SAUs and DUs.	1474.00	364.00	0.00	300.00	16.11	368.00	363.00
7.	AICRP on Home Science	295.00	40.00	32.71	48.00	39.90	65.00	63.00
TOTAL (A)		14474.00	2358.00	1356.59	3018.00	1253.75	2921.00	2721.00

**B. RECOGNISING OF PROFES-
SIONAL EXCELLENCE**

1.	Best Teacher Award	32.00	9.00	0.38	6.00	0.39	8.50	0.50
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C. PROFESSIONAL RESOURCES UTILIZATION								
1.	Utilization of Internal Competence	25.00	5.00	0.00	6.00	0.00	8.50	1.00
2.	Preparation of University Level books	32.00	5.00	0.00	6.00	0.54	7.00	1.00
3.	Eneritus Scientist Scheme	225.00	28.00	14.08	40.00	5.32	55.00	30.00
TOTAL (B & C)		314.00	47.00	14.44	58.00	6.25	79.00	32.50
TOTAL (AG. EDN.)		14788.00	2405.00	1371.03	3076.00	1290.00	3000.00	2753.50

XI. WORLD BANK AIDED PROJECTS/ FOREIGN AIDED PROJECTS

A. WORLD BANK PROJECT

1.	National Agricultural Research Project II	13523.00	2427.00	3139.85	3472.00	3293.97	3297.00	3297.00
2.	National Seed Project	Tr. to DAC	114.00	809.54	881.00	283.88		
B.	Other Foreign Aided Project	2181.00	659.00	360.00	735.00	742.73	503.00	503.00
GRAND TOTAL		15704.00	3200.00	4308.39	4888.00	4300.58	3800.00	3800.00

XII. MANAGEMENT AND INFORMATION SERVICES

A. BILATERAL AND AIDED PROJECTS

1.	Bilateral Cooperation Programme with Developing & Developed Countries	50.00	15.00	0.00	25.00	15.00	49.00	30.00
2.	Long-term Project under Indo-USSR, Indo-UK & Indo-USA Programme	50.00	2.00	0.00	0.00			
GRAND TOTAL (A)		100.00	17.00	0.00	25.00	15.00	49.00	30.00

B.	PUBLICATION & INFORMATION	415.00	42.00	26.87	30.00	26.15	55.00	32.30
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C. STRENGTHENING OF THE INFRASTRUCTURE							
1. Civil Works			17.56	350.00			
(a) ICAR Bhawan Phase II	450.00	110.00	0.00	0.00	0.00	55.00	31.00
(b) Guest House for ICAR Hqrs.	130.00	—	0.00	0.00	0.00	33.00	0.00
(c) National Agricultural Science Centre & Museum	70.00	—	0.00	0.00	0.00	55.00	0.00
(d) Residential Accommodation for ICAR Staff	200.00	—	0.00	0.00			
2. ICAR Agricultural Library	50.00	—	0.00	1.00	5.00	7.00	7.00
3. Strengthening of ASRB	50.00	1.00	0.00	1.00	1.00	2.00	4.00
4. Modernization of Office Space & Facilities	216.00	1.00	0.00	2.00	2.22	22.00	22.00
5. ICAR Headquarters	100.00	52.00	20.82	3.00	35.24	85.50	10.00
6. Publicity & Public Relations	—	20.00	19.52	3.00	4.71	5.50	5.50
GRAND TOTAL (B + C)	1661.00	226.00	64.77	360.00	74.32	320.00	111.80
D. SUPPORT TO PROFESSIONAL SOCIETIES/ASSOCIATIONS/ SUPPORT TO NATIONAL ACADEMY OF AGRICULTURAL SCIENCE							
	213.00	112.00	0.00	41.00	18.00	50.00	55.00
TOTAL	1964.00	355.00	64.77	458.00	107.32	419.00	166.80
GRAND TOTAL	129999.62	19229.90	17603.54	24673.40	23329.71	27500.00	27500.00